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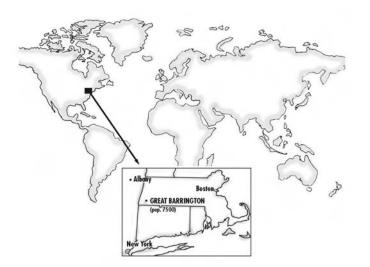
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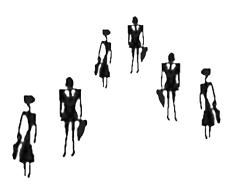
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How to Spell It and How to Say It: 100 Important People, Places, and Terms in World History

R alph Waldo Emerson once said, "A foolish consistency is the hobgoblin of little minds." Each time Berkshire Publishing Group sets to work on creating an encyclopedia, we review our guidelines on how we will present the names and terms that have changed in the course of history or through language alterations. We strive for consistency, though not the foolish kind against which Emerson warned.

Languages and geographic terms evolve regularly, and sometimes staying current means that we can't be completely consistent. Adding to the challenge is the fact that words in languages not based on the Latin alphabet (e.g., Chinese, Japanese, Arabic, Hebrew) must be transliterated—spelled in the language of another alphabet or "romanized" into English. And even within a language, transliteration systems change. Many people who grew up knowing the Wade-Giles system of Chinese romanization (with such spellings as Peking and Mao Tse-tung) had to become accustomed to seeing words using the pinyan romanization system introduced in the 1950s (with new spellings such as Beijing and Mao Zedong).

By and large, we look to *Merriam-Webster's Collegiate Dictionary*, 11th Edition (known as M-W 11), as our spelling authority, with *Merriam-Webster's Biographical Dictionary* and M-W's *Geographic Dictionary* for terms not in M-W 11. However, sometimes we overrule Merriam-Webster for a compelling reason. For example, historian Ross Dunn—who wrote the *Berkshire Ency*- *clopedia of World History*'s article on Ibn Battuta (and who is a leading expert on Battuta)—spells the name without the final "h," while M-W spells it "Battutah." In another case, the West African town of Timbuktu is so well known by that spelling that we opted for it in preference to M-W's preferred "Tomboctou."

Finally, there is the matter of using diacritical marks—accent marks, ayns (') and hamzas ('), and other markings—that provide phonetic distinctions to words from other languages. The use of diacritics is always a big question for a publisher on international topics. We—and the scholars we work with—tend to prefer to use various marks, from European-language accent graves to Japanese macrons and Arabic ums and ahs. But we have found that they can distract, and even intimidate, the general reader, so our policy has generally been to minimize their use. In time, as U.S. students become more comfortable with non-English forms and as we publish for global audiences, we will be able to make greater use of these marks, which are designed to be helpful to the reader.

That said, we thought it would be useful (and fun) to provide a listing of the "Top 100" terms—suggested by our editors—that have alternate spellings and names. We've also listed pronunciations for non-English names and terms. (The syllable in capital letters is the accented one; note, however, that Chinese and other languages do not necessarily stress syllables as is done in English.)

Dufamilia	n	Peop
Preferred form	Pronunciation	Alternates
Alexander the Great		Alexander, Alexander of Macedon
Asoka	a-SHO-ka	Ashoka
Augustine, St.	7777	Augustine of Hippo
Aurangzeb	or-ang-ZEB	'Alamgir
Caesar, Augustus		Augustus Caesar, Caesar Augustus
Chiang Kai-shek	chang kye-shek	Jiang Jieshi
Confucius	con-FYU-shus	Kong Fuzi, K'ung Fu-tzu
Gandhi, Mohandas	GHAN-dee, mo-HAN-des	Mahatma Gandhi
Galileo Galilei	ga-li-LAY-o ga-li-LAY	not Galilei, Galileo
Genghis Khan	JEN-gis kon	Chinghis, Chinghiz, Chingiz
Han Wudi	hon woot-see	Han Wu-ti
Ibn Battuta	ib-un ba-TOO-ta	Ibn Battutah
Ibn Sina	ib-un see-na	Avicenna
Jesus		Jesus Christ, Jesus of Nazareth
Kangxi emperor	kong-hsee	K'ang-hsi
Khubilai Khan	KOO-blah kon	Kublai, Qubilai
Laozi	laud-zuh	Lao-tzu, Lao Tzu
Leonardo da Vinci	le-o-NAR-do da VIN-chee	da Vinci, Leonardo
Mao Zedong	mao zeh-DON	Mao Tse-tung
Mencius	MEN-chee-us	Mengzi, Meng-tzu, Meng Tzu
Moses		Moshe
Motecuhzoma II	mo-tek-w-ZO-ma	Montezuma II; Moctezuma
Muhammad	mo-HA-med	Mohammad, the Prophet Muhammed, Mehemet
Napoleon	na-POLE-eon	Napoleon Bonaparte
Qin Shi Huangdi	chin sher hwang-dee	Ch'in Shih Huang-ti
Saladin	SAL-a-den	Salah al-Din, Selahedin
Siddhartha Gautama	si-DAR-ta GAU-ta-ma	Buddha, The
Sima Qian	suma chee-en	Ssu-ma Ch'ien
Sui Wendi	sway wen-dee	Sui Wen-ti
Sui Yangdi	sway yahng-dee	Sui Yang-ti
Süleyman	soo-lay-MON	Süleyman the Magnificant, Süleyman I. Suleiman the Lawgiver
Sun Yat-sen	soon yat-sen	Sun Yixian
Tang Taizong	tahng taizong	T'ang T'ai-tsung

eciation Y-nas nore uh w-ahn-jahng	Alternates not Aquinas, Thomas Timur Lenk, Tamerlane, Tamburlaine also Otto, Odo, Eudes—of Lagery Cheng Ho Chu Yüan-chang Places
nore uh vu-ahn-jahng	Timur Lenk, Tamerlane, Tamburlaine also Otto, Odo, Eudes—of Lagery Cheng Ho Chu Yüan-chang
uh u-ahn-jahng	also Otto, Odo, Eudes—of Lagery Cheng Ho Chu Yüan-chang
u-ahn-jahng	Cheng Ho Chu Yüan-chang
u-ahn-jahng	Chu Yüan-chang
, C	
ciation	Places
ciation	Places
ciation	
	Alternates
	Afroeurasia; Africa, Europe, and Asia
	Axum
1	Peking
AR-a	Bokhara, Boukhara
	Khmer Republic, Kampuchea
	Yangzi, Yangtze
slow-VA-kee-a	Czechoslovakia
	Insular Southeast Asia
	United Arab Republic
g-joe	Canton
	Hapsburg
3	Huange He, Yellow River
	Central Asia
	Persia
	Mesopotamia
-BULL	Constantinople, Byzantium
da-har	Qandahar
KOOM	Karakum
lks	Khazaks
ra-zem	Kwarezm, Khwarazm, Khuwarizm
	Congo
-an	Kushana, Kusana
	Middle America, Central America
	Moghol, Mogol
-bye	Bombay
N-mar	Burma
ar-kand	Samarkand
	nciation n CAR-a slow-VA-kee-a g-joe g b-BULL -da-har KOOM aks -ra-zem t-an t-an t-bye N-mar ar-kand

Places (continued)

Preferred form	Pronunciation	Alternates
Shilla kingdom	shil-la	Silla kingdom
Songhai		Songhay
Sri Lanka	shree LAN-ka	Ceylon
THAILAND	TIE-land	Siam
Timbuktu	tim-BUCK-too	Timbukto, Tombouctou
USSR		Soviet Union, Soviet Empire, Russia
Vietnam, Laos, Cambodia		known collectively as Indochina
West Indies		Caribbean

Religious , Political, and Cultural Terms

Preferred form	Pronunciation	Alternates
al-Jazeera	as-jah-ZEER-a	Al Jazeera, Al-Jazeera
al-Qaeda	al-KAY-da	Al Qaeda, al-queda
al-Razi	al-rah-zee	ar-Razi
Analects of Confucius		Sayings of Confucius
Bhagavad Gita	ba-ga-vad GEE-ta	Bhagavadgita
Bible, The		Old and New Testaments
Brahma		Brahman, Brahmin
CZAR		tsar
Daoism		Taoism
INDIGENOUS PEOPLES		primitive, native, nonindustrial
LATTER-DAY SAINTS		Mormons
Muslim		Moslem
NATIVE AMERICANS		Indians, American Indians
Persian		Achaemenian, Achaemenid empire
QING DYNASTY	ching	Ch'ing dynasty
Quran		Qur'an, Koran
Sasanian		Sassanian, Sasanid, Sassanid empire
Shia	SHEE-a	Shi'a
Sharia	sha-REE-a	Shari'a, Islamic law
Siva	SHEE-va	Shiva
Song dynasty		Sung dynasty
Tang dynasty		T'ang dynasty

	and C	Religious , Political, Sultural Terms (continued)
Preferred form	Pronunciation	Alternates
Torah		Five Books of Moses
Vodun	voo-DOO	Voodoo, Vodou
World War I		First World War, The Great War
World War II		Second World War
Yijing		I-ching, Yi-jing
and the second second		

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And Mar

Napoleon Napoleonic Empire Nationalism Nation-State Nation-State Native American Religions Natural Gas Natural Gas Natural Law Nature Navigation Newton, Isaac Nkrumah, Kwame Nonviolence North Atlantic Treaty Organization Nubians

Napoleon

French leader

Napoleon Bonaparte rose from relative obscurity to become the ruler of almost all Europe. He is also remembered for breaking new ground in promoting equality, religious freedom, education reform, and introducing a new civil code, the *Code Napoléon*.

Napoleon was born in Ajaccio, Corsica, and graduated from a French military school as an artillery lieutenant. In 1793 he scored his first victory as an officer in the French Revolutionary army, destroying ten British ships in the harbor at Toulon. He was then made brigadier general, at age twenty-four. On 5 October 1795, Napoleon's ultimate triumph of force was foreshadowed when he used artillery to fire upon a Royalist mob—his famous "whiff of grapeshot"—to protect the Revolutionary government in Paris. Now a national hero, he was promoted to commander-in-chief of the French forces in Italy.

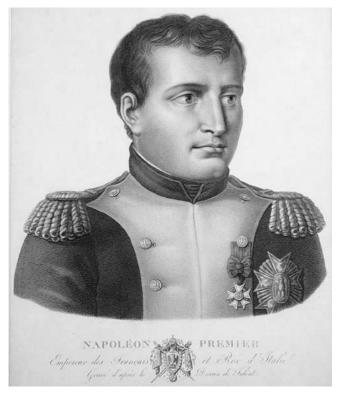
Napoleon married Josephine de Beauharnais in 1796 and immediately left to lead the French army in Italy, which was fighting the Austrians. He was soon victorious and formed the Cisalpine Republic out of part of northern Italy.

When an invasion of England proved impossible, in 1798 Napoleon was sent to invade British-controlled Egypt. He was generally successful in his land battles, but Britain's Vice Admiral Horatio Lord Nelson destroyed his fleet in the Battle of the Nile. Nonetheless, the discovery of the Rosetta Stone and the many scholars, artists, and



cartographers who accompanied Napoleon on the expedition laid the foundation for modern Egyptology, one of his enduring academic legacies.

When Napoleon returned to France, he took control of the government in the *coup d'état de Brumaire* (9–10 November 1799), becoming, at thirty-seven, First Consul of France. Again faced with the Austrians in northern Italy, Napoleon led his army through the Alps and won the Battle of Marengo on 14 June 1800.



Napoleon, the Emperor of France.

Later in 1800, Napoleon had his Civil or Napoleonic Code drafted. Perhaps his most important legacy, Napoleon's code organized the thousands of Royalist and Revolutionary decrees, abolishing feudal privileges and establishing equality before the law. The code also established freedom of religion and the separation of church and state. In 1801 he smoothed relations with Rome by signing the Concordat with Pope PiusVII, bringing Catholicism back to France while, over the Pope's objection, maintaining freedom of religion.

The 1802 Peace of Amiens with England allowed Napoleon to concentrate on domestic reforms, including a nationwide infrastructure improvement program and the first moves in Europe toward universal public education.

On 2 December 1804, backed by the Senate and the people, and to thwart efforts by Royalists to assassinate him, Napoleon consolidated his power still further, and was declared Napoleon I, Emperor of the French. However, his imposition of the progressive Napoleonic Code over his successive European conquests, effectively dismantling the centuries-old conservative European social order, arrayed all the monarchies of Europe against him, and war soon returned.

In 1805, abandoning plans to invade England, Napoleon moved his *Grande Armée* to central Europe to meet oncoming Russian and Austrian armies. His greatest victory was the Battle of Austerlitz on 2 December 1805 —although it was diminished somewhat by Nelson's earlier destruction of the French fleet off the coast of Spain at Trafalgar. At Austerlitz, Napoleon defeated a larger force by employing masterful military and psychological tactics.

Napoleon's Proclamation After the Battle of Austerlitz

Great leaders have often written accounts, diaries, bulletins, proclamations or memoirs of their campaigns in an effort to inspire their troops and citizens and put the best possible "spin" on their campaigns. Julius Caesar's Commentaries and Napoleon's Bulletins and Proclamations are probably the best examples. The day after his great victory at the Battle of Austerlitz on 2 December 1805, Napoleon issued the following proclamation, which stands as one of his most famous.

Soldiers! I am pleased with you. On the day of Austerlitz, you have justified what I expected from your intrepidity. You have decorated your eagles with an immortal glory. In less than four hours an army of 100,000 men, commanded by the Emperors of Russia and Austria, has been cut down or dispersed. Those who escaped your iron have drowned in the lakes. Forty flags, the standards of the Russian Imperial Guard, 120 pieces of cannon, twenty generals and more than 30,000 prisoners are the results of this day, to be celebrated forever. That infantry, so vaunted, and superior to you in numbers, could not resist your impact, and henceforth you have no rivals to fear. Thus, in two months the third coalition is conquered and dissolved. Peace can no longer be at a great distance; but, as I promised to my people before crossing the Rhine, I will only make a peace that gives you some guarantees and assures some recompenses to our allies. Soldiers! When the French people placed the Imperial Crown on my head, I entrusted you to keep it always in a high state of glory, which alone could give it value in my eyes; but at that moment our enemies thought to destroy and demean it; and that Iron crown, which was gained by the blood of so many Frenchmen, they would have compelled me to place on the head of our cruelest enemies; an extravagant and foolish proposal, which you have ruined and confounded the very day of the anniversary of your Emperor's coronation. You have taught them that it is easier for them to defy us and to threaten us than to vanquish us. Soldiers! When everything necessary to the happiness and prosperity of our country will have been achieved, I will lead you back to France. There you will be the objects of my most tender solicitudes. My people will see you again with joy, and it will be enough for you to say: "I was at the battle of Austerlitz," for them to reply, "There is a brave man!"

Source: Markham, J. D. (2003). Imperial glory: The bulletins of Napoleon's Grande Armée 1805–1814 (pp. 55–56). London: Greenhill Books.

In 1806, Prussia and Russia declared war on France. Napoleon conquered Prussia and signed a treaty temporarily ending hostilities with Russia in 1807. In 1806 he established the Continental System, an economic blockade of England that lasted six years, doing economic damage on both sides but ultimately failing to break the island nation. He put his brother Joseph on the Spanish throne, but Arthur Wellesley, the future Duke of Wellington, invaded Spain and the French forces eventually withdrew.

When Josephine proved unable to bear children, Napoleon reluctantly divorced her and in 1810 married the Austrian Emperor's daughter, Marie Louise. They had a son in 1811.

By 1810, England and Russia were the only major powers outside the French Empire. Tsar Alexander had quit the Continental System, demanded that France abandon Poland, and was prepared to invade. Napoleon moved first, and in 1812 led his army into Russia. He won at Borodino on 7 September and entered an abandoned Moscow, which was soon engulfed in flames ignited by Russian partisans. Napoleon withdrew, and the campaign cost him 90 percent of his army. In October 1813, a massive coalition of forces defeated Napoleon at Leipzig in what became known as the Battle of Nations, sealing the fate of the first French Empire.

Paris fell to allied forces in May 1814. Napoleon abdicated on 11 April and was exiled as Emperor of Elba, a small island off the coast of Italy. On 1 March the following year he returned to France to reclaim his throne from the Bourbon Restoration of Louis XVIII. He took Paris on 20 March without firing a shot, beginning the period known as the Hundred Days. He wanted only to govern France, but his old enemies soon moved against him, and after initial success he was defeated at Waterloo, in Belgium, on 18 June 1815. Exiled to the tiny British island of Saint Helena in the southern Atlantic Ocean, he dictated his memoirs and died on 5 May 1821, officially of stomach cancer but possibly, as many historians now believe, of poisoning. His remains were returned to Paris in 1840.

Often considered the father of modern Europe, Napoleon's legacy goes far beyond his military genius, and is subject to a wide variety of interpretations. Although he promoted the ideas of equality, meritocracy, religious freedom and a common system of law throughout his empire, he was an absolute ruler, suppressing many with whom he disagreed. Nonetheless, the Napoleonic Code remains the basis of French law, and it was the primary influence on nineteenth-century civil codes throughout continental Europe and Latin America. Napoleon's sale of the Louisiana Territory to the United States helped lead to that nation's greatness, and he had a profound influence on the rise of European nationalism: His efforts on the Italian peninsula and in the German principalities foreshadowed the unification of both Italy and Germany. Though the restored old regimes remained influential for a time, Napoleon's example of leadership based on merit eventually became the goal of Western nations.

J. David Markham

See also Napoleonic Empire

Further Reading

- Caulaincourt, A. A. L. (1935). With Napoleon in Russia: The memoirs of General de Caulaincourt, Duke of Vicenza. From the original memoirs as edited by Jean Hanoteau. (G. Libaire, Ed.). New York: Morrow.
- Chandler, D. G. (1996). The campaigns of Napoleon. New York: Macmillan.
- Chandler, D. G. (1979). *Dictionary of the Napoleonic wars*. New York: Macmillan.
- Cronin, V. (1972). Napoleon Bonaparte: An intimate biography. New York: Morrow.
- Jones, P. P. (Ed.). (1992). Napoleon: An intimate account of the years of supremacy 1800–1804. San Francisco: Random House.
- Markham, J. D. (2003). Imperial glory: The bulletins of Napoleon's Grande Armée 1805–1814. London: Greenhill Books.
- Markham, J. D. (2003). Napoleon's road to glory: Triumphs, defeats and immortality. London: Brassey's.

Napoleon Bonaparte. (2002). *In the words of Napoleon: The emperor day by day* (R. M. Johnston, Ed.). London: Greenhill.

Stendhal [Beyle, M. H.]. (1956). A life of Napoleon. London: Rodale Press.

Weider, B., & Forshufvud, S. (1995). Assassination at St. Helena revisited. New York: Wiley.

Napoleonic Empire

The Napoleonic empire (1799–1815) was the largest, most politically uniform state Europe had seen since Roman times, and it laid the foundation for many fundamental institutions of modern Europe.

The Revolutionary Heritage

When Napoleon Bonaparte became First Consul and head of the French state in November 1799, France had already been at war with the great European powers since 1792 and had acquired several adjacent territories as a consequence. Thus, the First French Republic, founded with the overthrow of Louis XVI in August 1792, had already become an empire by 1799. In 1795, France annexed the Austrian Netherlands, present-day Belgium, turning them into French departments governed from Paris under French laws and institutions. In 1797, they did the same with the all the areas of the Holv Roman Empire-now Germany-on the left (western) bank of the Rhine. In 1795, the United Provinces, the modernday Netherlands, was renamed the Batavian Republic under a puppet government. In 1796, Napoleon created a "satellite republic" in northern and central Italy with himself as its president—the Cisapline Republic—and its capital at Milan. In 1798, occupying French armies set up the Roman and Parthenopian Republics over the Papal States and the mainland parts of the Kingdom of Naples, respectively, in southern Italy, and the Helvetic Republic in present-day Switzerland; the first two lasted only a few months, and were soon overthrown by an internal revolt;

15th Century	Portuguese knights capture Cueta in North Africa from the Muslims.
	Columbus "discovers" the Americas for Spain and colonies are established in the Americas.
	Portugal claims Brazil under the Treaty of Tordesillas.
	Vasco da Gama of Portugal discovers an all-sea route to India.
16th Century	Portugal dominates the maritime trade in South and Southeast Asia.
	The Pacific Ocean is "discovered" by Vasco Nuñez de Balboa of Spain.
	Spain claims the Philippines.
	The Habsburg ruling house of Europe comes to power.
	France establishes a presence in West Africa.
	Portugal's dominance in East Africa and Asia begins to decline.
17th Century	The English, Dutch, and French charter trading companies.
	The English settle Jamestown in Virginia.
	France establishes colonies in North America and the Caribbean.
	Russia colonizes Siberia.
18th Century	France loses American colonies and territory to England and Spain.
Ioin Clarowi	The English lose control of their American colony.
	The Dutch Republic becomes a colonial power with the abolishment of its private
	trading companies.
	The Dutch begin to lose most of their colonies to the British.
C. C. States	The Spanish empire declines.
and the second	By the time of the Treaty of Paris in 1763, England has become the dominant
San and a	European colonial power.
19th Century	France under Napoleon regains territory in the Americas.
A second Boy	Haiti gains freedom from France through a slave revolt.
Section Constant	Brazil declares independence from Portugal.
	Slavery is abolished by all imperial powers.
	The Habsburg empire is transformed into the Austro-Hungarian empire.
S. S. Marsh	The German empire is established after the Prussian defeat of France.
A A A A A A A A A A A A A A A A A A A	Russia colonizes Poland and Finland, the Caucasus, and Central Asia.
	England, France, Spain, Portugal, Belgium, Germany, and Italy solidify their colonic in Africa.
20th Century	European control of its African colonies intensifies.
	World War I starts when the Austro-Hungarian government declares war on Serbia.
	The end of World War I marks the end of the Austro-Hungarian empire and the German empire.
	Britain and France gain trust territories in Asia.
	The British Commonwealth of Nations is created.
	During World War II Japan takes Asian colonies from Britain, France, and the Netherlands.
	Following the end of World War II, the British, French, Dutch, and Portuguese empires shrink as many former colonies become independent nations.
	The Comunidade dos Países de Língua Portuguesa (CPLP) unites eight Portuguese- speaking nations.



the third is still the official name of the Swiss Confederation. Until a series of military reverses in 1799, France effectively controlled most of western Europe.

The Creation of the Inner Empire, 1800–1805

Napoleon's first task was to recapture these territories from the Austro-Russian coalition and reestablish French hegemony in one form or another. This he did in a series of well-coordinated military campaigns, 1799-1800. By 1801, a general peace had been concluded with all the major powers, culminating in the Peace of Amiens with Great Britain in March 1802. Although Britain and France were soon at war again, France did not return to war with the continental powers until 1805, allowing Napoleon time to consolidate his rule in France itself, in northern and central Italy, and in the Low Countries. Simultaneously, Napoleon cultivated the larger states of western and central Germany within the Holy Roman Empire, winning them over from their traditional allegiance to the Hapsburg emperors with promises of territorial growth at the expense of the tiny imperial states and greater control over their states if freed from Hapsburg domination.

By 1805, the Napoleonic empire is best expressed as a power bloc, a hegemony, over most of western and southern Europe. This hegemony was exercised in three different ways. The left bank of the Rhine, modern Belgium, and northwestern Italy were annexed directly to France: satellite states were re-created in the Netherlands and north central Italy; the rest of western Germany was the preserve of states closely allied to France: Nassau, Baden, Bavaria, and Württemberg chief among them. These territories became deeply imbued with core French institutions, either by their direct imposition or through free but conscious imitation. These were principally the Civil Code, which guaranteed open trials and equality before the law, and the centralized state based on prefects -civil servants appointed by the central governmentand departments, the units they administered. The satellite states received constitutions modeled directly on that of France, which created a strong executive and a centralized bureaucracy; everywhere, local laws, weights and measures, currency, and administrative structures were replaced by those developed by the French revolutionaries since 1789. This also meant the abolition of the vestiges of feudalism, of provincial and noble privileges, and the confiscation of the properties of the church. To be within the French empire meant joining a uniform,

I hold the immortality of the soul to be the remembrance which we leave behind in the minds of men. • NAPOLEON BONAPARTE (1769–1821)

standardized political system; the old orders were swept away in every area the French took under their definitive control. Taken together, the areas under Napoleonic hegemony before 1805 became an "inner empire," the true core of Napoleonic power. Here, French public institutions and legal and administrative practices were readily assimilated, at least by the local elites, and usually endured after Napoleon's military eclipse and fall in 1814– 1815. This was crucial for the future development of Europe, because the embedding of the Civil Code and the centralized state laid the legal and institutional foundations of many western European states.

These reforms were aimed primarily at increasing state power, and that new power was enforced by the creation of the gendarmerie, a paramilitary police force mainly devoted to patrolling the countryside. Particularly after 1805, when large-scale war erupted again in Europe, this new force was used primarily to impose mass conscription and heavy taxation on peasantries for whom central authority had been a mere shadow before Napoleonic rule. Even in the more stable period of peace, 1800-1805, the arrival of the new state came as a traumatic shock. Much of southern and western France remained under virtual martial law in these years; northern and central Italy saw widespread, if localized, peasant revolts; very traditional forms of local justice and government, based on arbitration, were expunded from rural parts of the Rhineland for example. Independently, the German princes met similar opposition within their own borders. Some aspects of Napoleonic rule, such as the religious settlement or the ruthless imposition of conscription, were never really accepted outside France, or over much of the south and west of France itself.

Nevertheless, the propertied classes, which also included much of the peasantry, benefited from the higher levels of law and order brought to the countryside by the gendarmerie, particularly the extirpation of brigandage. Justice became quicker and cheaper to obtain under the Code than in the past, and was administered by an honest, professional magistracy. The fair and equitable reparation and administration of property taxes was largely achieved by the compilation of accurate land registers, the cadastre, although indirect taxes became very high under Napoleon. The prefects proved able and honest local administrators, all of which left a deep, favorable impression on the elites of western Europe, even among those politically opposed to Napoleon.

However, democratic politics formed no part of Napoleonic rule. The western European experience of the new Napoleonic state did not include meaningful representative, parliamentary government. Also, as the core of the Napoleonic empire took shape, that core was not wholly French. Many non-French areas, particularly the allied German states, the Rhineland, the Low Countries, and northern Italy, absorbed French institutions and proved better sources of taxes, conscripts, and administrators than western or southern France, where resentment of the revolutionary reforms of the 1790s persisted. When the empire expanded through war from 1805 onward, these areas came to form an "inner empire" around the new territories to the east and south.

By 1805, the Napoleonic empire had emerged as a direct challenge to other European empires in several senses. Its territorial expanse and the material and human resources it controlled made it an obvious military threat and a regional power of the first order, at least in western and central Europe. At a more structural level, its compact territorial nature and, above all, its centralized, uniform administrative system marked it out as very different from the looser, more arbitrational imperial model of the Holy Roman Empire and of the Hapsburg monarchy. On one level, Napoleon now chose to imitate his rivals; on another, they chose to imitate him. In December 1804, Napoleon crowned himself "Emperor of the French," and according to the new constitutional formula, "the French Republic was entrusted to a hereditary dynasty" (quoted from the coronation oath). In line with this, the Italian and Batavian Republics became kingdoms, the former under Napoleon but effectively ruled by his stepson, Eugène de Beauharnais, the latter under his brother, Louis. However, the real changes in the European order came in the years immediately following the creation of the empire. Fearing that the change of title heralded an attempt by Napoleon to become Holy



Roman Emperor, the Hapsburg emperor, Francis I, dissolved this ancient institution, and henceforth styled himself Emperor of Austria. In the same spirit of suspicion about Napoleon's ambitions, Austria soon joined with Britain and Russia in a new coalition against Napoleon. They were crushed by the French in a lightning campaign in 1805, and when Prussia and Russia attempted to fight on, they were defeated in a series of campaigns in 1806–1807 that took French armies into Russia itself.

The "Grand Empire," 1805–1814

This round of victories altered the shape of the empire and of Europe as a whole in dramatic, unexpected ways. In 1805, Napoleon seized the southern Italian Kingdom of Naples, placing his brother Joseph on the throne in place of the Bourbons. The states of western and southern Germany were linked together in the Confederation of the Rhine, with Napoleon as its "Protector," thus providing a new kind of political "umbrella" to replace that of the Holy Roman Empire; territory seized from Prussia and Hesse-Cassel in north central Germany became a new Kingdom of Westphalia, under Napoleon's youngest brother, Jerome. Further east, following the Treaty of Tilist, with Czar Alexander I, a new state, the Grand Duchy of Warsaw, was created from the Prussian parts of Poland. Napoleon annexed Tuscany and the Papal States, in central Italy, in 1809, and the North Sea coast of Germany, between the Kingdom of Holland and Denmark, in 1811. After 1805, the Napoleonic empire was no longer a purely West European state system, but a pan-European empire. Territorially, the Napoleonic empire reached its height in 1811. Its own departments, ruled directly from Paris, numbered 130, embracing 44 million inhabitants; when the satellite kingdoms and the Confederation of the Rhine are added, the "Napoleonic hegemony" contained over 80 million people. Appearances are deceptive, however. The territories acquired in this second phase of expansion proved less ready to accept the set of laws and administrative institutions that defined the Napoleonic imperium than those regions

under its control up to 1804. Feudalism was much more powerful in northern Germany, southern Italy and, especially, in Poland, than elsewhere in Europe, nor was the principle of religious toleration readily accepted in many of these regions. Thus, the Civil Code was never fully implemented in many of these areas. Although they became important sources of conscripts for the armies and for supplies, these regions came to represent an outer empire, which never properly absorbed the essence of Napoleonic rule, although the Grand Duchy of Warsaw remained politically very loyal to Napoleon, personally, for having restored its independence. Spain was never really under Napoleonic control, and its resistance proved an important springboard for the British to relaunch the war against Napoleon effectively in 1808, several years before Napoleon's military power was smashed in the 1812 campaign against Russia. By 1814, the "Napoleonic adventure" was effectively over.

The empire's administrative and legal uniformity was not mirrored in Napoleon's economic policies. To defeat Britain by economic means, Napoleon imposed a blockade along the imperial coastlines, which proved largely ineffective. His "Continental System" was a series of treaties erecting customs barriers protecting France from all European competition, even within the empire, creating a "one-way common market."

The Napoleonic Legacy

Napoleon's hegemony over Europe was brief; in some regions, it lasted only three years. Nevertheless, his reforms exerted a lasting influence on how the states of western Europe were governed henceforth. Although the Congress of Vienna, which reorganized Europe after Napoleon's fall, reordered the borders of states to a considerable degree, Napoleonic administrative institutions and, above all, the Civil Code reemerged sooner, rather than later, as basis for civil government in what had been the inner empire, and would become the historic core of the modern European Union. Later, the centralized, culturally uniform model established under Napoleon became the guiding principle of French overseas imperialism, starting with Algeria in 1829 and spreading across A national debt, if not excessive, will be to us a national blessing... It will be a powerful cement to our union. • Alexander Hamilton (1755–1804)

much of Africa and Indochina in the late nineteenth century. The legacy of the Napoleonic empire in European and imperial history is less in Napoleon's transient military exploits than in the durability of his civil reforms.

Michael Broers

See also Napoleon

Further Reading

Alexander, R. S. (2001). Napoleon. London: Arnold.

- Bergeron, L. (1981). France under Napoleon. (R. R. Palmer, Trans.). Princeton, NJ: Princeton University Press.
- Broers, M. (1996). Europe under Napoleon, 1799–1815. London: Arnold.
- Broers, M. (2001). Napoleon, Charlemagne, and Lotharingia: Acculturation and the boundaries of Napoleonic Europe. *The Historical Journal*, 44(1), 135–154.
- Dwyer, P. (Ed.). (2001). Napoleon and Europe. London: Longman.
- Ellis, G. (2000). Napoleon. London and New York: Longman.
- Ellis, G. (2003). The Napoleonic empire (2nd ed.). Basingstoke and New York: Palgrave Macmillan.
- Emsley, C. (1993). The Longman companion to Napoleonic Europe. London: Longman.
- Englund, S. (2004). Napoleon. A political life. New York: Scribner.
- Esdaile, C. (1995). The wars of Napoleon. London: Longman.

Geyl, P. (1949). Napoleon: For and against. London: Bradford & Dickens.

- Grab, A. (2003). *Napoleon and the transformation of Europe*. New York: Palgrave Macmillan.
- Laven, D., & Riall, L. (Eds.). (2000). Napoleon's legacy: Problems of government in restoration Europe. New York: Palgrave Macmillan.
- Lefebvre, G. (1969–1974). Napoleon (Vols. 1–2). New York: Columbia University Press.
- Schroeder, P.W. (1994). The transformation of European politics, 1763– 1848. Oxford, UK: Clarendon Press.
- Tulard, J. (1984). Napoleon: The myth of the saviour. London: Weidenfield & Nicolson.
- Woolf, S. J. (1991). Napoleon's integration of Europe. New York: Routledge.

Nationalism

Until recently, it was the conventional wisdom that nationalism arrived on the world stage in Western Europe around the end of the eighteenth century. Its birth was sometimes dated more precisely: 20 September 1792, when the French revolutionary troops who turned back the invading Prussian and Austrian coalition forces at Valmy did so with the cry "Vive la nation!" Whether or not the victory was the result of nationalist fervor or effective artillery is a moot point. However, there is little doubt that the mass mobilization with which the Revolution met its enemies, the administrative and cultural centralization begun by the Republic and continued under the Empire, and the belief in France's destiny inspired by Napoleon prefigured many of the themes of later nationalism. So too did the response that France's victories evoked. Resistance to French armies was carried out in the name of the nation, even when-as in the case of the patchwork of states, principalities, and imperial possessions which was to become Germany-no political entity corresponded to that name. Indeed, it was in the German language that the nation received its first explicit philosophical articulation, in the writings of Johann Gottfried von Herder and Johann Gottlieb Fichte. Once it found expression, the rhetoric of nationalism was taken up with great enthusiasm in the nineteenth and early twentieth centuries. Wars were fought, dynasties overthrown, empires challenged, and borders redrawn in the name of national self-determination.

The conventional wisdom has been subject to criticism on many fronts. Some have argued that nationalism had very little presence in the consciousness of ordinary people until well into the nineteenth century and perhaps even later. Eugen Weber (1976) has shown that most French peasants in the late nineteenth century had little sense of being French. John Breuilly (1982) has argued that nationalism was initially a political project designed to further the interests of elites, and only engaged popular sentiment as a result of the administrative and educational policies of the state. If this line of criticism encourages us to think of nationalism as emerging rather later than the end of the eighteenth century, a second line of criticism locates nationalism earlier. Linda Colley's (1992) account of eighteenth-century Great Britain tracks the development of a sense of British national identity over that period. Colley's argument is not inconsistent with, and indeed it presupposes the existence of, an English and perhaps even a Scottish sense of national identity before that. Liah Greenfeld (1992) and Anthony W.

The Battle of Valmy (1802): Vive la Nation!

France now calls herself a republic. She first assumed that title on the 20th of September, 1792, on the very day on which the battle of Valmy was fought and won. The battle of Valmy is rightly considered one of the decisive battles of the modern era, and one of the fonts of nationalism.

After France declared war on Austria on 20 April 1792 and following early encounters in which the French did not distinguish themselves, anti-revolutionary forces advanced into France (18 August 1792).The combined invading force comprised Prussians, Austrians, and Hessians. The allied invasion was aimed at restoring the deposed French King Louis XVI to power and strangling the emerging republic at birth. When at first it seemed that the plan would succeed, the republic seemed to be on its last legs.

In a desperate measure to halt the formidable Prussian army, the French unleashed a legendary artillery attack against their invaders. When the Prussians retreated without any serious military engagement, the French revolutionary troops who turned them back did so with the cry *"Vive la nation!"*

The new Republic, based on the ideals of Liberty Equality and Fraternity, would survive to ultimately transform the face of Europe.

Source: Creasy, E. S. (1994). Fifteen decisive battles of the world. London: DeCapo Press. Retrieved from http://www.standin.se/fifteen.htm

Marx (2003) trace the emergence of nationalism back to the early sixteenth century, and Adrian Hastings (1997) has presented a strong case for a sense of English nationhood even prior to the Norman Conquest.

It is important to separate different questions here. One concerns the extent to which nationalism was a significant presence in the consciousness of those in whose name nationalist struggles were carried on. Another concerns the use of nationalist rhetoric by political leaders, intellectuals, and cultural figures. It may be that Breuilly is right about the relatively shallow roots of nationalism, even in the nineteenth century. But it may also be that Greenfeld and Marx are right in that nationalist rhetoric was making its appearance in political and cultural discourse at least four hundred years earlier. In other words, nationalism may have begun its career as an elite phenomenon, and only become a mass possession very much later.

Definitions

If we are to pursue either question we need a clearer understanding of nationalism. In its most familiar nineteenth- and twentieth-century form, nationalism is the doctrine that each nation has a right to its own state, and that a state is legitimate only if it represents a nation. In more recent years, however, some nationalist movements -for example, the Welsh in the United Kingdom, the Kurds in Iraq—have been prepared to settle for something less than full political self-determination. Although these concessions may be born out of necessity, they suggest that we should recognize a more moderate and inclusive conception of nationalism as the claim that a nation has a right to political recognition, perhaps a degree of autonomy within a federal structure, and that a state is legitimate to the extent that it provides that recognition.

But what is the nation? And what is it about the nation that justifies its claim to a privileged political status? There is a limit to the extent that we can provide general answers to these questions. But there are some general characteristics. Nationalism came on the scene with the idea that a group of people is constituted as a political community through a shared cultural identity, and (enough) people believe that this identity should take priority over others. There is an enormous variety in the constituents of this identity, not only between nations but within a nation at different times. Each nation does have its own story to tell, but the plot may change. Every nation does, however, appeal to a common history, a story of triumphs and disasters, of heroism and betrayal, through which the nation has come to be what it is. Every nation thinks of itself as having a homeland, which is described and celebrated in the nation's art. literature, and music, and which provides the ground in

Tolstoy: Holy Moscow

The Napoleonic Empire extended its reign over most of Europe by the end of the first decade of the nineteenth century. In 1812, however, Napoleon's armies, mired in the legendary Russian winter that has stopped more than one invading army, were repelled by the Russians, who saved "Holy Moscow," as the great Russian novelist Leo Tolstoy put in one of literature's classics, War and Peace.

Every Russian, looking at Moscow, feels that she is his *mother*; every foreigner, looking on her, even though he cannot appreciate this feeling for the motherhood of the city, must feel the feminine character of this city, and Napoleon felt it.

"Cette ville asiatique aux innombrables églises, Moscou la Sainte. La voilá donc enfin cette fameuse ville! Il était temps. —There she is at last, this Asiatic city with its numberless churches, Holy Moscow. It was time!" said Napoleon, and, dismounting, he commanded to have spread before him the plan of that Moscow, —and he had his interpreter, Lelorme d'Ideville, summoned.

"Une ville occupée par l'ennemi ressemble à une fille qui a perdu son honneur," he said to himself, repeating the remark that he had made to Tutchkof at Smolensk. And it was as a "deflowered virgin" that he looked on this Oriental beauty, never been before seen by him, now lying prone at his feet. Strange it was to himself that at last his long desire, which had seemed impossible, was to be gratified. In the clear morning light, he contemplated now the city and then the plan, and studied the characteristics of this city, and the certainty that he should possess it excited him and filled him with awe.

"Could it have been otherwise?" he asked himself. "Here she is—this capital at my feet, awaiting her fate. Where now is Alexander, and what thinks he now? Strange, beautiful, magnificent city! And how strange and splendid this moment!"

Source: Tolstoy, L. (1899). War and Peace (pp. 79-80). New York: Thomas Y. Cromwell & Co.

a near literal sense of its national identity. Typically (though not universally), the national culture is based on a common written language, and members of the nation are able to communicate with each other through that language. The culture is also egalitarian: as Benedict Anderson (1991, 20) put it, the nation is "always conceived as a deep, horizontal comradeship." This is, of course, compatible with considerable inequality of wealth, power, and prestige. The nation is like the God of the great monotheistic religions: all are equal in the eyes of the nation, if in nothing else. However, insofar as the nation is conceived as the basis of legitimate political rule, nationalism is a populist doctrine: sovereignty is located in the people.

The Origins of Nationalism

Nationalism is the doctrine that a community, united by land, history, and language, has a claim to political recognition. The more visible nationalist movements of the nineteenth century-those of Germany, Italy, Greece, Poland, and many others-sought to remake political borders so that they would correspond to the aspirations of the nations they claimed to represent. However, it is possible to recognize earlier, less strident versions. English borders were, more or less, secure by the sixteenth century; they were extended by the incorporation of Scotland in 1706. (The attempt to include Ireland was much less successful.) A conception of England, involving landscape ("this scepter'd isle"), religion (Protestantism), history, mythology (Edmund Spenser's Faerie Queene was important), a cast of characters (the English veoman, the squire), a literary tradition, even special modes of warfare (the long bow), had begun to play an important role in public discourse in the sixteenth century. When England and Scotland formed Great Britain it formed an unusual, but not unique, multinational nation (Canada and the old Soviet Union are other examples). While England and Scotland could continue to celebrate their distinct national identities-though a strong case has been made by Hugh Trevor-Roper, in Hobsbawm and Ranger (1983), that Scottish national identity was

Excerpt from Edmund Spenser's "The Faerie Queen" (1590)

In this extract from his epic poem, Edmund Spenser (1552/53—1599) extols the glory of England, its royalty, and its mythology

Forth came that auncient Lord and aged Queene, Arayd in antique robes downe to the ground, And sad habiliments right well beseene; A noble crew about them waited round Of sage and sober Peres, all grauely gownd; Whom farre before did march a goodly band Of tall young men, all hable armes to sownd, But now they laurell braunches bore in hand; Glad signe of victorie and peace in all their land.

Vnto that doughtie Conquerour they came, And him before themselues prostrating low, Their Lord and Patrone loud did him proclame, And at his feet their laurell boughes did throw. Soone after them all dauncing on a row The comely virgins came, with girlands dight, As fresh as flowres in medow greene do grow, When morning deaw vpon their leaues doth light: And in their hands sweet Timbrels all vpheld on hight.

And them before, the fry of children young Their wanton sports and childish mirth did play, And to the Maydens sounding tymbrels sung In well attuned notes, a ioyous lay, And made delightfull musicke all the way, Vntill they came, where that faire virgin stood; As faire Diana in fresh sommers day Beholds her Nymphes, enraung'd in shadie wood, Some wrestle, some do run, some bathe in christall flood.

Source: Spenser, E. (1590). The faerie queen (Book 1, Canto XII).

largely formed in the nineteenth century—they did so as parts of a larger nation, Britain. The monarchy, shared political institutions, and a common written language were important unifying factors. So too was Protestantism, and as this became less important in the nineteenth century, it was replaced by a shared imperial mission.

The story so far focuses on England and later Britain. Many (Greenfeld 1992, Hastings 1997) have argued that England led the way into nationalism. And even Marx (2003), who places Spain first in the queue, with France and England close competitors, concedes that the nationalist project was more successful in early modern England than elsewhere. However, this leaves open the issue of whether there were even earlier forms of nationalism, perhaps elsewhere than in Europe. Hastings makes the interesting suggestion that Israel as depicted in the Old Testament served as a model for the early nationalist depictions of England. Certainly, the combination of culture, divine election, and political claims made on behalf of the Israelites has much in common with later nationalism. So too do the claims that Thucydides has Pericles make on behalf of Athens in his Funeral Oration after the first year of the Peloponnesian War. So we will need to look at the possibility of earlier—and perhaps non-European—forms of nationalism shortly.

Why Nationalism?

Whether or not there are premodern examples, there is little doubt that nationalism reached its zenith in the modern world. Why has the modern world been so hospitable to nationalism? There are four interrelated features of the modern world that were conducive to the emergence of nationalism:

Politics

Nationalism is, as both Breuilly and Marx emphasize, a political project. This suggests that we need to examine the emergence of nationalism in the context of changes in the nature of state power. The most obvious of these is centralization: the attempts by the early modern state to establish its position as the sole source of power within an increasingly clearly defined territory. Of almost equal importance was the expansion of the role of the state in social life. It acquired a range of administrative,



juridical, policing, infrastructural, and increasingly educational responsibilities. If state coercive power was centralized, its administrative power began to make itself felt in almost all aspects of social life.

Economic

The most important economic change was the spread of capitalist market relations. Ultimately this was to lead to industrialization, but that came much too late (in Britain, in the late eighteenth century; in Europe, North America, Japan in the eighteenth, and in other places even later) to explain the emergence of nationalism (as against Gellner 1983). As market relations spread, previously self-sufficient rural communities found themselves dependent on a wider network of production and distribution. The emergence of a labor market encouraged population movement. Transport, both of goods and of people, improved. If the market was always global in its reach, the most intensive development took place within the borders of well-established states, such as England and France. If the market was not a sufficient explanation of nationalism (as some Marxists may have believed), it defined the social space on which national identities were constructed.

Cultural

Perhaps the single most important development was what Anderson (1991, 37–46) called "print capitalism" the explosion in the production and dissemination of texts, increasingly in vernacular languages. If religious texts (especially the Bible) were initially most important, other text-based cultural forms (political tracts, scandal sheets, magazines, plays, eventually novels) developed to take advantage of the new opportunities for influence and markets. The spread of literacy made these products available to a large audience. If market relations were eroding the diversity of cultural forms characteristic of peasant life, the development of print-based culture made more encompassing and richer forms of identity available.

Difference

Many historians of nationalism (e.g., Colley 1992, Marx 2003) emphasize the role of real or imaginary differences

in the construction of nationhood. For Colley, the opposition to Catholic and absolutist France was crucial to the construction to British national identity in the eighteenth century. Marx makes a stronger case: for him, an essential component in the formation of national identities was the repudiation of some identifiable other. Earlysixteenth-century Spain selected the Jews, and most nations followed suit. For England, the exclusion of Catholics helped unify the otherwise heterogeneous Protestants. No doubt internal factors, such as those listed above, also played a role. However, it is plausible to suggest that a contrast with what is other is necessary for a unified identity. All too often, the other is conceived of as a threat that must be repudiated. Religious, racial, and ethnic exclusions lurk uncomfortably close to the surface of the most civilized national cultures.

These four features do not provide a full explanation of the rise of nationalism. History is too full of contingencies for this to be possible. But they provided the environment within which the nationalist project became possible and, for many, inevitable.

Premodern Nationalisms?

Once we have a reasonably clear understanding of nationalism it becomes a broadly empirical question whether there were premodern nationalisms. There are, however, reasons to be skeptical. For much of world history, the idea that it was the culture which political elites shared with those over whom they ruled that was the justification for their political rule would not have seemed plausible. This does not mean that there were not latent cultural similarities between ruling elites and their subjects. Both John A. Armstrong (1982) and Anthony D. Smith (1986) have argued that the early nationalisms of Western Europe were able to draw on the cultural resources these provided. (Both Armstrong and Smith conceive these similarities on ethnic lines. This is misleading. Religion and other cultural features were more important than descent.) However, these cultural ties seem to have played relatively little political role and it would be a mistake to think of them as constituting nations in the modern sense. Perhaps something more akin to the nation came into existence when these communities were faced with a common enemy. It may be, for example, that a sense of French national identity emerged during the One Hundred Years War, andeven earlier-that Vietnamese, Burmese, and Korean national identities came into play as a response to the ongoing struggles with China. A different candidate for premodern nationhood were those small communities, such as ancient Israel and the Greek city-states (excluding the slaves), where there was not a large gap between rulers and citizens, and social life involved a number of common activities and rituals (military service, religion). In these cases, shared experience would have forged a common cultural identity. But this is a long way from the vast nation-states of the modern world.

The Spread of Nationalism

Whether or not there were premodern nationalisms, it was at best an intermittent occurrence. In the modern world, it has seemed inescapable. And it is easy to see why. Once the link between culture and state power had been established, political rule acquired a cultural dimension. This was recognized after the Revolutionary and Napoleonic wars, and the nineteenth century was the period of "official nationalism" (the term is taken from Seton-Watson 1997). States strove to legitimize themselves in cultural terms. Public displays, rituals, and ceremonials were deployed, and even invented, as part of this nation-building exercise. By contrast, old polyglot empires on the Austro-Hungarian or Ottoman models faced increasing difficulties as their states responded to the challenge of the modern world. The relative success of the United Kingdom in forging an overarching national identity shows that these difficulties were not insuperable. As states expanded their territory and increased their presence in everyday life, minority cultures were faced with a choice, either to accommodate to the dominant culture or to resist. The former choice meant assimilation or marginalization; the latter was the path of national resistance, as the minority culture sought a political embodiment. It may be, as Breuilly argued (1982), that nationalism provided the rhetoric in which intellectuals and political leaders voiced their opposition to metropolitan centers of power well before it became a presence in the consciousness of the people in whose name nationalist struggles were fought. But the rhetoric was—and remains—an effective one.

The sources of nationalism are to be found in the enormous structural changes that were taking place in Western Europe in the sixteenth to eighteenth centuries. However, it was quickly appropriated in the non-Western world. This does not mean that European models were simply translated, though African and Asian leaders and intellectuals were undoubtedly influenced by what they learned from Europe. Perhaps most important was the experience of European imperialism. Borders were drawn according to the exigencies of colonial rule, and resistance to that rule itself formed the national identities in whose name resistance was carried out. While postcolonial nations were able to draw on local traditions and history, national identities often faced difficulties when the unity gained though struggle was overtaken by other competing loyalties.

Does Nationalism Have a Future?

For the past two or three hundred years, the nation-state has provided the organizing principle within which much economic, political, and cultural activity has taken place. There is some reason to suppose that this is no longer the case. Production, and not merely exchange, increasingly takes place on an international scale. Improvements in transport and, massively, in communication, have placed even ordinary people in contact with people across state borders. The imperative of economic growth has led most states to subordinate some of their power to supranational agencies and global market forces. National cultures have fragmented along lines that bear little relation to political boundaries. As Hobsbawm (1993, 163) remarked, nationalism "is no longer a major vector of historical development." But we should be very wary of predicting the demise of nationalism. The explanatory story sketched in above leaves a good deal of room for historical contingency. Whatever its origins, nationalism has become a historical force in its own right, not merely as a medium for other projects. Nations have been able to appropriate and create impressive cultural resources. States retain a good deal of residual power and are well aware of the potency of nationalism to support it. Whether or not globalization will eventually deliver prosperity and security, the contemporary reality for many is poverty and uncertainty. In these circumstances, it is not surprising that nationalism continues to attract the allegiance of states, oppositional groups, and—not least—ordinary people.

Ross Poole

See also Ethnic Nationalism; Nation-State

Further Reading

- Anderson, B. (1991). Imagined communities: Reflections on the origin and spread of nationalism (2nd ed.). London: Verso.
- Armstrong, J. A (1982). Nations before nationalism. Chapel Hill: University of North Carolina Press.
- Bayly, C. A. (2004). The birth of the modern world 1780–1914: Global connections and comparisons. Malden, MA: Blackwell.
- Breuilly, J. (1982). Nationalism and the state. New York: St. Martin's Press.
- Colley, L. (1992). *Britons: Forging the nation 1707–1783*. New Haven, CT: Yale University Press.
- Dahbour, O., & Ishay, M. R. (Eds.). (1995). *The nationalism reader*. Atlantic Highlands, NJ: Humanities Press.
- Gellner, E. (1983). Nations and nationalism. Oxford, UK: Basil Blackwell
- Greenfeld, L. (1992). Nationalism: Five roads to modernity. Cambridge, MA: Harvard University Press.
- Hastings, A. (1997). The construction of nationhood: Ethnicity, religion and nationalism. Cambridge, UK: Cambridge University Press.
- Hobsbawm, E. J. (1993). Nations and nationalism since 1780: Programme, myth, reality (2nd ed.). Cambridge, UK: Cambridge University Press.
- Hobsbawm, E. J., & Ranger, T. (Eds.). (1983). *The invention of tradition*. Cambridge, UK: Cambridge University Press
- Hutchinson, J., & Smith, A. D. (Eds.). (1994). Nationalism. Oxford, UK: Oxford University Press.
- Kedourie, E. (1962). Nationalism. New York: Frederick A. Praeger.
- Kohn, H. (1969). The idea of nationalism: A study in its origins and background (2nd ed.). Toronto, Canada: Collier-Macmillan.
- Marx, A. W. (2003). Faith in nation: Exclusionary origins of nationalism. Oxford, UK: Oxford University Press.
- Poole, R. (1999). Nation and identity. London: Routledge.
- Seton-Watson, H. (1977). Nations and states: An enquiry into the origins of nations and the politics of nationalism. London: Methuen.
- Smith, A. D. (1986). The ethnic origins of nationalism. Oxford, UK: Basil Blackwell.
- Weber, E. (1976). Peasants into Frenchmen. Stanford, CA: Stanford University Press.

Nation-State

The term *nation-state* ought to be distinguished from two closely related terms, *nationalism* and *nation*. The nation can be thought of as a group of people who are said to have collective bonds—produced by one or more cultural phenomena such as race, language, religion, culture, or history—and affiliation with a common territory. Nationalism is the valuation of the national bond over all other ties and is expressed as the identification of the national collective with a present or anticipated nation-state. The nation-state is the singular authority that represents the sovereignty of the people of the nation within clearly demarcated territorial boundaries.

A "primordialist" view of the relationship between these terms posits that the nation, if not nationalism, precedes the nation-state. In this view, the nation-state represents the primordial nation's ultimate awakening or coming to awareness of its racial or deep cultural bonds in order to fulfill its destiny in a modern future. Nationalists describe the history of the region as an evolution or awakening toward modern national consciousness. Contemporary scholars of nationalism, most of who can be dubbed "constructivists," do not subscribe to this view, although the extent and understanding of their constructivism varies. Constructivists argue that the nation is in many ways the product of relatively recent state formation that sought to integrate different groups into a political body (which comes to be called the nation). The constructivists argue that by interpreting the diverse history and loyalties of the region as the evolution of the nation, nationalist seek to legitimate the present nation-state.

To be sure, some societies, such as China or England, have had long processes of state formation that did produce enduring ties and even an awareness of Chineseness or Englishness, but in the absence of modern technologies or need for strong identity creation, such awareness was often temporary, limited to few groups, and rarely overrode other local or religious bonds. Nonetheless, some historians argue that historical conditions are an important factor and no social formation can be arbitrarily constructed into a successful nation. Before I built a wall I'd ask to know what I was walling in or walling out. • ROBERT FROST (1874-1963)

The Nation-State System

The nation-state is believed to have evolved from the system of states in Europe traceable to the Treaty of Westphalia (1648), which ended the Thirty Years' War. The treaty came to inaugurate a system in which, by the nineteenth century, each state was defined by territorial boundaries and ruled by one sovereign. But the system of nation-states is more appropriately dated to its explicit articulation by the philosopher Emmerich de Vattel (1714–1767) in the late eighteenth century, which assumed that states respected the territorial integrity of other similarly constituted states. The Westphalian-Vatellian nation-state was distinguishable from other polities (such as empires or kingdoms), which had several, often competing, sources and levels of authority (such as the church,

tribes, or feudal lords) and in which authority extended over people but not necessarily over territory.

Although in theory a nation-state acknowledged the sovereignty and autonomy of other nation-states, the states were engaged in a competition for resources that entailed not only military conquest and colonization, but also annexation or domination of one another's territories. During the eighteenth and nineteenth centuries these states became increasingly involved in creating the conditions for capitalist competition and wealth accumulation within Europe as well as overseas. Through the nineteenth century, they standardized and regulated their economic, judicial, and political systems while competing for colonies in Asia, Africa, the Americas, and the Pacific. Colonization or semicolonization (such as informal



A key element of state-building is an effective system of communciation and transportation. This photo from South Central Namibia shows men working on the Aus to Luderitz railway line.

domination through the imposition of unequal treaties in East Asia) was frequently justified by the allegation that colonized societies did not possess the laws and institutions of "civilized nation-states" and were thus not qualified to participate in the system. Their resources and labor were fair game for colonization and were mobilized for capitalist competition. Thus the emerging system of nation-states was closely associated with imperialism abroad.

Within the boundaries of the nation-state in Western Europe and North America, the nation became associated with the doctrine of rights for its citizens. The French Revolution of 1789 protected and enforced human and individual rights as national rights. Article III of the Declaration of the Rights of Man states, "The principle of all sovereignty resides essentially in the nation. No body nor individual may exercise any authority which does not proceed directly from the nation (or the laws of that nation)." In the early stages, the majority of the population, including women, minorities, and slaves within the nation, were not granted rights; their rights were won in the nineteenth and twentieth centuries through political and military struggles. But the fact that such struggle for rights became possible at all was due in large part to the changed foundations of the sovereignty of the state. The state no longer derived its sovereignty, particularly after the antimonarchical American and French Revolutions, from religious or dynastic claims, but increasingly from the idea of the "people" of the nation. The notion of the "nation-people" as the bearers of rights served as a spur for self-determination and fueled the spread of national movements in the territories of the Napoleonic, Spanish, Hapsburg, Ottoman, and Czarist empires in the nineteenth century.

Even so, most of these movements were relatively elitist affairs, and nationalism as such did not appear until toward the end of the nineteenth century. According to the historian Eric Hobsbawm, nationality was not viewed as a birthright or an ascriptive status during much of the nineteenth century. Patriotism in the eighteenth-century revolutions in America and France was regarded as a largely voluntary affair. To be sure, the territorial nationstate did produce the cultural homogenization that was a condition for nationalism. But ethnicity, language, and other markers of collectivity were not to become the natural basis of claims to sovereignty until the last decades of the century. There may have been earlier, individual cases of ethnicity or other collective markers being used as rallying points to mobilize the people, but they were isolated and usually elitist; nationalism as a near-universal phenomenon emerged only in the later period and became rapidly realized in the aftermath of World War I.

The Nation-State and Nationalism

Several circumstances led to the emergence of mass nationalism in the late nineteenth and early twentieth centuries. Industrialization necessitated mass literacy and interchangeable skills, which the philosopher Ernest Gellner (1925–1995) argued required the state to produce a culturally homogenous population congruent with state boundaries. The political scientist Karl Deutsch (1912-1992) noted the importance of modern mass media for nation-building projects, and the political scientist Benedict Anderson has emphasized the mass marketing of print media in what he calls print capitalism, which described the imagined community of the nation to the reading public. Nationalism was also linked to the politics of mass mobilization that emerged with the increasing democratization of European polities after 1880. Some of these conditions—such as the mobilization of certain identities or a form of print capitalism—could be found earlier in imperial China and elsewhere. Nonetheless, it was the simultaneous development of all or most of these conditions within an evolving system of competition between states that shaped nationalism at the end of the nineteenth century as the ideology of the nation-state.

The relationship between nationalism and competition between states was catalyzed by the challenge to British global supremacy in the latter part of the nineteenth century. Nationalism became the ideological means among rising competitor states, such as Germany, Japan, the United States, Russia, and Italy, to mobilize the population and resources within the state's territory in order to gain competitive advantage globally. Political and capGood judgment comes from experience and experience comes from bad judgment. • FRED BROOKS

italist elites in these newly industrialized societies gradually undermined the classical liberal principles of free trade—enabling and enabled by British hegemony—by adopting policies to secure a state-protected national economy. The two world wars of the twentieth century were significantly driven by emergent nation-states in the competition for global resources.

Equally important was the mobilization of human resources by the nation-state in the name of the nation. Nationalism was deployed to rally the population and resources for imperialist expansion and war. Mass organizations created by the nation-state to mobilize civilian support for war were first developed by Japan, the Soviet Union, and Italy, nations that were not principals in World War I but that observed the insufficiency of civilian support during the war. These government sponsored mass organizations, such as the Military Reservists Association formed in Japan in 1910, were developed along the model of a conscript army, imbued with nationalism, and were elevated rhetorically to represent the will of the people. In this way the government would call on the people to transcend immediate and particular interests; it might, for example, ask people to forego personal consumption or it might call into question the legitimacy of striking workers within the nation. Empire became the reward and glory of mass nationalism.

The events that concluded World War I established the normative principle that the world should be divided into nation-states and dealt an important though by no means conclusive blow to imperialism. The Paris Peace Conference of 1919, the Soviet Revolution, the break-up of the Ottoman and Hapsburg empires into nationstates, and the establishment of the League of Nations in 1920 reflected a vision of the world in which the boundaries of the state coincided with that of language and nationality. The creators of the League imagined the League as a forum for internationalism based upon cooperation among nations—the individual families of mankind. Two other factors following the war have to be noted: the changed balance of power in the world and the advent of a new discourse of anti-imperialism.

The Soviet Union and the United States of America emerged as new powers with little stake in the old international order based upon the European balance of power; indeed, they were opposed to formal imperialism. Both Lenin and Woodrow Wilson were committed to national self-determination; when the Czarist empire was reconstituted as the Union of the Soviet Socialist Republics, the constituent parts were theoretically autonomous socialist nationalities. The anti-imperialist outlook was undergirded ideologically by the discrediting of the "civilizing mission" of the imperialist powers. Horrified by the scale of devastation of World War I, intellectuals both in the West and in the colonial world launched a critique of the Western ideal of civilization, which in the light of the war they felt had forfeited the right to represent the highest goals or ultimate values of humanity. Colonial intellectuals and leaders in places such as China, India, and the Islamic world began to look to their own civilizations' traditions to sanction their emergent national movements.

The period after World War I witnessed both the expansion of the nation-state system and the growth of nationalism. While it was hoped that bringing more states under the regulatory mechanisms of the system, such as the League of Nations, would solve the problem of wars among nations, the inherent contradictions in the system actually appeared to intensify. On the one hand, more nation-states and even colonies such as India and mandated territories in the Middle East were part of the League of Nations; one the other hand, burgeoning nationalism justified aggression and domination. Older imperialist nations, faced with the growing phenomenon of nationalism, had to find alternatives to formal colonialism in order to control resources and remain globally competitive. Sometimes this meant developing client states and other subordinate political forms instead of colonies. Rising nation-states such as Germany, Italy, and Japan intensified their pursuit of economic and political supremacy, particularly during the Great Depression. The League of Nations turned out to have no teeth and could not enforce compliance upon those who brazenly violated its covenant, such as Italy and Japan. In part, this was because it was dominated by imperialist nation-states who themselves continued to possess colonies and special privileges. The League ultimately failed in its effort to reconcile the reality of imperialism with the idea of national self-determination.

Decolonization and Globalization

World War II brought about the beginning of the end of colonial empires. It also brought about the triumph of the nation-state as the successor state throughout the colonized world. This was not inevitable, because in several colonial empires, such as the French and the Japanese, there had been considerable experimentation with moreequal affiliations between colonies and the imperial metropole country through ideas of imperial citizenship. One of the most important factors ensuring that decolonization would yield nation-states was the growing role of the United Nations and international organizations, such as the World Bank, the International Monetary Fund, the Global Agreements on Tariffs and Trade, and the International Trade Organization (later World Trade Organization), and World Health Organization, which tended to recognize only nation-states. The enhanced resources, power, and prestige of the new nation-state system ensured that the only legitimate and viable polities in the world would be nation-states, recognized as such by the system. For example, during the 2003 SARS crisis, the state in Taiwan, which has all the prerequisites for being a nation-state except recognition, had considerable problems gaining access to the services of international organizations-precisely because it lacked nation-state status.

Since decolonization, some have argued that the nation-state form has not provided effective protection against domination by superior powers, which are able to use their continued military and financial might and their influence in international organizations to dominate weaker nation-states. The United States and West European powers have been able to limit the capacity of the new, often institutionally fragile nation-states for selfdetermination. Similarly, the Soviet Union sought to limit the independence of socialist republics in eastern Europe and of new nation-states dependent upon its military and financial aid. The effort to create a nonaligned movement during the Cold War, which gained momentum during the Bandung conference in Indonesia (1955), was not very successful, although some states were able to play off superpower rivalries to gain some competitive advantages.

Even though the threat of war between the superpowers was ever present during the Cold War, the existence of the socialist bloc and ideology nonetheless reduced the competitive pressures which had driven nationsstates to war during the first half of the century. For better or for worse, the new socialist nation-states restricted the role of multinational companies and full-fledged capitalism within their borders, and their nation-building projects tended to look inwards. With the fall of the Soviet Union in 1991 and the transformation of China into a capitalist society, nation-states have been turning away from the model of protected development and toward competitive capitalism, now called globalization. In the process, nation-states' relative autonomy from international capitalism and ability to exercise control over their boundaries and identity are once again being affected. Whether or not the new order of international institutions will be able to contain the effects of extreme competition and challenges from the interstices of the system remains to be seen.

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See also Ethnic Nationalism; Nationalism

Further Reading

- Anderson, B. (1991). Imagined communities: Reflections on the origins and spread of nationalism. London: Verso Press.
- Arrighi, G. (1994). The long twentieth century: Money, power, and the origins of our times. New York: Verso Press.
- Balibar, E., & Wallerstein, I. (Eds.). (1991). Race, nation, class: Ambiguous identities. London: Verso Press.
- Barraclough, G. (1964). An introduction to contemporary history. Hammondsworth, UK: Penguin Books.
- Breuilly, J. (1985). Nationalism and the state. Chicago: University of Chicago Press.
- Brubaker, R. (1996). Nationalism reframed: Nationhood and the national question in the new Europe. Cambridge, UK: Cambridge University Press.
- Bull, H., & Watson, A. (Ed.). (1976). The expansion of international society. Oxford, UK: Clarendon Press.



- Chatterjee, P. (1993). The nation and its fragments: Colonial and postcolonial histories. Princeton, NJ: Princeton University Press.
- Clarke, D., & Jones, C. (Eds.). (1999). The right of nations: Nations and nationalism in a changing world. New York: St. Martin's Press.
- Deutsch, K. W. (1961). Social mobilization and political development. American Political Science Review, 55(3), 493–514.
- Duara, P. (1995). Rescuing history from the nation: Questioning narratives of modern China. Chicago: University of Chicago Press.
- Duara, P. (2003). *Decolonization: Perspectives from now and then*. London: Routledge.
- Eley, G., & Suny, R. G. (Eds.). (1996). Becoming national: A reader. Oxford, UK: Oxford University Press.
- Gellner, E. (1983). Nations and nationalism. Ithaca, NY: Cornell University Press.
- Hobsbawm, E. (1990). *Nations and nationalism since 1780*. Cambridge, UK: Cambridge University Press.
- Leifer, M. (2000). Asian nationalism: China, Taiwan, Japan, India, Pakistan, Indonesia, the Philippines. New York: Routledge.
- Smith, A. D. (1986). *The ethnic origins of nations*. Oxford, UK: Blackwell. Tilly, C. (Ed.). (1975). *The formation of national states in western Europe*.

Princeton, NJ: Princeton University Press.

Native American Religions

S uch a complex topic as understanding historical consciousness in Native American religions begins with two major insights. First, the religions of the over one thousand indigenous societies of the American hemisphere involve concepts and practices that cannot be separated from the spheres of life in those societies termed economic, political, cosmological, and artistic. Lifeway is used here to indicate this seamless interweaving of the spiritual and the historical. Second, history can be recorded and transmitted in forms other than writing, There are, for example, the winter counts on bison hides among the North American Plains peoples, *quipu* or knottying of narratives among Andean peoples, and the screenfold picture books of preconquest Mexico. All of these historical expressions have oral myth-telling at their core.

Diversity of Native American Religions

The term "Native American" suggests homogeneous societies, but the native communities of North, Central, and South America are extremely diverse in their lifeways. For example, the archaeological record gives evidence of major cultural and civilizational developments in central Mexico associated with the pyramids at Teotihuacan (200–900 CE), Toltec sites (900–1000 CE), and the massive pyramidal structures built by Mayan peoples in Yucatan, Guatemala, and Belize (300–900 CE). Archaeological evidence in South America suggests that interactions of Amazonian cultures are as complex and old as those in the Andean highlands that led to the late Incan empire. Moreover, while North and Central America were home to over five hundred native languages, South America has over eight hundred indigenous languages.

In the region of the current United States alone, the diversity of cultural-historical developments is ancient and impressive. An indigenous culture named Hopewell (200 BCE-400 CE), based on corn agriculture, piled soil to create burial and effigy mounds in the central Ohio River watershed. A cultural florescence called Mississippian (600–1400 CE) left temple mounds from the Gulf of Mexico up the Mississippi River to the current state of Wisconsin. Similarly, in the Southwest cultures now called Anasazi and Kayenta (400-1300 CE) built remarkable cliff and pueblo dwellings at many sites including Mesa Verde in Colorado, Chaco Canyon and Montezuma in New Mexico, and Keet Seel and Betatikin at the Navajo National Monument in Arizona. Finally, the pottery skills and irrigation canals for agriculture of the T'ohono ancestors sometimes named Mogollon and Hohokam (100-900 CE) are still used. The progeny of these ancestral archaeological cultures migrated into diverse settings, continued ancient visions, and developed distinct religious concerns.

Religious Differences Among Native Americans

The North American Plains native peoples place a greater emphasis on individual visions and their relationships, in the symbolism of the circle, with the well-being of the community of life. The Northwest coast peoples celebrate a human community's privileges and obligations in a universe of giving subtly imaged as worlds within worlds symbolically imaged as boxes within boxes. Southwest Puebloan peoples stress processes of nurturing rain and corn-growth in communitarian ethics and ritual cycles that connect with ancestral histories. Southeastern native peoples continue ancient ceremonies of the first corn of the season, the Green Corn, at which they light the new fire of the community as a cosmological act revivifying creation.

Northern sub-Artic and Artic peoples produced elaborate technologies (e.g., seal hunting, snowshoes, toboggan, igloo) developed for survival in that harsh cold climate as well as intense shamanistic healing practices. A variety of terms are used to refer to all of these peoples in an effort to suggest shared similarities, such as American Indian, First Peoples, and First Nations. The most appropriate terms that honor their differences are those used by the peoples themselves, e.g., Anishinabe (Ojibway), Lakota (Sioux), Yup'ik (Eskimo), Muskogee (Creek), and Haudenosaunee (Iroquois).

Lifeway as the Context of Native American History

The term "religion" suggests that the sacred can be separated from ordinary or profane life. However, among Native American peoples the sacred, the appearance of the extraordinary, and the most meaningful values of life are inextricably intertwined with the pragmatic concerns of daily existence.

Thus, the ordinary pursuit of sustenance, the making of useful objects, as well as political decision-making may be charged with the presence and power of that which moves the cosmos. The term "lifeway" indicates this close connection of the spiritual awareness of cosmological forces as the key to understanding the meaning of both individual lives and larger societies.

From Denial to Ethnography

Early European studies of Native American societies from the late-fifteenth-century encounter period often reported that historical consciousness and religion did not exist among these peoples. This rejection of religion and systematic remembrance of the past among Native American peoples largely derived from the dominance of the Bible in European worldviews as the singular, literate revelation in which all of world history was revealed. Thus, when unknown peoples were encountered they were explained by locating them within the Bible.

Gradually, the significance of the encounters and the striking differences of native peoples caused Europeans to rethink their own identities and to reflect on their own historical past. The European Enlightenment and scientific worldview from the eighteenth century gave rise to ethnographic analyses of the societies and religious activities of distinct native peoples. Influenced by nineteenthand early-twentieth-century anthropology, the historical studies of Native American societies from this period often presented a single informant's remembered culture as normative and timeless for that whole society. These idealized perspectives tended to freeze Native American lifeways as unchanging over time.

Ethnohistorical studies have critiqued these static interpretations by simply presenting the changing descriptions of native peoples within written Euro-American historical records themselves. These academic investigations are significant, but they are strikingly different from native modes of historical remembrance. In fact, many researchers manifest an ahistorical bias that does not allow them to understand the deep historical visions embedded in Native American lifeways. Some of these native modes of historicity are consciously articulated while others are more performative and symbolic. Often these native modes of remembering and transmitting the deeper meanings of their cultures resisted the historical impositions of dominant societies.

History Among Native American Religions

1. From Native American perspectives the question "What ways of knowing history are embedded in Native American religions?" generates strikingly different responses. (For examples, see Mihesuah, Nabokov, and Thornton in Further Reading.) While not exhaustive, these are some considerations for under-

The Origins and Purpose of the Hopi Flute Society

The first responsibility of the Flute Society... is to help mature the crops by bringing the last summer rains and warming the earth by singing the songs that evoke heat, supplemented by the power of feathers taken from tropical birds. The second and most dramatic purpose is to enact mankind's Emergence to this present Fourth World. From this derives the origin and composition of the Flute Society.

When the Third World was destroyed by water, mankind emerged to the Fourth World by crossing the water in reed rafts to the shore of this continent. The place of Emergence was in the warm country to the south, believed to have been Central America. The people then separated into various groups to begin their migrations over the continent.

Those going north under the guidance of Spider Woman included members of the Spider Clan, the Ghost Clan—sometimes known as the Fire Clan the Sun Clan, Blue Flute Clan (another segment comprising the Gray Flute Clan separating and going east), and Snake Clan. After traveling as far as they could go, they attempted to melt the arctic ice cap by evoking the powers given them: the Sun Clan using the power of the sun, the Fire Clan the inner heat of the earth, and the Blue Flute Clan playing the flute, singing the songs, and using the feathers of tropical birds, which evoke heat. Four times they tried and failed, so they turned back south again.

Turning east, the Blue Flute Clan met the minor Gray Flute Clan and recounted their experiences. They were reminded that they had failed because their efforts were not in accord with the Creator's plans, and that they had done wrong in using their supernatural power before coming to the right place. The Gray Flute Clan accordingly assumed leadership of the two clans. After migrating to Oraibi and demonstrating their powers, both clans were accepted, but ever since then the Gray Flute Clan has been predominant over the Blue Flute Clan.

Like the Snake-Antelope Societies, the Gray and Blue Flute Societies conduct ceremonies apart: the former in separate kivas, the Blue Flute in its kivas, and the Gray Flute in its leader's home on the east side of the plaza next to the Sun Clan leader's home; but they combine on the last day, when the ceremony is held outside.

Source: Waters, F. (1963). Book of the Hopi (p. 211). New York: Viking Press.

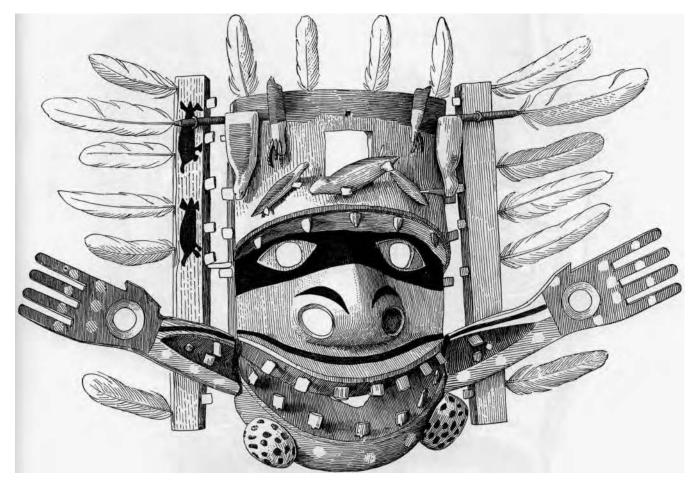
standing the history of "Native American religions" from the standpoints of native communities and individuals: Native American religions begin and end with living peoples who speak of the origins of the world and themselves as present realities.

- 2. This historical consciousness is now both oral and literate, but in both instances it is told by native voice and not locked in library texts or museum holdings of mainstream societies.
- 3. Discussion of rituals, myths, sacred objects, songs, and seminal places and ideas all hold historical insight for native peoples. Unlike academic history that attempts to describe objectively events, religious objects, and narratives, native historical awareness often sees them as persons deserving respectful treatment, even avoidance if one is not qualified to approach or embrace them.
- 4. Native history typically makes connections that seem atemporal to Western academic perspectives, but that actually link past, present, and future like a "hypertext" in which past or future events stand in immediate relationship with the present with regard to meaning, causality, and consequence. This shape-shifting and multivocal character of native narratives is not simply a matter of style of literature but indicates ways of perceiving the world that are creatively different.
- 5. Place occupies a central role in native historical consciousness. In native understanding the sensual engagement with place is an act of cultivation that may bring an individual or group to realization of cosmological values embedded in the lifeway. Sacred places provide foundational insight into that which gives identity to native peoples. This is unlike the passive, objective roles of the environment in Western

historical thought, in which the subjective human constructs, manipulates, and imposes meaning on place.

Narratives as Present Realities

Regarding the first point: the ways in which native peoples present themselves in remembered form are the myths of origin and legends of historical events considered to have happened since humans arrived. The historicity of myths and legends is a major stumbling block for most Western historians. For example, the Tewa anthropologist Alphonse Ortiz, in recounting the San Juan Pueblo origins, gave a strikingly simple and direct account of his people, saying: "In the very beginning we were one people. Then we divided into Summer people and Winter people; in the end we came together again as we are today" (Ortiz 1969, 29). Understanding this complex mythological statement involves research into Tewa language, myth, social structure, political governance, and religious ecology. That is, the myth provides insight into the living social structures of San Juan Pueblo, and the myth provides formative insight into Puebloan understanding of who they are as a people from the origin time into their present homeland.



Drawing of an Inuit mask from Alaska of a supernatutral being that controlled the supply of game. The carvings of seal attached to the mask suggest that the wearer of the mask seeked to obtain supernatural help for a good seal hunt.

The Jemez Pueblo historian Joe Sando observed that:

If we accept Native North American oral history...then we can start with the ancient people who have been in North America for many thousands of years and still allow for European and Mediterranean colonists to strengthen or boost the developing culture. This appears to be what indigenous people have been saying in their oral history. But later Europeans with their "proof positive" and "show me" attitudes have prevailed, and remain largely unwilling to consider, much less confirm, native creation accounts (Sando 1982, 2).

Sando claims a literalist interpretation for myth based on the living presence of his people in their ancestral Pueblo homes. Acceptance of the historicity of myths is a major challenge for historians, but it also opens the possibility for "seeing with a native eye" the historical facts embedded in these stories (Capps 1976, 9).

The Oral Native Voice

The second point draws attention to the need for native voice in reconstructing Native American religious history. Deep authenticity and fragility of native voice are found in the oral narratives that transmit the creation stories, legends, and tales of the people. Actual native voice, layering of stories within stories, and the immediacy and intimacy of oral narratives are crucial correctives to a view of native history that abhors subjective interpretation, ambiguity of outcome, and experiential voice as authoritative.

When oral stories are labeled myths it accentuates their sacred, revelatory character, but that term may also situate the stories as timeless, unchanging, and permanently past. When native peoples narrate stories of origins they may or may not be evaluated according to their conformity to traditional versions. Often narrations are accompanied by rituals that emphasize the living, present character of the beings, places, and events named. Thus, among a number of native nations there are animaladdressing, place-naming, ethic-declaiming narratives that accompany major rituals. These should not be seen as either simply describing past events or as objectively categorizing land, animals, or laws.

For example, the Midewiwin ceremony of the Anishinabe peoples of the Great Lakes region transmitted narratives of these tribes' origin-migration. Named geographical locations not only indicate where the ceremony had been performed but they are also honored as significant stopping places of sacred, spirit beings (Manitou). In effect the ceremony of Midewiwin validated the migration and formation of this Great Lakes people by appealing to the ancient spiritual animal masters. Midewiwin has been described as an "extinguished" ceremony in some academic works, but native practitioners have reasserted the contemporary survival and relevance of this ceremonial complex. While not all Anishinabe religiosity can be collapsed into Midewiwin, the revitalization of this ceremony in the contemporary period accentuates an emphasis in native religious understanding that formative cosmological experiences endure into the present and identify living people as much as ancestors, according to Wub-e-ke-niew in We Have the Right to Exist.

Cosmological Narrative and Song

The third point draws attention to the interactions of rituals, myths, sacred objects, songs, and seminal places and ideas as having the status of "persons" in Native American religions. While this complex of relations is differently expressed among particular peoples, one striking example comes from the Gitskan peoples of central British Columbia.

Each Gitksan house is the proud heir and owner of an *adáox*. This is a body of orally transmitted songs and stories that act as the house's sacred archives and as its living, millennia-long memory of important events of the past. This irreplaceable verbal repository of knowledge consists in part of sacred songs believed to have arisen *literally from the breaths of the ancestors*. Far more than musical representations of history, these songs serve as vital time-traversing vehicles. They can transport members across the immense reaches of space and time into the dim mythic past of Gitskan creation *by the very quality of their music and the emotions they convey* (Wa and Delgam 1987, 7).



A Native American pictograph depicting a ceremony meant to give thanks to the Great Spirit. Ideas like the Great Spirit were not indigenous but were borrowed from Christianity and merged with indigenous beliefs.

Taken together, these sacred possessions—the stories, the crests, the songs—provide a solid foundation for each Gitskan house and for the larger clan of which it is a part. According to living Gitskan elders, each house's holdings confirm its ancient *title to its territory and the legitimacy of its authority over it.*

In fact, so vital is the relationship between each house and the lands allotted to it for fishing, hunting, and foodgathering that the *daxgyet*, or spirit power, of each house and the land that sustains it are one (Wa and Delgam 1987, 26).

The historical testimony of this complex of songs and rituals connects architecture and traditional environmental knowledge. Gitskan elders voice their concerns in these religious performances for the cosmological and historical continuity of community vitality.

The Linkage of Past, Present, and Future

Regarding the fourth point, namely, the simultaneity of memory in Native American Religions, the Pawnee/ Otoe author Anna Lee Walters wrote that she: discovered two principal sequences of tribal history. The first starts at the beginning and works its way toward the present. The second starts with the present and works its way back to the beginning. Although there may be discussions on the history of the people moving to a particular place, for example—isolated events—often these historical notes seem to be just that until they are pinned down in this large framework (Walters 1992, 77).

Interpreting these dynamics of native historicity may necessitate abandoning chronological, linear, interpretive-building emphases on personalities, events, or social and economic forces. In the time-linkage narratives of Native American lifeways the primary focus is more typically on seminal realities of place, action, and spiritual presence. Rather than ideas or mental constructs as primary, the mutual participation of humans and the beings of the earth opens a way toward understanding the wisdom of history.

A striking illustration of this complex linkage is the tobacco symbolism found throughout the American hemisphere. In one particularized expression of tobacco ceremonialism the shaman-healers of the Warao peoples of the Orinoco Delta in Venezuela describe the history of human consciousness as beginning in the House of Tobacco Smoke. When a Warao shaman applies tobacco smoke to a patient or a victim, he breathes a cosmological force that simultaneously reaches back to primordial origins, heals in the present, and establishes ethical responsibilities and orientations into the future. For the Warao wisdom-keepers tobacco symbolism is a linkage to an archaic shamanistic substratum that still extends throughout the American hemisphere, according to Wilbert in *Mystic Endowment* (1993).

Place and Historical Consciousness

Finally, a widespread cultural activity among Native Americans that provides exceptional insight into their historical consciousness is sensing place. Native sensing of place is a daily, lifeway engagement with the local landscape as a means of cultivation of self and community. Ordinary lifeway interactions with local places are charged with stories that transmit ethical teachings, community identities, and cosmological presences.

The felt authority of the past in a particular place is communicated with humor and poignancy by the Western Apache, whose understanding of place is likened to drinking deeply of the ancestral wisdom that resides there. Such wisdom cannot be taught by rote but is awakened by engaging place deeply with all of the senses, with one's body. This is a historical consciousness that acknowledges informative ideas rising up from soil, that filters stories linked to places through one's own emotions, and that searches visually and intellectually for a whole understanding. After hearing a story of an Apache ancestor who fooled Coyote by enticing him to look up at her in a tree, Keith Basso describes how an Apache wisdom teacher, Dudley Patterson, affirmed his deep yearning to know the historical presence in places, saying:

"Our Ancestors did that!" Dudley exclaims with undisguised glee. "We all do that, even the women and children. We all look up to see her with her legs slightly apart. These places are really very good! Now you've drunk from one! Now you can work on your mind." ... As vibrantly felt as it is vividly imagined, sense of place asserts itself at varying levels of mental and emotional intensity. Whether it is lived in memory or experienced on the spot, the strength of its impact is commensurate with the richness of its contents, with the range and diversity of symbolic associations that swim within its reach and move it on its course. (Basso 1996, 143, 145)

Thus, Native American lifeways provide multiple ways of thinking about history, namely, in terms of the precontact history of Native American societies, the history of the encounter with European cultures, and the modes of historical consciousness embedded within Native American religions themselves.

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See also Art—Native North America

Further Reading

- Asatchaq. (1992). The things that were said of them: Shaman stories and oral histories of the Tikigaq. Berkeley: University of California Press.
- Basso, K. (1996). Wisdom sits in places: Landscape and language among the Western Apache. Albuquerque: University of New Mexico Press.
- Capps, W. (1976). Seeing with a native eye: Essays on Native American religion. New York: Harper Forum Books.
- Hill, J. D. (1988). *Rethinking history and myth: Indigenous South American perspectives on the past.* Urbana: University of Illinois Press.
- Hoxie, F. E. (1988). *Indians in American history*. Arlington Heights, IL: Harlan Davidson.
- Mihesuah, D. A. (1998). Native and academics: Researching and writing about American Indians. Lincoln: University of Nebraska Press.
- Nabokov, P. (2002). A forest of time: American Indian ways of history. Cambridge, UK: Cambridge University Press.
- Ortiz, A. (1969). *The Tewa world: Space, time, being, and becoming in a Pueblo society.* Chicago: University of Chicago Press.
- Sando, J. S. (1982). *Nee Hemish: A history of Jemez Pueblo*. Albuquerque: University of New Mexico Press.
- Thornton, R. (1998). Studying native America: Problems and prospects. Madison: University of Wisconsin Press.
- Wa, G., & Delgam, U. (1987). The spirit of the land: The opening statement of the Gitskan and Wets'uwetén hereditary chiefs in the Supreme Court of British Columbia. Gabrola, BC: Reflections.
- Walters, A. L. (1992). Talking Indian: Reflections on survival and writing. Ithaca, NY: Firebrand Books.
- Wilbert, J. (1993). Mystic endowment: Religious ethnography of the Warao Indians. Cambridge, MA: Harvard University Center for the Study of World Religions.
- Wub-e-ke-niew. (1995). We have the right to exist: A translation of "Aboriginal indigenous thought," the first book ever published from an Ahnishinahbaeotjiway perspective. New York: Black Thistle Press.

Natural Gas

N atural gas is a flammable mixture of hydrocarbon gases, formed primarily of methane (CH4) and produced by the anaerobic decay of organic material over the course of millions of years. The history of natural gas goes back in time at least 3,000 years, to the ancient civilizations of India, Greece, Persia, and China. However, extensive use of natural gas only occurred following the 1960s. Today, at the beginning of the third millennium, with 34 percent of the world's proven natural gas reserves located in the Middle East, 42 percent in Europe and the former Soviet Union, and 3 percent located in the United States, natural gas fulfils a vital role in the global supply of energy.

When early civilizations first came across natural gas seeping out from under the earth's surface through fissures in rock and in the form of mysterious flames, they believed it to emanate from supernatural powers. Such experiences with natural gas flames were especially common in ancient India, Greece, and Persia. However, around 600 BCE the Chinese learned to use natural gas flames to boil brine, separating out the salt and providing drinkable water. Indeed, Confucius wrote of wells 100 feet deep along the Tibetan border.

In 1785 Britain was the first country to commercialize the use of natural gas, using it to light up houses, streets, and the like. Some four decades later, in 1816, natural gas started to be used for street-lighting in the United States. Natural gas was first discovered in North America as early as 1626, when explorers observed that Native Americans in the area of Lake Erie were igniting gases that seeped out from the earth's surface. However, the first natural gas well was only dug in the United States in 1821, in Fredonia, New York, by William Hart. On 27 August 1859, Edwin Drake found both natural gas and oil at some sixty-nine feet below earth's surface. Drake's findings marked a new age for natural gas production in North America. Prior to his work, natural gas was primarily produced from coal. In order to commercialize his well's capacity, a pipeline was built from the well to a nearby village, Titusville, Pennsylvania.

Generally speaking, in the nineteenth century it seemed that natural gas was about to gain a vital role in Europe and North America as a lighting fuel for homes and public streets. However, its role was limited due to the difficulty in transporting it from the well to its endusers, as the existing pipeline infrastructure was not capable of doing the job. Moreover, with the advent of electric power in the 1880s, natural gas lights were replaced by electric lights.

As natural gas had lost its role as a lighting source, the natural gas industry searched for new uses for its product. In 1885 Robert Bunsen invented a device that used natural gas for cooking and heating, allowing its flame to be regulated. The Bunsen burner diversified the potential benefits of natural gas and encouraged the global demand for it. However, the difficulty in transporting gas to its potential users continued to restrict its actual usability.

Improvements in pipe-making, metals, and welding technologies during World War II made pipeline construction more economically attractive. Thus, after the war the world began building an extensive network of gas pipelines. Today, this network consists of over 1 million miles in the United States alone (enough to stretch to the moon and back twice). Moreover, the utilization of natural gas was diversified to include water heating, space heating and cooling, and as a fuel for generating electricity. The transportability of natural gas opened the possibility of using it for a variety of home appliances for oven ranges and clothes dryers, for example.

The oil shortages of the 1970s turned the world's attention toward ways of conserving energy, while a search for cheaper, more available energy sources also began. The rise of the environmental awareness in the 1960s and 1970s further impacted the energy industry, encouraging the development of energy generation sources that would be less polluting. As a result of these developments, natural gas became the preferable fuel for energy generation.

Continued oil shortages and concerns about environmental quality are expected to further increase the need for natural gas. Changes in the generation segment of the power industry, such as turning to fuel cells, which are combustion-free, and the quest for pollution-free power generators capable of being sited at the end-user's place of consumption, also are expected to increase our reliance on natural gas.

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See also Energy

Further Reading

- Castaneda, C. J., & Smith, C. M. (1996). Gas pipelines and the emergence of America's regulatory state: A history of Panhandle Eastern Corporation: 1928–1993. Cambridge, UK: Cambridge University Press.
- Clark, J. A. (1963). The chronological history of the petroleum and natural gas industries. Houston, TX: Clark Books.
- Herbert, J. H. (1992). Clean cheap heat: The development of residential markets for natural gas in the United States. New York: Praeger.
- MacAvoy, P. W. (2000). The natural gas market: Sixty years of regulation and deregulation. New Haven, CT: Yale University Press.
- Peebles, M. W. H. (1980). Evolution of the gas industry. New York: New York University Press.

Natural Law

Generally speaking, the Natural Law comprises universal, objective, and necessary moral truths, which define proper personal conduct or the fundamentals of political association. By necessity, this statement is an oversimplification because the meaning and import of the Natural Law has evolved throughout the history of Western civilization—from its genesis in ancient Greece and Rome to its modern, post-modern, and relativist twentieth-century forms. The Natural Law pervades the Western philosophical tradition as an alternative to subjectivist, cynical, or skeptical theories about human behavior and political association.

Natural Law in Ancient Greece and Rome

Although numerous cultures had recognized the basic dichotomy between law as an artifact and law existing outside and independent of human society, ancient Greek culture was the first to raise this distinction as a purely philosophical question. The issue of how to live "the good life" (*eudaimonia*) fascinated the ancient Greeks. The philosophy of Natural Law concluded that *eudaimonia* consisted in "living in agreement with nature." Before Natural Law was explicitly defined in philosophical terms, it was largely implicit in Greek culture, as revealed in Sophocles's *Antigone* and in the pre-Socratic metaphysical debates concerning the static or mutable nature of the universe. It was also implicit in Aristotle's (384– 324 BCE) distinction between natural and legal justice. Throughout, the Greeks repeatedly contrasted universal truths grounded in an objective and unchanging reality with subjective beliefs based in mutable facts or on contingent social customs.

In the Hellenistic Era (323–31 BCE), Zeno of Citium (334–262 BCE) explicitly conceived of Natural Law as a central concept of his Stoic school of philosophy. The Stoics maintained that the universe was structured and organized according to rational laws, which were knowable via the one human faculty that shares in this universal reason—the rational mind. These universal, absolute, unchanging laws constituted the "Natural Law," and living in agreement with nature (as structured by the Natural Law) was the good life.

Although the Stoics gave birth to the formal concept (and phrase) "Natural Law," they are not responsible for the long-standing impact that it would have on moral and political philosophy over the next two millennia. The reason is that the original Stoics were determinists. Thus, they believed that living in agreement with nature was solely an issue of aligning one's internal mental states with the events of the external world that were necessarily determined by Natural Law. The Stoic ideal was the happy tranquility (*apotheia*) of the person who simply accepts the world for what it is and has to be. There was no role for social or political philosophy in this worldview.

The Romans were heavily influenced by Stoicism, and some of the most prominent Stoic philosophers in the Western canon are Romans, such as Seneca (3 BCE–65 CE), Epictetus (55– c.135 CE), and Marcus Aurelius (161– 180 CE). The most prominent Roman Stoic is the lawyer and philosopher Marcus Tullius Cicero (106–43 BCE).

As a lawyer, Cicero rejected Stoic determinism but found the Stoic concept of Natural Law vitally important

John Locke's Second Treatise on Civil Government

The enormous scientific and intellectual advancements made in France and England during the seventeenth century—the Enlightenment (or Age of Reason)—were critical in terms of man's need to test his theories against knowledge empirically rooted in the natural world. Thinkers such as Voltaire, Rousseau, Montesquieu, and Jefferson applied this scientific approach to political and social issues, and so arose the liberal beliefs in a sense of human progress and that the state could be a rational instrument in bringing peace to the whole of society.

The Englishman John Locke (1632-1704), the foremost of these new political thinkers, elaborated upon the view of Sir Francis Bacon that all knowledge is founded on and ultimately derives itself from sense. While Locke's Second Treatise on Civil Government (1690) set forth his belief in the natural morality of pre-social man, he also thought it best for an individual to contract into civil society by surrendering personal power to a civil government. For Locke, this was a more efficient way of securing natural morality. Moreover, Locke's belief that ruling bodies that offend natural law must be disposed was to some extent the philosophical basis for both the American and French Revolutions of the late eighteenth century, and was embodied in the U.S. Constitution of 1787. The excerpt below, from Chapter VII (Of Political or Civil Society) of Locke's Second Treatise, sets forth his basic ideas on the relationship between man, government, and civil society.

Those who are united into one body, and have a common established law and judicature to appeal to, with authority to decide controversies between them and punish offenders, are in civil society one with another; but those who have no such common appeal, I mean on earth, are still in the state of Nature, each being where there is no other, judge for himself and executioner; which is, as I have before showed it, the perfect state of Nature.

. . . Wherever, therefore, any number of men so unite into one society as to quit every one his executive power of the law of Nature, and to resign it to the public, there and there only is a political or civil society.

Source: Locke. J. (1690) Second treatise on civil government. Retrieved from http://libertyonline.hypermall.com/Locke/second/second-frame.htm

for practical morality and politics. As the Natural Law comprised what Cicero called "right reason," it was applicable to (and was accessible by) all people in all places at all times. Thus, it became key to grounding political theory in a moral theory based on a universal human attribute: the human mind or, more precisely, the human capacity for reason.

This conception of Natural Law soon found a role in the unique and revolutionary tripartite division of sociopolitical rules developed by the Romans. In political and legal practice, the Romans had already conceptualized two types of law: the law of nations (*jus gentium*), an embryonic version of international law, and the civil law (*jus civile*), the particular laws of each sovereign empire or kingdom. Cicero's conception of Natural Law (*jus naturale*) was incorporated into this structure, serving as a universal, absolute moral foundation for both the law of nations and the civil law. For the first time in Western thought, a universal and absolute moral law was applied to all political institutions and laws.

The Modern Theory of Natural Law

Early Church Fathers, such as St. Ambrose of Milan (c. 340–397 CE), utilized Cicero's version of Natural Law to justify the emerging Christian Roman Empire. The concept largely disappeared, though, from philosophical—and what became theological—work for much of the Medieval Era, and was replaced by the Christian conception of Divine Law. Natural Law would reemerge after the turn of the first millennium in the work of Master Gratian (c. twelfth century), and, most importantly, in the work of St. Thomas Aquinas (c. 1225–1274). Aquinas synthesized Christian theology with rediscovered antiquarian texts, including those of the Stoics and Roman jurists. The result was the explicit reintroduction

of Natural Law into Western philosophy, but in a way that accommodated the now-dominant moral conception of the Divine Law.

Aquinas redefined the ultimate universal law as the Eternal Law, from which derived both the Divine Law and the Natural Law. Bifurcating Divine Law and Natural Law would have profound implications for the development of modern political theory. On the one hand, the Divine Law was the universal moral foundation for personal salvation, as guided by the rules set forth in the Decalogue and in the commandments of the New Testament. The Divine Law applied to human-made law, according to Aquinas, but only insofar as political and legal rules affected a person's ability to ascend to heaven. In this way, there was some overlap in the content of the Natural Law and the Divine Law.

On the other hand, Natural Law comprised abstract moral principles necessarily intrinsic in the temporal world and ascertainable by reason, and from these rational principles, people deduced proper socio-political rules. Natural Law was the universal moral foundation for human-made law. As Aquinas would declare (quoting St. Augustine (354–430), "An unjust law is no law at all."

This distinction between Divine Law and Natural Law matured in the seventeenth century in the work of Hugo Grotius (1583–1645), Samuel Pufendorf (1632–1694), and John Locke (1632–1704). It was now possible to provide reasoned analyses of the normative requirements of political systems and laws without reliance on particular, and most likely disputed, religious doctrine. Grotius, recognized as the "father of modern rights," argued that Natural Law required respecting each individual's life and liberty (*suum*) and property (*dominion*), which were identified as "Natural Rights."

Pufendorf systematized Grotius's arguments, producing an original and intricate Natural Law/Natural Rights philosophy. His magnum opus, *On the Law of Nature and of Nations,* explained how Natural Rights justified civil society and its myriad legal rules; this text would serve as the principal legal treatise in Europe and would be often cited by English and American judges up through the late nineteenth century. Finally, Locke's *Second Treatise on Civil Government* established Natural Law/Natural Rights theory as a normative foundation for limited, democratic government and the rule of law. Locke's political philosophy was the fountainhead for the Founding Fathers' creation of the United States of America.

The Nineteenth and Twentieth Century

In the nineteenth century, Natural Law philosophy waned with the rise of utilitarianism and related positivist doctrines. Jeremy Bentham (1748–1832) famously declared that Natural Rights were "nonsense on stilts." Legal positivism in particular directly challenged the central premise of Natural Law— the necessary connection between moral rules and socio-political rules. For legal positivists, such as John Austin (1790–1869 CE), legal rules can be analyzed and assessed without reference to, or reliance on, moral principles. The only law is human-made law, which is conceptually distinct from moral theory.

This raised questions about whether it was possible to form universal moral judgments about differing political systems or rules, which became a particularly salient concern with the rise of totalitarian regimes in the twentieth century. Following World War II, the Natural Law was called upon to condemn Nazi atrocities. Thus, in the second half of the twentieth century, there was a revival of scholarly interest in the Natural Law. Ronald Dworkin advanced the proposition of the inescapability of moral theory in legal decisionmaking. John M. Finnis developed a version of Natural Law more closely aligned with the moral dictates of the Catholic Church, but other contemporary Natural Law scholars dispute his views on these matters. As it has since the time of Cicero, Natural Law continues to offer universal, absolute moral rules for evaluating political institutions and humanmade laws.

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Further Reading

Aquinas, T. (1988). *On law, morality, and politics* (W. P. Baumgarth & R. J. Regan, Eds.). Indianapolis, IN: Hackett.

- Aristotle. (1941). Nicomachean ethics. In *The basic works of Aristotle* (R. McKeon, Ed., & W. D. Ross, Trans.). New York: Random House. (Original work written 350 BCE)
- Buckle, S. (1991). Natural law and the theory of property. Oxford, UK: Clarendon Press.
- Burns, J. H. (Ed.). (1988). The Cambridge history of medieval political thought. Cambridge, UK: Cambridge University Press.
- Burns, J. H. (Ed.). (1991). The Cambridge history of political thought, 1450–1700. Cambridge, UK: Cambridge University Press.
- Cicero, M. T. (1976). On the commonwealth (G. H. Sabine & S. B. Sabine, Eds. & Trans.). New York: Macmillan. (Original work written 54 BCE)
- Dworkin, R. A. (1977). Taking rights seriously. Cambridge, MA: Harvard University Press.
- Dworkin, R. A. (1982). "Natural" law revisited. University of Florida Law Review, 34(2), 165–188.
- Farquharson, A. S. L.(Trans.). (1998). The meditations of Marcus Aurelius. Oxford, UK: Oxford University Press.
- Finnis, J. (1980). Natural law and natural rights. Oxford, UK: Clarendon Press.
- Gratian. (1993). The treatise on laws (Decretum DD. 1–20) with the ordinary glos. (A. Thompson & J. Gordley, Trans.). Washington, DC: Catholic University of America Press.
- Grotius, H. (1925). *The law of war and peace* (F. W. Kelsey, Trans.). Oxford, UK: Clarendon Press. (Original work published 1625)
- Grotius, H. (2004). The free sea (D. Armitage, Ed., & R. Hakluyt, Trans.). Indianapolis, IN: Liberty Fund. (Original work published 1633)
- Haakonssen, K. (1996). Natural law and moral philosophy: From Grotius to the Scottish enlightenment. Cambridge, UK: Cambridge University Press.
- Johnson, H. J. (Ed.). (1987). The medieval tradition of natural law. Kalamazoo: Western Michigan University Press.
- Kretzmann, N., Kenny, A., & Pinborg, J. (Eds.). (1982). The Cambridge history of later medieval philosophy. Cambridge, UK: Cambridge University Press.
- Locke, J. (1988). Two treatises of government (P. Laslett, Ed.). Cambridge, UK: Cambridge University Press. (Original work published 1690)
- Locke, J. (1990). Questions concerning the law of nature (R. Horowitz, J. S. Clay, & D. Clay, Eds. & Trans.). Ithaca, NY: Cornell University Press. (Original work published 1664)
- Long, A. A., & Sedley, D. N. (Eds. & Trans.). (1987). The Hellenistic philosophers (Vol. 1). Cambridge, UK: Cambridge University Press.
- Pufendorf, S. (1934). On the law of nature and nations (C. H. Oldfather & W. A. Oldfather, Trans.). Oxford, UK: Clarendon Press. (Original work published 1672)
- Pufendorf, S. (1991). On the duty of man and citizen (J. Tully, Ed., & M. Silverthorne, Trans.). Cambridge, UK: Cambridge University Press. (Original work published 1673)
- Pufendorf, S. (1994). The political writings of Samuel Pufendorf (C. L. Carr, Ed., & M. J. Seidler, Trans.). Oxford, UK: Oxford University Press.
- Rommen, H. A. (1998). *The natural law*. Indianapolis, IN: Liberty Fund.
- Seneca. (1995). Moral and political essays (J. M. Cooper & J. F. Procopé, Eds. & Trans.). Cambridge, UK: Cambridge University Press.
- Sophocles. (1996). Antigone. In *The Oedipus plays of Sophocles* (P. Roche, Trans.). New York: Meridian. (Original work written 442 BCE)
- Strauss, L. (1953). Natural right and history. Chicago: University of Chicago Press.

- Striker, G. (1987). Origins of the concept of natural law. In J. J. Cleary (Ed.), Proceedings of the Boston area colloquium in ancient philosophy (Vol. 2). Lanham, MD: University Press of America.
- Tuck, R. (1979). *Natural rights theories: Their origin and development*. Cambridge, UK: Cambridge University Press.
- White, N. P. (Trans.). (1983). *The handbook of Epictetus*. Indianapolis, IN: Hackett.

Nature

A ll cultures depend on the natural world—on plants and animals, on the weather, on the sun and the sea —for their sustenance. Likewise, each culture has creation stories that classify and provide ethical concepts about its place in the natural world. Western culture, however, beholds the multitude of universal laws, physical matter, and forms of life on Earth and attempts to express it all as a single concept called "nature." The cultural historian Raymond Williams, in his book *Keywords*, traces the changes in usage of the word *nature* in the English language from the thirteenth to the eighteenth century. He concludes that *nature* "is perhaps the most complex word in the language" (Williams 1976, 184).

Scholars of the history of concepts of nature often point to Asian cultures such as China and Japan to make the distinction between Eastern and Western concepts of nature. In their essay collection, Asian Perceptions of Nature, Ole Bruun and Arne Kalland find that no Asian culture has a single term that encapsulates all of nature. Kalland and S. N. Eisenstadt say that among the Japanese, "reality is structured in shifting contexts and even in discrete ontological [relating to existence] entities, as opposed to the absolutist Western approach" (Bruun and Kalland 1995, 11). Likewise, when a researcher asked villagers in Sri Lanka if they had one word "which means things such as forests, wild animals, trees, birds, grass and flowers," responses varied, including "thick jungle," "sanctuary," and "all sentient beings" (Bruun and Kalland 1995, 153).

The literature on the etymology (history of a linguistic form) of the word *nature* is complicated. *A Documentary*

Anne Bridge (Lady O'Malley): Peking Picnic

Ann Bridge (Lady O'Malley) was a diplomat's wife in the 1930s and became a popular novelist. Her first book, Peking Picnic, is a romantic story set in the city of Peking (Beijing) and the temple complex T'an Chüeh Ssu. The story takes place during a time when warlords were battling for control of China and the Communists were beginning to gain power. This extract reflects on the difference between European and Chinese perceptions of nature:

The delicate strange beauty of the whole landscape struck powerfully on her senses, rousing her to an active delight. What was the quality in this Chinese scene which so moved her, she wondered? She remembered with curious distinctness the distress she had felt during the first months of her sojourn in Peking at the sheer unfamiliarity of the face of Nature. Her mind, accustomed to draw nourishment from the well-known scenes of England, the great elms standing round the quiet fields, the broad sweep of distant downs, the white roads winding over the de Wint-like sky lines, dotted with rick and barn, to the huddle of red village roofs, had ranged eagerly, vainly, over the Chinese countryside, finding no resting place. She remembered how alien at first had seemed these dusty flat fields, unmarked by hedge or tree, and the prevailing brown tone of the landscape; how unnatural the sharpness of outlines in crystal-dry air; the vivid color of far-off mountain shapes-the soft aqueous blue of distances in a moist climate. The stylized formal beauty of it she had seen once-what had been lacking was beauty in familiarity, the richness of association entwined with sights and scents, going back through the quiet swing of the seasons to the enormous days and tiny pleasures of childhood, going back deeper and further still, blood of her English blood and bone of her English bone, to the very roots of life. Cut off from all that, planted down in a life as strange as the world she looked upon, she had wilted within like an uprooted plant. She could still remember her own astonishment at the depth of her distress, at finding how much the spirit depends for its strength on the changing but familiar beauty without, the face of the earth, the changeful face of the sky.

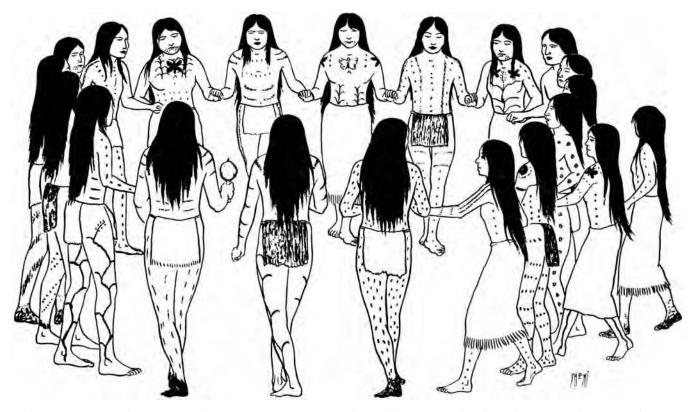
Source: Bridge, A. (1960). Peking Picnic (pp. 91–92). Pleasantville, NY: The Akadine Press.

History of Primitivism, Arthur O. Lovejoy's study of nature in Greek and Roman history, outlines the birth of the concept. The word *natura* meant "genesis, birth, origin." The Greek poet Homer (c. 700 BCE), in providing a physical description of an herb, also provided its character, its "nature." To the Greek dramatist Aeschylus (524–456 BCE), "nature" referred to visible characteristics that are assumed to be innate. The contrast between reality (nature) and appearance occurred as well. For example, the pre-Socratic philosophers distinguished between the appearance of a couch and the true nature of a couch the wood from which it is constructed. During this period people also came to think of nature as the entire cosmic system and its laws.

The English writer C. S. Lewis in his *Studies in Words* writes: "A comparatively small number of speculative Greeks invented *Nature*—Nature with a capital." This invention required "taking all things they knew or believed in—gods, men, animals, plants, minerals, what

you will—and impounding them under a single name; in fact, of regarding Everything as a thing, turning this amorphous and heterogeneous collection into an object or pseudo-object" (Lewis 1967, 35, 37). Clarence Glacken, in his *Traces on the Rhodian Shore*, reviews the force of the design argument in the history of nature from its emergence as early as the Greek historian Herodotus (484–425 BCE) through the seventeenth century CE. Teleological (relating to design or purpose) conceptions of the "purposefulness in the creation—that it was the result of intelligent, planned, and well-thought-out acts of a creator," including a sense of the fitness of nature to human needs, have been important in Western constructions of nature (Glacken 1967, 39).

From its beginning then the word *nature* referred to the whole material world and to intrinsic form and creative forces. One meaning of the word *nature* was enfolded within another. During the fourteenth century *nature* as "the essential quality or character *of* something" took on



The use of ritual to control nature is a cross-cultuiral universal. This drawing shows Tohono O'odham (Papago) of the desert of southern Arizona participating in a rain dance.

the additional sense of "inherent force." By the seventeenth century *nature* as the material world overlapped with *nature* as intrinsic form and creative forces. Thus, *nature*, which refers to a "multiplicity of things and creatures, may carry an assumption of something common to all of them" (Williams 1976, 185).

People also personify and abstract nature. The ancient Greek philosophers, taking a stance that was common in paganism at the time, believed that the natural world is alive, an all-encompassing animal with both mind and soul, binding animals (including humans) and plants in intellectual, psychic, and physical kinship. Plato (428/7-348/7 BCE) in his Timaeus conceived of the soul as female. Lovejoy suggests that the Roman orator Cicero (106-43 BCE) propelled the concept of nature as goddess from the Greeks into the eighteenth century. On the other hand, Carolyn Merchant, in The Death of Nature, traces the tradition from the Neoplatonism (Platonism modified in later antiquity to accord with Aristotelian, post-Aristotelian, and Eastern conceptions) of the Roman philosopher Plotinus (204–270 CE) to twelfth-century Christianity, which placed a female nature "as more powerful than humans, but... subordinate to God" (Merchant 1980, 10). Nature personified as female contains a good deal of ambiguity, being seen as chaotic and destructive, as innocent and tainted, and as an expression of the divine order. C. S. Lewis argued that this personification of nature as female has been the most difficult to overcome, but many environmental historians say the seventeenth and eighteenth centuries were the time when nature was most rigidly confined and its long history of vitalism (a doctrine that the functions of an organism are caused by a vital principle distinct from physicochemical forces) reduced.

Modern Times

Carolyn Merchant locates "the death of nature" in the rise of mechanical philosophy. Such philosophy is associated with the philosophers Francis Bacon (1561–1626) in England and Rene Descartes (1597–1650) in France. These men, critical of organic worldviews in which the world is personified as a forceful, living body, viewed nature as passive, inert matter that is acted upon by physical laws that are set in motion by a clockmaker deity. One result of the Scientific Revolution was that female nature was transformed "from an active teacher and parent...[to] a mindless, submissive body." That body was submissive first to God and then through God to humankind (Merchant 1980, 190).

Natural historians, strongly influenced by the explanatory power of mathematics and physics, continued to search for stable order in the rapidly increasing numbers of animals and plants that resulted from the voyages of discovery from the fifteenth to the nineteenth century. The Swedish botanist Carolus Linnaeus (1707–1778) created the first universally accepted system for organizing the members of living nature in an arrangement that apparently revealed God's design. Continuing a Greek tradition, however, Linnaeus viewed change in nature as fundamentally cyclical, always returning to the same starting point.

Mechanical philosophy located nature in mathematically based laws that play out in the physical world, in which the Earth can be understood through "a series of deductions from abstract premises" with little consideration for final causes and less interest in the abundance of life (Glacken 1967, 406). Although Linnaeus participated in the urge to render a nature ordered by abstract laws, he also inspired the rise of natural history by giving naturalists tools to organize their botanical discoveries. The obsession with documenting and organizing the abundance of life derives as well from a group of writers, many of them influenced by Linnaeus, who returned to classical ideas of organic nature, argued for final causes and design in nature, and sought them in observations of the sensory world. The Englishman John Ray (1627–1705), the leading natural theologian, in his The Wisdom of God in the Works of Creation (1691) emphasized the interrelatedness of animals, plants, and habitats as evidence of a wise creator. Naturalists who came later continued to investigate the intricacies of relationships in nature even as they moved away from the argument from design.

One of the most persistent characteristics of nature throughout the sixteenth to eighteenth centuries was the law of subordination. Lovejoy, in his *The Great Chain of* *Being,* outlines the belief that the deity appointed each species a fixed place in an eternal chain of being from the lowliest maggot through humans to God. The task of natural history was to fit new discoveries into the appropriate link in the chain. The environmental historian Donald Worster, in his *Nature's Economy,* traces the history of nature as both a sacred and an economic system from the Greek word for "house" *(oikos)* through its amplification to refer to household management, the political "oeconomy" of human societies, and nature's economy. Thus, Linnaeus, in his essay, "The Oeconomy of Nature" (1749), describes nature as the "earth household" in which God is the "Supreme Economist" who rationally ordered the cosmos and "the housekeeper who kept it functioning productively" (Worster 1985, 37).

By the beginning of the nineteenth century two scientists-the English geologist Charles Lyell (1797-1875) and the German geographer Alexander Von Humboldt (1769–1859)—began a discovery process that swept away the singular chain and the stable taxonomy (scientific classification) and led to questions about the role of a designing deity. In their footsteps walked the English naturalist Charles Darwin (1809-1882), who discovered a basic key to understanding the history of nature. Benefiting from Lyell's understanding of the age of the Earth's crust and its history of sometimes-violent change and from Humboldt's discoveries of geographical diversity and mutual dependency in plant groupings, Darwin sailed to the New World, arriving in 1835 at the Galapagos Islands, an isolated archipelago off the coast of Ecuador in South America. The creatures that he saw there were very like and yet very different from South American species. His observations led him to develop the theory that isolation, chance migration, and fit with a specific environment lead to the evolution of new species.

The English economist Thomas Malthus's (1766– 1834) An Essay on the Principle of Population gave Darwin the mechanism for evolution: the elimination of the weak and the survival of the fit. Darwin called this mechanism "natural selection." When he published On the Origin of Species in 1859, the objectified view of material life of the mechanical philosophers, as well as the eternally fixed singular chain of being of the natural theologians, was challenged by a world that Darwin called "an entangled bank, clothed with many plants of many kinds, with birds singing on the bushes, with various insects flitting about, and with worms crawling through the damp earth." The result was nature that, although partaking of universal, unchanging physical laws, had a distinctive history: "whilst this planet has gone cycling on according to the fixed law of gravity, from so simple a beginning endless forms most beautiful and most wonderful have been, and are being, evolved" (Darwin 1964, 489–490).

The Age of Ecology

Nature, in gaining history, regained some of the vitality that it had lost under the reign of mechanical philosophy. Darwin took the Linnaean conception of a stable chain of being and put it in motion through competition and co-adaptation. Donald Worster emphasizes the shift during the late nineteenth and early twentieth centuries to an imperfect nature-communities of competing lives that are contingent along axes of space and time. The ecologist Paul Sears situates Darwin's centrality to ecology in his observation that "environment had from the beginning built itself into the very form and organization of all forms of life" (Sears 1950, 56). Scholars generally credit the German zoologist and comparative anatomist Ernst Haeckel (1834–1919) with coining the term oecologie (by 1893, ecology) in 1866. Worster agrees with Sears that Haeckel grounded the web of life in Darwin's theory that the economy of nature is governed by relationships that derive from the struggle for existence.

The lack of a designer did not imply that no order exists in a nature that is conceived of as ecological. During the early twentieth century botanists and plant geographers in the United States and Europe gradually discovered in plant communities a changeful, active nature. By the 1930s this nature was defined most forcefully in the work of the U.S. botanist Frederic Clements (1874– 1945). He argued that nature is dynamic but that change occurs in patterns of "successional development" over time. Innovation through competition is progressive in the sense that a specific habitat "begins with a primitive, inherently unbalanced plant assemblage and ends with a complex formation in relatively permanent equilibrium with the surrounding conditions" (Worster 1985, 210).

Both ecology and the earlier natural history understated the roles of inorganic forces in the creation and maintenance of life. Under the ecosystem concept that was developed by the British botanist Arthur George Tansley (1871–1955) in 1935, mechanical philosophy returned through twentieth-century thermodynamic physics as a powerful approach to constraining nature. Uniting living and nonliving aspects of the world under the processes of energy flow emphasized nature's processes as historical while repudiating the organic community posited in Clements's version of nature. Nature as ecosystem is as linear as nature as climax community, but time moves toward entropy (gradual decline into disorder) rather than toward progress. As Donald Worster describes it, "the ecosystem of the earth, considered from the perspective of energetics, is a way-station on a river of no return. Energy flows through it and disappears eventually into the vast sea of space; there is no way to get back upstream" (Worster 1985, 303). Both Clements and Tansley, however, assume a predictable trajectory in natural history.

Historical nature by the end of the twentieth century had acquired randomness, chaos, and chance. The ecologist Daniel Botkin's Discordant Harmonies posits an organic nature, a "living system, global in scale, produced and in some ways controlled by life" (Botkin 1990, 189), that may be modeled through computer programs, uniting Clements and Tansley, but with a critical twist. Nature abstracted is essentially ambiguous, variable, and complex; time is not singular but rather a sheaf whose arcs and marks are defined by probability, "always in flux, changing over many scales of time and space, changing with individual births and deaths, local disruptions and recoveries, larger scale responses to climate from one glacial age to another" (Botkin 1990, 62). In the twenty-first century nature has a radically contingent history that is particularly troublesome in light of the role of nature in human history.

It is not the language of painters but the language of nature which one should listen to, the feeling for the things themselves, for reality, is more important than the feelings for pictures. • VINCENT VAN GOGH (1853–1890)

Nature and Humans

Exploring the other side of the equation—how to place nature in history-requires considering the place of humans in nature. Glacken's Traces on the Rhodian Shore covers the preindustrial history of humans and nature. He posits that throughout time the West has regarded the natural world with several questions, all arising from the sense that the Earth is an inherently habitable place for humankind: Is this Earth apparently so fitting an environment for organic life, "a purposely made creation"? What is the influence of the Earth's climates, physical terrain, and continental configuration, that is, the environment in which life is embedded, on the shape of human culture and on individual health and morality? Finallyand coming increasingly into play from the eighteenth century to the present-in what manner have humans through their artifice acted as "geographic agents" changing nature "from its hypothetical pristine condition" (Glacken 1967, vii)?

Much of people's attempt to describe the history of nature has centered on the first issue-on teleological aspects of nature. Although the idea of nature as a product of design arose independently of the concept of environmental influence, each reinforced the other. Organic life (including humans and their cultures) was seen as adapting to "purposefully created harmonious conditions" (Glacken 1967, vii). Human artifice, distinct from "first" nature and exemplifying the human place in the chain of being just below the Creator, constituted a "second" nature cultivating and adding improvements to the design. From the Greeks until the eighteenth century Western conceptions of nature in human history portrayed it as the world out there to which humans adapt-but part of that adaptation is to order nature. Human creations of second nature, through domesticating animals and hunting, through cultivating crops and digging canals, settled wild lands. However, until the seventeenth and eighteenth centuries such activity assumed an inviolate stability in first nature.

As nature itself began to develop a contingent history during the modern era, humans began to recognize their role as agents of geographic change. Human historyemerging during the Renaissance out of a growing selfconsciousness about the power of human control over nature and pushed by the belief that such power distinguishes humans from the rest of nature-became a narrative about harnessing the elements (through arts such as alchemy, which was a medieval chemical science and speculative philosophy aiming to achieve the transmutation of base metals into gold) and transforming the landscape for aesthetic and economic purposes. Just as the Age of Exploration contributed to an emerging sense of nature's history, it also offered comparative evidence of the interactions between human history and natural history. In addition to new animals and plants, the discovery and exploration of the New World offered an aspect of nature seemingly untouched by human artifice. Glacken says that by the eighteenth century the French naturalist George Louis Leclerc, Comte de Buffon (1707-1788), relied on the contrasts between Europe and the Americas to construct his history of the Earth as ultimately "seconded" by the history of human striving. Buffon, who little appreciated the wild, uninhabited places on Earth, saw second nature as both an improvement of first nature and an improvement of human civilization.

Agents of Geographic Change

In the New World the importance of modern humans as agents of geographic change was more obvious. Early commentators such as the Swedish botanist Peter Kalm (1716–1779) noted that settlers were replacing old environments with new and raised questions about their impact on first nature and whether second nature improved the prospects for human habitation. Industrialization in the United States and Britain accelerated the transformations of nature, sharpened the distinctions between city, country, and wild places, and dislocated increasing populations from labor on the land to labor inside factories.

Romanticism, a transcontinental philosophy that granted privilege to first nature as an organic force in



human history, made the most influential critique of people's attempts to second nature. Where Buffon argued that Earth history is improved by the shift from first nature to second nature, the U.S. Romantic transcendentalist and nature writer Henry David Thoreau (1817–1862) countered that Earth has its own history, which humans destroy by seconding nature. For the Romantics people who embedded themselves in first nature—returning at least to the countryside and at best to more untrammeled spaces—countered what the Romantics viewed as the growing dominance of mechanical philosophy and its attendant materialism and repression of the innate spirit in life.

Another key figure in the effort to place nature in history was a contemporary of Thoreau-the U.S. scholar George Perkins Marsh (1801–1882). Environmental historians widely credit Marsh's Man and Nature: or, Physical Geography as Modified by Human Action (1864) as the first comprehensive analysis of the harmful effects of human modifications on nature. Marsh compared soil erosion and forest destruction in Vermont with degraded environments in the Mediterranean basin and histories of land and resource use in Europe and Asia and concluded that "man [sic] is everywhere a disturbing agent. Wherever he plants his foot, the harmonies of nature are turned to discord" (Marsh 1965, 36). Marsh urged his contemporaries to be cautious in seconding nature, always to consider what must be learned from the priorities of first nature.

However, Marsh's image of people as disturbers of a pristine nature raises one of the most controversial meanings of nature for contemporary environmental history. Marsh and Thoreau, like many people of the nineteenth and twentieth centuries, make sharp con-



trasts between a world of nature "out there" and people. The question of people's place in nature has been answered ambiguously for the past two thousand years. One of the dangerous ambiguities about nature is that it may both contain and exclude people. During the nineteenth century critics of industrialism often argued, as Marsh and Thoreau do, that the artifices of people had shifted from improvement to destruction and were not seconding but rather were disturbing nature's history. People and their artifices then become unnatural, alien to nature. Similarly, during the early twentieth century two key figures in the age of ecology, Clements and Tansley, disagreed on the role of people in nature, with Clements making a sharp distinction between the disturbance brought by the plow and presettlement prairie biota (the flora and fauna of a region) and Tansley arguing that people can make ecologically sound changes by their artifices.

The U.S. environmentalist Aldo Leopold said that the twentieth century would require an ecology-based "land ethic" that "changes the role of *Homo sapiens* from conqueror of the land-community to plain member and citizen of it. It implies respect for his fellow-members, and also respect for the community as such" (Leopold 1949, 204). Marsh, Clements, and Thoreau shared Leopold's view.

This controversy over the role of nature in human history continues into the twenty-first century. Most fundamental is the question of whether one may speak of a nature as existing free from human modification. Raymond Williams says that "we have mixed our labor with the earth, our forces with its forces too deeply to be able to draw back or separate either out" (Williams 1980, 83). Drawing on Williams, the historian William Cronon suggests that the trouble with wilderness is its erasure of the history of human striving from natural history, and the historian Richard White poses nature in contemporary times as an "organic machine"—a sym-

This Maoist Chinese proverb says: Man Must Conquer Nature. biotic meld of natural processes and human artifices (White 1995, ix). However, for Williams the second nature that people have created is socially repressive, materialist, and polluted-toxic for humans and the rest of the organic world. The historian J. R. McNeill's Something New under the Sun reinforces the troubling reciprocity between recent understanding of the history of nature as not only changeful but also unpredictable and the disruptive forces of human history. McNeill says that during the twentieth century people took a planet whose future was uncertain and made change even more volatile, primarily through technological and economic imperatives, creating a "total system of global society and environment...more uncertain, more chaotic than ever" (McNeill 2000, 359). Indeed, the most pressing global issue for the twenty-first century is the environmental future.

Vera Norwood

See also Desertification; Erosion

Further Reading

- Botkin, D. (1990). Discordant harmonies: A new ecology for the twentyfirst century. New York: Oxford University Press.
- Bruun, O., & Kalland, A. (Eds.). (1995). Asian perceptions of nature: A critical approach. Surrey, UK: Curzon Press.
- Collingwood, R. G. (1945). The idea of nature. London: Oxford University Press.
- Cronon, W. (1983). Changes in the land: Indians, colonists and the ecology of New England. New York: Hill and Wang.
- Cronon, W. (Ed.). (1995). Uncommon ground: Rethinking the human place in nature. New York: Norton.
- Darwin, C. (1964). On the origin of species. Cambridge, MA: Harvard University Press. (Original work published 1859)
- Eisenstadt, S. M. (1995). The Japanese attitude to nature: A framework of basic ontological conceptions. In O. Bruun & A. Kalland (Eds.), *Asian perceptions of nature: A critical approach* (pp. 189–214). Surrey, UK: Curzon Press.
- Evernden, N. (1992). *The social creation of nature*. Baltimore: Johns Hopkins University Press.
- Flader, S. (1974). Thinking like a mountain: Aldo Leopold and the evolution of an ecological attitude toward deer, wolves, and forests. Madison: University of Wisconsin Press.
- Glacken, C. J. (1967). Traces on the Rhodian shore: Nature and culture in Western thought from ancient times to the end of the eighteenth century. Berkeley and Los Angeles: University of California Press.
- Krech, S. (1999). The ecological Indian: Myth and history. New York: Norton.

- Leopold, A. (1949). A Sand County almanac and sketches here and there. London: Oxford University Press.
- Lewis, C. S. (1967). Studies in words. Cambridge, UK: Cambridge University Press.
- Lovejoy, A. O. (1936). The great chain of being: A study of the history of an idea. Cambridge, MA: Harvard University Press.
- Lovejoy, A. O., Chinard, G., Boas, G., & Crane, R. S. (1935). A documentary history of primitivism and related ideas. Baltimore: Johns Hopkins University Press.
- Malthus, T. (1890). An essay on the principle of population. London: Ward. (Original work published 1798)
- Marsh, G. P. (1965). Man and nature. Cambridge, MA: Harvard University Press. (Original work published 1864)
- McNeill, J. R. (2000). Something new under the sun: An environmental history of the twentieth century world. New York: Norton.
- Merchant, C. (1980). The death of nature: Women, ecology and the Scientific Revolution. San Francisco: Harper & Row.
- Merchant, C. (1989). Ecological revolutions: Nature, gender, and science in New England. San Francisco: Harper & Row.
- Plato. (1952). Timaeus, Critias, Cleitophon, Menexenus: Epistles. Cambridge, MA: Harvard University Press.
- Ray, J. (1759). The wisdom of God manifested in the works of creation. London: John Rivington, John Ward, Joseph Richardson. (Original work published 1691)
- Sandell, K. (1995). Nature as the virgin forest: Farmers' perspectives on nature and sustainability in low-resource agriculture in the dry zone of Sri Lanka. In O. Bruun & A. Kalland (Eds.), Asian perceptions of nature: A critical approach (pp. 148–173). Surrey, UK: Curzon Press.
- Sears, P. (1950). Charles Darwin: The naturalist as a cultural force. New York: Scribner's.
- Soule, M., & Lease, G. (Eds.). (1995). Reinventing nature? Responses to post-modern deconstruction. Washington, DC: Island Press.
- Thoreau, H. D. (1906). *The writings of Henry David Thoreau: Journal VIII*. Boston: Houghton Mifflin.
- White, R. (1995). *The organic machine: The remaking of the Columbia River*. New York: Hill and Wang.
- Williams, R. (1976). Keywords: A vocabulary of culture and society. London: Fontana/Croom Helm.
- Williams, R. (1980). Problems in materialism and culture. London: Verso.
- Worster, D. (1985). Nature's economy: A history of ecological ideas. Cambridge, UK: Cambridge University Press.
- Worster, D. (1993). *The wealth of nature: Environmental history and the ecological imagination*. London: Oxford University Press.

Navigation

Navigation is the knowledge that is required to sail a ship between two known points by the shortest good way, and in the least possible time. The basis of the art of navigation is experience that is handed down from generation to generation of seamen, and includes the knowledge of prevailing winds, winds caused by The marksman hitteth the target partly by pulling, partly by letting go. The boatsman reached the landing partly by pulling, partly by letting go. • EGYPTIAN PROVERB

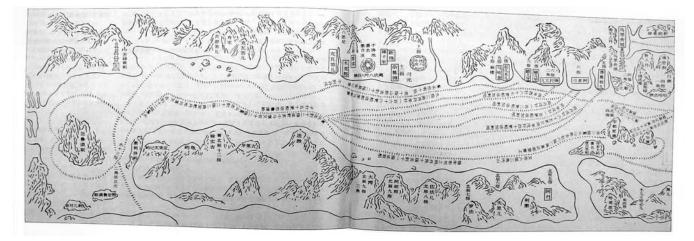
seasonal changes, sea and tidal currents, and water depths and the capability to estimate the sailing time between various ports. Distinction should be made between coastal and ocean navigation. Coastal navigation is practiced within sight of land, and orientation is provided by data such as the profile of the coastline, knowledge of conspicuous landmarks, water depth, and local sea currents. When sailing across a large stretch of water beyond sight of the coast, a mariner will register his approximate position by dead reckoning. This is the method by which a ship's position is estimated by using the knowledge of the position at departure, the steered courses, and the distances made good since departure. Because a number of uncertain factors influence these calculations, the resulting position is not entirely reliable. The uncertain factors are the speed and direction of sea currents and leeway, which is the angle between the course steered by the compass and the course made good, caused by the wind pushing the ship sideways. During a voyage the error caused by these factors cumulates so that the fault in a deadreckoned position can become considerable, and lead to a dangerous situation. An exact position, a "fix," can be found by observing celestial bodies, a calculation, and a subsequent construction in the sea chart.

Practical navigation is called seamanship, and includes the knowledge how to handle a ship and its rigging and sails and maneuvering the vessel. Seamanship is not dealt with in this article.

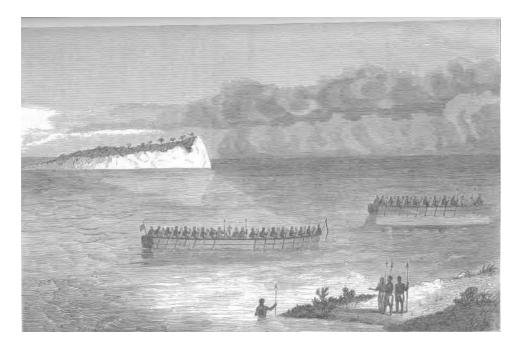
Navigation in the Ancient World

Navigational methods and techniques were developed independently in several parts of the world. From drawings in pyramids it is known that Egyptian seamen used sounding rods to measure the water depth beneath their vessels. When Persian and Arabian mariners sailed across the Indian Ocean, and, roughly from the eighth century CE, toward China, they used a wind rose for orientation, based on the points of rising and setting of fixed stars. Latitude was estimated by observing the altitude of the sun and the polestar. In the ninth century, in some parts of the Indian Ocean, shore-sighting pigeons were used on Persian ships to set course to the nearest land. Around 650 CE Arabs, who were experienced in finding their way in the desert by observing stars, used a compass rose of which the points were named after the points of rising and setting of fixed stars. The lodestone, with which iron can be magnetized so that it points toward the north, was not used by Arab and Persian navigators before the end of the eleventh century. By the fifteenth century Arab seamen used the kamal, an instrument for measuring the altitude of celestial bodies, to estimate their latitude.

Sailors from islands in the South Seas traditionally crossed large stretches of ocean using a "wind compass," with which the directions of islands were defined by the character of the wind, e.g., moist, dry, hard, or gentle. Their "star compass" was defined by the directions in



Chinese navigator Zheng He's compass guided chart to the Persian Gulf.



which a number of bright stars were seen. The polestar was used for an indication of latitude and the constellation of the Southern Cross was used to set courses. Pacific islanders memorized "zenith stars" for a number of islands, stars with a declination that is equal to the latitude of the island in question, and which are known to pass overhead there, from east to west. By observing a star's position they could see if they were to the north or the south of their destination, and adjust their course accordingly. South Sea navigators observed birds, cloud formations, and ocean swell for orientation and as an indication for their position.

Celestial Navigation

Navigation as we know it today was first practiced by Phoenician and Greek seafarers, beginning after the sixth century BCE. They navigated in the Red Sea and the Mediterranean in much the same way as Arabs, but had the advantage of sailing in an enclosed sea where land is never far off.

The first seaman of whom it is told that he steered by stars was Odysseus. At one stage, as he crossed the sea during his imaginary voyage, night after night he had to keep the stars of the Great Bear on his left hand. This was the method of steering by horizon stars. A star was observed shortly after rising (or before setting) and used as a compass direction. After a while the next rising (or setting) star, with more or less the same amplitude, was

This somewhat romanticized drawing depicts ships making their way across Lake Tanganyika in colonial Africa.

used to steer by in the same way and thus the ship was held on the same course without the use of a compass. During daytime the position of the sun was observed and used for orientation. Culmination (when the sun reaches its highest daily position in the sky) indicated the south (or north), while in low latitudes sunrise and sunset pointed to two other major compass di-

rections, east and west. In northern latitudes the polestar, although some degrees off the celestial North Pole, observed in combination with the Great Bear, also indicated the north. South of the equator, experienced seafarers could, at least for a while, still use the Great Bear to locate the north. They also estimated their position with the use of phenomena observed around them, such as the direction and force of prevailing winds. At night zenith stars were indicators for their position relative to the northern and southern shores of the Mediterranean, while the altitude of the polestar and the sun at noon provided an indication of latitude. Knowledge of longitude was based on sailing times between the eastern and western shores of the Mediterranean. The magnetic compass was probably introduced on ships in the Mediterranean by crusaders, during the thirteenth century. Sea charts and sailing directions, still in manuscript, came into use in that area in the fourteenth century and after the art of printing was introduced in Europe a century later, these aids were used more generally.

In the early Middle Ages, Norsemen and Irish monks started to cross the North Atlantic Ocean toward Iceland. Because of the long Arctic summer, stars were of less use to navigation here than in southern latitudes. To estimate the position relative to the track to Iceland, the Shetland Islands and the Faeroes were used as "steppingstones." These navigators also observed migrating birds, which showed them in what direction land was, and there is mention of Norsemen using ravens taken on board for this purpose. Seamen found that a group of clouds over the horizon indicated still-unseen land. When visible, Norsemen used the polestar for orientation at night, and the sun during daytime. They probably also used these celestial bodies for setting out their courses. The magnetic compass came into use in the north of Europe after it was introduced in the Mediterranean.

Navigation with specially developed scientific instruments, and tables with astronomical ephemera, dates from the time of the maritime expansion of Portuguese and Spanish navigators, in the fifteenth century. When the Portuguese embarked on their voyages along the west coast of Africa their courses were generally north-south. They found their latitude by observing the polestar at night, and during daytime from the sun's altitude at noon. For their observations they used the mariner's astrolabe, a navigating instrument that was developed out of the astronomical astrolabe, probably around 1445. The cross-staff, inspired on the kamal, and used for the same purpose, was introduced at sea about 1515. Beyond the equator, which was reached by 1474, the polestar is no longer visible. Although the Southern Cross had been seen by Portuguese seamen already in 1454, it was found that there was no southern polestar. It was then decided to try to improve the method of finding latitude from the sun's altitude at noon. As a result the first dayto-day declination tables of the sun were compiled. When Columbus sailed towards America in 1492, he was provided with such tables in manuscript. Columbus was also the first to observe westerly variation. Variation is the angle between the directions of the magnetic and the geographic North Poles, and depending on the place on the earth, it can be easterly, westerly, or zero. As the position of the magnetic pole changes slightly over a year, the variation increases or decreases. It is important that, when setting a course, the value of variation is taken into account.

After the Atlantic Ocean was crossed, and the Indian Ocean in 1497, east-west courses were sailed more frequently, and the necessity to measure longitude was felt. The difference in longitude between two places can be expressed in the difference in time between the two. Columbus tried to find his longitude in the New World from observing a lunar eclipse, which he knew would also occur in Spain. He compared the local time of his observation with the predicted time it would occur in Spain. The effort failed because of the inaccurate prediction through imperfect knowledge of the moon's motion.

The Nuremberg astronomer Johann Werner, in 1514, was probably the first to suggest that longitude could be determined by measuring lunar distances, the angle between the moon and a fixed star. The moon moves across the sky relatively rapidly. At a given time the angle between the moon and a particular star is the same for every observer who can see them both. The angle between the moon and a number of stars (called the distance) can be calculated ahead for certain dates and times, for a particular (prime) meridian. An observer measuring the angle would compare the result and his local time with the predicted result and time, and the difference between the two times would provide the difference in longitude. Werner's method is feasible, but at the time it was technically impossible to develop sufficiently accurate instruments and lunar tables. Fernando de Magallanes's astrologer in 1519 unsuccessfully tried to find the longitude in South America by conjunction of the moon and Jupiter. Failure was blamed on errors in the predicted astronomical ephemera.

Navigators sometimes used the variation of the magnetic compass for estimating their longitude. Because of the apparent relation between longitude and variation, sixteenth-century scholars designed methods of converting variation into longitude. For this to be successful in practice, however, the method requires a vast amount of data on the magnetic variation, which was not available until the eighteenth century, when Dutch navigators estimated their longitude with variation during crossings of the Atlantic and Indian Oceans.

As the attempts to solve the question of longitude at sea failed, the king of Spain, in 1598, offered a reward for anyone who came up with a practical solution. This example was soon followed by the Dutch States-General, the governments of France and Venice, and eventually in 1714 by the British Parliament, which offered £20,000.

The result was that a great many inventors claimed these prizes. Among those responding was Galileo Galilei, who suggested that the eclipse and occultation of Jupiter's satellites could provide a solution, as they are visible at the same instance for every observer. Lunar eclipse observations to determine longitude were done successfully by astronomer Edmond Halley near the Cape of Good Hope in 1719 and on land by Captain James Cook in Canada in 1766. However, to be successful for navigation, eclipse and occultation observations require great accuracy that, due to the movement of a ship, was almost impossible to accomplish at sea.

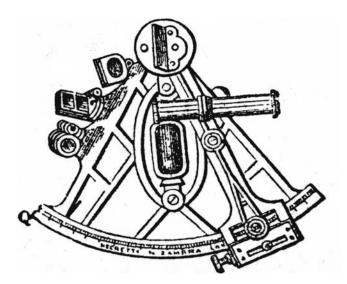
For the Royal Society of London for Improving Natural Knowledge (founded 1662) and the Académie Royale des Sciences in Paris (founded 1666), solving the question of how to find longitude at sea was one of the many subjects they engaged. An important step toward this was the founding of the Observatory of Paris in 1667, followed by Greenwich Observatory, near London, in 1675. Both institutions were commissioned to rectify the existing tables of stars in order to find the longitude of places for the use of navigation. Paris Observatory was the first to publish new tables of astronomical data for navigation, such as the daily celestial positions of the sun, moon and planets, and stars, which first appeared in 1678. From 1761 onward the publications also contained lunar tables, which made it possible to find longitude through the aforementioned method of lunar distances. The first accurate lunar tables had been calculated a few years previously by the German mathematician Johann Tobias Mayer. The British astronomer Nevil Maskelyne became the driving force behind the Nautical Almanac, which first appeared for the years 1767–1769 and also contained lunar tables. Another condition for using the lunar distance method was an accurate instrument for measuring the distance. That had been fulfilled in 1731 when John Hadley of London designed the octant (also named Hadley's quadrant), a double-reflecting-angle measuring instrument far more

The sextant, an invention crucial to making ocean travel safer and quicker.

accurate than the mariner's astrolabe and cross-staff. About three decades later it was successfully transformed into the sextant, and later adapted as the reflecting circle.

The method of lunar distances (lunars) was soon firmly established as a reliable method to find the longitude at sea. James Cook was among the first to apply it, in New Zealand in 1769, using the Nautical Almanac and a sextant. For many years lunars competed with the method of finding longitude by use of a chronometer. This is a clock that keeps the time on the prime meridian accurately during a voyage, and was developed successfully by the Englishman John Harrison, whose fourth timekeeper was awarded the longitude prize of British Parliament. Until the nineteenth century the astronomical solution by means of lunars and the mechanical method by means of a chronometer were both used at sea. Eventually the chronometer prevailed, because the method to find longitude by that instrument was much simpler than through lunars. An important result of the availability of these methods to find longitude was that sea charts became considerably more accurate.

A clouded sky prevents the taking of a noon observation of the sun, and a weather condition like that can last for days. In the mid-eighteenth century Cornelis Douwes, a teacher of navigation in Amsterdam, developed the first successful method of double altitudes, taken before and after noon. Hence forward latitude



could be found without the restriction of the traditional noon observation of the sun. Douwes's method was improved and remained in use until the nineteenth century, when position line navigation gradually also came into use. This is the name for various methods by which, through an astronomical observation and subsequent calculation and construction in a chart, a ship's position could be found at almost any time of the day. The first to develop a method by which a single observation of the sun or a star resulted in a position line was the American captain Thomas Sumner, in 1843. The intersection of several "Sumner lines," taken from stars in different directions, provided a fix. In the 1860s the Sumner method was improved by French astronomers and naval officers, and by then celestial navigation had reached the level at which it remained until long after World War II.

Electronic Means of Navigation

The development of wireless radio, at the beginning of the twentieth century, opened new possibilities, first through radio direction finding and later through radar and hyperbolic radio systems, such as Decca and loran (long range navigation). With these systems, within certain limitations, a position line or a fix could be obtained independently of weather conditions. The first practical gyrocompass was invented in 1906, which made northfinding possible without using the earth's magnetic field.

The next major development was the introduction of satellite navigation in the late 1970s. With the Global Positioning System (GPS), which became fully operational in the 1990s, a position can be obtained instantly, and it is far more accurate than through celestial navigation. As GPS became cheaper and easier to obtain, satellites have now replaced sextants and nautical almanacs completely. The Global Positioning System is operated by the United States government, and to insure independence from this system, the European Union supports and owns the European satellite navigation system, named Galileo, which should be operational around 2008. In the 1980s the electronic chart was developed. This is a digitized chart (a chart of which the image is built up of digits and made visible on a computer screen) that can be linked to other relevant navigational data, including GPS data, the actual water depth found with an electronic echo-sounding device, the ship's speed found with an electronic log, the gyrocompass, and radar-reflected images. In the decades to come, the electronic chart is expected to replace the traditional paper sea chart.

In the early years of aviation, airplanes were navigated by visual reference to the ground. As altitudes increased, "blind flying" (in clouds) became unavoidable, and various means of radio navigation were introduced. Most were non-directional radio beacons, and airplanes would fly from beacon to beacon. In the 1920s, the air plot technique, to find a dead-reckoned position, was derived from nautical practice. The first air almanac appeared in 1933, and five years later the first astronomical tables for air navigation were published.

In the 1940s sextants fitted with artificial (bubble) horizons were introduced, and a fix was found with celestial altitudes and the use of an air almanac and astronomical tables. Short-cut methods for calculation were developed especially for aviation, as were navigating machines and navigational slide rules, such as Bygrave's cylindrical slide rule, which bypassed or skipped part of the calculation. During World War II radio navigation was further improved. For civil aviation, non-directional beacons remained in use over land, and for crossing oceans and deserts traditional celestial navigation was applied. After the War loran was used in civil aviation for crossing oceans, as were radio signals from dedicated ocean station vessels. During the 1960s, nondirectional beacons were gradually replaced by VOR (Very high frequency Omnidirectional Range) stations; special techniques for polar navigation were already applied since 1957.

Due to the increase of aircraft in the 1960s and the introduction of jet aircraft, the requirements for position reporting became more stringent. Over land the use of ground radar by air traffic control increased but longrange (en route) navigation remained basically unchanged, although sextants were improved. Inertial navigation was developed for civilian en route aviation use in the 1970s, replacing celestial navigation. At present, GPS is also seeing civilian use and expectations are that it will be playing an ever increasing role in future aviation.

Willem F. J. Morzer Bruyns

See also Cartography; Henry the Navigator; Maritime History

Further Reading

- Cotter, C. H. (1968). A history of nautical astronomy. London: Hollis & Carter.
- Cotter C. H. (1983). A history of the navigator's sextant. Glasgow, UK: Brown, Son & Ferguson.
- Hayward, T. (2003). *The history of air navigation: A time line: Navigation News*. London: Royal Institute of Navigation.
- Hewson, J. B. (1963). A history of the practice of navigation. Glasgow, UK: Brown, Son & Ferguson.
- Hitchings, H. L., & May, W. E. (1955). From lodestone to gyro-compass. London: Hutchinson's Scientific and Technical Publications.
- Hourani, G. F. (1995). Arab seafaring in the Indian Ocean in ancient and early medieval times. Princeton, NJ: Princeton University Press.
- Howse, D. (1997). Greenwich time and the longitude. London: Philip Wilson.
- Jonkers, A. R. T. (2003). Earth's magnetism in the age of sail. Baltimore: Johns Hopkins University Press.
- Lewis, D. (1972). We, the navigators: The ancient art of landfinding in the Pacific. Canberra, Australia: Australian National University Press.
- Mörzer Bruyns, W. F. J. (1994). *The cross-staff: History and development* of a navigational instrument. Zutphen, Netherlands, Walburg Pers.
- Schnall, U. (1975). Navigation der wikinger: Nautische probleme der wikingerzeit im spiegel der schriftlichen quellen. Oldenburg, Germany: Gerhard Stalling Verlag.
- Stimson, A. N. (1988). The mariner's astrolabe: A survey of known, surviving sea astrolabes. Utrecht, Netherlands: Hes.
- Taylor, E. G. R. (1958). *The haven-finding art: A history of navigation from Odysseus to Captain Cook.* London: Hollis & Carter.
- Waters, D. W. (1958). The art of navigation in England in Elizabethan and early Stuart times. London: Hollis & Carter.
- Williams, J. E. D. (1992). From sails to satellites: The origin and development of navigational science. Oxford, UK: Oxford University Press.

Neolithic Era

See Agrarian Era; Foraging (Paleolithic) Era; Human Evolution—Overview; Paleoanthropology

Neolithic Revolution

See Agrarian Era; Agricultural Societies; Foraging (Paleolithic) Era; Secondary-Products Revolution

Newton, Isaac

(1642/43–1727) English mathematician and physicist

saac Newton was the dominant figure in the scientific L revolution, a creative period of experiment, observation, and theory known as the scientific revolution. According to many historians, this revolution in scientific thought began when astronomers learned about the theory of Nicolaus Copernicus (1473-1543)-that the earth revolved around the sun-which he proposed in a book published shortly after his death, and had transformed western Europe's understanding of the universe by the time of Newton's own death. Other than Charles Darwin (1809–1882) and Albert Einstein (1879– 1955), Newton remains the world's most widely known scientist, an icon of the scientific method for nonscientists who only vaguely know what he accomplished, for instance, discovering the theory of universal gravitation and inventing calculus. Newton himself was dissatisfied with such achievements, as they explained only certain aspects of the universe. Much more ambitious, he searched vainly for a single system that could explain everything, a unified system of the universe. Nor was he satisfied with learning how things happened; he wanted to know why.

Clearly unfit for the life of a farmer, Newton was sent by his family from its Lincolnshire farm to Cambridge University. He did not immediately impress his teachers there. He spent the most creative period in his life back in Lincolnshire when he temporarily left the university

If I have seen further, it is by standing on the shoulders of giants. • ISAAC NEWTON (1642–1727)

to escape an outbreak of plague. Nearly all his ideas originated during these eighteen months in 1665–1666. Newton fit the stereotype of the hermit scholar who lived in isolation for no purpose other than work. When Cambridge appointed him a professor of mathematics, he proved to be a poor teacher. He won respect (and election to the prestigious scientific Royal Society) when he built an impressive reflecting telescope.

In an age before specialization, Newton contributed to diverse fields of the physical sciences and mathematics. Often "publication" in private correspondence preceded print publication by many years. As a young man, Newton began his study of color and light, which reached a climax with the publication of the Opticks in 1704. While still very young he developed the mathematical theory that he called the method of fluxions (later known as calculus). Concurrently, the German scholar G. W. Leibniz (1646–1716) developed differential and integral calculus. A bitter controversy followed: did Newton or Leibniz deserve the credit? They had worked independently, so the answer is both of them. Newton is best known for his theory of universal gravitation. According to a familiar but probably untrue story, it was when he saw an apple fall from a tree in the family orchard that he was inspired to recognize that the same forces, expressed in the same laws, controlled both earthly and celestial bodies. Written in Latin and published in 1687, Newton's major work on mechanics was the Principia (or Mathematical Principles of Natural Philosophy).

Although he engaged in unattractive quarrels with scientists who dared dispute the correctness or the originality of his ideas, he acquired more admirers than critics, both inside and outside the English scientific community. He briefly served in the House of Commons, and in 1696 he moved from Cambridge to London when patrons put him in the Royal Mint at a salary that made him rich. In 1703 Newton was elected president of the Royal Society, and in 1705 he was knighted. One of his very few close friendships appears to have been that with the young Swiss mathematician Nicolas Fatio de Duillier (1664–1753), in the early 1690s. Never married and suffering recurrent bouts of depression, Newton in his later years lived quietly with a niece. His religious views were unorthodox—he rejected the divinity of Jesus Christ—but, because these views were not fully known, he did not experience the persecution that his great predecessor Galileo (1564–1642) had suffered.

Although the reclusive Newton never traveled outside his native England, his work became accepted in much of Europe, but not all of it and not immediately or unanimously. For instance, Jesuit scholars remained loval to the older Cartesian system, devised by René Descartes (1596–1650). His vortex theory credited impulsion in particles themselves (and not attraction) with moving things around in the universe. Newton eventually won acceptance because his theories produced better practical results. For instance, his theory correctly predicted the return of Halley's comet. During the middle decades of the eighteenth century the French philosophes Voltaire (1694-1778) and Gabrielle Emilie le Tonnelier de Breteuil, marquise du Châtelet (1706-1749) popularized Newton's ideas outside England among educated readers. Du Châtelet translated Newton's Principia into French and wrote a commentary describing new proofs of Newton's theories. Aided by Newton's prestige, the natural sciences became the model for the social sciences in the Enlightenment, with the latter borrowing the selfconfidence that the former had earned. Still later, Eurocentric interpreters of world history adopted Newton and the concept of a scientific revolution as evidence for the superiority of the West.

Eventually, scientists throughout the world acknowledged Newton as their teacher and inspiration. For instance, by 1730 Jesuit missionaries brought some of Newton's astronomical ideas to China, and by the middle of the nineteenth century Newton's calculus and part of his *Principia* were available in Chinese.

In the 1930s a reaction against the old emphasis on individual genius as the explanation for scientific progress challenged Newton's importance. Marxists and others argued that science was a collaborative enterprise, influenced by contemporary ideology, and that the acceptance of new scientific ideas by nonscientists required an educated public. More recently, scholars pointed out that Newton had "unscientific" interests, including alchemy—turning base metals into gold—and biblical Our colonial past and the present day intrigues of Neo-colonialism have hammered home the conviction that Africa can no longer trust anybody but herself and her resources.... We in Africa must learn to band together to promote African interests or fall victims to imperialist maneuvers to recolonize us. • KWAME NKURMAH (1909–1972)

chronologies and prophecies. In fact, all of Newton's work was interrelated. It is inadequate to describe him as a scientist, a modern term. A man of his own times, he was a cosmologist who sought to understand everything as a single system. Despite the need to put Newton into the context of late-seventeenth-century Europe, he remains a powerful symbol of the new science that eventually changed the world.

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Further Reading

- Berlinski, D. (2000). Newton's gift: How Sir Isaac Newton unlocked the system of the world. New York: Free Press.
- Fara, P. (2002). Newton: The making of a genius. New York: Columbia University Press.
- Fara, P. (2004). Pandora's breeches: Women, science and power in the Enlightenment. London: Pimlico.
- Gleick, J. (2003). Isaac Newton. New York: Pantheon Books.
- Guerlac, H. (1981). Newton on the continent. Ithaca, NY: Cornell University Press.
- Hall, A. R. (1992). *Isaac Newton: Adventurer in thought*. Oxford, UK: Blackwell.
- Manuel, F. E. (1968). Portrait of Isaac Newton. Cambridge, MA: Harvard University Press.
- Westfall, R. S. (1980). Never at rest: A biography of Isaac Newton. Cambridge, UK: Cambridge University Press.
- White, M. (1997). Isaac Newton: The last sorcerer. Reading, MA: Addison-Wesley.
- Zinsser, J. P. (2003). The ultimate commentary: A consideration of I. Bernard Cohen's Guide to Newton's Principia. Notes and Records of the Royal Society of London, 57(2), 231–238.

Nkrumah, Kwame

(1909–1972) First head of independent Ghana

Formerly known as the Gold Coast, Ghana was the first sub-Saharan African colony to gain independence from European colonial rule, providing a model for other aspiring African states. Under Nkrumah's leadership, Ghana promoted a firm anti-imperialist foreign policy and pan-African political and economic unity directed at creating a United States of Africa.

Nkrumah was born near the modern border between Ghana and Côte d'Ivoire. Established less than ten years earlier, this international boundary split the Nzima people, to whom Nkrumah belonged, between two different countries. The arbitrary nature of the borders of modern African states remains a major colonial legacy, and was a problem Nkrumah dealt with directly later in life through unification policies, which proposed redrawing African borders. Lucky to receive an education, Nkrumah eventually attended the Government (teacher) Training College. Here he was introduced to the ideas of the Jamaican Pan-Africanist Marcus Garvey (1887–1940). Garvey's writings emphasized the links between all people of African descent and the need to build an African Nation. It was also at college that Nkrumah became interested in going to the United States. He left the Gold Coast in 1936, but went first to London. While in London, Nkrumah learned of Ethiopia's defeat by the Italian Fascists. Years later Nkrumah said that at that moment he felt "as if the whole of London had declared war on me personally" (Nkrumah 1957, 27). The Italian invasion of the last independent state in Africa was seen as an outrage throughout the black world. It clearly connected imperialism to war and highlighted the exploitation of Africa under European colonial rule. It was in this context that Nkrumah arrived in the United States.

While in the United States, Nkrumah began to link the racism experienced by U.S. blacks to the colonial relationships experienced by blacks in Africa and the Caribbean. He graduated from Lincoln University in Pennsylvania in 1939 and entered the Ph.D. program in philosophy at the University of Pennsylvania, where he published his anti-imperialist ideas more widely in a student paper, The African Interpreter. Nkrumah became involved in politically organizing Africans abroad through the Pan-Africanist movement. His dissertation, entitled The Philosophy of Imperialism, with Special Reference to Africa, was never accepted by the university; Nkrumah believed he was the victim of political censorship. In 1945 Nkrumah went to London to study law and perhaps to finish his doctoral dissertation. However, he quickly became immersed in the organization of the upcoming Fifth Pan-African Conference, which was to be held in Manchester and chaired by one of his heroes, W. E. B. Du Bois (1868–1963). The contacts Nkrumah made while working on this project formed a "who's who" list of future nationalist and anti-imperialist leaders across Africa. His work on the conference attracted the attention of the United Gold Coast Convention (UGCC), whose leaders invited Nkrumah to return to Ghana to become the secretary of the party in 1947.

Nkrumah quickly fell out with the moderate UGCC and established the Convention People's Party (CPP) in 1949. Demanding "self-government now," the CPP launched strikes, boycotts, and civil disobedience based on Mohandas Gandhi's satyagraha (nonviolent resistance) methods. Jailed in 1950 for his political activities, Nkrumah was released after winning a seat in the legislative assembly from prison in 1951. This event marked the beginning of the end of British rule in the Gold Coast, although formal independence—and the name Ghana-did not come until 1957. Nkrumah was elected prime minister of the Gold coast in 1952 and served until 1960, when he became president of Ghana. While in power he promoted an African version of socialist development and an anti-imperialist foreign policy. He was active in the nonaligned movement, which established alliances amongst former colonies as alternatives to the bipolar Cold War visions promoted by the United States and the Soviet Union. In 1963, coinciding with the formation of the Organization of African Unity (OAU), Nkrumah published Africa Must Unite, outlining his argument for unification. But the OAU rejected Nkrumah's model, Ghana's economic condition declined, and unrest spread. In 1964 Nkrumah forbade political opposition, establishing the CPP as the only party in the first of many African one-party states. He attributed some of Ghana's problems to interference by the CIA, but understood that most of the nation's problems were economic. In 1965 he published an analysis of the role of foreign investment in maintaining colonial relationships in new forms in Africa; it was called Neo-Colonialism: The Last Stage of Imperialism. Although astute in his analysis of Africa's economic relations with the rest of the world, Nkrumah had lost touch with Ghanaians suffering from poor local economic conditions. Nkrumah's political enemies multiplied and in 1966 he was overthrown in a military coup d'etat. He lived in exile in Guinea until his death in 1972. Controversy will continue to surround Nkrumah's legacy, but his understanding of the interaction between Africa and the global economy via colonialism offers fresh insight into world history from an African perspective.

Eric L. Martin

See also Africa, Postcolonial

Further Reading

- Arhin, K. (Ed.). (1993). The life and work of Kwame Nkrumah. Trenton, NJ: Africa World Press.
- Davidson, B. (1973). Black star: A view of the life and times of Kwame Nkrumah. Boulder, CO: Westview Press.
- Nkrumah, K. (1957). Ghana: The autobiography of Kwame Nkrumah. New York: Thomas Nelson & Sons.

Nkrumah, K. (1963). Africa must unite. New York: Fredrick A. Praeger.

- Nkrumah, K. (1964). Consciencism: Philosophy and ideology for decolonization. New York: Monthly Review Press.
- Nkrumah, K. (1965). Neo-colonialism: The last stage of imperialism. London: Panaf.
- Oppenheimer, B. F., & Oppenheimer, M. (1966). *Ghana: End of an illusion*. New York: Monthly Review Press.
- Rooney, D. (1988). Kwame Nkrumah: The political kingdom in the third world. New York: St. Martin's Press.
- Smertin, Y. (1987). Kwame Nkrumah. New York: International Publishers.

Nomadism

See Pastoral Nomadic Societies; Steppe Confederations

Nonviolence

Nonviolence, the Indian nationalist leader Mohandas Gandhi said, "is as old as the hills." As an idea and an ideal, nonviolence is indeed old. Throughout history people have yearned for harmony, peace, and stability conditions ultimately rooted in nonviolence. Not surprisingly, nonviolence has had an important place in the Ye have heard that it hath been said, An eye for an eye, and a tooth for a tooth: But I say unto you, That ye resist not evil: but whosoever shall smite thee on thy right cheek, turn to him the other also. • MATTHEW 5:38-39

values of all major religions. People have long relied on nonviolent means to redress their grievances. However, the idea of nonviolence as a deliberate and preferred strategy of action for political and social change acquired widespread credibility and currency only during the twentieth century. No person was more central to that credibility and currency than Gandhi himself. With Gandhi nonviolence assumed a revolutionary dimension unprecedented in scope and global impact.

Gandhi and the Power of Nonviolent Action

Mohandas K. Gandhi (1869–1948) was the first person to develop a coherent worldview of nonviolent action and to propose a well-articulated strategy to realize such a worldview. Gandhi's strategy was "war" armed with a moral force. He called this force "satyagraha"—an active pursuit of truth through love and nonviolence. A satyagrahi (a person who undertakes satyagraha) must renounce not only violence, but also revenge and hate. Gandhi's dedication to nonviolence as a moral force to question, reform, and transform the unjust establishments of authority is unparalleled in the history of nonviolent mass action.

Gandhi's initial experiments in *satyagraha* were in the context of South Africa's policies of racial discrimination at the dawn of the twentieth century. He subsequently used *satyagraha* to transform the economic, political, and social realities in British colonial India. To him the purpose of satyagraha was not to force one's adversaries into submission but rather to transform the interrelationships of those people engaged in conflict. Gandhi's campaigns relied on methods such as fasting, *hartal* (strike), noncooperation, boycotts, marches, and civil disobedience and were aimed at the injustices of British colonialism as well as the moral crises among Indians. For instance, he undertook nonviolent campaigns to relieve the peasants of Champaran of the economic exploitation of British planters (1917–1918); to free India from British rule (1920-1921, 1930-1934, 1940-1942); and to foster unity and heal tensions between Hindus and Muslims (1947–1948) during and after partition of the subcontinent into India and Pakistan.

Gandhi's demonstrations of satyagraha—both in spirit and strategy-touched people around the world and inspired hundreds of leaders across geographical, ethnic, racial, and religious boundaries. Many people who followed Gandhi on the path of nonviolent action, even if pursuing different trajectories, have been internationally acclaimed. These people include the Indian freedom fighter Vinoba Bhave; the Dalai Lama (spiritual and political leader of Tibet); South African Archbishop Desmond Tutu; U.S. civil rights leader Martin Luther King, Jr.; U.S. farm worker activist Cesar Chavez; Aung San Suu Kyi, a prodemocracy activist in Myanmar (Burma); Polish trade union activist Lech Walesa; and Czech political activist Vaclav Havel. After Gandhi nonviolent action became a powerful trend during the twentieth century and shaped scores of social and political movements around the world.

Nonviolent Struggles in Asia

In Asia people used nonviolent action to combat oppression arising from colonialism or authoritarian regimes and to mobilize support for democratic reform and human rights. Khan Abdul Gaffar Khan (1890-1988), later known as "Badshah Khan" or "Frontier Gandhi," was a Muslim leader of the Pathan people in the North West Frontier Provinces (NWFP) of India. He was a follower of Islam and Gandhi and founded the world's first nonviolent army, known as the "KhudaiKhidmatgars" (Servants of God), to protest British atrocities, including plundering of Pathan villages. The army eventually grew to a force of eighty thousand Pathans dedicated to nonviolent action. Badshah Khan supported Gandhi's vision of a united India. However, partition could not be avoided, and NWFP became part of Pakistan. With the support of KhudaiKhidmatgars, Badshah Khan mobilized a nonviolent movement to gain democratic rights for the Pathans in newly created Pakistan. During the next three decades he spent fifteen years in prison and seven years in exile as Pakistan continued to be ruled by the military.

The Uttaraadhyayan Sutra, Chapter 20, verse 60

A person who is free from delusion (who understands things as they are),

who has good qualities, who has good thoughts, speech and deeds,

and who avoids violence of body, speech and mind,

enjoys freedom like a bird, while living on this earth.

Source: Kothari, S. Concept of nonviolence in Jainism: A system for inner peace and happiness. Retrieved April 3, 2003 from http://www.jainstudy.org

KhudaiKhidmatgars is significant not only because of its struggle against colonialism and authoritarianism, but also because it was an experiment that helped advance the agenda for a peace army to resolve international conflicts. Moreover, because of the dedication of such large numbers of Muslims to nonviolent action, the KhudaiKhidmatgars helped to dispel the myth that nonviolence is not consistent with Islam.

TIBETAN QUEST FOR FREEDOM

Tenzin Gyatso (b. 1935), the fourteenth Dalai Lama, was forced into exile by the Chinese government in 1959. Now based in Dharmasala, India, the Dalai Lama continues to lead his followers in nonviolent resistance against the Chinese and to serve as a beacon of nonviolence to the international community. He has declared that violence by Tibetans would be suicidal and that "nonviolence is the only way" for Tibet to gain independence. While accepting the Nobel Peace Prize in 1989, the Dalai Lama commended nonviolent resistance, including the hunger strikes of Chinese students at Tiananmen Square in Beijing. The Dalai Lama, like Gandhi, believes that the cultivation of inner peace and integrity is the ultimate weapon for world peace because happiness lies within oneself.

Restoring Democracy in the Philippines

Corazon Aquino (b. 1933) led a nonviolent resistance to restore democracy in the Philippines after President Ferdinand Marcos illegally declared himself the winner of an election in 1986. Influenced by Gandhian tactics of boycott and noncooperation, Aquino called for a nationwide boycott of banks, newspapers, beverages, and movies. She called upon people to withdraw their funds from large banks with close connections to Marcos, to shut down schools and factories, and to delay paying utility bills. Tactics of noncooperation brought government operations to a halt and slowed the economy. Housewives, priests, workers, and businesspeople alike supported the movement, refusing to accept the fraudulent outcome of the election. The force of nonviolent sanctions and boycott ultimately prevailed: Marcos was exiled to Hawaii, and Aquino became the duly elected president of the Philippines.

Quest for Democracy in Myanmar

In 1988, two years after democracy was restored in the Philippines, Aung San Suu Kyi (b. 1945) led a democratic movement in Myanmar (Burma). Consequently, in 1990 elections were held in which Suu Kyi's democratic party won. However, unwilling to give up authority, the military junta refused to abide by the election results. Inspired by Gandhian satyagraha and Buddhist compassion, Suu Kyi continued her nonviolent struggle in the face of oppression and remained committed to the cause of freedom and human rights even when put under house arrest. Her resistance often takes the form of hunger strikes and active noncooperation with the authoritarian regime because she is convinced that "freedom from fear" is essential for bringing democracy to Myanmar. Large numbers of Myanmar citizens are influenced by the moral strength of Suu Kyi and regard her as Myanmar's destiny.

Arrested Democracy in China

After the emergence of a democratic movement in Myanmar, in China tens of thousands of college students, led by student Wu'er Kaixi (b. 1968), demanded democratic reform from the Chinese Communist government in 1989. As the movement gained momentum, three thousand students staged a hunger strike, drawing more than a million people to their side at Tiananmen Square. They

Buddhist Nonviolence in Central Thailand

The following account describes how Theravada Buddhists in farming villages in central Thailand deal with the precept of nonviolence in their daily activities.

Similarly, behaviour towards mosquitos is merciless, and the man who can afford insecticide will not hesitate to spray a crop, thus killing thousands of small living creatures in flagrant contravention of the first precept. However, behaviour with regard to the killing of animals which are bigger than insects is often accompanied by a marked discomposure. A squirrel will be trapped and killed, because it devours the best fruit, a poisonous snake will be beaten to death, rats, which steal the provisions are disposed of similarly, but in all these cases the careful observer notices that there is uneasiness about these acts of violence. Sometimes, a farmer will evade the act of chopping a fish to death by letting it die out of the water, or by ordering a servant to do so. When fish or a chicken has to be killed for domestic consumption, it will be done out of sight, outside the house so that even the spirits of the ancestors cannot see this act.

An illustration of the uncomfortable awareness of the evils of killing animals is given:

"Today, standing on one of the jetties waiting for a taxiboat, a stranger struck up a conversation. At one point I asked him his profession at which he answered: 'I work on the water'. Mistakenly I thought he was a sailor, and consequently demanded to know whether he was attached to the navy or worked on a merchant vessel. Rather embarrassed the old man explained that he was a fisherman, but he had avoided saying so 'because it is not nice to tell a monk that you live by killing fish'."

Possibly the evasion would not have been used in conversation with other monks. The fact that the monk in question was a Westerner is relevant in this case. However special the circumstances, the fact remains that the man wanted to be extra polite and that he used a euphemism to describe the profession of fisherman.

Animals bigger than chickens, like pigs and buffaloes, are usually not slaughtered by farmers. Sometimes, when draught animals are too old to work, they are permitted to remain on the farm until they die a natural death, but often these big animals are sold to professional butchers. Most farmers shudder to think about the store of bad karma a butcher accumulates during his lifetime.

Source: Terwiel, B. J. (1975). Monks and Magic: An Analysis of Religious Ceremonies in Central Thailand (pp. 194–195). London: Curzon Press.



demanded democratic reform and an immediate meeting with government officials. However, negotiations could not continue because students felt rising anger toward the government and because student leaders felt estranged from one another. On 4 June 1989, military troops marched into the square, killing several hundred protesters in what became known as the "Tiananmen massacre." However, the movement helped secure international condemnation of the Chinese Communist regime for its violation of human rights and resulted in the imposition of economic sanctions.

Nonviolent Movements in the Americas

In the Americas nonviolent movements became central to the restoration of rights in the United States—the world's most powerful democracy—and to the defeat of dictators in central and Latin America.

Civil Rights Movement in the U.S. South

The seeds of Gandhian nonviolence were planted in new soil when Martin Luther King Jr. (1929–1968) led the civil rights movement in the U.S. South during the 1950s and the 1960s. Drawing upon *satyagraha* and his own experience as a Christian minister, King developed a unique philosophy of nonviolent resistance that was effective during the major civil rights campaigns, including the Montgomery, Alabama, bus boycott (1956), the lunch counter sit-ins (1960), the freedom rides (1961), the Albany, Georgia, campaign (1961–1962), the Birmingham, Alabama, campaign (1963), and the drive for

A war should never be waged against human beings until you call out to them 'Shalom'.

• Moses Maimonides (1135–1204)

voting rights (1964–1965). The movement championed the use of nonviolent action as a form of social protest and mobilized the African-American population across the nation. King's speech at the Lincoln Memorial in Washington, DC, in 1963, during which he articulated his dream of racial equality, attracted the largest nonviolent demonstration after Gandhi's mass movement in India and helped bring about the Civil Rights Act of 1964 and the Voting Rights Act of 1965.

United Farm Workers Movement

While the civil rights movement was still in its infancy, a young Mexican-American farm worker, Cesar Chavez (1927–1993), was searching for a solution to his community's economic problems. He found a sense of direction in Gandhi's autobiography, The Story of My Experiments with Truth. Imbued with the spirit of satyagraha, energized by King's civil rights campaigns, and drawing upon his Christian ethic, Chavez during the period 1960–1980 led members of the United Farm Workers (UFW) of America in nonviolent campaigns to secure their rights and protest their exploitation. Through policy changes and legislation Chavez achieved numerous improvements, such as an increase in wages, work rule reforms, workers' benefits, and a ban on the use of dangerous pesticides on farms. The movement relied on nationwide consumer boycotts and labor strikes, pickets, processions, and fasting. The movement not only achieved its goals, but also demonstrated the power of an underclass who previously had had no political standing.

Civic Strike in El Salvador

After people discovered the power of nonviolence, the scope of its application assumed several dimensions. In El Salvador in Central America students, doctors, and merchants in 1944 used nonviolent action to bring down the longtime military dictator, General Hernandez Martinez. Opponents of Martinez's brutal policies organized a civic strike using nonviolent tactics. They detached Martinez from his closest friends, allies, and members of the military and forced him into exile.

Desaparecidos Movement in Argentina

In 1977 fourteen mothers organized a march in Buenos Aires, Argentina, with the motto, "We will walk until we drop." Wearing white scarves, these women in their sixties, seventies, and eighties fearlessly walked into the Plaza de Mayo and were joined by hundreds of other people in their protests against the "disappearance" of their sons, daughters, husbands, and other relatives under the authoritarian regime of General Jorge Videla. Marching, writing letters to international agencies, advertising in newspapers, and collecting twenty-four thousand signatures on a petition, members of the *desaparecidos* (the disappeared) movement created international awareness about the violation of human rights in their country while refusing to be silenced at any cost. Their efforts eventually led to the downfall of the military government.

Chilean Resistance to a Dictator

Like protesters in El Salvador and Argentina, protesters in Chile remained committed to nonviolent noncooperation as they opposed the dictatorship of General Augusto Pinochet (b. 1915). As the protest movement grew, protesters gained courage and refused to pretend that Pinochet had their consent to rule. On the contrary, they worked to convince people that Pinochet commanded no popular support of Chileans. Challenged by such protests, in 1988 Pinochet called for plebiscite (vote), which he lost. Clinging to authority, he tried to bypass the plebiscite results. However, his own supporters, in the wake of mounting popular protest, refused to support him, and he was defeated.

Nonviolent Struggles in Europe

Soon after Gandhi began his nonviolent mass campaigns of noncooperation and civil disobedience against the British in India, Europeans faced aggression from Nazi Germany. Nonviolent revolutions occurred in several places in Europe during the Nazi occupation, most notably in Norway and Denmark.

To protest the imposition of fascist education and ideology during the Nazi occupation of Norway in 1942, two-thirds of Norway's twelve thousand teachers signed a petition and refused to accept membership in the new mandatory teachers organization, thereby rejecting the fascist model of education for their children and students. In spite of threats of dismissal, closure of schools, and even imprisonment of teachers, the movement grew, and teachers held classes in private homes. Tens of thousands of protest letters from parents supported the movement. Children gathered and sang songs as teachers were taken to concentration camps, where they were tortured. Their suffering provided renewed vigor to the movement, and after eight months the regime ordered the release of the teachers, and the attempt to establish a fascist model of education in Norway failed.

In Denmark two significant developments took place during the resistance to Nazi Germany. First, the Danes nonviolently protested and saved seventy-two hundred of eight thousand members of the Danish Jewish community from deportation to concentration campus in 1943. Second, in response to Nazi occupation in 1940 and the subsequent surrender of the Danish government, the underground movement in Denmark called upon people to protest through noncooperation, social boycotts, strikes, and even sabotage. Although their struggle did not remain totally nonviolent, the Danes showed an impressive capacity to resist Nazi occupation.

Poland, Czechoslovakia, and

Revolutions in Europe

During the last two decades of the twentieth century nonviolent revolutions became a major trend throughout eastern and central Europe. The most notable took place in Poland and Czechoslovakia.

In Poland, Lech Walesa (b. 1943), inspired by Gandhi, led industrial strikes in 1980, giving rise to Solidarity, a federation of Polish trade unions. The ensuing movement during the next several years remained totally nonviolent. It not only brought an end to Communist dictatorship in Poland but also kindled the spirit of democracy throughout eastern Europe. Through his dedication to nonviolent action, Walesa shared a lesson he had learned: "We can effectively oppose violence only if we ourselves do not resort to it." Walesa became the president of Poland in 1990.

In Czechoslovakia, the writer Vaclav Havel (b. 1936) led the nonviolent resistance movement against Soviet oppression. His seminal essay, "Power of the Powerless," outlined a strategy for nonviolent revolution. He called upon people to empower themselves by daring to "live within the truth" and refusing to "live a lie." Havel was elected first as president of Czechoslovakia in 1989 and later as first president of the new Czech Republic in 1991. Soon "people power" had resulted in the fall of the Berlin Wall and the overthrow of Communist regimes all over eastern Europe.

Supported by prodemocratic forces in Europe and the United States, a student-led nonviolent uprising in Serbia during the period 1999–2000 helped to defeat President Slobodan Milosevic, who had held power since 1989 and had refused to accept the results of democratic elections held in 1996. Opponents removed the last of Europe's dictators by neutralizing his security forces and crippling his infrastructure by general strikes.

Intifada in the Middle East

The intifada (uprising), a movement of 1.3 million Palestinians protesting Israeli occupation of the West Bank and the Gaza Strip during the period 1987-1990, was characterized by nonviolent methods such as protests, strikes, boycotts, noncooperation and civil disobedience, and the creation of alternate institutions. Its leader, Mubarak Awad (b. 1943), had been to India and was influenced by Gandhi. While in the United Sates, Awad was inspired by the work of Martin Luther King, Jr. Members of the intifada believed that nonviolence would empower them and demoralize their opponents, unite the Palestinians, and divide the Israelis. Therefore, they put Israel on the defensive. Youth and women played a predominant role. However, the movement had a limited impact because it was intercepted by two events: the Israeli deportation of Awad to United States and the rise of Hamas-a more fundamentalist organization-in the Gaza Strip. Intifada did not succeed in reclaiming Palestine from Israel. It did, however, empower Palestinians,

Bertrand Russell: On the Importance of Education

Bertrand Russell (1872-1970), British philosopher, logician, essayist, and renowned peace advocate, had strong opinions about the importance of education. Consider this excerpt from his book Why Men Fight:

The power of education in forming character and opinion is very great and very generally recognized. The genuine beliefs, though not usually the professed precepts, of parents and teachers are almost unconsciously acquired by most children; and even if they depart from these beliefs in later life, something of them remains deeply implanted, ready to emerge in a time of stress or crisis. Education is, as a rule, the strongest force on the side of what exists and against fundamental change: threatened institutions, while they are still powerful, possess themselves of the educational machine, and instill a respect for their own excellence into the malleable minds of the young. Reformers retort by trying to oust their opponents from their position of vantage. The children themselves are not considered by either party; they are merely so much material, to be recruited into one army or the other. If the children themselves were considered, education would not aim at making them belong to this party or that, but at enabling them to choose intelligently between the parties; it would aim at making them able to think, not at making them think what their teachers think. Education as a political weapon could not exist if we respected the rights of children. If we respected the rights of children, we should educate them so as to give them the knowledge and the mental habits required for forming independent opinions; but education as a political institution endeavors to form habits and to circumscribe knowledge in such a way as to make one set of opinions inevitable.

Source: Russell, B. (1917). Why men fight. London: Century Co.

who were more than ever filled with a sense of constructive nationalism. Such exposure undermined the credibility of the government. In 1994, after free elections, South Africa finally became a democracy; Mandela was its first president.

South Africa: A Century of Struggle

Even though Gandhi had begun his satyagraha in South Africa, inspiring nonviolent action throughout the world, South Africa remained under the policy of apartheid (racial segregation) for most of the twentieth century. The struggle against apartheid assumed violent dimensions several times during the century. Even the political leader Nelson Mandela (b. 1918), who began the nonviolent resistance, took to violence, resulting in his serving twentythree years in prison. Nevertheless, nonviolent sanctions, strikes, rent boycotts, street committees, and boycotts of business owned by whites ultimately disabled the government. Moreover, the formation of the United Democratic Front, which included all people who favored democratic reforms through nonviolent means, eventually forced change in South Africa. Nonviolent methods alone did not bring the change, but they were instrumental in exposing the stark nature of apartheid and the suffering of people engaged in nonviolent resistance.

Outlook

Nonviolence emerged as a powerful trend during the twentieth century. Undertaken in diverse contexts, nonviolent movements varied widely in the degree of challenge they posed to the established institutions of power and authority and the extent to which they brought about meaningful social transformation. However, collectively they showed that war and violence are not the only, and certainly not the best, means of changing the institutions of power or creating a new social order. In the years to come we may see that Gandhi was right in asserting that "we are constantly being astonished at the amazing discoveries in the field of violence. But I maintain that far more undreamt-of and seemingly impossible discoveries will be made in the field of nonviolence."

Tara Sethia

See also Civil Disobedience; Gandhi, Mohandas; Mahavira; Peace Projects

Further Reading

- Ackerman, P., & DuVall, J. (2000). A force more powerful. New York: Palgrave.
- Bondurant, J. (1965). Conquest of violence: The Gandhian philosophy of conflict. Berkeley and Los Angeles: University of California Press.
- Burrowes, R. J. (1996). The strategy of nonviolent defense. Albany: State University of New York Press.
- Easwaran, E. (1999). The nonviolent soldier of Islam. Tomales, CA: Niligiri Press.
- Flis, A. (2002). What the West has learned from the East in the twentieth century. *Development and Society*, 31, 245–264.
- Gandhi, M. K. (1960). *My nonviolence*. Ahmadabad, India: Navjivan Press.
- Havel, V. (1985). Power of the powerless: Citizens against the state in central eastern Europe. New York: M. E. Sharpe.
- Ingram, C. (2003). In the footsteps of Gandhi. Berkeley, CA: Parallax Press.
- Iyer, R. (1983). The moral and political thought of Mahatma Gandhi. New York: Concord Grove Press.
- King, M. L., Jr. (1964). Stride toward freedom. New York: Harper and Row.
- Powers, R., & Vogele, W. (Eds.). (1997). Protest, power and change. New York: Garland Publishing.
- Sharp, G. (2000). *The politics of nonviolent action* (8th ed.). Boston: Porter Sargent Publishers.
- Suu Kyi, A. S. (1991). Freedom from fear. London: Viking.

North Atlantic Treaty Organization

The North Atlantic Treaty Organization (NATO) was created as result of the signing of the North Atlantic Treaty on 4 April 1949 "to restore and maintain the security of the North Atlantic area" (defined as territories, islands, vessels, and aircraft of the signatories "north of the Tropic of Cancer"). Its creation has to be considered in the context of the incipient Cold War due to the deterioration in the relations between the victors of World War II, with the former Soviet ally now perceived as an increasing threat to the safety of the Western Democracies on both sides of the Atlantic—a perception confirmed by the explosion of the first Soviet atom bomb on 29 August 1949. It was also felt that the mistakes that followed World War I, when the four major Western victors (France, Italy, the United Kingdom, and the United States) each went their own way without a mutual guarantee of their future safety, should not be repeated.

Churchill was probably the first statesman to fully understand the implications of the Red Army's advance into the heartland of Europe agreed upon at Yalta. The combination of a residual United States Army and Air Force occupying southern Germany, nonexistent French and Italian armored and air forces, and a limited British land army on the Rhine (Britain being traditionally strong on the seas and now in the air) could under no circumstances resist a Soviet attack beyond what he called the Iron Curtain. The British policy of trying to persuade the United States to abandon its prewar isolationism met at first with little success. Down from over 3 million men stationed in Europe in May 1945, the United States presence was less than 400,000 strong smaller than the British contingent-in the spring of 1946, when Churchill raised the alarm again in a speech on "The Sinews of Peace" given before President Truman at Fulton, Missouri, which had a very cold reception in the American press.

The deciding factor was probably the British inability to continue to support the Greek government's struggle against Communist guerillas in March 1947, which made it clear that only the United States had the resources in men, equipment, and money to contain Communist expansion—in Europe as in the rest of the world. The approval by Congress in that month of the "Truman Doctrine," whereby the United States undertook "to support free peoples who are resisting attempted subjugation by armed minorities, or by outside pressure," was a major reversal of policy, which was soon extended from Greece to most of Western Europe. The Marshall Plan, announced in June 1947, was in the same vein, in that it postulated that European economic recovery with American aid was the best bulwark against Soviet and other Communist expansion. These American initiatives were in accord with the ideas publicly expressed by Belgian, British, and French statesmen that only a common system of defense could guarantee the safety of Western Europe—a plea that took on increased relevance and urgency with the Prague coup of 22 February 1948, after which events moved very fast.

15th Century	Portuguese knights capture Cueta in North Africa from the Muslims.
	Columbus "discovers" the Americas for Spain and colonies are established in the Americas.
	Portugal claims Brazil under the Treaty of Tordesillas.
	Vasco da Gama of Portugal discovers an all-sea route to India.
16тн Century	Portugal dominates the maritime trade in South and Southeast Asia.
	The Pacific Ocean is "discovered" by Vasco Nuñez de Balboa of Spain.
	Spain claims the Philippines.
	The Habsburg ruling house of Europe comes to power.
	France establishes a presence in West Africa.
	Portugal's dominance in East Africa and Asia begins to decline.
17th Century	The English, Dutch, and French charter trading companies.
	The English settle Jamestown in Virginia.
	France establishes colonies in North America and the Caribbean.
	Russia colonizes Siberia.
18th Century	France loses American colonies and territory to England and Spain.
	The English lose control of their American colony.
	The Dutch Republic becomes a colonial power with the abolishment of its private
	trading companies.
	The Dutch begin to lose most of their colonies to the British.
S. S. S. S. S. S.	The Spanish empire declines.
12 4	By the time of the Treaty of Paris in 1763, England has become the dominant European colonial power.
19th Century	France under Napoleon regains territory in the Americas.
	Haiti gains freedom from France through a slave revolt.
	Brazil declares independence from Portugal.
	Slavery is abolished by all imperial powers.
	The Habsburg empire is transformed into the Austro-Hungarian empire.
	The German empire is established after the Prussian defeat of France.
	Russia colonizes Poland and Finland, the Caucasus, and Central Asia.
	England, France, Spain, Portugal, Belgium, Germany, and Italy solidify their colonic in Africa.
20th Century	European control of its African colonies intensifies.
	World War I starts when the Austro-Hungarian government declares war on Serbia.
	The end of World War I marks the end of the Austro-Hungarian empire and the German empire.
	Britain and France gain trust territories in Asia.
	The British Commonwealth of Nations is created.
	During World War II Japan takes Asian colonies from Britain, France, and the Netherlands.
	Following the end of World War II, the British, French, Dutch, and Portuguese empires shrink as many former colonies become independent nations.
	The Comunidade dos Países de Língua Portuguesa (CPLP) unites eight Portuguese- speaking nations.
	The Russian-Soviet empire disintegrates.

A treaty of mutual assistance between Belgium, France, Luxembourg, the Netherlands, and the United Kingdom was signed in Brussels on 17 March 1948, with the Canadian prime minister expressing interest in joining them on 28 April, and Senator Arthur H. Vandenberg of the United States initiating talks in the Senate that resulted in the almost unanimous adoption on 11 June of a resolution calling for "the association of the United States, by constitutional process, with such regional and other collective arrangements as are based on continuous and effective self-help and mutual aid, and as affect its national security." The road was clear for formal negotiations and the drafting of a treaty, which took place in Washington from 6 July 1948 to 18 March 1949, when the terms were made public, with the Brussels Treaty signatories, Canada, and the United States announcing that they had also asked Denmark, Iceland, Italy, Norway, and Portugal to join the proposed alliance and that they had accepted. (Spain only joined in 1982, after the death of Francisco Franco.)

These nations constituted the twelve founding members, with Greece and Turkey joining in 1952. The controversial accession of the Federal Republic of Germany in 1955 led to the creation of the Warsaw Pact-the Soviet Bloc's version of the Atlantic alliance-and extreme tension with Communist parties in Western Europe, which denounced the rearmament of "revanchist" (i.e., intent on starting another war avenging the defeat of 1945) crypto-Fascists, as they saw the West German governing elite. The 1960s saw another period of difficulty for NATO, over the question of the "American nuclear umbrella" and who would decide on nuclear war. Only two other members, the United Kingdom (1952) and France (1960), had a nuclear retaliation capacitythough it was in no way comparable to that of the two superpowers—and each chose a different course, with the British government opting for total integration of its nuclear deterrent (1962) while France, under General de Gaulle and his successors, decided that continued membership in NATO did not preclude independent nuclear strikes (1966). After the period of detente in the 1970s, the installation of American cruise missiles on European soil in the 1980s led to many anti-NATO demonstrations, notably in England.

Many predicted that the fall of the Berlin Wall (9 November 1989) and the consequent removal of the Communist menace would lead to the dissolution of NATO, which had been negotiated and established against the backdrop of the Berlin blockade and airlift (24 June 1948-4 May 1949), but the organization seems to have found a new lease of life, with action in Serbia in 1994 and the Middle East in 2004, and the accession in 1999 of the Czech Republic, Hungary, and Poland, followed in 2004 by that of the Baltic Republics (Estonia, Latvia, and Lithuania) and Bulgaria, Romania, Slovakia, and Slovenia. The former anti-Communist, anti-Soviet alliance may still be said to justify its mission "to restore and maintain the security of the North Atlantic area" in the face of new threats against the twenty-six sovereign states that now compose it.

Antoine Capet

See also Cold War; Containment

Further Reading

- Duignan, P. (2000). NATO: Its past, present, and future. Stanford, CA: Hoover Institution Press.
- Heller, F. H., & Gillingham, J. R. (Vol.Eds.). (1992). NATO: The founding of the Atlantic alliance and the integration of Europe. *The Franklin* and Eleanor Roosevelt Institute series on diplomatic and economic history: Vol. 2. New York: St. Martin's Press.
- North Atlantic Treaty Organization, official website. (2004). Retrieved April 20, 2004, from http://www.nato.int/
- Park, W. (1986). Defending the West: A history of NATO. Boulder, CO: Westview Press.
- Schmidt, G. (Ed.). (2001). A history of NATO: The first fifty years. London: Palgrave.

Nubians

F or over a thousand years, from the fourth century to the fourteenth century CE, the medieval Nubian kingdoms and their peoples dominated a wide span of Africa, stretching 1,200 kilometers from the plains of the Blue

	Key Events in the History of African State
8th century bce	Cush (in southern Egypt and northern Sudan) invades and conquers Egypt; Shabaka of Cush establishes Egypt's twenty-fifth dynasty.
6th century bce	Meroë becomes the capital of Cush.
l st millen- nium ce	Wagadu (Ghana) empire flourishes.
1st-3rd century ce	Kingdom of Cush flourishes, engages in trade with Rome.
Mid-3rd century ce	Aksum replaces Cush as principal supplier of goods to Rome.
Early 6th century ce	Aksum loses its Nile Valley and southern Arabian provinces.
6th century	Nubian kingdoms (Nobadia, Makuria, and Alodia) flourish.
8th century	City of Aksum abandoned.
9th-14th century	Centralization of political power in central Africa leads to the formation of the kingdom of Kongo.
10th-12th Century	Hausa states emerge.
c. 1150–early 14th century	Saifawa dynasty rules in Kanem, in the Lake Chad basin.
Early 13th century	Wagadu reduced to a tribute-paying vassal of Soso and Mali.
13th century	Nubian kingdom of Alodia begins to disintegrate.
13th-14th Century	Loose alliance among the seven Hausa states.
Mid-13th- mid-15th century	Mali empire flourishes on the Upper Niger River.
1290-1450	Great Zimbabwe flourishes in southern Africa.
15th century	Empire of Songhai is expanding.
15th century	The East African island of Kilwa is a leading trading center.
1591	Songhai loses its independence to invaders from Morocco.
17th–18th century	Bornu, in the Lake Chad basin, is one of the largest states in Africa.
1808-1903	Sokoto caliphate flourishes in West Africa.
1818-1879	Zulu kingdom flourishes.

Nile (present-day Sudan) in the south to Aswan, Egypt, in the north.

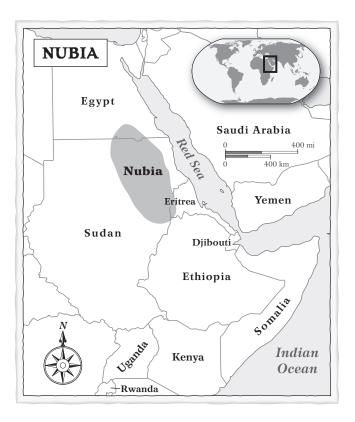
The historical roots of the Nubians trace back to a set of once widespread pastoralist communities, called the Astaborans by modern-day scholars. These peoples occupied the dry steppes of the eastern Sahara in the fifth and fourth millennia BCE. The ancestral Nubian-speaking society arose out the breakup of the Astaboran group during the final drying out of the Sahara in the middle of the third millennium BCE. The earliest surviving written notices, from two thousand years later, describe the Nubians of the third and second centuries BCE as living west of the Nile along the southern Sahara fringes, where they formed several small kingdoms independent of the powerful empire of Meroe. By the first and second centuries CE, a few Nubian communities had moved east of the river, while larger numbers settled along the Nile itself between the first and fifth cataracts. In these lands the Nubians became subjects of the Meroitic empire. Some scholars propose that the Meroites may even have encouraged the Nubians to settle down as a buffer farming population along the Nile, after the border between the Roman and Meroitic territories had been established by treaty near Philae in 23 CE.

The Rise of the Nubian Kingdoms

With the collapse of Merotic power in the third and fourth centuries, a period of strife overtook the region between Aswan and the Blue Nile to south, with the Nubians emerging triumphant by the later fifth and early sixth centuries. Archaeological findings identify two Nubian societies along the Nile, one between the first and third cataracts and the second extending from the third cataract south to the Blue Nile regions. In the sixth century these territories were apparently divided among three kingdoms: Nobadia, with its capital at Faras, Makuria, with its capital at Dongola, and Alodia farthest south, with its capital at Soba (south of present-day Khartoum). Interestingly, the royal succession in these kingdoms was matrilineal, the normal pattern being for a nephew to succeed his mother's brother as king. From the 540s to the 560s, missionary activities converted the Nubian royal courts and, in time, the general Nubian populace to Christianity, although some Nubians had become Christian as early as the fifth century. Nobadia and Alodia accepted Monophysite teachings (that Christ had a single divine-human nature; modern-day Monophysite churches include the Coptic and Ethiopian Orthodox churches), but Makuria apparently initially followed the Chalcedonian creed (which stated that Christ had two distinct natures, divine and human, in one person; this is the position adopted by the Roman Catholic, Eastern Orthodox, and, later, the Protestant churches).

The traditional view of historians has been that, sometime before 707 CE, Makuria conquered and incorporated Nobadia. But a recent reevalution of the literary and linguistic evidence by linguist-historian Marianne Bechhaus-Gerst strongly suggests that the unification of Nobadia and Makuria took place by early in the 600s. Moreover, her work shows compellingly that Nobadian culture dominated the unification of the two kingdoms. The language of Nobadia, known as Old Nubian, became the written and administrative tongue of the combined state, and Nobadia's Monophysite faith became the established religion, displacing Makuria's earlier adherence to Eastern Orthodoxy.

The social history evinces a similar history. The Nobadian stretches of the river were home to a multilayered social formation, with an administrative class, a prospering merchant class, a clerical class, servants and artisans in the towns, and a class of peasant farmers on the land. In contrast, society in the former Makuria appears to have consisted primarily of just two strata, the ruling and administrative elite and its retainers, and a far larger, probably enserfed peasant majority. The old lands of Makuria, in other words, bear all the earmarks of a conquered territory ruled by the Nobadians. Outsiders called the new combined state "Makuria," because its main capital was the Makurian city of Dongola. But the choice of Dongola as the capital most likely reflects an early policy of concentrating state power where opposition was most likely to arise.



The Muslim conquest of Egypt (639-641 CE) and the subsequent Muslim invasions of northern Nubian areas in 642 and 652 CE mark a major transition in the history of the Nubian states. Makuria effectively turned back both invasions, and the treaty of peace that ended hostilities established at first a regular annual, and then, after 835 CE, a triennial exchange of goods between Makuria and the governments of Egypt that lasted until the later thirteenth century. Muslim interpretations in much later times sought to portray the relationship as a tributary one. But the contemporary evidence shows this to have been a treaty among equals. Over the next several centuries, although there were a number of outbreaks of war between the Makurians and their northern neighbors, the Nubian states appear generally to have prospered. In the tenth century, Nubian kings in fact intervened in upper Egypt on behalf of their Coptic Christian coreligionists and ruled southern Egypt for several decades. It is clear that through much of this period the Makurian state and its merchant class continued to be prosperous participants in trade northward to Egypt. From the ninth through the twelfth centuries its kings also undertook to control overland access eastward to the expanding commerce of the Red Sea, launching military campaigns when necessary to maintain a loose hegemony over the nomadic Beja inhabitants of the intervening areas.

Alodia, the Nubian kingdom about which we know the least, was generally reckoned the more powerful of the two states, and it was certainly the more populous and probably the wealthier of the two. Travelers to Soba, the capital city, describe a wealthy court and a thriving urban sector with important trade links to the Red Sea. Among the notable products of country in its heyday was gold, mined in the southeastern borderlands of the kingdom, near the edges of the Ethiopian highlands. While the northern kingdom ruled primarily over people of Nubian language and culture, Alodia was very much a multiethnic state, with a variety of other peoples besides Nubians making up its population, especially in most of the peripheral areas of the state. Alodia was too far south to be involved in conflicts with Egypt, but we suspect that its kings, like those of Makuria, must have had very important relations with the Beja, whose lands lay between them and the Red Sea entrepots. The existence in the tenth and eleventh centuries of several small, nominally Christian principalities among the Beja surely reflects the political and material preeminence of Nubian influences.

Decline of the Nubian Kingdoms

From the twelfth century two new factors began to shift the balance of power away from the Nubian kingdoms. The factor of greatest long-term effect was the emergence and spread of a new ethnic element, Bedouin Arabs, who infiltrated southward from Egypt through the areas east of Nile. In the fourteenth and fifteenth centuries these Arabs began increasingly to displace or absorb the earlier Nubian and related Daju pastoral peoples of the desert steppes along the southern Sahara fringes, spreading a competing religion, Islam, as well a new ethnicity, language, and economy over large areas. The key to their success may have been that they introduced the first fullfledged camel nomadism into the most marginal areas, before then precariously dependent on goat and sheep raising. Another complicating factor in the thirteenth and fourteenth centuries was the disappearance of the earlier Beja principalities of the Red Sea hills and in their place the rise of a new confederation of Beja clans, the Hadariba, at the same time as Islam increasingly began to take hold among them. Controlling the crucial trade routes between the Red Sea and the old Alodia heartland, the Hadariba appear to have siphoned away a growing portion of the wealth of the trade. By as early as the mid-1200s the Alodia kingdom, which most strongly faced these new pressures, may have begun to break up into a number of independent principalities.

The second factor in the decline of independent Nubia was political. The new Ayyubid rulers of twelfth-century Egypt, and after them the Mamluks, instituted policies of more active engagement with the regions to the south. These pressures came to a head in the latter half of the thirteenth century and in the early fourteenth century, as aspiring Christian Nubian rulers undermined their own political base by seeking help from Muslims in their internal struggles for political advantage. In 1324 a new Muslim kingdom of Makuria took power at Dongola. The old Nobadian regions to the north broke away and may have had Christian rulers of their own for several decades longer, as did a number of the small independent Nubian principalities to the south, left over from the breakup of Alodia.

By the beginning of the sixteenth century, however, the political and cultural worlds of the Nubians had changed irretrievably. In 1504 the region encompassing the former territories of Alodia and the southern part of Makuria was united into a new state, the Funj kingdom, with its capital at Sinnar, 200 kilometers south of the now ruined city of Soba. The new rulers opted for Islam as the religion best able to unite their populations and consolidate their trade relations with the Red Sea countries and Egypt. Nubian languages continued to be spoken, especially in the old territories of Makuria. But Arabic became the language of commerce and, in time, of administration, in the Funj kingdom, and gradually between 1500 and 1800 most of the southern Nubians began to adopt Arabic as their first language and increasingly to think of themselves as Arabs. The same trends came gradually also to affect the self-perceptions of other peoples included in the originally multi-ethnic Funj kingdom.

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See also Egypt, Ancient; Meroë

Further Reading

- Bechhaus-Gerst, M. (1996). Sprachwandel durch Sprachkontakt am Beispiel des Nubischen im Niltal (Language Change through Language Contact in the Case of the Nubian Languages of the Nile Valley). Cologne, Germany: Köppe Verlag.
- Welsby, D. (2002). *The Medieval kingdoms of Nubia*. London: The British Museum Press.

Oil Oral History Organization of American States Orientalism Orthodoxy, Christian Osman I Ottoman Empire



N o commodity or industry had a greater impact on world history in the twentieth century than petroleum, or oil, a complex mixture of hydrocarbons that had their ultimate origin in plants and animals that lived and died hundreds of million of years ago. Oil production and use has transformed economic life and has had a deep and lasting impact on the environment. Control of oil has helped determine the outcome of major wars and has been a central element in U.S. global power.

History of Oil Use

Oil from natural seepages was used as early as 3000 BCE in Mesopotamia and China for heating, lighting, medicine, ship caulking, and road building. Later, oil was a key ingredient in Greek fire, a flammable mixture of petroleum and lime that was used in warfare. Widespread oil use did not occur until the mid-nineteenth century, however, when the development of techniques for refining crude petroleum created new uses for oil, and the development of hard-rock drilling for oil greatly expanded oil production. Kerosene refined from crude petroleum quickly became a major source of illumination, and petroleum-based lubricants replaced vegetable oils, whale oil, and animal tallow.

Used mainly for illumination in the nineteenth century, oil became an integral part of modern life in the twentieth century. Just as electricity began to overtake kerosene as the main source of illumination, at least in urban areas, the development of the oil-powered internal



combustion engine in the late nineteenth century and its almost universal adoption in the transportation sector over the course of the twentieth century created vast new markets for oil. Aided by improvements in refining techniques, oil became the fuel of choice for the automobiles, trucks, ships, and airplanes that revolutionized transportation and transformed the physical, economic, and social landscapes of societies all over the world. Oilpowered machinery and petrochemical-based pesticides. herbicides, and fertilizers also sparked unprecedented increases in agricultural production. In particular, the development in 1909 of a method to synthesize ammonia, first from coal and later from natural gas, allowed massive expansion in the use of inorganic fertilizers resulting in dramatic increases in food production and water pollution. By the end of the twentieth century, oil accounted for around forty percent of global energy consumption (including over ninety percent of transportation energy use) and was the most important commodity in international trade both in terms of mass and value.

Environmental Impact of Oil Use

Drilling for oil, transporting and refining oil, and burning oil has had a significant impact on the environment. Fossil fuel combustion, of which oil is a major component, puts far more carbon dioxide into the atmosphere than the world's oceans, soils, and biomass can absorb, and probably has affected the earth's climate. In December 1997, the developed countries agreed, in the Kyoto Accords on Climate Control, to reduce their emissions of global warming gases. The Kyoto Accords have not gone into effect, however, due largely to opposition from the United States, and global emissions of greenhouse gases have continued to increase. Oil production and oil-derived products, including the products of the petrochemical industry, have also contributed significantly to air, water, and soil pollution, both directly and indirectly. Oil-powered technologies have allowed vast increases in mining and logging activities, for example, with major environmental consequences.

Oil and Military Power

Oil became essential to military power in the early twentieth century, when the navies of the great powers, led by Great Britain and the United States, began to switch from coal to oil as fuel. Although the navies of the great powers played a relatively minor role in World War I, oil and the internal combustion engine heralded a revolution in mobility on the land, the sea, and the air.

Oil was crucial to the origins and outcome of World War II. Hitler's desire to gain control of oil for his heavily mechanized war machine was an important factor behind his decision to invade the Soviet Union. Japan was dependent on the United States for around 80 percent of its oil needs, and the U.S. decision in the summer of 1941 to cut off oil exports to Japan presented Japanese leaders with the option of going to war to seize oil supplies in the Netherlands East Indies or bowing to U.S. pressure. All the main weapons systems of World War II were oil-powered—surface warships (including aircraft carriers), submarines, airplanes (including longrange bombers), tanks, and a large portion of sea and land transport. Oil was also used in the manufacture of munitions and synthetic rubber. Access to ample supplies of oil was a significant source of allied strength, while German and Japanese failure to gain access to oil was an important factor in their defeat.

Although the development of nuclear weapons and later ballistic missiles fundamentally altered the nature of warfare, oil-powered forces, and hence oil, remained central to military power. Despite the development of nuclear-powered warships (mainly aircraft carriers and submarines), most of the world's warships still rely on oil, as do aircraft, armor, and transport. In addition, each new generation of weapons has required more oil than its predecessors.

Oil and World Power

While the demand for oil has been worldwide, the great sources of supply have been few and separated, and often in the Third World. Disputes over ownership, access, and price have made oil a source of international conflict, particularly in the Middle East, which contains two-thirds of world oil reserves.

In the first half of the twentieth century, the United States, blessed with a thriving domestic oil industry and firmly entrenched in the oil-rich region of the Gulf of Mexico and the Caribbean, controlled more than enough oil to meet its own needs and to fuel the allied war effort in both world wars. Following World War II, the United States made maintaining Western access to the oil riches of the Middle East a key element in its foreign policy. Control of oil, in turn, helped the United States fuel economic recovery in Western Europe and Japan and sustain the cohesion of the Western alliance.

The Soviet Union, in contrast, was unable to convert its control of extensive domestic oil supplies into political influence outside of Eastern Europe. In addition, despite geographical proximity, extensive efforts, and widespread anti-Western sentiment in Iran and the Arab world, the Soviets were unable to dislodge the United States from the Middle East. The Soviets benefited briefly from higher oil prices in the 1970s, but the collapse of world oil prices in the mid-1980s undermined efforts by Soviet reformers to use the earnings from oil exports to ease the transition from a command economy to a market economy while maintaining social welfare programs.

The central role of oil in transportation and agriculture, and the absence of alternative energy sources that possess oil's versatility, high energy density, and easy transportability, mean that oil prices and competition for access to oil will continue to be important issues in world affairs. Whether or not social, economic, and political patterns based on high levels of oil use are sustainable on the basis of world oil reserves, environmental scientists warn that they are not sustainable ecologically—that continuation of high levels of oil consumption will have severe and possibly irreversible impacts on the earth's environment.

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See also Energy; Natural Gas

Further Reading

- Bromley, S. (1991). American hegemony and world oil: The industry, the state system, and the world economy. Cambridge, UK: Polity Press.
- DeGolyer & McNaughton (1999). *Twentieth century petroleum statistics* [Electronic Resource]. Dallas, TX: Author.
- Heinberg, R. (2003). *The party's over: Oil, war, and the fate of industrial societies*. Gabriola Island, Canada: New Society Publishers.
- McNeill, J. R. (2000). Something new under the sun: An environmental history of the twentieth century world. New York: W. W. Norton & Company.
- Painter, D. S. (1986). Oil and the American century: The political economy of U.S. foreign oil policy, 1941–1954. Baltimore, MD: Johns Hopkins University Press.
- Painter, D. S. (2002). Oil. In A. DeConde, R. D. Burns, & F. Logevall (Eds.), *Encyclopedia of American foreign policy* (Vol. 3, pp. 1–20). New York: Charles Scribner's Sons.
- Philip, G. (1994). The political economy of international oil. Edinburgh, UK: Edinburgh University Press.
- Smil, V. (2003). Energy at the crossroads: Global perspectives and uncertainties. Cambridge, MA: MIT Press.
- Venn, F. (2002). The oil crisis. London: Longman.
- Yergin, D. (1991). The prize: The epic quest for oil, money, and power. New York: Simon & Schuster.

Oral History

Oral history is a field of study concerned with obtaining, interpreting, and preserving historical information from verbal accounts. Because such accounts are provided by eye witnesses or at least contemporaries to an The record—history—exists only in the media, and the people who make the media, make history. • JAMES MONACO (B. 1954)

event or period of time, they provide historians with important primary source materials, often from several points of view.

Oral Accounts and Oral Traditions

Oral history, in that it focuses on eliciting information (oral accounts) from people who actually experienced or witnessed historical events, differs somewhat from the fields of folklore and ethnography (cultural studies), which also collect verbal information from living persons. All of these fields of study rely heavily on interviews, but they pursue different goals. In general the folklorist seeks to uncover folk traditions known throughout a group, and the ethnographer seeks to unravel the cultural patterns and organizational structure of a group. Both the folklorist and the ethnographer attempt to interview a representative sample of people to uncover general cultural patterns, although many ethnographers are also fond of collecting biographies that embed a great deal of historical context. The folklorist and ethnographer therefore focus on reconstructing oral traditions. Oral traditions are verbal accounts of events from the more distant past that have been handed down over generations and are shared by a group of people. Oral traditions tend to become modified during long time periods, often serving to identify and legitimize a group. As one moves further and further into the past, history often fuses with legends and myths in oral tradition and folkloric accounts. Nonetheless, the boundaries dividing these fields of study are often blurry because cultural traditions often embed intriguing information about a group's actual past, and contemporary oral history accounts frequently reveal insights into a people's culture.

Early Uses of Oral History Accounts

The incorporation of oral accounts into written histories is undoubtedly as old as history itself. Indeed, oral accounts would have predated the invention of writing as the primary means by which events and ideals of the past were captured for a group's posterity. Oral transmission has also been the usual manner in which histories and traditions have been passed from generation to generation in nonliterate societies worldwide. Among the earliest historians to explicitly rely on oral accounts was the ancient Greek historian Thucydides, who interviewed participants in the Peloponnesian Wars (460–404 BCE). Other examples abound throughout history. For instance, Franciscan friars in sixteenth-century New Spain (Mexico) relied on "the memories of the old men" to record the histories and customs of the indigenous people in their native language (Dibble and Anderson 1982, 10), and the French writer Voltaire (1694–1778) questioned lords and servants alike in preparing his history of the French kings.

Oral History: Methods and Goals

As a systematic field of study, oral history is relatively young. In the United States formal interest in oral history dates from 1938 with a suggestion by the U.S. historian Allan Nevins to establish an organization to collect oral as well as written accounts of significant events from people who had participated in those events. The idea persisted and developed into the formation of the Oral History Association in 1966. Oral history enterprises have gained popularity in Latin America since the 1960s and in Europe since the 1970s and 1980s.

Oral historians emphasize the collection of verbal information through interviews. Other oral sources, such as scripted performances and the spontaneous recording of unrehearsed events, may embed historical information but are usually not used as major sources in a deliberately designed oral history study. The oral historian, in collecting oral accounts, has a particular research question in mind and a set of questions to elicit meaningful information about that question.

By necessity oral history focuses on the most recent generations whose memories can be tapped for their personal experiences and involvement in the historical events or moments of interest to the historian. The field has evolved from its initial interest in prominent people to an interest in everyday witnesses and participants, with ethnic and gender diversity of particular recent importance. Sophisticated digital technologies of the twenty-first century enable oral historians to accurately record interviews

The Pitfalls of Oral History

Historians using oral accounts have long recognized the possible pitfalls in relying on their sources. In the fifth century BCE, Thucydides was concerned that "different eye-witnesses give different accounts of the same events, speaking out of partiality for one side or the other or else from imperfect memories" (1972, 48). This early historian recognized two major concerns shared by modern historians: narrator bias and fallible or idealized memories.

Frances Berdan

Source: Thucydides. (1972). History of the Peloponnesian War. New York: Penguin.

orally and visually and to efficiently store, preserve, and access the interviews.

Limitations and Issues

Like historians relying on written accounts, oral historians recognize the imperfection of their data sources: Memories falter, people idealize past experiences, and narratives can be selective, biased, or even fabricated. Every person sees an event from his or her unique perspective, and this perspective involves not only personality traits but also cultural background. So, for instance, Sioux oral accounts of the Battle of the Little Bighorn on 25 June 1876, vary wildly. This variation probably derives not from faulty or selective memories, but rather from the style of Sioux military tactics that favored individual exploits over coordinated action, preventing any one warrior from gaining an overall picture of the battle. Problems in oral history can also arise from the interview experience itself: Interviewers' very questions and manner can channel narrators' accounts, and, on the other hand, narrators may tailor their accounts to satisfy their perceptions of interviewers' requests. Historians are well aware that the themes driving the historical enterprise itself reflect changing political and social climates.

Like any field, oral history is not without its issues. One such issue revolves around the fundamental mission of the field: Should it provide a record for future generations, or should projects be aimed at more immediate interpretations of recent history? Other issues reflect social changes: Should oral history serve as a means through which the voices of disenfranchised persons can be heard? Additional issues concern methodologies: Should the original tapes or their transcripts be considered the primary sources? Should the people interviewed be asked or allowed to edit transcripts of their interviews? Philosophical issues mirror general trends in other social science fields, particularly a consideration of the impact of the interviewer on the interview itself and on the quality of the data collected.

The Significance of Oral History

Historical enterprises benefit from reliance on as wide an array of complementary primary sources as possible. Oral history adds a unique dimension to the font of primary source material. Recent research pursues a wide range of topics and gathers oral accounts from a wide spectrum of people. Oral history also has practical applications in land use claims, historic preservation, governmental and business history, and cultural impact studies.

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See also Letters and Correspondence; Social History

Further Reading

- Allen, B., & Montell, L. (1981). From memory to history: Using oral sources in local historical research. Nashville, TN: American Association for State and Local History.
- Dibble, C. E., & Anderson, A. J. O. (Eds.). (1982). Sahagún's historia. Florentine codex: General history of the things of New Spain, introductions and indices (pp. 9–23). Salt Lake City: University of Utah Press.
- Dunaway, D. K., & Baum, W. K. (1996). Oral history: An interdisciplinary anthology. Walnut Creek, CA: Altamira Press.
- Henige, D. P. (1982). Oral historiography. New York: Longman.
- Monrtell, W. L. (1981). *The saga of Coe Ridge: A study in oral history*. Knoxville: University of Tennessee Press.
- Nevins, A. (1938). The gateway to history. Boston: Appleton-Century.
- Oral History Association. (1992). *Guidelines and principles of the oral history association*. Los Angeles: Oral History Association.
- Perks, R., & Thomson, A. (1998). The oral history reader. London: Routledge.

Ritchie, D. A. (1995). Doing oral history. New York: Twayne Publishers.

Thucydides. (1972). *History of the Peloponnesian War.* New York: Penguin.

Vansina, J. (1985). Oral tradition as history. Madison: University of Wisconsin Press.

Organization of American States

The Organization of American States (OAS), headquartered in Washington, D.C., is an international organization and successor to the Pan-American Union (PAU), which was founded in 1889–1890 at the First International American Conference and originally called the Commercial Bureau of the American Republics. The conferences sought to deal with commercial and legal issues in the Americas. The OAS is organized into the Office of the Secretary General, the General Assembly, a Permanent Council, and the Inter-American Council for Integral Development. There are specialized organizations and agencies to deal with such varied issues as drug control, telecommunications, human rights, and agriculture.

In the spring of 1948 in Bogotá, Colombia, at the Ninth International American Conference, delegates representing twenty-one American countries signed the OAS Charter and the American Declaration of the Rights and Duties of Man, the first international expression of human rights principles. The OAS, which built upon the Inter-American Treaty of Reciprocal Assistance, reflected the onset of the Cold War, which remained America's preoccupation for more than a quarter century. That is, the OAS was part of a broad American effort, along with the Truman Doctrine, the Marshall Plan, and NATO, all in Europe, to organize friendly countries to work together, to better the lives of their respective peoples, and to resist the Soviet Union and international Communism. The transition from PAU to OAS went smoothly, and the PAU director general, Alberto Lleras Camargo, became the first secretary general of the OAS. The non-signers were mostly British dominions and British crown colonies in the Americas still tied to the British Commonwealth. In subsequent years, fifteen countries have joined the original twentyone signatories, the last being Guyana in 1991.

The OAS has clear goals, including working with the United Nations to promote hemispheric peace, supporting economic development, encouraging cultural and social interactions, and protecting the sovereignty and independence of American states. There certainly have been tensions and differences in the organization and among member states, reflecting in part differences between the United States, caught up in Cold War bipolarization, and Latin American nations, who feared American power and interference.

The OAS has enjoyed some success in maintaining peace in the Americas. For example, it helped end border fighting between Costa Rica and Nicaragua in 1948–1949 and 1955 and resolve the 1969 "Soccer War" between Honduras and El Salvador.

But there have been challenges as well. In 1959, Fidel Castro led a movement that overthrew the corrupt regime of the dictator Fulgencio Batista. Three years later, after Castro announced he was a Marxist-Leninist, the United States moved to have Cuba expelled from the OAS on charges of subversion, and in 1964 the OAS imposed a trade boycott. However, by the 1990s, virtually every OAS member state save for the United States had restored diplomatic relations and resumed trade with Cuba.

For the United States, the Monroe Doctrine and the Cold War challenge from the Soviet Union mattered as much as the sovereignty of nations in Central America and the Caribbean. The OAS did approve American intervention in Santo Domingo in 1965, but opposed U.S. action in Nicaragua in 1979, since OAS delegates concluded that there was little threat of Soviet intervention developing from the Sandinista regime that overthrew Anastasio Somoza in that country, a view at odds with that of the U.S. government.

For a brief period, the United States seemed committed to active involvement in the Americas. In 1961, President John F. Kennedy pledged American aid to help promote Latin American economic development, land reform, and social development. He promised billions of dollars to assist the efforts of Latin American governments. But, as the United States became preoccupied with the war in Vietnam, the U.S. government reduced commitments to the program, and the OAS disbanded its committee to implement the alliance in 1973.

The influence of the Organization of American States began to decline with the collapse of the former Soviet Union and the attendant end of the Cold War, as well as the involvement of major international agencies in Latin America. For the United States, matters in Latin America seemingly mattered less than peace in the Middle East, relations with the People's Republic of China, helping Eastern Europe negotiate its post-Soviet future, and tensions on the Indian subcontinent. The International Monetary Fund and the World Bank began to play increasingly important roles in assisting the economies and governments of many of the countries of the Caribbean and Central and South America. The end of the Cold War has helped bring about a revitalization of the OAS, but future prospects hinge on dealing adequately with the inequality of power between the United States and the Latin American members, especially given concerns for democracy, human rights, security, and trade and economic prosperity.

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Further Reading

- Ball, M. M. (1969). *The OAS in transition*. Durham, NC: Duke University Press.
- Calvert, P. (1994). *The international politics of Latin America*. New York: St. Martin's Press.
- Hartlyn, J., Schoultz, L., & Varas, A. (Eds.). (1992). The United States and Latin America in the 1990s. Chapel Hill: University of North Carolina Press.
- McKenna, P. (1995). *Canada and the OAS: From dilettante to full partner*. Ottawa, Canada: Carleton University Press.
- Miller, N. (1989). Soviet relations with Latin America, 1959–1987. New York: Cambridge University Press.
- Scheman, L. R. (1988). The inter-American dilemma: The search for inter-American cooperation at the centennial of the inter-American system. New York: Praeger.
- Slater, J. (1965). A revaluation of collective security: The OAS in action. Columbus: Ohio State University Press.

- Slater, J. (1967). The OAS and United States foreign policy. Columbus: Ohio State University Press.
- Thomas, C. R., & Magliore, J T. (2000). Regionalism versus multilateralism: The Organization of American States in a global changing environment. Boston: Kluwer Academic Publishers.
- Wiarda, H. J. (1992). American foreign policy toward Latin America in the 80s and 90s. New York: New York University Press.

Orientalism

Few historical terms have been as central to attempts to explain the emergence of the modern world system as Orientalism—Western study and defining of the East. Orientalism must be understood in the context of the global history of colonialism and imperialism. An examination of Orientalism in such disciplines as the study of "Oriental" literature reveals the desire on the part of European civilization to acquire an image of its opposite: the "other." Postcolonial critics such as Homi K. Bhabha and Gayatri Chakravorty Spivak have argued that literary texts dating from the colonial and imperial periods in particular can be exposed as claiming (Western) dominance over the rest of the world.

Edward Said and Orientalism

The American-Palestinian professor of English and comparative literature, Edward Said (1935–2003), said that literature, the arts, and politics were inseparable. His *Orientalism: Western Conceptions of the Orient* (1978), a provocative and polemical study that received praise and controversy in equal measure since its first publication, redefined Orientalism, which originally meant simply scholarship pertaining to the Orient or knowledge of Oriental languages and cultures. For Said, Orientalism was the act, on the part of those in the West, of defining themselves by defining the other, the Easterner, or Oriental. He argued that this process told as much or more about the constructed self-image as about the other that the studies were theoretically attempting to define. What exactly comprises "the Orient" is not clear: For some it is the Middle East; for others it includes all of Asia. A further dimension comes into the discussion with Western approaches to Africa. Yet this dimension has largely been ignored so far, not least by Said himself who emphasized the congruency of the orientalist debate, including the geographical East. Marxist scholars, by contrast, have pointed to a multiplicity of problems and differences evident from many disciplines and resulting from a multidimensional relationship between knowledge and power. Knowledge, in short, was neither scientifically innocent nor politically disinterested.

Knowledge and Power

According to Said and Orientalism, knowledge of the Orient produced in the West helped European colonizers maintain their subjugation and exploitation of the colonized on the one hand and their pretence of objective and detached science on the other. Knowing and naming the other, they said, preceded control over the other. The consequence of linguistic, literary, philological and historical learning about Islam and Muslim peoples could be, for example, that it could be used as an instrument by the West to impose its worldwide superiority. Furthermore it was believed that Orientalism was also displayed in museums and in the academy as well as in biological and anthropological arguments.

In his *History of British India* (1817), the philosopher and historian James Mill (1773–1836) expressed the conviction that modernization was synonymous with Western imperial expansion, which, according to Said, also coincided with the Anglicization of the world. Thomas Babington Macaulay (1800–1859), probably the most famous nineteenth-century English historian, suggested that the evangelical and utilitarian values that were generally predominant in his age were instrumental for the reeducation of the Indian subcontinent. In the eighteenth century cosmopolitan views had been possible, indeed highly attractive for many intellectuals, who experienced an openness that had made possible comparisons between the European and Asian civilizations, encouraging the mutual reception of similarities and common ground. But in the nineteenth century a more ethnocentric attitude became the norm, as typified by opinions such as that of the philosopher G. F. W. Hegel (1770–1831), who notably called Africa a continent without history. It was out of this sense of superiority that Orientalism emerged and upon which it was based. It reflected the conviction that the peoples of the Orient (whatever that comprised) were ontologically different and represented a different type of character.

Knowledge about the Orient was thus constructed by generations of intellectuals and writers, politicians and artists. It was part of a broader imperial culture relating to Antonio Gramsci's understanding of cultural hegemony. The work of individual scholars spoke less for itself than for the uniformity of knowledge about the Orient as presented by the West. Thus nineteenth-century Western scholars were prisoners of their own academic world, unable to overcome the intellectual limits set by the methodology and the semantics of their approaches and thus following up an ongoing monologue on a subject about which they were not objectively informed. As Said pointed out, these scholars often did not even travel to the countries about which they wrote, and therefore they could hardly claim to be well and objectively informed. The West claimed mastery of a special way of knowing called "science," a supposedly objective route to universal truths, but the omniscient attitude that went along with Western scientific inquiry was devoid of any experience of Oriental reality. The message of the Orientalist discourse was this: The East was purely receptive, a passive reactor described by adjectives such as "female," while the West was the actor of history, structuring life and judging the other. This was the relationship between the colonizer and the colonized, the ruler and the ruled.

Orientalism and Its Traditions

In the introduction to a later edition of *Orientalism*, Said claimed that in the last quarter of the twentieth century research on the Middle East, Islam, and the Arabic world had not developed much in the United States. Europe, by

He who requires much from himself and little from others, will keephimself from being the object of resentment. • CONFUCIUS (551-479 BCE)

contrast, presented a better picture. A different perception of the East resulted from a different interest in it, whether political, economic, military, scientific, or cultural. Said suggested that the geographical proximity of Europe and the Middle East had been of great relevance for mutual cultural stimulation. He emphasized the impact of British and French writers but failed to mention German and East European scholarship.

It is striking that Said's impact on gender and literary studies, on discourse analysis and postcolonial critics, and on social studies and history has been predominantly in the English-speaking world while in Germany, for example, with its short colonial experience, Said's Orientalist thesis has had a relatively lukewarm reception. The impulses feeding *Orientalism*, however, come from a wide spectrum of intellectual sources. For obvious reasons, the period from the beginning of the direct European colonial presence and the establishment of colonial rule in the second half of the nineteenth century to the age of decolonization and political independence was of central importance for the development of Oriental scholarship.

Said believed that the Orientalist discourse experienced its first heyday in 1798, with Napoleon's invasion of Egypt. The scholar and politician C.-F. Chasseboeuf, Comte de Volney (1757–1820), who traveled in Egypt and Syria and became a prominent critic of the French campaign, nonetheless advocated forcibly changing the local government from religiously dominated despotism to republicanism. As Volney was also involved in the preservation of historical monuments, his attitude could be called an early version of *mission civilisatrice*—the civilizing mission—that manifested itself institutionally in the establishment of the French Institut d'Egypte in Cairo. The civilizing mission was an excuse for European cultural penetration of Oriental societies, legitimated by a belief in the supposedly passive character of Oriental peoples.

On the other hand, even in the earliest days there was an "Occidentalist" critique that shaped the understanding of how the West had projected its images of the "other" and of how the East could reply by investigating Western cultural identity. Essentially this dialectic required not only investigation of how Orientalist and Occidentalist traditions were invented, but in particular against what and whom. To the same degree that Western attitudes toward the East were formed by the colonial relationship that existed between ruler and ruled, the converse was also true: A new Occidentalism was constructed in order to draw a line between the West and the rest, to challenge this distinction and to investigate divisions within societies.

However, Occidentalism should not be mistaken for Occidental critique of Orientalism as an academic discipline. Here, as has been pointed out, two perspectives, the religious and the Marxist, are of particular interest, especially in the Arabic world. The Palestinian scholar Abdel-Latif Tibawi is of the opinion that until quite recently most Western academics dealing with problems of the Middle East were neither adequately trained in languages and social sciences, nor sympathetic to Islamic matters. Of even greater weight was the accusation that the scholarship of Orientalists was far from objective on religious questions. Indeed, it was suggested that it had helped to develop religious hatred between Christianity, Islam, and Judaism. The Marxist argument also built on a picture of cultural confrontation, holding that Orientalism should have been overcome when former colonies asserted their political independence. It continued to exist, however, in the minds of those believing in the alleged passivity of "Orientals." The Marxist perspective gave more attention than the religious perspective did to sociological and political concerns. Apart from recognizing the opportunity to marginalize Eurocentric worldviews, those taking this anti-imperialist perspective saw it as advantageous for promoting academic cooperation between the peoples of Asia, Africa, and South America. The Marxist perspective, in other words, is problem oriented and takes a comparative perspective on Third World countries, as opposed to being predominantly dichotomized and discursive, as is Said's critique of existing Orientalism.

Orientalism, Said, and His Critics

Edward Said's argument in *Orientalism* is frequently criticized for lacking a sense of history. It is also considered a failing that it gave so little weight to the religious motivations of Orientalists with Christian or Jewish backgrounds who write about Muslim peoples. Yet while both history and religion were certainly crucial to the nineteenthcentury understanding of Islam and Muslims, criticism of Said's thesis have come mainly from the fields of literary criticism, cultural studies, or feminism. (Feminist scholars have taken issue with the fact that Said presented Orientalism as the domain of white male scholars and writers without paying enough attention to its female aspects.) Above all, it remains questionable whether high literature, in particular, the novel, is a suitable medium for conveying the message of imperialism on a massive scale; possibly Said the professor of literature overestimated the influence of Dickens, Kipling, Conrad, and their contemporaries.

On the other hand, Said revealed that although literary texts such as travel reports and diaries were often fictional, they purported to reflect realistically on the Orient. But can literary works that deliberately painted a fictional image of the East be accused of Orientalism? Said's critics claim that the converse was true with regard to the "Oriental discourse" of professional linguistics, for example, namely that their subject was certainly not Orientalist. Said did not discuss why in the nineteenth-century Western world it was above all professional linguistics that formed the core of the sciences of the Orient, while it was the relatively new disciplines of geography and history that exercised the greatest influence upon political decision making in colonial and imperial matters. This means that critics of Orientalism overestimate the impact of Orientalist scholars, while they underestimate the impact of those academic disciplines in which the Orientalist attitude was less visible, but probably more inherent.

Finally, critics of the concept of Orientalism have claimed that the idea of a culturally united West as suggested by Said never existed. While Said rejected the assumption that there was an entity such as "the Orient" constructed by Orientalism, he nonetheless had no reservations about speaking of a monolithic "West," a single Western civilization able to dominate the world by every means, including cognitive and cultural ones. Given the actual intercultural relationships and transfers between the continents, his critics have considered Said's model to be too strongly based on the idea of a monologue; they argue for a dialogue that will eventually bring the Third World back into the debate.

Notwithstanding the problematic character of many of Said's generalizations, which his critics have pointed out are often oversimplifications, it remains a particular merit of *Orientalism* that it focused and intensified research on the delicate relationship between an academic discipline and imperialism. Sensitized by *Orientalism*, scholars have reformulated questions concerning representations of the "Oriental" and the "European," intercultural communication, and the conditions under which knowledge about the other in opposition to the self can be gained.

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See also Ethnocentrism; Eurocentrism

Further Reading

- Breckenridge, C. A., & van der Veer, P. (Eds.). (1993). Orientalism and the postcolonial predicament: Perspectives on South Asia. Philadelphia: University of Pennsylvania Press.
- Carrier, J. G. (Ed.). (1995). Occidentalism: Images of the West. Oxford, UK: Clarendon Press.
- Clifford, J. (1980). Review article of E. W. Said 'Orientalism.' History and Theory, 19, 204–223.
- Codwell, J. F., & Macleod, D. S. (1998). Orientalism transposed: The impact of the colonies on British culture. Aldershot, UK: Ashgate.
- Dallmayr, F. (1996). Beyond Orientalism: Essays in cross-cultural encounter. Albany: State University of NewYork Press.
- Freitag, U. (1997). The critique of Orientalism. In M. Bentley (Ed.), Companion to historiography (pp. 620–38). London: Routledge.
- Inden, R. (1990). Imagining India. Oxford, UK: Blackwell.
- King, R. (1999). Orientalism and religion. London: Routledge.
- Lewis, B. (1993). Islam and the West. Oxford, UK: Oxford University Press.
- Lowe, L. (1991). Critical terrains: French and British Orientalisms. Ithaca, NY: Cornell University Press.
- Macfie, A. L. (2000). *Orientalism: A reader*. Edinburgh, UK: Edinburgh University Press.
- Macfie, A. L. (2002). Orientalism. London: Longman.
- MacKenzie, J. M. (1995). Orientalism: History, theory and the arts. Manchester, UK: Manchester University Press.
- Majeed, J. (1992). Ungoverned imaginings: James Mill's The History of British India and Orientalism. Oxford, UK: Oxford University Press.
- Osterhammel, J. (1997). Edward W. Said und die "Orientalismus"-Debatte. Ein Ruckblick [Edward W. Said and the "Orientalism" debate: A review]. Asien-Afrika-Lateinamerika, 25, 597–607.

Peltre, C. (1998). Orientalism in art. London: Abbeville Press.

- Said, E. W. (1978). Orientalism: Western conceptions of the Orient. London: Penguin.
- Said, E. W. (1993). Culture and imperialism. London: Chatto & Windus.
- Turner, B. S. (1994). Orientalism, postmodernism and globalism. London: Routledge.
- Young, R. (1990). White mythologies. Writing history and the West. London: Routledge.

Orthodoxy, Christian

The Orthodox Church is a communion of independent Eastern churches organized geographically, usually by country. Together they constitute the second-largest Christian denomination after the Roman Catholic Church. Orthodoxy sees itself as the one holy, catholic, and apostolic Church founded by Jesus Christ.

The Eastern and Oriental Orthodox Churches

Most Orthodox churches belong to the Eastern Orthodox family of churches, with a smaller number belonging to the Oriental Orthodox family. In Eastern Orthodoxy, the churches are classified as either autocephalous (completely self-governing) or autonomous (mostly selfgoverning, but dependent upon a mother church). First among the autocephalous churches are the four ancient patriarchates that remain Orthodox; they are, in order of seniority, the churches of Constantinople, Alexandria, Antioch, and Jerusalem. These are joined by the eleven autocephalous churches of Russia, Serbia, Romania, Bulgaria, Georgia, Cyprus, Greece, Poland, Albania, the Czech Republic, and Slovakia, and the Orthodox Church in America. The autonomous churches are those of the Sinai, Finland, Japan, China, and Ukraine.

The Oriental Orthodox churches are those that may be traced to disputes over the Third and Fourth Ecumenical Councils. The Assyrian Church of the East, sometimes erroneously referred to as "Nestorian," is generally regarded as having not recognized the Third Council. Those churches generally regarded as having rejected the Fourth Council are the Armenian, Coptic (Egyptian), and Ethiopian churches, and the Syrian churches of Antioch and India.

Theological Authority

While Western Christians dispute whether the proper sources of theological authority are the Bible alone or the Bible together with the tradition of the church, Orthodox Christianity understands there to be one source, holy tradition. This tradition is rooted first of all in the Bible, and then in the seven ecumenical councils (including what is commonly called the Nicene-Constantinopolitan Creed, or Symbol of Faith, completed in 381 CE), and in later councils, the writings of the church fathers, the liturgy, the canons of ecumenical and local councils, and the holy icons.

When it comes to the formulation of church dogma. however, the Eastern Orthodox churches accept the validity of the first seven ecumenical councils. These meetings of bishops in the first eight centuries of the church's history, all convened to settle theological disputes within the Church, are considered the most authoritative expressions of Christian doctrine. The First Council of Nicaea (325 CE) affirmed the humanity and divinity of Christ and composed the first two-thirds of the Nicene-Constantinopolitan Creed. The First Council of Constantinople (381 CE) affirmed the divinity of the Holy Spirit and added the final third of the Creed. The Council of Ephesus (431 CE) affirmed the unity of Christ and declared his mother, the Virgin Mary, to be *Theotokos* ("birthgiver of God"). The Council of Chalcedon (451 CE) defined the human and divine natures of Christ, as opposed to the "one nature" doctrine of the Monophysites. The Second Council of Constantinople (553) CE) continued the work of Chalcedon. The Third Council of Constantinople (680-681 CE) condemned the Monothelite ("one-will") heresy, affirming that Christ has two wills (divine and human). The Second Council of Nicaea (787 CE) condemned the iconoclasts ("icon breakers") and upheld the proper veneration of icons.

The Great Schism

The break between East and West, between the Eastern Orthodox Church and the Roman Catholic Church, is often dated to 1054 CE, but the history is more complex. The Great Schism was the result of an estrangement between the East and the West that developed over several centuries due to differences in culture, politics, and language, as well as theology. The chief theological controversies that exacerbated the estrangement and led ultimately to a break in communion had to do with the authority of the Roman pope and a change in the Nicene-Constantinopolitan Creed. Both issues led to the so-called Photian Schism of the ninth century and to the mutual excommunications that occurred in 1054.

The five centers of the Church in the first millennium CE, the so-called Pentarchy, were Rome, Constantinople, Alexandria, Antioch, and Jerusalem. Rome, as the first capital of the empire and as the traditional location of the death of the Apostles Peter and Paul, was honored by being accorded primacy. In the East, the proximity of the patriarchal sees to one another functioned like a system of checks and balances, allowing the East to maintain the polity of autocephalous churches in communion with one another. But Rome was alone in the West, and over time the office of the pope began asserting more and more authority, even to the point of claiming jurisdiction over the Eastern churches. The proclamation of papal infallibility in the nineteenth century added a further obstacle to reunification.

The Nicene-Constantinopolitan Creed declares that the Holy Spirit "proceeds from the Father." Beginning in Spain in the sixth century, however, some Western Christians began adding a word (*Filioque*) to the Latin translation of the Creed that results in the declaration that the Spirit proceeds "from the Father *and the Son.*" Despite efforts to add this word to the Creed at Rome, it was not officially added to the text until 1054 CE. The *Filioque* issue is really twofold. On the one hand, there is a possible dogmatic dispute. If by *Filioque* the West means that the existence of the Holy Spirit has two sources (the Father and the Son), then the East sees the resulting subordination of the Spirit to the Son as heresy. If the West means something else, however, such as the position of St. Maximos the Confessor (580–662 CE) that the Spirit proceeds from the Father and through (*dia*) the Son, then a resolution of the theological difference is possible. On the other hand, the East clearly believes that no one autocephalous church has the authority to change the Creed, which was the product of two ecumenical councils. So even if there is a dogmatic resolution, the Orthodox position would still require the elimination of *Filioque* from the Creed.

A Liturgical Theology

The etymology of the term *Orthodox* is twofold, having the meaning of either "right belief," "right glory," or both. This is suggestive of Orthodoxy's fundamental assumption that worship is the primary theological transaction. Thus it is the Church's worship, especially its eucharistic liturgy, that is the locus of theology, and not the classroom or the library. The theologian is not the academic but the one "who prays truly," in the words of Evagrios of Pontus (c. 346–399 CE). Orthodox theology is therefore best understood as doxological in character.

The Orthodox Church celebrates at least seven mysteries or sacraments: baptism, chrismation (confirmation), eucharist, repentance (confession), marriage, anointing of the sick (unction), and ordination. The principal forms for celebrating the eucharist are the Divine Liturgy of St. John Chrysostom (used most of the year), the Divine Liturgy of St. Basil (used ten times annually), the Liturgy of the Presanctified Gifts (used on weekdays during Lent and the first part of Holy Week), and the Divine Liturgy of St. James (traditionally used on the feast of St. James of Jerusalem, but there is a growing use of this liturgy on other days during the year). While refraining from speculation as to the metaphysics of eucharistic presence, Orthodoxy believes strongly in the real presence of Christ's body and blood.

The Church year begins 1 September and includes the pre-Nativity fast (Advent); Nativity (Christmas); Theophany (Epiphany); Great Lent; Pascha (Easter); Pentecost; and the additional fasts preceding the feast of the Apostles Peter and Paul (29 June) and the Dormition (Assumption) of the Theotokos (15 August). The Twelve Great Feasts of the Church are the Nativity of the Theotokos (8 September); the Exaltation of the Cross (14 September); the Nativity of Christ (25 December); Theophany (6 January); the Meeting of Our Lord (2 February); the Annunciation (25 March); the Entry of Our Lord into Jerusalem (Palm Sunday); the Ascension; the Day of Pentecost; the Transfiguration (6 August); and the Dormition (Assumption) of the Theotokos (15 August). Most Orthodox churches reckon these dates according to the Julian calendar, although since the beginning of the early twentieth century, a number have adopted the secular Gregorian calendar for fixed dates. The Paschal cycle of movable feasts is still reckoned according to the Julian calendar.

In addition to the mysteries, the Church observes the canonical hours of prayer: vespers, compline, the midnight office, matins, the third hour, the sixth hour, and the ninth hour. As in the West, these are rarely celebrated fully outside of monasteries. However, most parishes celebrate Saturday night vespers and/or Sunday morning matins.

Theological Positions

In addition to differences from Western Christianity as to the sources of theological authority, the theology of the Orthodox East is characterized by numerous theological positions, also known as theological distinctives, that greatly affect its understanding of God, humankind, and the economy of salvation. Because Orthodoxy did not undergo Roman Catholic scholasticism or the Protestant Reformation that resulted, the East has avoided many of the theological polarities associated with the internecine struggles of the West.

Mystical Theology

For the Christian East, theology—dogmatic, moral, or otherwise—must be lived. "Mystical theology" is the term that identifies the inextricable relationship between dogma and life, between the teaching of the Church and one's personal experience. In the Orthodox view, theology that is not experienced is useless, and mysticism without theology is mere subjectivity. It is noteworthy that the East has given only three of its saints the title of "theologian"—St. John the Evangelist in the first century, St. Gregory of Nazianzus (329–389 CE), and St. Symeon the New Theologian (c. 949–1022 CE).

Apophatic Theology

The Orthodox tradition distinguishes between apophatic or negative theology, and kataphatic or positive theology. While each has a role within the Orthodox theological tradition, the apophatic is clearly preeminent. Following the lead of (Pseudo) Denys the Areopagite (fifth or sixth century CE), the East emphasizes the radical inability of human thought and language to describe God and "utterly excludes all abstract and purely intellectual theology which would adapt the mysteries of the wisdom of God to human ways of thought" (Vladimir Lossky, 1923–1958). The theological ascent to God must be apophatic. Kataphatic theology, on the other hand, is a kind of descent in which God manifests himself within the created order.

The Trinity

At the heart of all Orthodox worship, theology, spirituality, and life is the Holy Trinity—the Father, the Son, and the Holy Spirit. It is commonplace to say that Eastern theology begins with the three Persons and goes on to affirm the one Being, while Western theology generally begins with the one Being and then proceeds to a consideration of the three Persons. The value of this generalization is limited, but it is accurate to say that the East has emphasized the three Persons of the Trinity more radically than the West. Perhaps the most famous Orthodox icon of all is the Old Testament Trinity painted by the Russian iconographer St. Andrei Rublev, c. 1410. It is a depiction of the three angels who appeared to Abraham in Genesis 18, an appearance understood by the East to be a Theophany ("manifestation") of the Trinity.

Original Sin

Western Christianity's understanding of many subjects, not least of them the question of Adam's sin in the Garden of Eden, has been greatly shaped by the thinking of St. Augustine of Hippo (354–430 CE). Unfortunately, Augustine's view of original sin was predicated on St. Jerome's Latin (mis-) translation of Romans 5:12, which Jerome misunderstood to say that all humans bear the guilt of Adam's sin, and not merely the consequence of that sin, which is death. To avoid association with Augustine's view, Orthodox Christians generally prefer to refer to Adam's sin as "ancestral sin." The Orthodox also reject the Calvinist notion that humankind is utterly depraved as a result of the Fall and the resulting denial of human freedom.

The Atonement

Western Christians since the eleventh century have largely understood the reconciliation between God and humankind in terms associated with St. Anselm of Canterbury (1033–1109). His "satisfaction theory" of the Atonement seems to portray God as requiring satisfaction for the sins of humankind, with Christ undergoing the required vengeance. In contrast, the Orthodox or "classical" theory sees the Cross as the victory of Christ over the forces of evil. More than that, however, the Christian East understands the salvific work of Christ as considerably wider and more far ranging than the Crucifixion alone. Humankind was separated from God by our nature, by sin, and by death; Christ overcame these obstacles through his Incarnation (by which he assumed and therefore healed human nature), his Crucifixion (by which he overcame sin), and his Resurrection (by which he destroyed death and made all of humankind immortal).

Soteriology

Orthodoxy has been largely untouched by the Western disputes concerning justification and sanctification, instead understanding salvation as a mater of *theosis*, or deification. Tracing the idea from biblical texts such as 2 Peter 1.4, the Gospel of John, and the epistles of St. Paul, through the texts of patristic witnesses such as St. Irenaeus of Lyons (c. 120–203 CE), St. Athanasius of Alexandria (298–373), and St. Gregory Palamas (1296–

1359), the Orthodox understand salvation as our becoming by grace what God is by nature.

Grace versus Free Will

A great part of the Reformation debate with Roman Catholicism centered on the relative roles of grace and free will in human salvation. Some Protestants, concerned to safeguard the efficacy of God's grace, went too far and denied human freedom. Orthodoxy overcomes this opposition with its understanding of synergy, the biblical idea (as in 1 Corinthians 3:9) that we are cooperators with God.

Moral Theology

Western moral theology, utilizing the insights of philosophical ethics, usually portrays the nature of morality as a function of nature (natural law), utility (various consequentialist theories), the character of the moral agent (virtue ethics), or simply as a matter of God's command or prohibition (voluntarism). While these elements play a role in the work of some Orthodox moral theologians, the patristic understanding characteristic of the tradition as a whole sees the moral life as a function of *theosis*.

Spiritual Theology

The classic text of Orthodox spirituality is *The Philokalia* of the Neptic Fathers, a five-volume Greek work edited by St. Nicodemus of the Holy Mountain (1748–1809) and St. Makarios of Corinth (1731–1805), published in 1782. The *Philokalia* ("love of the beautiful") is a collection of writings on the life of prayer ranging from the fourth to the fourteenth centuries. It is associated with hesychastic (from the Greek *hesychia*, meaning "stillness") spirituality and gives special attention to the Jesus Prayer ("Lord Jesus Christ, Son of God, have mercy on me").

Science and Religion

Because Orthodoxy has emphasized a spiritual epistemology, or gnosiology, aimed at the deification of the creature rather than a totalizing narrative subjugated to biblical accounts, it has not been concerned with either the astronomical debates sparked by Galileo in the seventeenth century or the creation–evolution debate that began with the work of Charles Darwin in the nineteenth century but which was more characteristic of the twentieth century.

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See also Catholicism, Roman

Further Reading

- Baum, W., & Winkler, D. W. (2003). The Church of the East: A concise history. London: RoutledgeCurzon.
- Cunningham, M. (2002). *Faith in the Byzantine world*. Downers Grove, IL: InterVarsity Press.
- Lossky, V. (2002). The mystical theology of the Eastern Church. Crestwood, NY: St. Vladimir's Seminary Press.
- Meyendorff, J. (1981). The Orthodox Church: Its past and its role in the world today (4th rev. ed.). Crestwood, NY: St. Vladimir's Seminary Press.
- Meyendorff, J. (1996). Rome, Constantinople, Moscow: Historical and theological studies. Crestwood, NY: St. Vladimir's Seminary Press.
- Papadakis, A. (1994). The Christian East and the rise of the papacy: The Church, 1071–1453 AD. Crestwood, NY: St. Vladimir's Seminary Press.
- Sherrard, P. (1995). The Greek East and the Latin West: A study in the Christian tradition. Limni, Greece: Denise Harvey.
- Sherrard, P. (1996). Church, papacy, schism: A theological inquiry. Limni, Greece: Denise Harvey.
- Smith, A. (1998). Divine liturgy. In P. Steeves (Ed.), Modern encyclopedia of religions in Russia and Eurasia (Vol. 7). Gulf Breeze, FL: Academic International Press.
- Smith, A. (2004). Eastern Orthodoxy (pacifism in). In G. Palmer-Fernandez (Ed.), *The encyclopedia of religion and war*. New York: Routledge.
- Smith, A., et al. (2000). Orthodoxy. In G. Ferngren (Ed.), *The history* of science and religion in the western tradition. New York: Garland Publishing.
- Ware, T. (1993). *The Orthodox church* (rev. ed.). New York: Penguin Books.
- Watson, J. H. (2000). Among the Copts. Brighton, UK: Sussex Academic Press.

Osman I

(c. 1258–c. 1326) Founder of the Ottoman empire

Osman, from whose name comes the name of the Ottoman empire (*Osman* is '*Uthman* in Arabic, hence Othman and Ottoman), is known to us more from legend than from historical evidence. It is not, for instance, known when precisely he was born or ascended

the throne. However, it is certain that the major events of his lifetime occurred in the early fourteenth century.

The son of Ertugrul, Osman led a small emirate in Anatolia (modern Turkey). It was but one of numerous Turkic emirates in the region. Originally, Osman and his father had entered the service of the Seljuks with a small following, fleeing westward away from the Mongols. After his father's death, Osman's emirate increased in power, often at the expense of the Seljuks, and Osman expanded his territory in order to gain more pasturage for his nomadic troops. He grew sufficiently strong that his forces successfully repulsed a few attempts by the Mongols to impose their authority over him.

From coins dating from the era, it is known that Osman was an independent ruler by 1281 and that he fought with Byzantine forces on numerous occasions, usually emerging as the victor. His base of operations was in the Sakarya river valley in northwestern Anatolia. However, details from the contemporary sources are very sketchy, and most knowledge of his activities seem to be based in tradition rather any historical record. Nonetheless, it is known that his forces operated on the frontier of the Islamic world and that of the Byzantines. Osman defeated the Byzantines near Nikomedia (Izmit) and also at Katoikia. It is unclear when these battles occurred; the contemporary chronicler, Pachymeres, however, places them before 1307. Although Osman enjoyed success against the Byzantines, it was not uniform as he failed to take Bursa and Iznik.

Osman's role in world history is greater than his actions during his lifetime would indicate. He established the foundations for one of the greatest Muslim empires, and indeed, greatest empires of any kind, in history. His immediate successors continued to expand the nascent Ottoman state far beyond the small part of Anatolia that Osman ruled. While it is uncertain how much of a factor religion actually played in the wars between Osman and the Byzantines, it became part of Ottoman tradition that the Ottomans started off as Muslim warriors who lived on the frontier specifically to do battle with nonbelievers.

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See also Ottoman Empire

Further Reading

- Imber, C. (2003). The Ottoman empire, 1300–1650: The structure of power. New York: Palgrave.
- Inalcik, H. (2001). Phoenix: The Ottoman empire: The classical age, 1300–1600. London: Phoenix Press.
- Kafadar, C. (1996). Between two worlds: The construction of the Ottoman state. Berkeley and Los Angeles: University of California Press.
- Lindner, R. P. (1983). Nomads and Ottomans in medieval Anatolia. Bloomington: Indiana University Press.
- Shaw, S. J. (1976). History of the Ottoman empire and modern Turkey: Vol. 1. Empire of the Gazis: The rise and decline of the Ottoman empire, 1280–1808. Cambridge, UK: Cambridge University Press.

Ottoman Empire

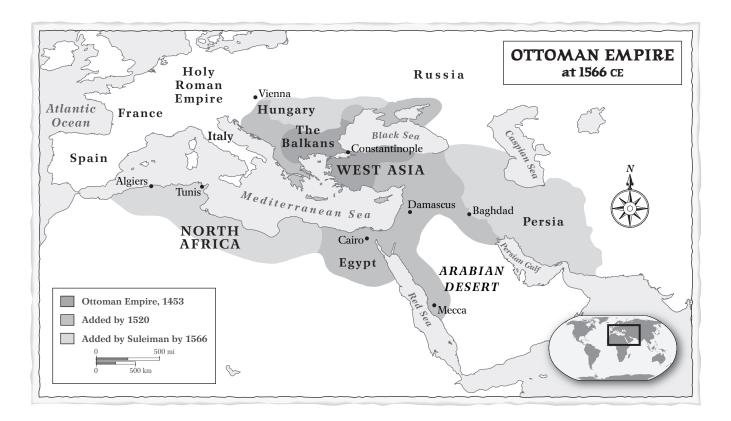
The Ottoman empire (c. 1300–1922) is among the most durable and successful empires in world history. It spanned the late medieval, early modern, and modern periods and, at its peak, held possessions on the continents of Europe, Asia, and Africa. Although officially an Islamic state for nearly all its history, the Ottoman state ruled over primarily Christian subjects until its final half-century, offering a comparatively tolerant model of imperial rule quite unlike the rabid exclusivist nationalisms that plague our own day.

International Political Developments

The Ottoman empire first emerged in the northwest corner of Anatolia, then in the midst of its transformation from a Greek-speaking Christian to a Turkish-speaking Muslim cultural zone. Indeed, the formation of the Ottoman state accompanied and completed this transformation. The Ottoman state achieved world empire status in 1453, when it conquered Byzantine Constantinople. Between the fourteenth and seventeenth centuries, the Ottoman empire was among the most powerful states in the Mediterranean and European regions. Indeed, for a time it may have surpassed all other states in the world except Ming dynasty China (1368–1644) in political, military, and economic power.

The Ottoman transition from principality to a world empire, in common with imperial achievements elsewhere in the globe, derived from a complex mix of factors that included geography, the proximity of weak enemies, and luck. But we must also give substantial credit to Ottoman policies and achievements. After all, there were many small states and principalities struggling for supremacy in Anatolia following the migrations of Turkish peoples from Central Asia. The Ottoman family emerged on the Byzantine borderlands not far from Constantinople. The dynasty and its supporters employed pragmatic statecraft and methods of conquest. They rewarded the human material at hand and cared little if it was Christian or Muslim or Greek, Bulgarian, Serb, or Turkish. Thus, on these early battlefields, the Ottoman dynasty commonly led troops that were a combination of both Muslim and Christian warriors. These pragmatic policies also included an exceptional openness to innovation, including military technology. Until sometime during the seventeenth century, the Ottomans typically enjoyed tactical battlefield superiority. Overall, openness and innovation go far in explaining why the Ottoman principality emerged as a world power. Like Rome, the Ottoman emergence to empire status was not overnight but built on a steady record of achievement and determination. The Ottoman Empire offered a durable example of state building in its combination of military power and an eve to justice and toleration of differences among its subjects.

During the seventeenth century, however, Ottoman preeminence slipped away. Just as explanations of the rise of empires remains elusive, so too are those regarding their decline. In the Ottoman case, it seems clear that factors at work well beyond its frontiers played a large role in the deterioration of the Ottoman international position. There is no doubt that the rise of capitalism and industrialism in Europe, western Europe's conquest of the New World, and its monopoly access to American wealth, are keys in understanding the mounting imbalance between Ottoman and European military and economic power. By the beginning of the nineteenth century, the Ottoman empire had become a second-class economic, military, and political power, and it shared a common fate with the entire non-European world save Japan after around 1850. Economically, the wealth gap between Ottoman subjects and residents in most west



European states widened. Politically, the Ottomans became part of the "Concert of Europe" at the mid-nineteenth century point but remained subordinate to the Great Powers such as Britain, France and the emergent Germany.

Internationally, on its western and northern fronts, the state encountered increasingly powerful enemies that had been enriched by New World wealth and could better bear the mounting costs of outfitting and maintaining armies in the field; expansion finally ground to a halt in the late seventeenth century. Innovation diminished as entrenched bureaucrats and statesmen acted to preserve positions for their children and closed entry to innovative newcomers. A catastrophic military failure at Vienna in 1683 was followed by some victories but mainly defeats during the subsequent one hundred years.

During the nineteenth century, there was an important reversal of fortunes as a series of successful reform programs measurably strengthened both the Ottoman state and its military. The size of the central bureaucracy increased substantially as the state increasingly sought to more closely control the lives of its subjects/citizens. Previously, the early modern Ottoman state, like its contemporaries across the globe, mainly had collected taxes and maintained order. In its more modern guise, the Ottoman and other states now took responsibility for the health, education, and welfare of its subjects and sought to bring government into every sphere of life. In this attempt, the Ottoman state enjoyed many successes during the nineteenth century and was vastly stronger in 1914 than it had been around 1800. Despite this impressive record, the Ottoman empire was defeated in World War I and partitioned by the Great Powers, notably Great Britain and France. Ottoman successor states include today's Albania, Bosnia, Bulgaria, Egypt, Greece, Iraq, Israel, Lebanon, Montenegro, Romania, Saudi Arabia, Serbia, Syria, Turkey, and other states in the Balkans, the Arab world, North Africa and the north shore of the Black Sea.

Domestic Political Developments

From the perspective of domestic developments, the Ottoman state underwent continuous change over the centuries. The Ottoman ruler, the sultan, began as one among equals but between the conquest of Constantinople in 1453 and the later sixteenth century, the Ottoman sultans ruled as autocrats. Thereafter, until around 1800, other members of the imperial household, often cooperating with provincial notables, controlled the state. During the nineteenth century, bureaucrats and sultans vied for dominance, with the former in charge in the middle of the century and the sultan during its first and fourth quarters. Overall, sultans presided over the impe-

rial system for all of Ottoman history but actually, personally, ruled only for portions of the fifteenth, sixteenth, and nineteenth centuries. It seems important to stress that the principle of sultanic rule by the Ottoman family was hardly ever challenged through the long centuries of the empire's existence. Unlike in the Chinese case, there was no mandate of heaven that could move to a new family and justify the overthrow of a dynasty.

Over the centuries, political power nearly always resided in the imperial center and, depending on the particular period, extended into the provinces either through direct military and political instruments or indirectly through fiscal means. The central regime exerted its military, fiscal, and political authority through mechanisms that evolved continuously. Thus, there was not a single Ottoman system or method of rule, except one of flexibility, adaptability, and change.

During the early centuries, the *timar* system was the financial basis of the cavalrymen, who fought with bows and arrows. Under this system, the state granted to each cavalryman (and others who served the state) the revenues from a piece of land but not the land itself, in a quantity sufficient to maintain the cavalryman and his horse. He did not actually control the land, but only the taxes deriving from it. Peasants worked the land and paid taxes that supported the *timar* cavalryman both on campaign and at home. This *timar* system was at the center of Ottoman fiscal and military affairs only for the earlier portion of Ottoman history, perhaps only during the fourteenth, fifteenth, and part of the sixteenth centuries. Hardly had the state developed the *timar* system when the regime began to discard the cavalrymen and, along with them, their *timar* financial underpinnings. The timar system nominally endured until the nineteenth century. Infantrymen bearing firearms became increasingly important. As they did, the famed Janissary Corps ceased to be a gun-wielding praetorian elite and developed into a firearm-bearing infantry of massive size. Support of these full-time soldiers required vast amounts of cash. Therefore, tax farming, which provided cash revenues, steadily replaced the *timar* system, which received taxes mainly in kind, as the major fiscal instrument. By 1700, lifetime tax farms began to become commonplace and dominated the fiscal system in the later part of that century. Despite these changes, Ottoman military forces lost out in the arms race by the end of the seventeenth century because tax revenues from agricultural pursuits could not match European revenues derived from a combination of colonialism, mounting world trade and the burgeoning domestic economy. During the eighteenth century the makeup of Ottoman military forces continued to change: The Janissary infantry and the *timar* cavalry continued to exist in name but gave way in importance to the troops of provincial notables and the forces of the Crimean khanate, a vassal state. The changes during the nineteenth century were more radical: Universal manhood conscription controlled by the central state slowly developed. Lifetime tax farms were abandoned, but tax farming nonetheless continued, a measure of the continued cooperation between the central elites and local notables.

Until the later nineteenth century, perhaps surprisingly, most Ottoman subjects were Christian. But, thanks to territorial losses in the mainly Christian Balkan provinces, Muslims became the majority element in the empire by the third quarter of the century. But regardless of whether they were Muslim, Christian, or Jewish, all subjects fell under the jurisdiction of both religious and secular law. In the eyes of the state, Muslims enjoyed a legal position superior to Christians and Jews-however, these latter groups possessed guaranteed legal rights and status. For these rights and legal protections, non-Muslims paid a special tax. Otherwise, all the communities were subjects to the same taxes. The Ottoman state determined who administered the laws governing a community, whether that of the Muslim, Christian, or Jewish community or of the imperial state. The sultan and his agents determined the judges in the respective communities either directly or by appointing those who in turned named the judges. Theoretically, the religious law of the respective group prevailed in the particular Muslim, Jewish, or Christian community. But, practically speaking, the Muslim courts very often were used by subjects of all religions. There were several reasons for this, including the quality of the justice that the judge administered and the fact that it was understood that rulings from such courts might well

Ottoman Conquest of Constantinople

In the extracts below from his History of Mehmed the Conqueror, the Greek historian Kritovoulos recounts the Ottoman sultan Mehmed's victory in Constantinople in 1453.

As for the great City of Constantine, raised to a great height of glory and dominion and wealth in its own times, overshadowing to an infinite degree all the cities around it, renowned for its glory, wealth, authority, power, and greatness, and all its other qualities, it thus came to its end.

The Sultan Mehmed, when he had carefully viewed the City and all its contents, went back to the camp and divided the spoils. First he took the customary toll of the spoils for himself. Then also, as prizes from all the rest, he chose out beautiful virgins and those of the best families, and the handsomest boys, some of whom he even bought from the soldiers. He also chose some of the distinguished men who, he was informed, were above the rest in family and intelligence and valor...

For the Sultan was overcome with pity for the men and their misfortune, as he saw from what good circumstances they had fallen into such great predicaments. And he had good intentions towards them, even though his ill will soon overcame these plans.

Source: Riggs, C. T. (Trans.). (1954). Kritovoulos: History of Mehmed the Conqueror. Princeton, NJ: Princeton University Press.

have greater weight than those from Christian or Jewish sources. In addition to this religious law, the state routinely passed its own, secular ordinances (always with the assertion that such rules adhered to Islamic principles). In the nineteenth century, when a flood of ordinances and regulations marked the presence of an expanding bureaucratic state, even the lip service frequently fell away in favor of scientific management. Moreover, as part of its nineteenth-century reform agenda, the state sought to replace the religious courts with secular ones, an effort strongly opposed by many Ottoman Christian leaders, who feared a loss of influence, and their patrons among the European states.

The Economy

The Ottoman empire remained populated mainly by cultivators who raised a wide variety of crops for subsistence and sale. Many not only farmed but also manufactured handmade textiles and other products, again both for personal use and the market. Cereals always topped the list of crops that they grew. Following ancient regional precedents, the sultan theoretically owned the vast majority of land and allowed others to grow crops and raise animals. In practice, generally, these land users enjoyed security of tenure and stayed on the land for generations. Sharecropping was widespread, and during the nineteenth century, at least, was the source of most crops that were sold in the marketplace. Most cultivators were small landholders; large estates were comparatively unusual. Slave labor was common for domestic work but very rare in agriculture. Commercialization of agriculture enjoyed considerable development in the eighteenth and nineteenth centuries in order to meet mounting foreign demand and, in the latter period, the needs of an increasing number of Ottoman city dwellers. Ottoman manufacturing, for its part, remained largely the domain of small-scale hand producers, although there was some mechanization in the late period. Ottoman manufacturers lost most of their existing foreign markets between 1700 and 1800 because of protectionist policies overseas and because of the increasing efficiency of European manufacturers, itself based on a combination of the more ruthless exploitation of labor and mounting mechanization. During the nineteenth century, however, rug making and silk spinning operations, staffed largely with female labor working outside the home, emerged as the most important of the new export industries. Throughout, Ottoman manufacturers retained the important domestic market for their wares. Important technological breakthroughs occurred in transport and communication during the second half of the nineteenth century. Steam replaced sail on the seas. Railroads emerged; but these were mainly in the Balkan provinces that later were lost. Additionally, a fairly thick network of telegraph lines connected most towns and cities by the later 1800s.

Ethnic and Religious Group Relations

The issue of the state's treatment of its non-Muslim subjects and the entire question of relations among the various ethnic and religious communities remains a hotly debated subject today, among both politicians and scholars. Many residents of Ottoman successor states, especially those in the Balkans, look back on the "Ottoman yoke" which they finally shook off. They remember the injustices and forget the toleration of Ottoman rule. Their frequent detestation of the Ottoman era is a sentiment often deriving from nation-building mythologies put in place after the end of Ottoman rule rather than the actual experiences with that administration. As mentioned earlier, until the later nineteenth century, the majority of Ottoman subjects were Christians of one kind or another although the state's official religion was Islam. Here, indeed, is a key to Ottoman longevity-the Ottoman state nearly always functioned as a multinational, multireligous entity that did not seek to impose religion or define itself in terms of the ethnicity of its subjects. The durability of the empire can be attributed to its toleration of difference among its subjects. And, as long as subjects paid their taxes and rendered obedience, the state protected the expression of these differences. For much of the Ottoman era, it is quite likely that minorities within the Ottoman realms received better treatment than they did in Europe or China. While the Christian and Jewish minorities were second to Muslims, they did have guaranteed protection under Ottoman law, legal assurances that religious minorities in Europe did not possess in

Europe. As Enlightenment notions of equality developed during the eighteenth century and later, however, these Ottoman methods seemed less attractive. While, during some years of the final Ottoman era, there were atrocities, these should be understood in the context of the generally admirable record of intercommunal relations over the six-hundred-year life span of the empire. Proof of Ottoman toleration can be found in ethnic and religious maps of the former Ottoman lands. If the Ottoman state had pursued policies of stamping out difference, how can we explain the rich diversity of ethnicities and religions that prevails in nearly all of these present-day countries?

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See also Mehme II; Osman I

Further Reading

- Brown, L. C. (Ed.). (1996). Imperial legacy: The Ottoman imprint on the Balkans and the Middle East. New York: Columbia University Press.
- Doumani, B. (1995). Rediscovering Palestine: Merchants and peasants in Jabal Nablus, 1700–1900. Berkeley and Los Angeles: University of California Press.
- Goffman, D. (2002). *The Ottoman empire and early modern Europe*. Cambridge, UK: Cambridge University Press.
- Imber, C. (2002). The Ottoman empire, 1300–1650: The structure of power. New York: Palgrave Macmillan.
- Inalcik, H., & Quataert, D. (1994). An economic and social history of the Ottoman empire, 1300–1914. Cambridge, UK: Cambridge University Press.
- Kafadar, C. (1995). Between two worlds: The construction of the Ottoman state. Berkeley and Los Angeles: University of California Press.
- Lowry, H. (2003). *The nature of the early Ottoman state*. Albany: State University of New York Press.
- Quataert, D. (2000). *The Ottoman empire*, 1700–1922. Cambridge, UK: Cambridge University Press.
- Todorova, M. (1997). *Imagining the Balkans*. Oxford, UK: Oxford University Press.

Pacific, Settlement of Paleoanthropology Pan-Africanism Paper Parliamentarianism **Pastoral Nomadic Societies** Paul, St. Peace Making in the Modern Era **Peace Projects** Pentecostalism Periodization—Overview Periodization, Conceptions of **Persian Empire** Peter the Great Pilgrimage Piracy Plastics Plato **Political Thought** Polo, Marco Population Population Growth as Engine of History Porcelain **Portuguese Empire Postcolonial Analysis** Postmodernism Production and Reproduction Progress **Property Rights and Contracts** Protestantism

Pacific, Settlement of

X Then Captain James Cook discovered Christmas Island, at the very center of the Pacific Ocean, in 1777, he wrote that there was no trace of any people having been there before him. He was mistaken, for his men had seen some rats, which must have been introduced, and subsequent research shows that Polynesians had colonized Christmas Island 500 years before its European discovery. In fact, archaeological evidence shows that most of the approximately 1,500 habitable Pacific islands had been settled by about 1000 CE in a series of migrations that required the longest ocean passages prior to the voyages of European exploration in the fifteenth century. The development of long-distance seafaring, the consequent pattern of island colonization, and the impact of people on long-isolated and fragile environments are issues of significance to world history.

Stretching across one-third of the earth's surface, the Pacific Ocean is vast, varied, and scattered, with perhaps 25,000 islands of all types and sizes, most of them in a wide tropical belt that extends southeast from Indonesia to Easter Island. They were settled in two broad phases of migration. The large islands of Southeast Asia, Australia, New Guinea, and the Solomons constitute "Near Oceania," and they were first settled during the Late Pleistocene. The generally small islands of Micronesia, eastern Melanesia (Vanuatu, New Caledonia, Fiji), and Polynesia (all the islands in the triangle with vertices at



Hawaii, Easter Island, and New Zealand), are known collectively as "Remote Oceania" and were settled first during the Late Holocene.

Pleistocene Migration and Holocene Developments

As sea levels were 120 meters lower in 25,000 BCE, today's Southeast Asian islands as far east as Bali and Borneo, and also Taiwan and Japan, were then attached by dry land to the Asian mainland and inhabited by large placental mammals, including elephants, deer, pigs, and people. Australia and New Guinea, however, formed a separate landmass, known as Sahul, which supported an ancient biota characterized by its marsupial mammals. Between them lay the island-studded sea of the mixedbiotic province of Wallacea. It is possible that some islands, notably Flores, had been reached by the Javan population of Homo erectus, which dates to 1.0-1.8 million years ago, but archaeological data suggest initial colonization of Sulawesi, Maluku, Timor, and the Philippines in the period 50,000-35,000 BCE. By 45,000 BCE, Sahul had also been colonized. The migrant populations were undoubtedly Homo sapiens, and their modern descendants, such as Australian aboriginals and Highland New Guineans, retain genetic markers that link them to the early diaspora of our species from its African homeland.

Pleistocene maritime technology is entirely unknown. However, as *Homo erectus* was tied almost entirely to dry land migration, even the modest dispersal of early *Homo sapiens* across Wallacea appears significant by contrast. Natural rafts of giant-bamboo clumps and other materials are quite common in the region and may have been used more by our species than earlier hominids to cross estuaries and lagoons, so that over many thousands of years the chance movement of small breeding units over distances of up to 170 kilometers, as was required to reach Australia, seems possible. At the other extreme from this proposition is the view that invention of formal watercraft, such as canoes and shaped rafts, and even of sailing technology, can be attributed to Pleistocene populations. There is evidence that not only people, but also some useful animals, such as possums and small wallabies, were introduced to new islands as early as 35,000 BCE, and that obsidian tools were being taken from New Britain to New Ireland by 20,000 BCE. Whatever the case, it is important to observe that the maximum achieved passage length remained at about 200 kilometers throughout the Late Pleistocene and Early Holocene. Seafaring may have become more frequent with time, but it did not become more extensive or efficient until the Late Holocene.

By 9,000–6000 BCE, rising sea levels had divided the Sahul landmass into New Guinea, Australia, and Tasmania, and the isolated populations followed different cultural trajectories thereafter, within exclusively foraging societies in the latter two regions. In New Guinea, however, there is evidence of the early development of agriculture. Research at the Kuk site, at 1,600 meters altitude in the Wahgi Valley, shows that by the Early Holocene (c. 8,000 BCE), there was systematic exploitation of pandanus and banana, and by 5000 BCE, formal garden mounds and drainage ditches were being constructed. These were probably for cultivation of taro, sugarcane, and bananas, all of which seem to have been domesticated in New Guinea, along with yams and breadfruit.



By the Late Holocene, around 2000 BCE, gardening was probably widespread in New Guinea, and possibly the Solomon Islands, and both the existence of groundstone adzes suitable for carpentry and evidence of the frequent movement of obsidian around the New Guinea islands indicate that canoes or other ocean-going watercraft existed. In the event, however, it was external influences that were instrumental in propelling the Late Holocene phase of maritime migration.

Settlement in Remote Oceania

Archaeological evidence shows that about 1300–1200 BCE, the older aceramic cultures of the New Guinea islands, notably of the Bismarcks, were largely replaced by a material culture that included pottery, polished stone adzes and chisels, slate and shell tools, and distinctive ornaments and fishhooks. While at least some of these elements have a long history in the New Guinea region, including shell adzes, shell beads, and simple fishhooks, ceramics were new, and the distinctive red-slipped, dentate-stamped types can be traced to earlier sites in Southeast Asia. In turn, these represent the expansion, after about 2500 BCE, of a neolithic culture that had its origins

around 5000 BCE in South China. This involved the cultivation of rice and millet and the husbandry of pigs, dogs, and chickens.

Cereal cultivation never reached the New Guinea region or anywhere else in Oceania, but the domestic animals and ceramic culture did, and they were probably associated with gardening of taro, bananas, breadfruit, and other crops. Linguistic and genetic data show that this was not just a case of cultural diffusion. There was also substantial migration. People of Southeast Asian ancestry moved into coastal New Guinea and on to its smaller islands and intermarried with the resident people. The immigrant languages of the Austronesian family prevailed, and it was this culturally mixed population that began the second great phase of Pacific settlement.

Between 1000 and 800 BCE, there was a rapid migration from the New Guinea islands southeast to Vanuatu and New Caledonia and east to Fiji, Tonga, and Samoa. Taken from the name of an early site in New Caledonia, this is known as Lapita culture. At some point, not necessarily at the beginning, it introduced the pig, dog, and chicken, and almost certainly also the cultivation of root and tree crops, into the Remote Pacific islands. As obsidian from New Britain is found as far east as Fiji and decorative styles on Lapita pottery changed synchronously, there was either repeated migration or some degree of interaction throughout the region. Lapita was contemporaneous with movement of a similar ceramic culture into western Micronesia, and both represent the beginning of long-distance seafaring in the Pacific. Equally importantly, from Lapita onward eastward migration in Remote Oceania was into islands where hitherto a few species of bats were the highest form of terrestrial mammalian life.

Seafaring and Colonization

A sudden and sixfold increase (to 1,200 kilometers) in voyaging range at about 1000 BCE indicates the advent in the Pacific of the sail, first recorded in China and Egypt by 3000 BCE, and probably also of shaped paddles used for both propulsion and steering, and the development, with vessel controllability, of rudimentary stellar navigation. The evolution of voyaging technology thereafter has been one of the most important issues in the settlement history of Remote Oceania. The traditional view, espoused by Peter Buck, was that early colonists used large, fast, double-hulled canoes that were capable of sailing into the prevailing southeast trade winds. Based on that assumption, modern voyaging researchers, such as Ben Finney, have worked with indigenous seafarers to build substantial double-hulled canoes, notably Hokule'a, and sail them around the Pacific to demonstrate the vovaging skills of ancient Polynesians. The performance data gained in these practical experiments were then used in computer simulations, which suggested probable patterns of early maritime migration. The conclusions of this neotraditional research were that voyaging capabilities were sufficiently sophisticated that no part of Oceania remained beyond reach, so that the overall pattern of colonization was broadly continuous from west to east; Lapita colonization reached as far east as Samoa at about 900 BCE, to the Cook Islands in East Polynesia by 500 BCE or earlier, and then throughout East Polynesia by 0-500 CE.

Recent chronological research in East Polynesia has cast doubt on this hypothesis. Key archaeological sites have provided significantly younger ages than existed in earlier data. For instance, the important Marquesan site—Ha'atuatua, Hane, and Anapua—once dated to about 0 CE are now dated no earlier than about 900 CE, and there are similar results from throughout East Polynesia. Consequently, the pattern of settlement history in Remote Oceania appears episodic rather than continuous, as follows:

- 1. a very rapid dispersal 1000–800 BCE of red-slipped pottery-using cultures, especially Lapita, into western Micronesia and from New Guinea to West Polynesia;
- expansion into central Micronesia, probably from the Santa Cruz islands, and colonization of some islands marginal to the eastern Lapita expansion (Niue Pukapuka and Rotuma), about 200 BCE;
- 3. rapid, aceramic dispersal from West Polynesia into and through East Polynesia at 900–1100 CE; and
- 4. colonization around 800–600 CE of South Polynesia (New Zealand and outlying archipelagos).

Sailing Downwind

The punctuated pattern of settlement suggests that the assumed sophistication of seafaring in Remote Oceania needs to be reconsidered. So also do linguistic data that show that the term for "double canoe" did not occur before the development of Central Pacific languages, that is after the Lapita expansion, and that there were no terms for either "fixed mast" or "standing rigging." Early migrations probably used outrigger canoes. In the western Pacific and Southeast Asia, these canoes had lateen rigs historically, but those may not have been introduced to Remote Oceania until about 1200 CE, through the influence of expanding Arabian seafaring technology. In the Central and East Pacific, Oceanic spritsails were dominant historically, and the early form of these, found in New Zealand and probably the Marquesas, had no fixed mast or rigging. It consisted of two spars, with a triangular sail, apex down, and it was held up only by wind pressure against sheets held aft. Canoes using it sailed downwind because the absence of side-stays meant that winds on the beam would push the rig overboard. Since



historical observations show that more complex rigs, including the lateen sail with its fixed mast, halyards, and balance boards, were only reaching the Central Pacific in the seventeenth and eighteenth centuries, long after the colonization of East and South Polynesia, it can be hypothesized that the New Zealand rig was used throughout Remote Oceanic colonization.

Although quite simple, this rig could be repaired at sea and set in high- or low-aspect shapes. It avoided the massive stresses on gear, especially on fragile pandanus sails of windward sailing, and it could be demounted instantly in high winds or squalls. However, sailing with this rig must have been relatively slow and highly dependent on fair winds. The question then arises of how the settlement of Remote Oceania was achieved by vessels that could not sail into the prevailing trade winds.

Westerly winds occur briefly but frequently so they cannot explain the long pauses in the colonizing sequence. However, there was also long-term variation in the frequency of westerly winds of El Niño origin. Proxy measures of the frequency and intensity of El Niño conditions, including long-term records of loess production in China, of changes in ocean circulation, and of sediment deposition in lakes, indicate that El Niño frequencies were unusually high about 3000 BCE, 1400-500 BCE, 400–900 CE, and 1100–1700 CE. Dispersal out of Southeast Asia, the Lapita expansion, and movement into East Polynesia approximate this pattern. They were all largely west-to-east movements. East-to-west movements into Central Micronesia and to South Polynesia occurred at intervening periods during the "normal" pattern of trade wind dominance. In summary, migration in Remote Oceania may have been restricted to downwind sailing at slow average speeds on long passages. Successful voyaging would have been significantly more difficult, with much lower rates of success than is envisaged in traditionalist and neotraditionalist hypotheses. It was probably undertaken uncommonly at times when winds were predominantly adverse, but occasional significant episodes of frequent wind reversals would have provided conditions that enhanced the probability of colonizing success toward the east.

Faunal Devastation

When colonists reached uninhabited islands, they broached ancient and fragile ecosystems with devastating results. The scale of the assault was realized as early as 1843 when remains of extinct giant birds (moa) were found in Maori middens. Evidence of anthropogenic change has continued to accumulate ever since. Extinction of terrestrial vertebrates is widely documented. Large flightless birds became extinct in Pleistocene New Ireland. The giant megapode, or brush fowl; a land crocodile, Mekosuchus inexpectatus; and a giant horned tortoise disappeared in New Caledonia, and the giant iguana and megapode in Tonga. Recent research shows that numerous species disappeared with the arrival of people in Fiji. These included another land crocodile, Volia athollander*soni*; a giant iguana and tortoise; a giant frog; two large megapode species; another giant megapode, Megavitiornis altirostris; and a giant flightless pigeon, similar to the dodo. In New Zealand nearly forty species of birds, including thirteen species of moas, disappeared. This represents a 50 percent decline in the number of bird taxa breeding on the mainland, and similar losses were sustained on Hawaii and elsewhere in East Polynesia, from the central archipelagos to the margins. Extinctions occurred rapidly, although perhaps not as quickly on large islands as the fifty years after human colonization preferred for moa extinction in one scenario. As well as extinction, there was also depletion and range contraction among other taxa. Some seal species occur in the earliest archaeological sites in subtropical Polynesia, but by the eighteenth century, they were found only in New Zealand, where their breeding ranges had contracted almost to the subantarctic under hunting pressure.

These data show that faunal collapse in Remote Oceania was rapid and early. The typical pattern is for remains of extinct taxa to be found in sites that date to the initial century or two of human settlement and thereafter to be absent. Extinction, at least among the larger-bodied taxa, was density-independent, that is, small human populations of widely varying density distribution could still devastate indigenous faunas very quickly. In addition, it is now clear that the process was virtually universal. So Men naturally despise those who court them, but respect those who do not giveway to them. • THUCYDIDES (460-404 BCE)

much so, that David Steadman estimates a loss of 8,000 species or populations within Oceania generally.

Deforestation

Profound changes also occurred in vegetation patterns. Forests retreated with the advent of people who wanted to create agricultural land and whose pigs, chickens, and rats foraged for seeds on the forest floor. In New Caledonia there was some loss of diversity in forest trees after 1000 BCE, and massive deforestation began by 500 BCE. On Viti Levu, the main island of Fiji, substantial deforestation began about 100 BCE but earlier on the smaller islands. These data suggest that in the Lapita region, settled by 1000 BCE, there was relatively little initial impact on the landscape, but that massive changes in sediment distribution and vegetation patterns developed as population density increased and settlement expanded inland. Sediment from the hills was eroded into the valleys and redeposited around the coasts, increasing opportunities for agricultural development.

The pattern in the eastern area is less clear, largely because of uncertainty about the timing of initial human colonization. Aceramic East Polynesian archaeology lacks any horizon marker of initial colonization comparable to Lapita pottery. Apparently, anthropogenic landscape changes have been dated to 1500 BCE in Mangaia, Cook Islands, and to 500 CE in New Zealand, Easter Island, and the Societies, using samples from lake sediment cores, but the results are contentious. Recent research in New Zealand shows that lake sediments are often contaminated by inwashing of old soil carbon and that radiocarbon dates are therefore too old.

Landscape change in Remote Oceania appears, therefore, to divide into two patterns. In the large western islands, it was often slow to start and took up to a millennium to assume major proportions. This seems to be a density-dependent pattern that was tracking the progressive expansion of agriculture. In the eastern islands, there was a stronger early impact, probably reflecting the small size of many islands, their very steep slopes and relatively fragile soils, and increased climatic volatility in the second millennium CE.

Island Settlement

Settlement of the Pacific occurred in a series of maritime migrations that began during the Pleistocene and accelerated in frequency and range during the Late Holocene. The movement into and across Remote Oceania probably reflected improvements in maritime technology, the impetus of favorable climatic episodes for sailing, and the utility of agriculture for sustained island settlement. Fragile island environments were altered profoundly by human colonization. Yet, if extinction on Oceanic islands was catastrophic for biological diversity, exploitation of the abundant and naïve fauna was also an optimal strategy of initial human survival on islands. Such an easy food supply allowed small colonizing populations to grow rapidly and avoid their own possible extinction as quickly as possible. Likewise, substantial deforestation and redeposition of upland sediments opened up the possibility of long-term demographic success by intensive agriculture. Significant anthropogenic environmental modification, in other words, underwrote the successful settlement of most Pacific islands.

Atholl Anderson

Further Reading

- Allen, J., & O'Connell, J. F. (2003). The long and short of it: Archaeological approaches to determining when humans first colonized Australia and New Guinea. *Australian Archaeology*, 57, 5–19.
- Anderson, A. J. (2000). Slow boats from China: Issues in the prehistory of Indo-Pacific seafaring. In P. Veth & S. O'Connor (Eds.), East of Wallace's line: Studies of past and present maritime cultures in the Indo-Pacific region (pp. 13–50). Rotterdam, Netherlands: Balkema.
- Anderson, A. J. (2002). Faunal collapse, landscape change and settlement history in remote Oceania. World Archaeology, 33, 375–390.
- Anderson, A. J. (2003). Initial human dispersal in remote Oceania: Pattern and explanation. In C. Sand (Ed.), *The prehistory of the Pacific: Assessments of the Archaeological evidence*. Noumea, France: Museé Territorial de Nouvelle Caledonié.
- Burley, D. V., & Dickinson, W. R. (2001). Origin and significance of a founding settlement in Polynesia. *Proceedings of the National Academy of Sciences USA 98*, 11829–11831.
- Burney, D. A. (2002). Late quaternary chronology and stratigraphy of twelve sites on Kaua'i. *Radiocarbon* 44, 13–44.
- Clark, G., Anderson, A. J., & Vunidilo, T. (Eds.). (2001). The archaeology of Lapita dispersal in Oceania. Canberra, Australia: Pandanus Press.
- Finney, B. R. (1994). Voyage of rediscovery: A cultural odyssey through Polynesia. Berkelev: University of California Press.
- Irwin, G. J. (1992). The prehistoric exploration and colonization of the Pacific. Cambridge, UK: Cambridge University Press.

- Kirch, P.V. (2000). On the road of the winds. Berkeley: University of California Press.
- Latinis, D. K. (2000). The development of subsistence system models for Island Southeast Asia and Near Oceania: The nature and role of arboriculture and arboreal-based economies. *World Archaeology 32*, 41–67.
- McGlone, M. S., & Wilmshurst, J. M. (1999). Dating initial Maori environmental impact in New Zealand. *Quaternary International 59*, 5–16.
- McGrail, S. (2001). Boats of the world: From the Stone Age to Medieval times. Oxford, UK: Oxford University Press.
- Moy, C. M., Seltzer, G. O., Rodbell, D. T., & Anderson, D. M. (2002). Variability of El Niño/Southern oscillation activity at millennial timescales during the Holocene epoch. *Nature* 420, 162–165.
- Steadman, D. W. (1995). Prehistoric extinctions of Pacific island birds: Biodiversity meets zooarchaeology. *Science* 267, 1123–1131.
- Worthy, T. H., Anderson, A. J., & Molnar, R. E. (1999). Megafaunal expression in a land without mammals—the first fossil faunas from terrestrial deposits in Fiji. *Senckenbergiana biologica* 79, 337–364.

Pacifism

See Nonviolence; Peace Making in the Modern Era; Peace Projects

Paleoanthropology

Paleoanthropology is the broad field of science devoted to understanding the biological and cultural evolution of our own species *Homo sapiens*, and of the zoological family *Hominidae* to which it belongs. Hominidae is the family (sometimes recognized only at the lower taxonomic levels of subfamily, or tribe) of primates that contains the living *Homo sapiens* and its close fossil relatives (those that are not more closely related by descent to the living great apes: the chimpanzees, bonobos, gorillas, and orangutans). Central to the practice of paleoanthropology are hominid paleontologists, scientists who study the fossil record that comprises the direct biological evidence of humanity's past; but the field is fleshed out by scientists of many different kinds, including stratigraphers, geochronologists, taphonomists, functional and comparative anatomists,

systematists, molecular and population geneticists, archaeologists, evolutionary biologists of various kinds, and a host of others. The notion of paleoanthropology as an essentially collaborative area of science dates back to the early 1960s, when Louis Leakey (earlier in his career the very exemplar of the traditional "lone paleontologist") and his wife Mary brought together specialists of various kinds to investigate the hominidbearing deposits of Olduvai Gorge, in Tanzania. Clark Howell, then of the University of Chicago, soon thereafter made the multidisciplinary approach definitive in his explorations of the fossil-rich sediments of the Omo basin in southern Ethiopia. Since that time virtually all intensive human evolutionary field investigations have included a diversity of experts and have involved collaborations with many outside specialists.

The Nature of the Evidence

The archive of human biological evolution is the fossil record. Fossils consist of the remains of dead creatures that have been preserved in the accumulating geological record. Almost invariably, such remains consist of bones and teeth, since these are the hardest elements of the body and best resist decay and other forms of destruction. The destructive processes themselves are the specialty of taphonomists, who study how remains are scattered and broken postmortem, and how fossil assemblages are accumulated. Fossils of land creatures are preserved within the sedimentary rocks that result from the deposition of eroded particles, principally by water in lakes and rivers. Such sediments are laid down in sequences within which later deposits overlie earlier ones, a process that is reconstructed by the geologists known as stratigraphers. The place of fossils in a rock sequence can tell you their *relative* age (older than this, younger than that), but the determination of absolute ages (in years) is the province of geochronologists. In their efforts to quantify the time that has elapsed since a particular event (the cooling at the surface of a lava flow, for instance), geochronologists most frequently take advantage of the fact that unstable, "radioactive,"

Cherchen Man of the Silk Road

The following is a description of the Cherchen Man, the most famous of the three-thousand-year-old Caucasoid mummies found at Ürümchi a stop along the ancient Silk Road. The desiccated corpses and their burial clothing and tapestries survived surprisingly well, giving the archeologist clues to the genetic makeup and cultural origins of the mysterious mummies.

His face is at rest, eyes closed and sunken, lips slightly parted; his hands lie in his lap, while his knees and head are tilted up—like a man who has just drifted off to sleep in a hammock. Visitors tend to tiptoe and lower their voices. A two inch beard covers his face, and his light brown hair has been twisted—plied from two strands, not braided from three—into two queues that hang halfway down to his chest. Here and there white hairs glint among the yellow-brown betraying his age—somewhere past fifty. He would have been an imposing figure in life, for he once stood six feet six inches tall.

Bright ocher-yellow face paint curls across his temple, sprouting short rats on its outer cheek and reversing its curl as it meanders down to the flatland of his cheek before climbing across the great ridge of his nose—not a low bridged Asian nose but a veritable Sierra Nevada of a nose—to the far side....

Passing from the face, one's eye jumps between the violently colored leggings and the purply-red brown two-piece suit that covers most of the man's body. Originally the man wore soft white deerskin boots to above his knees—the left one is still there. But the right one has torn away, revealing horizontal stripes of gaudy red, yellow, and blue that put Ronald McDonald in the shade....

And his suit? By way of decoration on the plainweave fabric, the tailor of the Cherchen Man's suit whipped bright red yarn as a sort of piping over the seams of both the shirt body and around the neck and front opening of the shirt. It produces a very subtle but very effective ornamentation—subtle because the piping is so fine and because its bright red color rest against the purply-red background... Holding the man's shirtfront together is a waist cord plaited from yarns of five different colours: bright red, dark purply brown, blue, green, and yellow.

Source: E. W. Barber (1999). The mummies of Ürümchi (pp. 26–27). New York: W. W. Norton & Company.

forms of elements contained in rocks "decay" to stable states at known and constant rates. For earlier periods, volcanic rocks (which may be interlayered in sedimentary sequences, and hence give an estimate of the age of fossil-bearing sediments above and below them) are favorite objects of geochemical dating; in more recent times, actual fossils (e.g., by radiocarbon) or sometimes even artifacts (e.g., by thermoluminescence) can often be assigned dates in years.

The fossils themselves provide information of many kinds. First, they tell us about the variety of hominids that existed in the past. Based on their anatomical similarities and differences, paleontologists first classify fossils into species, which are both the basic *kinds* of organisms and the building blocks of ecosystems. Elementary as it may sound, the sorting of fossils into species is one of the most difficult processes in paleoanthropology, and one of the most contentious. In recent years new methods such as scanning by electron microscopes and computerized tomography have helped to enlarge the range of morphologies that can be brought to bear on such problems. Once species are recognized, their genealogical relationships (those due to ancestry and descent) may be inferred. Again, such inferences are normally based on their morphologies and are similarly subject to a variety of algorithms and approaches. Over the past few decades molecular comparisons among extant species have helped solidify our notions of the relationships among extant species, and hence of the framework within which hominid fossils have to be fitted. In the hominid arena, molecular evidence has served to substantiate the species difference between Homo sapiens and Homo neanderthalensis, following the recent success of molecular geneticists in extracting short sections of mitochondrial DNA from fossils of the latter.

Further anatomical scrutiny can reveal a great deal about how extinct species may have lived. Particularly Despite my thirty years of research into the feminine soul, I have not been able to answer...the great question that has never been answered: what does a woman want? • SIGMUND FREUD (1856–1939)

when functional comparisons can be made with the structures of extant forms whose behaviors are known, such study allows tentative reconstruction of the anatomically limited (in the hominid case, most importantly locomotor) behaviors of the species concerned. In rare cases, such as the famous 3.5-million-year-old footprints preserved at Tanzania's Laetoli that directly document upright bipedalism at that great remove in time, the inferences made from bony anatomy may be independently confirmed. Our understanding of what our predecessors ate is enhanced by analyses of teeth and of how they wear, and the analysis of stable isotope ratios in fossil bone can further augment our understanding of ancient diets. Further, the examination of associated fossil faunas and floras, and of the geological evidence for the circumstances in which sediments enclosing particular fossils were deposited, can reveal a great deal about the environments in which the creatures of interest had lived and behaved.

In the hominid case, our knowledge of ancient behaviors is vastly enhanced by the archaeological record, which begins around 2.5 million years ago with the invention of the first stone tools. Archaeology, sometimes defined as "the study of ancient garbage," focuses upon the traces-of any and all kinds-of their activities left behind by ancient humans. It is not confined simply to the study of ancient artifacts, but also extends to the ways in which those artifacts were accumulated at particular sites, and to how such sites are located within the landscapes in which they are found. By combining analyses at all these levels, much can be determined about how now-extinct humans interacted with the environment around them and to a certain extent with each other, though it has to be admitted that even a rich archaeological record is but an indirect reflection of the complex social, economic, and material lives that were led by earlier hominids.

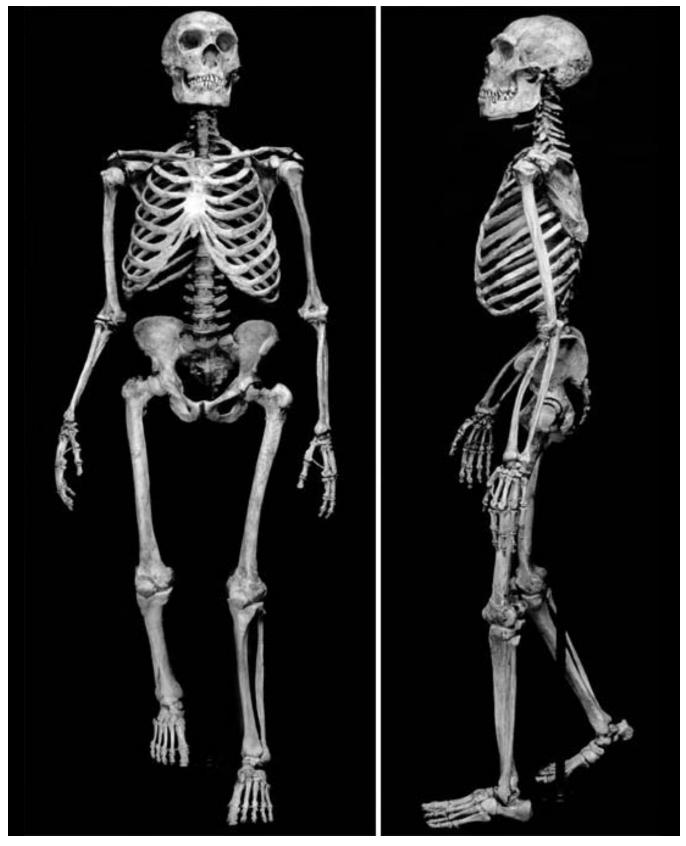
The Human Evolutionary Record

The reconstruction of the human evolutionary past has been greatly influenced by views of the evolutionary process itself. In the mid-twentieth century, most paleoanthropologists fell under the sway of the "Evolutionary Synthesis," a view of the evolutionary process that ultimately ascribed virtually all evolutionary phenomena to gradual generation-by-generation change of gene frequencies in populations, under the guiding hand of natural selection (whereby in each generation those individuals with favorable heritable adaptations reproduce more successfully than those less favorably endowed). This perspective led to an essentially linear view of human evolution, which was seen as involving a slow, dogged slog from primitiveness to our current burnished perfection.

Subsequently, an enlarging hominid fossil record forced the realization that the evolutionary process is more complicated than this, and is subject to a host of external influences, many of which are entirely random with respect to adaptation. The resulting picture of the hominid record is one of diversity, of evolutionary experimentation whereby many hominid species have emerged and done battle in the ecological arena, trying out the many ways there evidently are to be hominid. The story of our family is one of many species originations, and of many extinctions. It may seem natural to us today, since this is what we are familiar with, that *Homo sapiens* is the lone hominid in the world; but in fact it is a highly atypical situation, and one that strongly hints that there is something very unusual indeed about our species.

The First Upright Bipeds

The earliest fossils that have been claimed to lie somewhere in our ancestry, but not in that of the apes as well, come from African sites in the period between 7–6 and 4.4 million years ago. The genera *Sahelanthropus, Orrorin*, and *Ardipithecus* are largely known from different parts of the skeleton, and all of them have been disputed as hominids in one way or another—reflecting the fact that as yet we have no clear idea of what the earliest hominid *ought* to look like. What they all have in common, however, is that each genus has been claimed on one slender basis or another to have been an upright biped. In the period between about 10 and 7 million years ago the ancient African forests began to fragment, as the climate became less humid and more seasonal and this clearly provided new ecological opportunities



Front and side views of a Neanderthal skeleton. Recently reconstructed by G. J. Sawyer and Blaine Maley, this composite skeleton incorporates elements from several different individuals.

for terrestrial bipeds. Small wonder, then, that this adaptation has become the de facto criterion for membership in *Hominidae*. However, it still remains possible, even likely, that upright bipedality evolved more than once within the ancestral group from which both living apes and humans are descended.

The best-documented early bipedal hominid species is Australopithecus afarensis, known from sites in eastern Africa dating between about 3.8 and 3.0 million years ago. Exemplified by the famous "Lucy" skeleton, this species was small-bodied, standing between about 31/2 and 4¹/₂ feet tall. Such creatures retained a variety of features useful in climbing, though they would certainly have moved bipedally when on the ground. Above the neck, however, the proportions of A. afarensis were apelike, with a large face hafted onto a small, ape-sized braincase -which is why paleoanthropologists often characterize these early hominids as "bipedal chimpanzees." This combination of features was a remarkably successful one, remaining essentially stable as a whole variety of species of such "archaic" hominids came and went over the period between about 4 and 2 million years ago. Living on the fringes of the forests and in the newly expanding woodlands, hominids like A. afarensis probably subsisted primarily upon plant foods, although they probably scavenged the remains of dead animals and may have hunted small mammals much as some chimpanzees do today.

It was presumably a hominid of this archaic, smallbrained kind that first began to manufacture stone tools around 2.5 million years ago. Consisting of small sharp flakes struck from one river cobble using another, these tools were crude but remarkably effective, and must have had a profound effect on the lives of their makers, allowing them, for instance, to detach parts of carcasses and carry them to safer places for consumption.

Early Hominids with Modern Body Proportions

Interestingly, no technological change marked the emergence at around 2 million years ago of the first hominid species with body proportions essentially like our own. Built for life out on the broiling tropical savanna, far from the safety of the trees, it was apparently the unprecedented mobility of this striding biped, often known as *Homo ergaster*, that led to its almost immediate spread beyond the confines of Africa. Technological innovation, in the form of the deliberately shaped "handaxe," appeared later, also in Africa, at about 1.5 million years ago. During this period there also began a trend toward hominid brain-size increase, although the exact pattern of that increase will have to await better understanding of hominid diversity through this period.

By about 1 million years ago hominids had penetrated Europe and had begun to diversify there in a process ultimately culminating in Homo neanderthalensis, which had a brain as large as our own, albeit housed in a very differently structured skull. Meanwhile, the lineage leading to Homo sapiens was evolving in Africa, although this stage in human evolution is poorly-albeit tantalizingly -documented by fossils. Both molecular and fossil evidence suggests that anatomically modern Homo sapiens had emerged in Africa by about 150,000 years ago, and by around 100,000 years ago such hominids had reached Israel, which was also at least sporadically occupied by Neanderthals around this time. Interestingly, in the period of coexistence between about 100,000 and 50,000 years ago, the Neanderthals and moderns of the eastern Mediterranean region shared essentially the same technology. During this time, though, we find the first stirrings in Africa of the symbolic behavior patterns that characterize Homo sapiens worldwide today. As more sophisticated stone tools became common in Israel, presumably developed by Homo sapiens whose ultimate origins lay in Africa, the local Neanderthals disappeared, and in short order Europe was invaded by modern peoples, at about 40,000 years ago. These "Cro-Magnons" left behind them an amazing record of virtually the entire panoply of modern symbolic behaviors, including representational and geometric art in various media, music, notation, bodily ornamentation, elaborate burial, and so forth. At the same time, technologies became enormously elaborated and embarked upon a pattern of constant innovation and change.



The sequence of events just summarized strongly suggests that, with the emergence of Homo sapiens in Africa, an unanticipated ability for symbolic cognition was born. This new cognitive potential was evidently acquired in an emergent event, in which a chance coincidence of biological acquisitions resulted in something entirely new. Made possible by a long evolutionary history, but not an inevitable result of it, the expression of this unprecedented potential (the biological underpinnings of which were presumably acquired in the reorganization that led to modern anatomy) had to await behavioral discovery, much as ancestral birds had feathers for millions of years before discovering they could use them to fly. Most plausibly, the behavioral releasing agent concerned was the invention of language, an activity that is intimately tied up with symbolic thought.

Once the transition to symbolic thought had been made, *Homo sapiens* was positioned to eliminate its hominid competitors such as the Neanderthals and to embark on an aggressive demographic expansion. At this initial stage all human societies were economically based on hunting and gathering; rapidly, however, sedentary lifestyles relying on the domestication of plants and animals were independently adopted in various parts of the world. Sedentarism then led to further population expansion, urbanization, economic specialization, and the development of complex societies. And it also led to a redefinition of the relationship of *Homo sapiens* to the rest of the world: to what Niles Eldredge (1995, 101) has characterized as a "declaration of independence" from our surrounding ecosystems.

Implications of Paleoanthropology

The study of paleoanthropology teaches us above all that the process leading to the arrival on Earth of *Homo sapiens* was not one of constant fine-tuning over the eons. Rather, our cognitively unique species appeared in a short-term event that was emergent in nature, rather than representing the culmination of any preexisting trend. This entirely unprecedented event witnessed the replacement of a history of highly sporadic hominid innovation, in the context of very low population sizes, by patterns of demographic expansion and restless local invention in both the social and technological realms-even as the inherent limitations of human experience, together with an apparent reluctance to learn from such experience, guaranteed that similar patterns would tend to recur over and again. Further, the prehistory of sedentary societies almost everywhere shows that technological overintensification has repeatedly combined with climatic vagaries to ensure eventual economic collapse-for reasons that are often due as much to innate human proclivities as to the external proximate causes. Despite its extraordinary ratiocinative abilities, Homo sapiens is not an entirely rational creature, and its history worldwide reflects that fact. Evolutionary psychology and other reductionist approaches to the contrary, we *cannot* understand our own history as that of a creature that is biologically perfected for-or even broadly adapted to-any particular way of behaving.

Ian Tattersall

See also Dating Methods; Human Evolution—Overview; Universe, Origins of

Further Reading

- Bahn, P., & Vertut, J. (1997). Journey through the ice age. London: Weidenfeld & Nicholson.
- Deacon, H. J., & Deacon, J. (1999). Human beginnings in South Africa: Uncovering the secrets of the Stone Age. Cape Town, South Africa: David Philip.
- Delson, E., Tattersall, I., Van Couvering, J. A., & Brooks, A. (2000). Encyclopedia of human evolution and prehistory (2nd ed.). New York: Garland Press.
- Eldredge, N. (1995). Dominion: Can nature and culture co-exist? New York: Henry Holt.
- Gould, S. J. (2001). The structure of evolutionary theory. Cambridge, MA: Belknap/Harvard University Press.
- Johanson, D., & Edgar, B. (1996). From Lucy to language. New York: Simon & Schuster.
- Kingdon, J. (2003). Lowly origin: Where, when, and why our ancestors first stood up. Princeton, NJ: Princeton University Press.
- Klein, R. (1999). The human career (2d ed.). Chicago: University of Chicago Press.
- Klein, R., & Edgar, B. (2002). The dawn of human culture. New York: Wiley.
- Schwartz, J. H. (1999). Sudden origins: Fossils, genes, and the emergence of species. Wiley.

- Stringer, C. B., & McKie, R. (1996). African exodus: The origins of modern humanity. London: Jonathan Cape.
- Tattersall, I. (1995). The fossil trail: How we know what we think we know about human evolution. New York: Oxford University Press.
- Tattersall, I. (1998). *Becoming human: Evolution and human uniqueness*. New York: Harcourt Brace.
- Tattersall, I., & Schwartz, J. H. (2000). Extinct humans. Boulder, CO: Westview Press.
- Wenke, R. J. (1999). Patterns in prehistory: Humankind's first three million years. New York: Oxford University Press.
- White, R. (2003). *Prehistoric art: The symbolic journey of mankind*. New York: Abrams.

Paleolithic Era

See Foraging (Paleolithic) Era; Human Evolution— Overview; Paleoanthropology

Pan-Africanism

Pan-Africanism is a political and social movement that has historically encouraged both a political agenda of African unity and a broad cultural orientation of black identity in Africa and the African diaspora. Its ideology has roots in the early nineteenth century, while its specific political program emerged in 1900.

Origins and Themes

The roots of the Pan-African movement lie in the ideas and efforts of several key nineteenth-century intellectuals and activists from the United States and the Caribbean. These individuals were responding to the oppressive institutions of slavery, racist discrimination and segregation, and colonialism, as well as to the racial-cultural and psychological oppression and denigration that reinforced these institutions.

Much recent research has demonstrated the significance of African culture among North American blacks from the time of slavery to the present, while such information concerning Caribbean black culture has long been well-known. Thus, it is appropriate to locate the roots of Pan-Africanism in the slave experience itself, as that experience fostered the development of "African nationalism"—an effort by slaves to resist oppression and to "bridge ethnic differences" that "proceeded from an impulse that was Pan-African" (Stuckey 1987, ix).

Black abolitionists such as David Walker (1785–1830), Henry Highland Garnet (1815–1882), Maria Stewart (1803–1879), and Frederick Douglass (1817–1895) used their interpretations of African culture and ancient history from the time of Egypt and Ethiopia to argue against slavery. They were also all influenced by the redemptive promise of Christianity, particularly as expressed in Biblical references to Africa such as Psalms 68:31 (AV): "Ethiopia shall soon stretch out her hands unto God," in which "Ethiopia" was taken as a synonym for Africa and African-Americans. This quotation was widely used into the twentieth century.

Martin Delany (1812–1885), Alexander Crummell (1819–1898), and Edward Blyden (1832–1912) were all primarily black nationalists, though with significant differences. All three actually experienced Africa: Delany traveled to the Niger valley and Liberia while Crummell was a missionary for twenty years in Liberia before returning to the United States, and Blyden emigrated from St. Thomas in the Caribbean to live in both Liberia and Sierra Leone. Delany is credited with originating the phrase in 1861, "Africa for Africans," one of the later slogans of the Pan-African movement, though the original formulation was actually "Africa for the African race, and black men to rule them. By black men I mean, men of African descent who claim an identity with the race" (in Brotz 1992, 110), which significantly implied a key role for African-American emigrants to help uplift Africa.

Alexander Crummell, like Delany, was a nationalist who also supported small-scale emigration to Africa. But he was primarily a missionary who had very little interest in or knowledge of indigenous African culture and called for the Christianization of Africa in order to "civilize" it. In contrast to Crummell, Delany was much more secular in his approach and advocated the emigration of

Henry Sylvester Williams: The Call for the Pan-African Conference of 1900

One of the most important early political organizers of Pan-Africanism was the Englishman Henry Sylvester Williams (1869–1911), a lawyer from Trinidad who moved to London in 1896. He founded a black organization called the African Association in 1897, and the first documented use of the phrase "Pan African Conference" is found in an 1899 letter by Williams calling for a meeting in 1900. Williams wrote that "the time has come when the voice of Blackmen should be heard indepen dently in their own affairs."

In the written conference proceedings, he added:

In view of circumstances and the widespread ignorance which is prevalent in England about the treatment of native races under European and American rule, the African Association, which consists of members of the race resident in England ... has resolved during the Paris Exhibition, 1900 ... to hold a conference in London ... in order to take steps to influence public opinion on existing proceedings and conditions affecting the welfare of the natives in the various parts to the world ...

The proceedings were sent to activists in Africa, the United States, Europe, West Indies and Haiti. Reports of the conference appeared in thirty-five newspapers in the United Kingdom, the United States and Africa.

Sources: Retrieved from http://www.mainlib.uwi.tt/oprepweb/notes.html and http://www.100greatblackbritons.com/bios/henry_sylvester_williams.html

free blacks to Africa with skills in teaching, medicine, business, transportation and other fields.

Edward Blyden was the most significant black scholar of the nineteenth century, with complex and sometimes contradictory views of Africa. According to the historian Hollis Lynch, as early as the 1870s Blyden originated the concept of the "African personality," by which he meant the unique characteristics of African culture and psychology, a notion that presaged the negritude movement of the twentieth century. Blyden had a great influence on West African nationalists and Pan-African theoreticians. In the words of Lynch, "Blyden's pan-Negro ideology was undoubtedly the most important historical progenitor of Pan-Africanism" (Lynch 1967, 250).

Thus some of the early ideas leading to Pan-Africanism included black nationalism, the idea of Africa for Africans, emphasis by some but not all on a return to the African homeland, and the concept of the greatness of African history and culture, emphasizing Egypt and Ethiopia as black civilizations. Other aspects emphasized by some included the need to uplift and regenerate Africa through missionary activity in order to fulfill God's promise as expressed in Psalms 68:31.

Political Pan-Africanism

In his path-breaking and controversial paper, "The Conservation of Races," delivered in 1897 at the American Negro Academy, the recent Harvard Ph.D.W.E.B. Du Bois (1868–1963), who later became known as the father of Pan-Africanism, called upon African-Americans to "take their just place in the van of Pan-Negroism" (quoted in Foner 1970, 79). Du Bois called for "race organization," "race solidarity," "race unity," and a spirit of self-help, since "for the development of Negro genius, of Negro literature and art, of Negro spirit, only Negroes bound and welded together, Negroes inspired by one vast ideal, can work out in its fullness the great message we have for humanity" (in Foner 1970, 79). Inspired to a large extent by Alexander Crummell as well as by European nationalist theorists, Du Bois in the late 1890s began his transformation first into a race man (a person primarily concerned with African-American issues in the late 1890s) and eventually into a Pan-Africanist advocate and organizer.

The most important early political organizer of Pan-Africanism, however, was not Du Bois, but Henry Sylvester Williams (1869–1911), a lawyer from Trinidad resident in London since 1896. He founded a black organization called the African Association on 24 September 1897. Selection from the Charter of the Organization of African Unity (25 May 1963)

PURPOSES

ARTICLE II

1. The Organization shall have the following purposes:

a. to promote the unity, and solidarity of the African States;

b. to co-ordinate and intensify their co-operation and efforts to achieve a better life for the peoples of Africa;

c. to defend their sovereignty, their territorial integrity and independence;

d. to eradicate all forms of colonialism from Africa; and

e. to promote international co-operation, having due regard to the Charter of the United Nations and the Universal Declaration of Human Rights.

2. To these ends, the Member States shall coordinate and harmonize their general policies, especially in the following fields:

a. political and diplomatic co-operation;

b. economic co-operation, including transport and communications;

c. educational and cultural co-operation;

d. health, sanitation, and nutritional co-operation;

e. scientific and technical co-operation; and

f. co-operation for defense and security.

Source: Organization of African Unity: Basic Documents and Resolutions (p. 8). Addis Ababa: The Provisional Secretariat of the Organization of African Unity.

The first documented use of the phrase "Pan African Conference" is found in an 1899 letter by Williams calling for a meeting in 1900.

The Pan-African Conference met 23–26 July 1900 in London. Approximately thirty-eight delegates attended

from the United States, the Caribbean, and Africa. The delegates agreed to form a permanent Pan-African Association with headquarters in London and branches overseas, and to hold future meetings.

Du Bois was chosen chairman of the Committee on Address, which wrote the "Address to the Nations of the World" adopted at the end of the meeting. The Address contained one of Du Bois's most famous statements, which later appeared in revised form in his 1903 book, *The Souls of Black Folk*: "The problem of the twentieth century is the problem of the color line" (in Foner 1970, 125; Du Bois 1961, 23). The main points of the Address were appeals to end racism and economic exploitation and to "give, as soon as practicable, the rights of responsible government to the black colonies of Africa and the West Indies" (in Foner 1970, 126).

This 1900 meeting was thus significant as the first Pan-African gathering, but Sylvester Williams's tireless efforts did not result in a permanent organization. Williams began to focus on his law career instead of Pan-African organizing, and the people who had promised to follow up on organizing local chapters and the next international conference failed to do so. Consequently, The Pan-African Association was defunct by 1902, and Williams died in Trinidad in 1911.

The practice of convening international Pan-African meetings was revived by Du Bois, who in 1919 organized what he called the First Pan-African Congress (as opposed to conference), which met in Paris at the same time as the post–World War I Peace Conference. The fifty-seven delegates from Africa, the United States, and the West Indies adopted a resolution stating that "the natives of Africa must have the right to participate in the Government as fast as their development permits, in conformity with the principle that the Government exists for the natives, and not the natives for the Government" (quoted in Langley 1979, 740).

The 1921 Pan-African Congress was held in three sessions in London, Brussels, and Paris with 113 delegates. Du Bois delivered the presidential address, and the delegates endorsed a "Declaration to the World" that called for "local self-government for backward groups" (Padmore 1972, 109). A delegation headed by Du Bois presented a petition to the Mandates Commission of the League of Nations calling for the appointment of "men of Negro descent" to the Commission, and for the formation of an "international institute for the study of the Negro problem" (Padmore 1972, 112). (The "Negro problem" referred to worldwide racial discrimination, including colonialism.)

Du Bois was the chief organizer for two more meetings, in 1923 and 1927. The 1923 meeting took place in London and Lisbon. At the London session the resolution adopted demanded that Africans be granted a voice in their government and access to land and resources and that Africa be developed "for the benefit of Africans, and not merely for the profit of Europeans" (Padmore 1972, 118). The 1927 congress, held in New York City, generated no significant new demands.

Du Bois wanted to hold the next congress on African soil and proposed Tunis in 1929, but the French colonial government refused permission. The worldwide economic depression and the rise of Fascism and Nazism prevented efforts to hold any more Pan-African meetings between 1927 and 1945.

The Garvey Movement

Marcus Garvey (1887–1940), a Jamaican immigrant to the United States, organized and inspired a whole set of Pan-African ideas and activities in the 1920s. His efforts are primarily significant due to his mass appeal, his efforts to stimulate emigration to Africa, and the example he set by forming local chapters of the Universal Negro Improvement Association (an organization he founded in Jamaica in 1914) around the world. In 1918 he founded a paper called *Negro World*, and he held annual conventions of the UNIA beginning in 1920 that aroused great emotional excitement. His movement influenced some future leaders of Africa and the development of Rastafarianism in Jamaica and the Nation of Islam in the United States. But a steamship line that he started failed, and he was convicted of mail fraud in 1923, served three years in prison, and was deported back to Jamaica. He died in London in 1940.

Ethiopia and Pan-Africanism

The Italian Fascist invasion and occupation of Ethiopia between 1935 and 1941 brought unprecedented worldwide attention to the Pan-African symbol of Ethiopia. The biblical Ethiopia, as in Psalms 68:31, continued to be a symbol for the rising hopes for black freedom, but by the late 1890s African-Americans began to gain more specific knowledge about Ethiopia, the country. One stimulus for this increased interest was the Battle of Adwa on 1 March 1896, in which the armies of the Ethiopian emperor Menilek II (1844-1913) overwhelmingly defeated the invading forces of Italy. As the only military resistance that successfully preserved the independence of an African country in the era of European colonialism, this battle was widely reported in the black press and sparked a tremendous worldwide interest in the country. After Adwa, diplomatic and personal contacts increased between Ethiopians and African-Americans, particularly after the young heir to the Ethiopian throne, Ras (Prince) Tafari Makonnen (1892-1975; known after his 1930 accession as Haile Sellassie) sent the first official Ethiopian mission to the United States in 1919.

These increased connections may be illustrated by the career of Malaku Bayyan (or Bayen, 1900–1940). Malaku (Ethiopians go by their first name) attended college in Ohio in the 1920s. In 1929 he entered Howard University Medical School, from which he graduated in 1935. He later stated, "My belief in Race Solidarity caused me to select Howard University for my studies, in order that I might have a closer contact with my people" (quoted in Harris 1994, 22). He married an African-American who was working at Howard, and he traveled back and forth between Ethiopia and the United States in the 1930s.

After the defeat of Haile Selassie's armies in 1936, the emperor went into exile in England and ordered Malaku "to coordinate the black solidarity movement" in the United States and specifically to take control of the collection of funds for the scattered Ethiopian refugees (Zewde 2002, 206). In 1937 Malaku founded the Ethiopian World Federation and a newspaper, *Voice of Ethiopia*, whose slogan was "Ethiopia is Stretching Forth Her Hands unto God" (Harris 1994, 130). The paper saw itself as the successor to Garvey's *Negro World*, but advocated the use of "black" instead of "Negro" as a term allowing a greater sense of unity among African-Americans, West Indians, Ethiopians, and other Africans. It had a clear Pan-African perspective, stating, "We are out to create a United States of Africa" (Harris 1994, 131).

Pan-Africanism Since World War II

Two important supporters of Ethiopia in Britain in the 1930s-George Padmore (1900-1959) and T. Ras Makonnen (1899/1903-197?), a name adopted by George Thomas Nathaniel Griffith in honor of RasTafari Makonnen)-illustrate the Pan-African connections of the Ethiopian and World War II movements. Padmore was born Malcolm Nurse in Trinidad and adopted his new name when he joined the Communist International in the late 1920s, but later rejected the "pretentious claims of doctrinaire Communism" (Padmore 1972, xvi) in favor of African nationalism and Pan-Africanism." Makonnen was from Guyana but claimed Ethiopian ancestry. He lived in the United States, England, Ghana, and Kenya, and acted through a plethora of personal contacts with people of African descent in the diaspora, using face-to-face lobbying and advocacy in cases of police brutality or colonial injustices, thus exemplifying "practical Pan-Africanism."

Makonnen's business acumen enabled him to help finance and organize the Pan-African Federation, formed in 1944 by the merger of several groups, including the International African Service Bureau that had been formed in 1937 to support Ethiopia. The Pan-African Federation organized the 1945 Manchester Pan-African Congress and continued into the postwar era, as did Makonnen's journal, *Pan-Africa*.

The 1945 Pan-African Congress marked a significant

revival of the movement, being the "largest and most representative Pan-African Congress yet convened" (Padmore 1972, 127). Delegates to this congress included some of the leading future political and intellectual leaders of Africa and the Caribbean. At the age of seventy-seven, Du Bois also took an active part in the proceedings.

The resolutions of this congress were more radical than any previous ones. They rejected all euphemisms for colonial rule, such as partnership, trusteeship, guardianship, and the mandate system, demanding "autonomy and independence," and the right of all colonies to be "free from imperialist control, whether political or economic" (Langley 1979, 758, 760).

Political Pan-Africanism after 1945 has consisted of the ultimately contradictory movements for national independence and African unity. Culturally, Pan-Africanism has involved a series of conferences of black writers and artists, held periodically since 1956, and the publication of the journal, *Presence Africaine.*

The political movement was led by Kwame Nkrumah (1909–1972), the head of state of independent Ghana, 1957–1966. He sponsored two Pan-African meetings in 1958, the Conference of Independent African States, and the more significant All-African Peoples' Conference, the latter described as the "true successor" to the series of Pan-African congresses (Wallerstein 1967, 33).

Julius Nyerere (1922–1999), the leader of Tanzania from 1961 to 1985, supported the cause of liberation in southern Africa, playing a significant role in the Liberation Committee of the Organization of African Unity (OAU), formed in 1963, and hosting liberation movements. He also hosted a Pan-African Congress at the University of Dar es Salaam in 1974. This congress was spearheaded by African-American and Caribbean activists who developed a consensus theme of "self-reliance, self-determination and unity of black people throughout the world" (Abdul-Raheem 1996, 7), emphasizing participation by people's organizations and liberation movements rather than governments. Yet another Pan-African Congress was held in Kampala, Uganda, in April 1994. By that time, the political independence of the continent was essentially complete, and the congress dealt with such

important issues as reparations, economic development, democracy, social problems, science and technology, and the women's movement.

These issues and others reflecting the realities of Africa today show the continuing need for Pan-African based actions. Though there is as vet no United States of Africa, there is a growing recognition among African leaders and thinkers that Africa must unite in some form. At present, there are at least twelve economically based regional groups, such as the Economic Community of West African States, the Common Market for East and Southern Africa, the Economic Community of Central African States, and the Southern African Development Community. Moreover, the OAU has been transforming itself into the African Union during the last few years, and has stated an aim of creating an African Economic Union in the next two decades. Achieving the increased unity needed to deal with internal African problems may be the most significant hurdle of the current Pan-African agenda. Although Africa and the African diaspora have made great progress in the last two centuries, work remains for Pan-Africanists and their supporters in the present and the future.

James A. Quirin

See also African Union

Further Reading

- Abdul-Raheem, T. (1996). Pan-Africanism: Politics, economy and social change in the twenty-first century. London: Pluto Press.
- Ackah, W. B. (1999). Pan-Africanism: Exploring the contradictions. Brookfield, VT: Ashgate.
- Appiah, K. A., & Gates, H. L., Jr. (Eds.). (1999). Africana: Encyclopedia of the African and African American experience. New York: Basic Civitas Books.
- Brotz, H. (Ed.). (1992). African-American social and political thought, 1850–1920. New Brunswick, NJ: Transaction Publishers.
- Cronon, E. D. (1969). Black Moses: The story of Marcus Garvey and the Universal Negro Improvement Association (2nd ed.). Madison: University of Wisconsin Press.
- Du Bois, W. E. B. (1961). *The souls of black folk*. Greenwich, CT: Fawcett. (Original work published 1903)
- Du Bois, W. E. B. (1968). *Autobiography*. New York: International Publishers.
- Foner, P. S. (Ed.). (1970). W. E. B. Du Bois speaks: Speeches and addresses, 1890–1919. New York: Pathfinder.

- Harris, J. E. (1994). African-American reactions to war in Ethiopia, 1936–1941. Baton Rouge: Louisiana State University Press.
- Jacobs, S. M. (1981). The African nexus: Black American perspectives on the European partitioning of Africa, 1880–1920. Westport, CT: Greenwood Press.
- Langley, J. A. (Ed.). (1979). Ideologies of liberation in Black Africa, 1856– 1970. London: Rex Collings.
- Legum. C. (1965). Pan-Africanism: A short political guide (2nd ed.). New York: Frederick Praeger.
- Lewis, D. L. (1993). W. E. B. Du Bois: Biography of a race, 1868–1919. New York: Henry Holt.
- Lynch, H. R. (1967). Edward Wilmot Blyden: Pan-Negro patriot, 1832– 1912. London: Oxford University Press.
- Makonnen, R. (1973). *Pan-Africanism from within* (K. King, Ed.). Nairobi, Kenya: Oxford University Press.
- Mathurin, O. C. (1976). Henry Sylvester Williams and the origins of the Pan-African movement, 1869–1911. Westport, CT: Greenwood Press.
- Moses, W. J. (Ed.). (1992). Destiny and race: Selected writings, 1840– 1898, Alexander Crummell. Amherst: University of Massachusetts Press.
- Mshomba, R. E. (2000). Africa in the global economy. Boulder, CO: Lynne Rienner.
- Nkrumah, K. (1970). Africa must unite. New York: International Publishers.
- Padmore, G. (1972). Pan-Africanism or communism. Garden City, NJ: Anchor.
- Quirin, J. A. (in press). African American perceptions of the Battle of Adwa, 1896–11914. In S. Uhlig (Ed.), Proceedings of the Fifteenth International Conference of Ethiopian Studies, Hamburg, Germany, 20–25 July 2003. Wiesbaden, Germany: Harrasowitz.
- Richardson, M. (Ed.). (1987). Maria Stewart: America's first black woman political writer. Bloomington: Indiana University Press.
- Shepperson, G. (1960). Notes on Negro American influences on the emergence of African nationalism. *Journal of African History*, 1, 299–312.
- Stuckey, S. (1987). Slave culture: Nationalist theory and the foundations of black America. New York: Oxford University Press.
- Thompson, V. B. (1969). Africa and unity: The evolution of Pan-Africanism. New York: Humanities Press.
- Wallerstein, I. (1967). Africa: The politics of unity. New York: Vintage Books.
- Zewde, B. (2002). Pioneers of change in Ethiopia: The reformist intellectuals of the early twentieth century. Oxford, UK: James Currey.



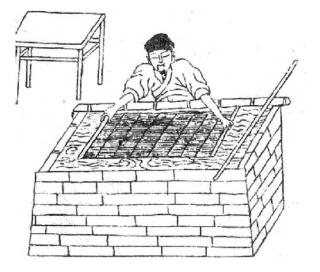
Paper, a thin, feltlike material made of cellulosic fibers from plants, is widely used around the world for writing, drawing, and wrapping. The English word *paper* derives from the similar material used by ancient Egyptians, Greeks, and Romans: papyrus.

Antiquity

Predecessors of paper, known by the generic term "tapa," are found in nearly all cultures in the equatorial zone and are used also for decorating and clothing. They are produced by beating the inner bark of plants such as the paper mulberry, fig, or daphne. In ancient Egypt, papyrus was made accordingly from the pith of the papyrus plant.

The oldest papermaking technique-still in use in a few locations in the Himalayas, China, and Southeast Asiaderives from a combination of this pounding technique and felting techniques (felting involves pressing together materials so that they adhere to form a large whole). To make a pulp, plant bark that has been cooked is beaten with a wooden hammer to form a thin fibrous layer that then is dissolved in a vat with water. The papermaker pours the quantity of pulp needed to make one sheet onto a mold consisting of a wooden frame with a fabric or bamboo screen and spreads it with his hand evenly across the screen. The mold is lifted carefully; the water drains off and a sheet of paper forms on the screen. Then the mold is placed in the sun or near a fire to dry. When dry, the sheet easily peels off the screen and, apart from possible smoothing, requires no further treatment.

As recent findings of very old paper in Chinese tombs show, paper has been produced in China ever since the



The engraving shows a Chinese papermaker at work.

last two centuries BCE. In 105 CE, the court official Cai Lun allegedly invented papermaking from textile waste (that is, rags). This was the birth of paper as we know it today. Chinese papermakers developed a number of specialties, including sizing (making the paper ink-proof), coating, and dyeing. They introduced bamboo as a fiber plant, beating it after cooking it in lye. Paper served for such diverse purposes as writing, drawing, wrapping, clothing, protection from weather, decoration, windows, and even for balloons and kites. Last but not least, paper was used for special currency to be burned in honor of the ancestors.

The Spread of Papermaking

Chinese papermaking techniques reached Korea at an early date and in 610 were introduced to Japan, where papermaking was becoming a skilled craft. The ultimate was the production of *shifu*, paper yarn woven into beautiful fabric.

Knowledge of papermaking also spread from China to Central Asia and Tibet, and then on to India. The Arabs, in the course of their eastern expansion, became acquainted with the production of the new writing material near Samarqand, and paper mills were subsequently set up in Baghdad, Damascus, Cairo, and later in Morocco and Spain. Using screens made of reed, the Arabs made thin sheets of rag pulp and coated them on both sides with starch paste, which could be colored. This gave Arab paper its good writing properties and its fine appearance. Arab technique spread into medieval Europe, and European innovations, especially the paper machine (multiplying the production rate), spread throughout the world during the nineteenth century.

European Handmade Paper

In medieval Italy, papermakers from Genoa, Fabriano, and Amalfi tried to improve on the Arab technique. Their innovations included the use of water power, stamping mills (derived from fulling mills, which shrank and thickened cloth) to pound the rags, molds made of wire, couching (setting the forming paper on a felt to be pressed), the screw paper press, dip sizing with animal glue, and a production process based on division of labor. Three kinds of paper were produced: writing paper, printing paper (mostly unsized), and cheap wrapping paper, also used for drafts. Printing paper caused the evolution of the graphic arts (woodcut; engravings). Work at the vat normally involved four people: the vatman, who made the sheet using the mold; the couchman, who worked in time with the vatman, placing the sheet on the felt; the layman, who removed the moist sheets from the felt after pressing; and the apprentice, who had to feed pulp to the vat and keep the vat heated. Up to nine reams (4,500 sheets) of paper could be made during a working day averaging 13 to 15 hours.

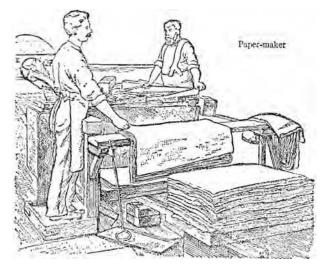
Technical progress continued. In the sixteenth century, hand glazing (polishing) using a glass or stone burnisher was supplemented by the use of the glazing hammer similar to a forging hammer. Toward the end of the seventeenth century a much more efficient tool, the so-called hollander beater, supplemented or even replaced the stamping mill.

Watermarks

The watermark, invented in medieval Italy, provides the historian with an unsurpassed dating and authenticating tool. The real watermark, a figure in the paper sheet, is seen by the naked eye. In hand papermaking, it is formed by a curved wire that is sewn onto the screen of the mold; the wire reduces the thickness of the sheet, thus making the figure transparent. Later, after the invention of the paper machine, a roll covered with wire gauze impressed the watermark on the wet paper web. The watermark serves as a papermaker's trademark. By comparing a watermark with others of a certain date or origin, the paper historian is able to determine age and origin of a document or print. Shadow (countersunk, embossment, intaglio) watermarks are produced on a mold that carries a fine, embossed woven wire, and appear as images, like a black-and-white photograph.

The Advent of Industrial Papermaking

From the sixteenth century, paper became more and more important for administrative and commercial purposes, and, as more people were trained in writing and



A European papermaker at work.

reading, for private use, too. The debates of the church reformers and new works of science were widely published by printing on paper, and popular pamphlets, romances, and plays were distributed in print all over Europe. Newspapers, which from the beginning of the seventeenth century had come out with weekly issues, changed during the eighteenth to a daily format, and became—censored by the government in most countries the sole means of shaping public opinion and spreading news of scientific progress. The ideas of the Enlightenment and of the French Revolution were supported by the development of the print mass media at the end of the eighteenth century.

Further developments in printing during the eighteenth and nineteenth centuries resulted in a steeply rising demand for paper, especially for new printing grades. This and the tremendous upsurge in papermaking soon led to a serious shortage of raw material and to regulations governing the trade in rags to ensure the local production of paper for administrative purposes. The systematic search for substitute pulping materials met with little immediate success.

Already in the eighteenth century, there had been some concentration of handicraft activities in big factories, which still depended on skilled papermakers organized in open guilds. Efforts to step up production and to have many jobs done mechanically culminated in the design and construction of paper machines. A Frenchman, Nicholas-Louis Robert (1761–1828), built the first paper machine using an endless wire screen, patented in 1799. It was further refined in England by Bryan Donkin



(1768–1855) and by Henry (1766–1854) and Sealy Fourdrinier (d. 1847). Soon, other types were developed, such as the Dickinson cylinder machine. Fourdrinier-type and cylinder machines gained ground in the nineteenth century and were extended to include a dryer section; the technology steadily improved, leading to considerable increases in production speeds. With the increasing industrialization of papermaking, small operators who were unable or unwilling to pay for machines were forced to survive with piece work or by producing special grades and cardboard, but they were sooner or later compelled to discontinue their activities.

The decisive turn in developing the U.S. paper industry was initiated by Joshua Gilpin, who in 1815 brought from England not only the plans of the Dickinson cylinder machine but also Lawrence Greatrake, a leading paper engineer. Special paper machines were successfully built (including the so-called Yankee cylinder machine), and soon the United States led the world in paper production and in per capita paper and board consumption (more than 300 kilograms per year in 1980).

The industrialization of papermaking was marked by some definite trends. First, all work sequences previously performed by hand were mechanized, thus steeply raising the demand for energy. Then, efforts were made to obtain rag substitutes on an industrial scale, and appropriate industrial plants were developed. Straw was suggested as a raw material but proved unsuitable because it produced low-quality paper. Only the 1843 discovery that one could use ground wood pulp, followed by the invention of chemical pulp (first patents in 1854), solved this problem. Pulping (the extraction of fibers from wood by mechanical or chemical means) became an industry of its own. Just from its start, two big problems arose: Wood grinding produced fibers of minor quality, prone to decay in a short term, especially if applied together with acid rosin size. Thus, most books and newspaper produced between 1850 and 1980 containing wood pulp are endangered and need conservatory treatment. Because of heavy water and air pollution, chemical pulping plants were—already in the nineteenth century, together with the then newly founded chemical plants producing synthetic dyestuffs—the first targets of popular ecological movements and legislation. A further stage was marked by the enlargement of the web width (*web* is the term for the continuous sheet of paper produced in mechanized paper mills), an increase in working speeds, the introduction of electric drive, and the development of machines designed specifically for the production of particular paper and cardboard grades. Web working width grew from 85 centimeters in 1830 to 1,100 centimeters in 1990, while production speeds rose from 3–5 meters per minute in 1820 to more than 2,000 meters per minute in 1995. Consequently, paper prices dropped, leading —starting also in the nineteenth century—to the production of very cheap booklets and magazines intended for a growing literacy of peoples around the world.

Alongside the development of printing, new paper grades were created, together with specialized paper such as punch cards, stand-up collars, tube papers, flong (stereotyping paper), pergamyn (parchment imitation), ammunition papers, envelopes, tobacco paper, toilet paper, and so on. The use of new materials (thermomechanical pulp, deinked waste paper, new fillers, process chemicals, and dyes) and new sheet-forming techniques, neutral sizing, greater stress on ecology, and—most effective—automation brought further improvement.

Paper Today

Paper consumption grew from medieval times to the end of the eighteenth century by a factor of fifty. Since then, paper and board has become a worldwide, large-scale commodity with exponential growth. Statistics from the United Nations' Food and Agriculture Organization (FAO) have led to a forecast of about half a billion tons in 2010, of which about two-fifths will be produced in the fastest growing industrial market, Asia.

Technical and commercial changes have led to specialization in certain paper types, development of new paper grades, and new commercial entities and structures brought about by corporate mergers or by company groups with their own raw-material supply and trading organizations. The evolution of new sheetforming principles and chemical pulp processes, along with increased demand in the global market (especially in the Third World), trends in chemical pulp prices, and location problems are again increasing the capital needed to be a successful competitor, which in turn is leading to the formation of big company groups with international operations. Papers for technical use form an increasing market.

Environmental problems have led to changes, too. Introduction of new forestry principles, fiber recycling from waste paper, heat recovery, closed water circuits, and replacement of aggressive chemical processes in pulping have improved the formerly poor image of the pulp and paper industry. Up to 60 percent of the total fiber consumption is covered by waste paper, thus saving forests from over-cutting. Modern papermaking processes are running quicker, consuming less water and energy, minimizing pollution, and are again producing long-lasting paper.

The electronic revolution in data processing and private and public communication appears not to be affecting reliance on paper and probably will not until an easier-to-handle, more lasting, cheaper storage medium for the memory of mankind is found. Even then paper will remain a ubiquitous helper (for example, in packaging and hygiene) in daily life.

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See also Computer; Information Societies; Libraries; Media; Writing Systems and Materials

Further Reading

- Gravell, T. L., & Miller, G. A. (1979). A catalogue of American watermarks, 1690–1835. New York: Garland.
- Gravell, T. L., & Miller, G. A. (1983). A catalogue of foreign watermarks found on paper used in America, 1700–1835. New York: Garland.
- Hills, R. L. (1988). *Papermaking in Britain*, 1488–1988. London: Athlone Press.
- Hunter, D. (1952). *Papermaking in pioneer America*. Philadelphia: University of Pennsylvania Press.
- Hunter, D. (1978). Papermaking: The history and technique of an ancient craft. New York: Dover.
- Labarre, E. J. (1952). Dictionary and encyclopedia of paper and papermaking (2nd ed). Amsterdam: Swets & Zeitlinger.

Smook, G. A. (1982). Handbook for pulp and paper technologists. Montreal, Canada: CPPA/TAPPI.

- Stevenson, L. T. (1940). The background and economics of American papermaking. New York: Harper & Brothers.
- Tschudin, P. F. (2002). Grundzüge der Papiergeschichte (Compendium of Paper History, in German only). Stuttgart, Germany: Hiersemann.

Parliamentarianism

Parliamentarianism as an organizing principle of a governance structure comes from modern Britain and is an early variant of constitutional monarchy. It designates a functional, relatively free, civic framework that seeks harmony and prosperity through preventing or managing political conflicts while endowing real power in the legislative branch, which, in turn, represents the will of the people (or, initially, the males who owned considerable property).

Parliamentarianism assured a high degree of stability while diminishing the ruling capacity of absolute monarchy. In its positive and preferred form, the expectation is that an accountable and incumbent sovereign government will enjoy the expressed will of a working majority of elected representatives. A lesser, negative option demands that, if a minority government exists, it will be supported, or at least tolerated, by the legislature, as demonstrated by the government's not being defeated in routine votes. Parliamentarianism guarantees that authority and power is possessed and is operational at all times, avoiding long periods of caretaker, unstable, or interim regimes.

The framework is akin to that of constitutional monarchy, but with rule-based parliamentary tradition and unwritten political conventions as the pivot of democratic life, rather than chartered documents or explicit regal prerogatives. The legal foundation of this structure is a substitute for a written constitution, which most kings and queens opposed as it would explicitly constrain the powers vested in their office their and public influence. Concomitantly, parliamentarianism assured the



Oliver Cromwell (1599–1658), a key figure in the English Civil Wars and a member in both the Short Parliament and the Long Parliament.

elite, political class of substantial impact on the routine formation and implementation of economic, social, diplomatic, and defense policies.

In the British system the governing party, as long as it has an effective mandate between elections, wields executive powers, composing and leading the cabinet. The term of office could last up to five years, but it typically was around four years. Within the maximum of five years that a parliament could be incumbent, it was at the discretion of the prime minister to ask the monarch to dissolve the House of Commons. Indeed, the full authority and the wide discretion exercised by the incumbent prime minister were at the heart of this system. Having the distinction of being the leader of the largest party and the most prominent member of Parliament from the House of Commons, the prime minister increasingly served as a viable alternative to the reigning monarch. Parliamentarianism thus accommodated the rise of the professional, urban, unhereditary, non-land owning, upper class by transferring political power to them from the monarchy and aristocracy.

The loss of an important vote—the approval of an annual budget or the ratification of vital domestic measures or crucial agreements with other countries—causes the instantaneous resignation of the prime minister and his cabinet and/or the immediate calling of new elections. This pattern though not written down, served as a binding convention in the British political culture. Securing a new mandate through the confidence of the voters was essential even if only a short time has elapsed since ballots were previously cast. New elections were scheduled immediately. Campaigns lasted a few short weeks. The transfer of power from the defeated party to the winning one, if the election results dictated that, was a speedy process amounting to only days after results were officially proclaimed, which, in turn, was also obtained within days.

History

The Glorious Revolution of the seventeenth century capped a political process that began with the Magna Carta of 1215, the result of widespread resentment of the absolute, authoritarian nature of the monarchy. Aristocrats and members of the upper middle class had increasing authority in England, then in the rest of Britain, and, eventually, in its colonies overseas, deciding most issues of public policy. The balance of power gradually shifted to the landed gentry and to an emerging group of liberal urban professionals (the Whig party) who supported the ideas of classic liberalism and were active in society, economic life, intellectual discourse, and diplomacy. Political supremacy, sometimes cloaked in civic and economic rights, was thus increasingly based on a mandate that the legislative chamber increasingly defined the duties and the privileges of kings and queens.

The pattern of vesting real power in members of the British Parliament aimed to revitalize representative democracy while securing property rights. It developed in the eighteenth and nineteenth centuries. Coupled with the first post-the-ballot electoral structure—which granted seats for the candidate with the highest amount of votes in each riding, rather than apportion them to parties by the percentage of votes received overall—the typical result was a two-party system. Inside the bicameral legislature the House of Commons gradually replaced the House of Lords as the senior partner within the structure of enacting and implementing legislation. This change positioned parliamentarianism at the center of democratic life and bureaucratic transparency (bureaucrats and their acts were subject to Parliament's consistent review and assessment) in the United Kingdom.

The absolute control of the British government was alternately held by the Liberals (Whigs) or the Conservatives (Tories), rather than by a third party or a wide coalition, even during prolonged wars. Dominant prime ministers included the Conservative Benjamin Disraeli (1804–1881) and the Liberal William E. Gladstone (1809–1898), who alternated in power during the second half of the nineteenth century.

Impact

While practically guaranteeing an unbreakable sequence of stable administrations and an orderly transfer of political power, there were severe consequences to this exclusive scheme. Civil service positions, especially those of permanent undersecretaries, became very influential as it was the people who held these positions continuously who ran governmental departments. These position holders came from the ranks of prominent families and elite schools. They largely represented the interests of the upper classes, which were naturally disposed to inhibiting reforms or repudiating radical alternatives. Prime ministers could, and sometimes did (especially around the middle of their terms), shuffle portfolios among different officials, even within the same cabinet, decreasing the tenure of ministers in the same position. As a result, long-term bureaucrats often decided policy issues, not merely implemented them. Furthermore, this conservative hierarchy was considerably less sensitive to sectarian interests, the advancement of economic reforms and social mobility, and the well-being of colonial communities, or else subordinated these concerns to the concerns of major factions and large corporations based in the British Isles.

American Dissent

Settlers in North American colonies during the 1760s and 1770s increasingly militated against this rigid frame-

work. It deprived them of adequate access to decisionmaking that concerned their daily lives. This pattern was epitomized in the slogan "no taxation without representation" adopted by Benjamin Franklin (1706-1790), who was well acquainted with the British, having lived in London. He led the movement that also vigorously opposed the "virtual representation" system, which allowed well-connected politicians access to legislative power although they did not have any constituencies (representing "corrupt boroughs"), then prevalent in Britain. Furthermore, the subsequent U.S. system of a balance of powers ("checks and balances") among the three branches of government-executive, legislative, and judiciaryand the relative independence of the presidency from Congress, as drawn up in a written constitution, were, in part, responses to the perceived excesses and shortcomings of parliamentarianism.

Irish Exclusion

Ostensibly, Irish Catholics, British subjects until the 1920s, had power equal to that of other voters. In reality, however, they were misrepresented by the politics of the British system, including the property requirements that limited suffrage. Their distinct ethnic and religious interests, moreover, were either left to sectarian parties that did not have realistic chances of reaching power nationally or were subsumed by parties whose main constituents were English and Irish Protestants. This lack of representation was one of the major reasons for the demand for Irish home rule in the nineteenth century, subsequently leading to independence after World War I.

Decline of Parliamentarianism

The impact of the Industrial Revolution in Britain changed the internal political structure, beginning in the mid-nineteenth century. In the early 1900s the Victorian age passed with Queen Victoria, who was succeeded by mediocre, much less omnipresent monarchs. The concomitant rise of trade unions and the Labor Party representing the wider franchise of the working classes and non-English elements (such as the Scots) within Britain broke the hold of the traditional, wealthy establishment. Culminating a process that had lasted decades, power shifted away from the restricted halls of Parliament into the more public arena. The turmoil of World War I (1914– 1918) and the rise to power of the Labor Party spelled the end of parliamentarianism in Britain.

Nevertheless, a modified form of the British parliamentary system continued in existence, especially in the developing world, in countries that used to be controlled by the British (the "Westminster System"). Westminster is the British system of a democratic, deliberative, representative parliamentary in control of state affairs through a government formed by the party that has a majority in Parliament and an independent judiciary. In a pattern similar to that leading to the creation of U.S. institutions, this democratic legacy of colonialism is in competition with the American hybrid of checks and balances between a Congress and a president, both of whom are directly elected by the people, rather than a prime minister selected by a Parliament.

Scandinavia

Although Scandinavia was never a part of the British Empire, there was enough awareness of and affinity with Great Britain—through commercial connections and geographical proximity—that the result was that unique versions of parliamentarianism as an organizing principle within constitutional monarchies developed.

Sweden

In Sweden the framework was put into place in 1907, with the parliament, the *Riksdag*, as the focal point of political power. This emulation of the British system was a major part of wide reforms that introduced universal franchise and aimed to neutralize class antagonism and tensions between growing urban and rural populations. Unlike those in Britain, however, many governments in Sweden have been coalitions of at least two parties, making them inherently less stable.

Norway

Norwegian independence from Sweden was peacefully secured in 1905. Through the subsequent written consti-

tution, a form of parliamentarianism was adopted; it was strengthened after occupied Norway regained its sovereignty in 1945, following Germany's defeat in World War II. The monarch, although occupying a hereditary position, has to pledge an oath to uphold the constitution and the laws of Norway, which provide for a universal franchise. After an election, the monarch appoints the leader of the largest party in Norway's parliament, the *Storting*, as the prime minister, who then forms a government—if need be, a coalition that enjoys a working majority. Members of the cabinet are formally selected by the monarch but are nominated by the prime minister. Elections are customarily held every four years; the Storting can be dissolved earlier, but not during in its fourth year.

Israel

The State of Israel was created by the United Nations in 1948 out of the British Mandate of Palestine. Close to three decades of British control left its mark. A government cannot be established or survive unless it receives and maintains a working majority in the *Knesset*, Israel's Parliament. In a role analogous to that of the British monarch, Israel has a president serving as titular head of state, one of whose major responsibilities is to designate a prime minister. A loss in a no-confidence vote does cause the fall of the government, but it does not trigger new elections without a specific law dissolving the current Knesset. Until a new cabinet is sworn in upon receiving confidence from the Knesset, the outgoing prime minister has full authority.

Caretaker regimes can remain in office for a relatively long duration. In March 1990, when the national unity alliance between Labor and the right-wing Likud collapsed over disagreements concerning the Arab–Israeli peace process, Prime Minister Yitzhak Shmair (b. 1915) took three months to form an alternative coalition. Between 1996 and 2001, a mixed system existed, under which two ballots were cast: one for a prime minister, the other for a party. The elected leader could start ruling only after forging a coalition that commands a majority in the Knesset.

In July 2000, following his controversial offers for peace with the Palestinians, Labor's Ehud Barak (b. 1942), who was elected in the previous year with a convincing individual majority (56 percent as compared with Likud's Binyamin Netanyahu's 44 percent) but with a weak party following (the one Israel bloc he led garnered merely 26 of 120 seats) lost most of his coalition partners, thus the plurality in the Knesset. Nevertheless, because there was no absolute majority to topple him, Barak was only forced to call personal elections in December 2000 for February 2001. He remained as a prime minister one more month, even after his resounding defeat (38 percent to 62 percent) to Likud's Ariel Sharon (b. 1928).

Canada

Canada is a former British colony. It gradually became independent from 1867 to 1948. It is a leading member of the British Commonwealth, has adopted parliamentarianism, and the British monarch is the titular head of state. Canadian federalism allows a strong degree of autonomy to provinces. The federal parliament represents, almost proportionately (some preference to the Atlantic region that has a smaller population), the Canadian people. There is also an unelected Senate, to which the Prime Minister appoints by patronage, obviously a duplication of the British House of Lords. There were plans (like the 1992 Charlottetown Accord) to reform the system, but to no avail.

A particularly intriguing example of the workings of parlimentarianism can be found in the short tenure of Progressive Conservative Prime Minister Joe Clark (b. 1940). Clark led a minority government, after defeating in 1979 the former Liberal prime minister, Pierre Elliot Trudeau (1919-2000), who had served as PM for eleven years. Clark was supported by several independent right-wing members of Parliament from western Canada. In February 1980, after only eight months in office, Clark failed to secure sufficient support for his first annual budget. He was compelled to ask Canada's governor-general (the vice regal representative appointed by the British monarch) to dissolve the federal parliament. Clark lost in the ballots cast the following month, and Trudeau became, again, the prime minister, after only nine short months in the opposition.

Contemporary Europe

The European Union (EU) had grown from a French vision in 1950, and a humble start in which Britain did not partake, in the 1957 Treaties of Rome. The EU has become a continental powerhouse with complex institutions and a hybrid of structures. The EU is gathering more political momentum, adding new members, incorporating territory in southern and Eastern Europe, consolidating its laws, and proclaiming constitutional powers. The EU is increasingly independent from the countries that compose its rapidly expanding ranks. Parliamentarianism may become its guiding principle on the road to securing popular support for strong federalism. The formation of the European Parliament as a body whose members, since 1979, are directly elected and often represent ideological agendas and continentalrather than national-interests also balances the influence of local politicians and state governments. While competition for authority will continue, real power seems to increasingly to be vested in an institution whose structure and procedures may resemble the traditional role of the British House of Commons, although the vast majority of EU members do not have a tradition of parliamentarianism.

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See also Democracy, Constitutional

Further Reading

- Barton, H. A. (2003). Sweden and visions of Norway: Politics and culture, 1814–1905. Carbondale: Southern Illinois University Press.
- Black, J. (2000). *New history of England*. Stroud, Gloucestershire, UK: Sutton.
- Bumsted, J. M. (1998). *History of the Canadian peoples*. Toronto and New York: Oxford University Press.
- Flynn, M. K. (2000). Ideology, mobilization, and the nation: The rise of Irish, Basque, and Carlist nationalist movements in the nineteenth and early twentieth centuries. New York: St. Martin's Press.
- Lacey, D. R. (1969). Dissent and Parliamentary politics in England, 1661– 1689: A study in the perpetuation and tempering of parliamentarianism. Piscataway, NJ: Rutgers University Press.
- Lazin, F. A., & Mahler, G. S. (Eds.). (1996). Israel in the nineties: Development and conflict. Gainesville: University Press of Florida.
- Manin, B. (1997). *Principles of representative government*. Cambridge, UK, and New York: Cambridge University Press.
- Nordstorm, B. J (2002). The history of Sweden: The Greenwood histories of the modern nations. Westport, CT: Greenwood Press.

Schama, S. (2000). History of Britain. New York: Hyperion.

- Walter, J. (1999). Understanding popular violence in the English revolution: The Colchester plunderers. Cambridge, UK, and New York: Cambridge University Press.
- Warleigh, A. (2003). Democracy and the European Union: Theory, practice and reform. London and Thousand Oaks, CA: Sage.

Pastoral Nomadic Societies

astoral nomadic societies view the husbandry of grazing animals as an ideal way of making a living and view the regular movement of all or part of their societies to be a normal part of life. Although this way of life produces a low population density, and the total number of nomads has always been relatively small, the impact of nomads on world history has been profound. During two thousand years (500 BCE-1500 CE) the horse-riding nomads of the Eurasian steppes (usually level and treeless tracts of land in southeastern Europe or Asia), such as the Scythians, Xiongnu, Huns, Turks, and Mongols, created powerful kingdoms that presented significant challenges to their sedentary neighbors in China, central Asia, Iran, Turkey, and Europe. The camel-raising desert Bedouins became key political actors in the Middle East and northern Africa after the rise of Islam during the mid-seventh century. In sub-Saharan Africa cattle-raising nomads such as the Masai and Zulus came to dominate much of the continent's grasslands by the end of the nineteenth century.

Origins

Early theorists saw pastoral nomadism as evolving out of hunting and into sedentary agriculture. Archaeological evidence has largely upended this view because the first domestication of both plants (wheat and barley) and grazing animals (sheep and goats) apparently took place in parallel more than nine thousand years ago in the Near East. Thus, rather than being a precursor of sedentary life, pastoral nomadism more likely developed as an economic specialization out of a mixed Neolithic (8000– 5500 BCE) economy based on sedentary villages after 5000 BCE. The viability of such a nomadic specialization increased with the later domestication of cattle and more particularly with the domestication of baggage animals such as donkeys, horses, and camels. Only with the domestication of baggage animals or new technologies such as cattle-drawn carts and wagons beginning in the Bronze Age (c. 4000–3000 BCE to the Iron Age) were nomads able to effectively utilize truly mobile dwellings such as black goat-haired tents (yurts).

Recent ethnographic (relating to the study of cultures) work has largely discredited the notion of the "pure nomad" who subsists entirely on pastoral products, free of entanglements with the sedentary world. Historically pastoral nomads have always been tied economically and politically to their sedentary neighbors. Without such ties they could not easily survive.

Why Pastoralism?

Pastoral nomadism is commonly found where climatic conditions produce seasonal pastures that cannot support sustained agriculture. Because people cannot eat grass, exploiting grazing animals that can eat grass effectively taps an otherwise unusable energy source. Although historians generally use the terms *nomads* and *pastoralists* interchangeably, the terms are analytically distinct. The former term refers to movement and the latter to a type of subsistence. Not all pastoralists are nomadic (dairy farmers and cattle ranchers), nor are all nomads pastoralists (hunter-gatherers or itinerant groups such as Gypsies).

Using portable tents or huts to facilitate migration, pastoral nomads rotate their animals through extensive but seasonal pastures. Migration cycles vary in time and length depending on local conditions. Nomads make relatively few moves when pastures and water supplies are dependable, many more moves when they are not. Although the degree of predictability in migration routes varies from group to group, pastoral nomads do not "wander"; they know where they are going and why.

Organization and Distribution

Pastoral nomadic societies are organized around mobile households rather than individuals, and everyone (men, women, and children) has a role in the various aspects of production. These characteristics distinguish pastoral nomads from European shepherds or U.S. cowboys who are recruited from the larger sedentary society to which they regularly return. All pastoral nomadic societies share such structural similarities as tribal organization and a strong bias toward patrilineal (through the paternal line) descent and residence.

Pastoral nomadic societies are confined to the Old World. The only area of indigenous large-animal domestication in the New World was the high-mountain Andes in South America, where llama-raising communities were integrated parts of alpine farming villages and did not form separate pastoral nomadic societies. Sheep, goats, horses, donkeys, and cattle were introduced into the Americas only after the Spanish conquest during the 1500s. Although cattle raising became important in the western United States, Brazil, and Argentina, it was ranching done by sedentary people. The capture of horses from the Spanish during the mid-seventeenth century by natives of the U.S. Southwest did produce a classic nomadic society, the Plains Indians, but they were mounted hunters who followed herds of bison, an animal they never domesticated.

Main Types and Key Animals

The variety of animals raised by pastoral nomadic societies is surprisingly small: six widely distributed species (sheep, goats, cattle, horses, donkeys, and camels) and two species with restricted distribution in Asia (yaks at high altitudes and reindeer at northern sub-Arctic latitudes). Dogs are also often kept for protection. Pastoral nomadic societies fall into six distinct types, each with a key animal that has primary cultural importance and a specific geographical range.

EURASIAN STEPPE: HORSES

In the Eurasian steppe zone nomads give pride of place to the horse, although they also raise sheep, goats, cattle, and Bactrian (two-humped) camels. Although the domestication of the horse may have occurred as early as 4000 BCE, the emergence of horse riding after 1000 BCE laid the foundation of steppe nomadic power. Beginning in the seventh century BCE the Scythians and Sarmatians established distinct societies in south Russia and Ukraine. Their way of life spread east relatively rapidly until, by the third century BCE, culturally similar groups, Xiongnu, Wusun, Yuehzhi, became well established on China's northern steppe frontier. For the next two thousand years a series of nomadic empires based there was to be China's greatest foreign policy challenge. The empires also controlled key links of the Silk Road, the overland trade route that linked China with the West.

The most powerful of these nomadic groups who successively bordered China were the Xiongnu, Turks, Uighurs, Mongols, Oirats, and Zunghars. In the West the best-known steppe nomads of the medieval and early modern periods included the Huns, Khazars, Kipchaks (Cumans), Golden Horde (Tatars), and Kalmuks. After the Mongol conquest the Kazakhs, Turkmen, and Kirghiz came to dominate central Asia.

Southwestern and Central Asia: Sheep and Goats

The mountain and plateau areas of southwestern and central Asia are dominated by pastoral nomadic societies who raise sheep and goats and use horses, camels, and donkeys for transport. Pastoral nomadic societies there have always had a symbiotic relationship with neighboring towns as economic specialists, trading meat animals, wool, milk products, and hides for grain and manufactured goods. Indeed, many settled villages are of nomad origin because poor nomad families settle into peasant villages when they become impoverished due to the loss of their animals.

Nomads coming from central Asia came to dominate this region politically from 1000 to 1500 and established a series of important dynasties on the Iranian and Anatolian Plateaus. These dynasties included the Seljuqs, Ghaznavids, Khwarazm Shahs, Mongol Il-Khans, Timurids, Uzbeks, and Ottomans. From 1500 onward nomads formed powerful regional confederations who retained considerable autonomy until well into the twentieth century. Important nomadic components of such primarily sedentary groups as the Pashtuns, Kurds, and Baluch also existed.

The Search for Pasturage

The Sherpa people of Nepal are one of the nomadic, or semi-nomadic peoples, of the mountains of South Asia. As described below, they must move in order to find pastures for their cattle.

Periodic movements from pasture to pasture are an essential element of the Sherpas' cattle economy. Their extent and range, however, varies with the size of herds. The owner of a small herd may base his yak for five months in the year on the main village, move with his animals to higher pastures for another five months and spend perhaps two months at one or two *gunsa*-settlements. A man owning thirty or more yak, on the other hand, may keep them only one month out of twelve in the main village, and take them even during part of the winter to some high *yersa*-settlements.

This system can be demonstrated by tracing the annual movements of the herds of two men of Khumjung: Dorje Ngungdu, who in 1957 owned 8 female yak and 1 bull, and Ang Tandin, who owned 2 male and 32 female yak, 1 female cross-breed and 1 bull.

Dorje Ngungdu kept his cattle in Khumjung from November until March, and during that time the animals grazed as long as possible on the surrounding slopes, and from December onwards were fed on hay and the dried stalks of buckwheat stored in Khumjung. In April his son took the herd to Chermalung, a site near some caves half-way between Teshinga and Lapharma. Dorje Ngungdu had a store of hay in Lapharma, which was then still under snow, and he hired men to carry some of this hay to Chermalung to supplement the meagre food found on the pastures which had only just emerged from that grip of winter. In May the yak were driven to Lapharma, where there was even less grazing, but where they were fed on the hay stored in Dorje's house. By the beginning of June new grass sprouted on the pastures near Khumjung and Dorje's herd, like those of other villagers, was brought down and kept at various *resa*camps above Teshinga and Khumjung.

In July, however, all cattle had to leave the hill-slopes close to the area of cultivation, and part of Dorje's family moved with the yak to their *yersa*-settlement at Lapharma, where by that time the pastures were covered by a carpet of luscious grass and flowers. After a few weeks herdsmen and herd moved further up to the settlement of Macherma. There Dorje Ngungdu and five other families celebrated the *Yer-chang* rite, which is designed to ensure the well-being of the herds. During the first part of September the yak remained at Macherma, and the grass on the walled-in meadows was cut and dried. When the hay had been safely stored, the herd was driven down to Lapharma and haymaking began there.

Two members of the family stayed with the yak at Lapharma until the middle of October. By that time the harvest in Teshinga had been completed and the cattle could be moved down to this *gunsa*-settlement. In its vicinity there was still ample grazing and when, at the end of October, Khumjung was reopened to the cattle, Dorje brought his yak back to the village, kept them at night in a harvested field next to his house and during the day let them graze on the hillslopes above the village.

Source: von Fürer-Haimendorf, C. (1975). Himalayan Traders: Life in Highland Nepal (pp. 52–53). London: John Murray.

Desert Middle East and

North Africa: Camels

The Sahara and Arabian Deserts are home to Bedouins who specialize in raising the dromedary (one-humped) camel for food and transport. They derive other income by extorting dates from oasis farmers, raiding other nomads for camels, selling camels for the caravan trade, and serving as mercenaries. Nomads who only raise camels live mostly in Arabia (the peninsula of southwestern Asia including Saudi Arabia, Yemen, and the Persian Gulf states) and have the widest migration circuits, which allow them to exploit deep desert pastures where only camels can survive because water is so scarce. A larger number of nomads in north Africa and other parts of the Middle East combine camel and sheep raising but have a much more restricted migration cycle because sheep need to be watered regularly.

The camel is a late domesticate (c. 1500 BCE); the nomads who specialized in raising camels emerged in an environment in which the urban civilizations in Mesopotamia and Egypt had already been in existence for two millennia. Camel-raising Bedouins became politically important only after the introduction of the north Arabian camel saddle between 500 and 100 BCE. This saddle allowed camel-mounted warriors to fight more effectively and gave them control of the lucrative incense trade routes that ran through Arabia. Such camel-mounted warriors became the core of the early Islamic armies who conquered the Near East and north Africa during the seventh and eighth centuries.

The rise of camel-raising societies was also facilitated by the growing demand for camels to be used for transport. Camels so effectively replaced wheeled vehicles as the more economical way to move goods that wheeled vehicles completely disappeared from the region until the arrival of cars and trucks during the twentieth century.

SUB-SAHARAN SAVANNA: CATTLE

Cattle are most highly valued in the savanna areas of sub-Saharan Africa, but sheep and goats also play a major role in subsistence, as does seasonal agriculture. In societies in that area ownership of cattle is the key determinant of a man's wealth and status. Ritual events all demand cattle exchanges or sacrifices. Using huts instead of portable tents, nomads there use only donkeys for transport. Because neighboring sedentary people also value cattle, determining just which societies should be considered true pastoral nomads can be problematic, but in general they have at least a five to one ratio of cattle to people.

The most prominent pastoral nomadic societies live in east Africa and include the Nuer, Turkana, and Masai. The Masai are renowned for a diet that consists primarily of meat, milk, and blood. They expanded rapidly south during the eighteenth century and came to dominate

Camels in the Libyan Desert

The following text makes clear why the camel is so important to the desert-dwelling Bedouin of Libya in North Africa.

The nomadic movements of the two small herd species, sheep and goats, are predicated upon the ability of these animals to extract all the water they need from their food whenever fresh, green graze is abundant. Like the small herd animals, camels can go without drinking in times of good winter and spring pastures, but camels carry the tendency toward mobility one step further.

In summer the small herd animals must be watered about twice a week, and their movements accordingly are limited to the area they can reach in a day's travel to and from their water supply. Camels can water as infrequently as twice a month, which in theory allows them to graze areas up to 150 kilometers from the watering point. One hundred fifty kilometers represents the outside limits of the camel's endurance, and while this figure does not represent the normal situation, it does indicate the vast resources at the disposal of the species in dealing with drought in exceptionally bad years. More commonly, camels water every seventh to ninth day and the distances grazed are correspondingly reduced.

Still, the camel's speed, plus the infrequency with which it needs water, means that camels retain a high degree of mobility year-round. Unlike the other species, camels are not dependent upon the fortuitous occurrence of both water and summer graze in one place.

Source: Behnke, R. H., Jr. (1980). The herders of Cyrenaica: Ecology, economy and kinship among the Bedouin of eastern Libya (pp. 28–29). Urbana: University of Illinois Press.

much of the highland grassland areas in Kenya and Tanzania. The Nuer expanded in a similar manner during the mid-nineteenth century in southern Sudan, displacing or incorporating neighboring groups. Broader interactions with the outside world did not occur until the latter part of the nineteenth century when these groups fought to resist their incorporation by European colonial powers. During this period some southern African pastoral societies such as the Zulus rapidly transformed themselves into powerful kingdoms that could more effectively deal with European expansion.

HIGH-LATITUDE ASIA: REINDEER

In high-latitude sub-Arctic areas pastoral nomadism is the most sophisticated variation in a continuum of reindeer exploitation. This continuum ranges from the simple hunting of wild animals, herding semiwild animals for meat harvest alone, to true pastoral nomadism in which domesticated reindeer are milked and used for traction among the Lapps of Scandinavia. Because reindeer feed on lichens rather than the grass or bush species grazed by other domesticated herbivores, societies who raise reindeer are isolated from other pastoralists. As a result these far northern reindeer herders have had the least-direct impact on world history. Although one might suspect that reindeer herding represents the oldest form of pastoralism because societies who depended on hunting them date back to the foraging (Paleolithic) era, many scholars now believe that the use of domesticated reindeer is historically recent and has emerged only during the past five hundred years.

HIGH-ALTITUDE ASIA: YAKS

The high-altitude plateau of Tibet is a harsh environment above 3,000 meters in elevation where the yak makes pastoralism viable. Herds also include yak-cattle hybrids, high-altitude varieties of sheep, cashmere goats, and a few horses. Tibetan pastoralists trade wool, skins, salt, and milk products to valley villagers for barley, which is a mainstay of their diet. In the past they also supplied the overland caravan trade with yak, the only animal capable of carrying heavy loads in that high mountain region. Nomads there move relatively short distances and live in black tents made of yak hair. Many of the pastoral nomadic communities were incorporated into large estates run by Buddhist monasteries until China took direct control of Tibet in 1959.

Political Structures

The complexity of political structures among pastoral nomadic societies is strongly correlated with the degree of centralization found among their sedentary neighbors. The most complex and centralized political organizations emerged among nomads who faced powerful centralized states such as China. By contrast, pastoralists in eastern Africa who faced only other stateless rivals relied on decentralized political organizations. Four basic types existed:

- Political organization based on age sets among the Masai or acephalous (lacking a governing head or chief) segmentary lineages among the Nuer was characteristic of sub-Saharan Africa, where pastoral nomadic societies encountered few state societies until the colonial era.
- Political organization based on lineages that had permanent leaders but no overarching or centralized organization typified north African and Arabian Bedouin societies who encountered only regionally powerful states.
- 3. Supratribal confederations with powerful hereditary leaders emerged throughout the Iranian and Anatolian Plateaus as parts of regional political networks that lay within large empires.
- 4. Centralized nomadic states ruling over vast areas and vast numbers of people periodically developed on the steppes of Mongolia, usually in response to the unification of China under the rule of a single dynasty.

The centralized nomadic states that formed along China's frontier had the greatest impact on world history. Their combination of horse riding with archery, which created a formidable horse cavalry, made these nomads powerful. Through policies that combined raiding or extorting their sedentary neighbors with controlling international trade networks, these nomads became wealthy and politically influential in spite of their relatively small populations. Such wealth and influence allowed for creation of large, long-lived nomad empires in Mongolia that were the political equals of the powerful native Chinese dynasties with whom they often warred. The most notable of these early empires was that of the Xiongnu, who rivaled the Han dynasty (206 BCE– 220 CE) in power. A series of Turkish empires then faced off against the Chinese Sui and Tang dynasties from 581 to 907. In the West the Huns under Attila created a similarly powerful but relatively short-lived empire that threatened the Romans during the fifth century.

However, the most powerful nomad empire to emerge on the world stage was that of the Mongols. Under Genghis Khan and his successors during the thirteenth century they conquered most of Eurasia to create a world empire that ran from the Pacific Ocean to the Danube River and from the frozen forests of Siberia to the humid shores of the Persian Gulf. From the eighteenth century onward, however, the steppe nomads' political power declined significantly because the gunpowder revolution reduced their military advantage. The growing imperial power of czarist Russia in the West and Qing China (1644–1912) in the East led to the division of the Eurasian steppe between them by the beginning of the nineteenth century and destroyed the autonomy of the steppe tribes.

Pastoral Nomads Today

Although pastoral nomadic societies can be found throughout their traditional ranges, they no longer have the influence they once did. The military power that they wielded as mounted archers or desert warriors disappeared centuries ago. Similarly their ability to remain autonomous by isolating themselves deep in the desert on the steppes or in the mountains was trumped by motorized vehicles and airplanes. As the world's population has expanded, they have lost pasture areas to farmers who have attempted to plow land that is only marginally fit for agriculture. Modern governments that have a bias against people who move and that employ active policies to settle nomads have accelerated this process. Still, in many parts of the world pastoral nomadism remains a viable economic strategy and is likely to continue in some form far into the future. The historical legacy of the nomad remains: The Mongol hordes galloping across the steppe, the Bedouin camel rider topping a sand dune, and the tall Masai holding his long spear are stereotypes so strongly engrained in the popular imagination that we could not eradicate them even if we wanted to.

Thomas J. Barfield

See also Steppe Confederations; Warfare—Steppe Nomads

Further Reading

- Barfield, T. J. (1989). The perilous frontier: Nomadic empires and China. Oxford, UK: Blackwell.
- Barfield, T. J. (1993). *The Nomadic alternative*. Englewood Cliffs, NJ: Prentice Hall.
- Barth, F. (1961). Nomads of south Persia. Boston: Little, Brown.
- Beck, L. (1986). *The Qashqa'i of Iran.* New Haven, CT: Yale University Press.
- Bulliet, R. (1977). The camel and the wheel. Cambridge, MA: Harvard University Press.
- Goldstein, M., & Beall, C. (1989). Nomads of western Tibet: The survival of a way of life. Berkeley and Los Angeles: University of California Press.
- Humphrey, C., & Sneath, D. (1999). The end of nomadism?: Society, state, and the environment in Inner Asia. Durham, NC: Duke University Press.
- Ibn, K. (1967). *The Muqaddimah* (F. Rosenthal, Trans.; N. Dawood, Ed.). Princeton, NJ: Princeton University Press.
- Ingold, T. (1980). *Hunters, pastoralists and ranchers.* Cambridge, UK: Cambridge University Press.
- Kelly, R. (1985). *The Nuer conquest: The structure and development of an expansionist system*. Ann Arbor: University of Michigan Press.
- Khazanov, A. M. (1994). Nomads and the outside world (2nd ed.). Madison: University of Wisconsin Press.
- Khazanov, A. M., & Wink, A. (Eds.). (2001). Nomads in the sedentary world. Richmond, UK: Curzon.
- Lancaster, W. (1997). *The Rwala Bedouin today* (2nd ed.). Prospect Heights, IL: Waveland Press.
- Lattimore, O. (1940). *Inner Asian frontiers of China*. New York: American Geographical Society.
- Morgan, D. (1986). The Mongols. Oxford, UK: Blackwell.
- Morris, D. R. (1965). The washing of the spears: A history of the rise of the Zulu nation under Shaka and its fall in the Zulu War of 1879. New York: Simon & Schuster.
- Ratchnevsky, P. (1991). Genghis Khan: His life and legacy (T. Haining, Trans. & Ed.). Oxford, UK: Blackwell.
- Tapper, R. (1997). Frontier nomads of Iran: A political and social history of the Shahsevan. Cambridge, UK: Cambridge University Press.
- Trippett, F. (1974). The first horsemen. New York: Time-Life Books.

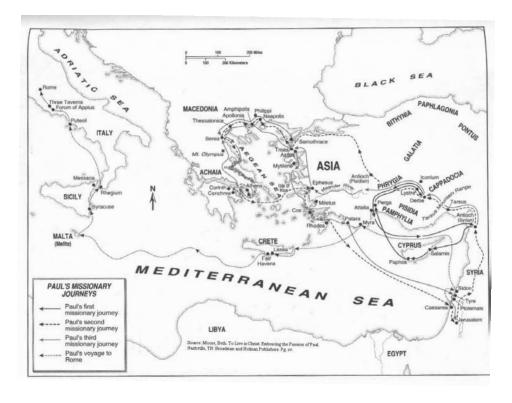
Patriarchy

See Kinship; Matriarchy and Patriarchy

Paul, St. (10-67 ce?) Early Christian theologian

A lthough he considered himself a Jew throughout his life, St. Paul is recognized today as the first distinctly Christian theologian. Paul was the first follower of Jesus to insist on the inclusion of Gentiles, or non-Jews, into the family of God. He also was the first to insist upon the importance of Jewish Scripture for the earliest followers of Jesus, and his insistence indirectly helped to form the two-part Christian Bible, which includes the Hebrew Scriptures and the New Testament. His seven authentic letters (Romans, 1–2 Corinthians, Galatians, Philippians, 1 Thessalonians, and Philemon) are the earliest New Testament writings and thus the earliest Christian documents available. These letters are indispensable for any study of the relationship between Jews and Gentiles in the first-century church or any examination of firstcentury church controversies, doctrines, and practices. In the history of Christianity, Paul's letter to the Romans facilitated St. Augustine's conversion in the fourth century and Augustine's development of the doctrine of salvation by grace in the fifth century, buttressed Martin Luther's insistence on salvation by grace through faith alone in the sixteenth century and anchored Karl Barth's work in the neoorthodox movement of the twentieth century.

Born a Jew in Tarsus in the early first century CE, Paul persecuted followers of Jesus early in his life. After seeing a vision of the resurrected Jesus, Paul became a follower himself and worked as a missionary between 35 and 60 CE, traveling throughout the ancient Near East and the Mediterranean and establishing churches. The disso-



nance between Paul's earlier life as a practicing Jew and his new life as a follower of Jesus was not lost on those around him, and Paul had to spend a great deal of time defending his right to be an apostle for Jesus, or a preacher called to spread the gospel (Galatians, 1–2 Corinthians). Paul appears to have been executed as a martyr during the reign (54–68 CE) of the Roman emperor Nero.

Paul's churches consisted mostly of Gentiles, and Paul argued vigorously that Gentiles did not have to adhere to Jewish traditions in order to be considered followers of

A map of St. Paul's journeys.

Jesus. Instead, Jesus' message was available to anyone who believed in his life, death, and resurrection, regardless of ethnicity (Galatians, Romans). Paul also gave instruction regarding the significance of Christian doctrines such as the resurrection and the second coming of Jesus (1–2 Corinthians, 1 Thessalonians). Paul's discussion of the Eucharist, or the Lord's Supper, in 1 Corinthians and the hymn about the Incarnation (the belief that Jesus is both human and divine) in Philippians 2 are the first descriptions of these doctrines. Furthermore, because Paul wrote to specific congregations, he had much to say about social ethics in each of his letters. For example, the status of women in the early church is mentioned in 1 Corinthians, and Philemon may address slavery, although no scholarly consensus exists regarding the exact purpose of the letter.

Paul's legacy remains controversial. While some scholars credit him for the establishment of Christian theology, others accuse him of establishing Christian anti-Judaism because of his occasionally polemical critiques of Jewish practices and his claim that only faith in Jesus, and not adherence to Jewish tradition, makes one righteous before God. His opinions about women and slaves also have been criticized for their apparent support of first-century ideals, which kept both groups in a socially subservient position to freemen. Whether one considers him worthy to be a saint or denounces him as the ringleader of Christian anti-Jewish sentiment and an advocate for social oppression, Paul left his permanent and unmistakable mark on the New Testament and consequently on all forms of Christianity, past and present.

Stacy Davis

See also Jesus

Further Reading

- Achtemeier, P., Green, J. B., & Thompson, M. M. (2001). Introducing the New Testament. Grand Rapids, MI: Eerdmans.
- Dahl, N. A. (1977). Studies in Paul: Theology for the early Christian mission. Minneapolis, MN: Augsburg.
- Dunn, J. D. G. (1998). The theology of Paul the apostle. Grand Rapids, MI: Eerdmans.
- Harrelson, Walter J. (Ed.) *The new interpreter's study Bible.* (2003). Nashville, TN: Abingdon.

Hawthorne, G. F., & Martin, R. P. (Eds.). (1993). *Dictionary of Paul and his letters*. Downers Grove, IL: InterVarsity.

Roetzel, C. J. (1998). *The letters of Paul: Conversations in context* (4th ed). Louisville, KY: Westminster John Knox.

Sanders, E. P. (1983). *Paul, the law, and the Jewish people*. Philadelphia, PA: Fortress.

Peacemaking in the Modern Era

Theoretically, Raymond Aron defines peace as the suspension of violence or rivalry between two political units (1966). This process by which two warring powers come to terms and stop fighting can be either imposed by the defeat of one adversary's military forces or, in the case of military stalemate, negotiation aimed at stopping the fighting. Peacemaking is thus the political process by which states shift from the state of armed conflict to the state of peace, theretofore confirming the political, geographic, economic, or social changes imposed by the war.

Related to the birth of the modern international system, peacemaking is associated with the basic principles structuring international relations: sovereignty of the state; the formally recognized equality of the international actors; codification and recognition of international law; and the regulating influence of the balance of power mechanism.

As John J. Mersheimer explains, since states "live in a fundamentally competitive world where they view each other as real, or at least potential, enemies, and they therefore look to gain power at each other's expense" and, moreover, "have powerful incentives to take advantage of other states," peacemaking seeks to limit the risk of a new conflict (2003, 52–53).

The Westphalian System

In the seventeenth century, the emergence of the modern state and the rule of law in Europe set the conditions for peacemaking. International relations in the feudal period

Ho Chi Minh Responds to Lyndon Johnson's Peacemaking Efforts

On 8 February 1967, U.S. President Lyndon Johnson wrote to Ho Chi Minh, President of the Democratic Republic of Vietnam (North Vietnam) "in the hope that the conflict in Vietnam can be brought to an end." On 15 February 1967, Ho Chi Minh responded that no talks would be possible until there was "unconditional halting of the American bombings and of all other American acts of war" against North Vietnam. In the extract below, Ho Chi Minh lays out his reasons for wanting the U.S. government out of the conflict.

Excellency, on February 10, 1967, I received your message. Here is my response.

Viet-Nam is situated thousands of miles from the United States. The Vietnamese people have never done any harm to the United States. But, contrary to the commitments made by its representative at the Geneva Conference of 1954, the United States Government has constantly intervened in Viet-Nam, it has launched and intensified the war of aggression in South Viet-Nam for the purpose of prolonging the division of Viet-Nam and of transforming South Viet-Nam into an American neo-colony and an American military base. For more than two years now, the American Government, with its military aviation and its navy, has been waging war against the Democratic Republic of Viet-Nam, an independent and sovereign country.

The United States Government has committed war crimes, crimes against peace and against human-

were based on a vertical power relationship between the European monarchies, the Holy Roman empire, and the papacy. In such a context, the Holy Roman empire and the papacy, being the universal representatives of Christianity, could meddle in the internal affairs of European dynasties.

The peace of Westphalia transformed diplomacy by changing the international power relationship to a horizontal one. Based on the four basic principles defining modern international relationships, the Westphalian system introduced the principle of the sovereignty of the

ity. In South Viet-Nam a half million American soldiers and soldiers from the satellite countries have resorted to the most inhumane arms and the most barbarous methods of warfare, such as napalm, chemicals, and poison gases in order to massacre our fellow countrymen, destroy the crops, and wipe out the villages. In North Viet-Nam thousands of American planes have rained down hundreds of thousands of tons of bombs, destroying cities, villages, mills, roads, bridges, dikes, dams and even churches, pagodas, hospitals, and schools. In your message you appear to deplore the suffering and the destruction in Viet-Nam. Permit me to ask you: Who perpetrated these monstrous crimes? It was the American soldiers and the soldiers of the satellite countries. The United States Government is entirely responsible for the extremely grave situation in Viet-Nam

The Vietnamese people deeply love independence, liberty, and peace. But in the face of the American aggression they have risen up as one man, without fearing the sacrifices and the privations. They are determined to continue their resistance until they have won real independence and liberty and true peace. Our just cause enjoys the approval and the powerful support of peoples throughout the world and or large segments of the American people.

Source: The Department of State Bulletin (1967, April 10), pp. 596-597.

state as the basis of interstate relations. More importantly, the two peace treaties that were signed in Münster and Osnabrück in 1648, putting an end to the Thirty Years' War, introduced the concept of national interest as a motivating factor that defined the conditions of peacemaking and resulted in an international system based on a European balance of power. As Henry Kissinger has shown (1957), European diplomacy was secularized by the replacement of religious motivation with the interests of the state in the conduct of affairs of state. The peace of Westphalia was based on the introduction of a peaceThe brave men, living and dead, who struggled here, have consecrated it, above our poor powerto add or detract. The world will little note, nor long remember, what we say here, but it can never forget what they did here. • ABRAHAM LINCOLN (1809–1865)

making process that preserved the political equilibrium that had arisen from the war that preceded it. In the particular case of the Thirty Years' War, the peacemaking process organized by the king of France, the queen of Sweden, and the Holy German empire, by its division of the German states, ensured French predominance in continental Europe for the next two hundred years. Furthermore, it showed the way to other peace settlements that ended the numerous European wars waged in the seventeenth and eighteenth centuries.

The Congress of Vienna

The French Revolution and the rise to power of Napoleon Bonaparte (1769–1821) posed a major challenge to the basis of balanced peacemaking. The shift of the political system toward the nation-state system and



France signs the preliminary agreements of a peace treaty ending the Franco-Prussian War in 1871. The painting is rich in symbolism with most of the characters wearing Prussian helmets. One is pointing to where France (the woman, who is no doubt a representation of Marianne, the revolutionary symbol of France) needs to sign the treaty. Another, behind her, has a dagger to her breast. She's holding the hand of a dead child. Other Prussians (on the right) are silencing a woman and leading away a screaming child.



University students in Xian, China, flash the peace sign in 1989 following the Tiananmen Square protests in Beijing.

With its fundamentally reactionary stance toward the Revolution, the Congress of Vienna, under the leadership of Metternich, adopted a pragmatic approach to the peacemaking process. France was included in the negotiations, the French monarchy was restored but contained by a written constitution, and to limit the risk of

the introduction of mass armies transformed the basis of peacemaking. By marching on Europe, the Napoleonic armies seemed like an irresistible force challenging the structures of the ancient regime. The conquest of Europe by French armies risked making France the dominating power, putting Britain in league with Austria, and leaving Prussia and Russia to defeat Bonaparte.

The resulting peacemaking agreement was similar to the established diplomatic tradition of the Westphalian system. The Vienna settlement established Austria, Britain, and Russia as the dominant European powers. When the victorious states met in Vienna in September 1814, the fundamental change behind the peacemaking process was the will of Austria, Britain, and Russia to keep France from regaining its capacity to transform the European balance of power. Napoleon's "hundred days"—when he returned from captivity on the isle of Elba in 1814 and led his troops to a final stand at Waterloo—confirmed the need for a diplomatic system capable of ensuring the continuation of the new balance of power.

Given that the aim of the major powers' representatives (Czar Alexander I of Russia, Klemens von Metternich, foreign minister of Austria, and Robert Stewart Castlereagh, Britain's foreign minister) was to restore the ancien regime and limit the impact of the French Revolution on Europe's political system and social values, they understood the need to build a diplomatic system capable of keeping at bay the impact of the Revolution. antagonizing the French population, the country was allowed to keep its 1789 borders. As a way of controlling France, which had come out of the Congress of Vienna still a major world power, Alexander I, Holy Roman emperor Francis II, and Frederick William IV of Prussia devised the Holy Alliance. Aimed at ensuring the European status quo, it was shunned by Britain, which considered it too intrusive and conservative. Its first article read as follows:

In conformity with the words of the Holy Scripture which ordain that all men should regard themselves as brothers the three contracting monarchs will live united by the bonds of an indissoluble fraternity, and considering themselves as compatriots will in all cases lend one another assistance, aid and help; regarding themselves in relation to their subjects and armies as fathers of families, they will direct them in the same spirit of fraternity by which they are animated in order to protect religion, peace and justice. (Simpson and Jones 2000, 94)

The main achievement of the Vienna system was to introduce a framework for the collaboration of the victorious powers to ensure the preservation of the European status quo. The result was the congress system, by which Austria, Britain, France, Prussia, and Russia met to respond to and consult with each other on various international crises that threatened the balance of power created in Vienna. Although conservative by nature, the Vienna peace settlement and the congress system that it instituted led to a century of peace that lasted until World War I.

The Treaty of Versailles

The European balance of power resulting from the Vienna peacemaking process didn't survive World War I, and the nature and aims of the conflict imposed a shift in the peacemaking process. The waging of total war led to a peacemaking process that basically excluded the defeated nations from the resulting balance of power to prevent them from seeking to redefine it anew.

The human cost of the war was on such a scale that two new elements were introduced into the peacemaking process that took place at the Palace of Versailles in 1919: war guilt and the establishment of a collective forum aimed at keeping war at bay. Through its infamous Article 231, the Treaty of Versailles, signed on 28 June 1919, held Germany solely responsible for the war. Excluded from the peace negotiations, Germany was required to pay financial reparations, disarm, and limit the size of its standing army and navy, and it was banned from building a new air force.

Under the influence of U.S. President Woodrow Wilson (1856–1924), the victorious powers accepted the establishment of an international organization designed to ensure by diplomacy and collective security the political status quo resulting from the Versailles settlement. With the aim of legalizing diplomacy by replacing armed conflict with negotiation, the treaty created the League of Nations, an international forum and ancestor to the United Nations. Acting as an international forum aimed at achieving a general disarmament process, it failed under the pressure of the Nazi Germany and Fascist Italy, both seeking to change the balance of power resulting from the war.

Without any authority other than the moral value of its covenant, the League epitomized the failure of the peacemaking process that took place in 1919. It must be understood that the peacemaking process was motivated by pragmatism. The Bolshevik Revolution in Russia and the numerous revolutionary movements in Central Europe seemed to pose a real threat in 1919, and the peacemakers had to act with speed to stabilize international relations. But as Jack C. Roth explains, "the defeat of Germany concealed the fact that in 1919 her potential for European domination was possibly greater than it had been in 1914. The war, in fact, ended in such a way as to break up the very coalition needed to keep Germany in check" (1968, 92).

The peacemaking process at Versailles was inspired by a collective will to "legalize" international relations, and the absence of any coercive mechanism meant that the whole system rested on the goodwill of its adherents. Incapable of stopping Japan's invasion of China in 1931, Germany's rearmament, or Italy's invasion of Ethiopia, the League demonstrated the weakness of the collective diplomacy introduced at Versailles and the difficulty of achieving a stable peacemaking process without the use of coercion.

From World War II to the Cold War

It is the alliance between Britain, the United States and the Soviet Union that defeated Germany in 1945. Following a second German bid for power in Europe, the victors decided to build a suitable peacemaking process aimed at ensuring the European status quo. The end of World War II marks a significant shift in international politics. It marks the end of European domination and the emergence of an international system based on the existence of two superpowers: the United States and the Soviet Union.

In Yalta and Potsdam, Britain, the Soviet Union, France, and the United States tried to build a suitable peacemaking process aimed at resolving, once and for all, the German problem. If the United States and the Soviet Union hoped in 1945 to perpetuate their wartime collaboration, their ideological divide soon shattered any hopes of collaboration, and once more the international status quo rested on an equilibrium between dominant powers, namely the Soviet Union and the United States. In fact, the incompletion of the peacemaking process meant They shall beat their swords into plowshares, and their spears into pruning hooks; nation shall not lift up sword against nation, neither shall they learn war any more • MICAH 4:3

that the world would live under the threat of war for the next fifty years.

The existence of nuclear weapons changed the stakes of international relations. Before the explosion of the atom bomb, war was considered a regulating mechanism reflecting shifts in the international balance of power. With the risk of destroying humanity, the focus shifted from warfare to peacemaking.

Understanding Peacemaking

Based on the historical record, it is possible to identify a model of peacemaking. At the heart of the process, peacemaking seeks to ensure equilibrium so that no single state can dominate all of its neighbors. The existence of a dominating nation or group can be balanced by a coalition of states. Peacemaking assures the predominance of the most powerful states while allowing weaker powers to influence international relations. As long as the interests of the states remain within the boundaries defined by the peacemaking process, the shift to war can be withstood.

Martin Laberge

Further Reading

- Aron, R. (1966). Peace and war: A theory of international relations. New York: Praeger.
- Kissinger, H. (1957). A world restored: Castlereagh, Metternich and the restoration of peace 1812–1922. New York: Houghton Mifflin.
- Kissinger, H. (1994). Diplomacy. New York: Simon & Schuster.
- Mersheimer, J. J. (2003). *The tragedy of great power politics*. New York: Norton.
- Roth, J. C. (1968). World War I: A turning point in modern history. New York: Knopf.
- Simpson, W., & Jones, M. (2000). Europe, 1783-1914. London: Routledge.

Peace Projects

In the depths of World War II, Edith Wynner and Georgia Lloyd published *Searchlight on Peace Plans,* in which they intended to provide insights into peace in a time of suffering and grief. The book summarized the main peace projects and world order proposals drawn up in the Western world since ancient Egypt. Between the fourteenth and the mid-twentieth centuries alone, more than 125 plans have been sketched. Besides many anonymous and obscure authors, some historic figures stand out, such as Dante Alighieri, William Penn, Jeremy Bentham, Immanuel Kant, and Thomas Paine. Well-known and unknown authors all share the same dream of doing away with war.

Peace projects inherently pertain to relations among states, whether these are kingdoms, nations, or modern states. The goal is to obviate war by establishing a set of procedures for the peaceful settlement of disputes. Unlike utopian schemes, peace projects aim at neither changing human nature nor eliminating violence between individuals. However, most peace projects transpose the basic elements that govern civil societies to the interstate level. A very common analogy between domestic and international structures tends to show that the tools used to pacify societies—rule of law, courts, sanctions—may well be applied to interstate relations, and thus used to pacify the world.

Peace projects are most frequent during and after wars, and even more after particularly destructive conflicts, as F. H. Hinsley observed. They also appear during political turmoil, when entities compete for supremacy. In fact, as one goes through seven centuries of peace projects, one finds that the idea of lasting peace is often tied in with a particular political order. Projects refer as much to the promotion of an order through which peace would be accomplished as to actually fulfilling the dream of a warless world. As the next examples show, what first appears as a scheme for the achievement of a universal aspiration often conceals a particular ideology and specific interests.

From the Middle Ages to the Dawn of the Modern State

The battle for prevalence between the papacy and the Holy Roman Empire dominated medieval political thinking. Peace projects reflected this tension. Was the pope a spiritual guide or did his power outshine the emper-

We make war that we may live in peace. • Aristides (fifth century bce)

or's? Both Pierre Dubois (c. 1255–c. 1312) and Dante Alighieri (1265–1321), each of whom wrote a peace project at the beginning of the fourteenth century, took sides against the bishop of Rome. Dante, in *De Monarchia* (1310), favored the emperor. In his hierarchical view of the world, the prince above all princes—the "Monarch"—was the only one capable of bringing peace to Christendom. In the same way the ancient Roman empire gave the world the Pax Romana, imperial domination that would bring lasting peace.

Dubois, who wrote under the patronage of the French king Philip IV, adopted a more innovative stance. His work *De Recuperatione Terrae Sanctae* (1305) focused on the Christian crusade to recover the Holy Land. To meet this goal, Dubois claimed that European kings should stop quarreling and renounce warring against each other. Unlike Dante, he opposed the imperial solution on the grounds that Christendom consisted of too many men and too many cultures scattered over too large a territory. Dubois then put forward a new kind of union: a council formed by the sovereigns of Europe that would act as a court of arbitration. Members who refused to submit a dispute or to obey the court's decisions would then face sanctions, from excommunication to economic and military actions. The pope, in charge of pronouncing the culprit excluded from the Christian community, was left with a moral power. The king of France, on the other hand, would assume the council leadership by executing the sanctions.

Dubois's scheme was obviously designed to enable Philip IV to encroach upon the powers of the pope and his fellow kings. Peace was at best the second of Dubois's concerns. Nevertheless, this fourteenth-century plan contained the basic elements of virtually all further peace projects: the formation of a council or a union of independent entities, a set of procedures for settling disputes, and a coercive device.



Masked protestors, symbolizing victims, protest to have General Augusto Pinochet returned to Chile to answer war crimes charges.

Peace is not the product of terror or fear. Peace is not the silence of cemeteries. Peace is not the silent result of violent repression. Peace is dynamism. Peace is generosity. It is a right and it is a duty. • OSCAR ROMERO (1917–1980)

Dubois's project fell into oblivion for three hundred years. During that period, the papal dream of temporal power vanished, as did the imperial one of a united Christendom, despite a last attempt in the sixteenth century by Emperor Charles V to revive it. As a reaction to this last imperial endeavor, the European nation-states emerged. Dubois's text was republished in 1611: His project of a council of sovereign European states, anachronistic in 1310, was now conceivable.

Peace Among Sovereign States

The rise of the modern state system during the sixteenth and seventeenth centuries resulted in a new doctrine, the balance of power. Although based on equipoise, the system saw states continuously struggling to alter the balance for their own benefit. Competition for glory or for economic or territorial superiority-the New World had just been discovered-was an added source of tension. War was an extreme yet lawful means of conducting relations among rival states. Conflicts increased accordingly and, as a byproduct, fostered thoughts on peace. But philosophers were aware that calls for Christian universal brotherhood would fall on deaf ears. They had to follow in Dubois's footsteps and sketch plans for independent nations to voluntarily join a partnership for the common good. Thus, the peace projects of the seventeenth and eighteenth centuries-Emeric Crucé's Nouveau Cynée, Sully's Grand Design, the Abbé de Saint-Pierre's Project to Bring Perpetual Peace in Europe, William Penn's Essay towards the Present and Future Peace of Europe-are all variations on the same idea. Penn's and Saint-Pierre's projects are especially representative of this period. They are, as well, exceptions to the previous assertion that peace plans generally promote specific interests, although they are certainly Eurocentric.

In his 1693 *Essay*, Penn (1644–1718) suggested the creation of a European parliament, which would meet periodically and whose task would be to settle disputes by arbitration and punish aggressive behavior. National representatives would be sent to the "Diet" (the assembly) in proportion to each nation's power, revenues, exports,

and imports. But in return, according to Penn, the member nations would have to abandon the key attribute of national sovereignty—unanimity of decision—within the assembly by accepting a three-fourths majority vote. A nation could thus be compelled to act according to the will of others.

The project proposed by Saint-Pierre (1648–1743), first published in 1712, is based on two observations: firstly, that peace could not be achieved as long as Europe lacked a treaty-enforcing mechanism, and secondly, that the balance of power was a continuous threat to peace. To settle these problems, he suggested the creation of a "grand alliance," supported by international armed forces. Saint-Pierre, unlike Penn, proposed an equal representation of the twenty-four European states.

For many years, Saint-Pierre sent improved versions of his plan to European sovereigns in the hope that they would realize how they would benefit from organized international relations, adding to his own text objections and counterobjections to overcome any criticism. Like Penn, Saint-Pierre trusted that the European rulers would assess the economic advantages of a peaceful order. But in the 1729 edition of his treaty, the Abbé confessed he had underestimated the essential concern of European leaders, that is, to keep their freedom of action, or what they called their national sovereignty. However much he claimed that preserving the members' independence against an aggressor was precisely the aim of a union, no one seriously considered it. Saint-Pierre incurred several pungent comments from his contemporaries. Voltaire (1694-1778) scoffed at this "Saint-Pierre of Utopia" who was naive enough to believe that princes, in the name of peace, would abandon precisely that power which defines them. National sovereignty was the stumbling block of peace projects.

The Kantian Approach to Perpetual Peace

Immanuel Kant (1724–1804) was the first to address the inescapable fact of national sovereignty. His *Thoughts on Perpetual Peace* (1795) is the most quoted and influential text on peace. Surprisingly, however, it pertains to A country cannot simultaneously prepare and prevent war. • ALBERT EINSTEIN (1879–1955)

the *idea* of lasting peace and not its fulfillment, as Kant's vision of perpetual peace is one of an asymptotic quest: Humanity will indefinitely tend toward it.

Kant believed that self-interest was the driving force of mankind. He believed as well that, as much as war is inherent to human life, the interest of men lay in submission to the moral law of peace. While men perpetually seek to impose their law upon others, they also fear that a law will arbitrarily be imposed upon them. Their only hope of breaking that circle of insecurity is therefore to submit to a common law, a "social contract" of international scope, a federation-in other words, to create a free union of nations instead of a supranational entity that would deny them their identity. Kant, however, stressed one prerequisite for the success of any federal scheme. In the "first definitive article for perpetual peace," he argued that "the civil constitution in each state should be republican" (1983). Thus, a population which is already governed by a social contract based on a constitution and on the separation of powers is likely to accept its international counterpart. By linking peace and a republican regime-or democracy-this requirement became the cornerstone of the liberal and modern approach to peace.

Kant expressed his views on peace and federalism while the former American colonies were experiencing the first large-scale federal structure. As for Europe, ruled by balance of power, it was sinking into a twenty-year war as a result of the French Revolution and Napoleon's dream of a new imperial domination.

Peace, Progress, and Interdependence

Major conflicts drastically decreased in Europe after Napoleon's abdication in 1815, but a quarter of a century of turmoil had greatly stimulated ideas on peace. Peace groups and peace plans flourished in the nineteenth century. The impetus was provided by Quakers who formed the first peace society in 1816. The goals of these various groups were religious—applying Christian principles to national and international relations—as well as humanistic. Inspired by the Enlightenment, they sought to rationalize interstate dealings. As the belief in continuous human progress grew stronger as a consequence of industrial and scientific development, perpetual peace represented the ultimate culmination of civilization. In the modern world, peace activists believed, war would inexorably become obsolete, and many signs supported this.

Firstly, the "European concert," even though designed to suppress national emancipation and liberal reforms, showed that leaders could meet during times of tension and find a common solution to European problems. Secondly, the international expansion of trade and commerce made clear the growing interdependence of nations; it seemed as if sovereignty would soon fall into obsolescence. Also, newly founded nongovernmental organizations like the telegraphic and postal unions showed that nations could work together and adopt common rules for the benefit of all. Finally, the popularity of the federal idea in the United States, Switzerland (1848), Canada (1867), and Germany (1871) validated Kant's prediction that a federation of states (a Völkerbund) was a practicable solution, as the first discussion on the "United States of Europe" was held at the 1849 Paris International Peace Congress.

Despite nationalism and armaments, which both grew disproportionately at the end of the century, the belief was strong among peace activists that war would eventually disappear with the help of reason, science, cooperation, and international law supported by arbitration and conciliation. The Great War came as a shock.

Dream of a Perpetual Peace in the Contemporary World

Between 1914 and 1918, many peace groups and individuals still produced peace projects, mostly recapping the propositions of the previous schemes (such as a federation of nations, parliament of mankind, international council, and executive force). For their authors, the conflagration made even more obvious the anarchy of the international system and the necessity of rebuilding it on the rule of law. Furthermore, the idea of an international organization for the purpose of preserving

Blessed are the peacemakers: for they shall be called the children of God. • MATTHEW 5:9

peace appeared in political discourse. The pledge by President Woodrow Wilson (1856–1924) to work for a league of peace and his call for the expansion of democracy filled peace activists with enthusiasm. Peace projects were no longer purely speculative.

The League of Nations, founded in 1919, tentatively tried to regulate international relations. Carefully designed not to infringe upon its members' sovereignty, its influence, which was solely moral, rapidly faded. As years went by, peace advocates understood that the process of global integration could not come out of such a political structure. The emphasis had to be put on education, cooperation, and the creation of an internationalist state of mind. After World War II, the dream of a peaceful international community continued via the United Nations but, like its predecessor, the U.N. was devised by the victorious countries to reflect the new geopolitical order. Its influence depended on the will of its sovereign constituents.

Kant's reflections on peace still echo today. Two centuries ago, the philosopher warned us against the panacea of a universal structure superseding states. Today, a world federation is still very much premature and universal peace projects are no longer topical. However, the ongoing and peaceful integration of European nations shows that the federal project first discussed in 1849 was not utterly unrealistic. Kant's call for the extension of the democratic principle and for cosmopolitanism—the international state of mind—may well represent the best hope for peace.

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Further Reading

- Armstrong, D. (1982). The rise of international organization: A short history. Houndmills, UK: Macmillan.
- Aron, R. (2003). Peace and war: A theory of international relations. New Brunswick, NJ: Transaction Publishers.
- Beales, A. C. F. (1931). The history of peace: A short account of the organized movements for international peace. London: G. Belles & Sons.
- Bosco, A. (Ed.). (1991). The federal idea: The history of federalism from the Enlightenment to 1945. London: Lothian Foundation Press.
- Ceadel, M. (1987). *Thinking about peace and war*. Oxford, UK: Oxford University Press.
- Ceadel, M. (1996). The origins of war prevention: The British peace movement and international relations, 1730–1854. Oxford, UK: Oxford University Press.

- Claude, I. L (1964). Swords into plowshares: The problems and progress of international organizations. New York: Random House.
- De Saint-Pierre, C. I. C. (1927). Selections from the second edition of the Abrégé du projet de paix perpétuelle (H. H. Bellot, Trans.). London: Sweet & Maxwell.
- Galtung, J. (1969). Violence, peace, and peace research. *Journal of Peace Research*, 6(3), 167–191.
- Gerbet, P. (1996). Le rêve d'un ordre mondial de la SDN à l'ONU [The dream of a world order, from the League of Nations to the United Nations]. Paris: Imprimerie nationale.
- Habermas, J. (1996). La Paix perpétuelle: le bicentenaire d'une idée kantienne [Perpetual Peace: The Bicentennial of a Kantian Idea] (Trans. of Kants Idee des Ewigen Friedens aus dem historischen Abstand von 200 Jahren [Kant's Idea of a Perpetual Peace: A Reassessment after 200 Years] from German to French by R. Rochlitz). Paris: Cerf.
- Hemleben, S. J. (1943). Plans for world peace through six centuries. Chicago: University of Chicago Press.
- Hinsley, F. H. (1963). Power and the pursuit of peace: Theory and practice in the history of relations between states. Cambridge, UK: Cambridge University Press.
- Howard, M. (2000). The invention of peace: Reflections on war and international order. New Haven, CT: Yale University Press.
- Kant, I. (1983). Perpetual peace, and other essays on politics, history, and morals (T. Humphrey, Trans.). Indianapolis, IN: Hackett Publishing Company.
- Murphy, C. (1985). The search for world order: A study of thought and action. Boston: Martinus Nijhoff Publishers.
- Pagden, A. (Ed.). (2002). The idea of Europe: From antiquity to the European Union. Cambridge, UK: Cambridge University Press.
- Ruyssen, T. (1954). Les sources doctrinales de l'internationalisme [The doctrinal sources of internationalism]. Paris: Presses Universitaires de France.
- Souleyman, E. V. (1941). The vision of world peace in seventeenth and eighteenth-century France. New York: Putnam's Sons.
- Suganami, H. (1989). *The domestic analogy and world order proposals*. Cambridge, UK: Cambridge University Press.
- United Nations. (1996). The League of Nations, 1920–1946: Organization and accomplishments: A retrospective of the first organization for the establishment of world peace. New York: United Nations.
- Wynner, E., & Lloyd, G. (1944). *Searchlight on peace plans*. New York: E. P. Dutton.

Pentecostalism

A lthough speaking in tongues, or glossolalia, appears to have existed off and on for millennia, as a distinct movement Pentecostalism emerged as a radical extension of the Holiness movement that sought to revitalize the Wesleyan doctrine of perfection and developed in various mainstream U.S. denominations, particularly the Methodists, following the Civil War. Despite a diversity of beliefs among them, Pentecostals generally emphasize

When and	
Religion	s Began
Hinduism	South Asia
Judaism	West Asia
Buddhism	South Asia
Confucianism	China
Zoroastrianism	West Asia
Jainism	South Asia
Daoism	China
Christianity	West Asia,
	Europe
Manichaeism	West Asia
Shinto	Japan
Islam	West Asia
Orthodoxy	West Asia
Sikhism	South Asia
Protestantism	Europe
Latter-day Saints	North
	America
Babi and Baha'i	West Asia
Pentecostalism	North
	America
	Religions Hinduism Judaism Buddhism Confucianism Zoroastrianism Jainism Daoism Oaoism Christianity Shinto Islam Shinto Shinto Sikhism Protestantism Latter-day Saints

(1) the baptism of the Holy Spirit manifested by speaking in tongues; (2) the imminent return of Jesus Christ; and (3) the significance of speaking in tongues as an evangelical mechanism. Although Pentecostals take a literal interpretation of the Bible and stress a puritanical morality, they are distinguished from other Fundamentalists or Evangelicals, such as Southern Baptists and the Churches of Christ, by greater exuberance in their religious services. Pentecostals also emphasize prophecy, interpretation of tongues, healing, and exorcism of demons. At the ideological level, Holiness and Pentecostal sects emphasize the notion of "sanctification." As opposed to the relatively subdued tone of Holiness services, Pentecostalism emphasizes inspirational outbursts of ecstasy such as shouting, gesticulating, twitching, fainting, rolling on the floor, and especially speaking in tongues or glossolalia. Some Pentecostal sects in southern Appalachia and the Ozark Mountains even handle poisonous serpents.

Development of Pentecostalism in the U.S.

Early sites of the Pentecostal movement included a center in western North Carolina and eastern Tennessee connected with A. J. Tomlinson and the Church of God; a center in Topeka, Kansas, associated with Reverend Charles Parham: and the interracial Asuza Street revival of 1906-1909 in Los Angeles. Parham left the Methodist Episcopal Church to establish Bethel Healing Home in Topeka, Kansas, in 1898. He had been inspired by the healing ministry of J. A. Dowie of Zion City, Illinois, and visited Holiness and healing ministries from Chicago to New York to Georgia in 1900. In late 1900, Parham established the Bethel Bible College in Topeka. Some of his students began to speak in tongues in early 1901 after investigating the doctrine of the "baptism of the Spirit." Parham closed his school and instructed his students to spread the Pentecostal message. He opened another Bible college in Houston in 1905 and recruited William Seymour, an African American Holiness preacher, who went on to provide the impetus for the famous revival at the Asuza Street Mission. Particularly poor and lower-class people from not only many parts of the United States but also other countries attended the revival. Sevmour spread the Pentecostal gospel to both whites and blacks in the Southeast. After attending the revival with two compatriots in early 1907, Charles H. Mason, one of the two founders of the Church of God in Christ (COGIC), transformed the Holiness sect into a Pentecostal group. His cofounder, C. P. Jones, rejected Pentecostalism and formed the Church of Christ (Holiness) U.S.A. By the early 1910s, the Pentecostal movement had attracted converts in much of the United States, Canada, and northern Mexico with estimates ranging from 50.000 to 100.000 followers.

The initial interracial character of the Pentecostal movement began to break down in the years following the Asuza Street revival. In 1914, COGIC-ordained white ministers formed the Assemblies of God. Whereas the COGIC, headquartered in Memphis, Tennessee, today constitutes the largest predominantly black Pentecostal group in the world, the Assemblies of God has evolved, with its present headquarters in Springfield, Missouri, into the largest Pentecostal group in the world. Several years later, Canadian-born Aimee Semple McPherson broke away from the Assemblies to establish her congregation in Los Angeles, which was incorporated in 1927 as the International Church of the Foursquare Gospel. Some Pentecostals, particularly those associated with the Pentecostal Assemblies of the World and the United Pentecostal Church International, emphasized the oneness of God and baptism in the name of Jesus, rather than in the name of the Father, Son, and Holy Ghost. By the end of the twentieth century several hundred Pentecostal sects, many of them African American, had emerged in the United States alone. Both African American and European American Pentecostalism have had a rich history of colorful and even flamboyant evangelists. In the 1940s, Oral Roberts, a Pentecostal Holiness Church evangelist, created a healing and radio ministry based in Tulsa, Oklahoma. "Sweet Daddy" Grace, the founder of the United House of Prayer for All People, functioned as one of the "gods of the black metropolis." Kathryn Kuhlman, a white Presbyterian, and Bishop Ida Robinson, an African American and the founder of the Mt. Sinai Holy Church of America, testified to the ability of women to rise to positions of leadership in the Pentecostal movement, despite the efforts of males to assume dominance. Pentecostal sects also have tended to attract a higher percentage of women than have mainstream denominations.

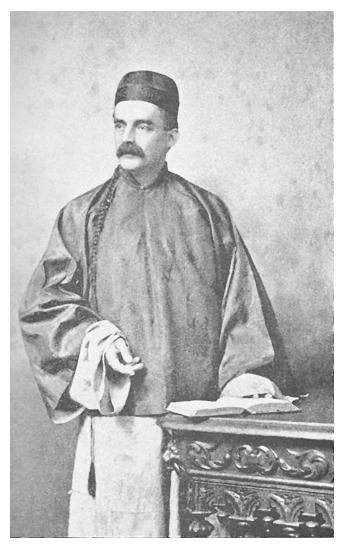
The Development of the Charismatic Movement

While Pentecostalism proper has catered largely to lowermiddle- or working-class people, neo-Pentecostalism, or the charismatic movement, has tended on the whole to cater to more affluent people, ranging from the lowermiddle class to the upper-middle class. The charismatic movement first spread among some members of mainstream Protestant churches (e.g., Episcopalians, Lutherans, and Presbyterians) in the 1950s and among Roman Catholics in the 1960s. Demos Shakarian established the Full Gospel Business Men in 1952, and David J. du Plessis, a South African–born Assemblies of God pastor in Connecticut, established connections with mainstream churches by joining the World Council of Churches in 1954 and attending the Vatican II conference as the sole Pentecostal observer. Although the Assemblies of God excommunicated him for these actions in 1962, du Pleissis served as an important catalyst in sparking the charismatic movement in mainstream churches. The charismatic movement also received an infusion of energy in the form of the Jesus People movement, a young people's revival that began in California. Jim Bakker, an Assemblies of God minister, and Jimmy Swaggart, also an Assemblies of God minister, joined Oral Roberts as highly visible and influential charismatic televangelists.

The Pentecostal movement within Catholicism began in the spring of 1967 at Duquesne University in Pittsburgh, but later spread to North Dame University and Michigan State University. Although members of the Catholic Pentecostal movement initially called themselves "Pentecostal Catholics" or "Catholic Pentecostals," they later referred to themselves as "Catholic charismatics" for class reasons (McGuire 1982, 4).

The Global Diffusion of Pentecostalism

Pentecostalism has spread from its roots in the United States to many other parts of the world, including the Caribbean, Latin America, sub-Saharan Africa, Southeast Asia, South Korea, Britain, and even eastern Europe.. David J. Barrett and Todd M. Johnson, renowned statisticians of Christianity, maintain that by 2000 there were 525 million Pentecostals/charismatics, composing 27 percent of the Christian population in the world, as cited in Wacker, *Heaven Below* (2001), making Pentecostalism the single largest Christian category after Catholicism. Large independent Pentecostal congregations sprang up in large numbers in Latin America and America, particularly during the 1980s and 1990s. Massive conversion to Protestantism, particularly of a Pentecostal variety, has



The Reverend George T. Candlin poses in Chinese dress in Tientsin, China, in the late 1880s. The photo quotes him as saying, "This is Pentecost and behind is the conversion of the world."

occurred in Brazil, where various estimates indicate that Protestant churchgoers outnumber Catholic ones on any given Sunday. Many members of Protestant mainstream congregations in Brazil have left in order to establish Pentecostal congregations. Although North Americans introduced Pentecostalism into Latin America, by and large Latinos are now responsible for diffusion of the movement. As in the United States, South African Pentecostalism emerged at the beginning of the twentieth century as a racially integrated movement that attracted blacks and poor Afrikaners and quickly became racially fragmented, in the view of A. H. Anderson in "Dangerous Memories for South African Pentecostal." (1999). The efforts of various North Americans and Europeans resulted in the formation of the South African District of the Assemblies of God. Many black Pentecostals opted to affiliate themselves with a wide array of African independent sects in South Africa. Some Pentecostals around the globe are interconnected through the Pentecostal World Fellowship, but apparently most are not affiliated with this body.

Interpretations of Pentecostalism

Robert Mapes Anderson, in Vision of the Disinherited (1979), provides perhaps the most insightful analysis of European-American Pentecostalism, noting that it serves several functions, none of which seriously challenges the larger society or significantly alters the position of Pentecostals within it. Pentecostalism, he asserts, (1) constitutes a cathartic mechanism for marginalized people; (2) provides career opportunities for its leaders; (3) serves as a "safety valve" for dissatisfaction within mainstream churches; (4) facilitates the migration process from the countryside to the city; (5) instills in its members passivity, industriousness, and thrift; and (6) develops a compliant working class. While the same could be argued historically for African American Pentecostalism as well, an increasing number of black Pentecostal congregations have become more politically and socially engaged due to the impact of the civil rights and black power movements on a third generation of black Pentecostal ministers. Pentecostal Institutional Temple, COGIC's mother church (located about a mile east of downtown Memphis), played an instrumental role in the establishment of the Ministers and Christians League, an organization that spearheaded a drive that doubled the number of black registered voters in Memphis. Black Pentecostals have won seats on city councils and in state legislatures and have been appointed to minor cabinet positions in the executive branch of the federal government.

McGuire views the search for empowerment as central to the Catholic charismatic movement. She asserts that even relatively affluent and conservative people in U.S. society "sense that change has 'robbed' them of the power to control the future, to effect their wills on their environment, to know what to expect and to act accordingly" (McGuire 1982, 176). Csordas, in *The Sacred Self*, asserts that the perception of divine presence often instills in Catholic charismatics a sense of security that enables them to overcome memories of traumatic events.

Various scholars have examined the role that Pentecostalism plays in Latin America and other Third World countries. For the most part, Pentecostalism in Brazil and elsewhere in Latin America caters to the poor. Despite the fact that Christian-based communities inspired by liberation theology provided Catholicism with a new lease on life in Latin America, Pentecostalism has proven to be a fierce competitor because of its ability to tap into deeply felt emotional needs and to promise its adherents upward social mobility. Based upon an ethnographic study of Pentecostals in Belem, Brazil, Chesnut in Born Again in Brazil reports that the great majority of his subjects converted to Pentecostalism during or shortly following a serious sickness. In a similar vein, Lancaster in Thanks for God and the Revolution (1988) found that Pentecostal churches in Nicragua recruit most of their members from the lowest echelon of the poor, many of whom are alcoholics or sick or elderly.

Despite their traditional political fatalism, Pentecostals have also become politically active in Latin America, although they have generally favored conservative candidates such as Rios Montt in Guatemala, a former Pentecostal Sunday School teacher, and Alberto Fujimori in Peru. Indeed, General Augusto Pinochet provided support to Chile's largest Protestant sect, the Pentecostal Church, according to Stoll in Is Latin American Turning Protestant? Some Brazilian Pentecostals have supported left-wing candidates and parties, such as Luiz Inacio Lula da Silva and the Workers' Party. Nevertheless, Chesnut argues that Brazilian Pentecostalism generally "reinforces the political status quo by engaging in the clientelistic politics that predominate in the republic" (1997, 146). South African Pentecostalism for the most part maintained its distance from the antiapartheid movement, although some of the younger black Pentecostals expressed opposition to the regime. In the case of South Korea, Jung asserts that Pentecostalism assumed an explicitly anti-Communist orientation and "produced an ahistorical, apolitical and other-world-centered form of faith" (1999, 151) that served to support the country's capitalist class. Conversely, as Stoll observes, Pentecostal pastors and congregations "tend to retain considerable autonomy in their dealings with state and society" (1990, 319).

An Increasingly Diverse Movement

Pentecostalism, like other religious traditions, is not a monolithic entity. As this essay has indicated, it exhibits tremendous diversity within specific countries, such as the United States or Brazil, and from country to country. At any rate, in the course of a little more than one hundred years, it has become a significant force politically, economically, and culturally. Furthermore, particularly in its charismatic form, it no longer is simply the religion of the downtrodden and disinherited. As a consequence, an increasing number of historians, theologians, sociologists, anthropologists, and other scholars, both Pentecostal and non-Pentecostal, have deemed it a topic to warrant serious consideration with the context of the world-system.

Sociologist David Martin views Pentecostalism, on the one hand, as the Christian equivalent of Islamic fundamentalism in the sense that it constitutes a cultural revolution responding to changes in the large global economy, while, on the other hand, unlike the latter, not offering an overarching political agenda. As a consequence, Pentecostalism, perhaps like Christianity as a whole, may be utilized to support existing sociopolitical and socioeconomic arrangements or to challenge them.

Hans A. Baer

See also Missionaries

Further Reading

Anderson, A. H. (1999). Dangerous memories for South African Pentecostal. In A. H. Anderson & W. J. Hollenweger (Eds.), *Pentecostals* after a century: Global perspectives on a movement in transition (pp. 89–107). Sheffield, UK: Sheffield Academic Press.

- Anderson, R. M. (1979). Vision of the disinherited: The making of American Pentecostalism. New York: Oxford University Press.
- Baer, H. A., & Singer, M. (2002). African American religion: Varieties of protest and accommodation (2d ed.). Knoxville: University of Tennessee Press.
- Blumenhofer, E. L., Spittler, R. P., & Wacker, G. A. (Eds.). (1999). Pentecostal currents in American Protestantism. Urbana: University of Illinois Press.
- Chesnut, R. A. (1997). Born again in Brazil: The Pentecostal boom and the pathogens of poverty. New Brunswick, NJ: Rutgers University Press.
- Csordas, T. J. (1994). The sacred self: A cultural phenonomenology of charismatic healing. Berkeley: University of California Press.
- Harrell, D. E. (1975). All things are popular: The healing and charismatic revivals in modern America. Bloomington: Indiana University Press.
- Hollenweger, W. J. (1997). *Pentecostalism: Origins and developments worldwide.* Peabody, MA: Hendrickson.
- Jung, L. H. (1999). Minjung and Pentecostal movements in Korea. In A. H. Anderson & W. J. Hollenweger (Eds.), *Pentecostals after a century: Global perspectives on a movement in transition* (pp. 138–160). Sheffield, UK: Sheffield Academic Press.
- Lancaster, R. N. (1988). Thanks for God and the revolution: Popular religion and class consciousness in the new Nicaragua. New York: Columbia University Press.
- Mariz, C. L. (1994). Coping with poverty: Pentecostals and Christian base communities in Brazil. Philadelphia: Temple University Press.
- Martin, D. (2002). *Pentecostalism: The world their parish.* Oxford, UK: Blackwell.
- McGuire, M. (1982). Pentecostal Catholics: Power, charisma, and order in a religious movement. Philadelphia: Temple University Press.
- Sanders, C. J. (1996). Saints in exile: The Holiness-Pentecostal experience in African American religion and culture. New York: Oxford University Press.
- Stoll, D. (1990). Is Latin America turning Protestant? The politics of evangelical growth. Berkeley: University of California Press.
- Synan, V. (1997). The Holiness-Pentecostal tradition: Charismatic movements in the twentieth century. Grand Rapids, MI: William B. Eerdmans Publishing.
- Wacker, G. (2001). Heaven below: Early Pentecostals and American culture. Cambridge, MA: Harvard University Press.

Periodization— Overview

Periodization refers to the way that historians divide the past into distinct eras. Like storytelling, history writing requires a structure, and periodization is one of the main techniques used by historians to create structure. Yet the past is fluid, complex, and continuous, so any attempt to divide it into neat chronological chunks is bound to be artificial. Periodization always does violence to the complex reality of the past, and even the most careful and most honest attempts at dividing up the past involve some distortion. Any scheme must compromise between the often contradictory demands of clarity, coherence, accuracy, and honesty.

The challenge of finding an appropriate scheme of periodization is particularly complex in world history, which tries to construct a coherent account of the history of all human societies. This essay discusses the particular problems that periodization raises in world history, some traditional approaches to periodization, and the compromise solutions that have been adopted as a framework for the *Berkshire Encyclopedia of World History*.

Problems of Periodization in World History

The task of breaking the past into manageable, labeled, chunks of time raises several sorts of problems. We can classify them as theoretical, organizational, and ethical.

Theoretical Problems

Periodization poses theoretical problems because any chronological scheme highlights some aspects of the past and obscures others. While a historian of gender might look for eras in which the relative status and power of women and men changed (the granting of suffrage to women, perhaps, or the emergence of patriarchal social relations in early agrarian societies), a historian of war might be more interested in technological changes that transformed military conflict (such as the use of gunpowder or the appearance of the first organized armies), while a historian of religion might look to the appearance of the so-called universal religions in the first millennium BCE. Different questions highlight different aspects of the past and generate different periodizations. To choose a periodization is to make some critical judgments about what is and what is not most important in human history. By focusing on a particular region, era, or topic, historians can avoid some of these challenges, but in world history, periodization requires judgments as to the most important changes across all societies on earth. Is there sufficient consensus among historians as to what those changes are? At present, the answer is probably no.

Organizational Problems

Periodization also poses severe organizational challenges. How can we find labels that can do justice to many different regions and societies, each with its own distinctive historical trajectory? The problem is peculiarly acute in world history because while neighboring regions or states may evolve in closely related ways, societies separated by large distances may often seem to have little in common. The modern history profession emerged in Europe, and many well-established schemes of periodization were designed to make sense of European history. This is true, for example, of the traditional division into ancient, medieval, and modern periods. Such labels make little sense outside of Europe, but they are so well established that they sometimes get used nevertheless. Similarly, Chinese historians have long used dynastic labels to provide a framework for historical writing, but these, too, are labels that mean little elsewhere. Is it possible to find labels that make sense for Africa as well as for the whole of Eurasia, the Americas, and the Pacific? On this question, too, there is currently no consensus among historians.

Ethical Problems

Periodization also poses ethical problems because it can so easily imply value judgments. School texts on European history have commonly used such labels as "Dark Ages," "Middle Ages," "Renaissance," "Scientific Revolution," and "Age of the Democratic Revolution." When used of entire historical periods, such labels were by no means neutral. They were generally used with the clear understanding that the Dark Ages were backward, that the Middle Ages were transitional, and that real progress towards modernity began with the Renaissance. Such schemes carry value judgments about different regions as well as different eras, because they implicitly compare the differing levels of "progress" of different regions. Until recently, it was commonly argued that, while Western societies had modernized, many other societies were stuck in earlier historical eras or stages and needed to catch up. Is it possible to construct a system of periodization that avoids imposing the values of one period or region on another? No system of periodization can satisfy all these different demands. Like historical writing in general, schemes of periodization reflect the biases and judgments of the era that produced them. They also reflect the questions being asked and the scale on which those questions are posed. This means that no single scheme will be appropriate for the many different scales on which historians can and do write about the past.

Schemes of Periodization

The simplest approach to periodization—one that is present in many creation stories—divides the past into two great eras. These can be thought of as the era of creation and the era of today (as in some Australian Aboriginal accounts), or the eras before and after "the fall" (as in the Genesis story in the Judaeo-Christian-Islamic tradition). Dualistic periodizations offer a powerful way of contrasting the present and the past, either to praise or condemn the contemporary era. Traces of such periodizations survive, even today, in dichotomous schemes such as those of modernization theory, with its stark contrasting of so-called modern and traditional societies.

However, most schemes of periodization are more complex, dividing human history into several major eras, each with subdivisions of its own. Dynastic histories weave their accounts of the past using the reign dates of major kings and emperors as their frame. Such accounts are present in Chinese dynastic histories and in the chronologies of Maya historiography. Dynastic histories often imply a cyclical view of the past, in which each era (like each ruler) passes through periods of strength and weakness. Historical accounts conceived within a more linear view of the past often take as their main framework a series of distinct eras, all of which may be seen as part of a larger, universal trajectory. Writing in the eighth century BCE, the Greek poet Hesiod described five great ages of history, beginning with a golden age, in which humans were contented and godlike, and passing through several stages of decline-the ages of silver, bronze, and heroes-and finally to the era of his own day, which Hesiod characterized as one of violence and stupidity.

Three Steps in the Evolution of Periodization Schemes

Jesuit Priest and Scientist Teihard de Chardin

Stage I: Cosmogenesis (5 billion years ago)

Stage II: Biogenesis (4 billion years ago)

Stage III: Anthropogenesis (4.5 million years ago)

Stage IV: Endomorphosis (40,000 years ago)

Lewis Henry Morgan (1877)

Stage I: Savagery (Fire, bow and arrow, pottery)

Stage II: Barbarism (Domestication of animals, smelting of iron, phonetic writing)

Stage III: Civilization: Alphabetic writing

Archaeologist V. Gorden Childe

Stage I: Paleolithic

Stage I: Neolithic

Stage III: Civilization (Life in cities in which writing of any kind is used)

Patterns of rise and fall have reappeared in more recent writings, such as in the work of Oswald Spengler (1880–1936) or Arnold Toynbee (1889–1975). Marxian historiography offered a combination of cyclical and linear chronologies, beginning with an era of simple perfection (the era of primitive communism), which was followed by stages characterized by increasing productivity and increasing inequality and exploitation. But the Marxist scheme culminated in a future that would resolve these contradictions by combining high productivity with a return to the egalitarianism of the first era.

Most modern attempts at large, synoptic histories have preferred schemes that are fundamentally linear. Such schemes have been greatly influenced by the work of archaeologists and anthropologists, for whom the problem of constructing a periodization covering the whole of human history was often more urgent than it was for historians, who normally focused on shorter periods of time. Because archaeologists, unlike historians, deal mainly with material artifacts, it was natural for them to construct their periodizations around aspects of material culture. The nineteenth-century Danish archaeologists Christian Thomsen (1788-1865) and Jens Worsaae (1821–1885) constructed a scheme comprising three ages—a Stone Age, a Bronze Age, and an Iron Age -that still has some influence within the study of prehistory. In the twentieth century, G. Gordon Childe (1892–1957) built on the Marxist insight that particular technologies imply distinctive lifeways and social structures to argue that the major turning points in human prehistory were the appearance of agriculture (the "Neolithic Revolution") and the appearance of cities and states (the "Urban Revolution"). Nineteenth-century anthropologists such as Lewis Henry Morgan (1818-1881) and Edward Tylor (1832-1917) offered parallel schemes in which different eras were distinguished by different social structures in a progressive movement from "savagery" to "barbarism" to "civilization."

In the late twentieth century, historians, anthropologists, and archaeologists became increasingly sensitive to the dangers of using schemes that imply easy value judgments. So, while most modern schemes of periodization retain a sense of directionality in history, they usually resist the assumption that directionality implies either progress or decline. On the other hand, most modern schemes of periodization at the largest scales still rely primarily on a combination of technological and sociological factors to distinguish between different eras. This is a tradition with roots going back to the earliest written histories. The Sumerian epic of Gilgamesh, which dates from the third millennium BCE, recognizes, in the contrast between the urban warrior hero Gilgamesh and his great friend Enkidu, who came from the wild lands beyond the city, that different technologies imply different ways of living, different systems of ethics, and different types of political and social action. Karl Marx (1818–1883) formalized this insight within the notion of a mode of production. The best justification for such an approach to the challenge of periodization is that fundamental technologies shape so many other aspects of human history, including living standards, demography, gender relations, political structures, and the pace and nature of historical change.

A Periodization for World History as a Whole

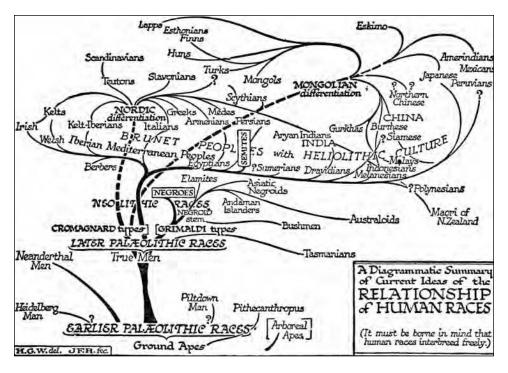
The scheme that follows is intended to provide a loose framework for discussing world history at the largest scales. It offers a three-part periodization for human history as a whole, with subordinate periodizations within each of those major periods, which may vary from region to region. This nested structure is, inevitably, an imperfect compromise between various different goals, but it reflects a broad consensus within contemporary writings on world history. At lower levels of generality, articles in this encyclopedia will adopt more specific periodizations that are appropriate for particular questions or regions.

Of the three major eras, the first is by far the longest, lasting for more than 95 percent of the time that humans have lived on Earth, while the modern era is the shortest, lasting just 250 years. On the other hand, populations were small in the foraging era, so that, measured by the number of human lives lived, the agrarian and modern eras loom larger. Perhaps 12 percent of the roughly 100 billion humans who have ever lived, lived during the foraging era, while 68 percent lived in the agrarian era and 20 percent in the modern era. Increasing life expectancies in the modern era mean that, measured by human years lived, the modern era looms even larger, accounting for almost 30 percent of all human years lived, while the agrarian era may have accounted for just over 60 percent and the foraging era for just under 10 percent.

This periodization tackles the central theoretical challenge of world history by taking as its framework three fundamental technological changes. These are the emergence of the first distinctively human societies, all of which relied on foraging for survival, the emergence of

Three Major Eras of World History				
Major Eras	Approximate Dates (before present [BP] and BCE/CE)	Subordinate Eras	Approximate Dates (before present [BP] and BCE/CE)	
The foraging era	250,000-10,000 вр	African origins	250,000-100,000 вр	
Societies mainly based on		Global migrations	100,000-10,000 вр	
foraging lifeways				
The agrarian era	8000 все–1750 се	Agrarian communities before cities	8000-3000 bce	
Societies mainly based on	(10,000-250 вр)	(later dates outside of Afro-Eurasia)	(10,000-5,000 вр)	
agrarian lifeways		Agrarian communities and the	3000 все-500 все	
		earliest cities and states (later		
		dates outside of Afro-Eurasia)		
		Agriculture, cities, and empires	500 все–1000 се	
		(later dates outside of Afro-Eurasia)		
		Agricultural societies on the eve	1000-1750	
		of the modern revolution		
The modern era	1750–today	The Industrial Revolution	1750-1914	
Societies mainly based on		Twentieth-century crisis	1914–1945	
modern industrial technologies		The contemporary era	1945–Today	

TABLE 1.



This evolutionary tree of the human races published in 1923 gives some idea of notions, since shown to be wrong, about the ascent of humans and the relationship between groups in different regions of the world.

most of this era, the histories of Afro-Eurasia, the Americas, and the Pacific world played out in completely separate arenas. While in parts of Eurasia, agricultural societies emerged as early as 10,000 years ago, in Africa and the Americas, all societies relied on foraging for

agriculture and of societies that depended mainly on agricultural production, and the emergence of modern, industrial societies. This scheme handles the organizational aspects of all periodization systems moderately well in its first and third eras. Before 10,000 years ago, it is reasonable to argue that all human societies relied on technologies that can be described, loosely, as forms of foraging, so that some useful generalizations can be made about all human societies. But it is also true that foraging societies survived in many parts of the world until modern times, so if we are to define this first era more precisely, we might say that it is the era in which all human societies depended on foraging for their survival. In the modern era, too, it is relatively easy to offer a global scheme of periodization because all parts of the world became interconnected and all have been subject to some of the same forces and influences. So we can define the modern era as the era in which the profound technological changes of the last two or three centuries transformed societies throughout the world. The secondary periodization within this era reflects a loose (but by no means universal) consensus on some of the most important transitions within the modern era.

The organizational challenge is most intractable in the agrarian era, from about 10,000 BP to about 250 BP. In this, the era that provides the subject matter for most historical writing, the world was at its most diverse, and no single label can adequately capture that diversity. For

several thousand years more, and in Australia agricultural societies did not exist until the modern era. The best way of defining this era, therefore, is to describe it as the era in which agriculture first began to have a significant impact on human societies in some parts of the world. But the huge differences in timing mean it is vital to opt for flexible subordinate periodizations within this large era. The scheme we have adopted implies the recognition of four broad phases in the history of agrarian societies. These phases occurred at different times in different regions. In the first, there existed agricultural communities, but no true cities and states. In the second, there existed cities and early forms of states and empires. The third phase is distinguished by the emergence of larger and more interconnected systems of cities and states. The fourth phase is defined retrospectively by the understanding that, between 1000 and 1750, the world was on the verge of a transition more revolutionary than any that had occurred in any previous era of human history.

The best way of solving the ethical problems posed by any scheme of periodization is simply to take great care with language and labeling. The labels used here are intended to imply no judgments as to the superiority or inferiority of different types of society or different eras of human history. On the other hand, this periodization clearly does imply a trajectory of some kind. On the largest scales, there can be little doubt that there is a directionality to human history. Foraging, agrarian, and modern societies have not appeared in a chronologically random jumble, but in a clear sequence. And that sequence has an underlying logic that reflects changing human relations with the environment. On large chronological scales, human technologies have changed so as to yield increasing amounts of energy, food, and other resources, which allowed human populations to increase. This, in turn, has given rise to larger and more complex communities, whose technologies and sheer numbers have given them many advantages whenever they came into contact with smaller communities with less productive technologies. There is a shape to human history, and that is precisely why a periodization scheme of some kind is so necessary.

David Christian

See also Human Evolution—Overview; Long Cycles; Periodization, Conceptions of

Further Reading

- Bentley, J. H. (1996). Cross-cultural interaction and periodization in world history. American Historical Review, 101, 749–756.
- Dunn, R. E. (Ed.). (2000). The new world history: A teacher's companion. Boston & New York: Bedford.
- Green, W. A. (1992). Periodization in European and world history. In *Journal of World History*, 3(1), 13–53.
- Livi-Bacci, M. (1992). A concise history of world population. Oxford, UK: Blackwell.
- Stearns, P. N. (1987). Periodization in world history teaching: Identifying the big changes. *The History Teacher*, 20, 561–580.

Periodization, Conceptions of

Periodization, the desire to make sense of human time by imposing epochs or eras upon the past, present, and future, has existed across time and cultures in global history. Categorizing human time into discrete periods makes sense of seemingly random past events and projects that coherence in a trajectory into the future. Many cultures have viewed human time in circular or He won't fly on the Balinese airline, Garuda, because he won't fly on any airline where the pilots believe in reincarnation. • Spalding Gray (1941–2004)

cyclic terms, periods of history running their course eventually to restart the cycle again; some cultures, particularly the Euro-American West, have viewed human time in linear terms, periods of history running toward an ultimate goal. In some schemes, history is viewed as a narrative of declension, each age worse than the one preceding it; in others, a narrative of ascent toward progress and improvement.

The Ancient World

In the third century BCE, the Chinese philosopher Tsou Yen (340–260? BCE) developed a cyclic model of history modeled on the seasonal changes of the annual year. *The Book of Rites* proposed three seasons in human history —the Age of Disorder, the Age of Righteousness, and the Age of Great Peace—which the Han commentators accepted in the *Annals of Spring and Summer*. This notion fell out of favor, only to be revived in modern times by K'ang Yu-wei (1858–1927 CE), for whom the cyclic theory of history was a central tenet of Confucianism.

On the analogy of its theology of human reincarnation, Hinduism proposed a cycle of four stages (yugas), found in the texts of the epic Mahabarata and of the Puranas. The first age, the Krita Yuga, is the golden age of human virtue and well-being; the second, Treta Yuga, a period of declining virtue; the third, Dvapara Yuga, a time of disease and sin; the fourth, Kali Yuga, a time of human suffering and religious neglect (in which we are said to live today). The Kali Yuga will end in the destruction of the world and its reincarnation into a new Krita Yuga.

The ancient Greeks tended to divide time into two: the mythic prehistory of the gods and the history of humans. In *Works and Days*, Hesiod (flourished c. 800 BCE) proposed a further narrative of declension and conceived of human time in five eras: the Golden Age, ruled by Kronos, in which humans and gods dwelt together without toil or pain; followed by the Silver Age, ruled by Zeus, during which humans began to neglect duties to the gods and to fellow humans; the third, the Bronze Age, a period of brutality; fourth, the Heroic Age, a time of great men and deeds; and finally the present Iron Age, a time of selfish individualism. The Roman poet Ovid (43 BCE–17 CE) adopted this scheme (minus the Heroic Age) in

his epic poem *Metamorphoses*, giving it much wider circulation in Europe's late classical and medieval periods.

Ironically, the view of history as linear rather than cyclic and the notion of history as possessing a trajectory or goal that has come to dominate the modern world would emerge not from the great civilizations of China, India, Greece, or Rome, but from a Palestinian backwater of the eastern Mediterranean, from the Jewish people and their Christian and Islamic heirs. History, the Jewish prophets came to believe, was teleological, that is, had a goal, toward which Yahweh directed them through the events of history; sacred kingship would be restored to Israel in the person of an anointed, a messiah. The final messianic age would be a time of earthly peace and wellbeing, a kind of return to the Garden of Eden before Adam and Eve's fall. In the interim, Hebrew Scriptures narrated implied stages: from Adam to Abraham, from Abraham to Moses, from Moses to the Babylonian exile. One of the Scriptures emerging after the exile, the apocalyptic book of Daniel (second century BCE), proposes an additional and more recent series of historical stages as well as stages yet to come. Through symbolic language and images (for example, Jewish history compressed into seventy weeks, or eastern imperial history configured as parts of a statue made successively of gold, silver, iron, and clay), the text imagines the sequential fall of empires hostile to the Jews and the rise of the messiah.

Conceived in this Jewish matrix, early Christianity accepted the linear messianic view of history. For Christians, the messianic age had begun with God's incarnation in Jesus of Nazareth, the Christ. At the same time, Christians awaited the return of Christ at a future time when the messianic reign of God, a millennium of peace and prosperity, would occur in full. The little-read prologue to the Gospel of Matthew, an invented "genealogy" of Jesus of Nazareth, neatly divides salvation history into three stages: fourteen generations from Abraham to King David, fourteen generations from David to the Babylonian exile, and fourteen generations from the exile to Jesus, the messiah. In the Letter to the Romans, St. Paul demarcated three stages of this history: from Adam to Moses, a time of sin without law; from Moses to the time of Jesus, the period of the law; from the time of Jesus of Nazareth, a final period of liberation from the law and from sin. Accordingly, the Christian calendar, which in the modern colonial and postcolonial eras has come to dominate global communication, begins with the birth of Jesus.

If for Jews the turning points of history occurred in the covenant with Abraham and its renewal with Moses on Mount Sinai, and for Christians in the birth of Jesus (the first year in the common western calendar first developed by Dionysius Exiguus [c. 500–c. 560 CE] in the sixth century CE), for Moslems the turning point of history is the Hegira (migration) of Muhammad (c. 570–632 CE) from Medina to Mecca in 622 CE, the first month of the first year in the Islamic calendar. Islam views Muhammad as the last and the greatest of the prophets among those of the People of the Book (the followers, successively, of Moses, Jesus, and Muhammad); thus the third Islamic age is, in one sense, the last age.

Medieval, Renaissance, and Early Modern Periods

Historiography in the European Middle Ages, the Renaissance, and the early modern period solidified the notion of history as possessing a goal with intermediary stages along its progress toward that goal and introduced a variety of schemes detailing the epochs of time. According to Collingwood (1946), western Christian concepts of historical time are necessarily universalist (that is, applying to all humans, not just to Christians), providentialist (directed by divine forces outside of human control), apocalyptic (having a goal that ends history), and periodized (advancing through discrete stages or epochs), features that even later western secular historiography would in some measure preserve. Christian historiographers, moreover, accepted the biblical accounts as historically true.

In his theological reflection on history, *The City of God*, St. Augustine (354–430 CE) rejected classical cyclical views of human time and articulated the uniquely providentialist and apocalyptic Christian view of history, which he divided into seven stages according to the analogy of the six days of creation and the seventh day of rest or the six periods between the opening of the first seal

St. Augustine on the Millennium

Now the thousand years may be understood in two ways, so far as occurs to me: either because these things happen in the sixth thousand of years or sixth millennium (the latter part of which is now passing), as if during the sixth day, which is to be followed by a Sabbath which has no evening, the endless rest of the saints, so that, speaking of a part under the name of the whole, he calls the last part of the millennium—the part, that is, which had yet to expire before the end of the world—a thousand years; or he used the thousand years as an equivalent for the whole duration of this world, employing the number of perfection to mark the fullness of time.

and the seventh seal in the book of Revelation: the first stage from Adam to the great flood; the second, from the flood to Abraham; the third, from Abraham to David; the fourth, from David to the Babylonian captivity; the fifth, from the captivity to the birth of Christ; the sixth, the present age until the Second Coming of Christ; and the last, the age to come, when the saints will rest in the millennial kingdom of God. This scheme was also analogously based on the classical concept of ages of man from infancy to old age. These stages were later adopted by St. Isidore of Seville (c. 560–636) in *Etymologies* and St. Bede (672 or 673–35) in *The Reckoning of Time*, works that, like Augustine's, were widely circulated throughout the Middle Ages.

Perhaps because Christian theology is trinitarian (believing in three persons—Father, Son, and Holy Spirit in one God), tripartite historical schemes also appeared in the Middle Ages, particularly in the twelfth century. Rupert of Deutz (c. 1075–1129) postulated an age before the Mosaic law, an age under the law, and an age of grace; Hugh of St. Victor (1096–1141), the Age of Natural Law, the Age of Written Law, and the Age of Grace; and Joachim of Fiore (c. 1130 or 1135–1201 or 1202), the Age of the Father (the Old Testament period), the Age of the Son (the period of the New Testament and the establishment of the church in the centuries following), and the Age of the Spirit (which he believed to be emerging in his own time).

The division of human time into "ancient" or "classical," "medieval," and "Renaissance," which are used here, might be said to be the invention of the Italian humanists who invented the "Renaissance" in an increasingly secular, rather than theistic, view of history. Historians had long been preoccupied with the rise and fall of empires, none more significant than the Roman Empire, which many Christian thinkers after its decline viewed as nonetheless continuous, translated first to Byzantium in the east, and later translated to the Frankish and Germanic Holy Roman Empire in the north. Fifteenth- and sixteenth-century Italian humanists, however, rejected this continuity, positing instead that they themselves were presiding over the rebirth of a phenomenon that had died with the ancient world, interrupted by an intermediary age of intellectual and artistic darkness. Thus they gave birth to another tripartite division of history: the Ancient Ages, the Dark Ages (a middle age or medi aevum), and the Rebirth (or Renaissance) of the Ancient Ages.

The Modern World

Historiography from the eighteenth-century Enlightenment until our own time has tended to be scrupulously secular, rejecting theistic claims to a providential succession of stages leading toward a divinely ordained end. Yet modern schemes of human time have still preserved some of the qualities that Collingwood claimed for Christian historiography. They tend to be universalist, claiming to offer a master narrative of the direction of all human history. Although not theistically providentialist, they tend to replace God with other external forces controlling human destiny. They are often apocalyptic or millennialist, positing an end *to* and an end *of* history. Finally, they are just as prone to periodization.

Giambattista Vico (1668–1744) proposed a cyclic view of civilization in three stages: the Age of Gods (primitive, superstitious prehistory), the Age of Heroes (with the emergence of writing and established political structures), and the Age of Men (with the establishment of commonwealths based on reason and law). His ideas were revived later in the nineteenth century by the French historian Jules Michelet (1798–1874). Influenced by the utopian ideals of Condorcet and Saint-Simon, Auguste Comte (1798–1857) developed a tripartite linear scheme of human history, which moved from the Theological (religious) Era through the Metaphysical (philosophical) Era to the Positive (scientific) Era.

Perhaps the most influential modern schematizers of human time were Karl Marx (1818-1883) and Friedrich Engels (1820–1895), for whom the engine of historical change was economic and the trajectory of history was determined. In their view, human civilization emerged from an idyllic form of tribal communism into a succession of oppressive forms of the control of property and the means of production-the three successive stages of ancient slavery, medieval feudalism, and modern capitalism-which would eventually lead to the global revolution that would establish the workers' paradise of communist socialism. With the economic engine exhausted, "history" would end. Since the fall of the Soviet Union and its East European satellites, postmodern western neoconservatives have appropriated this narrative, claiming an ironic victory for capitalism, the end of ideology, and, in Francis Fukuyama's title from a popular post-Cold War book, The End of History (the full title is The End of History and the Last Man [1993]).

Particularly since the mid-twentieth century, professional historians have been less inclined toward grand (or grandiose) universal theories of history with their schemes of discrete stages. The increasing professionalization of the discipline of historical studies since the nineteenth century has meant that professional historians increasingly specialize in a geographic area and historical period, defined more for academic purposes than for theoretical ones. Thus students are familiar with (and their professors specialize in) such fields as colonial New England, pre-Columbian Aztec society, samurai Japan, Islamic Mali, or Victorian England.

Future Prospects

For centuries, chroniclers and historiographers tended to define historical periods from the perspective of political power (such as dynasties of ruling families or the reigns of monarchs). Among historians of the late twentieth and twenty-first centuries, however, the phenomenon of periodization has become problematic in two respects. First, it tends to make global judgments about local histories. What, for example, does it mean to characterize as "medieval" the period in Japanese history in which Murasaki Shikibu (978-1026) wrote the eleventh-century novel The Tale of Genji? Even to describe sixteenth-century England as "Renaissance" England ignores the fact that the island never possessed a classical culture that could be reborn. Second, the very artificiality of periodization (if not arbitrariness) suggests that it is always an ideological formation at the service of an implicit theory of history. For example, many scholars today prefer the term "early modern" in lieu of "late medieval" or "Renaissance," which suggests their repositioning the period as looking forward more than looking backward, but also a reflection of the self-consciousness of the "modern." The rise of structuralist approaches to studying history (which examine structural institutions under specific material conditions) will likely further question periodization. Nonetheless, historians, teachers, academic departments, and popular culture will no doubt continue to employ and redefine local and global histories in terms of periods. Finally, the revival of both Christian and Islamic fundamentalisms (the former with an explicit dispensationalist or providentialist view of the stages of human time) will certainly revive some traditional schemes of historical development.

Thomas L. Long

See also Periodization—Overview

Further Reading

- Borst, A. (1993). The ordering of time: From the ancient computus to the modern computer. Chicago: University of Chicago Press.
- Breisach, E. (1983). *Historiography: Ancient, medieval, and modern*. Chicago: University of Chicago Press.
- Collingwood, R. G. (1946). The idea of history. Oxford, UK: Clarendon. Esposito, J. L. (1984). The transcendence of history: Essays on the evolution of historical consciousness. Athens: Ohio University Press.
- Fitzsimons, M. A., Pundt, A. G., & Nowell, C. E. (1954). The development of historiography. Harrisburg, PA: Stackpole.
- Gerhard, D. (1956). Periodization in European history. American Historical Review, 61(4), 900–913.
- Gerhard, D. (1973–1974). Periodization in history. Dictionary of the history of ideas (Vol. 3, pp. 476–81). New York: Charles Scribner's Sons.
- Economic and Social History Department, University of Leicester. (2003). Historiography and the writing of history: Sources and methods:

Module EH 2001. Retrieved March 25, 2004, from http://www.le.ac.uk/esh/teach/ug/modules/eh2001/chapter7.pdf

- Fukuyama, F. (1993). The end of history and the last man. New York: Avon.
- Reinhard, W. (1997). The idea of early modern history. In M. Bentley (Ed.), *Companion to historiography* (pp. 281–92). London: Routledge.

Sullivan, J. E. (1970). Prophets of the West: An introduction to the philosophy of history. New York: Holt, Rinehart, & Winston.

Widgery, A. G. (1961). Interpretations of history: Confucius to Toynbee. London: George Allen & Unwin.

Persian Empire

The Persian (or Achaemenid) empire (550–330 BCE) was established in 550 BCE by Cyrus II (c. 585–c. 529 BCE). It included the Plateau of Iran, northern India, Central Asia, Arabia, Mesopotamia, the Caucauses, Syria, Palestine, Anatolia (Asian Turkey), Egypt, Nubia, Cyprus, and parts of northern Hellas (Greece). The last Persian king, Darius III (reigned 336–330 BCE), was defeated by Alexander of Macedon in 330 BCE. The Persian empire brought a period of peace to the areas in its sway for two centuries.

The Rise of the Persians

The Persians were a confederation of tribes who, along with other Iranian-speaking peoples, had moved into the Plateau of Iran in the first millennium BCE. They established their stronghold in such locations as Anshan in the southwestern portion of the plateau, in what came to be known as Persis or Fars province. Cyrus II was able to unite the Persian tribes by 559 BCE and became king of Anshan. A decade later, in 550 BCE, he was able to defeat the last king of the Medes, Astyages (reigned c. 584-550 BCE). He then moved on to Anatolia and defeated King Croesus (reigned c. 560-546 BCE) of Lydia, taking his capital, Sardis, in 547–546 BCE. This was followed by the conquest of Mesopotamia and the city of Babylon in 539 BCE. Upon entering, Cyrus honored the Babylonian god Marduk and paid for the rebuilding of the temple of Marduk. He also freed the Hebrews who had been held captive in Babylon and paid for the rebuilding of their temple in Jerusalem, for which the Old Testament remembers him and the Persians kindly (Isaiah 35:40– 55; Ezra 1). He also left behind a firsthand account in the Akkadian language of his tolerance—the "Cyrus Cylinder." By the time of his death at the hands of nomadic Saka people around 529 _{BCE}, his empire stretched all the way from the Plateau of Iran to the Mediterranean Sea.

Cyrus's son, Cambyses II (reigned 529–522 BCE), is known for conquering Egypt and incorporating it into the Persian empire in 525 BCE. Just as his father had been respectful of the Babylonian deities, Cambyses respected Egyptian ceremonies and religion and was accepted as the pharaoh of the twenty-sixth dynasty of the New Kingdom. From Egypt the Persian forces made inroads into Libya, another force went southward from Egypt toward Ethiopia, and although the Persians were unsuccessful in their military campaign, through negotiations they were able to draw that region into their empire. Upon the death of Cambyses, his brother Bardiya (according to some accounts) or an imposter impersonating Bardiya (according to other accounts) came to the throne. Bardiya-or his impersonator-forgave taxes and initiated a land redistribution. It was not long, however, before Darius I (reigned 522-486 BCE), who was married to Cyrus's daughter, staged a coup de'état with the backing of the Persian nobility and brought his line of the family into dominance.

Darius I and the Organization of the Empire

Darius is responsible for the organization of the Achaemenid Persian empire. He unified the empire in many ways. For example, he created a uniform system of measurement and weights throughout the empire for better trade and economic activity; Darius also instituted a unified monetary system; gold coins called darics became the recognized coinage in the empire. To govern his unified realm, Darius divided the empire into twentythree administrative units known as satrapies, each to be overseen by a provincial governor, or satrap.

His public works projects included the building of a royal road, which stretched some 2,560 kilometers from

The Inscription of Darius on the Rock of Behistun

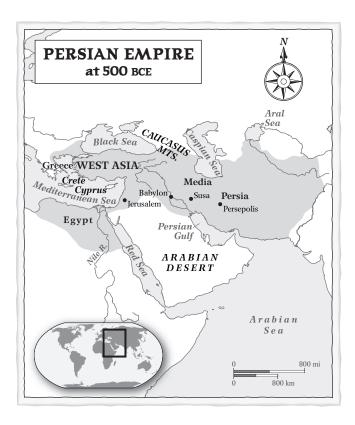
The inscription of Persian ruler Darius (written c. 520 BCE) on a rock in Behistun recounts his exploits and triumphs in coming to power. The extract below contains the first ten items of text. All told, there are five columns, containing seventy-six points.

- 1 I am Darius, the great king, the king of kings, the king of Persia, the king of the provinces, the son of Hystaspes, the grandson of Arsames, the Achaemenian.
- 2 (Thus) saith Darius, the king: My father is Hystaspes; the father of Hystaspes was Arsames; the father of Arsames was Ariyaramnes; the father of Ariyaramnes was [Teispes]: the father of Teispes was Achaemenes.
- 3 (Thus) saith Darius, the king: On that account are we called Achaemenians; from antiquity are we descended; from antiquity hath our race been kings.
- 4 (Thus) saith Darius, the king: Eight of my race were kings before (me); I am the ninth. In two lines have we been kings.
- 5 (Thus) saith Darius, the king: By the grace of Auramazda am I king; Auramazda hath granted me the kingdom.
- 6 (Thus) saith Darius, the king: These are the provinces which are subject unto me, and by the grace of Auramazda became I king of them: Persia, Susiana, Babylonia, Assyria, Arabia, Egypt, the (Islands) of the Sea, Spards, Ionia, [Media], Armenia, Cappadocia, Parthia, Drangiana, Aria, Chorasmia, Bactria, Sogdiana, Gandara, Scythia, Sattagydia, Arachosia and Maka; twenty-three lands in all.

- 7 (Thus) saith Darius, the king: These are the provinces which are subject unto me; by the grace of Auramazda they became subject unto me; they brought tribute unto me. Whatsoever commands have been laid on them by me, by night or by day, have been performed by them.
- 8 (Thus) saith Darius, the king: Within these lands, whosoever was a [friend], him have I surely protected; whosoever was hostile, him have I utterly destroyed. By the grace of Auramazda these lands have conformed to my decrees; even as it was commanded unto them by me, so it was done.
- 9 (Thus) saith Darius, the king: Auramazda hath granted unto me this empire. Auramazda brought me help, until I gained this empire; by the grace of Auramazda do I hold this empire.
- 10 (Thus) saith Darius, the king: This is what was done by me after I became king. He who was named Cambyses, the son of Cyrus, one of our race, was king here before me. That Cambyses had a brouther, Smerdis by name, of the same mother and the same father as Cambyses. Afterwards Cambyses slew this Smerdis. When Cambyses slew Smerdis, it was not known unto the people that Smerdis was slain. Thereupon Cambyses went into Egypt. When Cambyses had departed into Egypt, the people became hostile, and the lie multiplied in the land, even in Persia, as in Media, and in the other provinces.

Source: King, L. W., & Thompson, R. C. (1907). The sculptures and inscription of Behistun (p. 1). London: Trustees of the British Museum.

his winter residence in Susa (southwestern Iran) to Sardis; it was just one of the many roads that were constructed in the Achaemenid period. Darius also instituted a postal system along the royal road; through a system of 111 stops and hostels, men and fresh horses transmitted royal decrees and proclamations. Another major public works program was the building of a new capital, known to the Greeks as Persepolis (City of the Persians). Darius brought together craftsmen, engineers, and materials from all the satrapies to symbolize the coming together of all parts and peoples of the empire. Persepolis was a ceremonial capital, at which during the Persian New Year Darius received guests and ambassadors, who came to pay homage and tribute to the King of Kings. Darius also finished an Egyptian project, the building of a Suez canal that connected the Mediterranean to the Red Sea more than two thousand years before the British accomplished the same task in 1866. He then set out to



make known to the people under what circumstances he had come to power—his version was that he had wrested the throne from an imposter who was impersonating Bardiya—leaving us a long cuneiform inscription (the Bisitun inscription) in the modern-day province of Kermanshah in northwestern Iran. (That inscription, when deciphered in the 1840s, made possible the translation of Assyrian and Babylonian records.) He then had copies of this inscription translated into different languages of the empire on parchment and leather and sent to the different areas to be read to his subjects.

The Greco-Persian Wars

During the rule of Darius I, the Ionian Greeks revolted against Persian rule and asked aid from the Athenians on the Greek mainland. This action started off the long period of warfare known as the Greco-Persian Wars. Darius's son, Xerxes I (reigned 486–465 BCE) had to retake Egypt, which had revolted, and then set out to conquer Greece in 480 BCE. While he was successful initially, he was later defeated at the battles of Thermopylae, Salamis, and the Plataea. In order to destabilize the Greeks, the Persians then developed the strategy of using the Greek city-state rivalries to their advantage, now supporting one side, now the other. It is important to note that while for the Greeks the battle with the Persians was a threat to their very existence, for the Persians it was only a minor affair that was hardly worthy of being mentioned in the imperial inscriptions. The Persians never sent the bulk of their force to battle the Greek city-states, and the number supplied by the Greek authors are exaggerated.

Later Achaemenid Rule

The rule of Xerxes ushered in the later part of Achaemenid Persian empire, during which religious toleration began to wither away. Xerxes I was killed in 465 BCE; he was succeeded by Artaxerxes, who reigned until 424 BCE. He was followed by Darius II (423–404 BCE), and Artaxerxes II, also called Mnemon (404–359 BCE), who had the longest rule of any Persian ruler.

It at this time that we hear of two important women of the court, Stateira and Parysatis, who attempted to exert influence on the king. Artaxerxes II's wife, Atossa, also was to become quite powerful. What we hear about the decadence and the decline of power in Persia from the Greek sources is probably biased-the result of Greek historiography. The reign of Artaxerxes III Ochus (reigned 350–338 BCE) was dominated by the suppression of revolts and the reconquest of Egypt and the conquest of Phoenicia and Cyprus. The last Achaemenid king of kings was Darius III (reigned 336-330 BCE). It was at this time that Philip II of Macedon (reigned 359-336 BCE) conquered the Greek city-states. His military innovations greatly improved the Macedonian (and then Greek) military, and under the command of Alexander of Macedon (reigned 336–323 BCE), they became a potent force. Alexander is said to have wanted to take revenge for what the Persians had done in Greece a century earlier. He was able to defeat the Persian forces at three decisive battles at Granicus, Issus, and Gaugamela. Darius III fled to eastern Iran and was murdered there by his own countrymen.

Persian Society

The basic unit of the Persian family was known as *tauma*. Several *taumas* formed a clan, and a conglomeration of clans formed the Persian tribe. At the court the king of kings reigned supreme. An important office below the king was the chiliarch, the go-between for the king of kings and those who wanted to seek an audience with him. Then there were the royal princes who lived at the court who were from the clan. The elite of the Achaemenid Persian society was the Persian and the Median nobility, and royal princes were granted a special position. Part of the warrior class of the Iranians, they were exempt from paying taxes, and many served as commanders of the army and the cavalry. The king possessed a special force, ten thousand men strong, known as the Immortals, dedicated to his protection. These Persian royal princes along with the king were the elite rulers. The royal women lived in the private quarter or harem and were protected by eunuchs. They traveled with the king and the nobility in battle and were allowed to own property.

Slavery was a fact of life. Slaves worked mainly as laborers, both on land as harvesters and as manual workers. However, they were paid for their labor when they were working on the land of the Persian nobility and to a lesser extent on the land of small farmers.

Zoroastrianism (Mazdaism) was the dominant religion of the Persians, and Zoroastrian priests (magi) memorized the sacred hymns and kept the rituals alive. The magi are believed to have been a Median tribe who became the religious doctors of the empire. Darius I mentions the great deity Ahura Mazda more than sixty times in his Bisitun inscription alone. Later on the Iranian deities Mithra and Anahita come to be mentioned and honored by the kings as frequently as Ahura Mazda.

For the most part, the Achaemenid Persians were quite tolerant of other religions. Cyrus II paid homage to the Hebrew god Yaweh and to the Babylonian god Marduk. Economic tablets from Persepolis reveal that the state allotted food for non-Zoroastrian sacrifices. Thus, it appears that although the Achaemenid Persians honored Ahura Mazda at their capital and in their homeland, they did not proselytize.

Significance of the Persian Empire

With the creation of the Persian empire—the largest empire the world had yet seen—in the sixth century BCE, for the first time three of the four early major river civilizations (those of Indus, Tigris-Euphrates, and Nile) were unified, and their three civilizations brought into contact with one another. This resulted in the exchange of ideas. It also brought about a period of peace (Pax Persica) in those portions of the world controlled by the Persians for two centuries—something that had not been experienced in the past. Although not remembered fondly by contemporary Greeks, the Persians are remembered with respect and admiration by contemporary Hebrews and Mesopotamians.

Touraj Daryaee

See also Cyrus the Great; Macedonian Empire; Mesopotamia

Further Reading

- Boyce, M. (1982). A history of Zoroastrianism: Vol 2. Zoroastrianism under the Achaemenians. Leiden, Netherlands: Brill.
- Dandamaev, M. A. (1989). A political history of the Achaemenid empire (W. J. Vogelsang, Trans.). Leiden, Netherlands: Brill.
- Dandamaev, M. A., & Lukonin, V. G. (1989). The culture and social institutions of ancient Iran. Cambridge, UK: Cambridge University Press.
- Frye, R. N. (1993). Heritage of Persia. Costa Mesa, CA: Mazda.
- Frye, R. N. (1984). The history of ancient Iran. Munich, Germany: C. H. Beck.
- Gershevitch, I. (Ed.). (1979). The Cambridge history of Iran: Vol 2. The Median and the Achaemenian periods. Cambridge, UK: Cambridge University Press.
- Root, M. C. (1979). The king and kingship in Achaemenid art: Essays on the creation of a iconography of empire. Louvain, Belgium: Peters.
- Schmitt, R. (1991). The Bisutun inscription. London: Corpus Inscriptionum Iranicarum.
- Stronach, D. (1978). Pasargadae. Oxford, UK: Oxford University Press.Vogelsang, W. (1992). The rise and organisation of the Achaemenid empire: The eastern Iranian evidence. Leiden, Netherlands: Brill.
- Wiesehöfer, J. (1996). Ancient Persia. London & New York: I. B. Tauris.

Peter the Great

(1672–1725) Russian czar

Peter I (czar of Russia 1682–1725) was a modernizer who inspired Russia's rise as a major world power. The son of Czar Alexis I (reigned 1645–1676), Peter ruled jointly with his elder half-brother Ivan until the latter's death in 1696. During the regency of their sister Sophia (1682–1689), Peter pursued hobbies that informed his later reforms, learning to sail and drilling his "play" regiments. In 1686 Russia joined the Holy League against Turkey and in 1697–1698, seeking aid for that war, Peter became the first Russian ruler to visit western Europe. For Peter it was also a voyage of self-education. His experience of Western cultures prompted him to force his nobles to shave off their beards (attributes of piety for Orthodox Christians) and adopt Western dress.

Following peace with the Turks, in 1700 Peter embarked upon the Great Northern War with Sweden. After early defeats, victory at Poltava in Ukraine in 1709 freed him to capture Sweden's eastern Baltic ports. In 1711 Russia was defeated by the Turks, but a lenient settlement allowed Peter to pursue the Swedish war to a successful conclusion in the Treaty of Nystad (1721). He accepted the titles Emperor, the Great, and Father of the Fatherland.

War was a determining factor in Peter's reforms. He improved the army and founded a fleet, using foreign technical expertise. His goal was to train Russians in new skills and develop private enterprise, but the state remained the chief producer and customer. Peter's government reforms aimed to improve administrative efficiency. In 1711 he founded the senate, in 1717–1720 new government departments known as colleges, and in the 1700s–1710s organs of provincial government based on Swedish models. To rationalize and improve the military and civil service he created the Table of Ranks (1722), comprising a ladder of fourteen grades. Men from the hereditary elite continued to enjoy prominence, although some newcomers made their fortunes, most famously Peter's favorite Aleksandr Menshikov (c. 1670–1729).

Peter successfully established technical schools, such as the Moscow School of Mathematics and Navigation (1701), but new elementary schools (1714) generally failed to attract pupils. The Academy of Sciences (founded 1725), initially staffed entirely by foreigners, was his major achievement in this field. The Orthodox Church also ran schools. In 1721 Peter replaced the patriarchate (the last patriarch died in 1700) with a state-monitored committee of clergymen called the Holy Synod to run the church. He restricted entry into monasteries and requisitioned church funds for the war effort.

In 1703 Peter founded Saint Petersburg on former Swedish territory, as a base for the Baltic fleet and a port for foreign trade. From about 1712 it replaced Moscow as the capital. Saint Petersburg became Russia's "window on Europe." Its main buildings were designed by foreign architects and its inhabitants had to follow European fashions. In the seventeenth century upper-class Russian women had lived in semiseclusion; Peter now forced them to socialize with men. Many Russians, however, resented being uprooted from Moscow to these alien surroundings.

Peter was a practical man. He studied many crafts, including ship-building, wood-turning, and dentistry. He began his army and naval careers from the lowest ranks as an example to others. But this man with a common touch remained an absolute ruler with an ambitious vision: to make Russia the equal of other European nations and to win their respect. He faced serious problems. More than 90 percent of his subjects were peasants and half of these were serfs. Peter had to extend and intensify serfdom to meet the demand for army recruits, labor, and tax revenues. The nobles, too, found lifelong service burdensome. They had no corporate rights or institutions and they were subject to Peter's numerous regulations, devised "in order that everyone knows his duties and no-one excuses himself on the grounds of ignorance"-as it was stated in many edicts. These principles extended to Peter's heir, Alexis Petrovich (1690-1718), the son of his first marriage. Alexis opposed many of his father's ideas and in 1718 he was condemned to death for treason. In 1722 Peter duly issued a law that required the reigning monarch to nominate an heir, to reduce the risk of an "unworthy" successor. However, Peter failed to make a nomination. He was succeeded by his widow, Catherine I (reigned 1725-1727), a Livonian peasant whom he married in 1712.

An enduring view of Peter the Great is that he singlehandedly transformed Russia from a backward fringe nation into a major modern power, even though some of his policies originated with his predecessors. At 201 centimeters tall, he was larger than life. Both Lenin and

Hindu pilgrims entering the Shri Ranganath Temple in Vrindavan, India.

Stalin admired Peter for "accelerating" Russia's economic and military development. Opinions are divided about the "balance sheet" of his activities, however. Critics question the heavy cost of his schemes, his use of force, the dangers of excessive imitation, and the split he created between a westernized elite and the peasant masses. He remains a controversial figure in Russia today.

Lindsey Hughes

See also Russian-Soviet Empire

Further Reading

Anderson, M. S. (1995). Peter the Great. London: Longman.

- Anisimov, E. V. (1993). Progress through coercion: The reforms of Peter the Great. New York: M. E. Sharpe.
- Bushkovitch, P. (2001). Peter the Great: The struggle for power, 1671– 1725. Cambridge, UK: Cambridge University Press.
- Cracraft, J. (2003). *The revolution of Peter the Great*. Cambridge, MA: Harvard University Press.
- Hughes, L. A. J. (1998). *Russia in the age of Peter the Great*. New Haven, CT: Yale University Press.

Pilgrimage

The word *pilgrimage* is derived from the Latin words *per* (meaning "through") and *ager* (meaning "field" or "land"). People usually think of pilgrimage as involving a journey—made either alone or in a group—to and from a sacred site. Pilgrims often perform rituals not only at the sacred site itself, but also at the beginning and end of the journey. In addition, pilgrims may visit other holy places during the course of the journey.

Motivations for pilgrimage can include a desire for divine healing, penance for a wrong committed, thanks for a prayer answered, fulfilment of a religious injunction, or some combination of these motivations. The fact that pilgrimage occurs, in some form, in so many societies makes studying this phenomenon fascinating but difficult.

Pilgrimage in the Classical World

No single word in Greek or Latin specifically described travel to a holy destination, but festivals brought together



people from scattered settlements both to celebrate the gods and to engage in trade. The numerous shrines of the Hellenic (Greek) world illustrated a great variety of possible reasons to travel. The frieze (a sculptured or richly ornamented band) of the famous Parthenon in Athens commemorates the Great Panathenaea, an event celebrated every four years and aimed at achieving a union of all Athenians. Epidauros provided a place for the god Apollo and his son Asklepios to cure the sick. Delphi delivered prophecies through the medium of a priestess. At Olympia the festival of Zeus was celebrated with sporting competitions every four years-an event echoed in the contemporary games, which have taken on global significance in their revived form. Wealthier people in particular had the resources to travel, and pilgrimage also provided one of the few opportunities for women to travel outside their home cities. Roman patterns of pilgrimage were often modeled on Hellenic precedents, with numerous gods celebrated in shrines of greater or lesser size, but with few written doctrines or rules being drawn upon.

Pilgrimage in the World Religions

Pilgrimage is performed in all of the great religions and is usually—unlike its position in the classical world provided with a justification and model in sacred texts. The degree to which pilgrimage is seen as obligatory varies. Islam is the most prescriptive faith. Every Muslim

The Hajj (Muslim Pilgrimage to Mecca)

The hajj, or pilgrimage to Mecca, is one of the five pillars of Islam. The following description of Muslim Kurd pilgrims in Iraq shows how making the hajj influences one's status in the community.

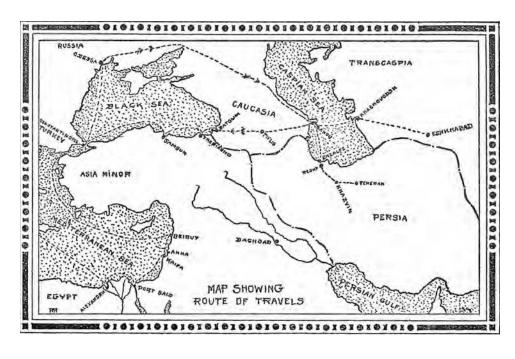
Another requirement is the duty of pilgrimage to Mecca at least once during the believer's lifetime. In spite of the high cost and the arduous character of the journey, a surprising number of persons in the Rowanduz district have made the trip, and are entitled to call themselves hajji or "pilgrim." Three men from the town went in 1950, and the wealthy merchants, such as Hajji Ibrahim and Hajji Muhammad Amin, who have completed the task have been mentioned. The return of pilgrims is an event of great importance in Rowanduz, and a crowd gathers to greet them at Kawlokan below the town. The pilgrims are escorted from the bus to their homes, accompanied by the music of drum, flute, and tambourine. Banquets are held for them, and each is expected to give a detailed account of his journey. They return with many souvenirs, such as rosaries, which are distributed to relatives and friends. A pilgrim commands a certain amount of public respect, and persons often stipulate sums in their wills for another to make the pilgrimage in their name. It is interesting that wealthy commoners can afford this undertaking, while many mullas or priests are rarely able to realize it. Chieftains or members of the government elite who are pilgrims are comparatively few in number. Hajji Muhammad 'Ali Agha of Jindian made the pilgrimage to avoid the police. Few of the aristocrats or officials in Rowanduz itself could claim the distinction.

Source: Masters, W. A. (1953). *Rowanduz: A Kurdish administrative and mercantile center* (pp. 303–304). Doctoral dissertation. Ann Arbor: University of Michigan.

is required to perform the hajj (pilgrimage to the holy city of Mecca in Saudi Arabia) at least once unless prevented by illness or lack of economic resources. The binding nature of the hajj is combined with other features that distinguish it from other activities. Only Muslims are allowed to enter the holy city; the timing of the pilgrimage is fixed at certain days within the twelfth month of the Muslim year; and pilgrims, dressed in two sheets of unsown cloth or plain dresses, must perform a predetermined sequence of ritual actions, including walking seven times around the Kaaba, the cube-shaped stone building in the court of the Great Mosque.

Just as the practices of the hajj developed out of earlier traditions already extant in the Arabian Peninsula of the seventh century CE, so Islam emerged within a wider sacred landscape already occupied by Judeo-Christian religious assumptions and influences. The Prophet Muhammad (c. 570-c. 632 CE) regarded Jerusalem as sacred, and the seventh-century Dome of the Rockeven today an object of Muslim pilgrimage-was constructed on the site of the former Jewish Temple and resting place of the Ark of the Covenant in Jerusalem. The hajj had some parallels with the *haggim* of Judaism, the ancient pilgrimage feasts involving the convergence of the Israelites on Jerusalem. (The Hebrew term hag implies the actions of turning around and dancing.) However, such feasts also expressed specific aspects of Jewish history. Passover, the oldest, celebrated deliverance from servitude in Egypt. Tabernacles was a feast that involved the construction of temporary shelters and commemorated the forty years spent by the Jews in the wilderness. Shavuot (Weeks) was a harvest festival that also marked the giving of the Ten Commandments to Moses on Mount Sinai. These gatherings therefore provided occasions for pilgrimage while also recalling different forms of movement: escape from slavery, wandering in the desert before locating the Promised Land, or ascending a mountain. They are still celebrated by members of a faith whose identity remains rooted in the experience of dispersal, the so-called Diaspora (the settling of scattered colonies of Jews outside Palestine after the Babylonian exile). Even today, two thousand years after the final destruction of the Temple but with the state of Israel restored, Passover is an occasion when many Jews proclaim: "Next year in Jerusalem!"

Christianity echoes Islam and Judaism in its reverence for Jerusalem, both in relation to scripture and in relation



The route of travel of Baha'i pilgrim Charles Mason Remy in 1908.

haps especially—to those of south Asia. The Hindu term *tirtha-yatra* means broadly "journey to river fords," illustrating a devotion to flowing water evident since Vedic (relating to the Hindu sacred writings) times (from c. 1500 BCE), and pilgrimage practices often involve taking a purifying dip, as well as visiting holy figures or gaining sight of a deity contained within an image. The

to pilgrimage. The landscape of the Holy Land and the holy city have provided potent reminders of Jesus's life as well as of the location of his future return (just as in Islam Paradise will be transferred to Jerusalem during the Last Days). The early centuries of the church brought the quick emergence of a pious tradition of traveling. During the fourth century CE Helena (c. 255-327 CE), the mother of the Roman emperor Constantine (c. 274-337 CE), toured the Holy Land, adapting the model of traditional Roman imperial progress through a province for her own spiritual as well as political purposes. As the Christian empire developed so did the pilgrimage routes of often highly ascetic travelers, who expected to see the biblical narrative played out in the places visited. A growing monastic tradition was also evident in Palestine and neighboring lands. However, with the decline in Muslim tolerance of Christian visitors to Jerusalem from the tenth century CE onward, European sites became increasingly prominent pilgrimage locations. Rome housed the tombs of St. Peter and St. Paul, and other shrines, such as Santiago de Compostela in northwest Spain, were viewed as symbols of Christian military opposition to Islam, celebrating St. James in his role as a warrior, armed with both a sword and a cross. Some sites even replicated the sacred landscape of the Holy Land, such as Walsingham in Norfolk-known as "England's Nazareth" because it claimed to have an exact copy of the holy house that Jesus had inhabited as a boy.

The qualities of the landscape have been central to Judeo-Christian pilgrimage traditions, but also—and per-

Mahabharata (c. 300 BCE), a Vedic epic, contains sections describing and noting the religious merit to be gained from visiting numerous tirthas (sacred places). Such merit is said to apply to people of all classes and castes and usually involves a temporary renunciation-akin in some ways to Christian asceticism-that rejects bodily comforts and pleasure. As one scholar of Hindu pilgrimage puts it, "The returning pilgrim should be thinner and poorer" (Gold 1988, 263). Other important features of the Hindu pilgrimage landscape include hilltops, caves, and forests, creating a complex sacred geography that encompasses the whole of India. Furthermore, with the economic migration of Hindu populations into the West, features of the sacred Indian landscape have been translated into new parts of the world, so that, for instance, the convergence of two rivers in Ohio has been compared by some Hindus with the confluence of the sacred Indian rivers: the Ganges, Yamuna, and Sarasvati.

On the Indian subcontinent the religions of Jainism and Sikhism maintain pilgrimage traditions that have some similarities with Hindu practices. According to Buddhist tradition, among the last words of Buddha (c. 563–c. 483 BCE) were instructions to his followers to visit places marking the most significant events of his life. People soon added numerous holy spots to this biographical landscape, within and beyond India. Just as the emperor Constantine reinforced his imperial power by placing pilgrimage churches in the Holy Land, so the emperor Ashoka—the first Buddhist pilgrim of whom we know—used imperial patronage during the third century BCE to create a Buddhist landscape of pilgrimage by improving roads and resting places for travelers. As the religion itself spread, new pilgrimage sites emerged in China, Tibet, and Japan.

Similarities and Differences

Both in the past and in the present pilgrimage practices across the world's religions have appeared to exhibit some striking similarities: Circumambulation of shrines and other sacred objects is evident not only in Islam but also in Hinduism and Buddhism, for instance. Pilgrims also commonly take some material evidence of their journey back home—perhaps a vial of holy water, an image, or a token. However, we should not assume that actions that look similar from the outside have the same meaning to participants from different cultures and religions. Furthermore, pilgrimages have tended to contain within them-even to foster-conflicts between pilgrims supposedly united by the same religion or between ordinary pilgrims and shrine authorities. Thus, the famous Catholic site of Lourdes, situated on one of the main medieval pilgrimage roads of southern France and commemorating the visions of the Virgin Mary granted to a young girl during the nineteenth century, is enormously popular in the present, attracting millions of visitors a year. Such popularity inevitably creates tensions over the varied motivations of the pious, for instance, between the desire for miraculous healing expressed by the sick who visit the site and the general emphasis on spiritual rather than physical benefits that is promoted by the clergy.

The religious and often political (and even economic) power contained in many pilgrimage sites has often led to acute, even destructive, conflicts. Jerusalem is not the only site of competition between faiths. The pilgrimage center of Ayodhya in Uttar Pradesh, India, remains a site of troubled relations between Hindus and Muslims, resulting not only in violence but also in rivalrous construction and destruction of sacred buildings. Elsewhere in India, the Golden Temple at Amritsar, holiest of shrines for Sikhs, became the center of conflict between religious separatists and the Indian government, leading in 1984 to the storming of the temple by the army and the killing of many people, including pilgrims.

Pilgrimages have also been attacked from within their religious traditions, with critics often denying the value of physical travel or challenging the idea that the divine can be particularly located in a single spot on Earth. The tenth-century Sufi (Muslim mystic) authority Abu Sa'id enjoined his followers not to undertake the hajj on the grounds that they should concentrate on cultivating mystical experiences instead. Within Hinduism some writers have argued that pilgrimage implies too much attachment to the material world. A key aspect of the Protestant Reformation was the iconoclasm that denied the spiritual value of the statues and relics in numerous shrines and that attacked the economic corruption in both the guardianship of sacred sites and the selling of "indulgences"-remissions of punishments for sin that the Catholic Church granted in return for pious acts such as pilgrimage.

Pilgrimage in the Future

Despite some predictions that the world is becoming more secular, pilgrimage remains a flourishing institution. Although it has always been combined with other activities, pilgrimage is increasingly being associated with tourism, so that sacred travel is often undertaken alongside other forms of leisure, and pilgrimage sites have become accustomed to hosting both pilgrims and tourists at the same time. As more people can more easily travel throughout their own countries or even across the globe, pilgrimage seems likely to become an ever more visible part of life in the twenty-first century.

Simon Michael Coleman

See also Festivals; Missionaries

Further Reading

- Bhardwaj, S. M. (1973). *Hindu places of pilgrimage in India (A study in cultural geography)*. Berkeley and Los Angeles: University of California Press.
- Coleman, S. M., & Elsner, J. (1995). *Pilgrimage past and present in the world religions*. Cambridge, MA: Harvard University Press.

Pirates celebrating in Charleston, South Carolina.

- Coleman, S. M., & Eade, J. (Eds.). (2004). Reframing pilgrimage: Cultures in motion. London: Routledge.
- Dillon, M. (1997). *Pilgrims and pilgrimage in ancient Greece*. London: Routledge.
- Dubisch, J. (1995). In a different place: Pilgrimage, gender, and politics at a Greek island shrine. Princeton, NJ: Princeton University Press.
- Eade, J., & Sallnow, M. (Eds.). (1991). Contesting the sacred: The anthropology of Christian pilgrimage. London: Routledge.
- Eickelman, D. F., & Piscatori, J. (Eds.). (1990). Muslim travellers: Pilgrimage, migration, and the religious imagination. London: Routledge.
- Elad, A. (1999). Medieval Jerusalem and Islamic worship: Holy places, ceremonies, pilgrimage. New York: E. J. Brill.
- Gold, A. (1988). Fruitful journeys: The ways of Rajasthani pilgrims. Berkeley and Los Angeles: University of California Press.
- Howard, D. R. (1980). Writers and pilgrims: Medieval pilgrimage narratives and their posterity. Berkeley and Los Angeles: University of California Press.
- Hummel, R., & Hummel, T. (1995). Patterns of the sacred: English Protestant and Russian Orthodox pilgrims of the nineteenth century. London: Scorpion Cavendish.
- Hunt, E. D. (1982). Holy Land pilgrimage in the later Roman empire AD 312–460. Oxford, UK: Clarendon.
- Kunin, S. (1998). God's place in the world: Sacred space and sacred place in Judaism. London: Cassell.
- Morinis, E. A. (1984). Pilgrimage in the Hindu tradition: A case study of west Bengal. Delhi, India: Oxford University Press.
- Morris, C., & Roberts, P. (Eds.). (2002). Pilgrimage: The English experience from Becket to Bunyan. Cambridge, UK: Cambridge University Press.
- Nolan, M. L., & Nolan, S. (1989). Christian pilgrimage in modern western Europe. Chapel Hill: University of North Carolina Press.
- Ousterhout, R. (Ed.). (1990). The blessings of pilgrimage. Urbana: University of Illinois Press.
- Peters, F. E. (1994). The hajj: The Muslim pilgrimage to Mecca and the holy places. Princeton, NJ: Princeton University Press.
- Reader, I., & Walter, T. (Eds.). *Pilgrimage in popular culture*. London: Macmillan.
- Swatos, W. H., & Tomasi, L. (Eds.). (2002). From medieval pilgrimage to religious tourism: The social and cultural economics of piety. Westport, CT: Praeger.
- Turner, V., & Turner, E. (1978). Image and pilgrimage in Christian culture: Anthropological perspectives. New York: Columbia University Press.

Piracy

A ccording to the 1982 United Nations Convention on the Law of the Sea (UNCLOS), piracy is any illegal act "of violence or detention . . . committed for private ends by the crew or the passengers of a private ship or a private aircraft, and directed . . . on the high seas, against another ship or aircraft, or against persons or



property on board such ship or aircraft." This definition is the product of high-level deliberations in an age of nation-states, but it captures the essence of piratical activity throughout history. Because of their mobility, their tendency to operate in places frequented by commercial shipping, and the fact that the theft of a ship's cargo—and often of the ship itself—disrupts international trade, piracy often has far-reaching implications.

The tendency to romanticize pirates as a class of seagoing Robin Hoods tends to obscure the violent and criminal nature of their actions. Certainly no victim of modern piracy speaks fondly of his or her assailants. It is true, however, that pirates generally create and operate within hierarchies that are relatively flat when compared with those of commercial shippers, privateers, and navies. In the eighteenth century, for instance, the distribution of prize money, for instance, was more equitable than it was among privateers or naval sailors, where the share system favored officers, shareholders or the government. Likewise, there have always been divergent views of piratical behavior. In the first century BCE, Cicero held that a pirate "is not specified as belonging to the ranks of combatants, but is a foe in all men's eyes," (Walsh 2001, 121) a sentiment echoed by the seventeenth-century English jurist Sir Edward Coke, who called pirates the enemy of mankind. A contrary perspective is found in St. Augustine's City of God, which relates a conversation between Alexander the Great and a pirate who asks: "How darest thou molest the whole world? But because I do with a little ship only, I am called a thief: thou doing it with a great navy, are called an emperor" (Pennell 2001, 25). Modern practice follows Cicero and Coke, and "enemy of humankind" *(hostis humani generis)* is used today not only to describe pirates but also in reference to people engaged in terrorism, torture, and genocide.

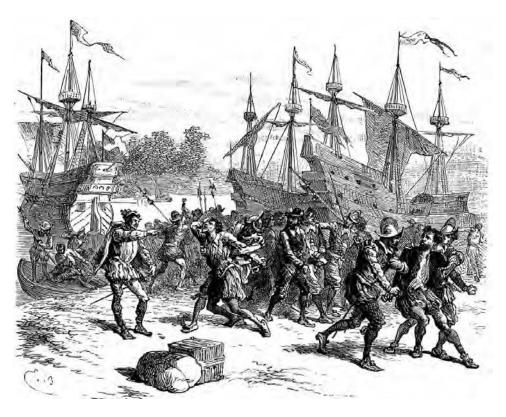
The conditions in which piracy flourishes make the concept of legality difficult to pin down. One classification of maritime predation distinguishes between parasitic, intrinsic, and episodic forms. Of these, only parasitic qualifies as pure piracy conducted without any legal constraints, such as was found in the Caribbean and western Atlantic during the classic age of piracy, from about 1650 to 1725. This was the era of flags emblazoned with a skull and crossed bones, one of many symbols—albeit a popular one—intended to strike fear in the minds of prospective victims. Government efforts to suppress piracy were every bit as ruthless

as the pirates themselves. In 1701 Captain William Kidd, a privateer-turned-pirate wanted for crimes committed in the Indian Ocean, was captured in Boston, hanged at London's Execution Dock, and displayed at Tilbury Point on the River Thames as a warning to others. Kidd was only one of many early-eighteenth-century pirates who were tried by government authorities anxious to encourage peaceful trade. The ruthless Edward Teach, or Blackbeard, was hunted down and

Spanish forces capture pirates on the Carolina coast. killed in North Carolina in 1718. In Jamaica two years later, Calico Jack Rackam and his consorts Mary Read and Ann Bonny were captured, tried, and sentenced to death. Rackam hanged, but Read and Bonny, both pregnant, were spared; Read died in prison, Bonny's fate is unknown. The tough measures worked, and within a few years piracy was all but eradicated in the western Atlantic.

An early form of episodic piracy is found in the second century BCE, when Cilician pirates from Asia Minor evolved from relatively small groups into a full-fledged navy that fought against Rome in the Mithridatic Wars. Determined to crush the Cilicians, the people endowed Pompey the Great with the administrative power of the *imperium* for an unprecedented period of three years in 67 BCE. His campaign was swift and decisive, but the lingering effects of his *imperium* are regarded as a milestone in the metamorphosis of Rome from a republic to an empire.

In the fifteenth century, China's Ming dynasty banned overseas trade, putting tens of thousands of seamen out



of work. While the state was unable to suppress smuggling at sea, imperial authorities attempted to check the pirates on land. In the ensuing round of reprisals violence became endemic. Many of the pirates—perhaps forty thousand in all—operated out of bases in Japan. This period of piracy ended when the ban on trade was relaxed and other economic reforms were instituted in the 1560s.

Privateering and corsairing are forms of intrinsic or institutionalized piracy. In the early modern period, European navies routinely commissioned merchant ships to sail as privateers against enemy commerce. These were issued letters of marque that outlined the scope of their operations and afforded captured privateers legal protection. The degree to which these niceties were observed depended on the strength of the legal authority. During the American Revolution, privateering in the Gulf of Maine degenerated into indiscriminate violence by "privateers" who owed allegiance to neither crown nor colonies.

Corsairing is another example of state-sanctioned "piracy," as American Federalists called it. The North Africa regencies of Algiers, Tunis, and Tripoli raised money by capturing merchant ships and ransoming their crews, passengers, and cargoes. Many governments found it expedient to pay the regencies for safe conduct passes, but this practice ended in 1816 when European powers decided to take advantage of their overwhelming superiority and the state of peace prevailing at the time to put an end to it. Privateering was formally outlawed by the 1856 Declaration of Paris.

Piracy has by no means been eradicated, and since 2001 there has been growing concern over the potential collaboration of pirates, whose motives are essentially economic, and terrorists with political aims. The trend toward privatizing certain military and security undertakings also suggests that a return to some form of private naval warfare is a distinct possibility.

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See also Maritime History

Further Reading

- Cordingly, D. (1995). Under the black flag: The romance and the reality of life among the pirates. New York: Random House.
- De Souza, P. (1999). *Piracy in the Graeco-Roman world*. Cambridge, UK: Cambridge University Press.
- Ellen, E. (Ed.). (1989). *Piracy at sea*. Paris: International Maritime Bureau.
- Exquemelin, A. O. (1969). *The buccaneers of America* (A. Brown, Trans.). Harmondsworth, UK: Penguin.
- Johnson, C. (1972). A general history... of the most notorious pyrates. ... (M. Schornhorn, Ed.). London: Dent.
- Lane-Poole, S. (1890). *The story of the barbary corsairs*. New York: C. P. Putnam's Sons.
- Pennell, C. R. (Ed.). (2001). Bandits at sea: A pirates reader. New York: New York University Press.
- Petrie, D. A. (1999). The prize game: Lawful looting on the high seas in the days of fighting sail. Annapolis, MD: Naval Institute Press.
- Rediker, M. B. (1987). Between the devil and the deep blue sea: Merchant seamen, pirates, and the Anglo-American maritime world, 1700–1750. New York: Cambridge University Press.
- So, K. (1975). Japanese piracy in Ming China during the 16th century. East Lansing: Michigan State University Press.
- Walsh, P. G. (2001). *Cicero, on obligation* (p. 121). New York: Oxford University Press.

Plagues

See Diseases—Overview; Diseases, Animal

Plastics

Plastics are everywhere, yet the term *plastics* is not well defined. The adjective *plastic* means pliable (from the Ancient Greek *plassein*, to mold), yet many plastics (notably Bakelite) are rigid. As a group, the metals are more "plastic" than plastics. Natural materials such as wax or horn are pliable but are not thought of as plastics. Rubber is usually considered separately from plastics (as in this encyclopedia) but hard rubber (ebonite) is a plastic. Any attempt at a technical definition usually ends up including adhesives and synthetic fibers, but excluding an important group of plastics such as the silicones. Our use of the term *plastic* usually depends on the object. The rubber duck is actually made from plastic (PVC, or polyvinyl chloride), yet carbonfiber tennis rackets are usually not regarded as plastic. We all know what plastics are, but it is a culturally determined term, not a technical one.

The Origin of Plastics

For many centuries, objects have been shaped out of natural materials that could be considered similar to modern plastics, including clay (pottery), glass, and wood (which has a similar structure to synthetic reinforced composites). Wax, horn, and shellac (made from the lac insect) were even closer to our current concept of plastics. Horn is perhaps the closest of these materials to modern plastics. By the eighteenth century, horn was being molded, using pressure and heat, to produce a variety of objects, especially beakers, medallions, snuffboxes and jewelry. Restricting the use of the term *plastics* to synthetic (or at least semisynthetic) materials, the history of modern plastics began with the accidental discovery of nitrocellulose (cellulose dinitrate) by the Swiss chemist Christian Schöbein in 1845. The British chemist and inventor Alexander Parkes experimented with nitrocellulose in the 1850s, and by 1860 he had made molded objects from this material, which he exhibited at the International Exhibition in London two years later. He patented the idea of adding camphor to soften the stiff nitrocellulose in 1864. Variants of the resulting substance, called Parkesine, were developed in London in the 1870s as xylonite by Parkes's former works manager Daniel Spill and an American, Levi Merriam, and in Newark, New Jersey, as the better-known celluloid by two brothers, John Wesley and Isaiah Smith Hyatt. By the 1890s, celluloid had become an important material, used to make billiard balls (and other items formerly made from ivory), combs, washable collars and shirtfronts, photographic film, and ping-pong balls (invented in 1901 and one of few remaining uses of celluloid). In 1892, two British chemists, Charles Cross and Edward John Bevan, introduced a new cellulose-based material, viscose rayon, which could be molded into combs, handles, and ashtrays, but which became more important as the first commercially successful semisynthetic fiber.

Bakelite and Style

Celluloid had its uses, but it was expensive, difficult to work with, and flammable (it is related chemically to gun cotton). The real breakthrough for plastics had to await the development of the first fully synthetic plastic, Bakelite. The Belgian-American chemist and inventor Leo Baekeland invented Bakelite in 1907 while trying to make a synthetic lacquer from the reaction between two organic chemicals, phenol and formaldehyde. He used a two-stage process: the chemicals reacted to form an intermediate which was then heated in a pressurized mold to make the final product. Bakelite appeared at the right moment, when the rapidly growing electrical industry was looking for a good robust material for switches and other components that did not conduct electricity. Although it could be used for domestic goods (billiard balls were an early example), its dark color and lack of translucency was a major drawback. These problems were overcome by the amino plastics (made by the reaction between formaldehyde and urea or melamine), which were colorless and translucent. They could be colored to produce very attractive molded household objects including clocks, ashtrays, and crockery. The first amino plastics were developed by the British Cyanide Company (later renamed British Industrial Plastics) in 1924, and the American Cyanamid Company introduced the melamine plastics in 1939. By the 1930s, plastics manufacturers were encouraging industrial designers, such as Norman Bel Geddes, to create new styles which showed off their products to the best advantage. In this period Bakelite and melamine plastics were particularly associated with Art Deco and the new technology of radio sets.

Wartime Expansion

In the 1930s other plastics were being developed which were very different from Bakelite, being both light and easily shaped. They had existed as laboratory curiosities for almost a century (polystyrene had been discovered in 1839), but they had not hitherto been a commercial success. Polyvinvyl chloride (PVC), for instance, decomposed on the hot rollers used to turn it into sheets. By the mid-1930s, however, the American corporation Union Carbide and the German firm I.G. Farben had independently succeeded in producing types of PVC which could be turned into flooring, cable covering, and household goods. The German firm of Rohm & Haas was successfully developing polymethyl methacrylate (PMMA, better known as Perspex or Plexiglas) in collaboration with its American counterpart. In 1933 the British chemical firm ICI (Imperial Chemical Industries) had, by chance, discovered polyethylene (Polythene), which showed promise as a light insulator. The industry was initially held back by the lack of any serious demand for these new materials, but the situation was transformed by World War II. PVC was used as a substitute for rubber and other materials, PMMA was used to make aircraft cockpits, and polyethylene was used in radar sets. Polyurethanes (used in foams, shoe soles, and stretch fabrics) were a German innovation which was developed in the United States in the 1950s.

Plastics Become Common

After the war ended, the plastics industry needed to find new outlets for its products. Polyethylene was converted into washing-up bowls (dishpans), squeeze bottles, and Tupperware dishes. PVC displaced fragile shellac in longplaving records. PMMA was used to make jukeboxes. Plastics were also used extensively in house building, and in toys, for instance, hula hoops and Barbie (who was "born" in 1959). Hula hoops were among the first examples of a new plastic called high-density polyethylene which first appeared in the mid-1950s. This strategy succeeded beyond the industry's expectations. While the period between 1945 and 1973 was a highly successful one for the plastics industry in terms of technology, production, and profits, the popular image of plastics eventually took a tumble. Whereas Bakelite had been considered high tech and stylish in the 1930s (except by social snobs who always insisted that natural products were better), plastics were regarded as cheap, tacky, and generally nasty by the mid-1960s. This was a result of poor manufacturing techniques by some of the momand-pop operations that had entered the industry, as well as the use of plastics to make cheap items such as fairground gewgaws and novelties for crackers.

Plastics Become Sophisticated

Despite their popular image, plastics were growing in technical sophistication in the 1950s and 1960s. Glassfiber-reinforced composites enabled the production of light but very strong casings, which are now widely used in the aerospace and transport industries. Teflon had been discovered by accident in 1938, but Du Pont was opposed to its use in cooking utensils, and the first nonstick pans, made without the firm's approval, did not appear until 1960. In the 1960s there was a growing demand for heat-resistant plastics, partly because of the space program (and the growing popularity of ready meals) and partly because of the withdrawal of asbestos on health grounds.

The plastics industry also devoted considerable effort to developing substitutes for glass, a potentially enormous market. The polycarbonates, a virtually unbreakable, vandal-proof material used for street lighting, public shelters, and safety visors was developed independently by General Electric and the German firm Bayer in the late 1950s. At the other end of the hardness spectrum, soft contact lenses were first made by a Czech chemist, Otto Wichterle, using a chemical relative of PMMA, in 1961. Attempts to make drink containers from plastics were initially unsuccessful, but a Du Pont team headed by Nat Wyeth (a member of the famous family of artists) was able to blow drinks bottles from polyester resin (better known as a synthetic fabric) for Pepsi in 1975.

Crunch Time for Plastics

The plastics industry, which used petroleum as its raw material, was badly affected by the oil crisis of 1973,

when the price of oil quadrupled. Not only did its costs escalate, the demand for its products fell as Western economies faltered. The public image of plastics was already lackluster. The environmental movement, gaining momentum from the anti-Vietnam War protests, was highlighting the highly visible results of discarded plastics waste. Even more alarmingly, there were growing concerns about the safety of the workhorse plastic PVC. In 1972, the monomer (building block) of PVC was discovered to cause a rare form of liver cancer. More recently there have been concerns about the health effects of plasticizers, chemicals used to make PVC flexible. The producers of traditional materials such as wood, metals, and glass were not idle and capitalized on this public disillusionment. Sometimes the users of these materials, for instance furniture manufacturers, made their products more competitive by incorporating plastics into their products where they would be invisible.

The Resilience of Plastic

Nevertheless, the plastics industry proved to be remarkably resilient. By 1992, American production had trebled over two decades. Meanwhile, the use of plastics continues to grow, in window frames, computers, and in our cars. The high-performance plastics of the 1960s are becoming commonplace, and even more sophisticated plastics are being developed. Carbon-fiber-reinforced composites are used in sports equipment. While the public at large remains attached to natural materials, we use an ever-increasing amount of plastics (even if we tend not to think of them as such).

Peter Morris

Further Reading

- Clarke, A. J. (1999). Tupperware: The promise of plastic in 1950s America. Washington: Smithsonian Institution Press.
- DuBois, J. H. (1972). Plastics history USA. Boston: Cahners Books.
- Fenichell, S. (1996). *Plastic: The making of a synthetic century*. New York: HarperBusiness.
- Katz, S. (1984). Classic plastics: From bakelite to high-tech, with a collector's guide. London: Thames and Hudson.
- Kaufman, M. (1963). The first century of plastics: Celluloid and its sequel. London: Plastics Institute.

- Meikle, J. L. (1995). American plastic: A cultural history. New Brunswick, NJ: Rutgers University Press.
- Morris, P. J. T. (1986). *Polymer pioneers*. Philadelphia, PA: Center for the History of Chemistry.
- Mossman, S. T. I. (Ed.). (1997). Early plastics: Perspectives, 1850– 1950. London: Leicester University Press.
- Mossman, S. T. I., & Morris, P. J. T. (Eds.). (1994). The development of plastics. Cambridge, UK: Royal Society of Chemistry.
- Seymour, R. B. (Ed.). (1982). History of polymer science and technology. New York: Marcel Dekker.

Plato (c. 427–347 bce) Greek philosopher and writer

Plato was born into a wealthy and aristocratic family who was active in politics in Athens, Greece. His given name was "Aristocles": "Plato" was a nickname that he received as a result of his broad shoulders, testimony to his youthful love of wrestling. He first sat in the circle of the philosopher Socrates when he was about twenty and remained devoted to his teacher until Socrates's execution in 399. Afterward Plato traveled for a time, visiting Cyrene, Egypt, and Sicily. His visit to Sicily ended abruptly when Dionysius I, the tyrant of Syracuse, had him deported.

Upon his return to Athens, Plato followed Socrates in the establishment of a philosophical circle. In effect, Plato removed himself from civic life, neither marrying nor participating in political life. Plato's circle, however, had a more formal existence than that of Socrates. It met regularly in the grove dedicated to the hero Hakedemos, from which it took its name, the "Academy." This circle, in essence a school if not a university, continued its existence for more than nine hundred years, ceasing its operations only at the order of Christian Emperor Justinian in 529.

Plato's foundation of the Academy represents the merest beginnings of his influence on subsequent generations. The most prolific interpreter of Socrates, he wrote dialogues in which his teacher is characterized as a shrewd and versatile interrogator. Plato's Socrates does not offer teaching so much as cross-examine claims to Laws are partly formed for the sake of good men, in order to instruct them how they may live on friendly terms with one another, and partly for the sake of those who refuse to be instructed, whose spirit cannot be subdued, or, softened or hindered from plunging into evil. • PLATO (C. 427-347 BCE)

knowledge, tell stories, and muse aloud. In representing Socrates in this way, Plato, perhaps, sought to be true to the spirit of his teacher, who mistrusted certainties and dogmatism. Socrates's (and therefore Plato's) philosophy is represented much more as a process than as a product. Although we do not know with certainty whether the philosophical voice of the dialogues is more Socrates or Plato, we can be certain that the voice is an amalgam of the two. The philosophical style that emerges from the dialogues is, however, styled "Platonism."

The principal feature of Platonism is its idealism. Plato asserted that perceived reality is merely a shadow of truth. Although concepts and objects exist in true and perfect forms, our perceptions and understandings of those concepts and objects are limited, and thus any attempt to apprehend or describe them is a partial construction, constantly subject to renegotiation, reinterpretation, and reformulation.

As such, Plato deeply mistrusted ideology. He explains in a letter *(Letter Seven)* that, as a young man, he had expected to enter politics. He had, however, been disillusioned by the narrow regime of the Thirty Tyrants (who included members of his family) and even more so by the restored democracy that had proceeded to execute Socrates. Plato's *Republic*, arguably one of the most important philosophical texts ever written, mounts an argument against societies dominated by political certainty, advocating instead the rule of enlightened and philosophically inclined elites—the so-called philosopher-kings.

After some years Plato took the opportunity to put this philosophical approach into practice. He was invited back to Syracuse by a former student, Dion, a philosopher and politician. Plato became the informal tutor to Dion's nephew, the young tyrant Dionysius II. Dion and Plato both hoped to establish a rational and philosophically consistent regime, and Dionysius II himself initially also seemed enthusiastic. Court intrigue intervened, however, and Dion was banished. Although Dionysius II courted Plato and sought his approval, Dionysius II did not receive it. Instead, Plato went home to Athens, returning to Syracuse only in response to Dionysius II's repeated invitations. Plato stayed for some time, initially hoping to influence Dionysius II and to secure the return of Dion. However, Plato realized that Dionysius II was not terribly interested either in confronting the questions that Plato led him to or in the welfare of Dion. As a result, Plato determined to return home but secured his passage only with difficulty.

Plato's Sicilian experiences led to the composition of an open letter *(Letter Seven)*, which is the most autobiographical document of his that survives. He remained in Athens for the remainder of his life, and at his death was succeeded as head of the Academy by his nephew, the philosopher Speusippus.

Plato's achievement set the tone for much ancient and modern philosophy. Although he has drawn criticism for his elitist vision of an ideal society, he advanced propositions across the entire philosophical spectrum: from aesthetics to education, from mathematics to metaphysics. All subsequent philosophy has, indeed, been likened to a response to this vast body of work. He has also been vastly influential in an unexpected way: His dialogues, the *Timaeus* and the *Critias*, are the basic ancient primary sources for the legend of the lost city of Atlantis.

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See also Greece, Ancient; Political Thought

Further Reading

- Annas, J. (1986). Classical Greek philosophy. In J. Boardman, J. Griffin, & O. Murray (Eds.), *The Oxford history of the classical world* (pp. 238–245). Oxford, UK: Oxford University Press.
- Plato. (1955). *The republic* (H. D. F. Lee, Trans.). Harmondsworth, UK: Penguin.
- Plato. (1975). *Phaedrus and letters VII and VIII* (W. Hamilton, Trans.). Harmondsworth, UK: Penguin.
- Taplin, O. (1990). Greek fire: The influence of ancient Greece on the modern world. New York: Athenaeum.

Political Thought

Political thought is reflection and debate about the proper way of arranging political life or making sense of processes within it.

Politics as a sphere of human concern has typically been understood in two ways. In a minimalist definition, politics is the realm of the state, of the institution that in complex societies enjoys a monopoly on the legitimate use of force in the territory it controls. Politics thus revolves around efforts by individuals and groups to gain control over the state, and to exercise the state's ultimate power on behalf of public peace, and some interests rather than others. This minimalist definition, dating back to the German sociologist Max Weber a century ago, tends to hold sway in contemporary political science.

A more substantive, traditional definition has its origins in classical Greek (especially Aristotelian) political theory. That view holds that politics is the highest realm of human affairs, the art that integrates all other pursuits. This means that the state, since it orders society as a whole, also has the ethical purpose of relating the various social functions and kinds of human flourishing to one another, and promoting sound character development among its citizenry. Political thought, more specifically, is normative thinking that goes beyond what politics *is* to what it *should be*. Political thinkers put forth visions of an ideal state, against which one might measure the realities of human self-interest and power-seeking.

World Histories of Political Thought

Various important points of contact lie between political thought and world history. One involves world-historical treatments of how political thought has developed in different settings, and how its unfolding reflects broader influences across space and time. Such treatments can occur on the level of either history of ideas or intellectual history. History of ideas traces the influence of thinkers and modes of thinking upon one another over time, often in isolation from larger social contexts. World histories of ideas might deal with the transmission of doctrines over large expanses of space and time, or with the influence of thinkers in different settings on one another. Intellectual history, by contrast, deals more with the social context and imprinting of ideas. Ways of thinking and the social forces that generate them are probed as layers of social reality, as expressions of or at least responses to larger historical circumstances and processes.

One example of world intellectual history is treatment of the so-called Axial Age, the period of Eurasian history between roughly 800 and 600 BCE. The German philosopher Karl Jaspers coined the term to refer to the common flowering of classical thought that happened during those centuries in the major centers of civilization in the eastern Mediterranean, the Fertile Crescent, India, and China. Whether in religious or philosophical guises, the era saw the emergence of complex "second-order thinking," or what one might call "thought about thought." In contrast to the mythical worldview of earlier cultures, new intellectual elites that had come to power began referring to transcendent sources of truth-God, natural law, Heaven, the Dao, and so on-that existed apart from mere tradition. With this opening of a gulf between the mundane world and a higher order, cultures were reoriented away from imitating the past and toward a critical engagement with the example of pioneering creative personalities: prophets, philosophers, and state founders. In the political realm, the new civilizations began measuring the realities of state and society against ostensibly universal ideals of public virtue and cosmic order. From the standpoint of world history, the Axial Age is a framework for thinking comparatively about intellectual processes that occurred almost entirely independently of one another. The overlap in timing also reflects common world-historical conditions, like the emergence of complex urban societies that could support the kinds of stratification needed for such an intellectual breakthrough.

Notably, the emergence of much of this higher-level thinking, especially on a political plane, involved a kind of exercise in world-historical reflection. Early in the Axial Age, two core areas that generated classical political thought—the eastern Mediterranean and northcentral China—were divided into many polities. Leading intellectuals like Plato and Confucius posed questions about politics and human flourishing in a comparative way, using the experience of often radically different An onlooker sees more of the game than a player. • SPANISH PROVERB

political communities as raw material for their reflections. They thought broadly about political diversity and historical evolution, using the Greek city-states and the decay of the Zhou empire into the warring states as illustrations. This comparative approach gave rise to insights into universal truths about human nature and wellordered states.

Two main types of sophisticated political thought emerged from the Axial Age, from this new Eurasian experience of complex agrarian societies. One, which we might call virtuocratic, reflected the worldview of highculture intellectuals who were committed to certain orthodoxies of religion or philosophy. Such groups included the Hindu brahmins, the Confucian literati, the Greco-Roman Stoics, and the priests of the Middle Eastern monotheistic faiths. While their conceptual frameworks differed, they overlapped in seeing society as an arena for the pursuit of virtue and human flourishing. The state had a crucial role to play as the keystone of a just social order, which placed people in positions suited to their natures. The ideal statesman was a kind of philosopher-king, who held himself to a transcendent standard of ethical truths and cosmic order. The ethical activities of the state unfolded on a plane higher than mere functional performance.

A second stream of political thinking that emerged at about the same time can be called atomist. Examples include Legalism in China and Sophism in Greece. From the fact of diversity across communities and eras, atomist political philosophers drew quite the opposite conclusion from their more virtue-minded counterparts. They held that diversity showed there was no objective truth or standard of virtue. Human nature amounted to no more than individual self-interest, the rather pedestrian desire to seek pleasure and safety and avoid suffering. Emptied of any moral content, the atomist vision of the state involved only efficient management, preservation of peace, and practicing hard-headed skills of statecraft. This stream of thought, with its social base in the mercantile and bureaucratic classes, endured until modern times but largely below the surface of respectable political discourse. Thomas Hobbes, the seventeenthcentury English political theorist of absolutism, was a more recent voice of atomist statecraft, and paved the way for the more mundane and less virtue-oriented character of modern Western political thought.

All these are examples of how world history can situate the emergence of the major traditions of political thought, inform comparisons across those traditions, and trace long-term continuities and ruptures in thinking about politics.

Political Thought as a Lens for World History

In reverse, political thought can also influence the telling of world history. As a mode of imagining the ideal political community and making sense of large-scale social processes, any system of political thought implies a lens through which its adherents view the past. The term *metanarrative* often describes a story of world history colored by political thought. A metanarrative integrates the happenings of the past into one simplified tale filled with meaning and with lessons for the present.

One such metanarrative is religious. Religious metanarratives date back to the beginning of the so-called world religions, those universal systems of spiritual insight that emerged from the Axial Age. Since each world religion professes to speak to humanity as a whole, to represent a cosmic order not confined to any one territory or culture, it has had to grapple with the problem of religious diversity. Given its superior access to truth, in other words, how should it think about other world religions? The Hindu approach has typically been to treat religious diversity as merely a variety of paths to the same divine essence. This perhaps avoids the need for a metanarrative about the relative worth of religions, but still integrates doctrinal diversity into one overarching system of meaning. In the social realm, however, premodern Hinduism still saw the hierarchies and ritual practices of the caste system as a superior context for spiritual self-cultivation. Non-Hindus who sought true human flourishing would have to enter the Hindu social order over several generations. In practice, some conquerors and potentates were brought into the Hindu caste system by tracing back fictitious Aryan genealogies for them. The traditional Confucian worldview had some similarities to this system. While the absence of caste purity made entrance to Chinese civilization easier for outsiders, entry was still very much a one-way process of *laihua*, of "coming to be transformed." As the ideal Confucian social order was the supreme expression of virtue, and the emperor the point of contact between heaven and earth, the Chinese polity was seen as radiating outward and potentially encompassing the *tianxia*, the "world under heaven." "Barbarians" could improve their standing only by ascending the cultural gradient of Confucianization.

Religious metanarratives were most developed in expansionist missionary religions like Christianity and Islam. Founded against the background of earlier Middle Eastern faiths, and colliding with still other religions as they spread around the world, Christianity and Islam have had sophisticated visions of world history and how religious diversity fits into it. Both are *narrative* religions, that is, religions with a sense of historical development centered on events of significance to a spiritual community. Both share a metanarrative of human creation, fall, prophecy, covenants, and eventual redemption, all unfolding within world history. And both draw on this metanarrative to make sense of other belief systems. Other religions that preceded them, like Judaism, have been seen as legacies of earlier stages in God's intervention in the world. Islamic theology has proved quite accommodating in extending this basis for coexistence to all the major world religions. In the medieval period, when Christian theologians first struggled to find points of contact with revived classical thought and with the newly encountered cultures of the Americas, they fell back on natural law. Natural law, while only truly fulfilled with knowledge of Jesus Christ, still could be seen as informing all religions and ways of life. It denoted the innate sense of ethics and the striving toward God that even non-Christian societies and religions reflected. For both Christianity and Islam, these metanarratives tied in with practical political arrangements of tolerance and coexistence. In medieval custom, nonbelievers often enjoyed toleration as residues of life before the true religion, though the grand vision of history implied their eventual absorption once their consciences allowed it. Islamic civilization developed elaborate mechanisms of incorporation, in which non-Muslim minorities enjoyed a good deal of social and political autonomy, resting on the idea of a contract of protection that dated back to the early conquests.

Metanarratives of world history have also served political purposes in modern times. Four in particular deserve mention. The first has been called a "Whiggish" theory of history, after the liberal Whig party of eighteenth-century Britain. The gradual constitutional development of the English monarchy, and the growing power of merchants and others of liberal temper, gave rise to the notion that history had been unfolding toward a built-in goal of liberal enlightenment. This metanarrative was transferred to North America, including the United States after its founding as a "great experiment." As Whiggish historians would have it, the story of the Anglo-Saxon peoples, both in medieval and early modern English experience and in the triumph of the colonies, was one of divine favor and ever-expanding liberty. In the twentieth century, this metanarrative gained a broader scope, in Western Europe and even beyond. During the Cold War, the Whiggish view of history merged into a "Plato to NATO" metanarrative. This saw the contemporary West as heir to a continuous heritage of human freedom over two millennia, and its defender against world Communism. In the present day, an example of Whiggish history is Francis Fukuyama's book The End of History, which predicts the triumph of capitalism and liberal democracy everywhere in the world, as the political system best suited to human nature.

A second modern metanarrative has been Marxist. As Karl Marx (1818–1883) first argued in the nineteenth century, history is driven by class struggle. When technology advances, the economic possibilities it opens up come into tension with older patterns of social and political organization. Eventually societies rupture in revolutions, and new ruling classes rise to power. Thus the major phases of world history succeed one another: slavery, feudalism, capitalism, and eventually socialism and communism. This focus on economic structures and vast impersonal forces can give quite comprehensive and compelling interpretations of world history. One of the strengths of Marxist thought in the early twentieth century was its ability to encompass and explain everything, or at least profess to do so. But it bears noting also that treating the contours of world history as basically inevitable denies much room for human agency. Everything unfolds in its own good time, so hurrying along history as those of a more inspired temper might wish cannot achieve much. Moreover, the eventual triumph of communism rests more on inevitability than on any absolute moral desirability. According to the Marxist metanarrative, all moral standards are products of their time, of the circumstances and interests that they serve.

A third kind of metanarrative is that which affirms a large-scale political identity, typically of a civilization or a nation-state. This use of world history became especially important in the twentieth century, as non-Western parts of the world began finding their feet within the modern international system. Certain Indian and Chinese metanarratives of world history illustrate this pattern well. To take their place in the world, large and internally diverse countries like India and China have to develop a coherent sense of self and a claim to preeminence despite the momentary triumph of the West. In Jawaharlal Nehru's 1944 book The Discovery of India. the future prime minister laid out what amounted to a metanarrative of Indian history. All currents, no matter how different on the surface, merged together in a single stream of Indian identity, which eventually flowed into the secular, socialist, internationalist India he envisioned. Likewise, Chinese nationalists reflected in the 1920s on what China could keep and what it must abandon in its march to modernity. Many concluded that the Confucian high culture and other traditions had to go, to ensure the modernization and survival of the Chinese race in a Darwinian world.

Whatever the details of these kinds of national or civilizational metanarratives, they have some features in common. They project back onto the past some forerunner of the cultural identity that is supposed to triumph in modern times. They play down internal diversity for the sake of unity. They play up distinctiveness from other cultural centers so as better to affirm a sense of self in the present, and a pride in self-contained accomplishments. Often, the metanarrative comes forward into the last century or two, as a tale of how outsiders (European imperialists in particular) encroached upon a once glorious community. Despite oppression and humiliation, the indomitable spirit of that community eventually broke through again in the mid-twentieth century, and began a process of self-renewal. Sometimes the metanarrative looks forward to a future national or civilizational redemption as a new power center in the world, restored to its proper place by its own efforts.

Postmodernism and the New World History

Finally, a fourth kind of contemporary metanarrative is loosely postmodern. At first glance, it may seem odd to talk of such a thing, since postmodernism is suspicious of metanarratives and stresses that all identities and meanings in history are constructed and perpetually in flux. But "world history" as largely practiced in Western academia today is heavily influenced by some aspects of postmodernism, and tells tales of the past through a political lens much as the writers mentioned above do. One prevailing emphasis of contemporary world history has been on encounters among cultures, on hybrid identities and transgressions, and on the mixing and matching of cultural packages. Partly this reflects what inevitably would be a theme in any global history, simply given its scale, and the issue for this discussion is less one of accuracy than of relative emphasis. The emphasis goes as far as it does partly because of a skepticism toward rival metanarratives of national unity or civilizational superiority. From the past, world historians of this bent strive above all to extract illustrations of pluralism and to call into question any essential boundaries that others might take for granted. This aim maps loosely onto political sympathies for present marginality and the hybrid identities that liberal globalization is producing.

Diasporas and transnational migrants and ethnic minorities and the like have not been fully accommodated by the homogenizing national polities of the nineteenth and twentieth centuries. This new approach to world history provides a perspective that serves two complementary purposes, therefore. On the one hand, it undermines what its practitioners see as dominant narratives of exclusionary national identity, thereby opening space for the excluded. On the other hand, it grounds alternative pluralistic social arrangements in a wider range of historical experience, and in doing so adds legitimacy to certain political perspectives in the present. As with all other metanarratives, what we think of as world history also engages profoundly with political thought.

Adam K. Webb

See also Aristotle; Confucius; Laozi; Locke, John; Plato; Socrates

Further Reading

- Aristotle. (1995). The politics (E. Barker, Trans.). New York: Oxford University Press.
- Collins, R. (1998). *The sociology of philosophies*. Cambridge, MA: Harvard University Press.
- Dikötter, F. (1992). The discourse of race in modern China. London: Hurst.
- Duara, P. (1995). Rescuing history from the nation: Questioning narratives of modern China. Chicago: University of Chicago Press.
- Eisenstadt, S. N. (Ed.). (1986). The origins and diversity of axial age civilisations. Albany: State University of New York Press.
- Fu, Z. (1996). China's legalists: The earliest totalitarians and their art of ruling. London: M.E. Sharpe.
- Fukuyama, F. (1992). *The end of history and the last man.* New York: Free Press.
- Gress, D. (1998). From Plato to NATO: The idea of the West and its opponents. New York: Free Press.
- Havelock, E. A. (1957). *The liberal temper in Greek politics*. New Haven, CT: Yale University Press.
- Hodgson, M. G. S. (1974). The venture of Islam: Conscience and history in a world civilisation. Chicago: University of Chicago Press.
- Jaspers, K. (1953). *The origin and goal of history* (M. Bullock, Trans.). London: Routledge and Kegan Paul.
- Mannheim, K., & Wirth, L. (1985). Ideology and utopia: An introduction to the sociology of knowledge (E. Shils, Trans.). New York: Harcourt Brace.
- Nehru, J. (1946). The discovery of India. New York: John Day.
- Savarkar, V. D. (1949). *Hindutva: Who is a Hindu?* Pune, India: S. P. Gokhale.

Smith, H. (1991). The world's religions. San Francisco: Harper.

Tucker, R. C. (1972). The Marx-Engels reader. New York: Norton.

Waley, A. (1939). Three ways of thought in ancient China. New York: MacMillan Press.

Weber, M., Gerth, H. H., & Mills, C. W. (Eds.). (1958). From Max Weber: Essays in Sociology. New York: Oxford University Press.



Venetian explorer

Tn 1271, at the age of seventeen, the Venetian Marco Polo (1254–1324) set out with his father, Niccolo, and his uncle Maffeo on a journey to the Mongol empire of Khubilai Khan. Marco spent almost the next two decades traveling throughout Asia, trading and working as an official within the Khan's administration. After his return to Venice, Marco Polo was captured in 1298 by the Genoese navy while serving as the "Gentleman-Commander" of a Venetian galley during a war between the Italian city-states. While imprisoned in Genoa, Marco recounted his adventures to his cell mate, Rusticello of Pisa, a writer of romance stories, who had served at the court of Edward I of England. Rusticello's account of Polo's trip, titled the Travels of Marco Polo, was one of the first depictions of Asia to appear in the West. Translated into many languages, the *Travels* circulated widely throughout Europe in handwritten manuscript form before the appearance of the printing press. Marco Polo's Travels influenced European perceptions of Asia from the late medieval period through to the Age of Discovery in the sixteenth and seventeenth centuries. In 1492 Christopher Columbus carried a copy of the book with him on his voyage west across the Atlantic during his attempt to find a new route to the riches of Marco Polo's Cathay.

In 1260 the merchants Niccolo and Maffeo Polo joined a Venetian trading mission to the city of Bukhara, located on the famed Silk Road in modern-day Uzbekistan. From there they joined a Mongolian embassy and traveled to the court of Khubilai Khan at Kanbalu (Beijing). The elder Polos spent the next several years trading in China until they were ordered by the Khan to return to Venice as his emissaries. When they returned home, Nicollo and Maffeo were instructed to gather a letter from the pope, one hundred Christian scholars as well as a flask of oil from the lamp from the Holy Sepulchre in Jerusalem, and then to return to Kanbalu. When the Polo brothers finally arrived back in Europe in 1269, however, they discovered that Pope Clement IV had died the previous year and had yet to be replaced. Unable to secure the required papal letter or ecclesiastic scholars until a new pope was named, Nicollo and Maffeo left Rome and returned to Venice, where they spent two years awaiting the election of a new head of the Church. Unable to wait any longer and fearing that Khubilai would be angered by their lengthy delay, the Polos, this time accompanied by young Marco, set out on a return voyage to the court of the Mongol ruler. After a brief interruption following the eventual election of Pope Gregory X, the Polos, along with a flask of holy oil and a mere two Christian missionaries left the safety of the Mediterranean world in 1271 to begin their journey across central Asia.

Although the missionaries abandoned the party in Armenia, the Polos did return to Khubilai's summer palace at Shandu after a difficult journey through Persia, Afghanistan, Turkistan, and eventually Tibet and the western reaches of China. The Khan was impressed by young Marco and over the course of the next twenty years appointed him to several official positions within his government, including the post of governor of the city of Yangzhou between 1282 and 1285. While in China Marco also visited the southern regions of Khubilai's empire along the Burmese border and much of southern China; he also had a lengthy stay in Hangzhou (Kinsai), the former capital of the Southern Song dynasty. During their time in China, the Polos prospered, but by the late 1280s, they were eager to return home and petitioned the Khan for permission to leave. In the Travels Marco claimed that Khubilai had become attached to his Venetian advisors and at first refused their request. At last an opportunity arose that provided the Polos with a reason to serve Khubilai one last time. The Khan of Persia had lost his wife and had requested that another princess from the same Mongol family be sent to marry him. Since the overland route was extremely dangerous, the Polos volunteered to serve as ships pilots and to escort the princess to Persia by sea. Reluctantly, Khubilai agreed and allowed the Polos to depart, asking that they deliver messages of friendship to the pope and the kings of Europe. Departing in 1292 from the port of Xiamen (Amoy), the Polos traveled past the islands of Sumatra, Java, and along the coast of India before reaching Persia two years later. The following year, they finally arrived back in Venice after being away from home for almost twenty years.

In early 1298, just three years after his return to Venice, Marco Polo found himself serving as a "Gentleman-Commander" or advisor aboard a war galley in his city's navy. At this time Venice was engaged in a war with its rival Genoa over trading rights in the eastern Mediterranean. On 7 September 1298, Marco Polo was captured, along with the entire Venetian fleet, by the Genoese navy. He was then imprisoned in a Genoese jail where he spent the next several months regaling his fellow prisoner, Rusticello, with his tales of adventure and the riches of the Khan's empire. Within a year the war between Venice and Genoa was concluded, and Marco Polo returned home a second time.

Back in Venice, Marco married a woman named Donata, with whom he would have three daughters: Fantina, Bellala, and Moreta. Little else is known of his life from this point onward, except that he continued to engage in trade and that he presented a French nobleman with a copy of his Travels in 1307. Marco's fame as a traveler spread during his lifetime, although not many people believed his accounts of the riches of China, the sophistication of Asian culture and technology, or the size of the Khan's empire. Most Europeans simply could not believe his tales of paper money, burning black rocks (coal), or cities with populations the size of Western nations. So incredible were the details in the Travels that Marco Polo was often referred to as "Marco of the Millions," in reference to the number of lies he must have been telling.

In a controversial book published in 1996, the historian Frances Wood argues that Marco Polo was indeed lying and that it is doubtful that he traveled anywhere near China. Along with other critics of Polo's account, Wood notes that Marco failed to mention the Great Wall, tea drinking, the Chinese written script, or the bound feet of Chinese gentry women in his tale. Perhaps these omissions, as well as the more fanciful elements in the *Travels* involving cannibalism and bizarre sexual behavior, can be blamed not on Marco Polo, but on the chronicler of his adventures, Rusticello. In the end, whether or not Marco Polo ever did make it to the Khan's capital or serve as a Mongol official, is not as important as the fact that his *Travels* inspired generations of Europeans to look beyond their borders and to eventually search for routes to the riches he described.

Robert John Perrins

See also China

Further Reading

- Gernet, J. (1962). Daily life in China on the eve of the Mongol invasion, 1250–1276. (H. M. Wright, Trans.). Stanford, CA: Stanford University Press.
- Hart, H. H. (1967). *Marco Polo: Venetian adventurer*. Norman, OK: University of Oklahoma Press.
- Humble, R. (1975). *Marco Polo.* London: George Weidenfeld and Nicolson.
- Marsden, W. (Trans.).(1997). Marco Polo: The travels. Ware, Hertsfordshire: Wordsworth Editions. (Original work published 1818)
- Moule, A. C., & Pelliot, P. (1976). Marco Polo: The description of the world (Vols. 1–2). New York: AMS Press.
- Olschki, L. (1960). Marco Polo's Asia: An introduction to his description of the world called 'Il Milione'. (John A. Scott, Trans.). Berkeley: University of California Press.
- Pelliot, P. (1959). Notes of Marco Polo (Vols. 1–2). Paris: Impression Nationale.
- Rossabi, M. (1988). *Khubilai Khan: His life and times.* Berkeley: University of California Press.
- Wood, F. (1996). *Did Marco Polo go to China?* Boulder, CO: Westview Press.
- Yule, H. (Trans. & Ed.). (1921). The book of Ser Marco Polo the Venetian concerning the kingdoms and marvels of the East (Vols. 1–2). London: John Murray.

Popular Culture

See Alcohol; Art—Overview; Consumerism; Dance and Drill; Dress; Drugs; Festivals; Games; Globalization; Leisure; Literature and Women; Mass Media; Modernity; Music—Genres; Music and Political Protest; Postmodernism; Sex and Sexuality; Sports

Population

Oopulation growth and decline affect human history **I** everywhere and always, sometimes making life better, sometimes making it worse. Basic instincts and human wishes promote births, and people almost always try to escape death. But individual choices are only part of what balances births with deaths and determines the actual sizes of human populations. Availability of food and exposures to lethal disease are other obvious factors; so is the frequency of death from predatory animals or human violence. Moral rules, marriage customs, and the costs and gains of child raising also affect family size. In addition, migration from one community to another reasserts human populations continually, enlarging some and diminishing other groups. Finally, new healing skills can sometimes prolong life, as happened worldwide after 1950; and birth control pills lowered birth rates even more recently. The interplay of these and still other factors remains far too complex for anyone to decipher fully.

Increase and decrease in membership of small local communities is what people actually notice, and when changes are swift and obvious, as is true in most rural communities today, radical disruptions of old ways of life ensue. Whole villages and small towns are disappearing; cities multiply and the texture of human daily life changes in ways that may turn out to be unsustainable.

Throughout most of the past people took the circumstances into which they were born more or less for granted and had no notion of how growth or decrease in their local community was immersed in larger patterns of population changes. To be sure, governments sometimes made efforts to list taxpayers, and historians have used surviving fragments of tax lists to estimate the total populations of the Roman and Chinese empires around the beginning of the common era at about 60 millions each. But such evidence is fragmentary, and modern estimates of world population rest on guesswork about average density of foragers and of farmers in different climates and landscapes around the earth. Anything like reliable census figures for whole countries start only about two hundred years ago and became (almost) worldwide only after 1950. Nonetheless, there is no doubt that population tended to increase across the millennia. To begin with, humans were rare in the balance of nature, and confined to parts of East Africa. There they were preyed upon by leopards and other big cats in the savanna grasses where they foraged for vegetable foods and ate grubs, insects, and meat, catching small animals and scavenging from dead carcasses left behind by the big cats.

Subsequent improvements in weapons, tools, and food-getting skills raised humans to the top of the food chain, with little to fear from rival predators, whereupon rapid expansion across most of the habitable globe between about 100,000 and 10,000 years ago demonstrated our ancestors' unmatched adaptability to diverse landscapes, foods, and climates. Then, beginning about 11,000 years ago, farming and herding multiplied food supplies, allowing farmers to become far more dense on the ground than the foragers whom they supplanted as they spread out from five or six different core areas where farming began. More recently, since 1780, urban industrialism, based on using inanimate forms of energy, proved capable of sustaining even denser populations and started to spread from northwestern Europe, where it initially emerged. That process is still going on, disrupting older agrarian societies everywhere, just as farmers once disrupted foraging bands.

These successive waves of population growth are reflected in recent estimates of total human numbers, shown in Table 1.

Foraging Bands

Before 10,000 BCE almost all humans lived in small foraging bands that moved about within a well-defined territory looking for food day after day. Population undoubtedly fluctuated within each band, whenever more infants survived, or accident, disease, or violence killed more people than usual. Famine was uncommon since foragers ate many different foods; when one kind failed others usually remained available. Still, extremes of weather, especially drought, could deprive foragers of so many foods as to provoke famine. Creeping increases in numbers might also put strain on, or even extinguish, important food sources.

Table 1.	
Estimated Human	Population

Date	Global population (millions)	
300,000 bce	1	
10,000 bce	4	
1000 bce	50	
1 се	200	
500	200	
1000	270	
1200	380	
1400	370	
1600	550	
1800	820	
1900	1,625	
2000	6,000	

Source: J. R. McNeill (2003). Population, human. In S. Krech III, J. McNeill, & C. Merchant (Eds.), *Encyclopedia of world environmental history* (Vol. 3, p. 1010). New York: Routledge.

Despite all risks, customary arrangements for marriage, food finding, and infant care allowed human groups to survive most of the time. Defense of the home territory against outsiders was necessary for survival, but so were peaceable encounters with neighbors, where precious items, news, and mates were regularly exchanged. Early human bands were so small that inbreeding was biologically harmful, and out-marriage appears to have been universal. This perhaps reflects an instinct that tends to inhibit children who grow up together from interbreeding. At any rate, genes shared by dint of out-marriages allowed *Homo sapiens* to remain a single species despite its worldwide expansion.

Fluctuation of numbers probably meant that some bands died out or merged together, while others divided and formed separate bands. But such local instability did not prevent something close to a steady state from existing within fully occupied regions, while migration into new lands allowed overall human numbers to increase slowly. Even in long-occupied places, sporadic breakthroughs, such as the invention of new weapons to keep predators at bay or the discovery of new kinds of food, allowed larger local populations to survive. One especially important breakthrough came when the invention of rafts, boats, paddles, oars, sails, and nets allowed people to cross open water, making possible the colonization Population, when unchecked, increases in a geometrical ratio. • THOMAS ROBERT MALTHUS (1766–1834)

of Australia between 60,000 and 40,000 BCE and the catching of fish in deep water as well as immediately offshore. The monsoon seas of Southeast Asia seem to have been where this new mode of life first flourished.

Fishermen needed sheltered places to bring their boats ashore, and whenever fishing at sea began to feed local populations, human communities probably settled down permanently at suitable shoreline locations. But beginning about 16,000 years ago, a warmer climate melted so much glacial ice that former shorelines are now deep under water, so no one can be sure. Nevertheless, whenever fishermen started to come ashore at the same place regularly, they probably began to build more substantial shelters for the night, whereupon women and children made their foraging for vegetable food more efficient by growing especially useful plants close by. A settled style of tropical gardening thus arose, and it continued to exist (with innumerable later changes) in remote parts of Southeast Asia and New Guinea until the present.

Settled communities also formed at other locations, where seasonal harvests of game or of grain sufficed to feed a community throughout all, or most, of the year. For example, once methods for preserving meat had been invented (perhaps by smoking or drying), Magdalenian hunters could live year round by slaughtering herds of reindeer, caught in corrals built along their routes of migration. This, in turn, gave them lots of spare time to decorate caves in southern France with their famous wall paintings between about 14,000 and 11,000 BCE. Nets and weirs to catch migrating salmon freed up time for the Amerindians of the river banks along the Pacific coast of North America, who used their spare time to erect lofty lodges and totem poles until the nineteenth century. Or again, in Southwest Asia archeologists have discovered traces of so-called Natufian villages, whose inhabitants harvested wild wheat with flint sickles and hunted antelope in their spare time in the 13,000–11,000 BCE period.



Drier climate perhaps withered the stands of wild wheat that supported the Natufians. At any rate, their villages were abandoned by the time grain agriculture started in suitably moist locations in Southwest Asia about 10,000 BCE. Across the next five thousand years, other grains and roots became staple crops for other farming villagers, and wherever harvests had to be stored. people were compelled to settle down and remain yearround in the same place. This

Population sprawl is shown in this view from Corcovado overlooking the Lagoa Rodrigo de Freitas and the neighborhood of Ipanema on the Atlantic Coast of Brazil. Ipanema was immortalized in the song, *The Girl from Ipanema*, and is one of Rio's most desirable neighborhoods. The area developed after the equally famous Copacabana beach area, to the north, in the 1950s. created quite different life patterns and inaugurated a new era of human population history.

Agrarian Societies

The fundamental difference between settled farmers and wandering foragers was that a family of farmers needed far less land to feed themselves. Far denser populations thus became possible, and denser farming populations steadily expanded their domain by supplanting foragers on suitably fertile lands. Soon they also began to sustain cities and civilizations, centered in different parts of Afro-Eurasia and the Americas. That inaugurated an agrarian era, when the majority of humankind—something between 85 to 95 percent—lived in villages, farmed fields nearby, and exported part of their harvest and some of their children to cities which were, in effect, parasites upon the rural population.

Farmers who support city folk with rent and taxes are called peasants, and from many points of view peasant life was less attractive than the freer life of foragers. First of all, peasant diets were usually restricted to a few staples, and their exposure to famine from crop failure consequently increased. Moreover, cultivating the soil and harvesting crops required more work than foragers usually spent finding food. Infections also increased when human and other wastes remained close by to pollute water supplies. Finally, human violence and organized warfare increased in scope because stored harvests could and did attract robbers from far and wide.

Yet these disadvantages did not prevent peasant villages from maintaining themselves generation after generation, and when war, famine, or pestilence destroyed local populations, as often happened in agrarian societies, new settlers quickly formed new villages and resumed daily routines almost as before. The central reason for this resilience was that village custom defined a way of life that seemed meaningful, natural, and inevitable to those born to it. Within the village, everyone had definite roles to play and rules to obey, and on festival occasions the whole population gathered together to sing and dance, dissipating hard feelings and arousing shared sentiments, just as bands of foragers had done before them.

Traditional division of labor between men and women made marriage necessary to conduct a household, and children learned everything they needed to know simply by growing up in the village, and watching everyone on his or her daily rounds. From a very early age, youngsters added to family income by scaring birds from the ripening grain, herding animals, or picking berries and other wild foods. Moreover, custom obligated children to look after their parents in old age, when they became unable to work as before. So numerous children were an advantage to parents and the best possible insurance against a helpless and hopeless old age.

In practice then, village populations tended to grow much faster than foraging populations had done. This implied crisis whenever local landscapes came to be fully occupied, so that some grown-up children could no longer find enough land to cultivate for themselves as their parents had done. Emigration was one possibility, heading either toward some distant frontier where land might still be available, or into a city, where unskilled labor perhaps could support a different, marginalized style of living. Intensified cultivation of smaller portions of land was a second, equally awkward choice, since it usually lowered standards of living that were already marginal. A third alternative was to resort to violence by joining a robber band or organized army. These responses to population pressure on the land acted together in different parts of the civilized world to create recurrent outbreaks of peasant rebellion and civil disorder that often cut back local populations drastically.

Local rhythms of growth and decline among agrarian populations, shaped largely by violence, were complicated by changing incidence of infectious diseases. When foraging bands first penetrated cooler climates by entering Asia and Europe, they left many tropical infections and infestations behind. Disease organisms and the insects that spread them in Africa could not adjust to new environs as flexibly as humans did. This presumably promoted population growth and accelerated the spread of foragers around the earth, since it took a long time for new diseases, capable of propagating themselves in diverse climates, to find a niche among still scant populations of foragers.

As people settled down and lived in fixed abodes however, germs were able to move from one human host to another far more easily than before. When human feces accumulated around dwellings, for example, people could become infected with intestinal diseases through drinking polluted water or through person-to-person contact with someone who was already infected. Villagers overcame this increased exposure to intestinal diseases partly by marrying early and giving birth to numerous children, but mainly by developing greater resistances in their immune systems.

The same was almost equally true of the next intensification of lethal infection, arising through transfers of herd diseases from domesticated animals to humans. The most formidable of these infections were viral, and survivors developed resistances that lasted a lifetime. Diseases of childhood, such as chicken pox, measles, and mumps, only strike once and can only survive among relatively large populations living in close enough contact to permit the virus to find an unending sequence of susceptible hosts. In modern times, it took a population of about a quarter of a million persons for measles to keep going, for example. Cities and all the coming and going connected with trade, tax collection, and governmental administration were needed to sustain such viruses. These diseases therefore became characteristic of civilized societies in Eurasia, but not in the Americas, where domesticated herds of animals were absent, so herd diseases could not make the leap to human hosts.

Exactly when and where different herd infections first established themselves among humans is unknown. But when trading contacts began to link Chinese, Indian, West Asian, and Mediterranean peoples together, lethal viruses—most notably smallpox and measles—spread across the Old World. They provoked heavy die-off in both the Roman and Chinese empires in the second and third centuries CE. Thereafter these diseases remained precariously in circulation in a few large urban centers, and sporadically flared up into epidemics when large enough populations of susceptible persons had accumulated in rural hinterlands and smaller cities.

Crop failure and famine could also provoke outbreaks of disease, and new infections continued to appear in new locations from time to time, sometimes with sudden and severe consequences for large populations. The most drastic new disease exposure after those of the second and third centuries CE, came after 1346, when bubonic plague—the dreaded Black Death—ravaged Europe, the Muslim world, and China, killing up to a third of the population during its first onset and recurring thereafter at irregular intervals down to the time when antibiotics made it easily curable in the 1940s.

Sporadic die-off from infectious disease resembled die-off from outbreaks of violence, and the two often peaked simultaneously. In fact most war casualties came from disease and not from wounds until after 1900, when preventive vaccines reduced soldiers' risks of infection to comparatively trivial proportions. It is also true that military formidability and intensified exposure to infectious diseases became twin instruments whereby civilized societies were able to subdue neighboring populations and incorporate survivors into their expanding domain. Unfamiliar infections devastated previously isolated populations over and over again within the Old World and, after 1500, even more drastically in the Americas and other transoceanic lands, where resistances were totally lacking to the whole array of diseases by then familiar in Eurasia and Africa.

Initial die-offs when Europeans began to settle the Americas were total on many Caribbean islands, and among some mainland peoples as well. Over larger regions survival proved possible as resistances built up among native Amerindians; but not before their societies and indigenous religious and political organizations had been destroyed by disease-experienced Europeans and Africans imported as slaves. Drastic redistribution of populations and cultures throughout the globe resulting from the ravages of infectious disease among previously isolated populations still continues on remote Arctic shores and in the Amazon jungles. It profoundly altered the population of whole continents and innumerable The entrance to a block of Chinese apartments in June 2004. These modern constructions are rapidly replacing the more traditional hutongs (courtyards). Due to population crunch, multi-story apartment complexes are increasingly necessary to house China's population.

islands, including, not least, the population of the United States of America.

All the local ups and downs of population generated among agrarian societies and civilizations disguise but nevertheless conform to a long-term trend of increasing human numbers. Technological improvements in food production and enlarged transport capabilities for distributing food and other commodities among consumers made that possible. Beginning about 1000 CE, precarious but more and more pervasive market relations sustained specialized producers, whose superior efficiency enlarged wealth and increased differentiation of lifestyles, century after century This process crossed a critical threshold after about 1750, when population surged as never before and urban industrial production based on inanimate forms of energy-mostly running water and coal to begin with-inaugurated the urban industrialized age in which we now live.

Urban Industrialism since 1750

One of the unsolved puzzles of world history is that population growth set in at an accelerated rate in all the densely populated parts of the earth sometime about 1750. By that date the initial die-offs in Mexico and Peru were over, and Amerindian populations in those lands started to increase, slowly at first and then more rapidly. Chinese, Indian, European and (less certainly) Muslim populations also started to grow more rapidly than before. Demographers do not agree as to why this happened; and most of them have been content to focus their researches on one or another local population and have not considered the phenomenon as a whole.

Unique local circumstances certainly played important roles. The spread of smallpox vaccination, for example, diminished the impact of that infection among some European nations and may have been significant in Central Asia and among Muslin merchants generally. The spread of American food crops during the eighteenth



century, especially potatoes, sweet potatoes, and maize, also much enlarged food supplies in many parts of China, Africa, and Europe. Warmer and drier weather improved North European crop yields, but may have had an opposite effect in Mediterranean and Southwest Asian lands. Finally, intensified transport and communication perhaps spread infections as widely as social and climatic conditions allowed, so that lethal epidemics coming from afar became fewer, while endemic infections, affecting mainly children, became more pervasive. If so, adults of childbearing age perhaps died less often, so that increasing mortality among infants could be compensated for by higher birth rates and enlarged family sizes.

Although there is no consensus about how to explain the worldwide spurt in population growth that set in about 1750 and began to reverse itself after 1950, it remains a central phenomenon of human history during those two centuries. Since it affected agrarian societies as much as industrializing ones, it was not directly dependent on the rise of modern industry, though intimately intertwined with the propagation of that novel style of life.

What the invention of machinery driven by falling water, coal-fired steam engines, and other inanimate sources of energy did was allow far larger populations than before to cluster together in cities and import food from far and wide, much of which came to be produced by power-driven machinery-tractors and harvesters and other specialized devices. This had devastating consequences for old-fashioned peasant farming, and the consequent collapse (some say transformation) of village life is still going on at a very rapid rate throughout Asia, Africa, and Latin America. The upshot is uncertain. Profound disruption of age-old demographic and cultural patterns of rural life has already occurred, and it seems unlikely that North American-style agribusiness, involving mass production of grain and other crops by expensive machines fueled by gasoline or diesel oil, can ever become the dominant pattern worldwide.

Recent census figures show that half or perhaps a little more than half the 6 billion human beings who now inhabit the earth live in cities and depend on food they do not grow themselves. In the United States, a mere 5 percent of the population feeds the remaining 95 percent. This turns agrarian society upside down, for until recently the vast majority lived in villages, producing food for themselves and for a small (though growing) number of city folk, living close enough to the fields that fed them to be sure of getting the nourishment they needed. Food, like other commodities, now can travel long distances, feeding people halfway round the earth. Supporting our present numbers indeed requires an elaborate, worldwide distribution system for both fuel and food. Any prolonged breakdown of transport would provoke famine of unprecedented universality and with almost unimaginable consequences.

Birth and death rates are likewise unstable as never before. Throughout the agrarian era, cities were places where intensified infections meant that deaths exceeded births, so that a continual flow of migrants from the healthier countryside was needed to maintain urban populations. Recently, that ceased to be true, beginning when public health measures (1860s) and new vaccines (1880s) became available in some well-managed cities. This medical transformation became worldwide after 1950, when public health administrators succeeded in eliminating smallpox and diminishing the ravages of most other infections through vaccines, mosquito control, new drugs, and more sanitary water supplies.

The first effect was to accelerate rates of population growth, especially in rural areas and among village populations. A second and not long-delayed result was to create crisis for young people in already crowded rural landscapes, who could no longer find enough land to found a new a family along traditional lines. This coincided with intensified communications, thanks to movies, radio, and television, that showed rural dwellers how different their lives were from those of city dwellers. Wholesale migration ensued and continues today at a very rapid rate, creating vast slum settlements around African, Asian, and Latin American cities, and crowding European, North American, and Australian cities with newcomers from far and wide.

Simultaneously, long-urbanized populations began to restrict births on a far greater scale than ever before. This accelerated when oral birth control pills became available in the 1960s. The fact that raising children in modern cities is costly and not always truly satisfying for parents lay behind the rapid spread of deliberate birth control, and has made cities once again into places where populations are not self-sustaining. Obviously, when adults have to leave home to work in offices, factories, and shops, small children hamper and interrupt daily routines. Then, as children grow older, legal and practical requirements for formal schooling last into late adolescence or beyond. This means that children contribute little or nothing to family income, and wherever governmental social security programs function, they seldom have to look after their parents in old age. All the incentives that sustained births in rural villages are thus cancelled in our cities. But galloping immigration from distant rural countrysides still disguises the way cities have recently become population sinkholes, not for epidemic but for economic and sociological reasons.

What this may mean for the future is hard to imagine. Fundamental patterns of the agrarian past are in question. Will rural populations continue to sustain cities by supplying food and migrants on the necessary scale? Or will rural populations imitate urban life styles and also begin to wither away? What happens when declining birth rates require fewer working adults to support larger numbers of old folks through government-managed programs? What will deliberate intervention do to sustain births, privately or publicly? No one knows, but with current rates of population change as rapid and massive as they are, one can be sure that if and when population decline becomes everywhere apparent, the effect will be as painful and drastic as the unprecedented population growth between 1750 and 1950 was for so many of the world's peasants.

William H. McNeill

See also Diasporas; Disease—Overview; Migrations; Population Growth as Engine of History; Urbanization

Further Reading

- Bogin, B. (2001). The growth of humanity. New York: Wiley.
- Caldwell, J., & Schindlmayer, T. (2002). Historical population estimates: Unraveling the consensus. *Population and Development Review* 28(2), 183–204.
- Curtin, P. D. (1989). Death by migration: Europe's encounter with the tropical world in the nineteenth century. Cambridge, UK: Cambridge University Press.
- Glass, D. V., & Eversley, D. E. C. (Eds.). (1965). Population in history: Essays in historical demography. London: Edward Arnold.
- Lourdes Arizpe, M., Stone, P., & Major, D. C. (Eds.). (1994). *Population* and environment: Rethinking the debate. Boulder, CO: Westview.
- Lutz, W., Prskawetz, A., & Sanderson, W. C. (Eds.). (2002). Population and environment: Methods of analysis. *Population and Development Review*,28 (Supplement).
- Massim, L. B. (2001). A concise history of world population. Malden, MA: Blackwell.
- McNeill, W. H. (1984). Human migration in historical perspective. *Population and Development Review*, 10, 1–18
- McNeill, W. H. (1990). Population and politics since 1750. Charlottesville: University Press of Virginia.
- McNeill, W. H. (1998). The disruption of traditional forms of nurture. Amsterdam: Het Spinhuis.
- Quale, G. R. (1988). Families in context: A world history of population. New York: Greenwood.
- Ts'ui-jung Liu, Lee, J., Reher, D. S., Saito, O., & Feng, W. (Eds.). (2001). Asian population history. Oxford, UK: Oxford University Press.
- Whitmore, T. M., Turner, B. L., Johnson, D. L., Kates, R. W., & Gottschang, T. R. (1990). Long-term population change. In W. C. Clark, B. L. Turner, R. W. Kates, J. Richards, J. T. Mathews, & W.

Meyer (Eds.), *The earth as transformed by human action* (pp. 25–40). New York: Cambridge University Press.

Wrigley, E. A. (1969). *Population and history*. London: Weidenfeld & Nicholson.

Population Growth as Engine of History

When seen over large time scales, population growth is one of the most striking features of human history. One hundred thousand years ago, there may have been just a few tens of thousands of humans on earth. Today, there are more than 6 billion, and they can be found on all continents on earth (even on Antarctica). No other large animal has multiplied like this (though domesticated species and fellow travelers from rabbits to sheep, from rats to cockroaches, have multiplied, as it were, in the slipstream of humans). So population growth counts as one of the fundamental distinguishing features of human history. Humans have multiplied in this way because they are more innovative than other animals. As a species, humans have shown a unique capacity to adapt to their environments in novel ways that allow them to extract more energy and resources from their surroundings. The source of this capacity for ecological innovation lies within human culture, in the ability, unique to humans, to share and therefore preserve, store, and accumulate learned information generation by generation. Population increase is a natural consequence of this ability, for the constant sharing and accumulation of knowledge has enabled humans to find new ways of exploiting their environments, so that, unlike other species, they can move well beyond the environments in which they first evolved. Over time, humans have learned to transform their environments in order to exploit them more effectively. As a result of their unique capacity for innovation, humans have managed to feed, clothe, and house increasing numbers of their own species.

Paleolithic Migration and Early Agriculture

Population increase is apparent even in the Paleolithic era, though in this era it mainly took the form of a slow but accelerating capacity to migrate into new environments. Humans probably evolved in the savanna lands of southern and eastern Africa, and for all but the last ten thousand years, we have lived as foragers. But the variety of foraging techniques used by humans clearly increased over time. Archaeological evidence suggests that even 100,000 years ago, humans were exploring new environments-in arid regions, for example, or near seashores or in tropical forests (McBrearty and Brooks 2000, 493-494, 530). Then, from about 100,000 years ago, humans began to migrate out of Africa. They appeared in the very different environments of Australia (from perhaps fifty thousand years ago), ice age Siberia (perhaps thirty thousand years ago), and finally the Americas (from at least thirteen thousand years ago). Though we have no direct evidence, we can be sure that these migrations meant an increase in the total number of humans. This remains true even though each particular community remained small, so that contemporaries could hardly be aware that human numbers were increasing.

From about ten thousand years ago, as the last ice age was ending, agricultural communities appeared in different parts of the world. Agriculture quickened population growth. Current estimates suggest that there may have been 5 to 10 million humans ten thousand years ago; 50 million five thousand years ago; and 250 million just one thousand years ago. Agriculture stimulated population growth in many ways. Nomadic foragers have a limited ability to increase production from a given area, so they have powerful reasons to limit the number of children too young to walk or forage on their own, and to limit the numbers trying to feed from a given area. Modern anthropological studies suggest that foragers have many ways of limiting population growth, including prolonged breast feeding and even infanticide. However, agriculturalists are normally sedentary, so transporting young children is not such a problem. Furthermore agriculture makes it possible to increase the amount of food produced within a given area, so it is possible to accommodate population increase even without migrating to new lands. Perhaps even more important, for farming households in most pre-modern agricultural communities it was important to have lots of children because this increased the available labor. In a world of high death rates (commonly in pre-modern agricultural societies, up to 20 percent of infants died in their first year, and another 30 percent before their fifth birthday), the best way of maximizing the number of children surviving to adulthood was to have as many children as possible. Such behavior, and the increased resources available within agrarian societies, ensured that populations would grow much faster than in the Paleolithic era.

As in the Paleolithic era, population growth led to migrations, and as farmers migrated they helped spread agriculture around the world. But migration was not the only option, for farmers, unlike foragers, could also create larger and more densely settled communities. Eventually, "intensification" of this kind led to the emergence of communities large enough and complicated enough to be called cities. Seeing these long-term trends was not always easy at the time, because local population gains could easily be wiped out by famines or epidemics. So, to contemporaries, cycles of growth and decline were more apparent than the long-term trend toward growth. Indeed, these cycles provide the central idea of Thomas Malthus (1766-1834), the founder of modern demographic studies: that population growth would always end up exceeding productive capacity so that periodic population crashes were inevitable.

Industrial and Scientific Innovation

In the last thousand years, population growth has accelerated once again as the global human population has risen from 250 million one thousand years ago, to 950 million two hundred years ago, and more than 6 billion today. There are many specific causes for population increase in given instances, but once again, the most general explanation for this increase is that increasing rates of innovation have allowed humans to produce the food and resources needed to support rapid population growth. Death rates fell in many parts of the world in the last two centuries, partly because of the spread of new crops and improved knowledge about basic sanitation. In the twentieth century, scientific medicine, and the introduction of antibiotics, have reduced death rates throughout the world. But despite such advances, populations could not have continued to rise if it had not been for the burst of innovation we associate with the industrial revolution, which provided the energy, the resources, and the techniques needed to feed, clothe, and supply the rapidly increasing populations of the modern era. Some of the most important new technologies included improved forms of irrigation, the introduction of artificial fertilizers and pesticides, the use of fossil fuels in agriculture, and the breeding of new and more productive varieties of major food crops such as rice and maize. Equally important was the huge increase in available energy supplies made possible by the fossil fuels revolution.

Today, we may be in the middle of a new transition, often referred to as the "demographic transition." Evidence has been accumulating, in some regions for more than a century or two, that as death rates fall and humans become more affluent, more urbanized, and better educated, they have fewer children. By 2000, there was no net population growth in more than thirty of the world's more affluent countries. This trend seems to mark a return to a regime of systematic population limitation, like that of the Paleolithic era.

Population Growth as a Historical Force

Although population growth has been a consequence of innovation, it has also shaped human history in profound ways. The size and density of populations can have a profound effect on rates of innovation, as well as on the structure of society, the power of states, the spread of disease, the health of commerce, and the availability of labor. The following are some of the major types of change in which population growth plays a significant role.

We have seen already that population growth can stimulate migration by causing localized overpopulation. Such migration, in its turn, has been one of the major causes of the spread of agricultural communities throughout the world. The rough calculations of Rein Taagepera suggest that the area of the inhabited earth within agrarian civilizations (a very rough measure of the area dominated by farming) grew from 0.2 percent some five thousand years ago to about 13 percent two thousand years ago, and perhaps 33 percent just three hundred years ago (Christian 2004, 305). While population growth was often the primary trigger for migrations of farmers into new regions, states often backed such migrations because their own fortunes depended on the size of the tax-paying populations under their control. Statebacked migrations of this kind have been particularly spectacular in recent centuries as imperial states such as Russia, China, Spain, and Great Britain backed migrations of farmers into previously unfarmed lands in Siberia, Asia, the Americas, and Australasia.

Population growth has been one of the main drivers of increasing social complexity. There is little evidence for significant increases in the size or complexity of human communities until very late in the Paleolithic era. But human societies began to change significantly as soon as population densities started to rise with the appearance of agriculture. Larger, denser communities could no longer be organized through the informal kinship structures that worked well enough in foraging communities, most of which consisted of just a handful of people. Once hundreds or even thousands of people began to live together in villages and towns, new types of social coordination became necessary to limit conflict, organize worship, and organize collective activities such as defense, or the maintenance of irrigation systems. Eventually larger communities, supported by more productive technologies, allowed for the beginnings of specialization. No longer was everyone a farmer; so specialists had to buy their food and other necessities through markets, which had to be regulated and protected. Cities required even more sophisticated forms of coordination to manage refuse collection and maintain water quality, and for defense. The earliest states appeared, in part, to take over the new organizational tasks that emerged within dense communities; but their power also reflected the large numbers of people they controlled and taxed. In the last two hundred years, population growth has created new and even more complex human communities, so that modern states have had to acquire new administrative and technological skills to manage, tax, and coordinate the activities of many millions of people. All in all, increasing population density counts as one of the main drivers of social complexity in human history.

Population growth and the human migrations that resulted from it have also been a major cause of ecological degradation in human history. There is increasing evidence that this was true even in the Paleolithic era as communities of foragers developed technologies that had a significant impact on their environments. It seems likely that the arrival of humans led to the extinction of many species of large animals, particularly in Australia, Siberia, and the Americas. In Australia and the Americas, it is possible that 70-80 percent of all mammal species over 44 kilograms in weight were driven to extinction after the arrival of humans (Christian 2004, 200). But the slow spread of agrarian communities during the last ten thousand years has had a much more profound impact on the environment. Above all, it led to deforestation as farmers moved into forested zones, clearing trees as they went, at first temporarily and then more permanently. Overpopulation and overfarming occasionally caused regional breakdowns in production and the abrupt decline of entire regions. At the end of the third millennium BCE, the populations of Mesopotamia, which lived mainly from sophisticated forms of irrigation farming, collapsed. The cause was probably overirrigation leading to salinity, which undermined the productivity of the soil. The sudden decline of Mayan civilization at the end of the eighth century CE may also have been caused by overexploitation of fragile environments, leading to an abrupt decline in the fertility of the land.

Finally, though population growth has been a consequence of the human capacity for constant innovation, it can in its turn stimulate innovation by providing new markets and new incentives to increase productivity, and by increasing the number of people contributing to the pool of new ideas. Ester Boserup (1981) has been a strong supporter of the view that population growth can stimulate innovation, particularly in agriculture. Yet it is clear that such arguments should not be overstated, for there have been all too many instances (some of which are listed above) when overpopulation did not generate new and more productive technologies, but led to social, economic, and demographic collapse. There seems to be a feedback loop between innovation and population growth. But it is not entirely clear which side of this feedback loop is most powerful, and the answer may vary from place to place. Was population growth a cause or a consequence of change? Theorists and governments have been divided on the issue, sometimes arguing for measures to support population growth, sometimes seeing overpopulation as a prelude to decline.

The debate has raged most furiously in discussions of the industrial revolution. Was population growth a cause or a consequence of innovation? There is no doubt that populations were growing rapidly in the eighteenth century in much of the world, or that population growth stimulated innovation by providing cheap labor and expanding markets for food and other basic necessities. Furthermore, in Britain growing populations increased the demand for fuel, which highlighted the shortage of wood and stimulated increasing use of coal, thereby encouraging the fundamental innovations (above all the steam engine) that led to increased use of fossil fuels. Yet it's also possible to argue that innovations in agriculture industry and commerce in turn led to further population growth. Global population growth was caused in part by the exchange of crops, animal species, and human migrants between Eurasia and the Americas (though the exchange of diseases between the continents caused a sharp decline in populations in the Americas). It has also been suggested that in many areas, both in Europe and elsewhere, the spread of new, commercialized forms of production and employment in rural areas (protoindustrialization) may have enabled young couples to create families younger, whereas previously they might have had to wait until enough land became available to set up a new household and start producing children. Population growth was also caused in part by an increase in the areas being farmed or exploited in new ways, both within major states and in newly colonized regions, usually with the backing of governments. All these factors the emergence of global markets, the search for new resources with state backing, and the emergence of more industrialized forms of production in rural areas—may have stimulated population growth in the early modern period. In the nineteenth century, the industrial revolution itself stimulated population growth in new ways. New forms of sanitation reduced mortality rates, and artificial fertilizers increased food supplies. Eventually, modern scientific medicines and the spread of knowledge about sanitation helped drastically reduce mortality rates around the world.

Such discussions show that, however necessary it may be to separate out factors such as population growth as causes of historical change, it is always somewhat artificial to do so. The very notion of "engines of growth" is little more than a crude way of trying to clarify the relative importance of different causes of change. Throughout human history, long-term population growth has stimulated change; but the long demographic trends have themselves been shaped by technological innovations, climatic patterns, the actions of states, and the spread of disease, in a complex feedback cycle that needs to be analyzed instance by instance.

David Christian

See also Engines of History

Further Reading

- Anderson, J. L (1991). Explaining long-term economic change. Basingstoke, UK: Macmillan.
- Boserup, E. (1981). *Population and technological change*. Oxford, UK: Blackwell.
- Christian, D. (2004). *Maps of time: An introduction to big history*. Berkeley: University of California Press.
- Cohen, M. (1977). *The food crisis in prehistory*. New Haven, CT: Yale University Press.
- Cohen, M. (1989). *Health and the rise of civilization*. New Haven, CT: Yale University Press.
- Livi-Bacci, M. (1992). A concise history of world population. Oxford, UK: Blackwell.
- Malthus, T. R. (1976). An essay on the principle of population (P. Appleman, Ed.). New York: Norton.

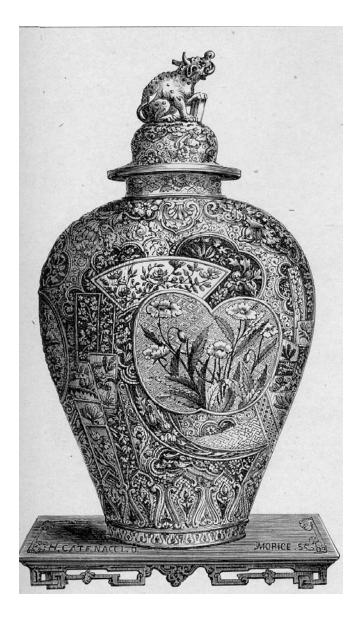
- McBrearty, S., & Brooks, A. S. (2000). The revolution that wasn't: A new interpretation of the origin of modern human behavior. *Journal of Human Evolution*, 39, 453–563.
- McEvedy, C., & Jones, R. (1978). Atlas of world population history. Harmondsworth, UK: Penguin.

Porcelain

orcelain is a type of ceramic that is white, rock hard, Γ translucent when thin, and resonant when struck. Made from quartz and either kaolin (china clay) or porcelain stone (and later from all three) it is fired at around 1,350°C. The ingredients for porcelain are found in abundance in China but do not exist in West Asia and occur only in isolated deposits in Europe. West Asian potters produced earthenware-made from various clays and fired at 600 to 1,100°C, while Europeans turned out earthenware and, from the fourteenth century, limited amounts of stoneware, a ceramic produced at 1,100 to 1,250°C. In contrast, China produced stoneware as early as the Shang period (1766–1045 BCE) and porcelain by the Tang (618–907 CE). During the Song dynasty (960–1279), artisans at Jingdezhen in Jiangxi province created a superior form of porcelain, made by combining kaolin and porcelain stone.

China had a monopoly on porcelain for a thousand years, until the Meissen manufactory of Augustus II (1670–1733), elector of Saxony and king of Poland, turned out a close facsimile in 1708. Indeed, the success of Chinese porcelain closely tracks that of China's economy and China's international reputation. Triumphant for a millennium, porcelain, Chinese industry, and Chinese prestige all went into steep decline in the last half of the eighteenth century, giving way to British pottery (which came to overshadow mainland European pottery) and Western imperialism.

Before that historic turnabout, China dominated the international ceramic trade, exporting untold numbers of ceramic vessels to Japan, Southeast Asia, India, West Asia, and East Africa. After the Portuguese opened trade



with China in the sixteenth century, Europe also became a premier market for porcelain, with perhaps 250 million pieces being imported by 1800. Jingdezhen used mass production techniques to manufacture wares for wideranging markets, with a single piece of porcelain passing through the hands of over seventy workers during its manufacture and decoration. Other regions could not compete with the massive Chinese economy, nor could their potters create vessels as lustrous as porcelain. Whether it was monochromatic whiteware in the Song or blue-decorated pieces from the Yuan dynasty (1279– 1368), porcelain swept all before it. In Borneo and Java, local ceramic traditions died out when huge quantities of porcelain were imported. Peoples in the hills of Sumatra and the islands of the Philippines incorporated porcelain

A Chinese porcelain vase.

into their fertility, divination, and headhunting rituals; they adopted Chinese "dragon jars" into lineages and passed them down through generations, each seen to possess a personality and embody supernatural power. On the coast of East Africa and the littoral of North Africa, porcelain adorned mosques and religious shrines.

In Iran, Iraq, and Egypt in the eleventh century, potters imitated gleaming white porcelain by applying a tin glaze surface to their earthenware. Discontent with the dull result, they used cobalt oxide pigment to paint blue designs on the earthenware. By the fourteenth century, under the influence of Muslim merchants in China and Mongol rulers in Beijing, potters in Jingdezhen also began producing vessels in blue and white, the ceramic style destined to conquer the world, imprinting it with an image of elegance and refinement.

Rulers of Mughal India (1526-1857), Safavid Iran (1501–1722/1736), Mamluk Egypt (1250–1517), and Ottoman Turkey (c. 1300-1922) collected blue-andwhite porcelain, while potters in those kingdoms replicated and transformed Chinese designs on their own blue-and-white earthenware. When porcelain reached the West in large quantities after 1600, the same thing happened: The elite amassed blue-and-white porcelain, and potters in Holland, Germany, France, and Italy copied the Chinese ceramics, combining their own traditional motifs with imaginative versions of Chinese pagodas, Buddhist symbols, and urbane mandarins. At the same time, European princes, influenced by mercantilist doctrine, aimed to staunch the flow of silver bullion to Asia to pay for exotic commodities, including porcelain. In the end, the race to find a formula for porcelain was won by Augustus II, although within a few years, absconding artisans carried the secret to other manufactories.

Still, neither Meissen nor its great competitor, the Sèvres manufactory outside Paris, could compete internationally with Chinese porcelain. That was the achievement of Josiah Wedgwood (1730–1795), the pottery baron of Great Britain. He produced an innovative glazed earthenware, christened "creamware," that was as durable and thin as porcelain. Equipping his manufactory with steam power and employing mass production methods (modeled on Jingdezhen's), and being attentive to the latest fashion styles and promotion techniques, Wedgwood aggressively sold his pottery, driving Chinese porcelain from markets around the world. Just as veneration for China in Western intellectual and ruling circles began declining precipitously after 1750, so too Chinese porcelain fell from its age-old pedestal.

Robert Finlay

See also Art-East Asia

Further Reading

- Atterbury, P. (Ed.). (1982). The history of porcelain. London: Orbis. Carswell, J. (1985). Blue and white Chinese porcelain and its impact on
- the Western world. Chicago: David and Alfred Smart Gallery. Emerson, J., Chen, J., & Gardner-Gates, M. (2000). Porcelain stories:
- From China to Europe. Seattle, WA: Seattle Art Museum.
 Finlay, R. (1998). The pilgrim art: The culture of porcelain in world history. Journal of World History, 9(2), 141–187.
- Vainker, S. J. (1991). Chinese pottery and porcelain. London: British Museum Press.

Portuguese Empire

The Portuguese empire was the first and longest lasting of all the empires that western Europeans created. For centuries it created a forum for an unprecedented variety of cross-cultural interaction.

1415-1505: Expansion

After Portuguese king Afonso III (reigned 1248–1279) expelled the Muslims from Portugal, the wars against Islam moved overseas when in 1415 an expedition of glory-hungry Portuguese knights captured—and held— Ceuta, now a Spanish enclave in modern Morocco. Long-standing royal support of maritime activities culminated in Portuguese Prince Henry the Navigator's promotion of the exploration of the African coast in the new caravel sailing ships rigged with lateens (character-

World	l Religion	s Began
4000-2500 все	Hinduism	South Asia
1300-1200 все	Judaism	West Asia
500-400 все	Buddhism	South Asia
	Confucianism	China
	Zoroastrianism	West Asia
	Jainism	South Asia
400-221 все	Daoism	China
lst century ce	Christianity	West Asia,
		Europe
3rd century ce	Manichaeism	West Asia
6th century ce	Shinto	Japan
7th century ce	Islam	West Asia
11th century	Orthodoxy	West Asia
15тн-16тн	Sikhism	South Asia
CENTURY		
16th century	Protestantism	Europe
19th century	Latter-day Saints	North
		America
	Babi and Baha'i	West Asia
19тн-20тн	Pentecostalism	North
CENTURY		America

ized by a triangular sail extended by a long spar slung to a low mast), which could sail closer to the wind than ever before. By 1435 West African gold was used to reintroduce a gold currency in Portugal, and bases were established on the Gold Coast at Mina (1482) and Axim (1503). In 1498 the explorer Vasco da Gama discovered an all-sea route to India, around the Cape of Good Hope. Two years later the navigator Pedro Alvares Cabral improved the route, avoiding the calm waters of the Gulf of Guinea by skirting the coast of Brazil, which the Portuguese also claimed from Spain under the terms of the Treaty of Tordesillas (1494).

Commercial and missionary expansion, along with a desire for Guinea gold and an alliance with Prester John (a legendary Christian king and priest of the Middle Ages) against the Muslims, motivated these explorations. As a member of da Gama's crew explained in Calicut (a

When and Where World Religions Began

The Treaty of Tordesillas, 1492

Columbus's discoveries that he claimed for Spain concerned Portugal's king who feared enchroachment on lands considered to belong to Portugal. On 7 June 1494, the Treaty of Tordesillas, extracted below, partitioned the world between Spain and Portugal.

Whereas a certain controversy exists between the said lords, their constituents, as to what lands, of all those discovered in the ocean sea up to the present day, the date of this treaty, pertain to each one of the said parts respectively; therefore, for the sake of peace and concord, and for the preservation of the relationship and love of the said King of Portugal for the said King and Queen of Castile, Aragon, etc., it being the pleasure of their Highnesses, they, their said representatives, acting in their name and by virtue of their powers herein described, covenanted and agreed that a boundary or straight line be determined and drawn north and south, from pole to pole, on the said ocean sea, from the Arctic to the Antarctic pole. This boundary or line shall be drawn straight, as aforesaid, at a distance of three hundred and seventy leagues west of the Cape Verde Islands, being calculated by degrees, or by any other manner as may be

considered the best and readiest, provided the distance shall be no greater than aforesaid. And all lands, both islands and mainlands found and discovered already, or to be found and discovered hereafter, by the said King of Portugal and by his vessels on this side of the line and bound determined as above, toward the east, in either north or south latitude, on the eastern side of the said bound, provided the said bound is not crossed, shall belong to, and remain in the possession of, and pertain forever to the said King of Portugal and his successors. And all other lands, both islands and mainlands, found or to be found hereafter, discovered or to be discovered hereafter, which have been discovered or shall be discovered by the said King and Queen of Castile, Aragon, etc., and by their vessels on the western side of the said bound, determined as above, after having passed the said bound toward the west, in either its north or south latitude, shall belong to, and remain in the possession of, and pertain forever to, the said King and Queen of Castile, Leon, etc., and to their successors.

Source: Davenport, F. (Ed.). (1917–1937). European treaties bearing on the history of the United States and its dependencies (Vol. 4, p. 84). Washington DC: Carnegie Institution.

city in southern India) to two astonished Spanishspeaking Tunisians, "We have come to seek Christians and spices." Although King Manuel I's (1469–1521) assumption of the title "Lord of the conquest, navigation, and commerce of Ethiopia, India, Arabia, and Persia" reflected ambitions more than realities, the monarchy would keep the title for centuries.

1505–1598: Constructing an Empire

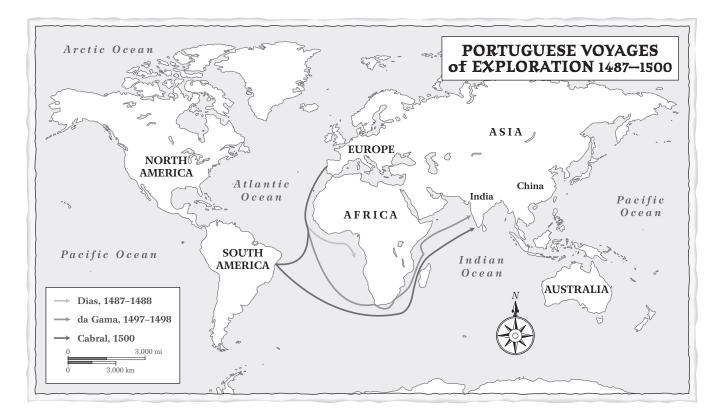
A celebrated veteran of the wars against Islam, Francisco de Almeida (c. 1450–1510) left Lisbon, Portugal, in 1505 to serve as India's first viceroy. He wrested an incomplete dominance of Indian Ocean trade from the Arabs and Muslim Indians by defeating their combined naval forces off Diu in western India in 1509. That year he gave up his office to a Crown-appointed governor, Afonso de Albuquerque (1453–1515). During his tenure Albuquerque conquered Muslim Goa on the western coast of India to serve as the Portuguese capital, captured the entrepôts (intermediary centers of trade and transshipment) of the strait of Melaka on the Malay Peninsula (1511) and the strait of Hormuz in the Persian Gulf (1515). Having secured these key straits, the Portuguese expanded their maritime empire with a string of permanent forts along the coasts of eastern Africa, India, and Ceylon, which complemented the sizeable lands acquired along the Zambezi River in Africa and in western India. Portuguese victories came as much from their tenacity and superior firearms as from native rulers' intramural conflicts and disinclination toward lowly maritime battles.

Lacking a relative military advantage in eastern Asia, the Portuguese reached commercial agreements with the local authorities in Bengal and China. Although early relations were troubled, through informal agreements worked out in the 1540s the Portuguese began to lease the Macao Peninsula from the Chinese. Regular trade with Japan began in 1544 and was funneled through Nagasaki after 1569. Ships were required to pay tolls at Portuguese ports. This system gave the Portuguese dominance of the spice trade, the principal source of the empire's wealth. At century's end the *Estado da India* (State of India) stretched from Japan to the Cape of Good Hope. Importation of peppers and other spices, as well as silks and porcelains, affected a trade deficit that was balanced with gold bullion and the profit from the "country trade" between Asian lands. Although Brazilian sugar became the first profitable crop export from the Americas, commerce overshadowed agriculture. Amidst the daunting expenses of empire, colonies still had to import foodstuffs along with manufactured goods.

A typical Portuguese vessel sailing to Goa might carry one or two women for every hundred men, and a Goanese population of mixed heritage soon developed. Albuquerque, in fact, married his men to the local widows created by his invasion. The Portuguese suffered from a labor shortage throughout Asia, and on their merchant vessels a captain and a dozen soldiers (as young as six years old) might be the only Europeans among a crew of African and Asian slaves.

To discharge the universal responsibility that it claimed for non-Christians, the papacy delegated a variety of Church patronage rights to the Portuguese crown. Thus, the Inquisition (a Church tribunal) remained under royal authority, and all missionaries were required to obtain royal approval and to depart from Lisbon. Jealous of its prerogatives, the Crown blocked the development of an overland route to Asia under the protection of the Habsburg ruling house of Europe and icily suggested that unauthorized missionaries be rerouted to Greenland. The mass destruction of Hindu temples in Goa in the 1540s gave away to the policy of denouncing conversion by force even while introducing legal restrictions on non-Christian religions.

When Henry the Cardinal-King (1512–1580) died, his nephew Philip II of Spain pursued an inheritance claim to the Portuguese crown, which he solidified through bribery and an invasion. Philip's successors did





The statue of Christ atop Corcovado, 2,300 feet above the city of Rio de Janeiro. The complex at the top of the mountain was intended to mark the 100th anniversary of Brazil's independence from Portugal in 1922 but due to funding problems it did not open until 1931.

seized in 1622 by Shah Abbas of the Safavid dynasty of Persia in cooperation with the British

not honor his promises to respect traditional liberties, and Portugal would regain independence in 1640. Although the administration of each domain remained distinct, the territories of the joint crown of Portugal and Spain became the first empire upon which the sun never set.

1598–1663: Portuguese-Dutch World War

Battling for independence from Spain, the Dutch came into conflict with the Portuguese through the Spanish-Portuguese union. Although traditionally trading partners with Portugal, the Dutch challenged Portuguese dominance of the spice trade by seeking spices at their Asian sources. From the Dutch attack on Príncipe and São Tomé on the western coast of Africa (1598) to their capture of Portuguese settlements on the Malabar coast of India (1663), the Protestant Dutch and the Catholic Portuguese fought a global war for global trade, not only over the European commerce, but also over the slave trade in Africa, the sugar trade in Brazil, and the spice trade in southeastern Asia. Superior resources and a leadership awarded by experience rather than social status gave the advantage to the Dutch, although the Portuguese were acclimated to tropical warfare and generally enjoyed greater support from indigenous peoples-a result in part of Portuguese marriage patterns and the efforts of Catholic missionaries. Even in areas occupied by the Dutch, such as Brazilian Pernambuco from 1630 to 1654, use of creolized (hybrids of mixed Portuguese and indigenous languages) Portuguese languages endured. Hormuz was East India Company. Melaka, the other vital port in the Portuguese system, fell to the Dutch in 1641 after a long blockade.

1663-1822: Divergences

Dutch victories in Asia shifted the focus of the Portuguese empire to Brazil, originally little more than a way station for the fleet to Goa. The world's richest known gold deposits were discovered in Brazil in 1695, causing a gold rush and a shift of population from the coastal areas. During the eighteenth century gold would displace sugar as the core of Brazil's economy.

After 1755 equally important changes came from reforms introduced by the Portuguese king's prime minister, the Marquês de Pombal. Pombal formed two chartered companies with monopolies on Brazilian trade. He closed Brazilian ports to foreign ships in order to wean the ports from commercial dependency on Britain. A legal equality was announced for whites and indigenous peoples, and in 1763 the Brazilian capital was transferred to Rio de Janeiro. In his pursuit of centralized power Pombal butted heads with the Society of Jesus (whose opposition was perhaps more imagined than real), and in 1759 he had the Jesuits deported from Portuguese territories. For similar reasons universities and printing presses were severely restricted.

1822–1999: Independences

In Brazil heavy taxes and increasingly rigid controls over the gold and diamond industries, designed to favor the interest of Portugal over Brazil, provokes a series of conspiracies among social elites who had acquired Enlightened (relating to a philosophic movement of the eighteenth century marked by a rejection of traditional social, religious, and political ideas and an emphasis on rationalism) thought while studying in Europe. These conspiracies rarely flared into rebellion because of fears that revolt would lead to a slave insurrection.

The French emperor Napoleon's 1807 invasion of Portugal prompted the prince regent Dom John (from 1816, King John IV) to flee to Brazil under the protection of the British Navy. This transfer of the court marked the first time in world history that a colony housed the government of the mother country, and the Crown favored Brazil with decrees abolishing mercantilist prohibitions on manufacturing and opening its ports to all nations—a move welcomed by the market-hungry British. When an 1815 decree designated the empire the "United Kingdom of Portugal, Brazil, and the Algarves," Brazil enjoyed a status equal with Portugal.

The colonists' enthusiasm for a resident monarch cooled as cheap British machine-made goods flooded Brazil's handicraft market and as the nobles and bureaucrats who accompanied the court brought new competition for jobs. The spark for independence, however, came from Lisbon, when in 1820 liberal revolutionists demanded the return of the king to Lisbon. He appointed his son Pedro regent and returned to Portugal. Seeking a return to a subordinate Brazil tied to Portugal by a commercial monopoly, the revolutionists demanded that Pedro also return. Pedro refused and, acting on his father's parting advice, declared the independence of Brazil on 7 September 1822. Thus, a liberal revolution in Portugal triggered a Brazilian revolution more conservative and less bloody than other independence movements in the Spanish colonies at the time.

The Enduring Afro-Asian Empire

Brazilian independence shifted the heart of the Portuguese empire to Africa, with smaller possessions remaining in western India, East Timor, and Macao. A new policy favored African colonial expansion, which would threaten an alliance with Britain that dated back to 1372. In 1886 Portugal obtained French and German recognition for its claims to a trans-African colony extending from Angola to Mozambique, but British rival claims led to an ultimatum issued by the British to the Portuguese in 1890. Caught between proimperial public opinion and the threats of the British Navy, the ultimatum crisis toppled the Lisbon government. Subsequent agreements with Britain (1891, 1899) recognized existing Portuguese colonies, which covered almost one-tenth of Africa. Throughout their African colonies the Portuguese suffered casualties in campaigns against the Germans during World War I. During the 1920s the League of Nations denounced the forced labor practices that had replaced slavery in Portuguese colonies by the turn of the century.

As minister of colonies, António de Oliveira Salazar (1889–1970) in 1930 announced the Colonial Act, which reemphasized the colonial tradition by centralizing administration and unifying the imperial economy against foreign capital. In 1951 Salazar attempted to deflect anti-imperialist criticism by reorganizing the colonies into the "overseas provinces" of a "single and indivisible" state. The regime increasingly directed investment and white emigration from Portugal to the African colonies, thus worsening racial tensions.

Decolonization

After winning independence from the British in 1947 India began pressing claims against Portuguese enclaves on the subcontinent. Portuguese authorities violently responded to nonviolent resisters crossing into Goa from India in 1955, and diplomatic relations were severed. Indian troops seized Goa, Diu, and Daman in 1962.

Salazar's enduring opposition to decolonization sparked renewed independence movements, troop reinforcements, and expensive wars in Africa beginning in 1961. General António de Spínola, a veteran of these wars, promoted negotiated self-government as an alternative to continued violence in his 1974 book, *Portugal and the Future.* A 1975 military coup involving General de Spínola followed in Portugal, bringing independence to Portuguese Guinea. All other Portuguese colonies in Africa became independent the next year. The Portuguese History must be written of, by and for the survivors. • ANONYMOUS

withdrew from Angola without formally transferring power to any of the liberation movements that had been active in the country, and a long and increasingly internationalized civil war began. Nearly 1 million people fled to Portugal from the former African colonies, adding a refugee crisis to the already volatile domestic situation.

On 28 November 1975, East Timor declared its independence but was overrun by Indonesia nine days later.

The last of the Portuguese overseas provinces, Macao had lost its economic role to Hong Kong after 1842 and had declared its independence from China in 1849. Its neutrality during World War II made it attractive to European as well as Chinese refugees, who came in even greater numbers after the Communist takeover of China in 1949. Not until 1984, under pressure from the Portuguese governor, did the majority Chinese population obtain the right to vote. Only in 1987 did China agree to assume rule of Macao: Following the pattern established by Hong Kong two years earlier, Macao returned to Chinese rule in 1999 under an agreement preserving local autonomy for fifty years.

As the first and longest lasting of the European empires, the Portuguese empire is notable for its longevity and for its maritime, trade-based structure. Today Portuguese creole languages continue to be spoken in Africa, Asia, and the Americas. Founded in 1996, the Comunidade dos Países de Língua Portuguesa (CPLP) unites eight Portuguese-speaking countries to promote the language and to facilitate the cross-border circulation of their citizens.

Luke Clossey

See also Gama, Vasco da; Henry the Navigator

Further Reading

- Albuquerque, L. (1985). Os descobrimentos Portugueses (The Portuguese discoveries). Lisbon, Portugal: Publicações Alfa.
- Alden, D. (1996). The making of an enterprise: The Society of Jesus in Portugal, its empire, and beyond, 1540–1750. Stanford, CA: Stanford University Press.
- Bell, C. (1974). Portugal and the quest for the Indies. London: Constable.
- Boxer, C. R. (1965). Portuguese society in the tropics: The municipal councils of Goa, Macao, Bahia, and Luanda, 1510–1800. Madison: University of Wisconsin Press.
- Boxer, C. R. (1969). The Portuguese seaborne empire, 1415–1825. New York: A. A. Knopf.

- Clarence-Smith, W. G. (1985). The third Portuguese empire, 1825– 1975: A study in economic imperialism. Manchester, UK: Manchester University Press.
- Coates, T. J. (2001). Convicts and orphans: Forced and state-sponsored colonizers in the Portuguese empire, 1550–1755. Stanford, CA: Stanford University Press.
- Diffie, B. W., & Winius, G. D. (1977). Foundations of the Portuguese empire, 1415–1580. Minneapolis: University of Minnesota Press.
- Duffy, J. (1959). Portuguese Africa. Cambridge, MA: Harvard University Press.
- Dutra, F. A., & Santos, J. C. (Eds.). (1995). The Portuguese and the Pacific. Santa Barbara: Center for Portuguese Studies, University of California.
- Hammond, R. J. (1966). Portugal and Africa, 1815–1910: A study of uneconomic imperialism. Stanford, CA: Stanford University Press.
- Milward, P. (Ed.). (1994). Portuguese voyages to Asia and Japan in the Renaissance period. Tokyo: Renaissance Institute, Sophia University.
- Russell-Wood, A. J. R. (1998). The Portuguese empire, 1415–1808: A world on the move. Baltimore: Johns Hopkins University Press.
- Sá, I. G. (1997). Quando o rico se faz pobre: Misericórdias, caridade e poder no império português, 1500–1800 (When the rich become poor: Almshouses, charity, and power in the Portuguese empire). Lisbon, Portugal: Comissão Nacional para as Comemorações dos Decobrimentos Portugueses.
- Subrahmanyam, S. (1993). *The Portuguese empire in Asia*, 1500–1700. London: Longman.
- Wheeler, D. L., & Pélissier, R. (1971). Angola. New York: Praeger.

Postcolonial Analysis

Nostcolonial analysis is a mode of inquiry into the nature and aftereffects of European colonial rule in different parts of the world. Today it has emerged as one of the most dynamic if not controversial modes of inquiry to be articulated in the humanities after World War II. Much thought in postcolonial analysis is of recent origin, having developed during the past century out of the confluence of traditions that are strongly anticolonial, highly theoretical, and interdisciplinary in their orientations. Drawing from an eclectic range of theorists (Homi Bhabha, Jaccques Derrida, Frantz Fanon, Michel Foucault, Mohandas K. Gandhi, Antonio Gramsci, Edward Said, and Gayatri Spivak) and intellectual traditions (feminism, Marxism, postmodernism, and psychoanalysis), postcolonial theory has opened new fields of inquiry across diverse disciplines that have reframed the phenomena of European colonialism and its legacies. It continues to critique social inequality and structures of power around the globe, supporting the resistance of subordinated peoples to dominant traditions. Postcolonial analysis tends to be self-consciously critical as it attempts to fashion new forms of cultural and political activity.

Canonical in the development of postcolonial analysis has been the work of Edward Said, whose book Orientalism (1978) discussed the ways in which European representations of the "Orient" were responsible for producing enduring stereotypes that have persisted to this day. More recently, postcolonial historians have also been deeply concerned with recording the lives and voices of subaltern (disempowered) peoples. Drawing from a range of theories spread across disciplines, these subaltern historians have generated a renewed interest in questions of power, inequality, and human agency. However, this mode of inquiry has its share of critics. While some have critiqued the possibility of ever writing subaltern histories, others dismiss these postcolonial writers as migrant "Third World" intellectuals enjoying the benefits of a restructured capitalist global economy. Still others criticize postcolonial theorists for their use of incomprehensible language and excessive indulgence in intellectual gymnastics.

Postcolonial Analysis and World History

Postcolonial writings examine a range of topics that interests world historians, such as colonial encounters, diasporic (scattering) and immigrant experiences, and modern capitalism and its discourses of development. In such writings postcolonial analysts tend to unpack longheld views of scholars to reveal the nuances that are inherent in any historical phenomena but that are often ignored by others. For instance, postcolonial writings have contributed significantly to broadening our understanding of long-studied phenomena such as European colonialism. Colonizer-colonized interactions are no longer seen as colliding worlds but rather as complex, hybrid, and sometimes contradictory flows that shape both the colonizer and the colonized. Postcolonial writers have been careful to take into account the role of class, gender,

Salman Rushdie: Postcolonialism in India

Post-colonialism, often associated with the independence movements of states from the empires of Europe, was hardly limited to rebellion against western powers. In Midnight's Children, Salman Rushdie describes protests in India against the border warfare with China of 1965.

The disease of optimism, in those days, once again attained epidemic proportions; I, meanwhile, was afflicted by an inflammation of the sinuses. Curiously triggered off by the defeat of Thag La ridge, public optimism about the war grew as fat (and as dangerous) as an overfilled balloon; my longsuffering nasal passages, however, which had been overfilled all their days, finally gave up the struggle against congestion. While parliamentarians poured out speeches about 'Chinese aggression' and 'the blood of our martyred jawans', my eyes began to stream with tears; while the nation puffed itself up, convincing itself that the annihilation of the little yellow men was at hand, my sinuses, too, puffed up and distorted a face which was already so startling that Ayub Khan himself had stared at it in open amazement. In the clutches of the optimism disease, students burned Mao Tse-Tung and Chou En-Lai in effigy; with optimism-fever on their brows, mobs attacked Chinese shoemakers, curio dealers, and restaurateurs. Burning with optimism, the Government even interned Indian citizens of Chinese descent-now 'enemy aliens'in camps in Rajasthan. Birla Industries donated a miniature rifle range to the nation; schoolgirls began to go on military parade. But I, Saleem, felt as if I was about to die of asphyxiation. The air, thickened by optimism, refused to enter my lungs. Source: Rushdie, S. (1980). Midnight's children (p. 380). New York: Alfred A. Knopf.

race, sexuality, ethnicity, and nationality in explaining historical processes. Writers have given critical attention also to how Europe's intellectual legacies (Enlightenment [a philosophic movement of the eighteenth century marked by a rejection of traditional social, religious, and political ideas and an emphasis on rationalism] thought, science, the modern state, and colonial knowledge) have shaped our world, engendering dangerous stereotypes, misrepresentations, and inequalities. Writers have given special attention to questions of religious conversion, Western science and education, travel writing, literature, and nationalism.

Postcolonial analysis is a valuable addition to the repertoire of approaches being used by world historians to conceptualize global flows, processes, and connections across time. It has provided world historians with a repertoire of tools for analysis drawn from feminist studies, literary criticism, Marxism, philosophy, and psychoanalysis. Postcolonial analysts study global phenomena such as imperialism, colonialism, decolonization, capitalism, world systems, nationalism, and migration not only in terms of neatly bounded nations, culture regions, civilizations, time periods, and abstract processes but also in terms of complex flows that embrace a wide range of actors across societies and time periods. The advent of subaltern studies approaches has impressed on world historians the need to critique structures of power and social inequalities and to recognize the presence of disempowered and subordinated groups (women, indigenous peoples, peasants, tribals, low castes, gays and lesbians) throughout the history of the world. Recent postcolonial writers have taken a philosophical turn in their attempt to critique the very discipline of history especially its intellectual debts to Western thought. These writers seek to include alternative understandings of the world that do not conform to the standards of Western reason or modern disciplinary conventions.

Implications

Yet, this focus on complexity and agency in the study of historical processes has not always transitioned neatly to the study of large-scale processes. Perhaps what distinguishes postcolonial analysis from other forms of writing in world history is its reluctance to produce grand theories or analyze large-scale processes and instead to focus more on specific texts and historical situations concerned with the politics of identity formation and the agency of human beings. With many of its creators themselves migrants to the "First World," it is not surprising that postcolonial analyses are particularly interested in the dynamics by which social identities based on class, caste, gender, nationality, ethnicity, race, and sexuality are informed and unsettled by global phenomena such as capitalism, colonialism, migration, and international politics. Postcolonial writers frequently engage in selfcriticism, or auto-critique, and so postcolonial narratives can seem to break up no sooner than they take shape.

Nevertheless, postcolonial analysis has contributed significantly to the study of world history by cautioning against the development of simplistic macro (large-scale, general) frameworks and categories that usually end up losing sight of the variety of historical actors and the nuances that make up global processes. World history practiced in this vein becomes theoretically sophisticated, thematically focused, and self-critical, its dominant narratives and grand theories constantly breaking down to reveal the world full of differences, contradictions, and variations. Although we cannot yet see the full impact of these trends in world history, postcolonial analysis continues to offer one of the most exciting frameworks for cultural study and will invigorate the study of world history for some time to come.

Bernardo A. Michael

See also Colonialism, Decolonization

Further Reading

- Ahmad, A. (1992). In theory: Classes, nations, literatures. London: Verso.
- Ashcroft, B., Griffiths, G., & Tiffin, H. (Eds.). (1998). Key concepts in postcolonial studies. London: Routledge.
- Bhabha, H. (1994). The location of culture. London: Routledge.
- Chakrabarty, D. (2000). Provincializing Europe: Postcolonial thought and historical difference. Princeton, NJ: Princeton University Press.
- Chatterjee, P. (1993). The nation and its fragments: Colonial and postcolonial histories. Princeton, NJ: Princeton University Press.
- Dirlik, A. (1997). The postcolonial aura: Third World criticism in the age of global capitalism. Boulder, CO: Westview Press.
- Escobar, A. (1995). Encountering development: The making and unmaking of the Third World. Princeton, NJ: Princeton University Press.
- Gandhi, L. (1998). *Postcolonial theory: A critical introduction*. New York: Columbia University Press.
- Gilroy, P. (1993). The black Atlantic: Modernity and double consciousness. Cambridge, UK: Cambridge University Press.

- Guha, R. (1983). Elementary aspects of peasant insurgency. Oxford, UK: Oxford University Press.
- Johnson-Odim, C., & Strobel, M. (Eds.). (1999). Restoring women to history. Bloomington: Indiana University Press.
- Loomba, A. (1998). Colonialism/postcolonialism. London: Routledge.
- Minh Ha, T. (1989). Woman, native, other: Writing postcoloniality and
- feminism. Bloomington: Indiana University Press.
 Moore-Gilbert, B. (1997). Postcolonial theory: Contexts, practices, politics. London: Verso.
- Nandy, A. (1995). History's forgotten doubles. *History and Theory*, 34(2), 44–66.
- Ngugi, W. T. O. (1981). *Decolonizing the mind: The politics of language*. London: James Curry.
- O'Hanlon, R., & Washbrook, D. (1992). After Orientalism: Culture, criticism, and politics in the Third World. *Comparative Studies in Society* and History, 34(1), 141–167.
- Prakash, G. (1999). Another reason: Science and the imagination of modern India. Princeton, NJ: Princeton University Press.
- Said, E. (1978, 1991). Orientalism. London: Penguin.
- Said, E. (1993). Culture and imperialism. London: Chatto & Windus.
- Schwarz, H., & Ray, S. (Eds.). (2000). A companion to postcolonial studies. London: Blackwell.
- Spivak, G. C. (1988). Can the subaltern speak? In C. Nelson & L. Grossberg (Eds.), *Marxism and the interpretation of culture* (pp. 271–313). Chicago: University of Illinois Press.
- Thomas, N. (1994). Colonialism's culture: Anthropology, travel and government. Princeton, NJ: Princeton University Press.
- Trivedi, H., & Mukherjee, M. (Eds.). (1996). Interrogating postcolonialism: Theory, text, and context. Shimla, India: Indian Institute of Advanced Study.
- Young, R. J. C. (2003). Postcolonialism: A very short introduction. New York: Oxford University Press.

Postmodernism

In *The Postmodern Condition* (1984), the philosopher Jean-François Lyotard (1924–1998) described postmodernism as "incredulity towards metanarratives" (Lyotard 1984, xxiv). While not aimed specifically at world historians, this observation—like many others by postmodern thinkers—has serious implications for the field of world history.

Origins and the Problem of Definition

Trying to define postmodernism is rather like trying to get a uniform and cohesive set of demands from globalization protestors. The adjective *postmodern* is applied to a varied assortment of nineteenth- and twentieth-century thinkers, including Friedrich Nietzsche (1844–1900), Martin Heidegger (1889–1976), Theodor Adorno (1903– 1969), Walter Benjamin (1892–1940), Max Horkheimer (1895-1973), Jacques Lacan (1901-1981), Roland Barthes (1915–1980), Gilles Deleuze (1925–1995), Michel Foucault (1926–1984), Hayden White (b. 1928), Jean Baudrillard (b. 1929), Jacques Derrida (b. 1930), Félix Guattari (1930–1992), Luce Irigaray (b. c.1932), Frederic Jameson (b. 1934), and Julia Kristeva (b. 1941). It is difficult to identify overlaps in these thinkers' ideas, let alone any clear program or agenda. This is because they are resistant to, and incredulous of, universal truths, ideas, activities, narratives, and definitions as well as notions of rationality, authority, progress, clarity, and objectivity. Postmodernism thus entails a questioning of the grounds and forms of knowledge claims, including those made in histories and world histories. Postmodernism shares affinities with, but is not synonymous with, poststructuralism. Poststructuralism challenges the view that linguistic structures such as signifiers (sounds or scriptive symbols or words) are stable and reflective of the mind and reality.

Postmodernism is known to most historians through the strong reactions it provokes in those opposed to it. The historians Gertrude Himmelfarb and Arthur Marwick see postmodernism as incompatible with historical study; Keith Windschuttle has connected it with the "killing" of history, and Geoffrey Elton has concluded that it is the "intellectual equivalent of crack" (1991, 41). While extreme, these comments reveal an understanding of the extent to which postmodern claims undermine many of the methods and ideas that give shape to historical research and writing. To postmodern theorists such as Keith Jenkins, notions of truth and objectivity and indeed the very activity of writing history are comforters that need to be dispensed with. Others have struck a more conciliatory chord, suggesting, as Beverley Southgate has, that history be reconstructed to "incorporate rather than repudiate postmodernist ideas and ideals" (Southgate 2003, 29).

World History and Postmodernism

Postmodernism unmasks world histories as constructions—not descriptions—of the world by and for particular groups. They are "grand," "master," or "meta" narratives that legitimate certain ideals and gloss over conflicting views and discontinuities. Traditionally that has meant the adoption of a Eurocentric position: That is, events and spaces are named, organized, and judged in line with European ideas and ideals. Framed thus, world histories convey the message that European civilization is the epitome of a modern civilization, that European culture offers a model that other cultures should and will aspire to emulate. In questioning the privileging of a single view of the past—whether Eurocentric or any other "centric" view-postmodernists argue that all we are left with are multiple and often contradictory perspectives. That endpoint appears to be incompatible with the project of researching and writing world history, as that project demands the selection, arrangement, and synthesis of historical experiences.

Adding to the challenge of postmodernism, poststructuralism questions whether world histories may be linked back to authors or even to a real historical world. As writers are shaped by the system of language they are born into, world histories should not be studied for their creators' intentions but for traces of that system through the examination of other texts (intertextuality). Opinion is divided about what texts will be considered relevant in studies of intertextuality: some writers focus on contemporary works from the same genre, whereas others cast their studies much wider, crossing spatial, temporal and genre boundaries. In the wake of the death of the author, as the literary critic Roland Barthes calls it, comes the birth of the reader, who writes and rewrites meaning. This deconstruction is extended even further in the writings of the philosopher Jacques Derrida, who denies that even readers can be a source of meaning and who characterizes the search for meaning as movement in a closed maze of mirrors. In Derrida's view, signifiers do not refer to phenomena outside of a system of language: They only refer to other signifiers in an endless chain of signification.

Responses to Postmodernism

Given the radical implications of postmodernism for the field of world history, it is surprising that few writers have addressed the topic. Nor is it clear that postmodernism has been the major stimulus for the reduced scope of new world histories and the currently lively discussion on Eurocentrism. The rise of gender history and postcolonial and world systems studies, as well as concerns about the practicalities of world history education may also be credited for these developments.

Writings on postmodernism and world history focus in the main on metanarratives and the dissolution of nations and historical agents. Attending to the latter, for instance, the psychologist Lewis Wurgaft has described the activity of writing national and world histories as a form of psychological projection intended to ensure "narcissistic equilibrium" (Pomper, Elphick, and Vann 1998, 195). The historian Stephen Greenblatt has called for the creation of world histories in which cultural difference and homogenization oscillate and deny one another mastery. Kerwin Lee Klein, also a historian, has taken a more critical stance, suggesting that Lyotard's distinction between "master" and "small" narratives preserves the very antinomy of people with and without history that postmodernism tries to escape. Jerry Bentley, who edits the Journal of World History, has also been critical of postmodernism, arguing that the reduction of history to discrete micronarratives has led to a neglect of cross-cultural interaction. In response, he has posited a large-scale empirical narrative from which themes like population growth are inducted, not imposed. But Arif Dirlik, a historian whose research focuses on China, argues that Bentley's inducted empirical themes are fashioned out of Western concepts of space and time, as seen for instance in the naming and division of the continents. This is true of even the most inclusive new world histories. To Dirlik's view, world histories are rhetorical constructions, and world historians have yet to grasp that due recognition of differences "may mean the end of history as we know it" (Stuchtey and Fuchs 2003, 133).

Extending Dirlik's thinking, we should also note that this encyclopedia is fashioned out of Western concepts and conceptual arrangements. Recognizing this may mean the end of encyclopedias of world history, as well as world history itself. The opinion of postmodernist writers on what will (or should) occur after this death of history varies, and most do not say anything at all on the subject. This is because dictating an "after" equates to the presentation of an endpoint, a concept that is too universalist for postmodernism. Some may see humans engaged in emancipatory aporia (living lives of radical undecidability, unrestrained by moral, and historiographical norms), whereas others see us engaged in conversations unrestrained by purpose and endpoint.

Marnie Hughes-Warrington

See also Modernity

Further Reading

- Barthes, R. (1968). *The death of the author*. In S. Heath (Ed. & Trans.), *Image, music, text* (pp. 142–148). London: Fontana.
- Dirlik, A. (2000). *Postmodernity's histories: The past as legacy and project.* New York: Rowman and Littlefield.
- Domanska, E. (1999). Universal history and postmodernism. Storia della Storiagrafia, 35, 129–139.
- Elton, G. (1991). *Return to essentials.* Cambridge, UK: Cambridge University Press.
- Greenblatt, S. (1990). Towards a poetics of culture. In *Learning to curse: Essays in early modern culture* (pp. 146–160). London: Routledge.
- Jenkins, K. (2003). Refiguring history. London: Routledge.
- Klein, K. L. (1995). In search of narrative mastery: Postmodernism and the people without history. *History and Theory*, *34*(4), 275–298.
- Lyotard, J.-F. (1984). The postmodern condition: A report on knowledge (G. Bennington & B. Massumi, Ed. and Trans.). Minneapolis: University of Minnesota Press.
- Mazlish, B. (1993). Global history in a postmodernist era? In B. Mazlish & R. Buultjens (Eds.), *Conceptualizing global history* (pp. 113–127). Boulder, CO: Westview.
- Pomper, P., Elphick, R. H., & Vann, R. T. (1998). World history: Ideologies, structures and identities. Oxford, UK: Blackwell.
- Southgate, B. (2003). Postmodernism in history: Fear or freedom? London: Routledge.
- Stuchtey, B., & Fuchs, E. (2003). Writing world history, 1800–2000. Oxford, UK: Oxford University Press.
- Thompson, W. (2004). Postmodernism and history. London: Palgrave Macmillan.

Printing

See Communication—Overview; Libraries; Mass Media; Paper; Writing Systems and Materials

Production and Reproduction

Production is the way by which human communities satisfy their needs for food, clothing, and shelter. Reproduction is the way by which generations of people succeed generations through births and deaths. Population growth is fundamental to the human record. As one generation has succeeded another, world population has grown from mere tens of thousands at the beginnings of humanity to more than 6 billion today.

In history three basic systems of production and reproduction existed: hunting-gathering (or foraging), agriculture, and industry. A variant of agriculture was pastoralism, the tending of domesticated herds of herbivorous livestock. We should keep in mind some concepts: (1) These systems are theoretical. Real living societies were almost never pure examples of one system or another. Even highly advanced industrial societies during the twenty-first century depend on agriculture. Most modern societies also have elements of foraging, for example, sea fishing and timber industries. (2) Each system represents a stage in history. Foraging was by far the most enduring system of production, from the beginnings of humanity to about 9000 BCE. Agriculture developed and became prevalent after 9000 BCE, industry after 1750 CE. (3) Each of these systems was developmental and geographically variable. Human inventiveness led to occasional improvements in the technologies of production, with corresponding adjustments in reproductive behavior. The systems of foraging, agriculture, or industry in a given region depended upon the climate and resource base. (4) Each stage in history began somewhere and spread elsewhere. Each stage represented a successful technological breakthrough, which resulted in increased production. (5) More production invariably meant more people, that is, more reproduction. Besides needing food, clothing, and shelter, humans, like other successful species, have biological and psychological urges to be sexual and to nurture their young, which, when expressed, result in population growth if the birth rate exceeds the death rate.

When humanity began is debatable. Anatomically modern humans known as *Homo sapiens* date back about 200,000 years, originating in southeastern and eastern central Africa. *Homo sapiens*' direct ancestors—with some intermediary types (*Homo erectus* and possibly some other distinct species)—date back 1.8 million years ago, and even these types had their predecessors. Early humans lived in an era that had a technology known to social science as "paleolithic," meaning "old stone."

Foraging was an enduring system of production. Communities typically gathered the edible plants and animals within range of a campsite, staying there for a few days or even a month or more, depending on available foodstuffs. Where trees produced abundant nuts, or where stands of wild grain grew, or where rivers and seacoasts offered abundant fish, shellfish, and aquatic animals such as waterfowl, seals, or walruses, communities might settle longer, some remaining even for years. However, generally hunting and gathering as a system of production required mobility. With some exceptions most communities had to move frequently, maybe ten to forty times per year. Bands had only as many young children or tools, clothing, baskets, and so forth as they could carry to another distant campsite.

The paleolithic system of reproduction sharply restricted births. For example, a band of forty persons would have about twenty females, of whom perhaps ten would be of child-bearing age, say, eighteen to forty, the other ten too young or too old. Ten mothers, if they gave birth every two years, and if each baby survived, would have after six years three children each, in all thirty small children, and membership swelled to seventy persons. Such a group could hardly feed itself in a restricted foraging zone and could not move readily every few weeks a distance of 15 kilometers or so. A band small enough to feed itself within range of a campsite and mobile enough to move frequently required tiny numbers of babies, probably no more than one under age seven per woman. A woman therefore probably had no more than three or four births, of which half would not survive to adulthood. Births were limited by strict control of sexuality, by naturally high infant mortality, and even by infanticide. These limitations put population growth at almost zero, one woman with two surviving children being minimal to replace a generation.

Women's Work, Men's Work

Because adult women conceived, gave birth, breastfed, and nurtured young children, their work tended to be confined to near campsites. They gathered edible vegeta-



tion, carried water, tended fires, prepared food from raw materials, and made and mended clothing. Men ranged far from camp, hunting, scouting for likely campsites or vegetation, or keeping watch for dangerous animals and rival bands. When young men of one band encountered those of another, hostile contacts might follow, in effect territorial boundary

Incised drawing of deer on a deer antler from southern France. maintenance. Bands never wandered aimlessly; rather, they circulated within a home range of possibly 150 square kilometers in extent, moving seasonally from one familiar campsite to another. Violence between bands, hunting injuries, and other accidents also helped to reduce populations. Low productivity and mobility kept population growth at nearly zero.

Population growth was nearly zero, but not quite. During the many thousands of years of the foraging (Paleolithic) era, populations did grow by tiny percentages. For example, a *Homo sapiens* population of twenty thousand persons in eastern south Africa in 200,000 BCE that increased by .00005 per year would double in twenty thousand years. Doubling again each twenty thousand years would give about 2.5 million people by 20,000 BCE, a high estimate for the world near the end of the last great ice age.

Population growth disrupted equilibrium. Like most successful species, humans had the potential for many more babies than they usually produced. Where food was plentiful, constraint on the natural human propensity to reproduce was relaxed. As bands grew, they split off to form new bands, which could then move into unpopulated territories rich in forage. Growth therefore was most rapid among peoples moving into frontier zones.

These frontier zones first were along waterways. Some time after 100,000 BCE *Homo sapiens sapiens* went on a long migratory expansion from coastal east Africa across the Red Sea—evidently by crossing the sea itself—to the Arabian Peninsula, thence to southern and southeastern Asia. Living by a mix of hunting and fishing, along coasts and islands, they developed watercraft—canoes, rafts, and so forth—and crossed open water to Australia perhaps as early as 60,000 BCE and certainly not later than 50,000 BCE and to islands in southeast Asia and the western Pacific.

As coastal areas became populated, multiplying bands pushed inland, which meant northward into Eurasia after about 45,000 BCE. They experienced dramatic technological and biological changes. These changes involved development of microlithic tool making (using small flakes of flint and obsidian mounted on slight spear shafts), development of the atlatl or spear-thrower, sewn clothing, and constructed housing and at some time after 15,000 BCE the bow and arrow. In the colder northern latitudes humans left behind tropical diseases and found abundant herds of subarctic herbivores. Moving into northeasternmost Asia some bands after about 15,000 BCE found their way across the great Beringian Plain to the Americas, where they swept across the continents, full of large animals with no prior experience of human predators.

Climate change may explain why some communities made a transition from foraging to agriculture. The millennia from 9000 to 6000 BCE featured multiple points where transitions to agriculture occurred. The first was in southwest Asia, in the highlands overlooking the Mediterranean to the west and rimming the Mesopotamian basin formed by the Tigris and Euphrates Rivers. In these upland plateaus strains of barley and wheat grew wild, and several communities had become semipermanent by gathering these grains and hunting gazelles, wild sheep and goats, and other animals. By about 9000 BCE several communities-now known as "villages," meaning relatively permanent settlements-had become dependent on planting stands and harvesting grain and had domesticated sheep, goats, cattle, and asses. Most continued to hunt and gather, but increasingly they depended on grown foods. In northeast Asia on the loess (an unstratified, usually buff to yellowish brown loamy deposit) soils of the Huang (Yellow) River valley, a semiarid and cool temperate zone, foraging communities developed cultivation of millet, which they combined with domesticated pigs and chickens, and became agricultural villages.

In moist and tropical southeastern Asia communities who gathered wild rice in marshes and foraged in the forests developed rice cultivation, in combination with domestication of pigs, chickens, water buffalo, and a variety of fruits, particularly bananas, coconuts, and sugarcane. In lightly forested regions of the upper Congo River basin of west Africa the ancestors of Bantu peoples cultivated oil palm trees and root crops and domesticated goats, adding millet and other grains as they expanded eastward. On the other side of the world in Mesoamerica (the region of southern North America that was occupied during pre-Columbian times by peoples with shared cultural features), a transition to agriculture developed around the cultivation of maize (corn) in combination with chili peppers, beans, and varieties of squash and pumpkins. Domesticated animals included turkeys and guinea pigs. Another transition to agriculture occurred in the highlands of the Andes around cultivation of potatoes, maize arriving later from central Mexico, and domesticated llamas and alpacas. Recent research reveals also development of agriculture in the tropical lowlands of the Amazon and the Yucatan Peninsula, depending on maize, sweet potatoes, and other crops.

Agricultural societies were fundamentally different from the foraging societies who surrounded them on all sides. First, the geographical range of agricultural societies was smaller; with a radius of perhaps 6 kilometers from its center, a village's land might include 80 square kilometers and be crossed end to end in a two-hour walk.

Population Increase

Second, populations were much larger. Deliberately growing food required vast amounts of labor but yielded vastly larger amounts of food than did foraging. Villages contained hundreds of persons, and in ideal sites with excellent water, fertile soil, and abundant forest resources, populations might reach a thousand or more.

Third, restraints on reproduction relaxed. Having adequate food and permanent dwellings—a lifestyle known as "sedentism"—allowed women to have multiple numbers of children, perhaps one every two or three years during their fertile adulthood, that is, roughly eighteen to forty. During twenty years ten or more children were possible, and six or eight were commonplace. Of these, of course, perhaps half died before attaining adulthood, but three or four surviving children per woman added up to an astonishing growth rate. More material possessions, larger families, and increased sexuality were the advantages of a shift to agriculture.

Disadvantages also existed. Agricultural societies show in their skeletal remains unmistakable evidence of

malnutrition and disease far greater than do foraging societies. First, frequent births and early weaning, combined with substitute foods and bland diets of cereals and vegetables, caused malnutrition in childhood. Agricultural societies polluted their immediate surroundings, and human and animal wastes accumulated. Water supplies became contaminated by topsoil runoff and wastes from villages upstream. Dense habitation, of course, increased disease. Villages of several hundreds each, separated by 15 kilometers or so, formed interactive culture zones, through which infectious diseases passed. By contrast, tiny foraging communities rarely came in contact with others, kept campsites clean by frequently moving, and seldom contracted illnesses.

Agricultural societies were less healthy, but villages multiplied relentlessly from their multiple points of origins. The scholar Jared Diamond terms this "farmer power." Hunter-gatherers may have been healthier and more warlike, but sheer superiority of numbers and their huge reproductive capacities drove agricultural societies forward across frontiers. Foraging societies retreated, assimilated, or were wiped out, depending on local circumstances. During the millennia from 9000 BCE to the industrial age agricultural populations fanned out across the cultivable world.

Pastoralism was a variant of agriculture. By the fifth millennium BCE some societies had become specialists in the grazing of herbivorous animals, mainly cattle, sheep, goats, yaks, and horses, later camels and reindeer. These societies moved the principle of domesticating animals into semiarid lands of northern Africa, Arabia, the nonagricultural uplands of southwest Asia, the Iranian plateau, and inner Eurasia. These were regions where rainfall was inadequate for crops but sufficient for vast grasslands whose exploitation by grazing livestock supported thousands of people organized in communities of several hundreds. Not all pastoral societies were nomadic; some practiced intermittent agriculture, and most traded with agricultural societies around them.

Their patterns of reproduction were similar to those of sedentary agriculturalists but with slightly fewer births. Mortality was slightly greater as migration between winter and summer pastures and harsh climatic conditions took their toll on the young, old, or infirm. Population pressures frequently built as numbers increased or as climate changes reduced grazing. On such occasions long migrations into grasslands of rival communities, or even invasions of the civilized societies nearby, would occur. Some examples are the Turkic and Mongol peoples of inner Eurasia in the twelfth to fourteenth centuries CE, Semitic peoples of Arabia in the seventh and eighth centuries CE, and the proto-Egyptians of the Sahara Desert who migrated into the Nile River valley after 4000 BCE.

As agricultural and pastoral populations spread across the world, some found their way into the fertile valleys of the Nile, Tigris and Euphrates, Indus, and Huang Rivers, where they developed dense concentrations of large villages and highly productive agriculture, which gave rise to urban cores, that is, cities and civilization. Early civilizations were urban-based political and economic systems. Each city controlled a few thousand villages, whose structures and systems of production and reproduction were largely unchanged, except in two important ways.

First, civilizations were more socially stratified and developed classes of specialists: crafts people, bureaucrats, a priesthood, and a landed aristocracy often identical to a military elite. About 90 percent of the population remained agricultural peasantry, who continued to



The yak, the beast of burden in Tibet as well as a source of food and hair.

reside in villages having little contact with urban centers. With the advent of iron metallurgy after about 1000 BCE peasantry acquired improved tools—axes, plow parts, shovels, hoes, and so forth—that increased production substantially.

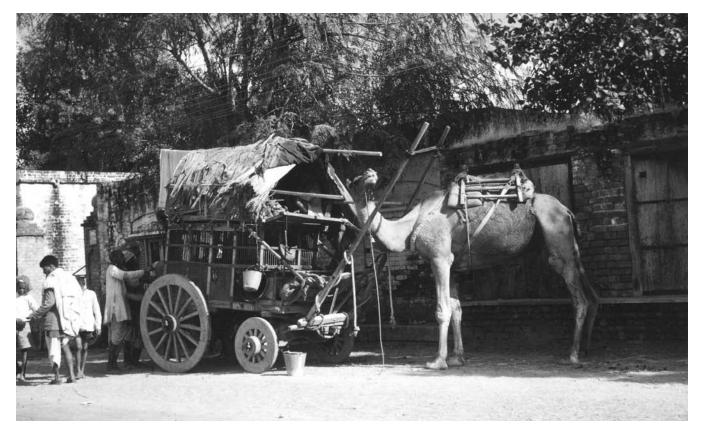
Second, civilizations created large interactive populations that numbered in the hundreds of thousands. Crowd diseases became permanent features of the human biological condition.

Two consequences occurred. First, cities had demographic deficits; that is, their death rates normally exceeded their birth rates. Cities survived only because of regular rural emigration from the surrounding villages or emigration from long distances. Second, civilized peoples developed at least partial immunities to the diseases they carried. Simple agriculturists, pastoralists, and huntergatherers had little or no immunity to urban diseases and suffered vast die-offs when they came in contact with civilized groups. Civilized societies expanded because of the continued strong reproductive habits of villagers. As their populations expanded into peripheral areas for agricultural land or for natural resources such as timber, metal ores, or fresh water sources, primitive peoples shrank back or perished from disease, in effect a kind of bacteriological warfare no less potent because urban societies did not know that disease was why they prevailed.

Industrialization

By these processes agrarian civilizations expanded from about 3500 BCE to 1750 CE, when the Industrial Revolution brought the next great shift in production and reproduction. It launched the modern population explosion; increasing output of food and manufactured products at rates greater than population growth resulted in a dramatic rise in standards of living. Beginning in northwestern Europe during the mid-eighteenth century, industrialization passed through successive stages during the next two centuries, meanwhile diffusing its productive forces or their influence across most of the world.

Industrialization arose out of the intersection of two factors. The first factor was the rise of a global network



The camel has been a significant beast of burden and means of transportation in Africa and Asia throughout much of human history. This photo shows a camel bus in contemporary India.

of production and trade that began with establishment of transoceanic communications during the fifteenth and sixteenth centuries. This network was linked with river and canal transportation during the seventeenth and eighteenth centuries, then with railroads during the nineteenth century, and automotive highways during the twentieth century. The second factor was harnessing of fossil fuel energy: coal during the eighteenth and nineteenth centuries; oil, natural gas, and electricity during the twentieth century. Regions linked to world trading networks, resource-rich colonies in the New World, coal and iron deposits, and rivers or terrain suited to canal building became the epicenters of early industrialization. England, the Netherlands, northern France, and northwestern German states were foremost.

Inanimate energy harnessed to machinery greatly increased the productivity of labor. World trading networks provided enormous bounties of furs, fish, seals, whales, cotton, grain, sugar, spices, gold, and silver. Global contacts meanwhile increased demand for west European manufactured products. The economy and population responded to an enormous bounty and rising demand by increasing output and by creating a population explosion.

This explosion was a product of what social science calls the "demographic transition." It had several stages. From 1740 to 1830 most of western Europe experienced declining mortality and high or even increasing fertility. Mortality declined because of at least two factors. First, infectious diseases seem to have diminished in virulence. Why is not clear, but European populations exposed to Asian and African diseases brought by increased global contacts had, after two centuries or so, developed immunities to the deadlier strains of most diseases. Second, nutrition improved. Transportation improvements facilitated movement of emergency food supplies to alleviate localized crop failures. New World foods-potatoes and maize-assured subsistence for the poorer classes. Bringing more land into cultivation and improving crop rotations increased output of traditional foods. Imported sugar from plantations in the tropical New World and fish from the north Atlantic became staples in the diet, particularly for the English.

Municipal and national governments experienced a "great sanitary awakening" as medical scientists recognized urban filth; human, animal, and industrial wastes; contaminated waters; and so forth as health hazards. Governments constructed sanitary water and sewerage systems, drained and paved streets, and relocated unsanitary cemeteries, abattoirs, and polluting industries such as tanneries. Public schooling, which developed at this time, instructed the poorer classes in basic hygiene.

Considerable regional variations existed. At first living conditions worsened for the factory laboring classes. Rapid unplanned urbanization resulted in contaminated water supplies, adulterated and scarce food, crowded housing and streets, harsh working conditions, and industrial pollutants that filled air and water. The stature of the laboring classes diminished, their health deteriorated, and infant mortalities remained high, particularly as mothers drawn into factory labor were forced to neglect their children. Among some poor laboring urban and rural people birth rates rose as illegitimacy increased, age of marriage declined and they lost traditional village community restraints or community child-care support. In England death rates from high infant mortality actually rose a little. In other regions, for example, northern France, birth rates declined, but death rates dropped considerably more, still resulting in population growth.

After 1850 rural and urban laboring classes experienced rising standards of living and increased literacy. Meanwhile, mortality continued its downward spiral. Horrible epidemics of cholera from 1832 to 1884 spurred further sanitary measures. By the 1880s the bacteriological origins of certain killer diseases—cholera, typhoid, diphtheria, smallpox, and others—had been definitively established, and medical science applied to public policy led to a system of vaccines and preventive techniques that extended life expectancy more than during all of the previous human record: from roughly thirty-five or fifty years to nearly seventy by the first decades of the twentieth century. These decreases of fertility and mortality caused an enormous increase in European population, smaller families, an older population profile, diminished sickness, and less psychological suffering. The European population trebled and quadrupled. Meanwhile, Europeans between 1820 and 1920 sent roughly 40 million immigrants into the world, some 35 million to North America alone, creating neo-Europes in southern South America, North America, Australia, and New Zealand.

The Industrial Revolution and accompanying population explosion also created great global inequalitieswhat some scholars call the "great divergence." Industrial societies of North America and western Europe enjoyed higher per capita consumption, vastly extended life expectancies, greater leisure, low mortality, and low infant mortality. They became healthier, wealthier, and presumably happier. Meanwhile, conditions of life elsewhere in the world worsened. European seizure of key resources around the world and imposition of imperialism aided industrializing societies while impoverishing and culturally disorienting others. The Netherlands, France, Britain, and later Germany, the United States, and Japan became military-industrial powerhouses. Rich and powerful confronted poor and powerless. After about 1950 standards of living, sanitary conditions, and literacy gradually improved along with political independence for most of the subjected populations of Asia, Africa, and Latin America. However, fundamental inequalities in per capita production, consumption, and life expectancy persist into the twenty-first century.

Paul V. Adams

See also Agrarian Era; Foraging (Paleolithic) Era; Modern Era

Further Reading

- Cohen, M. N. (1989). Health and the rise of civilization. New Haven, CT: Yale University Press.
- Diamond, J. (1997). Guns, germs and steel: The fate of human societies. New York: W. W. Norton.
- Fagan, B. (1990). *The journey from Eden: The peopling of our world*. New York: Thames and Hudson.
- Fagan, B. (2004). The long summer: How climate changed civilization. New York: Basic Books.

Those who exercise power always arrange matters so as to give their tyranny the appearance of justice. • JEAN DE LA FONTAINE (1621–1695)

- Harris, D. R. (Ed.). (1996). The origins and spread of agriculture and pastoralism in Eurasia. Washington, DC: Smithsonian Institution Press.
- Kiple, K. (Ed.). (1993). The Cambridge world history of human disease. New York: Cambridge University Press.
- McNeill, W. (1976). Plagues and peoples. Garden City, NY: Anchor Press.
- Smil, V. (1994). *Energy in world history*. Boulder, CO: Westview Press. Wrigley, E. A. (1969). *Population and history*. New York: McGraw-Hill.

Progress

rogress originally meant moving cross country toward a chosen destination and derives directly from Latin. Progress toward individual betterment was a derivative meaning that entered English in the seventeenth century, most famously with John Bunyan's book, *Pilgrim's Progress* (1678). But the idea that society as a whole might also progress was slower to emerge. To be sure, ever since 1492, when Europeans first began to sail across the oceans, advances of geographical and mathematical knowledge accumulated rapidly. Scientific progress became obvious by 1687, when Isaac Newton published mathematically formulated laws of motion, making eclipses as well as more ordinary movements of sun, moon, planets-and even cannonballs-predictable. Writers like the French scientist, Bernard de Fontenelle (1657–1757) concluded that progress of knowledge was real and might be expected to continue indefinitely into the future, but unchanging laws of nature meant that human society as a whole would remain much as before.

As long as most people lived just about the same way their parents and grandparents had done, any other opinion would have seemed absurd. But beginning about 1750 a cluster of changes began in Great Britain and western Europe that historians later called the Industrial Revolution. The central feature of that revolution was expanding the output of useful goods by using inanimate forms of power—first falling water, then coal and steam, then electricity—to drive large, often complicated machines. As a flood of useful things began to come from such machines, human lives in western Europe began to change unmistakably, and sometimes for the better, as cheaper manufactured goods became available.

Engines of Change

But at first the biggest improvement for most people was not industrial at all. Rather, food supplies increased enormously in Europe due to the rapid spread of potato cultivation after 1763, when all the principal governments of the continent set out to imitate the Prussians who, fifteen years before, had pioneered official efforts to persuade peasants to plant their fallow fields with potatoes. Potatoes meant more work, since they had to be hoed in summer to remove weeds. But as long as enough hands could be found for that task, potatoes multiplied the amount of food European fields could produce without diminishing the grain harvest in the slightest. This, together with use of turnips and other fodder crops as a parallel alternative to fallowing, radically diminished age-old risks of famine and provoked two centuries of population growth for humans and for their domesticated animals. That in turn assured a supply of people, horses and cattle for intensified cultivation in the European countryside, and soon provoked a surge of migrants looking for wage work in burgeoning industrial towns.

Economic expansion thus became self-sustaining; and as new styles of farming and new forms of industry spread, the daily experience of almost everyone in western Europe began to change in obvious ways. These novelties soon began to affect the entire world as well. Not all changes were for the better. Living conditions in crowded industrial cities were often horrible, and alternating patterns of boom and bust meant insecurity for all and inflicted severe suffering on unemployed wage earners. But new possibilities and cheaper goods were just as real. Think, for example, of what it meant for ordinary persons-especially those with small babies to swaddle and keep more or less cleanwhen, as the utopian socialist Robert Owen tells us in his autobiography (The Life of Robert Written by Himself, 1920), in 1858 the cost of cotton cloth in England had shrunk to one seventieth of what it had been sixty years before when he started work as a teenager. During that same life span, steam railways, introduced in 1825, drastically cheapened and speeded up overland

Herbert Spencer on Progress

A leading philosopher during the Victorian era, Herbert Spencer (1820–1903) was a proponent of social Darwinism. In the extract below, he discusses how progress and evolution are related.

In respect to that progress which individual organisms display in the course of their evolution, this question has been answered by the Germans. The investigations of Wolff, Goethe, and Van Baer have established the truth that the series of changes gone through during the development of a seed into a tree, or an ovum into an animal, constitute an advance from homogeneity of structure to heterogeneity of structure. In its primary stage, every germ consists of a substance that is uniform throughout, both in texture and chemical composition. The first step in its development is the appearance of a difference between two parts of this substance; or, as the phenomenon is described in physiological language-a differentiation. Each of these differentiated divisions presently begins itself to exhibit some contrast of parts; and by these secondary differentiations become as definite as the original one. This progress is continuously repeated—is simultaneously going on in all parts of the growing embryo; and by endless multiplication of these differentiations there is ultimately produced that complex combination of tissues and organs constituting the adult animal or plant. This is the course of evolution followed by all organisms whatever. It is settled beyond dispute that organic progress consists in a change from the homogeneous to the heterogeneous.

Now, we propose in the first place to show, that this law of organic progress is the law of all progress. Whether it be in the development of the Earth, in the development of Life upon its surface, the development of Society, of Government, of Manufactures, of Commerce, of Language, Literature, Science, Art, this same evolution of the simple into the complex, through a process of continuous differentiation, holds throughout. From the earliest traceable cosmical changes down to the latest results of civilization, we shall find that the transformation of the homogeneous into the heterogeneous, is that in which Progress essentially consists....

Whether an advance from the homogeneous to the heterogeneous is or is not displayed in the biological history of the globe, it is clearly enough displayed in the progress of the latest and most heterogeneous creature—Man. It is alike true that, during the period in which the Earth has been peopled, the human organism has become more heterogeneous among the civilized divisions of the species —and that the species, as a whole, has been growing more heterogeneous in virtue of the multiplication of races and the differentiation of these races from each other.

Source: Spencer, H. (1857). Progress: Its law and causes. The Westminster Review, 67, 445-465.

transport for goods and people; and after 1837 electric telegraphs allowed instant communication, at first only for a few, later for nearly anyone with an urgent message to send.

As significant novelties multiplied, it became obvious that human lives and the whole structure of society was changing as never before. Ever since a cascade of new technologies, new products and new experiences has continued, and even accelerated, spreading from an initial focus in Great Britain and adjacent parts of Europe quite literally around the earth.

As always, new possibilities brought new risks and damaged or destroyed old ways of life. Most of the time, most people welcomed enlarged possibilities and liked to have access to cheaper machine-made goods. Yet costs were real too. Everywhere artisans found they could not compete with machine-made products; and old-fashioned agrarian empires found that they had to allow European goods, merchants, missionaries and soldiers to intrude on their territories more or less at will. The flood of new products soon affected even the most remote hunters and foragers whose ways of life were upset by encounters with such items as iron tools and, not least, handguns.

But looked at from the center of disturbance, the rapid growth of wealth, population and political power that Britain, France, Germany, and the United States all experienced between 1800 and 1914 seemed a thoroughly good thing to almost everyone. Accordingly, the idea that human society was destined to progress in desirable directions soon took hold among these peoples. An early champion of that idea was a French nobleman, the Marquis de Condorcet (1743–1794), who wrote *Sketch for an Historical Picture of the Progress of the Human Mind* in the year of his death. His confidence in human progress toward perfection remains surprising, considering the fact that he was in prison and about to have his head cut off by the French revolutionary government when he wrote his sketch.

In the next century, as desirable novelties multiplied, the idea of progress took firm hold among Europeans. In Germany, the philosopher Georg Wilhelm Friedrich Hegel (1770–1831) made progress a universal principle of reality, moving from thesis to antithesis and then to synthesis, which immediately became a new thesis to keep the process going. Karl Marx (1818–1883) claimed to have stood Hegel on his head by proving that class struggle toward equality and freedom under Communism was the path of the future. Before that, in France another nobleman, Count Henri de Saint Simon (1760-1825), founded a different socialist movement aimed at hastening progress towards a similarly free and equal future. One of his younger associates, Auguste Comte (1798–1857), founded what became the academic discipline of sociology with parallel aims. Meanwhile in England the philosopher and economist, John Stuart Mill (1806–1873), and the historian Henry Thomas Buckle



This Maoist Chinese proverb says: Greater, Faster, Better, More Economical.

Life can only be understood backwards; but it must be lived forwards. • SOREN KIERKEGAARD (1813–1855)

(1821–1862) explored a more open-ended liberal version of progress in their articles and books.

In 1851, the reality of material progress was spectacularly demonstrated when Prince Albert, Queen Victoria's husband, organized a very successful Great Exhibition in the Crystal Palace, London. Beneath a specially constructed iron and glass structure, exhibitors from far and wide displayed a vast array of new machines and products for public admiration and instruction. Thereafter, similar world's fairs became quadrennial events, achieving a new peak of success in 1893, when Chicago hosted the World's Columbian Exposition. That fair celebrated four hundred years of progress since Columbus' discovery of America, and met with altogether unusual success. A still new transcontinental railroad net made it possible for more than twenty-one million persons to attend the Fair; and at night, when incandescent electric bulbs lit up plaster-covered temporary buildings, the dazzling whiteness seemed like a preview of heaven to many of the Fair's visitors. Progress never seemed so certain and so obvious, before or since.

The success of the Columbian Exposition depended partly, too, on the fact that the idea of progress had enlarged its scope and persuasiveness after 1867, when Charles Darwin published The Origin of Species. Darwin argued that plants and animals had evolved through geological time thanks to a process of natural selection; and in another book, The Descent of Man (1871), he specifically discussed human evolution from ape-like ancestors. This challenged the biblical story of creation head on and provoked intense and prolonged controversy. Accordingly, one of the innovative features of the Columbian Exposition was a World Parliament of Religions where spokesmen for each of the world's principal faiths had a chance to come before an American public, looking for shared principles and in some instances, even exploring the plausibility of religious progress through time.

There had always been doubters who discounted the desirability of all the tumultuous changes that beset nineteenth-century societies; and in the course of the twentieth century, doubts about human progress multiplied. The long stalemate of trench warfare in World War I Property rights are not the rights of property; they are the rights of humans with regard to property. They are a particular kind of human right. • DAVID FRIEDMAN (TWENTIETH CENTURY)

(1914–1918) made the military side of technological progress, of which their nineteenth-century predecessors had been so proud, seem anything but desirable to millions of European and American soldiers; and the postwar boom, followed by the Great Depression (1929–1938) and World War II (1939–1945) broadened and deepened that skepticism. Renewed economic growth after 1950 was counterbalanced by fears of sudden atomic annihilation and by uneasy awareness that rapid population growth in Africa and Asia was widening the gap between the rich and poor peoples of the earth.

By the beginning of the twenty-first century, though nearly all the world's politicians still promised to accomplish all sorts of good things if elected to office, most writers and commentators on public affairs took a much gloomier view of the future. Emphatic rejection of the nineteenth-century faith in progress became general. That was partly because continuing improvements in human comfort and diet as experienced by people in the world's wealthiest countries, like air conditioning in summer, and fresh fruit and vegetables in supermarkets all year round, swiftly came to be taken for granted, while innumerable medical breakthroughs, like antibiotics and heart surgery, had the immediate effect of prolonging life and thereby multiplying the pains and debilities of old age.

Destructive capabilities of biological, chemical, and nuclear weapons also multiplied; while gaps between rich and poor, rivalries among ethnic and religious groups, and the decay of local communities seemed only to increase. All too obviously, change was everywhere, but was it really for the better? Did happiness increase with longer life and more things to own and look after? Or did accumulating material goods merely get in the way of leading a good life?

These are valid reproaches against rosy nineteenthcentury predictions of moral and political progress. But material progress remains undeniable. No one can doubt that increasing knowledge and skills have enlarged human command of energy flows at a very rapid rate since 1750, and have done so more slowly throughout history. The resulting increase in human capabilities, both for good and for ill, is clearly cumulative, and constitutes a kind of progress that deserves to be recognized as such.

William H. McNeill

See also Modernity; Postmodernism

Further Reading

Bury, J. B. (1932). *The idea of progress: An inquiry into its origin and growth*. New York: Macmillan. (Original work published 1920)

Dyson, J. (2001). A history of great inventions. New York: Carroll & Graf.

Rydell, R. W., Findling, J. E., & Pelle, K. M. (2000). Fair America: World's fairs in the United States. Washington, DC: Smithsonian Books.

Property Rights and Contracts

Much contemporary political and popular discourse posits "property" as modern capitalist private property whose owner has the right to use the property, to exclude others from it (or regulate their use of it), and to alienate it. Private property is frequently seen as natural, desirable, or inevitable because it allows us to express or follow our self-interest, do as we please with what we own, or to enact the final stage of a linear developmental history of which contemporary private property is the culmination. The history of property and contracts, however, shows that property has taken many different forms and a contract is but one type of exchange.

In thinking about the diversity of property practices, some important questions need to be asked. Who can own property? Private property can be owned by an individual person, a partnership, a corporation (a "legal person" in the eyes of the law), a family, a group, a tribe, or the state. "Common property" is open for use by a specific set of people, such as all townspeople. Sometimes not all individuals are eligible to own property: Historically women (or married women), children, prisoners, and noncitizens have been disqualified.

A Man's Property

This passage shows the remorse of Soames Forsyte, The Man of Property in John Galsworthy's 1922 novel of that name, after asserting his rights over one of his many properties—his wife. Soames never loses his conviction that his wife belongs to him, while Irene Forsyte's horror over the events of that night shape the course of events in future volumes of what came to be the Forsyte Saga, Galsworthy's most famous work. Galsworthy received the Nobel Prize for Literature in 1932.

The morning after a certain night on which Soames at last asserted his rights and acted like a man, he breakfasted alone.

He breakfasted by gaslight, the fog of late November wrapping the town as in some monstrous blanket till the trees of the Square even were barely visible from the dining-room window.

He ate steadily, but at times a sensation as though he could not swallow attacked him. Had he been right to yield to his overmastering hunger of the night before, and break down the resistance which he had suffered now too long from this woman who was his lawful and solemnly constituted helpmate?

He was strangely haunted by the recollection of her face, from before which, to soothe her, he had tried to pull her hands—of her terrible smothered sobbing, the like of which he had never heard, and still seemed to hear; and he was still haunted by the odd, intolerable feeling of remorse and shame he had felt, as he stood looking at her by the flame of the single candle, before silently slinking away...

Two nights before, at Winifred Dartie's, he had taken Mrs. MacAnder into dinner. She had said to him, looking in his face with her sharp, greenish eyes: "And so your wife is a great friend of that Mr. Bosinney's?"

Not deigning to ask what she meant, he had brooded over her words.

They had roused in him a fierce jealousy, which, with the peculiar perversion of this instinct, had turned to fiercer desire.

Without the incentive of Mrs. MacAnder's words he might never have done what he had done. Without their incentive and the accident of finding his wife's door for once unlocked, which had enabled him to steal upon her asleep.

Slumber had removed his doubts, but the morning brought them again. One thought comforted him: No one would know—it was not the sort of thing she would speak about.

And, indeed, when the vehicle of his daily business life, which needed so imperatively the grease of clean and practical thought, started rolling once more with the reading of his letters, those nightmare-like doubts began to assume less extravagant impor-

What can be owned as property, in what ways can it be used, and can it be alienated (i.e., transferred by gift or contract)? Personal property, tools, shelter, and family burial grounds have frequently been owned by individuals or families, and in many societies they could not be freely sold but had to remain within the family, guild, or citizenry. Land uses have frequently been regulated, and sale prohibited. Some societies permit property in human bodies (children, wives, slaves), and others in human intellectual products, like written texts, songs, or cartoon characters.

Property practices are usually closely connected with important values and structural aspects of a society. The rules governing, and distribution of, property affect and reflect economic growth and decay, wealth and poverty, and political power and social status, as well as individual opportunity and psychological resources. Not surprisingly, then, property rights have been claimed, exercised, and contested throughout history with serious disagreement and often violence.

To explore the diversity of property and contract practices, it may be helpful to look at examples of property among hunter-gatherers, agricultural peoples, and industrial capitalist societies.

Property among Hunter-Gatherers

The earliest human communities were hunter-gatherers who lived primarily by hunting and gathering what nature provided, and sometimes also cultivating land. tance at the back of his mind. The incident was really not of great moment; women made a fuss about it in books; but in the cool judgment of rightthinking men, of men of the world, of such as he recollected often received praise in the Divorce Court, he had done his best to sustain the sanctity of marriage, to prevent her from abandoning her duty, possibly, if she were still seeing Bosinney, from—No, he did not regret it....

In his corner of the first-class compartment filled with City men the smothered sobbing still haunted him, so he opened the Times with the rich crackle that drowns all lesser sounds, and, barricaded behind it, set himself steadily to con the news.

He read that a Recorder had charged a grand jury on the previous day with a more than usually long list of offences. He read of three murders, five manslaughters, seven arsons, and as many as eleven rapes—a surprisingly high number—in addition to many less conspicuous crimes, to be tried during a coming Sessions; and from one piece of news he went on to another, keeping the paper well before his face.

And still, inseparable from his reading, was the memory of Irene's tear-stained face, and the sounds from her broken heart.

Source: Galsworthy, J. (1922). The Man of Property.

They lived in many parts of the world and, indeed, inhabit a few areas still. Contrary to standard myths, hunter-gatherers did have notions of property. For instance, Native Americans had understandings concerning personal (or individual), familial, and tribal property. A bow made by a male Huron was likely to be considered his, and the basket made by a female Iroquois to be considered hers. At the same time, material accumulation was relatively unimportant to a Native American, while traditions of gift giving were extremely important to building and maintaining the political structure of a tribe. For instance, the chief distributed food and other resources to the members of the group—in a potlatch, for instance—in order to assure their well-being and solidify his social and political dominance, and one chief hosted another chief, or allowed another tribe to hunt on his property, to solidify intertribe relations. Similarly, familial clans maintained usufruct rights to planting fields and hunting grounds, but they would not prohibit others from entering or even from obtaining nonagricultural foods.

In addition, every village or tribe understood what marked their territorial boundaries and those of neighboring tribes. These boundaries were fluid, as tribes frequently exchanged territorial rights. As William Cronon puts it, these territorial transactions were more diplomatic than economic: Native Americans did not treat land and possessions as commodities to be traded in a marketplace. So land transactions between Native Americans themselves—in comparison to transactions between Europeans— "had more to do with sharing possession than alienating it" (1983, 67).

Agriculturalists and Landed Property

Even from the earliest times some places seemed better suited for agriculture than hunting and gathering. Agriculture has a long history in the Fertile Crescent, China, India, and the Nile River valley, where property boundaries were established and, by sophisticated geometry, reinscribed after each flood season. Because one acre devoted to farming or domesticated livestock can feed ten to one hundred times more people than a huntergatherer acre, agriculture generated food surpluses and settled civilizations, frequently headed by kings, ruled by bureaucrats, and marked by laws, many concerning landed property. Because it constituted power, land frequently could not be freely bought or sold; because it needed to be cultivated, workers might be owned as slaves or tied to the land by unbreakable contract as serfs. Some critics, of whom Rousseau is perhaps the most famous, have argued that agricultural property leads to a rich and powerful upper class, a downtrodden (frequently owned) and unhealthy laboring class, more work for all, and periodic famines when a major crop fails.

Others saw in the fixed, landed property of agriculture the possibility and goal of community. During the later years of the Chou dynasty (1122–221 BCE), after the age of Confucius, the famous philosopher Mencius (371-289 BCE) looked back nostalgically to the Golden Age of Sages when-he believed-peace, order, and equality abounded because the state had been founded on principles of equal land distribution. Hoping for the return of a similar age, he advocated the restoration of the "wellfield" system of equal land holding. Thus, according to Mencius's ideal and as the Chinese character suggests, each well-field was to encompass one li square, consisting of nine hundred mu. The well-field would thus be divided into nine equal parts, each consisting of 100 mu. From this, the eight peripheral plots would be given to eight families while the central plot would be owned by the state. Thus, all of the eight families would have to work the central, state-owned plot as a form of tax to the state. While Mencius believed such a system fostered equality, it did inevitably require a two-class system of "gentlemen" (magistrates, officials, and so forth) and "countrymen" (farmers). Even though most scholars doubt the historical accuracy of Mencius's well-field system, it became a very popular model for later land reformers.

Similar visions—with a plurality of classes or social divisions—occurred in India and in medieval Europe, where the manor was the primary economic unit. The lord was understood to be the owner of his manor, and thus the peasants who lived on his land had to pay him rent by working on his land; peasants who farmed for a long time had effective tenure (or "copyhold") to farm the land without being evicted by the lord, although the peasant could neither sell the land he lived on nor exchange it with another peasant or freeman. Mirroring the manorial system, feudal lords and vassals practiced fealty, in which a small lord would pledge his military allegiance to a greater lord in return for the greater lord recognizing and protecting his estate. So great lords, vassals, and peasants were bound together by mutual obligations and duties.

Trade, Global Expansion, and Capitalism

In China, medieval Europe, and most if not all agricultural societies, merchants engaged in trade. In classical Greece, Aristotle (384–322 BCE) distinguished merchant property from that of others in his Politics. Heads of households, Aristotle stated, exchange goods (and money) in order to buy goods to satisfy the household's needs. Merchants, on the other hand, exchange goods in order to make money on the exchange; so the goal of exchange for merchants is profits. Within the limits set by laws, traditions, and religion, merchants bought and sold goods as commodities. Around the fifteenth century, European traders, with the support of their rulers, explored and expanded their trade, buying and selling commodities globally. With the development of commercial societies in England and Holland in the seventeenth century, land itself was coming to be seen not as inalienable by nature or tradition but as something that could be bought and sold; when these European societies colonized others, they brought with them and imposed their own ideas of property. As Locke stated, "in the beginning all the world was America," waiting for Europeans to claim common or uncultivated land as their own private property or buy land from Native Americans who thought they were sharing its use.

European expansion since 1492 and the economic dominance of European countries like Great Britain and then the United States has meant that capitalist practices of private property and free contract have been imposed or adopted throughout much of the world. Sir William Blackstone, the leading British legal theorist, in the 1760s pronounced the absoluteness of private property as "that sole and despotic dominion which one man claims and exercises over the external things of the world, in total exclusion of the right of any other individual in the universe" (1979, 2), language that suggests individual control of the material world and freedom of action (and that ignores the state's power to tax and to fund public goods). With the development of corporate capitalism in the twentieth century, much individual property is now held as shares of stock and other financial instruments, so control and action have devolved to corporate managers, and the individual shareholder has become an "almost completely inactive recipient" of income (Berle 1954, 30-31).

Many have criticized capitalist private property. Marx sought to abolish private property because it limited individuality and freedom, alienating individuals and subjecting them to impersonal economic laws, Proudhon because property as theft subverted justice. Other critics, like the American utopian writer Edward Bellamy in Looking Backward, thought that national ownership of property would produce a more efficient and equitable economy with more leisure time. Arguments about whether private property increases freedom, efficiency, equity, and justice can be expected to continue, and the twenty-first century will probably see some new debates about property linked to changes in global trade (as the "free trade" disputes expand to include, for instance, distorting subsidies for private agricultural property in the developed world), environmental problems (as property's relation to ecological degradation is examined), and intellectual property in an information society.

Intellectual Property and Copyright

Copyright, an aspect of intellectual property, can serve as a good current example of ongoing contestations of and changes in property. The three major intellectual property rights-patent, trademark, and copyright-each protect different types of intellectual property in the United States. A *patent* grants an inventor the exclusive right (i.e., monopoly) to produce and sell his invention for a given period of time-usually a standard seventeen years. A trade*mark*, which must be renewed every ten years, is a name, design, word, or cluster of words-such as the big yellow McDonald's *M*—that signifies a firm's identity to consumers. Copyright is an author's legal right to control the production and distribution of her work-published or unpublished—for a legally established period of time, which has recently been extended to the author's life plus seventy years thereafter.

Copyright protects an author's *expression*, not his ideas or theories. That is to say, for example, Albert Einstein could never copyright his general theory of relativity because it was an idea, but he did possess copyrights for the books and essays in which he *expressed* the ideas

Property Law: The Common Rule of Adverse Possession

One of the fundamental principles of the common (judge-made) law of property is that land *use* is favored over disuse, and therefore a party who uses land is preferred by the law to one who does not use it, even if the latter is the rightful owner. While this may seem to violate the rights of the owner, our property laws allow certain types of acquisition of someone else's property. This is known as *adverse possession*. In fact, the common law rules for adverse possession have been codified and passed by legislatures (lawmaking bodies such as the U.S. Congress) under both federal and state statutes.

How does adverse possession work? Imagine that a landowner who lives down the street builds a swimming pool on your land while you are out of the country. He fully intends to seize that property. A typical adverse possession law allows that landowner to get title (legal ownership) from you (the original owner) simply by using it out in the open for all to see in order to signal his or her intent to seize the land. If you know about this use, allow the other landowner to pay taxes on the property, and do nothing about it for a period of time determined by the law, the landowner who built the pool can claim this property as his or her own. The theory is that if you do not dispute this seizure of your land, you abandon your rights to the property.

Benjamin S. Kerschberg

of relativity. Although most authors register their work with the U.S. Copyright Office, one's mere creation of a work is enough to establish one's copyright over it. In most cases the owner of a work's copyright is the work's author, and the "author" is the primary creator of the work. The author may by contract reassign or sell his copyright to another party (so that, as an extreme example, Michael Jackson, who has purchased the copyright to many Beatles' songs, can prohibit any Beatle from playing them). Copyright law has come under criticism recently for many reasons. As with laws governing many types of property, the law is subject to interpretation about what constitutes infringement of copyright. Currently, the U.S. Copyright Office defines infringement as any action involving the reproduction, distribution, performance, or making public of a copyrighted work without the express permission of the copyright owner. But one may be exempt from infringement charges if the reproduction is done by a nonprofit library, archive, or educational institution and is considered to be *fair use*. The boundaries between fair use and copyright infringement can be unclear or contested, for the law does not draw a clear line between the two.

Copyright law originally was intended to protect authors from having others copy and sell their work for profit. With the explosion of file sharing, "peer-to-peer" (P2P) networks, copyright law and its enforcement have changed significantly. Recent statutes such as the "No Electronic Theft" Act (1997) and the Digital Millennium Copyright Act of 1998 state that individuals who reproduce or distribute copyrighted material-even if they have no intention of profiting from it or are unaware of any harm they may cause-are subject to civil and criminal prosecution. The ninth circuit court of appeals in the case of A&M Records v. Napster (2001) reasoned that the Audio Home Recording Act (1992)-which exempted from prosecution individuals using digital or analog devices to make musical recordings for their personal use -did not apply to individuals who reproduced copyrighted works on computers, and hence peer-to-peer networks such as Napster. In particular, file sharing is thought to be most commonly practiced by younger, cybersavvy generations, and thus the Recording Industry Association of America (RIAA) has increasingly made peer-to-peer networks on college campuses the target of their lawsuits. In May of 2003, four college students settled a lawsuit in which they agreed to pay the RIAA sums varying from \$12,000 to \$17,000. While actions taken against file sharers have had some effect on file sharing, it remains to be seen how copyright law, the market, and file sharing will evolve in response to peer-to-peer networks.

The new statutes have effects beyond file sharing. Because creators have copyright in their works, whether registered or not, and because many ordinary works lack a known or easily available public record of who currently owns their copyright, many works of culture from about 1920 are in a kind of limbo. They may be important or valuable culturally or as works of art; they may be disintegrating, as their pulp paper rots or their celluloid decays. But when, as is frequently the case, their ownership is unknown, no one will be willing to reprint or republish them—or even to preserve them in digital form—because of the possibility that the copyright holder will come out of obscurity and sue for infringement, even if the holder had no intention of preserving or publishing the work.

Peter G. Stillman

See also Capitalism; Communism and Socialism; Feudalism; Global Commons; Indigenous Peoples Movements

Further Reading

- Aristotle. (1997). *The politics of Aristotle* (P. L. P. Simpson, Trans., Vol. 1). Chapel Hill: University of North Carolina Press.
- Berle, A. A. (1954). *The twentieth century capitalist revolution*. New York: Harcourt, Brace, and World.
- Blackstone, W. (1979). Commentaries on the laws of England. Chicago: Chicago University Press. (Original work published 1765–1769)
- Congost, R. (2003). Property rights and historical analysis: What rights? What history? Past and Present, 181, 73–106.
- Critchley, J. S. (1978). Feudalism. Boston: George Allen & Unwin.
- Cronon, W. (1983). Changes in the land: Indians, colonists, and the ecology of New England. New York: Hill and Wang.
- De Bary, W. T., Chan, W., & Watson, B. (1960). Molders of the Confucian tradition. In *Sources of Chinese Tradition*. New York: Columbia University Press.
- Ewart, K. (1950). *Copyright*. Cambridge, UK: Cambridge University Press.
- Harmon, A. (2003, May 2). Suit settled for students downloading music online. *The New York Times*, p. A6. Retrieved June 11, 2004, from LexisNexis database.
- Lessig, L. (2004). Free culture. New York: Penguin Press.
- Locke, J. (1980). Second treatise of government (C. D. Macpherson, Ed). Indianapolis, IN: Hackett. (Original work published 1680)
- Marx, K., & Engels, F. (1998). The communist manifesto. New York: Penguin.
- Mencius (1970). Mencius (D. C. Lau, Trans.). Middlesex, England: Penguin Books.
- Pennock, J., & Chapman, J. (Eds.). (1980). Property. New York: New York University Press.

- Rousseau, J.-J. (1757). The second discourse: Discourse on the origin and foundations of inequality among mankind.
- Schaumann, N. (2002). Intellectual property in an information economy: Copyright infringement and peer-to-peer technology. *William Mitchell Law Review 28*(1001), 1–31. Retrieved June 11, 2004, from Lexis-Nexis database.
- Strayer, J. R., & Coulborn, R. (1956). The idea of feudalism. In R. Coulborn (Ed.), *Feudalism in history* (pp. 3–11). Princeton, NJ: Princeton University Press.
- The UCLA Online Institute for Cyberspace Law and Policy. (1998). The "No Electronic Theft" Act. Retrieved June 11, 2004, from http://www. gseis.ucla.edu/iclp/hr2265.html
- U.S. Copyright Office. (2003). About copyright. Retrieved June, 14, 2004, from http://www.copyright.gov
- U.S. Copyright Office. (1998). The Digital Millennium Copyright Act of 1998: U.S. Copyright Office Summary (of Pub. L. No. 105–304, 112 Strat. 2860, Oct. 28, 1998).
- U.S. Patent and Trademark Office. (2003). FAQ. Retrieved June 14, 2004, from http://www.uspto.gov

Protestantism

rotestantism represents a form of Christianity that $m{\Gamma}$ spread in five hundred years from northwest Europe to every continent. This global version of the faith derives from a cluster of movements within Western or Catholic Christianity in the early sixteenth century and thrives in the form of thousands of independent church bodies. Rejecting the authority of the pope, Protestants almost universally profess that the Bible-that is, the Hebrew Scriptures and the New Testament—is the authoritative source and norm of their teaching. Through the centuries, Protestantism quite naturally took on the culture of whatever new environments its churches spread to. Thus Lutherans in Namibia differ in many respects from those in Norway, yet both stress the grace of God and are critical of any Catholic teaching that insists on human endeavors to impress and please God.

Global Protestantism Today

Early in the twenty-first century, religious demographers estimate that about 370 million people are Protestant. Often associated with Protestantism but insisting on its Catholic character is Anglicanism, the heritage of the

	I Nelly 1011	BDegan
4000-2500 все	Hinduism	South Asia
1300-1200 все	Judaism	West Asia
500-400 все	Buddhism	South Asia
	Confucianism	China
	Zoroastrianism	West Asia
	Jainism	South Asia
400-221 BCE	Daoism	China
lst century ce	Christianity	West Asia, Europe
3rd century ce	Manichaeism	West Asia
6th century ce	Shinto	Japan
7th century ce	Islam	West Asia
11TH CENTURY	Orthodoxy	West Asia
15th-16th century	Sikhism	South Asia
16th century	Protestantism	Europe
19th century	Latter-day Saints	North America
	Babi and Baha'i	West Asia
19th-20th Century	Pentecostalism	North America

Church of England, which numbers 82 million adherents; a third group, labeled Independents, numbers 415 million. Taken together, after 2000 these non-Roman Catholic varieties of Christianity, all of which derived from the sixteenth-century Reformation, have over 800 million followers. (By comparison, there are an estimated 101 million Roman Catholics and 217 million Eastern Orthodox adherents.) Demographers estimate that by 2025 the Protestant numbers will grow from 370 million to almost half a billion, a sign that Protestantism is not confined to the period of early prosperity from the sixteenth through the nineteenth century, but faces a prosperous future. While these are necessarily imprecise numbers, the totals suggest the enormous historical importance of this movement.

The momentum of Protestantism, however, has dramatically shifted. While much of its base remains in northwest

When and Where World Religions Began

Europe, the point of its origin, the membership there is often nominal. In some Scandinavian nations, for instance, over 90 percent of the population will be listed as Protestant because most children are baptized by the Lutherans, yet church participation is very low. Meanwhile, in sub-Saharan Africa, where over ten thousand new members are added every twenty-four hours, Protestants, especially in forms called "Pentecostal" or "charismatic," are known for their vital and even exuberant patterns of worship and are among the chief deliverers of health care and works of mercy.

Protestant Origins in Western Europe

While Protestantism did not receive its name until 1529, historians of Protestantism characteristically date its rise from sporadic pioneering reform movements in England under John Wycliffe (1320–1384), William Tyndale (1494?–1536), and others. They and their followers combined efforts to translate the Bible into English and then to use biblical teachings, as they interpreted them,

to criticize the Catholic church. The Czech reformer Jon Hus (1372–1415), a critic of Catholic practices who died for his faith, endeavored to break the hold of the hierarchy and to teach lay people to base their views of divine grace on the Bible.

While the English reformers and the Hussites were put out of the Catholic Church or put to death, many other reform movements which tested the Roman church of the day, denouncing it as legalistic, corrupt, and inefficient as a deliverer of the message of divine grace, remained within the Church. Typical among this group were humanists like Desiderius Erasmus (1467?–1536) of the Netherlands, a man who satirized the papacy and monasticism with a savagery unmatched by most of his Protestant-leaning contemporaries. However, Erasmus and other humanists in the universities of England and throughout the Holy Roman Empire on the continent could not envision carrying their reform to the point of a break with the papacy.

Breaks that led to permanent breaches began to occur in the second decade of the sixteenth century. Most visi-



ble and best-remembered among them were the universitybased reforms at Wittenberg in Saxony. A cluster of monks and professors led by Martin Luther (1483–1546) set out to attack the Church's modes of dealing with people who sought salvation and attempted to live a moral life. Luther and his followers saw the Papacy as repressive, self-centered, and corrupt, and declared their intent to recast Church teachings from within Catholicism. However, they became so upsetting to both the Church and the Holy Roman Empire that Rome took action—usually, as in the case of Luther, it excommunicated them as heretics. Many other critics left voluntarily.

The map of early Protestantism indicates that a great number and variety of sites developed quickly. In England, a controversy between the Pope and King Henry V led to a sundering of ties and the birth of the Anglican church. In Switzerland, reformers such as Huldreich Zwingli (1484–1531) and John Calvin (1509–1564) complemented or competed with Luther and the Germans and with Scandinavian reformers, while more radical reformers spread through Switzerland and the Lowlands. By midcentury essential changes in allegiances had occurred and Protestantism had reached its early geographical limits. However, Mediterranean Catholics on the Iberian peninsula, in France, and in the Italian states were unmoved as were Eastern Europeans, whose Catholic churches abutted Orthodox churches in Russia, Poland, and Greece.

The Inner and Outer Expressions

The early Protestants, who acquired their name almost accidentally from the act of some princes who "protested" imperial and Catholic action at the Diet of Speyer in 1529, were more frequently referred to with a more congenial and positive term, *evangelical*. Although five centuries later that name appears to characterize only conservative Protestantism, in the beginning it simply implied that those who professed it were devoted to the *evangel*, the message of the New Testament gospels. They were not to be confined by Roman Catholic church law and did not define themselves as legalistic followers of Jesus and the Church. Instead, they professed to take the risk of governing the church and inspiring individual

Martin Luther: Defying the Catholic Church

In 1521, Luther was forced to stand trial at the Diet of Worms (in Worms, Germany), where he openly—and personally—defied Emperor Charles V, and thereby both the state and church authorities. One question remained: Would Luther recant? He answered this question in no uncertain terms, as the excerpt below makes clear. Luther was soon excommunicated from the Catholic Church.

Since then your serene majesty and your lordships seek a simple answer, I will give it in this manner, neither horned nor toothed. Unless I am convinced by the testimony of the Scriptures or be clear reason (for I do not trust either in the Pope or in the councils alone, since it is well known that they have often erred and contradicted themselves), I am bound by the Scriptures I have quoted and my conscience is captive to the Word of God. I cannot and I will not retract anything, since it is neither safe nor right to go against conscience. I cannot do otherwise, here I stand. May God help me. Amen.

Source: Retrieved from http://www.whatsaiththescripture.com/Voice/History. Protestant.v1.b6.html#CHAPTER%206

members' lives with the message of grace as mediated only by the Christian gospels and voiced in the acts of preaching and prayer.

The inner expression of Protestantism arose from the way some Christians gave expression to this evangel, how they worshiped and lived. The outer expression refers to the ways in which Protestants in various societies and cultures related to governments and economic and social powers.

The Gospel and the Inner Life of Protestants

Once the hold of the papacy and the Catholic hierarchy was tested and broken, the people called Protestant set to work to give voice and form to personal and church life in ways that would distance them from Rome and yet keep them within the Christian tradition, a tradition that they were soon to claim as belonging more rightfully to them than to the members of what they considered a corrupt Catholic church. Many Protestant leaders, especially the Anglicans and the Lutherans, continued to think of themselves as a kind of Catholicism without a pope, and they affirmed all that they could from the life of the existing Church. Yet their criticism of its forms was often searching, radical, and even savage. In fact, for many, the pope became not a faulty follower of Christ but the Antichrist.

Although they were unwilling to be defined only negatively vis-à-vis the Roman hierarchy and church or canon law, Protestants had difficulty defining themselves positively. The genus had to include everyone from Anabaptists, ancestors to latter-day Mennonites and radical Baptists, to church bodies that worshiped in very formal ways, including the use of incense and what radicals considered the trappings that belonged in Rome, not in evangelicalism. The genus also had to include Protestants who supported the religious establishment, who did not sever the ties between religion and regime, separate "church and state," or cease taxing the whole citizenry for church support. At the same time, in the same cluster, were Protestants-again, the Anabaptists and Baptists led the way—who wanted religious life in their churches to be independent of political organizations and leadership; they advocated very simple forms of worship that demonstrated their distance from Rome.

Authority and Grace

Despite these diversities and the many charismatic reformers who started independent movements, some broadly defined motifs can be used to characterize most Protestants. First, most Protestants did and still do give highest priority to the canonical scriptures, which they share with Catholics. Most Protestants, however, want to downgrade Catholic affirmations of church tradition and papal interpretations of the Bible. They may affirm that the Christian faith was expressed through the ages wherever Catholics were baptized or observed the Lord's Supper ("the Mass") as a second sacrament, and where the gospel of Jesus Christ was read and where it served as the basis of preaching and teaching to summon people to faith and the living of a godly life. The Protestant rejection of so much tradition and its refusal to turn to other authority, led Protestants to put a major, sometimes unique, stress on divine revelation in Scripture (on the interpretation of which they disagreed). One frequent statement of this motif was the authority of *sola scriptura* (scripture alone).

Second, while Protestants differed from each other in interpreting the scripture, most found in the writings of Paul and classic teachers such as Augustine an accent on divine grace. In this case, the distinctive elements were *sola gratia* (grace alone) and *sola fide* (faith alone)—people were saved from sin and from eternal punishment by the graceful and generous action of God, especially through the death and resurrection of Jesus Christ, in which they had faith. Catholics, of course, also acknowledged divine initiatives, but in the eyes of Protestants their emphasis on the need to please God through personal merit or works made them subject to Rome, which stipulated exactly how they should acquire merits and which works were beneficial to those who would be saved.

Continuing to baptize and to celebrate the Lord's Supper or Holy Communion, the sacred meal which memorialized Jesus and, most said, was a means of imparting grace among believers, most evangelical Protestants simplified worship. Preaching, singing hymns, and saying prayers became the main features.

Authority and Public Life

Protestants, whose early breakthroughs were often connected with particular nationalist or territorial movements and strivings by political rulers, knew that they had to find ways to promote civil life and instill obedience among populations. Few were ready to go so far as to repudiate existing earthly authority, be it that of emperors, monarchs, princes, or magistrates, many of whom converted to Protestantism and gave protective cover to reformers who were allied with them and who promoted their cause. By 1555 at the Peace of Augsburg, all but the radical reformist Protestant leaders had signed on to a concept that they took for granted: *cuius region, eius religio* (whoever determined the government of a region stipulated what religion should be favored or have a monopoly).

That halfway stage of reform led many Protestant leaders to adopt a servile attitude to their government, and many clergy became lower-grade civil servants. Dependent upon the government for funds, they were often uncritical of rulers, and Protestant radicals charged that they were replacing the tyranny of the pope with the tyranny of princes. Yet from the beginning, early Protestant witnesses to the value of conscience and of relative autonomy in respect to spiritual choices produced a widespread restlessness that by the middle of the seventeenth century had led to edicts and settlements of toleration in England and elsewhere.

A century later, these protesting impulses and liberated consciences served many Protestants as they teamed up with political thinkers, revolutionaries, and statesmen, to distinguish between religion and the civil authorities—to use the terms of American constitutionalist James Madison—or the separation of church and state, Thomas Jefferson's term. Such distinguishing and separation became marks of Protestant life in the United States after 1787, and were important instruments in determining Protestant church life when its missionaries founded churches in Asia and Africa, where no form of Christianity was more than a small minority presence.

Not all the external life of Protestant Christians had to do with government and politics. There was also an accent on personal ethics, based on the gospel in ideal circumstances, though many evangelical churches developed laws and nurtured legalistic ethics. As religion and regimes became more independent of each other, the Protestant ethic of "faith made active in love" inspired Protestants during and after the eighteenth century to invent many forms of voluntary associational life. Their churches formed groups where leaders and followers could promote charity and reform. The legacy of these inventions in the late eighteenth century, especially in Anglo-America, is evident wherever the Protestants took their efforts to convert people, even on continents where Protestants were never more than a minority presence.

Protestant Phases of Development

The first generations of Protestantism were what sociologist Emile Durkheim called "effervescences," bubblingsup, hard-to-discipline eruptions, usually marked by the language and life of an outstanding leader. By the second generation such movements, in order to sustain themselves and give an accounting of their ways, saw the rise of definers. Thus in the Church of England, Richard Hooker (1554–1600) brought legal expertise to drafting Of the Lawes of Ecclesiastical Polity. John Calvin, arriving on the scene slightly later than Luther or Zwingli, was himself a principled systematic theologian and defined the Calvinist or Reformed wing of Protestantism with his Institutes of the Christian Religion. Martin Luther, a man of contradictions who favored paradoxical language, gave place to university systematicians in the seventeenth century, giants of dogmatic expression like Johann Gerhard. The impulse among the secondgeneration leaders was to reintroduce more legalistic norms and in some cases to adopt the scholastic approach to faith which their predecessors had criticized. This meant that they offered philosophical defenses of the verbal inspiration of the Bible or reasoned apologies for the existence of God and the workings of grace.

Such defining legalism and scholasticism, especially where Protestants were linked with and dependent upon civil authorities, could follow a predictable means toward an unsurprising end. That is, they often appeared to degenerate into desiccated or fossilized forms, inert, incapable of keeping the evangelical spark alive. Such kinds of settlement bred restlessness. Thus, in a third long generation or short century of Protestant life, inspired leaders and movements from within devoted themselves anew to the inner life of the individual praverful soul, the piety of believers, and the reform of worship. These eighteenth and early nineteenth century movements, concurrently in the reveil in French-speaking lands, the Glaubenserweckung among German speakers, and the "awakening," "revivalist" or "pietist" movements in the British Isles and the American colonies or young United States, brought forth fresh accents.

Now the concentration was on the personal experience of God acting through the Holy Spirit to lead individuals from indifference or apathy to fervent faith. The converts, once "awakened" or "revived," were to turn to their reprobate or spiritually lifeless and wicked neighbors and convert them. Then they were to form small

Paul Tillich: Protestantism and Systematic Theology

Paul Tillich is a highly regarded theologian who stands at the boundary between Protestant and Roman Catholic theology. For Tillich, theology is designated to satisfy the church's demand; namely, to make "the statement of the truth of the Christian message and the interpretation of this truth for every new generation," as he wrote in one of his seminal works, Systematic Theology. Tillich thus uses the Christian message, obtained from the Word of God, to answer philosophical questions that are derived from common culture. This method of questioning is the so-called "correlation" methodology. Tillich's "correlation" method has been labeled as one of his major contributions to modern theologians. The excerpt below provides an example of Tillich's thoughts on Protestantism:

The Protestant Principle is an expression of the conquest of religion by the Spiritual Presence and consequently an expression of the victory over the ambiguities of religion, its profanization, and its demonization. It is Protestant, because it protests against the tragic-demonic self-elevation of religion and liberates religion from itself for the other functions of the human spirit, at the same time liberating these functions from their self-seclusion against the manifestations of the ultimate. The Protestant principle (which is a manifestation of the prophetic Spirit) is not restricted to the churches of the Reformation or to any other church; it transcends every particular church, being an expression of the Spiritual Community. It has been betrayed by every church, including the churches of the Reformation, but it is also effective in every church as the power which prevents profanization and demonization from destroying the Christian churches completely.

Source: Tillich, P. (1951). Systematic theology (p. 51). Chicago: University of Chicago Press.

groups, often within the established church, as was the case with Jonathan Edwards or George Whitefield, the towering figures in colonial America at mid-century, or with John Wesley, who eventually moved out of the Church of England to form Methodism. In general, these awakened movements matched and fed the democratic spirit of the times and empowered lay people to engage in works of reform and missionary endeavor.

In the nineteenth century, the age of colonialism, such awakened Protestants, moved by the sense that they were advancing the millennium (for Christ's return to earth) or promoting human progress through conversion and reform, boarded ships from the British Isles, western European nations, and the United States, and took their gospel to the Middle East, Asia, and the Pacific Island world, sometimes but with less success in Catholic Latin America, and finally to Africa. Most of these evangelical missionary movements date from the 1790s in England and after the 1810s in the United States.

Gifted college graduates, ambitious entrepreneurs, and sacrifice-minded men and women accompanied their message of salvation with efforts to educate and heal and provide physical benefits for the populations they reached. It is easy to connect their moves with colonial and imperial impulses, but without the entrepreneurs and conquerors they could probably not have moved as efficiently as they did. Yet they paid a high price, because anticolonialism eventually made it necessary for them to distance themselves from many of the Euro-American missionary endeavors—in sub-Saharan Africa, for example. They developed what they thought of as autochthonous Protestant churches—that is, churches rooted in the cultural soil of their new country.

At the beginning of the twentieth century, a new expression of Protestantism called Pentecostalism broke forth. Pentecostals claimed that their charismatic form of Christianity was as old as the biblical prophets and the New Testament. They believed they were reviving gifts of early Christianity, which had long fallen into disuse. They "spoke in tongues," for example; they prophesied and claimed miraculous healings. Pentecostalism quickly became a dominant form among Protestant late-arrivals in Latin America and sub-Saharan Africa. Some demographers claimed that over 570 million Protestants, Anglicans, Independents, and sometimes even Roman Catholics were Pentecostal. Having become the dominant form in the emerging world, Pentecostalism seemed ready to become the most prominent form of global Protestantism as the European churches declined in numbers and significance.

The End of One Millennium, the Beginning of Another

Through centuries, Protestantism developed many schools of theology, not least impressively in the twentieth century, long after many cultural observers had expected such fresh flowerings in a secular world. These schools reflected the dominant philosophies of the day, as their ancestral versions had done during periods characterized by idealism and the Enlightenment, for example. In the same way existentialism, language philosophies, phenomenology, and other philosophies inspired Protestant thinkers, usually in university settings, to rework biblical and historic evangelical motifs to meet new challenges. These included coming to terms with whatever industrialization, urbanism, globalization, and humanistic crises brought to people's lives. Far from fading, as it seemed to be doing in its own heartland, Protestantism in the early twenty-first century represents a confusing, explosive, adaptive force in secular and religiously pluralistic settings. Hard-line reactive Protestant fundamentalists resist adaptations, but their leaders manifest an ability to engage in invention on the ever-changing front of Protestantism.

Martin E. Marty

See also Luther, Martin; Missionaries; Pentecostalism

Further Reading

- Ahlstrom, S. (Ed.). (1967). Theology in America: The major voices. New York: Bobbs-Merrill.
- Barth, K. (1972). Protestant theology in the nineteenth century: Its background and history. London: SCM Press.
- Bergendoff, C. (1967). The Church of the Lutheran Reformation: A historical survey of Lutheranism. St. Louis, MO: Concordia.
- Bossy, J. (1985). Christianity in the West, 1400–1700. Oxford, UK: Oxford University Press.

- Bouyer, L. (2001). *The spirit and forms of Protestantism.* San Francisco, CA: Sceptre.
- Brauer, J. C. (1965). Protestantism in America. Philadelphia: Westminster.
- Brown, R. M. (1961). The spirit of Protestantism. New York: Oxford University Press.
- Cragg, G. R. (1960). *The Church in the age of reason.* Grand Rapids: MI: Eerdmans.
- Curtis, C. J. (1970). Contemporary Protestant thought. New York: Bruce.
- Dillenberger, J., & Welch, C. (1954). Protestant Christianity interpreted through its development. New York: Scribner's.
- Drummond, A. L. (1951). *German Protestantism since Luther*. London: Epworth.
- Flew, R. N., & Davies, R. E. (Eds.). (1950). The Catholicity of Protestantism. London: Lutterworth.
- Forell, G. (1960). *The Protestant spirit*. Englewood Cliffs, NJ: Prentice-Hall.
- Greengrass, M. (1987). The French Reformation. London: Blackwell.
- Groh, J. E. (1982). Nineteenth century German Protestantism: The church as a social model. Washington, DC: University Press of America.
- Halverson, M., & Cohen, A. A. (Eds.). (1958). A handbook of Christian theology: Definition essays on concepts and movements of thought in contemporary Protestantism. New York: Meridian.
- Hastings, A. (1976). African Christianity. London: Continuum.
- Hastings, A. (1991). A history of English Christianity 1920–1990. Philadelphia: Trinity Press.
- Heim, K. (1963). The nature of Protestantism. Philadelphia: Fortress.
- Heron, A. (1980). A century of Protestant theology. Philadelphia: Fortress.
- Kerr, H. T. (1950). Positive Protestantism. Philadelphia: Westminster.
- Léonard, E. (1966, 1967). A history of Protestantism (Vols. 1–2). London: Nelson.
- Marty, M. E. (1972). Protestantism. New York: Holt.
- Nichols, J. H. (1947). Primer for Protestants. New York: Association Press.
- Pauck, W. (1950). The heritage of the Reformation. Boston: Beacon.
- Rupp, G. (1986). Religion in England, 1688–1791. Oxford, UK: Oxford University Press.
- Tillich, P. (1951). *The Protestant era*. Chicago: University of Chicago Press.
- Troeltsch, E. (1966). Protestantism and progress: A historical study of the relation of Protestantism to the modern world. Boston: Beacon.
- Von Rohr, J. (1969). Profile of Protestantism. Belmont, CA: Dickenson.
- Weber, M. (1958). The Protestant ethic and the spirit of capitalism. New York: Scribner's. (Original work published 1904)
- Welch, C. (1972, 1983). Protestant thought in the nineteenth century (Vols. 1–2). New Haven, CT: Yale University Press.
- Whale, J. S. (1955). The Protestant tradition. Cambridge, UK: Cambridge University Press.
- Williams, G. H. (1961). The radical Reformation. Philadelphia: Westminster.
- Worrall, B. G. (1988). The making of the modern church: Christianity in England since 1800. London: SPCK.

Qin Shi Huangdi Quinine

Qin Shi Huangdi

(c. 259–210 bce) Chinese emperor and founder of the Qin dynasty (221–206 bce)

The unifier of China after several centuries of internecine warfare, Qin Shi Huangdi established the principle of centralized rule, with court-appointed officials governing throughout his realm. However, his dynasty, for which he created the new title *huangdi* (literally, August Supreme Sovereign), or emperor, barely outlived its founder, collapsing under the onslaught of popular rebellions just four years after his death.

In traditional Chinese historiography, Qin Shi Huangdi (commonly referred to as Qin Shi Huang) was remembered as an extreme tyrant whose cruelty and megalomania caused the rapid collapse of the dynasty for which he had designated himself as first, or founding (shi), emperor in what was to be an unending line of descent. The popular suffering accompanying the forcible unification of China was probably real enough, but the adoption of Confucianism by the succeeding Han dynasty (206 BCE-220 CE) as the official state philosophy probably was responsible for Qin Shi Huang's becoming a lasting symbol of oppression. Late in his reign Qin Shi Huang had tried to eradicate dissenting opinions by banning all traditions and schools of thought except the Legalist teachings that had been adopted by his home state of Qin a century earlier. This proscription hit Confucian scholars hardest, and it was for his great crime of



allegedly burning the books and burying the scholars (alive, of course) that the First Emperor was chiefly remembered in later China's Confucianized historical memory.

With the rise of modern Chinese nationalism, he has acquired a more positive image as a political unifier and nation builder. Mao Zedong (1893–1976) went further, seeing him as the kind of great leader who pushed the wheel of history forward by ruthlessly exterminating traditional or reactionary forces. In Mao's last years, during the later stages of the Cultural Revolution (1966–1976), there was a nationwide campaign to glorify Qin Shi Huang as historically progressive and to denigrate Confucius as reactionary. That campaign ended, however, with the death of Mao, and Qin Shi Huang remains a rather ambiguous symbol in modern China, seen on the one hand as a great national unifier and on the other as a tyrant and despot.

Appraising his real achievements is not easy. Significantly, critics and admirers in China focus more on his role as a political centralizer than as a military conqueror, although his armies crushed all the remaining independent Chinese states and pushed China's boundaries to present-day Vietnam in the south and beyond the present Great Wall (which he built by connecting and extending existing fortifications) in the north. Important in his role as a centralizer was the *junxian* system with which he administered his vast empire. Formerly hereditary fiefdoms held by not-always-obedient retainers were replaced by commanderies and districts administered by officials serving at the emperor's pleasure. While execrating his name and policies, the Han dynasty that followed basically accepted this system, which became the norm for later Chinese imperial government.

The Han also continued many of Qin Shi Huang's other unification policies, such as standardization of currency, weights, measures, and even the width of roads and cart axels. In cultural matters, the Qin suppression of various philosophies and traditions was dropped, although the Han's designation of Confucianism as the state orthodoxy also dampened the vigorous philosophical disputations that had characterized the latter years of the pre-Qin Zhou period (1045–256 BCE). One other Qin standardization was of enormous historical significance: The written script was purged of regional variations, thus facilitating communications and reinforcing cultural unity, at least for the literate elite.

The most notable discontinuity from Qin to Han was the repudiation of the School of Law (*fajia*) that Qin Shi Huang had made the sole philosophy, or political doctrine, of his empire. Usually called Legalism in the West, the School of Law demanded universal law codes, enforced by harsh punishments, that would abolish all the old feudal distinctions of rank and privilege, thus leveling society under the all-powerful ruler. As explained by its most articulate spokesman, the political philosopher Hanfeizi (d. 233 BCE), this would not only maximize power for the state and the ruler, but also benefit the common people by ensuring peace and good order. There was little attention paid to law as a restraint on the absolute power of the ruler.

Upon the death of Qin Shi Huang, palace intrigues led to the accession of a younger son lacking his father's All truths are easy to understand once they are discovered; the point is to discover them. • GALILEO GALILEI (1564–1642)

shrewdness and prodigious capacity for work. The strictly centralized system, in fact, required an exceptional ruler, and lacking traditional legitimacy or popular support, it rapidly collapsed. In the West, the most lasting legacy of the short-lived Qin dynasty is its name: Qin (in Wade-Giles romanization, Ch'in), pronounced in English "chin"—the origin of the English name *China*.

In China, lurid stories about the rise and fall of Qin Shi Huang and his empire continue to captivate the popular imagination, as shown in the recent movie (released in North America with English subtitles) The Emperor and the Assassin, 2001, directed by Chen Kaige. Much of this lore is based on the account by the official Han dynasty historian, Sima Qian (c. 145–c. 86 BCE), which was not only written over a century later but also reflects pro-Han, pro-Confucian sentiments. The historical Qin Shi Huang may or may not have been as cruel, paranoid, and arrogant as he is depicted. However, one indisputable piece of physical evidence attests to the grandiosity of his ambitions. In the 1970s construction workers near the modern city of Xi'an discovered enormous underground chambers with thousands of life-sized statues of soldiers and horses. This terra-cotta army, left to guard the First Emperor forever, has become a national monument and first-class tourist attraction. The emperor waits nearby, his tomb encased in an artificial mountain. When it is excavated, Qin Shi Huang will probably achieve even more historical celebrity-or notoriety.

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See also China

Further Reading

- Bodde, D. (1938). China's first unifier: A study of the Ch'in dynasty as seen in the life of Li Ssu. Leiden, Netherlands: Brill.
- Cottrell, L. (1981). The first emperor of China. London: Penguin.
- Twitchett, D., & Loewe, M. (Eds.). (1986). The Cambridge history of China: Vol 1. The Ch'in and Han empire. Cambridge, UK: Cambridge University Press.
- Wills, J. E. (1994). Mountain of fame: Portraits in Chinese history. Princeton, NJ: Princeton University Press.
- Yu-ning, L. (Ed.). (1975). The first emperor of China: The politics of historiography. White Plains, NY: International Arts and Sciences Press.

Quinine

Quinine, the great antimalarial medicine, was the first disease-specific medicine in the Western medical arsenal. Unlike earlier medicines that only masked or relieved the symptoms of medical complaint, quinine was capable of bringing about either a temporary or permanent cure, depending on the type of malarial infection. It was widely employed in western Europe and North America for generations before the germ theory of disease. In the nineteenth century it was the principal line of defense against the major public health threat in the United States and parts of Europe.

In 1820 the French chemists Pierre-Joseph Pelletier and Jean-Bienaimé Caventou isolated two alkaloids from the bark of the cinchona tree. They named the white crystal *quinine* and the brown liquid *cinchonine*. These and other successful laboratory experiments by Pelletier and Caventou mark the beginning of modern alkaloidal chemistry.

In the course of the 1820s, chemical manufacturing firms sprang up in the U.S., the Netherlands, Great Britain, France, and Prussia to produce quinine and cinchonine. Cinchonine became known as the "poor man's quinine"; it sold at a fraction of the price of quinine and became part of patent medicine formulations. Quinine gained an international reputation as the effective cure for malaria, and the high demand for it yielded robust profits. Many of today's major international pharmaceutical corporations have roots in the quinine industry.

Most early consumers were in the U.S. and in western Europe, where malaria was one of the principal public health problems of the nineteenth century. Through the course of European colonial expansion and experience with the disease environment on the African coasts, malaria eventually came to be understood as a global disease. Quinine was extremely portable, and from the middle of the nineteenth century onward it was regularly taken as a prophylaxis, allowing European explorers, missionaries, and troops to carry out their activities in areas where malaria was endemic. In India, the British learned to take their quinine dissolved in water, with gin added, thereby creating the gin and tonic. Some authors have assigned a primary significance to the role of quinine in the European conquest of the tropics, but recent scholarship suggests that a variety of other public health practices, such as mosquito screening and latrine-digging were at least as important in reducing the rates of sickness and death in the tropics.

Beginning in the early twentieth century, quinine was employed in mass public health campaigns, known as quininization, designed to reduce drastically the toll of malaria through universal chemical therapy. This policy was first adopted in Italy, with considerable success. But the expense of the policy, in combination with the fact that quinine could not prevent relapses of all forms of malaria, led to a return to individual therapy and a focus on environmental interventions to destroy the anopheles mosquito, which carries malaria, and its habitat.

Quinine proved its importance to the military during the early twentieth century. Quinine could be crucial to keeping troops fit to fight, and reducing the enemy's access to the drug could produce military victory. During World War I, the Allied Powers cut off the supply of quinine to the Germans and thereby produced great suffering along the Eastern Front. The Germans undertook an emergency scientific research program to find a synthetic substitute, but did not succeed until the 1920s.

Following World War I, the League of Nations Malaria Commission attempted to survey the global status of malarial infections and to estimate the amount of quinine that would be necessary to intervene effectively. The estimated quantity was in excess of the world's supply, and the initiative to treat the world's populations chemotherapeutically was dropped. This early survey and the problems encountered with mass chemotherapy, however, anticipated both the creation of the World Health Organization and the later problems of the global HIV pandemic.

The world's market supply of quinine during the 1920s and 1930s came to be controlled by an Amsterdam-based cartel known as the Kina Bureau, which succeeded in assuring a reliable supply of quinine at prices that allowed growers to avoid excessive competition. This system was shattered by the Japanese conquest in 1942 of the Dutch East Indies, where extensive cinchona cultivation was practiced. The Japanese captured the cinchona plantations that had produced most of the raw material for quinine production. Allied casualties mounted rapidly in the Pacific theatre of the war, and a major scientific research program was launched in the U.S. to find a synthetic substitute.

Since World War II, synthetic antimalarial drugs have largely replaced quinine. Today, quinine remains a highly effective antimalarial drug, and in cases of synthetic drugresistant malaria, it is the drug of last resort.

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See also Malaria

Further Reading

- Curtin, P. D. (1998). Disease and empire. New York: Cambridge University Press.
- Duran-Reynals, M. L. (1946). *The fever bark tree: The pageant of quinine.* Garden City, NY: Doubleday.
- Harrison, G. (1978). *Mosquitoes, malaria, and man.* New York: E. P. Dutton.
- Rocco, F. (2003). The miraculous fever tree: Malaria and the quest for a cure that changed the world. New York: HarperCollins.
- Taylor, N. (1945). Cinchona in Java: The story of quinine. New York: Greenberg.



Race and Racism Radio Railroad Ramses II Raynal, Abbé Guillaume **Red Cross and Red Crescent** Movement **Religion**—Overview **Religion and Government Religion and War Religious Freedom Religious Fundamentalism Religious Syncretism** Renaissance **Revolution**—China Revolution—Cuba **Revolution**—France Revolution-Haiti Revolution—Iran **Revolution**—Mexico **Revolution**—Russia **Revolution—United States Revolutions**, Communist Ricci, Matteo **Roman Empire** Roosevelt, Eleanor Roosevelt, Franklin Delano Rubber Rumi **Russian-Soviet Empire**

Race and Racism

number of historians have argued that racial divisions and racist attitudes were already present in societies such as Greece and Vedic India in ancient times. In any meaningful usage, however, these ways of conceptualizing and responding to differences between human groups originated in an age of global expansion and cross-cultural interaction in the fifteenth and sixteenth centuries CE. This era saw the first sustained contacts between the Eastern and Western hemispheres as well as greatly intensified regional and intracontinental interactions among societies across the world. Like all of the other peoples involved in cross-cultural contacts in these centuries, the Europeans who traveled overseas to trade, explore, and proselytize were highly ethnocentric, that is inclined to see their languages, customs, ways of thinking, and material culture as preferable-if not superior-to those of the diverse societies they encountered in Africa, Asia, and the Americas. This very human propensity to emphasize *cultural* differences was much in evidence in ancient times among peoples such as the Greeks, who distinguished themselves from the "barbarians" because the latter could not speak Greek, or the Chinese, who viewed such nomadic, pastoral peoples as the Turks and Mongols as uncouth and inferior because they lived in regions with too little rainfall to support the sedentary agriculture and sophisticated urban lifestyles that the Chinese deemed essential for civilization.

Racism can be seen as an extreme form of this ethnocentrism, which for a number of reasons explored below



developed for the first time in the early modern era of expansion, and-at least in this time period-only among peoples of European descent. Rather than cultural markers of difference, which are malleable and can be overcome if some groups are willing and able to adopt the beliefs and customs of others, racial boundaries are based on perceptions of somatic or physical distinctions between human body types, which are seen to be expressions of innate, *biological* divergence. Although the physical attributes stressed by those who construct or adhere to beliefs in the racial distinctiveness of human groups have varied considerably by time period and the society in which they are nurtured, racist thinking has almost always encompassed convictions that some peoples are inherently superior or inferior to others and presumed-at least implicitly-that this state of inequality arises from innate and immutable differences in intelligence.

The Genesis of Race and Racism

Whether based on a sense of religious or material superiority, European ethnocentrism in the fifteenth and sixteenth centuries CE was blinkered and self-congratulatory, but it was usually not racist in any meaningful sense of the term. Until the late seventeenth century, humanity was seldom divided into clearly demarcated categories by European travelers or writers, and when attempts were made to distinguish human types, the criteria were invariably vague and inconsistent. Physical differences between peoples encountered overseas were, of course, frequently described in considerable detail. But even in reports of contacts between the fairest-skinned northern Europeans and the darkest peoples of the rain forest regions of Africa or coastal South Asia, differences in skin pigmentation or hair texture are often noted in a matter-of-fact way. Contrary to the arguments of a number of Western scholars, which themselves may be expressive of ethnocentric preferences, European travelers did not necessarily admire light-skinned peoples more than "tawny" or "black" ones. In fact, numerous explorers explicitly commented on the beauty or well-proportioned bodies of both males and females of peoples described as dark-skinned. For example, François Bernier, one of the most famous French travelers of the late seventeenth century, was one of the first writers to attempt to classify the different types of humans he had encountered in his peregrinations. He had, however, very little to say about the basic human types that he proposed in a rather desultory way, and was a good deal more interested in ranking the peoples he had encountered according to which had the most beautiful women, which included at the top of his list relatively dark-skinned Egyptians and Africans. In a number of accounts by other Western observers, peoples described as tawny or black are ranked above their lighter-skinned neighbors in terms of their intelligence and the level of cultural development they have achieved. And few Europeans who traveled overseas made any attempt to link facial features or hair quality to more general assessments of a people's aptitudes or intelligence. Like differences in culture, physical variations were usually linked to environmental influences rather than seen as innate products of reproduction and biological inheritance.



The Atlantic Plantation System, Slavery, and Racism

It is still not clear exactly when attitudes and responses that were genuinely racist first emerged. But decades of careful research on the Atlantic slave trade and slave societies throughout the Americas have thoroughly documented the connection between chattel slavery as it developed in the centuries of European expansion into the Atlantic world and the emergence of increasingly elaborate arguments for the inherent and immutable differences between peoples sold into bondage for the slave plantations of the New World and the Europeans who shipped them across the Atlantic and profited from their enforced servitude. Even though we cannot determine precisely when and why the belief in extreme differences between Europeans and Africans was first articulated, by the seventeenth century it was widely held by the Portuguese, Dutch, English, and other nationals deeply involved in the slave trade. And there can be little question that the socioeconomic conditions under which the Atlantic slave trade was conducted directly affected the widespread acceptance of arguments for the Africans' innate, or racial, inferiority, and in some circles the conviction that they were a separate species from the rest of humankind.

Early, inchoate racist sentiments were to some degree elicited by extreme differences in skin color and other obvious (but not genetically significant) variations in physical appearance between both those who sold slaves and those actually reduced to slave status. But cultural differences were in most cases far more critical in shaping European attitudes toward different peoples and societies. These ranged from the Africans' alleged paganism -which was said to revolve around the "worship" of what the Europeans misguidedly lumped together as "fetishes"—to European disparagement of what they judged to be low levels of material development, based on everything from the coastal peoples' lack of impressive stone structures (including forts), large cities, powerful rulers, and strong states, to their indifference to semi- or complete nudity. These assessments were, of course, problematic in a number of ways. To a significant degree,

for example, they were shaped by the fact that the slave traders concentrated their activities in coastal areas, where, due to environmental conditions and human choice, political power was in fact less centralized than in much of Europe, and building materials and modes of dress were well suited to hot and humid ecosystems rather than the colder temperate conditions in the lands from which the Europeans set forth. The few European explorers who traveled inland throughout the vast savanna lands of the Sudanic belt (the desert and semiarid zone between the North African Maghrib and the rainforest regions of West Africa) before the nineteenth century encountered impressive cities-such as Jenne and Timbuktu-as well as states and armies often larger than those in Europe, extensive trading networks, monumental architecture, and Islam, a monotheistic religion that had emerged from the Judeo-Christian tradition, and thus-despite intense Christian-Muslim rivalry -one Europeans could relate to their own. Because so much of what the Europeans found in the interior of Africa matched their ethnocentric expectations regarding human achievement and worth, the African peoples of the Sudanic zone were generally given more favorable treatment in Western writings. And until well into the nineteenth century they were usually dissociated from the racist strictures often directed against the peoples of the societies on the west and southwest coasts of the continent, where the slave trade was concentrated from the sixteenth through the nineteenth centuries.

Few of the European travelers, slave traders, merchants, or missionaries who became involved in ongoing cross-cultural exchanges with African coastal peoples had any real understanding of their complex, sophisticated social systems and religions or appreciation for their splendid art, music, and oral literature. In addition, most of the Africans whom Europeans came into contact with were either merchants engaged to varying degrees in the slave trade or groups and individuals who had the misfortune to be captured and marched to coastal entrepôts in bondage, where they would be sold to the Europeans and transported to plantation societies across the Atlantic. Not only were the enslaved understandably

W. E. B. Du Bois on the Veil

After the Egyptian and Indian, the Greek and Roman, the Teuton and Mongolian, the Negro is a sort of seventh son, born with a veil, and gifted with second-sight in this American world, -a world which yields him no true selfconsciousness, but only lets him see himself through the revelation of the other world. It is a peculiar sensation, this double-consciousness, this sense of always looking at one's self through the eyes of others, of measuring one's soul by the tape of a world that looks on in amused contempt and pity. One ever feels his twoness-an American, a Negro; two souls, two thoughts, two unreconciled strivings; two warring ideals in one dark body, whose dogged strength alone keeps it from being torn asunder.

The history of the American Negro is the history of this strife—this longing to attain selfconscious manhood, to merge his double self into a better and truer self. In this merging he wishes neither of the older selves to be lost. He would not Africanize America, for America has too much to teach the world and Africa. He would not bleach his Negro soul in a flood of white Americanism, for he knows that Negro blood has a message for the world. He simply wishes to make it possible for a man to be both a Negro and an American, without being cursed and spit upon by his fellows, without having the doors of Opportunity closed roughly in his face.

Source: Du Bois, W. E. B. (1903). The souls of black folks. Retrieved September 11, 2003, from http://www.bartleby.com/114/1.html

profoundly disoriented and in states of shock and despair, they had been suddenly and violently snatched from the cultures where their skills were valued and they had won respect and social standing. In the Atlantic system, slaves were regarded as chattel, the property of other humans, and merely drudge labor. Even if they served as house servants on plantations in the Americas, they had no chance of becoming full members of the households and kinship networks to which they were usually connected in the largely domestic systems of slavery that predominated across most of Africa and Asia. Thus, there was little opportunity for most slaves to demonstrate their intelligence or talents. In fact, once enslaved, their burdens as laborers, and often their very survival, could depend on feigning incompetence or stupidity. "Smart" slaves were viewed with suspicion by members of the planter classes as potential troublemakers who might rouse others to resist the oppressive existence to which they had been condemned.

Whatever mix of these factors accounted for the emergence of racist attitudes among different European groups operating within the Atlantic slave trading network, on the plantations of the Americas, or in drawing rooms of Europe where natural philosophers deliberated over the latest treatise on the divisions within the human species, racist ideas were regularly enlisted in the defense of the enslavement of Africans and the brutal systems of social control that were essential to hold them in bondage. Emphasis on the innate inferiority of the African "race," or in extreme cases the contention that Africans were subhumans, served to rationalize the lives of humiliation, servitude, and misery that tens of millions forced to labor in the Atlantic plantation system endured through over four centuries. In these same centuries, far smaller numbers of Asian peoples, such as the Malays imported into the Dutch Cape Colony in South Africa or impoverished bonded servants from the lower castes of India. were also enslaved by Europeans overseas. But at least until the late eighteenth century, there were few attempts to argue for the racial distinctiveness of these groups. And those, such as the effort by sixteenth-century Spanish jurist Juan Ginés Sepúlveda, who sought to demonstrate that the indigenous peoples of the Americas were soulless subhumans who could legitimately be enslaved, were fiercely contested-most famously by the Dominican friar Bartolomé de Las Casas, who energetically disputed Sepúlveda's contention that wars to subjugate Amerindian peoples were just. Although in recent decades there has been considerable debate over the extent to which North American settler colonists distinguished themselves from the indigenous peoples in racial terms, the evidence suggests that until the nineteenth century at



This page from a 1878 geography text sets forth a classification of races that remained popular well into the twentieth century.

One ever feels his twoness—an American, a Negro; two souls, two thoughts, two unreconciled strivings; two warring ideas in one dark body, whose dogged strength alone keeps it from being torn asunder. • W. E. B. DU BOIS (1868–1963)

least, settler prejudice against the Native Americans was predominantly based on perceived cultural rather than physical differences.

Scientific Verification and Theories of Race

Until the last decades of the eighteenth century, racial distinctions and the concept of race itself remained vague and mutable. Early attempts to distinguish basic types within the human species in the mid-seventeenth century were crude and impressionistic. It is believed that the first of these was by the humanist Isaac de la Peyrère who in a 1655 treatise on the descendants of Adam and Eve, chose skin color as his key marker and lumped most human groups according to whether they were reported as "red," "yellow," "black," or "brown." In the 1680s the indefatigable traveler François Bernier argued there were five main types of humans, including a catch-all "lightskinned" category and an equally variegated "African" grouping, and opined that the relatively minuscule Lapp herder peoples of the Scandinavian north composed a comparable category. Neither of these writers sought to set forth clear criteria on which these differences between human groups could be discerned and tested. A century later, a number of natural philosophers, most prominently the Scotsman Lord Monboddo, who had not even seen most of the peoples he wrote about, asserted that Africans, or Negroes, were closer (mainly on the basis of physical appearance) to apes than humans. In contrast to Lord Monboddo and other armchair naturalists, the physician Edward Long had lived for decades in the midst of the large African slave population in Jamaica. Large sections of Long's History of Jamaica (first published in 1774) were devoted to descriptions of the unflattering physical features and signs of cultural debasement of the slave population that set them off from the European planter class. Like Monboddo, Long went to great lengths to chronicle the biological differences that made the Africans more akin to "lower" animal species than "whites." But Long also argued at great length, and with considerable pretension to scientific authority, that miscegenation between Negroes and "whites" invariably resulted in infertile hybrids; thereby proving they were separate species.

In the last decades of the eighteenth century, a number of prominent scientists, including two Germans, S. T. Soemmering and Christopher Meiners, conducted extensive anatomical investigations of different human types, using mainly skeletal remains for which they had only limited non-European samples. The purpose of these exercises in comparative anatomy was to provide an empirical grounding for determining specific bodily differences between racial groups and to establish more precise-hence ostensibly scientific-classifications of basic racial types within the human species. Popularized, and in many cases seriously distorted, by numerous nineteenth-century racist thinkers, including physicians who sought to refine or revise the findings of earlier investigators, racial classifications proliferated steadily. In some cases race studies were merged with "scientific" explorations of innate criminal types or utilized in tracts by eugenists and other evolutionist thinkers arguing for the prohibition of race mixtures or promoting ones deemed advantageous for the improvement of dominant, hence superior races, whether "Caucasian" or "Mongoloid." By the middle decades of the nineteenth century, the scientific study of race had fostered the production of a remarkable variety of instruments to measure the anatomical features of cadavers, skeletons, and skulls of specimens for different racial groups. Increasingly, the focus of these efforts to quantify racial distinctions came to be concentrated on the comparative measurements of skull samples from different human groups. By the last decades of the century, the "science" of phrenology was pervasive in European societies, a constant presence in venues as disparate as the ponderous deliberations of scientific societies and anthropological associations, such best-selling books as the Sherlock Holmes mysteries by Sir Arthur Conan Doyle, and the seaside amusement stands of Great Britain, where one could have one's head measured in considerable detail for a small fee. The influence of evolutionary thinking, the assertion of Christian doctrine, and some of the more credible scientific studies led over the last half of the nineteenth century to the slow

Richard Wright: American Hunger

The excerpt that follows, American Hunger, tells in part a story often lived by African-Americans in America. According to Wright, African-Americans, because of historical circumstances, remain a migratory people, forever on the move, leaving one spot in order to find freedom in another. Wright wrote American Hunger at the age of nineteen.

My first glimpse of the flat black stretches of Chicago depressed and dismayed me, mocked all my fantasies. Chicago seemed an unreal city whose mythical houses were built of slabs of black coal wreathed in palls of gray smoke, houses whose foundations were sinking slowly into the dank prairie. Flashes of steam showed intermittently on the wide horizon, gleaming translucently in the winter sun. The din of the city entered my consciousness, entered to remain for years to come. The year was 1927.

decline in the popularity of polygenetic explanations of racial difference, which traced them to separate creations, in favor of monogenetic theories, which stressed the essential unity of humankind, while attempting to argue ever wider, less permeable differences between racial types.

Racism and Ideologies of Oppression

In the half century before World War I and the two decades following the conflict, racial thinking reached the peak of its influence in shaping the ways in which societies in many parts of the world were organized, providing justifications for imperial expansion, supplying ideological fodder for mass social movements, and generating unprecedented intra-human strife and oppression. In the late nineteenth century, notions of racial superiority, often expressed in terms that were clearly nationalistic rather than biological, were constantly invoked by those who advocated colonial expansion and the domination of "lesser" peoples. Racist assumptions undergirded the civilizing mission ideology that was used to justify this aggressive behavior, explain away the marked decline in the living conditions of colonized

... My ability to endure tension had now grown amazingly. From the accidental pain of Southern years, from anxiety that I had sought to avoid, from fear that had been too painful to bear, I had learned to like my unintermittent burden of feeling, had become habituated to acting with all my being, had learned to seek those areas of life, those situations, where I knew that events would complement my own inner mood. I was conscious of what was happening to me; I knew that my attitude of watchful wonder had usurped all other feelings, had become the meaning of my life, an integral part of my personality; that I was striving to live and measure all things by it. Having no claims upon others, I bent the way the wind blew, rendering unto my environment that which was my environment's, and rendering unto myself that which I felt was mine.

Source: Wright, R. (1945). Black Boy. New York: Harper.

peoples, and rationalize often draconian measures taken to repress popular resistance to imperial domination.

In colonies from Morocco to Vietnam, racist pronouncements informed all aspects of life from urban planning to schemes aimed at promoting the work ethic among the indigenous laboring classes. In the American South, South Africa, Australia, and New Zealand, many of the same ideas (though far less infused with scientific racism in the case of South Africa) provided the ideological basis for societies organized around extreme racial segregation and discrimination against people of color: African Americans in the southern United States; "kaffirs" or the Bantu-speaking majority in South Africa as well as immigrant Indians and mixed-race "coloreds"; Aboriginal people in Australia; and Maoris in New Zealand. In Germany, racist thinking intensified centuries-old religious and cultural prejudice against the Jews with ever more virulent expressions of anti-Semitism. After abetting the Nazi rise to power, racist invective made possible segregation, dispossession, removal and incarceration, and finally a massive, systematic campaign to exterminate not only the German Jews but all of those in the areas that were forcibly incorporated into the short-lived Nazi empire from the late 1930s. In Japan in roughly the same decades, ultra-patriotic ideologues who stressed the importance of racial purity as the key to the superiority of the Japanese people played critical roles in launching an increasingly militarized society on the path to external aggression, empire building, and ultimately a disastrous war against the United States and its European and Pacific allies.

Racism Repudiated and the Persistence of Prejudice

Those who sought to develop a science of race or promoted racist ideologies in the nineteenth and early twentieth centuries were no more successful than earlier thinkers had been in establishing meaningful, widely agreed upon points of demarcation between different human groups, much less in setting forth acceptable, nonethnocentric standards by which the superiority or inferiority of different racial types might be judged. In the early decades of the twentieth century, when the influence of racist-charged ideologies and demagogues as well as racial discrimination at the everyday levels of social interaction remained pervasive in societies across the globe, an intellectual counteroffensive was mounted. One of the prime movers of this assault on racist thinking was Franz Boas, a prominent German anthropologist who spent the most productive decades of his distinguished career training graduate students in the United States, among whom were Margaret Mead and Ruth Benedict. Boas, the anthropologists his teaching inspired, and allied ethnographers challenged the widespread assumption that racism had been validated by objective, culturally neutral, scientific investigation. They also sought to supplant race or biological difference with an emphasis on cultural variations in the study of human societies. By the early 1940s, the genocidal nightmare that the Nazis unleashed across Europe in the name of race purity and the racially charged war then raging in the Pacific generated widespread revulsion against racist social and political agendas. In the decades that followed, the spread of movements for independence organized by colonized peoples across Asia and Africa, as well as civil rights agitation against the segregationist regimes in the American South and South Africa, further discredited theories of racial difference and their use to legitimize discrimination.

Despite these countervailing trends and campaigns explicitly aimed at eliminating racial prejudice mounted by international organizations such as the United Nations, racism has persisted both in popular attitudes in many societies and, in some instances, state policy, such as the regime based on institutionalized discrimination that lasted in South Africa well into the 1990s. In some of the more militant, extremist strands of movements for liberation from racial oppression, such as some Black Power organizations in the United States and settler Zionism in Palestine, reactive racist sentiments were nurtured. Theories of race were also kept alive by scientists and social pundits who persisted in efforts to demonstrate empirically that there were genetic differences, centered on intelligence quotient, or IQ, averages, in the capacities of different human groups. But by the final decades of the twentieth century, the idea of race and the racist prejudices and behavior that had been associated with it for nearly half a millennium were rejected by the overwhelming majority of scientists and social thinkers worldwide.

Michael Adas

See also Colonialism; Ethnocentrism; Genocide; Holocaust; Slave Trades; Social Darwinism

Further Reading

- Adas, M. (1989). Machines as the measure of men: Science, technology, and ideologies of western dominance. Ithaca, NY: Cornell University Press.
- Barkan, E. (1992). The retreat of scientific racism. Cambridge, UK: Cambridge University Press.
- Curtin, P. (1964). The image of Africa: British ideas and action, 1780– 1850. Madison: University of Wisconsin Press.
- Fredrickson, G. (1971). Towards a social interpretation of the development of African racism. In N. I. Huggins, et al. (Eds.), *Key issues in the Afro-American experience*. New York: Harcourt, Brace, Jovanovich.
- Fredrickson, G. (2002). Racism: A short history. Princeton, NJ: Princeton University Press.
- Gould, S. (1981). The mismeasure of man. New York: Norton.
- Holt, T. (1995). Marking: Race, race-making, and the writing of history. *American Historical Review*, 100(1), 1–20.
- Jordan, W. (1968). White over black: American attitudes toward the Negro, 1550–1812. Chapel Hill: University of North Carolina Press.

- King, J. (1981). *The biology of race.* Berkeley: University of California Press.
- Mosse, G. (1964). The crisis of German ideology: Intellectual origins of the Third Reich. New York: Grosset & Dunlap.
- Pagden, A. (1982). The fall of natural man. Cambridge, UK: Cambridge University Press.
- Vaughn, A. (1995). Roots of American racism. New York: Oxford University Press.

Radio

R adio, or wireless, technology developed in the late nineteenth century and became the basis of a widespread broadcasting medium beginning in industrial countries during the 1920s. By the early twenty-first century, analogue AM and FM radio service was available in nearly every nation, and digital services were rapidly developing. (Note that although *radio* can refer to any electromagnetic radiation, in this article the term is used for broadcasting and related services but not, for example, for television broadcasting signals, radar, or mobile phone service.)

Wireless Innovation

The first theoretical prediction of a wireless means of transmitting information was made by James Clerk Maxwell (1831–1879) in the 1860s in Britain. The German physicist Heinrich Hertz (1857–1894) proved Maxwell correct with small-scale experiments in the late 1880s, but took the idea no further. The Italian inventor Guglielmo Marconi (1874–1937) began experimentation in the mid-1890s, and by the end of the decade had moved to Britain and interested the government and military in potential applications of wireless. In 1901 he transmitted the Morse code signal for the letter "S" across the North Atlantic. By then other experimenters had begun work in Germany, the United States, Russia, and elsewhere.

Wireless telegraphy was first used to communicate with (and between) ships at sea and also for long distance (often transoceanic) links. Before and during World War I, wireless telegraphy was also applied to navy and

The ideas that conquer the race most rapidly and arouse the wildest enthusiasm are precisely the ideas that are most insane. This has been true since the first "advanced" gorilla put on underwear, cultivated a frown and began his first

military needs. Nations that made effective use of radio (especially at sea) enjoyed a decided advantage over other countries. Japan beat the Russian fleet in 1904 at the Battle of Tsushima in part because of superior radio communications; British signaling failures at the Battle of Jutland in 1916 were due in considerable part to confused radio messages.

To transmit voice or music signals (wireless telephony as opposed to telegraphy) requires more complex continuous-wave equipment that developed only slowly in the first two decades of the twentieth century. Reginald Fessenden (1866-1932), a Canadian working in the United States, was one of the first to realize this important distinction and sought to develop the needed transmitter. Lee De Forest (1873-1961) had by 1906 developed his Audion, an improved vacuum tube which, it was eventually discovered, allowed amplification of electrical signals, and thus more effective transmitters and receivers. Edwin Howard Armstrong (1890-1954) developed several important wireless circuits that made effective radio receivers possible. Patent fights among these and other inventors often delayed radio's progress. Few of them had radio broadcasting in mind.

Early U.S. Radio Broadcasting

What was probably the world's first broadcast (that is, a noncode transmission sent out to all who cared to listen) took place Christmas Eve of 1906 at Brant Rock, Massachusetts, south of Boston. Fessenden, using equipment of his own design, transmitted voice and music signals to a small audience of amateur ("ham") and government or shipboard radio operators. Though he repeated the feat a week later, he did not establish a continuing service. Others, including Lee De Forest offered occasional broadcasts, but again did not offer a regular service. That role fell to Charles D. Herrold (1875-1948), who in about 1909 began what is probably the world's first regularly scheduled radio broadcast service in San Jose, California. It expanded and continued until early 1917, when U.S. entry into World War I brought most private radio usage to a halt.

lecture tour, and it will be so until the high gods, tired of the farce at last, obliterate the race with one great, final blast of fire, mustard gas and streptococci. • H. L. MENCKEN (1880–1956)

Radio broadcasting began in earnest in parts of Europe, Canada, and the United States in the two years following World War I, as nations lifted their bans on private use of wireless technology. The very first stations were experimental affairs, often on for only a few hours a week and offering no set schedule. Equipment was often handmade. Few in the potential audience owned or knew how to make receivers. Only slowly did this change, as demand for the new over-the-air service expanded. By the end of 1922 there were more than five hundred stations on the air in the United States, all sharing a handful of frequencies.

The years 1927 and 1928 were crucial in defining U.S. broadcasting as a commercially supported and federally-regulated system. Receivers improved, the first regular networks were established (NBC in late 1927; CBS a year later), programs became more standardized as to their variety, content, and length, advertisers were attracted to radio's growing audience, and preliminary audience research made clear the medium's growing availability and impact. Finally, federal regulatory standards and licensing were standardized and given enforcement teeth. The present AM band of frequencies was reserved for broadcasting, allowing many more stations. Radio's golden years were in the 1930s. Depression pressures made "free" radio (once you owned a receiver) a bargain when money was tight. Drama, comedy, variety, and eventually news programs were all honed to a high standard by late in the decade. Many companies that pioneered radio advertising enjoyed growing product sales. Radio programs were widely discussed and listeners identified with popular drama and comedy characters. Radio news became more important by the late 1930s, edging out newspapers for breaking stories. World War II events were brought to home-front listeners thanks to improving technologies that allowed radio's reporters to broadcast live or recorded from battlefronts. On CBS, for example, Edward R. Murrow (1908–1965) and his colleagues brought vivid reports of wartime developments home to U.S. listeners. Radio journalism was fully developed during the fighting in the early 1940s.

European Public Service Radio

In contrast to the U.S. commercial model, starting in the late 1920s, the British Broadcasting Corporation (BBC) established a very different approach of public service and noncommercial programming, becoming a model for radio systems in many other nations. BBC leadership saw radio as a means to improve the country and its people, and therefore offered considerable culture, education, and arts programming, but not much light entertainment. Other European nations followed suit with their own domestic radio systems, and applied the same approach to radio in their colonial possessions. In the United States, public service radio before the 1960s was relegated to a small number of educational and noncommercial stations, most run by schools or universities. Radio was of greater social importance in Europe (because of its public service emphasis) than in the United States (where radio focused on musical formats) after the introduction of television.

By the start of World War II, radio systems in Europe, Africa and Asia (but not North and South America), were under some degree of government control, supported by fees paid by listeners (few carried advertising). For nations in which the government controlled radio systems, the purpose of radio was to advance national arts and culture and perhaps forward government policies. Little entertainment or popular music was offered, which led, along with advertisers' demand for access to listening audiences, to the formation in the 1950s and 1960s of numerous "pirate" (unlicensed) stations in Europe, some of them broadcasting from the high seas, all playing popular music and supported by advertising.

International Radio Services and Propaganda

Governments often co-opted radio broadcasting for the purposes of persuasion and sometimes terror. Radio Moscow in 1929 was perhaps the first international short-wave radio service; it was designed to extol the virtues of Communism beyond Russia. It was followed in 1932 by the BBC's Empire Service (the predecessor of

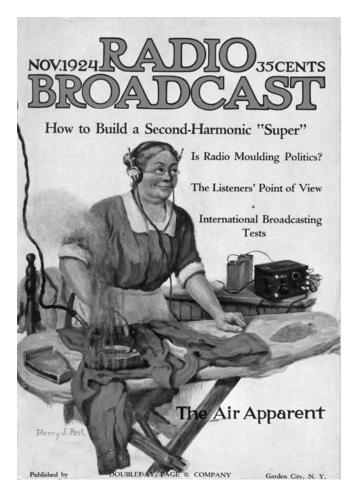
The cover of *Radio Broadcast* magazine from 1924.

today's World Service) to British colonies, French colonial broadcasting, and, after 1933, by Nazi Germany's radio service. The Nazi official Josef Goebbels (1897–1945) bent the medium to promote German ideas while striking fear into the hearts of potential enemies. The United States, which had relied on private networks for international radio services in the 1930s (especially into Latin America), by 1942 formed the Voice of America as the official voice of the United States outside its shores.

Broadcast propaganda continued from all belligerents during World War II and expanded further during the Cold War as the Soviet Union, China, and several of their satellite states developed their short-wave radio systems and added airtime. The United States created Radio Free Europe and Radio Liberty in the 1950s to broadcast into Eastern Europe and Russia, respectively. Dictators sometimes made personal use of radio: The Egyptian leader Gamal Nasser (1918–1970) used radio extensively to reach his people in the late 1950s, as did Fidel Castro (b. 1926 or 1927), who made hours-long speeches regularly after taking over Cuba in 1959. Both leaders sought to strengthen their popular domestic support, often by attacking external enemies (usually the United States). With the end of the Cold War in the early 1990s, international radio became somewhat muted, focused more on nationalistic messages and culture than on persuasion. Yet U.S. services into Cuba (Radio Martí) and the Middle East (Radio Sawa) show how international radio could still be applied to political and cultural persuasion. Cold War radio propaganda served primarily to keep true believers on both sides in line-it probably persuaded few listeners to totally change their thinking.

Radio in a World of Television

Postwar radio broadcasting faced a very different media context worldwide. In the 1930s Edwin Armstrong had perfected FM technology, which largely eliminated static and offered far better sound and more predictable coverage. FM was a boon as Europe rebuilt its wardevastated radio systems, allowing more stations and diversified content. The service developed slowly into the



1950s in the United States as money was poured into new AM stations (which expanded from 900 to 2,400 from 1945 to 1952) and television. FM radio was especially valuable in tropical countries, where electrical interference often drowned out AM transmissions.

As commercial television expanded after World War II, however, radio often shed much of its program variety (and, in the United States, its network service) to the newer television business. Radio became "background" to most listeners as it sought a new role—which turned out to be that of purveyor of modern popular music. "Formula" or "top-40" radio appeared in the mid-1950s in the United States as radio stations became jukeboxes for the latest musical fads, rapid-fire newscasts, and a growing amount of advertising. U.S. radio DJs (disc jockeys) became media heroes to millions—and models for the European pirate stations. A growing number of listeners used easily portable transistor radios after about 1960, making radio the "take it with you" medium.

Educational radio became known as public radio in the United States after 1967, with National Public Radio being founded in 1969 to connect what would become hundreds of local outlets. National Public Radio provided a national public affairs service along with local expression and alternatives to pop music, including the classics, which had all but disappeared from commercial stations. By the late 1990s, more than a thousand small community stations operated, largely with volunteer staffs. In the United States, FM radio's vastly better sound quality and programming made it more popular than AM radio in the 1980s; by the end of the century it was attracting more than 75 percent of the total U.S. audience. Music of all kinds was more likely to be heard on the growing number of FM stations (from 2,500 in 1970 to nearly 8,000 by the end of the century). By the 1990s, talk and news formats dominated AM stations, many of the most popular programs featuring conservative political commentators or religious broadcasters. Such programs-much like international propagandatended to reinforce like thinking by listeners, but probably persuaded a few to change their mind. Some political campaigns were clearly affected by such broadcasts, but evidence was divided on their long-range impact. Radio became more widely available in automobiles as well (half of all cars had an AM radio in the early 1950s; by 1990 more than 95 percent had FM capability as well) —important because of the increasing number of "drive time" (commuting) listeners.

Changes in radio regulation in the United States allowed development of national chains of radio stations run by a single entity, while one owner could own up to eight stations in the largest markets. Considerable controversy arose as to whether this harmed or aided diversity of programming, but most observers agreed that deregulation contributed to the trend of less news and public affairs programming on U.S. stations.

After about 1990, the U.S. model of commercially supported popular music radio became more widespread worldwide. Some countries had adopted competing public service and commercial radio systems as early as 1974 (in Britain) and even the 1940s (in Canada). Others moved away from noncommercial systems to a commercially supported structure.

Radio's Digital Future

By the late 1990s, radio was entering what will surely be a lengthy transition from existing analogue AM and FM broadcast transmissions to digital transmissions. The latter are delivered from terrestrial stations in some countries, while in others (including the United States) satellites transmit digital radio programming on a commercial-free, subscription basis. Digital radio provides vastly superior sound quality but requires new receivers. After more than eight decades of service, sometime in the early twenty-first century analogue AM and FM radio services are likely to disappear in the face of these newer digital offerings. While the changing technology will make for clearer signals, there is no evidence thus far that it will either improve or diminish radio programming.

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See also Communication—Overview; Telegraph and Telephone

Further Reading

- Albarron, A. B., & Pitts, G. C. (2000). The radio broadcasting industry. Boston: Allyn & Bacon.
- Barnouw, E. (1966–1970). A history of broadcasting in the United States (Vols. 1–3.). New York: Oxford University Press.
- Briggs, A. (1960–1995). A history of broadcasting in the United Kingdom (Vols. 1–5.). London: Oxford University Press.
- Codding, G. A. (1959). Broadcasting without barriers. Paris: UNESCO.
- Coe, L. (1996). Wireless radio: A brief history. Jefferson, NC: McFarland.
- Douglas, S. J. (1987). Inventing American broadcasting, 1899–1922. Baltimore: Johns Hopkins University Press.
- Douglas, S. J. (1999). Listening in: Radio and the American imagination. New York: Times Books.
- Dunning, J. (1998). On the air: The encyclopedia of old-time radio. New York: Oxford University Press.
- Hilmes, M., & Loviglio, J. (Eds.). (2001). Radio reader: Essays in the cultural history of radio. New York: Routledge.
- Katz, E., & Wedell, G. (1977). Broadcasting in the Third World: Promise and performance. Cambridge, MA: Harvard University Press.
- Keith, M. C. (2000). The radio station (5th ed.). Stoneham, MA: Focal Press.
- McNicol, D. (1946). Radio's conquest of space: The experimental rise in radio communication. New York: Murray Hill Books.
- Sterling, C. H. (1984). Electronic media: A guide to trends in broadcasting and newer technologies, 1920–1983. New York: Praeger.
- Sterling, C. H. (Ed.). (2004). *Encyclopedia of radio* (Vols. 1–3). New York: Fitzroy Dearborn.
- Sterling, C. H., & Kittross, J. M. (2002). Stay tuned: A history of American broadcasting (3rd ed.). Mahwah, NJ: Lawrence Erlbaum.
- Woods, J. (1992, 1999). *History of international broadcasting* (Vols. 1–2). London: IEE.

Rail travel at high speed is not possible because passengers, unable to breathe, would die of asphyxia. • DIONYSUS LARDNER (1793–1859)

Railroad

The railroad is a mode of transportation that consists of a locomotive, a train of passenger or freight cars, a two-railed steel track, a graded railbed, and terminals. Unlike other forms of transport, rail travel requires no steering: wheels with flanges (raised rims) keep the locomotive and cars on track. Railroads are energy-efficient because the wheels glide on the tracks with little friction.

A typical rail network consists of a trunk (main line) and branches (spurs). The trunk links the major urban and industrial centers along a roughly straight trajectory. Branches link the hinterland to one or more of the urbanindustrial junctures on the trunk. Tokyo, Guangzhou, London, Cologne, Chicago, and New York are among the cities that have become major rail hubs, because they lie either in an industrial region, on the crossroads of multiple trunks, or near a seaport.

Steam engines were used to power locomotives for most of the nineteenth century, but modern engines run on diesel or electricity. Today's high-speed passenger trains, built by Japan and France, can travel up to 300 kilometers per hour, faster than all other modes of transport except airplanes and spacecraft. The longest trip that can be undertaken without a change of trains extends 10,214 kilometers from Moscow, Russia, to Pyongyang, North Korea. Only ships regularly transport people and cargo a greater distance.

Few inventions have had a more immediate or lasting impact on world history than the railroad. It was the first mode of land transport capable of outpacing and outdistancing the horse and camel. It brought far-flung parts of continents, and disparate groups of people, together for the first time. It became a potent symbol of modernity, technological prowess, and industrial know-how. "The railroad," writer Heinrich Heine remarked in 1843, "annihilates space and only time remains."

The Origin of Railroads

Europe's mining enterprises began to utilize primitive rail systems to haul coal and iron ores as early as the sixteenth

century. Because mine shafts were muddy and uneven, ore haulers placed parallel wooden rails along the mine floors to keep the cartwheels above the ruts. By the late eighteenth century, iron rails had come into common use and some enterprises had begun to extend their tracks from the mine entrances to the coal ports. These colliery railways were especially thick in the coal-mining regions of northeast England, near the Tyne and Wear rivers, where they were known as "Newcastle roads."

Most historians date the beginning of the "Railroad Age" with the opening of the 44-kilometer-long Stockton and Darlington Railway, a steam-powered freight line that cut the cost of coal transport by more than half, in 1825; and the 50-kilometer-long Manchester and Liverpool Railway, a passenger and freight line that linked two of England's most important urban-industrial centers, in 1830. Both were designed by George Stephenson, Great Britain's first great railroad engineer.

Railroad Mania in the Nineteenth Century

By the 1840s Great Britain was in the grips of a "railroad mania," a period of boom-and-bust construction that led to a fourfold expansion in British tracks from 2,340 kilometers to over 9,700 kilometers within a decade. This period also witnessed the rise and fall of George Hudson, the "Railway Napoleon," the first of many rail swindlers whose stock manipulations and shady dealings spawned numerous lawsuits, bankruptcies, and political scandals. "Britain is at present an island of lunatics, all railway mad," Judge Cockburn declared in 1845 (Blum 1994, 14–15).

Railroad mania spread quickly to the coal-producing regions of northwestern Europe—Belgium, northern France, and Rhineland Prussia. This was where the world's first international line was built, linking Liege, Belgium, and Cologne, Rhineland Prussia. Governments played a greater role on the continent than in Great Britain in promoting rail development and determining the routes. So did international bankers, most notably the Rothschild family, a name that became all but synonymous with continental rail construction in the nineteenth century. Government-business collaboration resulted in a construction frenzy, and by 1907 Europe (excluding Russia) was crisscrossed with 263,000 kilometers of track. Germany alone possessed 58,000 kilometers, followed by France (47,900 kilometers), the Austro-Hungarian empire (41,800 kilometers), Great Britain and Ireland (37,300 kilometers), Italy (16,600 kilometers), Spain (14,800 kilometers), and Sweden (13,400 kilometers).

Railroads also played a major role in achieving the nation-building ambitions of the United States, the Dominion of Canada, and Czarist Russia. The first U.S. rail link, the Baltimore and Ohio Railroad, began operation in 1830, and for the next three decades construction occurred almost exclusively east of the Mississippi. The discovery of gold in California in 1849, however, put a premium on a fast and secure land route to the Pacific Ocean. Generous subsidies from the U.S. government made it possible for the Union Pacific and Central Pacific companies to jointly finish a line between Sacramento and Omaha in the years 1863 to 1869. Several other lines followed, including the Southern Pacific (1881), Northern Pacific (1883), and Great Northern (1893). Meanwhile, Canada completed the first true transcontinental railroad, the Canadian Pacific, which linked the eastern port of Montreal to the western port of Vancouver, in 1885. The Canadian Northern and Grand Trunk Pacific followed in the early twentieth century. Last, the Russian government constructed the Trans-Siberian Railway, linking Chelvabinsk and Vladivostok, between 1891 and 1916. At 7,600 kilometers, it is still today the world's longest railroad. By 1907, the United States had laid a total of 382,100 kilometers of tracks (more than all of Europe combined), Canada 36,300 kilometers, and Russia 63,100 kilometers.

Colonial and Foreign-Financed Railroads

The Railroad Age coincided with the peak years of European colonization and imperialism, and consequently most of Africa's and Asia's early railroads were built with European capital and know-how. The British jump-started India's rail network in 1853, with the construction of a 34-kilometer-long line between Bombay and Thana, and by 1880 all of its major cities were connected by rail. Various European governments built lines in China, but construction proceeded at a snail's pace until the Qing dynasty finally bowed to the inevitable and commissioned a U.S.-trained Chinese engineer, Zhan Tianyou, to build the Beijing-to-Zhangjiakou line in 1905. By 1907, Asia possessed a total of 77,110 kilometers of tracks, not counting those portions of Asia under Russian control. British India alone accounted for 48,230 kilometers, followed by Japan (8,000 kilometers) and China (6,800 kilometers). During the same time period, Africa's rail network grew to 29,800 kilometers, most of it concentrated in South Africa (11,300 kilometers) and Egypt (5,600 kilometers). Cecil Rhodes's dream of a transcontinental Cape-to-Cairo railroad, however, remained unfulfilled.

In the Americas south of the U.S. border, national authorities and international investors together provided most of the impulse for the 80,500 kilometers of tracks that were laid there between 1846 and 1907. Argentina developed the largest network (22,100 kilometers), followed by Mexico (21,900 kilometers of tracks) and Brazil (17,300 kilometers). British entrepreneurs financed the most construction in Argentina and Brazil, while the Mexican government managed to finance many of its own tracks.

Technology, Organization, and Regulation

The success of the railroad depended on several key inventions, chief among them the locomotive. Richard Trevithick demonstrated in 1804 that a steam engine could be used to propel railcars, but it was not until the 1820s that George and Robert Stephenson constructed the first modern locomotives, the "Locomotion" and "Rocket," for use on Britain's rail lines. Other important breakthroughs include the sleeping car, developed by George Pullman (U.S.) in 1857; pneumatic brakes, invented by George Westinghouse (U.S.) in 1869; the automatic car coupler, patented by Eli Janney (U.S.) in 1873; the electric locomotive, invented by Werner von Siemens (Germany) in 1879; and steel rails and steel cars,





which came into widespread use in the early twentieth century. Equally important for a fast, safe, and smooth ride were track lines that followed an even gradient despite changes in the terrain. Two inventions were particularly useful in this regard: the iron bridge, pioneered by Robert Stephenson in Newcastle in 1849, and the railroad tunnel, first used in the Italian Alps in 1871.

Organizational breakthroughs also played a major role in the success of the railroad. The first was the introduction of Greenwich mean time ("railroad time") in 1840, which made it possible for rail companies to establish uniform timetables and for passengers to plan their trips and make their connections. The second was the use of the telegraph for purposes of signaling and traffic control, a necessity especially on one-track lines where the danger of a head-on collision was always present. Station managers, signalmen, switchmen, and brakemen were all as essential to a safe and trouble-free journey as the engineer.

Track width was the one major technologicalorganizational problem that was never fully resolved. Most European and North American railroads adopted the same track width used in Britain—1.44 meters (56.5 inches)—which came to be known as "standard gauge." Some countries, however, chose a "broad gauge." Russia and Finland picked 1.52 meters (60 inches), while Spain, Portugal, and India chose 1.68 meters (66 inches). "Narrow gauge" railroads (less than 1.435 meters) were also built, especially in mountainous regions. The chief advantage of a nonstandard gauge is that it offers some protection against a military invasion. The chief disadvantage is that it inhibits the free flow of goods and passengers across borders.

Impact on Society and Politics

The railroad displaced the horse-drawn carriage as the preferred mode of passenger travel as early as the 1840s because it provided a faster, safer, and more comfortable ride under all weather conditions. It also largely outcompeted the canal-and-barge industry for the transport of bulk commodities such as ores, grains, gravel, lumber, chemicals, and petroleum. Rail travel, in fact, proved so superior to all previous modes of transportation that by the 1870s it had achieved a near monopoly on the movement of persons and goods in all the major industrial countries. Monopoly led to price fixing, deceptive business practices, and rampant corruption-and eventually also to government regulations designed to restore a semblance of public trust and private competition. One of the earliest was the Interstate Commerce Act, passed by the U.S. Congress in 1887. Monopolistic practices also made the railroad one of the most hated symbols of foreign domination. "Nationalization" thus became one of the catchwords of anticolonial and anticapitalist movements in the colonial and developing world. Juan Peron, for instance, purchased Argentina's railroad system from British investors shortly after coming to power in 1946.

Many nineteenth-century liberals and radicals welcomed the railroad as a tool for bringing the world together in peace and harmony, but rails proved equally useful as a tool of empire-building and warfare. In the Franco-Prussian War (1870–1871), the Prussian army skillfully used the German rail system to invade and conquer northern France. Russia's decision to build the Trans-Siberian Railway through Manchuria was one of the principal causes of the Russo-Japanese War (1904– 1905). Plans to construct a Berlin-to-Baghdad Railway in the early twentieth century contributed to the outbreak of World War I in 1914.

The End of a Monopoly

The Railroad Age came to an end during the first half of the twentieth century with the emergence of automobiles, trucks, buses, airplanes, and pipelines as alternative modes of transport. Nonetheless, with some 1,204,000 kilometers of track on every continent except Antarctica (enough to encircle the earth more than thirty times), the railroad remains central to the movement of people and goods to this day. In densely populated regions, such as western Europe and Japan, rails are often as fast and convenient as autos and planes. Railroads also remain popular in India, China, and other parts of the developing world, where they are typically the only affordable means of travel. Because railroads require far less fuel than trucks, they are also still one of the most cost-effective methods for transporting bulk commodities.

Railroads experienced a small revival in the 1960s with the advent of the "container age" in the shipping industry and the development of high-speed trains. Flatbed rail cars loaded with containers now transport a portion of the finished products that were once carried almost entirely on trucks. Similarly, with the opening of the New Tokaido line between Tokyo and Osaka in 1964, railroads began to recapture a portion of the passenger traffic that had been lost to the airlines. The completion of the Channel Tunnel ("Chunnel") in 1994, for instance, opened up a high-speed rail route between Paris and London that can be traversed in less than three hours.

The United States possesses the most usable miles of tracks of any country in the world today (195,200 kilometers), followed by Russia (117,400 kilometers), Canada (73,400 kilometers), China (70,200 kilometers), and India (63,700 kilometers). Germany, Australia, Argentina, France, and Brazil each possess between 32,000 and 48,000 kilometers of track. According to the International Union of Railways, the Americas now account for 38 percent of all freight miles on railroads, most of which is carried on U.S. tracks. Europe's share is 30 percent and Asia's 29 percent. Asia, meanwhile, accounts for 66 percent of all railroad passenger miles worldwide. This is largely because millions of Indians and Chinese travel by rail every day. Europe's share of the passenger traffic is 29 percent and Africa's 4 percent. Passenger traffic in the U.S. is minuscule, despite the advent of Amtrak service in 1971.

Mark Cioc

See also Transportation—Overview

Further Reading

- Ambrose, S. (2000). Nothing like it in the world: The men who built the transcontinental railroad, 1863–69. New York: Simon & Schuster.
- Awasthi, A. (1994). *History and development of railways in India*. New Delhi, India: Deep & Deep.
- Blum, J. (1994). In the beginning: The advent of the modern age, Europe in the 1840s. New York: C. Scribner's Sons.
- Burton, A. (1994). The railway empire. London: J. Murray.

- Burton, A. (2001). The Orient Express: The history of the Orient Express service from 1883 to 1950. Newton Abbot, UK: David & Charles.
- Carter, I. (2001). Railways and culture in Britain: The epitome of modernity. Manchester, UK: Manchester University Press.
- Conder, F. R. (1983). The men who built railways: A reprint of F. R. Conder's personal recollections of English engineers (Jack Simmons, Ed.). London: Telford.
- Daniels, R. (2000). Trains across the continent: North American railroad history. Bloomington: Indiana University Press.
- Hawke, G. R. (1970). Railways and economic growth in England and Wales, 1840–1870. Oxford, UK: Oxford University Press.
- Haywood, R. M. (1998). *Russia enters the railway age*, 1842–1855. Boulder, CO: East European Monographs.
- Headrick, D. R. (1981). The tools of empire: Technology and European imperialism in the nineteenth century. New York: Oxford University Press.
- Railways. (1911). *Encyclopedia Britannica* (11th ed., Vol. 22). New York: Britannica.
- Roth, R., & Polino, M.-N. (2003). The city and the railway in Europe. Burlington, VT: Ashgate.
- Schivelbusch, W. (1986). The railway journey: The industrialization of time and space in the 19th century. New York: Berg.

Simmons, J. (1991). *The Victorian railway*. New York: Thames & Hudson. Stilgoe, J. R. (1983). *Metropolitan corridor: Railroads and the American*

- scene. New Haven, CT: Yale University Press.
- Talbot, F. A. A. (1911). The railway conquest of the world. London: W. Heinemann.
- Theroux, P. (1975). The great railway bazaar: By train through Asia. Boston: Houghton Mifflin.
- Theroux, P., & McCurry, S. (1985). The imperial way: Making tracks from Peshawar to Chittagong. London: H. Hamilton.



(reigned 1304–1237) Egyptian pharaoh

R amses II, also known as "Ramses the Great," was one of the most famous pharaohs of the 19th dynasty of Egypt (1570–1070 BCE). This powerful ruler, born to Seti I and Queen Tuya in 1279 BCE, established numerous building projects, conducted aggressive war campaigns, and created international ties that are still discussed today. Moreover, it is possible that Ramses II may have had some connection with the exodus of the biblical text, as there is some discussion among scholars whether Ramses or his father was the reigning pharaoh at the time of the event. Although most agree that Seti I was pharaoh, no Egyptian texts mention any accounts of the Hebrew exodus. However, the stela of Merneptah, son of Ramses, does include the name "Israel" in a list of peoples conquered.

Ramses II began his reign at the age of twenty-five. In contrast to his grandfather Ramses I's brief period on the throne (1293–1291 BCE), Ramses II led Egypt successfully for sixty-seven years. Not only did the king solidify Egypt's legacy throughout the world, he secured his family legacy by fathering many children. As a result of his marriages and of relationships with women in his harem, Ramses sired more than one hundred sons and daughters.

Two of his wives, Nefertari and Istonfret, are known in Egyptian history, but there is not much information available regarding the background of either queen. Nefertari was Ramses' first wife, and she gave birth to their initial child, the crown prince Amenhirkhopshef. Their family also included two daughters, and three more sons. Nefertari died during the twenty-fourth year of his reign, and Istonfret became queen shortly thereafter. Istonfret also bore three sons, one of whom, Merneptah, would be the king's successor. Primarily for political reasons, Ramses made international connections by marrying women from surrounding nations or having them become a part of his harem.

The powerful pharaoh was also a great military strategist, a trait associated with his grandfather, who was also a successful army officer. During his time on the throne, Ramses II battled several enemies, but among the most notable Egyptian foes were the Hittites to the north. Seti I had success in maintaining peace with them, particularly at Egypt's volatile Syrian border near the city of Kadesh. However, a revolt near Kadesh in 1275 BCE forced Ramses to take action against the Hittites. What followed is known as the "battle at Kadesh." As the Egyptian forces slowly moved north to the city, it appeared that they would have little difficulty with the Hittites. They even captured two spies who divulged the Hittites' attack plans, but the men were designated plants who purposely gave false information to the Egyptians. Consequently, Ramses' men marched into a waiting ambush. However, by employing his cunning military skill, Ramses was able to maneuver his troops and eventually forced the Hittites to retreat. Within days the Egyptians and Hittites battled again to what most scholars interpret as a draw. Nevertheless, the inscriptions on the walls of the Ramesseum mortuary temple and the temples at Karnak, Abydos, Abu Simbel, and Derr show iconographic depictions of a triumphant Egyptian army slaughtering its Hittite enemies, and the writings sing the praises of Ramses' bravery and skill on the battlefield.

In addition to the ruler's military brilliance, the reign of Ramses II is further defined by colossal architecture and detailed sculptures found throughout Egypt . One of his greatest architectural marvels is the Great Temple at Abu Simbel. The facade of the structure has four seated figures of Ramses II. Each stands 65 feet high, and they have been sculpted directly from the mountain where the edifice is located. The temple also demonstrates a unique feat of engineering in that when the sun rises on February 22 and October 22 the light shines through the entrance and illuminates three of the four gods seated inside. Like the statues of Ramses, the gods have also been carved directly from the mountain.

Ramses II's reign ended in 1237 BCE: Not only did the king lead the Egyptians successfully during his tenure as king, he lived more than ninety years. Sadly, the contents of Ramses' tomb, like those of many others, fell into the hands of robbers. Items such as bronze and wooden *ushabtis* (figures shaped like mummies) and a statue of the king survived and are housed in museums throughout Europe. Excavators also discovered the pharaoh's mummified body, which now lies in the Louvre. Ramses II's magnificent accomplishments are firmly etched in Egyptian history.

Theodore Burgh

See also Egypt, Ancient

Further Reading

Clayton, P. (1994). *Chronicle of the pharaohs*. New York: Thames and Hudson.

Gardiner, S. A. (1961). *Egypt of the pharaohs*. Oxford, UK: Oxford University Press.

Grimal, N. (1992). A history of ancient Egypt. Oxford, UK: Blackwell Publishers.

Quirke, S. (1990). Who were the pharaohs? A history of their names with a list of cartouches. London: British Museum.

Raynal, Abbé Guillaume

French historian

The Abbé Guillaume Raynal was the primary author L of Philosophical and Political History of the European Settlements and Commerce in the Two Indies. This book, known as "the History," was a multivolume exploration of European expansion in the East and West Indies, as Asia and the Americas were then designated. One of the most popular and influential works of the eighteenth century, this collaborative venture appeared in three major editions and many printings between 1770 and 1781. Like Denis Diderot's Encyclopedia, it was a laboratory of Enlightenment ideas and concerns with an agenda of opposing tyranny and ignorance. The Enlightenment was a philosophic movement of the eighteenth century marked by a rejection of traditional social, religious, and political ideas and an emphasis on rationalism. However, the *History* was more thematic in comparing the experiences of European nations in the pursuit of global commerce both in Asia and the New World. Raynal focused on the methods by which colonies and trading stations were established, the impact of colonialism on the indigenous cultures, and the effects of imperialism on European countries. Beyond his comparative and global perspectives, what also connected him to twentieth-century approaches to world history was his inclusive concern with elements of both material and nonmaterial culture. He was just as fascinated by the products of commerce and the geographical conditions of commercial intercourse as he was by the principles of colonialism.

Raynal was joined in his enterprise by various Enlightenment figures, the most important being the co-editor of the *Encyclopedia*, Denis Diderot. Diderot's more radical vision was increasingly prominent in the *History* editions of 1774 and 1781 and was especially prominent in the attacks on slavery and political oppression. Raynal also relied on numerous printed sources and the reports of colonial administrators, traders, and persons of learning with whom he had contact. Raynal himself traveled only through his writings.

Although the History was interspersed with anecdotes and digressions, its organization reflected the direction announced in the title. Beginning with the East Indies, Raynal described not only the Portuguese, Dutch, English, and French expansion in Asia, but also the lesser roles of Russia, Prussia, and Sweden. China and India were given extensive treatments, and then the focus shifted to the West Indies and descriptions of the Spanish and Portuguese conquests and colonization in the New World. In the following books Raynal and his collaborators examined French and British colonization in the Antilles and then in North America. Slavery and the slave trade were central to this discussion. The last book of the second and third editions constituted an overview of the moral and philosophical underpinnings that characterized much of the History. Such topics as religion, morality, tariffs, public credit, population, commerce, and agriculture were followed by a final theme, "Reflection on the benefit and harm which the discovery of the New World has done to Europe."

The Jesuit-trained Abbé Raynal (an abbé is a member of the French secular clergy) embraced progressive Enlightenment ideals, even though the editions of the *History* and several of his minor works betrayed many shifts and inconsistencies in his positions. He shared the popular ideology of the French economists known as "Physiocrats" in advocating free trade, the elimination of commercial monopolies, and the advantages of free labor over slavery. Indeed, although Raynal came to represent a gradual approach to emancipation, contemporaries viewed the *History* as an oracle of the antislavery movement. A foe of the extremes of political absolutism and popular government, he seemed to have preferred some form of constitutional monarchy. Some of Raynal's harshest criticisms were leveled at the claims of religious systems, such as the Catholic Church's doctrine of papal infallibility, which he felt had led to intolerance and fanaticism.

Raynal's *History* was perhaps the last example of the cosmographical tradition, begun by Andre Thevet and Sebastian Muenster in the sixteenth century, which attempted a global comparison of cultures. They anticipated Raynal in explaining the rise of Europe in part as a result of utilizing such technologies as the compass and the printing press. Yet, he went much further in championing eighteenth-century ethnocentric perspectives that celebrated Europe's ascendancy and the benefits of European culture for indigenous societies, even recommending, in the third edition of 1781, mixed marriages between French subjects and colonial natives as a way of further civilizing the latter. Although he gave considerable hearing to the debate about the virtues of primitive culture versus civilization and expressed humanitarian concerns about various societies the perspective of the History was clearly Eurocentric.

As much as any single literary production, Raynal's *History* mentored the advocates of reform and even revolution on both sides of the Atlantic. A didactic work, clearly representative of its age, it nevertheless provided an agenda for modern excursions in world history.

William H. Alexander

See also Enlightenment, The; Expansion, European

Further Reading

- Canizares-Esquerra, J. (2001). *How to write the history of the New World: Histories, epistemologies, and identities in the eighteenth-century Atlantic world.* Stanford, CA: Stanford University Press.
- Duchet, M. (1971). Anthropology and history in the century of enlightenment. Paris: Francois Maspero.
- Pagden, A. (1998). Lords of all the world: Ideologies of empire in Spain, Britain and France c. 1500–c. 1800. New Haven, CT: Yale University Press.
- Seeber, E. (1937). Anti-slavery opinion in France during the second half of the eighteenth century. Baltimore: Johns Hopkins University Press.
- Wolpe, H. (1957). Raynal and his war machine. Stanford, CA: Stanford University Press.

Red Cross and Red Crescent Movement

The International Committee of the Red Cross (ICRC) and the International Federation of Red Cross and Red Crescent Societies (the Federation), together with the national Red Cross and Red Crescent Societies in over 178 countries around the world, form the International Red Cross and Red Crescent Movement. As a whole, the Movement's mission is to help victims of international and local armed conflicts and to lessen the horrors of war indirectly through international law and directly through humanitarian intervention. The larger movement also undertakes the peacetime relief of suffering from natural and manmade disasters. There are currently over 250 million members of the Red Cross Movement.

Perhaps more than any other international organization, the Red Cross has been able to shape international behavior. Working through the international legal system with the Geneva Conventions (first developed in 1864, and adopted in their current form in 1949) and other treaties, the Red Cross has created what is now almost universally recognized as correct humanitarian behavior in wartime: neutrality for medical personnel and their equipment and the humane treatment of prisoners of war. The ICRC considers itself the "guardian of international humanitarian law" and works to extend the reach and observance of those laws. The success of the international body has been aided by the local importance of the national societies.

The International Committee of the Red Cross

The ICRC is the original, earliest Red Cross group, founded in 1863 by Jean-Henri Dunant (1828–1910), who was honored for this accomplishment in 1901 with the first Nobel Peace Prize. The ICRC, an independent

organization that remains small and almost unchanged since the late 1800s, is a nongovernmental organization staffed almost entirely by citizens of Switzerland, a policy intended to safeguard the neutral political stance of the organization. These 800-plus "delegates" conduct business for the Committee around the world. The group's main responsibility is to work as a neutral intermediary in situations of armed conflict, protecting both military and civilian victims, as well as mobilizing and organizing the national societies to assist its work. Comprising fifteen to twenty-five members who make policy for the Committee, the ICRC is technically a private Swiss company, headquartered in Geneva, Switzerland, where its archives and offices are located.

The Federation and the National Societies

The Red Cross and Red Crescent Movement is augmented considerably by the work of the national societies, self-governing organizations that today exist in over 178 countries (the societies in Taiwan and Israel are not recognized by the ICRC). These groups are funded by membership fees and popular subscriptions, although in many countries, government subsidies provide much of their monies. Each national society has a unique character and history, linked to the national history of the country in which the society was founded. For example, the American Red Cross Society was a latecomer to the Red Cross organization. It was founded in 1881 by Clara Barton and chartered by Congress in 1900, and modeled on the Japanese Red Cross Society, which was the preeminent Red Cross society in the world at the time. Many national societies sponsor public health programs, as well as provide disaster relief and assist the ICRC in war relief.

The International Federation of Red Cross and Red Crescent Societies, like the ICRC, is an international group with headquarters in Geneva, representing the national societies and coordinating their mutual help, cooperation, and program development. Proposed after World War I by American Red Cross War Committee president Henry Davison, it was founded in 1919 as the League of Red Cross Societies. The League changed its name in 1983 to the League of Red Cross and Crescent Societies, to include Muslim nations unwilling to adopt the sign of the cross, and finally in 1991 became the International Federation of Red Cross and Red Crescent Societies.

The Red Cross Movement: Perspectives on the Future

In the past 140 years, the Red Cross has grown from a small group of visionary European men intent on lessening the destruction caused by war to a worldwide movement including and serving people on all continents. The Movement has been unusually successful in educating states and individuals in its principles, principles it claims are universal: humanity, impartiality, neutrality, independence, voluntary service, unity, and universality. The Red Cross symbol is perhaps the most widely recognized symbol in the world, known to people of all nations as a beacon of medical aid and relief. The success of the Red Cross mission is encouraging for those hoping to create an international society that has the moral weight to influence the behavior of states and individual actors.

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See also Human Rights

Further Reading

- Berry, N. O. (1997). War and the Red Cross: The unspoken mission. New York: St. Martin's.
- Best, G. (1980). *Humanity in warfare*. New York: Columbia University Press.
- Dunant, H. (1986). A memory of Solferino. Geneva, Switzerland: International Committee of the Red Cross.
- Hutchinson, J. F. (1996). *Champions of charity: War and the rise of the Red Cross*. Boulder, CO: Westview.
- Moorehead, C. (1998). Dunant's dream: War, Switzerland, and the history of the Red Cross. New York: Carroll & Graf.



To one who has faith, no explanation is necessary. To one without faith, no explanation is possible. • St. Thomas Aquinas (1225–1274)

Religion— Overview

Moderns have given the name "religion" to the many efforts through which people respond to what they experience or believe in as supernatural or suprahuman forces or beings. Exceptions in the form of purely humanistic religions are few. Most people in most cultures throughout most of history have given evidence that tending to religious matters is basic in their existence, and the energy they give to these has produced artifacts temples and the like—and events, phenomena with which historians have consistently reckoned.

While religion may be what many modern people have come to call it, a private affair, it always has had a public presence. While individuals may be religious, most of them form communities and these may collide with each other, attempt to exert power, and often turn out to be useful to civil authorities just as the religious communities find civil authorities useful. Religions support empires and console their victims. They inspire war and motivate warriors, but they can also be agencies of peace and the working of justice. The religious may be privileged as supporters of the state or hounded as victims when they dissent. For all these reasons, they are characteristically central in accountings of world history.

Prehistory and Preliterate Cultures

Prehistoric and preliterate people could not and did not leave sacred texts of the sort that inform most study of religion throughout history. Yet archaeology reveals numberless grave sites whose contents show that the living engaged in ceremonies and left articles suggesting their care for the dead and their concern for their afterlife existence. Some of this evidence in Europe and parts of Asia dates back over 70,000 years. Lacking texts, scholars have to deduce the meanings of the relics, but these demonstrate that religion is a constant and profound dimension of human life, so much so that many neuroscientists hypothesize that humans are "hard-wired" to seek meaning through rites and ceremonies, myths and symbols, ideas and behaviors, that they associate with the word religion.

One of the most common and, to those who uncover the altars and bones, most unsettling set of practices has to do with human sacrifice. Castes of people, usually priests, were assigned the task of pleasing deities, for example the gods of fertility or weather or war, by offering their fellows or their captives on altars. Especially when such killing occurred in northern climates, as in Scandinavia, some corpses were so well preserved that scholars can deduce much about the way of life of the sacrificed and the sacrificers. While human sacrifice has virtually disappeared in modern times, it was long a factor in societies. In Aztec cultures in South America just before Europeans arrived and conquered them, thousands of people were ceremoniously sacrificed. In many ancient religions animals were substituted for people by those who wanted to win the favor of their deities. Bloodless sacrificial offerings, for example, gifts of money, remain favored ways of being religious into our own times.

Not only beginnings and ends, birth and death, fertility and burial rites occupied the religious. From observing how great stones were placed, as in Stonehenge in England or throughout Maya and Aztec cultures in



Ritual is an important part of all religions. In this drawing two men in late nineteenthcentury China offer each other a traditional New Year's greeting. Central and South America, scholars deduce that people observed the heavens for signs of divine will. They paid attention to the seasons of the year and the movement of sun and moon and stars, calculating some of their bearings from these. Many ancients worshiped sun-gods or moon-gods. Such observance has lived on in moderated ways within literate cultures, where Judaism, Christianity, and Islam, among others, thrived. Their sacred texts prescribed certain ceremonial days in the light of the phases of the moon.

LITERATE CULTURES AND ANCIENT STORYTELLERS

Just as they looked up to the heavens, these religious folks also looked backward and ahead, as their texts reveal: They wanted to account for how the world came into being and what its future, often a future ending in destruction, would be. Their stylized stories of beginnings, or myths of origin, provided guidance for daily living. Their altars and relics also signal that they were concerned about weather and the gods or forces who control it, since it had so much impact on their survival and possible prosperity. They danced, prayed, and made offerings to deities associated with agriculture and hunting.

The Rise of "World Religions"

Knowledge of what religion meant in ancient lives becomes more sure when historians can deal with texts in which priests and scribes recorded their presumed transactions with the divine or in which they prescribed ceremonies. Many of those have left rich heritages where they appeared around the Mediterranean Sea and especially in the Middle East. In the fifth century BCE Athens was a bustling city, whose architects produced temples such as the Parthenon, where the statue of Athena by Phidias dominated. Readers of the literature of ancient Greece become familiar with large companies of gods, whom citizens always tried to understand, often to pacify, and sometimes to emulate.

While a thousand years before that, around 1500 BCE, Chinese peoples gave signs that they were preoccupied with the sacred, it was with the birth of K'ung Ch'iu

WOFIC	keligion	s Degan
4000-2500 все	Hinduism	South Asia
1300-1200 все	Judaism	West Asia
500-400 все	Buddhism	South Asia
	Confucianism	China
	Zoroastrianism	West Asia
	Jainism	South Asia
400-221 все	Daoism	China
lst century ce	Christianity	West Asia,
		Europe
3rd century ce	Manichaeism	West Asia
6th century ce	Shinto	Japan
7th century ce	Islam	West Asia
11th century	Orthodoxy	West Asia
15тн-16тн	Sikhism	South Asia
CENTURY		
16th century	Protestantism	Europe
19th century	Latter-day Saints	North
		America
	Babi and Baha'i	West Asia
19тн-20тн	Pentecostalism	North
CENTURY		America

(Confucius) in 551 BCE that texts appeared which provide access to the spiritual world of China. Whether Confucius should be thought of as a religious founder or a philosopher is a point of debate, but students of Chinese religion characteristically study his writings. These became influential in China and have remained so thousands of years later. He taught followers to be humble and generous, respectful of their ancestors, and devoted to civic life.

Even before Confucius died, China saw the emergence of another philosophy, a this-worldly faith, Daoism, which paid little attention to a life to come, as most other religions have done. Attractive especially to poor farmers, to peasant classes, it taught reverence for the natural world, the landscape, in the face of which people were to learn to be serene but never weak.

More vital and influential through the centuries have been religions that emerged in the subcontinent of Asia,

When and Where World Religions Began

Fasting and Ramadan

Ritual is a key element of all religions and ritual often involves behaviors involving the consumption of food, including what one eats, how it is eaten, and when and where it is eaten. The following extract illustrates how fasting during the month of Ramadan is one of the central tenets of Islam.

Next to prayer the most important religious observance in Arabia is fasting. Every Mohammedan must fast one lunar month out of the twelve. The month called Ramadhan is set apart for this observance. By fasting the Arab means abstinence from all food, drink, and tobacco from early morning to sunset. From the time in the morning when a black thread can be distinguished from a white one until sundown, he may taste nothing. During the night, however, men may eat and drink, and thus it happens that the fast month by day is a feast month by night. It is the season par excellence for indigestible pastries and impossible candies. The bazaar is frequently open and brilliantly illuminated the whole night. More cases of acute indigestion come to the hospital during this month than in any other two. . . .

especially in India. Less interested in science and invention than the Chinese, Indians can be said to have specialized in responses to the sacred. Settlers of Indo-European background planted the roots of Hinduism, a faith that called for respect, even awe, for priests and holy people called Brahmans. It is hard to grasp an essence of Hinduism, so diverse are the shoots and so manifold are the sacred writings that grew from those roots. It called for worship of many gods including one above the others, Brahma. A core belief of Hindus was that all living beings possessed an inner soul, one that outlasted the body but would then transmigrate to a new body. That belief led to regard for cows as sacred. But Hinduism is not only a set of beliefs: It stipulates complex practices, many of them related to the belief in transmigration.

Just as Daoism coexisted with and challenged Confucianism in China, so Buddhism emerged to rival Hinduism in India. In the case of this philosophy and religion it is possible to point to a single founder, Siddhartha Gautama (traditionally c. 563–c. 483 _{BCE}; more probably

But violations of the spirit and letter of this law are rare among the Arabs. The month is a time of great hardship for cultivators and other working men. Since the Mohammedan year of twelve lunar months is about ten days shorter than a solar year, the different months move gradually around the circle of the four seasons. The fast month works less hardship in winter than when it comes to summer. A pious Arab considers it next to infidelity to complain of any hardship caused by the fast, and the men who do the heavy work of the cities are frequently the most scrupulous of all in its observance. Their constancy reflects no small credit on their religious devotion, especially in summer when the days are long and hot. From the beginning of the fast at early dawn till sunset may be sixteen hours or even more, and heavy work under an almost tropical sun for that period of time without food or drink is an indication of real religious zeal. There is no difference between Sunni and Shiah here. All are examples of faithfulness.

Source: Harrison, P.W. (1924). The Arab at home (pp. 238-239). New York: Crowell.

c. 463–c. 383 BCE), son of a prince from Nepal. Sheltered in childhood and assured a life of leisure and reasonable luxury, he left behind the way of life these permitted and rode off seeking enlightenment and salvation. Indeed, he did experience such, and became known as "The Enlightened," the Buddha. His journey led him and his followers to self-denial and the pursuit of sanctity. While Hinduism fostered a caste system in which the poor were destined to remain poor and the rich to enjoy riches, Buddhism was more spiritually democratic. But the wealthy were also attracted, and many of them contributed to the building of monasteries that were attractive to the most rigorous followers. Buddhist monasteries sprang up in city after city along the holy Ganges River.

Buddhism entered world history and was assured of a future when Asoka, a king of India, gained power and prestige often by the use of the sword but also with building and humanitarian concerns, around 265 BCE. Through his spreading empire Buddhism prospered, while Asoka built hospitals and educational centers to



give it practical effect among the people he dominated. Hinduism, after early prosperity, languished but was periodically revivified. Buddhists meanwhile spread their self-disciplined ways of life into China and Japan, eventual and virtual home bases for one of what came to be called "the world religions."

Developments Called "Greco-Roman," Jewish, and Christian

Greek and Roman cultures survived in the centuries of great cultural productivity. Philosopher Karl Jaspers spoke of the centuries between 700 BCE to 200 BCE as an "axial period," a time of religious formation and creativity, and these dates are commonly accepted. This is often marked in Greek drama and Roman poetry as well as in the records of statecraft. While honor was shown the old Greek gods in the course of developments associated

A highly decorated Hindu processional cart in India.

with Rome in the fourth century BCE, the Roman rulers increasingly came to be treated as divine agents worthy of worship. They, in turn, invoked some of the gods, offering them sacrifice of animals. Culturally open to other influences, they also welcomed Isis, the mother-god from Egypt, who ruled the universe, and Mithras, the sun-god from Persia. Much more complex was the arrival of Jews from Palestine and, from within their Judaism, a new sect that the Romans soon learned to name "Christian."

The Roman Republic came to be the Roman Empire in the centuries in which Judaism and Christianity came to be a presence. Together these two also became "world religions," dynamic inheritances from a five-hundred-year period in world history that saw special creativity and devotion. Webbed at the beginning and conflicted by the end of

the first century CE, Judaism and Christianity also demand separate treatment by scholars of religion.

Hebrew people—their name refers to their having wandered—told themselves that they were people who came from slavery in Egypt. They had seen glories, beginning with their conquest of many small ethnic groups in Palestine, and kingship beginning around 1000 BCE. They revered the memory of charismatic rulers such as David, who captured his capital city of Jerusalem, and then his son Solomon, a temple-builder there. The temple-goers and their priests and scribes recounted and lived by stories of their freedom from slavery, their wandering in a wilderness, and their conquest in Canaan, on the soil of Palestine.

Among their stories, one that inspired much of their moral concern and many of their religious rites was one about Moses, a leader who helped free them from slavery,

Buddhism-Ideal and Real

In many religions there are significant differences between how the religion is understood and experienced by the educated elite and how it is understood and experienced by the common person. In addition, many religions have borrowed beliefs and practices from other religions. In Asia, people who are Buddhists sometimes combine elements from other religions such as Daoism and Confucianism with Buddhism. The text below describes these multiple expressions of Buddhism in Central Thailand.

The farmers, as well as the educated classes call themselves Buddhists. It should be recognised, however, that the two types of Buddhism are quite distinct. The elite often appear to be aware of the philosophical message of the teachings of Siddhartha Gautama

often with apparently miraculous means. Among these was one that had to do with the deity they called Yahweh, revealed through ten "utterances" that came to be called the Ten Commandments. Followers of these commandments, in northern and southern kingdoms (the latter being called Judea, hence "Jewish"), considered to be the special chosen people of God, forbade the making of divine images. They often revered lesser gods whom they considered to be anti-Yahweh, but to whom they were frequently attracted. Their attraction quickened criticism by prophets, mainly in the eighth century BCE. These were men in a special calling that directed them to judge errant people and promise divine assurance to the righteous. God held Jews to an especially high standard, and, as they interpreted it, let them prosper or meet disaster, depending upon how well they kept divine laws, especially the Ten Commandments.

While most Jews, freed from captivity in Babylon after 586 BCE, lived in Palestine, they also saw the creation of a diaspora, a dispersal of peoples, and they were strategically placed in much of what had become the Roman Empire. They built synagogues and worshiped in relative freedom so long as they did not give the rulers any troubles. It was Christianity, one of Judaism's offspring, originally a Jewish sect, that did give trouble and receive it.

This faith centered in a rabbi of Nazareth, Jesus, in the

and its implications for those who wish to follow his path to salvation. The farmers, on the other hand, have little or no idea of the philosophy of Buddhism. Instead, the practices and beliefs which are derived from Buddhism have been re-interpreted in the farmers' religion to fit their particular worldview....

The religion of the farmer is basically animistic, whilst the elite may be regarded as having organized an intellectual appreciation of their religion. It is because of the incorporation of Buddhism in the animistic worldview that the villagers "do not feel that they are members of several different religious systems at the same time." On the other hand, the sophisticated Buddhist may well feel that there exists a discrepancy between the Great Tradition and the manifold accretions.

course of time believed by most of his followers to have been born of a virgin, Mary of Nazareth, who had been impregnated by the Holy Spirit, and without a human father. He was one of many latter-day prophets, such as John the Baptist, who influenced his mission. In the sacred writings called the Gospels, which became part of a "New Testament," this Jesus was portrayed as a wonderworker whose main task was healing and preaching the imminence of God's kingdom. Exactly what that meant depended upon who was writing about it or interpreting the writings, but it had to do with divine sovereignty exercised in "saving" people from their sins.

With Israel chafing under resented Roman rule, however, many wanted saving from the Romans. The Gospels picture Jesus teaching his disciples that he was to be executed. Meanwhile, a growing number of enemies among religious authorities targeted him for execution. The Gospels portray him as knowing that this form of execution, crucifixion, was to be his destiny, his means of saving people. In such portrayals his death was a sacrifice pleasing to the one he called Father. In the experience and belief of his followers, he was resurrected, raised from the dead, and after making appearances among them for forty days, ascended into heaven, thence to rule.

In the eyes of Greeks and Romans the sect that followed this resurrected one, called Christians, could have Though the farmer uses the same Buddhist institutions, concepts and ideas with which the elite are familiar, he gives them a different meaning. In the course of this book it will be seen that in rural areas the role of the monk is intimately connected with the idea of creating a certain type of magical power. Similarly, whilst the educated Buddhist may accept the five precepts as an ethical guide, in the countryside they are often used in a cleansing ritual. And the acquisition of merit is important for both types of Buddhists, but in the eyes of the farmer the concept of merit is closely connected with beneficial magical power and good luck.

Source: Terweil, J. B. (1975). Monks and magic: An analysis of religious ceremonies in central Thailand (pp. 3–5). London: Curzon Press.

survived as one more strange movement. However, while some of them served in the Roman army and paid taxes, they refused to give signals of worship that would show they regarded the ruler, Caesar, as divine. Forty years after Jesus' death, around 70 CE, conflicts between these Christians and other Jews led to schism and growing enmity. More important for survival, however, was the attitude of Roman rulers and other elites, who scorned them and saw them as subversive. Before the year 70 persecution of Christians had begun in Jerusalem, Rome, and outposts along the way this fast-spreading faith was developing.

Divided Christendom and the Rise of Islam

In the course of three centuries as Rome declined, one of its emperors, Constantine, for a mixture of reasons, became a believer and directed his empire on a course that led Christianity by the end of the fourth century CE to be the official religion of Rome. The persecuted now became the persecutors in many instances. Christianity was official, legally established, and was to remain so for a millennium and more. When as the eastern half gained power and influence and Rome divided, the Christian movement also progressively divided, with headquarters in Rome and in Constantinople, Constantine's power became based in what is today's Turkey. The Christian story, including the account of the development of its creeds, doctrines, and practices, henceforth had western and eastern versions, and these split permanently in 1054 CE.

If Christianity sprang out of Judaism, still another world religion, second in size only to Christianity, developed out of and then over against those two. It developed in the small cities of the Arabian peninsula, where Muhammad was born around 570 CE. Christians and Jews lived there, but old religions considered to be pagan thrived in the interior, where at Mecca, Muhammad's birthplace, people revered and made pilgrimages to a great black meteorite in a shrine they called Kaaba. In that city Muhammad experienced a profound religious revelation and claimed that he was recording the direct utterances of God, Allah, in the sacred book that became the Quran. Islam means "submission," and the religion that issued from the prophet Muhammad's revelation and transcription, stressing obedience to Allah, prescribed precise and simple ways in which one pursued Islamic faithfulness.

While the Quran included many passages advocating tolerance and peace, the text also included militant themes and the prophet's career included military ventures. The Arabian peninsula, always dry, in the early years of the sixth century was experiencing drought, and many desperate Arabs joined Muhammad's conquering armies. By 635 Damascus in Syria fell, to be followed in a year by Jerusalem. The armies invaded Egypt and captured Alexandria in 641. Everywhere the victorious Muslims won converts and built mosques. Many of these moves were threatening and even devastating to Christians, who met defeat in northern Africa and parts of Europe, including Spain. There Muslims developed a sophisticated civilization, which it shared with Jews and Christians until 1492. Constantinople had fallen in 1453, and for much of the next century the Ottoman Turks spread Islam while assaulting Europe all the way into Hungary. The Christians earlier gained some selective victories as they tried to win back the holy places of Palestine in a series of bloody crusades, but outside Europe itself Islam held its own and became a permanent challenger.

Two patterns of religion in world history have been the spread of religions and the use of religion in healing. This small Catholic chapel, El Santeria de Chimayo, in New Mexico was built by Spanish settlers and is a pilgrimage site for people seeking cures.

Religious Expansion and Division

Meanwhile, for a thousand years Buddhists were on the move. They came from India into many parts of China, just as they had expanded into Sri Lanka. Mahayana, a new form of Buddhism, developed in northern India. It was a more aggressive and proselytizing faith than the passive Buddhism of earlier years. Shrines and giant statues of Buddha marked the path of their progress. Emperor Shomu in Japan embraced Buddhism in 737. Spared in an epidemic, he credited Buddha and erected the Great Buddha at Nara. Like Christianity and Islam, Buddhism spread not only with armies but also through energetic missionaries and proselytizers. Each left in its trail and on its soil great houses of worship and thousands of smaller ones, places for pilgrimage and devotion, libraries for the encouragement of learning and piety -in short: civilizations.

While western Catholic Christianity that was centered in Rome dominated Europe, with the Muslim present in the West, in Spain, and threatening in the East toward Vienna, and with Jews surviving as an often sequestered minority, one church system set the terms for religious and much of civil life. The Catholic church was in position to enforce loyalty and persecute dissenters. The head of Catholicism, the pope, could not only field an army but also demand and frequently gain obedience from monarchs whose people would be denied access to heaven if their rulers did not acquiesce to Rome.

It was in that context that all over Europe restless reformers began to question the Catholic system and to subvert it. Their main instrument was the preached and taught Bible, a book of divine revelation that became available in the fifteenth century CE as Johannes Gutenberg's invention of movable type and new presses helped ordinary people gain access to it and its message. In German-speaking Saxony a monk, Martin Luther, after 1517 preached a gospel of liberation and came to storm the official church, which hounded him in turn. Joined by Swiss and other reforming scholars and with support of



some princes in the Holy Roman Empire (much of today's Germany) and elsewhere, these questioners undercut the teachings and much of the edifice of Catholicism, though it continued to dominate in most of Europe. But as the new movements called Protestant after 1529 made their way, often in alliance with the state in Germany, England, Scandinavia, the Lowlands, and elsewhere, they helped assure that Europe would be divided religiously. This became doubly evident as Protestants themselves were divided, in no position to be attracted back to Rome as a unit or to be destroyed as one.

When the western hemisphere became a subject of knowledge in Europe, Catholic Christianity prevailed in the central and southern Americas. Meanwhile, Dutch, Swedish, and especially English churches had turned Protestant. Merchants and explorers from these countries dominated in that part of America that became the United States, as well as in all of Canada but Quebec.

Renaissance, Enlightenment, and Secularism

While the faith was spreading, Christianity and to a lesser extent all religions in the sixteenth century began to face fresh challenges from propagators of a new approach to the world. Sometimes it was called the Renaissance, because it involved a recovery in the thought world of the glories of Greece and Rome, just as it celebrated their arts and sciences. Sometimes the change came in what was called the Enlightenment. This was a movement in northwest Europe, one that celebrated reason, progress, and science, often at the expense of faith.

In Renaissance times some challengers such as Copernicus and Galileo, who presented new views of the physical universe, were harassed, the latter condemned by the pope. Sometimes they won converts from Enlightened church leaders who fused rationalist or scientific thought with their faith and church. But in any case, the modern world saw an increase in tension between believers and nonbelievers. The emergent worldview of the latter came to be called "secular," from the Latin word *saeculum*. The implication or even overt claim was that whether or not God existed, one could live out a full life interpreting and changing the world without recourse to God, sacred texts, religious institutions, and the like.

In the nineteenth century, on the soil of secularism, there arose more pitiless and belligerent rivals to Judaism, Christianity, Islam, Buddhism, and Hinduism. Most of the twentieth-century forms ended in -ism: Fascism, Communism, Nazism, Maoism were typical. Many of these took on the trappings of the religions they set out to replace. They called for the sacrifice of millions of lives in war, and they took other lives. They generated myths of leadership and symbols such as the swastika, the hammer and sickle, and the star to rally or subjugate people. They invented ceremonies and rituals. In due course their creations imploded and they waned, while in most cases the religions they had set out to abolish returned and often prevailed in various areas.

Religious Survival and Revival

In the twenty-first century, religion without doubt plays as large a role as it had centuries earlier, despite many predictions that modernity, secularity, and science would sweep it away. The old heartland of Christianity, western The god of the cannibals will be a cannibal, of the crusaders a crusader, and of the merchants a merchant. • RALPH WALDO EMERSON (1803–1882)

Europe, did not experience the growth in the number of religious adherents, though Christianity in its various forms survived there. Yet 1.8 billion people around the world were numbered as Christian, one billion of them Roman Catholic at the turn of the century. Especially prosperous were new Christian movements, especially Pentecostalism, in the southern world, especially sub-Saharan Africa. Meanwhile Islam advanced by population growth, efforts to convert, and development of philosophies and movements attractive to many among the world's poor. Hinduism was also among the advancing religions.

Religion came wearing many guises. In a vast generalization that needs many qualifiers, it could be said that in the world of today, more people are being healed and more are being killed in the name of religion than of any other force. Healing here would mean not only physical and personal spiritual healing, but reconciliation, concord, works of justice and mercy. Killing here need not always mean literal murder; it could imply anything negative related to persons, including oppression, repression, suppression. But it can point directly to killing, since armies move against each other, or terrorists act in the name of their gods. Efforts at reconciling the religious do occur, and many people of good will in many cultures initiate and promote movements of interfaith dialogue and common action. These are dwarfed, however, by the massive, convulsive moments of tribe against tribe, people against people, and often nation against nation on the basis of mixed motives, but many of them being religious.

Some Functions of Religion in the Contemporary World

Any assessment of the role of religion has to begin with the place it plays in the life of individuals. This is as true in Jainism, Sikhism, Shinto, Babism, and other significant movements that one will find in atlases and encyclopedias of religion or in open encounters around the world. Historical change came because of Buddha realizing enlightenment, Jesus teaching and dying, monks like Francis of Assisi, Jewish scholars like Maimonides, and



reformers like Martin Luther experiencing fire in their soul, acquiring a mission, and then spreading their message and changing the world. But there would be no religious movements were there not also stirrings and hungers in individual souls, and at least partial and often wholly enthusiastic responses to God or the gods.

At the other extreme, religions have to be appraised as mass movements. Millions of Muslims make pilgrimages to Kaaba in Mecca, as Christians went on crusades; they form armies in support of kings who they think rule by divine right, or they stimulate revivals, awakenings, and renewal movements. They can be attached to movements already existing: Often nations are ready to war against nations, but they mobilize when they are convinced that God or the good is on their side, and that enemies of God—Satan, if you will, among others—are on the other side.

Religions often undertake revolutionary missions. While their main function may be conservative, urging respect as they often do for the wisdom and achievements of sacred ancestors and offering ballast and sanity in times of disturbance, they may also take it to be their mission to upset the world. Thus the Hebrew prophets of the eighth century BCE, acting on the basis of a covenant they claimed God had with Israel that was now being forgotten, called the people to repent, change their ways, and do works of justice and mercy. They may form resistance movements against modern dictators, or provide conscience for individuals who need courage and divine authorization. So religions make history both in their integrating roles and when they are prophetic and disruptive. Since they deal with invisibles, with soul and spirit and unseen forces, they may not be as easy to track and chronicle as are wars, earthquakes, famines, or catastrophes, but they do as much as such phenomena to alter the human landscape through history and into the present.

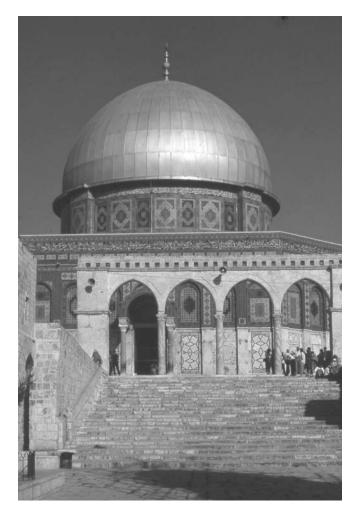
Martin E. Marty

The Dome of the Rock in Jerusalem, a site sacred to Judaism, Christianity, and Islam.

Further Reading

- Armstrong, K. (1993). A history of God: The 4,000-year quest of Judaism, Christianity, and Islam. New York: Ballantine.
- Bianchi, U. (1975). The history of religions. Leiden: E. J. Brill.
- Bishop, P., & Darton, M. (Eds.). (1987). The encyclopedia of world faiths: An illustrated survey of the world's religions. New York: Facts on File Publications.
- Braun, W., & McCutcheon, R. T. (2000). *Guide to the study of religion*. New York: Cassell.
- Brown, P. R. L. (1971). *The world of late antiquity: From Marcus Aurelius to Mohammad*. London: Thames & Hudson.
- Burkert, W. (1996). Creation of the sacred: Tracks of biology in early religion. Cambridge, MA: Harvard University Press.
- Bush, R. C. (Ed.). (1993). The religious world: Communities of faith. New York: Macmillan.
- Carmody, J. T., & Carmody, D. (1993). Ways to the center: An introduction to world religions. Belmont, CA: Wadsworth.
- Denny, F. M. (1985). An introduction to Islam. New York: Macmillan.

Despland, M., & Vallée, G. (Eds.). (1992). Religion in history: The word, the idea, the reality. Waterloo, Ont.: Wilfrid Laurier University Press.



The Government will regard as its first and foremost duty to revive the spirit of unity and cooperation in the nation and to preserve and defend its basic principles of Christianity as the foundation of our national morality, and the family as the basis of national life. • ADOLF HITLER (1889–1945)

Dowley, T. (1990). The history of Christianity. Oxford, UK: Lion.

- Dumoulin, H. (1963). A history of Zen Buddhism. New York: Pantheon.
- Durkheim, E. (1965). *The elementary forms of religious life*. New York: Free Press.
- Earhart, H. B. (Ed.). (1993). *Religious traditions of the world*. San Francisco: Harper San Francisco.
- Eastman, R. (Ed.). (1993). The ways of religion: An introduction to the major traditions. New York: Oxford.
- Edwards, D. L. (1997). Christianity: The first two thousand years. Maryknoll, NY: Orbis.
- Eliade, M. (Ed.). (1987). The encyclopedia of religion. New York: Macmillan.
- Embree, A. T. (Ed.). (1966). *The Hindu tradition*. New York: Modern Library.
- Esposito, J. (1998). Islam: The straight path. New York: Oxford.
- Finegan, J. (1952). *The archaeology of world religions*. Princeton, NJ: Princeton University Press.
- Frazer, J. G. (1963). Golden bough: A study in magic and religion. London: Macmillan.
- Hastings, A. (Ed.). (1998). A world history of Christianity. Grand Rapids, MI: Wm. B. Eerdmans.
- Hick, J. (1989). An interpretation of religion: Human responses to the transcendent. New Haven, CT: Yale University Press.
- Hodgson, M. G. S. (1974). The venture of Islam: Conscience and history in a world civilization. Chicago: University of Chicago Press.
- Holton, D. C. (1965). The national faith of Japan: A study of modern Shinto. New York: Dutton.
- James, E. O. (1960). The ancient gods: The history and diffusion of religion in the ancient Near East and the eastern Mediterranean. London: Weidenfeld & Nicholson.
- Jurji, E. G. (Ed.). (1946). The great religions of the modern world. Princeton, NJ: Princeton University Press.
- Kitagawa, J. M. (1966). *Religion in Japanese history*. New York: Columbia.
- Landis, B.Y. (1957). World religions: A brief guide to the principal beliefs and teachings of the religions of the world, and to the statistics of organized religion. New York: Dutton.
- Rahman, F. (1968). Islam. New York: Doubleday Anchor
- Ringgren, H. (1973). *Religions of the ancient Near East*. London: S.P.C.K. Sachar, A. L. (1965). *A history of the Jews*. New York: Knopf.
- Smart, N. (Ed.). (1999). Atlas of the world's religions. New York: Oxford.
- Zaehner, R. C. (1961). The dawn and twilight of Zoroastrianism. London: Weidenfeld & Nicholson.

Religion and Government

 $R^{\rm eligion\ has\ traditionally\ served\ as\ a\ source\ of}$ authority, law, and moral norms for society, even in predominantly secular societies. Through most of the world's history, religious traditions have had formal ties

with governments and have been seen as an important source of legitimacy of rulers. Various societies throughout history have practiced toleration or acceptance of minority faiths, although only rarely based on principled beliefs in religious freedom. Modern ideas of rights to religious freedom and secular governmental systems are based in a variety of sources, but draw great strength from the Western church-state tradition and the Enlightenment.

Religion as Source of Law, Authority, and Moral Values

Throughout world history, religious traditions and beliefs have been a direct and indirect source of law and authority. The Babylonian Code of Hammurabi, for example, begins with a reference to the gods Anu and Bel, who called Hammurabi (reigned 1792-1750 BCE) to "bring about the rule of righteousness in the land." The Jewish Law of Moses not only codified religious belief, but also set forth an extensive and elaborate legal system that governed all areas of social life. In more recent times, the Bible formed the basis for laws in the early American colonies and was used to resolve issues as far-ranging as procedural rules, property law, criminal law, and, in general, the ideal of the rule of law. Even in modern secular societies, religion is still regularly used as the source for moral values and arguments for reform. For example, Reverend Martin Luther King, Jr. (1929–1968 CE) and Mahatma Gandhi (Mohandas Karamchand Gandhi; 1869–1948 CE) drew extensively on the Christian and Hindu traditions in their calls for social change, and similar religious beliefs have informed debates on the abolition of slavery, care for the poor, abortion, marriage, and other social and economic issues.

Traditional Religious-Governmental Ties

In the ancient world, religion was traditionally intertwined with ruling hierarchies, through either theocracies or divinely ordained rulers. In the Chinese Confucian tradition, for example, emperors were believed to have the mandate of heaven. Roman emperors claimed to be

Islam, Government, and the Poor

In many Islamic societies, the poor or otherwise disadvantaged are helped by taxes collected by the government and also charity given by individuals.

In 1949 I was traveling by bus from Tehran to Hamadan. At a certain ford the driver stopped. A blind woman, nursing a baby, arose from a brush shelter beside the road and approached the bus. The driver passed the hat, everyone put in a coin or a bill, and he handed the collection to the poor woman, who replied with an invocation to God to bless her benefactors. The blessing was returned by the occupants of the bus, and the driver drove on. (If, in visiting an oriental city, you find yourself pestered with beggars and remark, "There ought to be an institution to take care of these people," remember that there is an institution, and an old one, the zaka. Give, in moderation as the Muslims do, and take it off your income tax.)

The zaka is not the only tax imposed in Muslim states. There is a special tax on Christians and Jews, which was abusively levied on Berber converts to Islam in the early days of the conquest of North Africa. There are also customs, gate taxes, market taxes, and other sources of revenue most of which appeared after Muhammad's death. But the zaka differs from those in that it was not originally designed to support the state, being rather a means of leveling out the income of the various elements in the community so that no one would go hungry, of financing the conversion of the heathen and of facilitating travel between the various parts of the Islam world.

Source: Coon, C. S. (1951). Caravan: The Story of the Middle East (p. 112). New York: Holt.

descended from the gods or to be gods themselves, as did Egyptian pharaohs. The Japanese emperor served as the head of the Shinto tradition. In the caste systems of the Vedic and Hindu traditions in India, the priests were traditionally the highest castes. Roman Catholic popes ordained the Holy Roman Emperors and Protestant kings claimed a divine right to rule. From the time of Byzantium, Orthodox countries were marked by caesaropapism, a system in which the head of state has authority over the church. Ties such as these conferred legitimacy on the rulers and gave religion an important role in ensuring the community's stability, unity, and compliance with law. For example, a strong, unified religious tradition was seen as playing an important role in ensuring the binding power of oaths and contracts. The close association of a religious tradition with the ruling hierarchy was usually also associated with political privileges for the favored religion and limitations or bans on the practice of minority religions.

Experiences of Religious Tolerance

Despite the tendency for governments with strong religious ties to limit protections to a favored religion, some rulers throughout history have accommodated and tolerated minority religious traditions, although this tolerance was not always principled and was often limited by the perceived needs of the sovereign. In many cases, tolerance served as a practical way to handle a multiethnic, multireligious empire. For example, the Persian empire from Cyrus II (reigned 559-530 BCE) to Darius I (reigned 522-486 BCE) employed a policy of religious toleration and support for minority groups, allowing the Jews to rebuild the temple in Jerusalem and returning images of Babylonian gods to their sanctuaries in Babylon. The Mongol empire created by Genghis Khan (c. 1162-1227 BCE) practiced toleration of Buddhists, Christians, Confucians, Daoists, and Muslims, and the Qing dynasty in China (1644–1912 BCE) maintained a general policy of religious toleration toward Jews, Muslims, and Christian missionaries until antiforeign and anti-Christian sentiments led to the expulsion of foreign missionaries from China in 1720. The Muslim Ottoman Turks developed a "millet" system in which other "religions of the book," that is, Christianity and Judaism, could be practiced and had some self-rule, albeit with significant discrimination. The Peace of Westphalia (1648) at the end of the European Thirty Years' War established limited religious tolerance in which believers had time to leave their country and move to one that supported their religious beliefs.

Principled Conceptions of Religious Freedom

In contrast to tolerance or acceptance of religious minorities by the grace of the sovereign, rulers and governments have only occasionally developed a principled basis for protecting the beliefs of others. In most cases, this basis itself has come from the religious beliefs of the ruler. For example, Asoka, the last major emperor in the Mauryan dynasty of India (reigned c. 265–238 or c. 273–232 BCE), adopted Buddhism and then promoted religious tolerance through his "Rock Edicts" based on the Buddhist idea of dharma. Anabaptist preacher Balthasar Hubmaier (1485–1528 CE) argued against the coercion of heretics or nonbelievers and wrote a defense of religious freedom based on the Bible. Roger Williams God is on everyone's side... and in the last analysis, he is on the side with plenty of money and large armies. • JEAN ANOUILH (1910–1987)

(c. 1603–1683 CE), the founder of the American colony of Rhode Island, wrote passionately in support of religious freedom and the separation of church and state, both based on his understanding of the Bible. Despite his own strong religious convictions, he opened the colony of Rhode Island to people of all faiths, where they were welcome to freely practice their beliefs. During the Second Vatican Council, the Roman Catholic Church adopted a policy statement, *Dignitatis humanae* (1965), which endorsed religious freedom and the independence of church and state based on religious reasons such as human dignity.

While some thinkers and religious leaders in some traditions still struggle with a principled basis for religious tolerance, modern scholars from all major religious traditions have identified resources within their own traditions that could support a principled belief in religious freedom. Drawing on worldwide legal, philosophical, and religious beliefs, the Universal Declaration of Human



The remains of a large kiva at Pueblo Bonito in New Mexico. The structures within the kiva indicate that it was used for religious purposes but its size suggests that it was also used for community meetings. Rights, adopted by the United Nations in 1948, supports the right to "freedom of thought, conscience and religion," which includes "freedom to change his religion and belief and freedom, either alone or in community with others and in public or private, to manifest his religion or belief in teaching, practice, worship, and observance." (Stahnke & Martin 1998, 59).

Much of the contemporary strength of the concept of religious freedom as a human right and the role of a secular state, however, comes from the Western tradition. The growth of Christianity in the originally pagan Roman empire led to a system of "two kingdoms," where both the emperor and

Selection from John Calvin's Institutes of the Christian Religion IV: 20, 11 on War

11. On the right of the government to wage war

As it is sometimes necessary for kings and states to take up arms in order to execute public vengeance, the reason assigned furnishes us with the means of estimating how far the wars which are thus undertaken are lawful. For if power has been given them to maintain the tranquillity of their subjects, repress the seditious movements of the turbulent, assist those who are violently oppressed, and animadvert on crimes, can they rise it more opportunely than in repressing the fury of him who disturbs both the ease of individuals and the common tranquillity of all; who excites seditious tumult, and perpetrates acts of violent oppression and gross wrongs? If it becomes them to be the guardians and maintainers of the laws, they must repress the attempts of all alike by whose criminal conduct the discipline of the laws is impaired. Nay, if they justly punish those robbers whose injuries have been inflicted only on a few, will they allow the whole country to be robbed and devastated with impunity? Since it makes no difference whether it is by a king or by the lowest of the people that a hostile and devastating inroad is made into a district over which they have no authority, all alike are to be regarded and punished as robbers. Natural equity and duty, therefore, demand that princes be armed not only to repress private crimes by judicial inflictions, but to defend the subjects committed to their guardianship whenever they are hostilely assailed. Such even the Holy Spirit, in many passages of Scripture, declares to be lawful.

Source: Calvin, J. (1599). Institutes of the Christian Religion. H. Beveridge, (Trans.). London: Arnold Hatfield.

church leaders exerted power over the faithful. The competition for power between the Roman Catholic Church and the Holy Roman Empire escalated in the middle ages under Pope Gregory VII (c. 1020–1085 CE), who forbade the appointment of bishops by kings in 1078 CE. This controversy, referred to as the Investiture Contest, strengthened Religion is regarded by the common people as true, by the wise as false, and by rulers as useful. • SENECA THE YOUNGER (4 BCE-65 CE)

the power of the church vis-à-vis the state. This contest for power, together with Western Christian notions of an independent duty to obey one's conscience and natural rights, laid the groundwork for modern conceptions of a limited government and individual rights to religious freedom. Enlightenment scholars, such as John Locke in his famous Letters on Toleration, also advocated religious freedom and argued for the limited competence of governments in the field of religion, based on both philosophical and pragmatic reasons. The search for religious freedom was an important factor in the founding of the American colonies and was first embodied in a written constitution in the First Amendment to the U.S. Constitution. While religious freedom has since been enshrined in many national and international legal norms, many governments still significantly limit religious freedom.

Although most modern governments are primarily secular in nature, religion still plays an important role in government and society. For example, religious traditions still often serve as a source of reform and law. Religion traditions and emblems still provide important ceremonial and spiritual influences in most countries. Unlike the United States, most governments still have formal, institutional ties, often including subsidies and other forms of state cooperation. Religious buildings, social services, or workers may be supported by the state and may serve as a resource in times of national crisis or on public holidays. Even in more separationist governmental systems, such as the United States and France, religious leaders often serve as chaplains in the military, prisons, and hospitals. While individual countries may have particular historical or cultural ties with a single religious tradition, most governments with cooperationist or accommodationist systems allow multiple religions to obtain government benefits and cooperate with the state. Despite the wide variety of current structures of the relationship between religion and governments and the many remaining challenges to religious freedom, a range of accommodationist and cooperationist systems throughout the world still preserve religious freedom.

Elizabeth A. Sewell

See also Religion and War; Religious Freedom

Separation of Church & State: Jefferson's Wall of Separation Letter

U.S. President Thomas Jefferson (1743–1826) wrote a letter to the Danbury Baptist Association in 1802 to answer a letter from them in which they asked why he would not proclaim national days of fasting and thanksiving, as had Presidents George Washington and John Adams before him. His letter contains the phrase "wall of separation between church and state," which has become short-hand for the principle of "separation of church and state" embodied in the Establishment Clause of the U.S. Constitution.

This is a transcript of the letter as stored online at the U.S. Library of Congress and reflects Jefferson's spelling and punctuation.

Mr. President:

To messers Nehemiah Dodge, Ephraim Robbins, & Stephen S. Nelson a committee of the Danbury Baptist association in the state of Connecticut.

Gentlemen

The affectionate sentiments of esteem & approbation which you are so good as to express towards me, on behalf of the Danbury Baptist association, give me the highest atisfaction. my duties dictate a faithful & zealous pursuit of the interests of my constituents, and in proportion as they are persuaded of my fidelity to those duties, the discharge of them becomes more & more pleasing.

Believing with you that religion is a matter which lies solely between man & his god, that he owes account to none other for his faith or his worship, that the legitimate powers of government reach actions only, and not opinions, I contemplate with sovereign reverence that act of the whole American people which declared that their legislature should make no law respecting an establishment of religion, or prohibiting the free exercise thereof, thus building a wall of separation between church and state. Adhering to this expression of the supreme will of the nation in behalf of the rights of conscience, I shall see with sincere satisfaction the progress of those sentiments which tend to restore to man all his natural rights, convinced he has no natural right in opposition to his social duties.

I reciprocate your kind prayers for the protection and blessing of the common Father and creator of man, and tender you for yourselves and your religious association, assurances of my high respect & esteem.

[signed] Th. Jefferson

Jan.1.1802.

Source: Jefferson, T. (1802). Retrieved from http://www.loc.gov/loc/lcib/9806/ danpost.html

Further Reading

- Berman, H. J. (1985). Law and revolution. Cambridge, MA: Harvard University Press.
- Berman, H. J. (2004). Law and revolution, II: The impact of the Protestant reformations on the Western legal tradition. Cambridge, MA: Belknap Press.
- Evans, M. D. (1997). *Religious liberty and international law in Europe*. Cambridge, UK: Cambridge University Press.
- Janis, M. W., & Evans, C. (Eds.). (1999). *Religion and international law*. The Hague, Netherlands: Martinus Nijhoff.
- Laurensen, J. C. (Ed.). (1999). Religious toleration: "The variety of rites" from Cyrus to Defoe. New York: St. Martin's.
- Lindholm, T., Durham, W. C., Jr., & Tahzib-Lie, B. G. (Eds.). (in press). Facilitating freedom of religion or belief: A deskbook. Leiden: Martinus Nijhoff.
- Mullan, D. G. (Ed.). (1998). *Religious pluralism in the West*. Malden, MA: Blackwell.
- Reynolds, N. B., & Durham, W. C., Jr. (1996). Religious liberty in Western thought. Grand Rapids, MI: Eerdmans.

- Stahnke, T., & Martin, J. P. (1998). Religion and human rights: Basic documents. New York: Columbia University Center for the Study of Human Rights.
- Van der Vyver, J., & Witte, J., Jr. (1996). Religious human rights in global perspective: Legal perspectives. The Hague, Netherlands: Martinus Nijhoff.
- Witte, J., Jr., and van der Vyver, J. (1996). Religious human rights in global perspective: Religious perspectives. The Hague, Netherlands: Martinus Nijhoff.
- Wood, J. E., Jr. (Ed.). (1989). *Readings on church and state*. Waco, TX: J. M. Dawson Institute of Church-State Studies at Baylor University.





Religion and War

War and religion are universal historical phenomena, occurring in nearly all places and all time periods. It should not be surprising, then, to find that the two have a long, complex, and varied historical relationship—one which is sometimes antagonistic, at other times mutually supportive, and most of the time deeply ambivalent.

Warrior gods played a central role in the pantheons of many early religions as civilizations struggled to subdue the cosmos and, often, their neighbors. The war god Indra ranks among the most prominent Vedic divinities; the warrior god Marduk is the hero of the Babylonian creation epic, "Enuma Elish"; the war gods Ares and Mars populate a host of Greek and Roman myths; and the war god Thor wages battle in ancient Norse mythology.

In many ancient civilizations-including Indo-Arvan, Greek, Egyptian, Babylonian, Hittite, Roman, Aztec, Crow, Norse, and Celtic-war was considered a fact of life and heroes were divinized. Religious epics emerged surrounding the exploits of human (if at times legendary) war heroes such as Arjuna (Hindu), Achilles (Greek), Arthur (Celtic), and Siegfried (Norse). Being a warrior was socially prestigious in cultures such as Indian (where the warrior class, the Kshatriya, ranked high in the Hindu caste system), Crow (where the warrior's raiding activities provided him with access to valued economic goods, most particularly horses), and ancient Babylonian (where male warriors were often rewarded with the society's most desirable female partners). Even great spiritual leaders could, at times, take up the sword and lead armies (for example, Joshua in Judaism and Muhammad in Islam).

However, even in cultures that valued war and warriors, the religious attitude toward them was often one of ambivalence. In the Hindu caste system, the priest (*Brahman*) ranked above the warrior. Holy men enjoyed a similarly elevated social standing in Crow and Babylonian cultures. In Greek mythology, war was as often seen as the source of tragedy as it was of glory. According to anthropologist C. Scott Littleton, "The role of the warrior... was steeped in paradoxes. He was at once at the apex of the social order and a potential threat to that order. Indeed, the contradiction here, which is reflected throughout Indo-European religious beliefs, is inherent in the profession of arms: it involves a social institution dedicated to the destruction of society" (Littleton 1987, 345).

The histories of many of the major world religious traditions evidence a continuing struggle to come to grips with this paradox. In the process, the phenomenon of war has come to play a major role in defining, distinguishing and, at times, dividing particular religions, while the phenomenon of religion has come to give meaning and inspiration to war.

Judaism: Debating the Warrior Ethic

Judaism was founded in the ancient Middle East where warfare was the norm. The earliest Jewish texts, which probably stem from the mid-to-late second millennium BCE, reflect this violent reality. In Genesis, Yahweh (the ancient Hebrew term for god) is said to have told Abraham: "Know this for certain, that your descendants will be aliens living in a land that is not theirs; they will be slaves, and will be held in oppression there for four hundred years. But I will punish that nation" (Genesis 15:13–24). Yahweh promises the Jews the lands of "the Kenites, Kenizzites, Kadmonites, Hittites, Perizzites, Rephaim, Amorites, Cannanites, Gigrashites, Hivites, and Jebusites" (Genesis 15:19–21). Much of early Jewish history consists of the ensuing, often exceedingly bloody, battles between the Jews and these various peoples. The book of Joshua in the Hebrew Bible records the story of the conquest of Canaan in which, at God's bidding, the Israelites burn entire enemy cities to the ground, slaughtering all inhabitants-men, women, and children alike. As the biblical scholar Millard Lind writes, "Yahweh is a God of war.... Violent political power is thus a central issue in Israel's experience of Yahweh" (Lind 1980, 24).

Yet existing side-by-side with these violent episodes is a deep-seated Jewish reluctance to embrace the warrior life. Speaking of Abraham, Moses, and other seminal figures in the history of Judaism, the nineteenth century German scholar Julius Wellhausen writes, "It is remarkable that the heroes of Israel...show so little taste for war" (Lind 1980, 34). The Jewish hero of the Exodus account, Moses, does not, with a warrior might, destroy the Egyptian army as it pursues the Jews; Yahweh drowns the army with Moses as a bystander. Powerful Jewish kings like David and Solomon are as often chided for hubris as lauded for their might. While Jewish history speaks of nationhood, land, and national destiny, its prophets more often speak of peace: "They shall beat their swords into mattocks and their spears into pruning-knives; nation shall not lift sword against nation nor ever again be trained for war" (Isaiah 2:4).

These two rival attitudes toward war emerge repeatedly in Jewish history. The Maccabean revolt in the middle of the second century BCE pitted Jewish rebels against their Greek oppressors. When the Greeks, led by Antiochus Epiphanes, attempted to stamp out Judaism by forbidding all Jewish practices and desecrating the temple in Jerusalem, the Jews, led by the Maccabaeus family, rebelled, eventually recapturing Jerusalem and reconsecrating the temple (an event celebrated in the Jewish holiday Hanukkah). While the rebellion was doubtlessly violent in nature-some scholars see it as an early instance of successful guerilla warfare-a number of Jewish historians emphasize the fact that it was a group of nonviolent Jerusalem Jews who brought the ultimate victory. By peaceably withdrawing into the wilderness in response to the Greek actions and taking their tax "dollars" with them, these Jews, it is argued, forced the Greeks to relent and to accept Jewish worship practices in Jerusalem. Jewish scholars also point to the fact that the passage from Zechariah that is traditionally read on the Sabbath of Hannukah declares: "Not by might and not by power but by my spirit, saith the Lord of the Hosts" (Ferguson 1978, 86).

The ambivalence in Judaism concerning participation in warfare and the use of violence continues to this day in the emotional and often divisive Jewish debate over the proper response by the state of Israel to challenges posed by Palestinians and their fight for statehood. Prayer is not an old woman's idle amusement. Properly understood and applied, it is the most potent instrument of action. • Монамдая Gandhi (1869–1948)

Christianity: Pacifism, Crusades, and Just Wars

The religious ambivalence toward warfare is perhaps nowhere more graphically evidenced than in the history of Christianity, as adherents of the religion have, at different times (and sometimes simultaneously), embraced pacifism, "holy" crusades, and "just" wars (that is, a war limited by strict moral principles).

For the first three centuries following the crucifixion of Christ (c. 30 CE), the Christian church was almost exclusively nonviolent. Founding its actions upon the teachings of Jesus to love the enemy and Jesus' refusal to take up arms in order to fight the Romans or even to prevent his own arrest and execution, the early church opposed killing and warfare. Whereas the Roman gods were seen as advocates of the Roman people in their battles against foreign foes, the influential Christian Bishop Clement of Alexandria (d. c. 215) writes in the second century, "Divinity now pervades all humankind equally... deifying humanity" (Pagels 1988, 39).

Christianity's minority status within the powerful Roman Empire—until 312 CE, Christians constituted no more than 10 percent of the population of the Empire and were periodically subjected to savage persecution at the hands of the state-provided an additional (and, some scholars say, more practical and hence decisive) reason for the Christian rejection of war. As Elaine Pagels writes: "Christians had discovered a terrible secret: the powers behind the Roman magistrates are not gods...but demons, active evil forces bent upon corrupting and destroying human beings" (Pagels 1988, 39). The state meant death to Christians. As such, Christian complicity in the state, and in the institution of war, was largely rejected and pacifism was embraced. A minority of Christians-including members of most monastic orders as well as denominations such as the Mennonites-continue to this day to reject all wars.

In 312, Constantine (c. 280–337 CE) became the first Christian leader of the Roman Empire and quickly legalized the practice of Christianity. In 381, Emperor Theodosius (c. 346–395 CE) made Christianity the

There will be peace on earth when there is peace among the world religions. • Hans Küng (в. 1928)

state religion of the Empire, forbidding the worship of the Roman gods entirely. As Christians for the first time began to ascend to positions of political power, the religion began to consider anew the question of bearing arms. Aurelius Augustine (354–430 CE), the Catholic bishop of the city of Hippo in North Africa who is later canonized as St. Augustine, produced one of the most influential works in the history of Christianity, *City of God*, in which he argued that the state was an instrument provided by a loving God to help keep human sinfulness in check until Christ's return.

While a kingdom of true and eternal peace will ultimately be established by God, in the interim "the natural order which seeks the peace of mankind ordains that the monarch should have the power of undertaking war if he thinks it advisable, and that the soldiers should perform their military duties in behalf of the peace and safety of the community" (Christopher 1994, 40). Augustine defines "just wars" as those which "avenge injuries . . . punish wrongs . . . or restore what has been unjustly taken" (Christopher 1994, 40). Augustine himself would come to advocate Christians participating as both soldiers and military commanders in wars to fend off the attackers of the Roman Empire, even though he acknowledged that grave injustices would inevitably be committed.

The notion of war as an instrument of the Christian God would reach its logical, if bloody, conclusion in the Crusades. The Crusades were a series of Christian military expeditions prompted by papal declarations and aimed, at least initially, at the recovery of the Holy Land from Muslim control. Initiated by Pope Urban II (c. 1035–1099) at the Council of Clermont in 1095 and extending for several centuries, the Crusades promised participants the remission of their sins if they took up the cross and defended the faith. (The Latin word for cross, crux, is the root of the word "crusade.") Tens of thousands of European Christians answered the call. Eventually this "defense" of the faith included attacks not only upon Muslims but upon all alleged enemies of the church, including European Jews and Christian heretics, with perhaps hundreds of thousands of people

being brutally slaughtered in the name of Christ. One crusader reports, "Wonderful sights: piles of heads, hands, and feet. It was a just and splendid judgment of God that this place should be filled with the blood of unbelievers" (Baran 1998, 1).

With the end of the Crusades, placed variously by scholars between the fourteenth and sixteenth centuries, came the rise of the Christian just-war tradition. Over the course of several centuries, so-called Scholastic authors such as Francisco Suarez (1548-1617) and Hugo Grotius (1583-1645) built upon the foundation established by Augustine and Thomas Aquinas (1225-1274) to develop a set of moral principles which, while allowing Christian warfare, attempted to place strict limits on its conduct-limits which presumably would prevent the barbaric excesses of the Crusades. These principles, which would eventually serve as an important impetus for the founding of international law, consist of the jus ad bellum-rules which establish the circumstances under which Christians may enter warand the *jus in bello*—rules covering the ethical conduct of war once it has been initiated. Central to the jus in *bello*, for instance, is the principle of discrimination, which holds that Christians may kill even noncombatants as long as the deaths are unintentional: "The death of the innocent must not be sought for its own sake, but it is an incidental consequence; hence it is not considered as voluntarily inflicted but simply allowed..." (Suarez 1944, 847-848).

In the twenty-first century, although Christians continue to debate various historical attitudes toward warfare, the just-war perspective has come to gain the support of the vast majority of individual Christians and Christian institutions, with *jus ad bellum* criteria such as "just cause" and "last resort" emerging as central aspects of public debate on initiating war.

Islam: War and Tolerance

Islam is often depicted as a religion that not only allows for but embraces warfare. In reality, the history of the religion is complex and surprisingly pluralistic with regard to issues of violence.

The Quran at times is clear in its support of the institution of war: "Warfare is ordained for you, though it is hateful to you; but it may happen that you hate a thing which is good for you, and it may happen that you love a thing which is bad for you" (2:216). Such passages combine in Islam with an important historical fact about the prophet Muhammad (571-632 CE): "Muhammad, it will be recalled, was not only a prophet and a teacher, like the founders of other religions; he was also the head of a polity and a community, a ruler and a soldier. Hence his struggle involved the state and its armed forces" (Lewis 1990, 49). In one of the most famous episodes in the founding of Islam, Muhammad flees his native city of Mecca in 622 AD, ridiculed and threatened by the town leaders for his religious teachings. Eight years later, he returns as a conqueror, leading an army of ten thousand into Mecca and converting the city in the process. As John Kelsay, a professor of religion at Florida State University, writes, "At least with respect to the example of Muhammad, then, it was possible to speak of the use of lethal force which was right, in the sense of divinely sanctioned -even divinely commanded" (Kelsay 1993, 45).

The Abbasid caliphate during the classical period of Islamic civilization (c. 750–1258 CE) established an imperial state based in Baghdad and, employing the principles of divinely sanctioned war, ruled an empire extending from Egypt to Spain. During the Christian Crusades, Muslim forces enjoyed a series of decisive victories over the crusaders, keeping much of the Middle East in Muslim control. Thus, although pacifism is found in some forms of Sufism (Islamic mysticism), mainstream Islam historically accepts warfare as a God-given instrument.

This does not mean, though, that war is accepted in Islam as a normal and acceptable condition. Far more of the Quran speaks of peace than of war: "The good deed and the evil deed are not alike. Repel the evil deed with one that is better. Then lo! He between whom and thee there was enmity will become a bosom friend" (41:34). Even the concept most often associated with the Islamic support of violence, *jihad*, literally translates from the Arabic as "striving" and not, as it is often translated, as "holy war." In traditional Islamic thought, the "greater jihad" represents the striving of Muslims to overcome their own tendencies toward selfishness, hatred, and hubris; it does not mandate the slaughtering of infidels. Muhammad's triumphant return to Mecca is recast accordingly in some Islamic historical sources. In 630 CE, when Muhammad enters the city with his huge army, he asks the Meccan nobles who had threatened his life eight years earlier, "What am I to do with you?" Their leader, Abu Sufyan, replies: "The best." With that, Muhammad frees all his rivals, in the process converting them to Islam by his generosity. In this strain of Islam, Muhammad rules by justice not fear, war is never initiated by Muslims, but fought defensively and reluctantly, and tolerance is among the highest values.

This moderate vision of Islam has guided much of the religion historically. When the Moors (a Spanish term for Muslim) crossed the Mediterranean to Gibraltar in 711 CE and conquered Spain, they ushered in a seven-hundred-year-long period not of oppression but of cultural flourishing, as Muslim art, architecture, and ideas were peaceably integrated with those of the indigenous culture. The longest continually existing Christian community in the world exists not in Greece, Italy, or England; it is a Coptic Christian community in Egypt, a land dominated by Islam since 700 CE.

Islam's history with regard to war is thus more varied than many popular contemporary depictions in the West would suggest.

Hinduism: From Kshatriya to Ahimsa

War would seem to hold an unquestioned position of acceptance in Hinduism. The structure of the caste system suggests as much, with the Kshatriya (warrior) constituting one of the four main social classes. While classical Hinduism traditionally holds that all of creation is infused with a spark of the divine and killing is thus not to be taken lightly, the warrior's *dharma* (duty) to fight is consistently judged to outweigh this consideration. The *Mahabharata*, one of the greatest epic poems in all of world religious literature, examines the dilemma faced by the Kshatriya and concludes: "Since those evil actions belong to the duties of your profession, the penalty of evil *karma* will not attach to you" (Ferguson 1978, 29). In fact, the entire *Mahabharata* tells the tale of a great multigenerational war between members of the Bharata clan. In its most beloved segment, the *Bhagavad Gita*, the warrior Arjuna debates whether to fulfill his dharma to fight or his dharma to protect life, since the two seem to be incompatible; he is told by Krishna, an avatar of the great god Vishnu, quite directly: "Fight, O Bharata!"

Not surprisingly, then, war is common in the history of Hinduism. The Gupta empire (320–484 CE), often viewed as the golden age of Hinduism, was established by Candragupta and his son Samudragupta, two soldier-monarchs and unapologetic conquerors. In the early eleventh century, when the Muslim Mahmud of Ghazna (971–1030 CE) invaded India, Hindus fought fiercely to defend the temple with, according to some accounts, fifty thousand men dying in a single battle. The Rajputs—calling themselves the "sword arm of Hindustan" and the protectors of the Brahmans —emerged in the ninth century and have fought foreign challengers to Hinduism ever since.

There is a counterstrain in Hinduism, though, found in the Upanishads and other sacred texts. In the Chandogya Upanishad, ahimsa (nonharmfulness or nonviolence) is seen as a foundational Hindu value, equal in importance to austerity, almsgiving, uprightness, and trustfulness. Mohandas Gandhi (1869-1948), the great spiritual and political leader of twentieth-century India, was the most influential advocate of ahimsa. In his teachings, Gandhi attempted to explain classical Hindu works that had for centuries been seen to support the warrior life as in fact embodiments of the principle of nonviolence. The Mahabharata, Gandhi argues, ends by depicting not the glory but the futility of war; Krishna in the Bhagavad Gita tells Arjuna to fight, but only as a means of illustrating to Arjuna the essential incompatibility of violent acts and the spiritual obligation to remain unattached to the "fruits of action." Gandhi emerges with an approach to combating evil, which is both grounded in Hinduism and entirely nonviolent. As he writes, "I seek to blunt the edge of the tyrant's sword, not by putting up against it a sharper-edged weapon, but by disappointing his expectation that I would be offering physical resistance" (Ferguson 1978, 38).

Hence, while Hinduism traditionally preserves a privileged place for the warrior, in recent decades a revisionist interpretation of Hinduism, founded on the rejection of war and violence suggested by Gandhi and others, has become highly influential.

Buddhism: From No Harm to the Bushido Warrior Ethic

Buddhism may well be the major religious tradition that has most consistently rejected warfare, but the history of even this religion is far from uniform.

The first of the Five Precepts of Buddhism, incumbent on monks and laity alike, is to not take life nor be a party to its taking. This prohibition applies equally to war, murder, and the killing of animals for food or ritual sacrifice. According to the Dhammapada, "Everyone is afraid of violence; everyone likes life. If one compares oneself with others one would never take life or be involved in the taking of life" (Ferguson 1978, 47). The Buddha, Siddhartha Gautama (c. 566-c. 486 BCE), preached and lived by a code that mandated the causing of no harm, and he attracted many adherents to pacifism, both in his lifetime and beyond. The Maurya emperor Asoka (c. 270–232) BCE) was a military imperialist who, upon converting to Buddhism, established a welfare state, prohibiting all killing. The pervasive effect of the Buddha's teachings with respect to pacifism can be seen in the harsh words of Yuan Tchen (779–831 CE), who chastises Buddhists for using their religion as an excuse for shirking military duty.

Yet the historical Buddha, born into the Hindu Kshatriya caste, is also regularly depicted as employing martial analogies, even after his awakening to Buddha status. *The Sutra of 42 Sections* records: "A man practicing the Way is like a lone man in combat against ten thousand[S]ome retreat; some reach battle and die; some are victorious and return to their kingdoms triumphantly" (Sharf 1996, 45). The *Suttanipata* draws a distinction



between accidental and intentional killing and, like the principle of discrimination in Christianity, condemns only the latter. In fact, all major strains of Buddhism, including both Theravada and Mahayana, contain important historical instances of support for war. In China during the Tang dynasty (618–907 CE), Buddhist monks were accorded military honors for their actions and, in 619 CE, five thousand of them led a violent uprising that resulted in one monk proclaiming himself emperor with the title of "Mahayana." In Korea, kings historically recruited thousands of Buddhist monks into the military—to fight the Mongols in the fourteenth century, the Japanese in the sixteenth, and the Manchus in the seventeenth.

After Zen Buddhism was introduced to Japan in 1192, it became the religion of the soldiered aristocracy and contributed to the emergence of the Bushido ideal, the way of the Samurai warrior. In the 1930s and 1940s, a series of Zen masters in Japan used the Zen notion that truth lies beyond reason (and that there are thus no absolute moral principles) to excuse and even to support military aggression on behalf of Japanese imperialism, with Daiun Sogaku Harada Roshi (1870–1961) declaring, "The unity of Zen and war... extends to the farthest reaches of the holy war now underway" (Baran 1998, 1).

Thus, Buddhism, like Christianity, begins historically with a rejection of war and comes, over the course of centuries, to accept and even embrace warfare as an aspect of religious duty.

The Relationship Between War and Religion Considered

Does war shape religion or does religion shape war? As the above examples indicate, the answer is almost surely both. Religious beliefs are often adopted and adapted to support political enterprises of various sorts, and warfare is a prominent instance of the political use of religion. But historically, religions have also used warfare as an instrument for their own advance, initiating wars or prompting others to do so on their behalf. While war remains an accepted part of the mainstream components of all the leading world religious traditions, it continues to raise the question pondered by ancient religions: Is war the instrument of society's preservation or the source of its destruction?

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See also Religion and Government; Religious Freedom

Further Reading

- Augustine. (1984). City of God. New York: Penguin Books.
- Baran, J. (1998). Zen holy war? Tricycle, 27, 53-56.
- Christopher, P. (1994). The ethics of war and peace: An introduction to legal and moral issues. Englewood Cliffs, NJ: Prentice Hall.
- Duncan, R. (Ed.). (1951). Selected writings of Mahatma Gandhi. Boston: Beacon Press.
- Ferguson, J. (1978). War and peace in the world's religions. New York: Oxford University Press.
- Good, R. M. (1985). The just war in ancient Israel. Journal of Biblical Literature, 104(3), 385–400.
- Johnson, J. (1981). *Just war tradition and the restraint of war*. Princeton, NJ: Princeton University Press.
- Kelsay, J. (1993). Islam and war: A study in comparative ethics. Louisville, KY: Westminster/John Knox Press.
- King, W. L. (1993). Zen and the way of the sword: Arming the Samurai psyche. New York: Oxford University Press.
- Lewis, B. (1990, September). The roots of Muslim rage. Atlantic Monthly, 266(3), 47–60.
- Littleton, C. S. (1987). War and warriors: Indo-European beliefs and practices. In M. Eliade (Ed.), *The encyclopedia of religion* (15, pp. 344– 349). New York: Macmillan Library Reference.
- Lind, M. (1980). Yahweh is a warrior: The theology of warfare in ancient Israel. Scottdale, PA: Herald Press.
- Kulke, H. (1993). Kings and cults: State formation and legitimation in India and Southeast Asia. New Delhi, India: Manohar.
- Narasimhan, C. V. (1965). The Mahabharata: An English version based on selected verses. New York: Columbia University Press.
- National Conference of Catholic Bishops. (1983). The challenge of peace: God's promise and our response (the pastoral letter on war and peace). In J. Elshtain (Ed.), *Just war theory* (pp. 77–168). New York: New York University Press.

Olivelle, P. (1996). The Upanishads. Oxford, UK: Oxford University Press.

- Pagels, E. (1988). Adam, Eve, and the serpent. New York: Vintage Books. Riley-Smith, J. (Ed.). (1995). The Oxford illustrated history of the Cru-
- sades. New York: Oxford University Press. Sharf, R. (Ed.). (1996). The scripture in forty-two sections. In D. S. Lopez,
- Jr. (Ed.), *Religions in China in practice* (pp. 360–371). Princeton, NJ: Princeton University Press.
- Strong, J. S. (1983). The legend of King Asoka. Princeton, NJ: Princeton University Press.
- Suarez, F. (1944). Selections from three works of Francisco Suarez. Oxford, UK: Clarendon Press.
- Victoria, B. (1997). Zen at war. New York: Waetherhill.

No difference there is between a temple and a mosque, nor between the Hindu worship or the Muslim prayer: for men are the same all over, though they appear not the same. • GURU GOBIND SINGH (1666-1708)

Religious Freedom

Religious freedom did not emerge in human history as the widely accepted idea that it is today. In fact, human governments, until the modern era, generally have mandated religious belief on the assumption that a common religion is essential to social stability. This assumption has not died easily, and prevails still in some areas of the world today. Nevertheless, religious freedom has now become an almost universally accepted norm, backed by international law and the constitutions of most nations. Religious freedom can be defined as the liberty guaranteed to human beings by state authority to believe, concerning matters of religion, that which is dictated by conscience, including no belief at all.

Ancient Societies

In ancient societies there was no differentiation between the religious and the secular. All of life was religious, and state authority generally assumed the role of moral agent and mandated religious belief to further its own ends. Ancient Mesopotamia, Egypt, and Greece were polytheistic cultures in which civil authorities were also considered either priests or gods themselves, and the religious life of subjects was closely regulated. As popular new religions emerged, state machinery frequently adopted these religions as a basis of unity for society. Thus Hinduism in India, Buddhism in Thailand, Shintoism in Japan, Confucianism and Daoism in China, Judaism in Israel, and Islam in the Middle East all influenced law and public policy and still retain today a status as formal or semiformal state religions. In these settings, freedom and religion have not been natural allies. The brave heretic who has pursued religious ideas outside those of official sanction has frequently been persecuted or even executed as a cancer on society.

The Union of Church and State in Medieval Europe

This pattern of persecuting heretics persisted in the early Roman empire. Under emperors such as Nero, Trajan, Decius, Valerian, and Diocletian, by some estimates as many as a quarter of a million Christians were executed for violating the mandatory worship requirements of the empire. Christianity continued to grow, however, and by the fourth century claimed as much as 10 percent of the Roman population. The persecutions against the Christians ended, however, only when Constantine became the first emperor to become a Christian. He was instrumental in the passage of the Edict of Milan in 313, a document of landmark proportions in the history of religious freedom. It provided "that liberty of worship shall not be denied to any, but that the mind and will of every individual shall be free to manage divine affairs according to his own choice" (Pfeffer 1967, 13). The edict elevated Christianity to a status equal to that of other religions in the empire, although within a decade Constantine altered laws to give legal preference to Christianity. The Roman state built great Christian edifices, instituted Christian holidays, granted exemptions from taxation to Christian clergy, and persecuted adherents of "heathen" religions. The persecuted had become the persecutor. In 380, under Emperor Theodosius, Christianity was officially enshrined as the state religion of the empire.

The Christian state became the model for all of Europe during the Middle Ages. The Orthodox Church became the established religion over much of the Eastern empire, including Greece and Russia; Catholicism prevailed in the West. The goal of the church-state partnership was the glory of God and the salvation of man. Any impediments to this goal were dealt with harshly. Thus by the thirteenth century, Western authorities devised a formal Inquisition by which heretics would be systematically sought out and, if deemed beyond rehabilitation, executed. Between 1231, when the Inquisition was formally instituted by Pope Gregory IX, until 1834, when the Spanish Inquisition was finally abolished, tens if not hundreds of thousands of heretics were burned at the stake because their faith did not match the officially approved Christian doctrines. Religious freedom, obviously, was not part of the medieval vocabulary.

Occasionally there emerged, however, from within the Christian church voices in behalf of religious freedom.

Branding Heretics

By the reign of Theodosius I (379–395 CE), Christianity had become the official religion of the Roman empire, and practicing other religions became illegal. As the excerpt below from the Theodosian Code notes, non-Christians were considered "foolish madmen" and were branded as heretics.

It is our desire that all the various nations which are subject to our Clemency and Moderation, should continue in the profession of that religion which was delivered to the Romans by the divine Apostle Peter, as it hath been preserved by faithful tradition; and which is now professed by the Pontiff Damasus and by Peter, Bishop of Alexandia, a man of apostolic holiness. According to the apostolic teaching and the doctrine of the Gospel, let us believe the one deity of the Father, the Son and the Holy Spirit, in equal majesty and in a holy Trinity. We authorize the followers of this law to assume the title of Catholic Christians; but as for the others, since, in our judgement, they are foolish madmen, we decree that they shall be branded with the ignominious name of heretics, and shall not presume to give to their conventicles the name of churches. They will suffer in the first place the chastisement of the divine condemnation, and in the second the punishment with our authority, in accordance with the will of Heaven, shall decide to inflict.

Source: The Theodosian Code (XVI, i, 2). (1943). In H. Bettenson, Ed., Documents of the Christian Church (p. 31). London: Oxford University Press.

Tertullian, Justin Martyr, Hilary of Poitiers, Chrysostom, and Augustine, among others, pleaded the cause of toleration and condemned punishment of heresy. In the early third century, for example, the lawyer-cleric Tertullian wrote, "it is a fundamental human right, a privilege of nature, that every man should worship according to his own convictions. One man's religion neither helps nor harms another man" (Pfeffer 1967, 15). In the late fourth century, Augustine similarly defended toleration of unorthodox religious views. Later, however, when members of the Donatist sect engaged in acts of civil disobedience, he apparently changed his view and opined that compulsion was benevolent, "for what is a worse killer of the soul than freedom to err." (Pfeffer 1967, 16) Due to the weighty influence of the brilliant Augustine, one scholar had articulated what has become an accepted estimation of him. Because of Augustine, he wrote, "the Medieval Church was intolerant, was the source and author of persecution, justified and defended the most violent measures which could be taken against those who differed from it." (Pfeffer 1967, 16). Some have said that Augustine's views became the "charter for the Inquisition."

The Crusades

Equally out of step with the spirit of religious freedom were the Crusades of the eleventh, twelfth, and thirteenth centuries. The purpose of the seven crusades, initiated by Pope Urban II in 1095, was to recapture the Holy Land that had been lost to the Muslims and to extend the rule of Christianity in the "land of Christ." The motto of the Crusades became "Kill the infidels." In carrying out the slaughter of tens of thousands of Muslims, the Crusaders availed themselves of the opportunity to root out Jewish and Orthodox infidels as well. The popular Peter of Cluny asked, "Why wait for the infidels in the Holy Land? We have infidels here-the Jews" (Wood 1966, 9). It has been estimated that in the First Crusade alone more than ten thousand Jews across Europe were massacred. Pope Innocent III, perhaps the greatest exemplar of militant Christianity, launched the Fourth Crusade in 1202. While en route to the Holy Land, his army of 20,000 crusaders sacked and destroyed the great Orthodox city of Constantinople, slaughtering thousands of citizens, burning much of the city, and destroying more of the city's great religious treasures than were lost when the Turks later bludgeoned and captured the city in 1453.

Religious Intolerance during the Reformation

The Roman Catholic Inquisition of the fifteenth and sixteenth centuries unleashed fresh attacks against a rising number of Protestants. Protestants in turn persecuted Catholics as well as competing Protestants. Contrary to popular belief, the Protestant Reformation did not usher in a new era of religious freedom. In fact, the rise of Protestantism witnessed a fresh outbreak of religious intolerance. Protestants were vigorous in winning converts from Catholicism, but they were often as vicious in their persecution of Catholic and Protestant heretics as Catholics had been against them. The leading lights of the Reformation, Martin Luther and John Calvin, were never reluctant to exterminate their own adversaries. Luther frequently recommended to the Duke of Saxony the execution of Catholic, Jewish, and Anabaptist heretics. Calvin himself prescribed the execution of numerous heretics, including the Unitarian Michael Servetus at Geneva in 1553. Calvin's contemporary and Protestant scholar Sebastian Costello probably had it right when he wrote of Calvin, "If Calvin ever wrote anything in favor of religious liberty, it was a typographical error" (Wood 1966, 11).

The spread of new religious ideas across Europe during the Reformation led to a series of religious wars that was finally curtailed only by the Peace of Westphalia settlement of 1648. By then, it was apparent to many that religious tolerance was essential, lest everyone in Europe die of heresy. A healthy spirit of tolerance appeared in many dissenting groups, most notably the Socinians, Anabaptists, Diggers, Quakers, Politiques, and Baptists. These groups, all of whom experienced acute degrees of religious intolerance, were far apart on theological matters but united in their advocacy of religious freedom.

The growth of religious tolerance was not merely a matter of expediency, however. Seminal thinkers such



Endicott, a follower of Roger Williams and passionate supporter of religious freedom in colonial New England, in an act of defiance cuts the cross from the King's banner.

Mark Twain: A Connecticut Yankee in King Arthur's Court

Mark Twain, one of America's preeminent authors of the nineteenth century, was—and still is—well known for his social commentary on important issues of his day, such as slavery. In A Connecticut Yankee in King Arthur's Court, Twain comments on the importance of religious freedom.

I had started a teacher-factory and a lot of Sundayschools the first thing; as a result, I now had an admirable system of graded schools in full blast in those places, and also a complete variety of Protestant congregations all in a prosperous and growing condition. Everybody could be any kind of a Christian he wanted to; there was perfect freedom in that matter. But I confined public religious teaching to the churches and the Sunday-schools, permitting nothing of it in my other educational buildings. I could have given my own sect the preference and made everybody a Presbyterian without any trouble, but that would have been to affront a law of human nature: spiritual wants and instincts are as various in the human family as are physical appetites, complexions, and features, and a man is only at his best, morally, when he is equipped with the religious garment whose color and shape and size most nicely accommodate themselves to the spiritual complexion, angularities, and stature of the individual who wears it; and, besides, I was afraid of a united Church; it makes a mighty power, the mightiest conceivable, and then when it by and by gets into selfish hands, as it is always bound to do, it means death to human liberty and paralysis to human thought.

Source: Twain, M. (1899). A Connecticut Yankee in King Arthur's Court (p.77). Toronto, Canada: Random House.



A plaque mounted on the wall of a Protestant church in a small town in Provence, France, recounts the Protestant fight for religious rights in this mainly Roman Catholic region.

as Hugo Grotius, Henry Parker, Thomas Hobbes, John Locke, Jean-Jacques Rousseau, Sidney Algernon, John Milton, Erasmus, Voltaire, Thomas More, and Dirck Coornhert all protested the mania of the times— "hereticide"—and took up their pens to propose new political and theological bases for religious freedom. Locke in particular was instrumental in proposing the notion of the secular state, which removed jurisdiction over religious matters from civil authority, thereby protecting each individual from state-mandated religious conformity. He articulated a theory of natural rights that placed fundamental rights of life, liberty (including religious freedom), and property beyond the reach of government.

Spread of Religious Freedom in America and Elsewhere

These ideas took root as nowhere else in America. Roger Williams, who founded the colony of Rhode Island, fought an ideological war against theocratic traditionalists in Puritan New England. Williams set up a secular state and welcomed to his colony settlers of every religious persuasion, requiring only that they conform to

Christian Martyrdom

The extract below, from a letter written by a Christian who survived a cruel persecution of Christians during the reign of Marcus Aurelius (161 - 180 ce), describes the torture of Blandina of Lyons.

Finally... on the last day of the gladiatorial combats, Blandina was again brought in, together with Ponticus, a boy of about fifteen, and they had been brought in daily to witness the torture of the others, and attempts were made to force them to swear by the very idols, and because they remained steadfast and regarded them as nothing, the mob was roused to fury so that they had neither pity for the youth of the boy nor respect for the feminine sex, and they exposed them to all the horrors and led them in turn through every torture, repeatedly trying to force them to swear but being unable to do this. For Ponticus was encouraged by his sister, so that even the heathen saw that she was urging him on and encouraging him, and after he had nobly endured every torture he gave up the ghost. But the blessed Blandina, last of all, like a noble mother who has encouraged her children and sent them forth triumphant to the king, herself also enduring all the conflicts of the children, hastened to them, rejoicing and glad at her departure, as if called to a marriage

This drawing depicts the massacre of Mormons at their camp at Haughn's Mill, Illinois, in 1838. The Mormons were subjected to nearly 70 years of government-backed oppression in the 1800s.

standards of good citizenship. His policies led Puritans and others to refer to Rhode Island as "that sewer," but his ideas eventually found their way into

the U.S. Constitution in the late eighteenth century.

The new Constitution and its Bill of Rights guaranteed religious freedom and ensured it with an establishment clause that prevents government from establishing any religion or even from preferring some religions over others. The United States was the first nation in human history to formally adopt the principle of the separation of church and state as a fundamental element of its public philosophy. It was a noble experiment in the founding era and remains so today. The experiment was undertaken by the framers in the hope that it would enable America to escape the persecutions and religious wars that had characterized the Christian West for almost two millennia. Due to the success of this formula in America, other nations have since adopted the idea of church-state separation as a guarantor of religious freedom, and today, approximately one-half of the nations of the world make formal guarantees of church-state separation in their constitutions.

Internationalization of Religious Freedom

The twentieth century witnessed unprecedented progress toward the internationalization of religious freedom. Of the three major international documents that universalized the principle of religious freedom in the twentieth



feast and not being thrown to the beasts. And after the scourging, after the wild beasts, after the roasting seat, she finally was placed in a net and thrown to a bull. She was tossed about for some time by the animal, but was insensitive to what was happening to her because of her hope and hold upon what had been entrusted to her and her communion with Christ. And she also was sacrificed, and the heathen themselves confessed that never had a woman among them suffered so many and such horrible tortures.

Source: Eusebius. (1955). Ecclesiastical history (V, 1). In *The fathers of the Church* (R. J. Deferrari, Trans.; Vol. 19, pp. 276ff). New York: Christian Heritage.

century, by far the most central is the Universal Declaration of Human Rights, passed by the United Nations in 1948. This landmark document declares that "Everyone has the right to freedom of thought, conscience and religion; this right includes freedom to change his religion or belief, and freedom, either alone or in community with others and in public or private, to manifest his religion or belief in teaching, practice, worship and observance" (Claude & Weston 1992, 421).

The declaration embraces modernity's political principle that one of human government's main roles is to protect people's religious choices, not to mandate religious conformity. It took centuries, even millennia, of religious wars and government-perpetrated religious persecution for the majority of modern nation-states to come to this position, but the principle is now widely accepted, especially in the West, and its near universal recognition in the 1948 declaration is undoubtedly a human milestone.

Whereas the declaration imposed a *moral* obligation upon all signatory nations, later documents went further in creating a *legal* obligation to comply with its broad principles. The International Covenant on Civil and Political Rights (1966), ratified already by approximately 150 nations, prohibits religious discrimination "without distinction of any kind, such as race, colour, sex, language, political or other opinion, national or social origin, property, birth or other status" (Claude & Weston 1992, 432). Moreover, the 1966 covenant provides a broad definition of religion that encompasses both theistic and nontheistic religions as well as rare and virtually unknown faiths. The covenant is especially important because its provisions are mandatory for the states that have ratified it.

Finally, the United Nations Declaration on the Elimination of All Forms of Intolerance and of Discrimination Based on Religious Belief, enacted in 1981, is a fundamentally important document protecting religious rights. The declaration includes the most comprehensive list of rights to freedom of thought, conscience, and religion enumerated in any international instrument.

Looking Ahead

Human civilization has achieved much over the last three thousand years in making religious freedom a fundamental human right. Much remains to be done, however, to make religious freedom a reality for all peoples of the world. There is no more important project to be undertaken by the human community now and in the future.

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See also Religion and Government; Religion and War; Secularism

Further Reading

- Bainton, R. (1951). The travail of religious liberty. New York: Harper & Brothers.
- Bates, M. S. (1945). Religious liberty: An inquiry. New York: International Missionary Council.
- Boyle, K., & Sheen, J. (Eds.). (1997). Freedom of religion and belief. New York: Routledge.
- Claude, R. P., & Weston, B. H. (1992). Human rights in the world community (2nd ed.). Philadelphia: University of Pennsylvania Press.
- Doerries, H. (1960). Constantine and religious liberty (R. H. Bainton, Trans.). New Haven, CT: Yale University Press.
- Fergeson, M. L. (1966). The church-state problem and the American principle of separation. Waco, TX: Baylor University Press.
- Gavin, F. (1938). Seven centuries of the problem of church and state. Princeton, NJ: Princeton University Press.
- Kamen, H. (1967). The rise of toleration. New York: McGraw Hill.
- Kramnick, I., & Moore, L. R. (1996). The godless Constitution: The case against religious correctness. New York: Norton.
- McNeil, J. (Ed.). (1950). John Calvin on God and political duty. New York: Liberal Arts Press.
- Oakley, F. (1979). *The Western church in the later Middle Ages*. Ithaca, NY: Cornell University Press.
- Pfeffer, L. (1967). *Church, state, and freedom* (2nd ed.). Boston: Beacon Press.

- Skinner, Q. (1978). The foundations of modern political thought. New York: Cambridge University Press.
- Solt, L. F. (1990). Church and state in early modern England 1509–1640. New York: Oxford University Press.
- Stokes, A. P. (1950). Church and state in the United States: Historical development and contemporary problems of religious freedom under the Constitution. New York: Harper & Brothers.
- Tierney, B. (1982). *Religion, law, and the growth of constitutional thought,* 1150–1650. Cambridge: Cambridge University Press.
- Tracy, J. D. (Ed.). (1986). Luther and the modern state in Germany. Kirksville, MO: Sixteenth Century Journal Publishers.
- Treece, H. (1994). The Crusades. New York: Barnes & Noble Books.
- Wardman, A. (1982). Religion and statecraft among the Romans. Baltimore: Johns Hopkins University Press.
- Wood, J. E., Jr. (1966). Religion and freedom. *Journal of Church and State*, 8(1), 5–13.
- Wood, J. E., Jr., Thompson, E. B., & Miller, R. T. (1958). Church and state in scripture, history, and constitutional law. Waco, TX: Baylor University Press.

Religious Fundamentalism

Religious fundamentalism, often confused with conservativism or traditionalism, is a name for a movement in any religion that retrieves "fundamental" elements of that religion and projects them into new formulations in reaction to challenges from modernity, however that is defined. This reaction may lead to protective withdrawal by groups in some cases, at least in early stages. In practice, however, leaders of such movements attract followers to engage in militant action against whatever it is that they regard as a profanation or that stands in the way of their battles for their God. Since fundamentalisms appear in Protestant Christianity, Judaism, Hinduism, and Islam, they can be seen as both local and global assaults on both secular and settled religious orders, be they conservative or liberal.

The Problem of the Word "Fundamentalism"

Scholars agree that the first use of the term occurred in American Protestantism early in the twentieth century. Some question, therefore, whether the word might fairly and without causing confusion be used to characterize forces in other religions. On the side of the critics are factors such as these: it seems unfair and perhaps imperial to borrow from an American domestic movement a term to impose on other religious movements that draw on vastly different sources. Second, the term is often seen as pejorative, stigmatizing. In addition to that, it does not always have a cognate term in the languages identified with other religions. Fourth, it may license comparisons that unfairly lump together disparate movements that lose their identity when so classified.

Over against these, defenders of the usage recognize that the term is simply established, in textbooks and media, in statecraft and scholarship, and argue that efforts are better aimed at clarifying the term than trying to abolish it. In addition, they point out that similar categories of words travel from language to language, situation to situation. Words like colonialism, revolution, conservatism, nationalism, and others are all "born" somewhere in the West and travel to other settings and languages. Third, fundamentalism is a genus, and scholars or communicators can clarify issues by pointing to species: the Islamic fundamentalism of the Wahhabi movement might have formal congruences with the Jewish fundamentalism of Gush Emunim or a party of Protestants in Northern Ireland, but the content of their claims differs vastly. Finally, no other term has come forward to foster comparative analysis. Thus "Islamist" works only for Islamic movements. And comparisons are valuable, since only by isolating them do certain features stand out.

Features of the Fundamentalist Movements

The word "fundamentalism," in religious contexts at least, is not to be found in any dictionaries published before the 1920s. When Baptist Protestants in the United States during intradenominational struggles in the early 1920s coined it and when Presbyterians took it up, lexicographers had to take note of it and defined it as a Protestant movement devoted to biblical literalism. What they may not have noticed is that in the same decades such movements were developing in India in what have become



major political parties, or in Egypt under the Muslim Brotherhood, from which fundamentalisms spread to Saudi Arabia, Iran, and the larger Islamic world.

World historians have it as their mission to account for the long record of movements, and ask about the distant origins of fundamentalism. However, students of the movements will find that they rose as reactions to modernity, again "however defined." Definitions may, for instance, take into account critical assaults on sacred canons, such as the Bible or the Quran. When conservatives perceive these as assaults from within their religious camp, they feel they must react and respond. Thus Muslim fundamentalists from the 1920s to the 1990s almost always directed their fire to what they perceived, not always inaccurately, as corrupt and repressive but only nominally Muslim governments. American Protestants did not bother themselves in any primary way with Catholicism; they attacked their fellow Presbyterians or Baptists for treason to their own cause. The critical movements that inspired the responses developed early in the twentieth century, or just before, so one could not have had fundamentalism without this modern assault.

Just as often the reactive response may be against perceived threats to one's domain. Thus "westerners" as "infidels" were seen to be subverting Iran in the 1970s, thus evoking purifying countermovements by the followers of the Shiite Ayatollah Khomeini. Fundamentalists in the United States felt called to oppose liberal Protestants allied with secular humanists and others who were critical of cherished practices such as issuing prayers in public schools while these critics provided theological justifications for disapproving moral expressions, for example, the legalizing of abortions. In Israel, if there seemed to be even a trace of accommodation by peace-seeking governmental administrations, movements like Gush Emunim (Bloc of the Faithful) organized, demonstrated, and built not-yet-approved settlements on the West Bank.

To pursue their aggressive missions in the name of God, fundamentalist movements must build at least figurative boundaries around their movements. They may not keep outsiders or compromisers at a physical distance, as sectarians were able to do before the rise of mass media, mass higher education, and global commerce. But they can develop their own media of communication, their own separatist institutions, their own sets of stigmas with which to label the moderates or other deviators. In media especially, their difference from conservatives or traditionalists is most apparent: They embrace the very modern instruments of communication—tapes, videos, radios, films, the Internet—that were agents of assaults against them. They fight modernity with modern technology.

Their spiritual weapons need ammunition. They all find it in shared sacred texts, usually from centuries before, from times that they perceive to have been perfect or that offered prototypes for living in a perfected world. From these they select the elements that will most help them fight off modernity; these become "the fundamentals." They need strategies, which can range all the way from attempts at boycotting or demonstrating, from efforts at amending constitutions to revolution and warfare—and, in the end, in some cases, terrorism in the name of God. With these self-confident moves, which they experience or claim to be God-guided, they are certain about where history is going, however long it takes.

Fundamentalisms have to be efficient; what are called "free riders" and others half-committed are unwelcome. Participants have to be ready for total sacrifice of self. So they will pursue most zealously the group members they perceive as compromisers, people who should know better but who are too ready to barter too much away. Thus an American Protestant fundamentalist chronicler named the evangelist Billy Graham the most dangerous American of the last century—because Graham knew better than to appear on platforms with others who do not share all details of fundamentalist faith.

Finally, fundamentalists need all-or-nothing ideologies. Scholars speak of these as "Manichaean," after a dualistic religious movement: dark opposes light, with no shadows between them; it is God versus Satan, Christ versus Antichrist, Allah versus the infidels. There is no room for ambiguity or compromise in the minds of individuals or in the approach of the group as a whole.

Still problematic to the student of world history is the claim that since the movements developed in reaction to modernity, including the experience of religious pluralism and the often accompanying tendency to relativize "truth," is it not true that many religious movements had to fight off their own "modernities" long ago? Thus New England Puritans abhorred the very idea of "innovation," and promoted the old ways. If this is the case, would not one have to begin the story of any modern religious fundamentalism by looking at precedents and antecedents through history? Thus Hindus and Muslims have had to fight off modernisms in many generations. Protestant fundamentalists bear some resemblances to Anabaptist or sectarian movements of the sixteenth and seventeenth centuries. So what is new?

The Place of Fundamentalisms

American Protestant fundamentalism, for one instance, fights its battles in the context of a republic where political means are accessible. Resorting to violence is extremely rare. Exceptions such as the bombing of abortion clinics by radical fundamentalists are criticized by mainstream fundamentalists, who find their movements set back by such violence. They may express resentment against a modern world that they believe is depriving them of their rightful place. After that, their energies go into political organization, attempting to persuade voters, to gain power with holders of office, to employ mass media to make their case.

In the United States it is hard to remain a "pure" fundamentalist. To gain anything in a republic a movement must enter into coalitions, make alliances, swallow some principle for a common cause. Or one may turn to more moderate movements that are religiously satisfying in respect to message though less attractive in their cultural roles. Fundamentalists have been in the public eye since the Scopes trial, a battle over evolution in public schools in 1925. Many people on all sides have been nettled, unsettled, angered, frightened lest their cause be defeated, but they have not had to fear guns.

In Israel one of the very rare fundamentalist movements was Gush Emunim. It was a very modern force, organized under charismatic rabbis who agitated in America and in Israel especially against Israeli leaders who even entertained the idea of coming to terms with the Palestinians. Many in this "Bloc of the Faithful" were offspring of barely observant Jews who in their new turn "went all the way" into and beyond Orthodoxy. Members make claims that they are relying on ancient sacred texts in which the land of Israel was given, with stipulated and precise boundaries, to the people of Israel, the Jews. They find support from and kinship with American Protestant fundamentalists and their slightly more moderate kin who read biblical passages "fundamentalistically" in order to certify and sustain their support of Israel.

In India, the Rashtriya Swayamsevak Sangh (RSS) organized what many Hindus call a cultural, not a religious institution. Maharashtrian Brahmans developed it within Hinduism and it became a base for militant opposition to equally militant Muslims. The two hard-line groups fought over sites that were holy to both. The RSS is an ideology of the Hindu nation. Keshav Baliram Hedgewar, founder of the movement, now a party, wanted to purge India of non-Hindu influences. It is highly organized in order to stimulate emotional response to Hindu appeals and to stand off the Muslims. Many Indians welcome talk of a Hindu nation, but memories of the assassination of Mohandas Gandhi by RSS people makes them uneasy. And the RSS did teach people to use western instruments, including weaponry. The RSS literature suggests a sense of embattledness, but the leaders have taught ordinary members to take out their rage on Muslims, who crowd what they think of as uniquely Hindu holy places.

The Muslim Brotherhood was founded in Egypt under the leadership of Hasan al-Banna' (1906–1949), a moralist who was repulsed by moral and spiritual corruption in Egypt and wanted to use the resources of Islam to counter it. The Brotherhood organized schools and hospitals, and became a very vocal critic of semisecular or nominally Muslim governments there. Most influential in the Brotherhood was Sayyid Qutb (1906–1966), a former secularist who turned to be a zealous Sunni Muslim leader. He abhorred what he saw in the United States, which looked corrupt, sensual, immoral, godless. Qutb was executed by the Egyptian government for his subversion, but his version of Wahhabi Islam thrived,

Origins of Christian Fundamentalism in the United States

Religious fundamentalism appears in a wide variety of religions: Protestant Christianity, Judaism, Hinduism, and Islam. Nevertheless, in the United States today, it is most often associated with religious groups that are minorities in the United States, and, since the attacks on the World Trade Center and the Pentagon on September 11, 2001, with Islam.

However, religious fundamentalism remains a strong current among Christians (and other groups) in the United States, and is a powerful force in all levels (national, state, and local) of U.S. politics.

The term "fundamentalism" can be traced to pamphlets published around the turn of the twentieth century. Authored by evangelical clergy, these pamphlets were widely circulated within the church as a reaction to the rise of Darwinian theories about the origin of the universe. In 1920, a journalist and member of the Baptist church named Curtis Lee Laws used the term "fundamentalism" to designate those who were ready "to do battle royal for the Fundamentals." Law was referring to the scriptures, which are sacred for Christian fundamentalists, who believe that the Bible should be understood as literally true.

The Reverend Jerry Falwell, one of the preeminent U.S. evangelists of the late twentieth century, said: "I hope I live to see the day when, as in the early days of our country, we won't have any public schools. The churches will have taken them over again and Christians will be running them. What a happy day that will be!" (*America Can Be Saved* 1979).

This sort of passionate insistence on the undeniable truth of one's beliefs is hardly unique: Other traditions similarly claim to be guardians of the truth.

Benjamin S. Kerschberg

especially in Saudi Arabia. It is out of this tradition that the al-Qaeda movement emerged.

Best known to the West has been the Iranian revolution of 1979. It serves as a model of how fundamentalist movements make their way. The United States–backed Shah of Iran presided over a corrupt regime. As population grew and needed resources were not available to all but the upper classes, resentment developed among young urban males. So did aspiration and hope. After the shah fell, the exiled Ayatollah Khomeini came back from Paris to reoccupy the land that his followers felt had been immorally taken over from them. Soon the shah had to flee, the Khomeini faction grew in power and threat, the United States retreated, and a new pattern of militant, revolutionary unrest followed. Whether they are called fundamentalist or not, movements like the RSS and the Muslim Brotherhood illustrate how the forces develop.

They begin as conservative or traditionalist complexes. They are oppressed (not all fundamentalists are literally poor, though many are desperately so). Their enemy is seen as a corrupt betrayer of the tradition they believe is theirs. No matter what the world thinks, they must act. Allah will bless them now or, more likely, in eternity. And they will have made a contribution to purifying and ennobling an often corrupt and repressive regime. Something similar goes on in fundamentalist movements elsewhere, and in different religions.

As for the future, militant fundamentalisms are likely to continue to create upheavals of a sort unanticipated at the end of the Cold War. They resort to terrorism or destabilize regimes. At the same time, others run their course and settle for somewhat moderated expressions. In almost every major religious complex—Christian, Muslim, Jewish, Hindu, and the like—nonviolent fundamentalists will seek to make their way through efforts to convert others, to outvote them, or to influence public policy through means and toward ends that they find satisfying. And "modernism" in its many forms, including with its manifestations of pluralism and relativism will remain the enemy.

Martin E. Marty

See also Modernity; Pentecostalism

Further Reading

Armstrong, K. (2000). The battle for God. New York: Knopf.

- Antoun, R. T., & Hegland, M. E. (Eds.). (1987). Religious resurgence: Contemporary cases in Islam, Christianity, and Judaism. Syracuse, NY: Syracuse University Press.
- Bjorkman, J. W. (Ed.). (1986). Fundamentalism, revivalists, and violence in South Asia. Riverdale, MD: Riverdale Company.
- Caplan, L. (Ed.). (1984). *Studies in religious fundamentalism.* Albany: State University of New York Press.
- Dollar, G. W. (1973). A history of fundamentalism in America. Greenville, SC: Bob Jones University Press.
- Falwell, J. (Ed.). (1981). The fundamentalist phenomenon: The resurgence of conservative Christianity. New York: Doubleday.
- Hodgson, M. (1979). The venture of Islam: Conscience and history in a world civilization. Chicago: University of Chicago Press.
- Juergensmeyer, M. (2000). Terror in the mind of God: The global rise of religious violence. Berkeley: University of California Press.
- Kepel, G. (1994). The revenge of God. Oxford, UK: Blackwell.
- Lawrence, B. B. (1989). Defenders of God: The fundamentalist revolt against the modern age. San Francisco: Harper & Row.
- Lustig, I. S. (1989). For the land and the Lord: Jewish fundamentalism in Israeli. New York: Council on Foreign Relations.
- Marsden, G. M. (1980). Fundamentalism and American culture: The shaping of twentieth-century evangelicalism, 1870–1925. New York: Oxford University Press.
- Marty, M. E., & Appleby, R. S. (Eds.). (1991) Fundamentalisms observed. Chicago: University of Chicago Press.
- Marty, M. E., & Appleby, R. S. (Eds.). (1993). Fundamentalisms and society. Chicago: University of Chicago Press.
- Marty, M. E., & Appleby, R. S. (Eds.). (1993). Fundamentalisms and the state. Chicago: University of Chicago Press.
- Marty, M. E., & Appleby, R. S. (Eds.). (1994). Accounting for fundamentalisms. Chicago: University of Chicago Press.
- Marty, M. E., & Appleby, R. S. (Eds.). (1995). Fundamentalisms comprehended. Chicago: University of Chicago Press.
- Piscatori, J. P. (1991). *Islamic fundamentalisms and the Gulf crisis*. Chicago: Fundamentalism Project, American Academy of Arts and Sciences.
- Sandeen, E. (1970). The roots of fundamentalism. Chicago: University of Chicago Press.
- Sivan, E. (1985) Radical Islam: Medieval theology and modern politics. New Haven, CT: Yale University Press.
- Sprinzak, E. (1986). *Gush Emunim: The politics of Zionist fundamentalism in Israel*. New York: American Jewish Committee.
- Watt, W. M. (1988). Islamic fundamentalism and modernity. London: Routledge.

Religious Syncretism

Syncretism is the attempt to reconcile disparate—and sometimes opposed—beliefs and practices. It represents a blending of schools of thought and is often associated with establishing analogies between two or more discrete and/or formerly separate traditions. Most studies of syncretism focus on the blending of religion and myths from different cultures. Viewed positively, syncretism seeks underlying unity in what appears to be multiplicity and diversity. It is common in many aspects of society and culture, including language, literature, music, the arts, technology, politics, social organization and kinship, and economics. Robert D. Baird asserted that the term syncretism contributes little to our understanding of world religions since what it seeks to describe is nearly universal. He suggested that the term "syncretism" should be replaced by the term "synthesis." Other scholarsmost notably anthropologist Richard Werbner-have suggested that anthropologists restrict their use of the term to the study of religions. Werbner has since rescinded his position. Still other social scientistsnotably Peter Beyer and Jonathan Friedman-have suggested that the term syncretism may prove extremely useful for understanding many aspects of culture and society, including social organization, material culture, and processes of localization and globalization.

Viewed negatively, syncretism is a contentious concept that has undergone many transformations. To religious leaders, syncretism often implies impurity and/or contamination and is associated with—but is not identical to —"eclecticism." It is unlikely that any contemporary scholar or theologian would argue that processes of syncretism do not exist. Disagreements center on the word itself and on the history of its applications.

Classical Greek and Roman Concepts of Syncretism

The Ancient Greek prefix *syn*- means "with" and the word *krasis* means "mixture." Thus, the term *synkrasis* meant "a mixture or compound." The Greek words *synkretismos* and *synkretizein* do not appear in classical literature until the time of Plutarch (c. 46–after 119 CE). Plutarch utilized a political meaning of the term in an essay entitled "On Brotherly Love" (*Peri Philadelphias*), which appeared as a chapter in his *Moralia*. In searching for the origin for the word "syncretism," Plutarch claimed to have found an example of syncretism in the Cretans who reconciled their differences and came together in an



alliance whenever they were faced with an external threat. He labeled this coming together as "their so-called syncretism." Plutarch's use of the term later gave rise to negative connotations—many of which were never intended by Plutarch. For Plutarch, syncretism was not only a testament to political expediency, but also had potential to foster sociability and brotherly love. On the other hand, he also saw it as the root of insincerity and impurity. It became synonymous with a lack of authenticity. Passages from Plutarch's *Moralia* attest that the term "syncretism" was known in the first century CE. Unfortunately, there are few other examples of the term's use during this period.

Although the word "syncretism" was not in common use among the ancient Greeks and Romans, the practice of syncretism seems to have been very common. It was central to both Greek and Roman political culture as well as Roman and Greek religions. In many respects, the commingling of religions was a direct result of Roman conquest, slavery, and forced migration. Historian of religion Franz Cumont speculated, "Who can tell what

The bell-towers of this Roman Catholic Church at Acoma Pueblo, New Mexico, combine features of Christianity and Native American architecture.

influence chambermaids from Antioch and Memphis gained over the minds of their mistresses?" (1956, 24).

During the time of Alexander the Great, Hellenistic culture was itself a mixture, having blended Persian, Anatolian, Egyptian, and later Etruscan-Roman elements into an overall Hellenic framework. It is apparent that the syncretic gods of the Hellenistic period enjoyed wide favor among the Romans. Serpis, Isis, and Mithras were the most prominent among these deities. The goddess Cybele—as she was worshipped in Rome—was also highly syncretic.

In addition, pagan elements were incorporated into first-century Christianity. But—as with all religious syncretisms—not everyone agrees on the specifics. There are numerous and acrimonious debates with respect to the who, what, when, where, and why. While a majority of classicists and New Testament scholars agree that syncretism has occurred within Christianity and is likely to continue, specific examples often give rise to heated debates.

The Romans-who saw themselves as the heirs to Greek civilization-identified Greek deities with members of the Etruscan and Roman pantheons. Interestingly, they accepted the Greek and Etruscan gods but rarely copied Greek or Etruscan rituals. Vague attempts to establish equivalencies between Roman, Greek, and Etruscan deities were seldom contested. But putative correspondences vary; for example, Jupiter was seen as a better equivalent for Zeus than the huntress Diana was an equivalent for Artemis. Classicists argued that Ares was not a good match for Mars. The Anatolian goddess Cybele-who was imported to Rome from her cult center at Pessinus-was identified as Magna Mater and given a matronly image that had been developed earlier in Hellenistic Pergamum. The Egyptian god Amun was borrowed from a Hellenized "Zeus/Ammon" after Alexander the Great's quest for Amun's oracle at Siwa. The Greek god Dionysus was imported into Rome as Bacchus, and the Anatolian Sabazios was transformed into the Roman deity Sabazius. Given these precedents, the Romans would have recognized few barriers to the worship of Isis or Mithras. Likewise, when the Romans first encountered the Celts and Teutonic peoples, they commingled these northern gods with their own gods,

The things that will destroy us are: politics without principle; pleasure without conscience; wealth without work; knowledge without character; business without morality; science without humanity; and worship without sacrifice. • MOHANDAS GANDHI (1869–1948)

creating, among others, "Apollo Sucellos" (Apollo the Good Smiter) and "Mars Thingsus" (Mars of the War Assembly). As C. Stewart and R. Shaw have emphasized, attempts to explain syncretism by reference to perceived equivalencies and/or correspondences are often flawed. Equivalencies, they asserted, must be recognized by actors—and even when such equivalencies are recognized, they do not have to be accepted.

Such identifications and equivalencies may stem from a Hellenic practice of identifying deities of disparate mythological traditions with their own. When proto-Greeks—whose language would later become classical Greek—first arrived in the Pelonnesus over two thousand years ago they encountered localized nymphs and divinities already associated with important geographical features such as mountains, groves, caves, and springs each of these geographical features had its own locally venerated deities.

Syncretism from the Renaissance to the Present

The term "syncretism" fell into disuse from the time of Plutarch to the time of the Renaissance. It was reborn with Erasmus (1466?-1536) and his reading of Plutarch. Erasmus modified the term "syncretism" in his Adagia (Adages)-first published in 1517-with reference to the coherence of dissenters despite their myriad philosophical and theological differences. Syncretism, for Erasmus, represented agreement among peoples with seemingly different beliefs and ideals. In a letter to Melanchthon dated 22 April 1519, Erasmus specifically referenced the Cretans (borrowing from Plutarch) as an example of the adage "Concord is a mighty rampart." Nearly a century later, in 1615, David Pareus of Heidelberg urged Christians to adopt what he called "pious syncretism" in opposition to the Antichrist, but few seventeenth-century Protestants seriously considered compromises that might bring about the ultimate reconciliation of Protestantism and the Roman Catholic Church. In the seventeenth century, Calixtus (1586-1656) sought to reconcile the various Protestant denominations with each other. He was ridiculed by Calovius (Abraham Calov; 1612–1686) for being an advocate of "syncretism."

Nonpejorative connotations of the term "syncretism" began again in the eighteenth century with the publication of Dennis Diderot's *Encyclopedie*, which contained entries on "Eclecticisme" and "Syncrétistes, Hénotiques, ou Conciliateurs." Although Diderot published two separate entries, he equated syncretism with eclecticism and portrayed syncretism as the concordance of eclectic sources.

Throughout the nineteenth century, overt syncretism in folk beliefs was seen as a strong indication of the cultural acceptance of an alien and/or earlier tradition. Nevertheless, it was also recognized that "foreign" cults may survive or infiltrate other religions without an official, authorized syncretism. By the end of the nineteenth century, identities were no longer predicated on the existence of continuous and immutable cultures, and the concept of syncretism came to the forefront largely because it blurred local distinctions-a characteristic that made it useful for rulers of multicultural populations. At the same time, the rejection of syncretism, that is, antisyncretism in the name of purity and/or orthodoxy, helped to generate and legitimize a strongly felt desire for cultural unity. Contemporary celebrations of Christmas, Easter, and Halloween offer many telling examples of syncretism in practice. This is not a new phenomenon. The ancient Romans adopted pagan Yule traditions that eventually made it into Christmas celebrations (Christmas trees, Yule logs, and the like), and Roman Catholics in Central and South America have integrated a large number of elements that are taken from indigenous Latin American and North American religious traditions. It is of interest that religious leaders who oppose syncretism almost always express their opposition in terms of personal piety.

A number of so-called "new religious movements" like Reverend Moon's Unification Church or L. Ron Hubbard's Church of Scientology have openly embraced syncretism, while others—Christian fundamentalism and Islam are perhaps the most dramatic examples—have rejected syncretism as a devaluing of precious, genuine religious and cultural truths and distinctions. Examples of intense syncretism can be found in Romanticism and in various other



"new religions" like mysticism, occultism, Theosophy, paganism, and New Age. In the fine arts, the eclectic aspects in postmodernism are abundantly apparent.

Generally, the term "syncretism" has been positively regarded by social scientists. Yet Stewart and Shaw report that there is growing uneasiness with the term among anthropologists who have been influenced by postmodernism. Other anthropologists have devoted their attentions to showing that syncretism is not inevitable. It is possible, they contend, for two groups to live in close proximity and largely ignore each another. For this reason, scholars find it both necessary and informative to examine syncretism with respect to relations of power. In Syncretism and the Commerce of Symbols, Goren Aijmer dramatically shifted the direction of research by asking, "Under what specific conditions do people in any one group pay attention to the cultural symbols of another group?" (1995, 27). Often, it seems that syncretism has been most intense whenever inequality between cultures has been the most pronounced. Equally important, war, conquest, colonialism, trade, migration, and intermarriage bring syncretism to the forefront. Race, gender, age, and social class are also factors. Scholars must examine the relationships between global and localized syncretisms. Are two or more religions influencing one another equally or is one dominating the rest? How does syncretism relate to issues of entrepreneurship and to theories of modernization?

In anthropology, the term "syncretism" is most closely associated with Melville J. Herskovits, who is best known for his research on the survival of African cultural traits among blacks in the Americas. Herskovits advocated an appreciation of what he called "syncretized Africanisms" and focused on various types of "acculturation" in order to address more general issues of culture contact. Again, there is need to recognize that acculturation (and syncretism) is not inevitable, and that all major world religions and cultures seem to be of composite origin.

Marked evidence of syncretism has been identified in New World religions such as Brazilian Candomble, Haitian vodun, and Cuban Santeria. These religions analogized various Yoruba and other African gods and selected Roman Catholic saints. Some Candomble leaders have incorporated the spirits of American aboriginal leaders like Sitting Bull and Black Hawk into their rituals. The most syncretic New World religion is perhaps Brazilian Umbanda, which combines African deities with a form of French spiritism attributed to Alan Kardec (1804–1869). In Brazil, French spiritism is also known as *Kardecism* or *Kardecismo*. Umbanda also incorporates local aboriginal spirits, African and Hindu deities, and North American aboriginal leaders.

Roger Bastide's influential study The African Religions of Brazil attempted to account for syncretism by stressing historical processes like conquest and migration. He traced the various ways in which African, European, and aboriginal religions have come together in what he termed an "interpenetration" of civilizations. Rather than offering a psychological explanation, Bastide's sociological approach focused on groups of people who were differentiated by sex, social class, and age. By contrast, Stephen D. Glazier's research on of the Spiritual Baptists in Trinidad focused on individual Baptist leaders and their practice of borrowing rituals from a variety of religious traditions but keeping these borrowed rituals separate in time and space. According to Glazier, one outcome of this process is a religion that is marked not so much by syncretism as by juxtaposition.

In South Africa, studies of syncretism have focused on independent churches. The earliest studies of African Independent Churches (AICs) were conducted by Christian missionaries, and the term syncretism was used in derogatory ways. Contemporary anthropologists—most notably J. Y. D. Peel—argued effectively that syncretism was not central to independent churches in South Africa because these churches represented reinterpretations of Christianity but never encouraged a mixture of Christianity and tribal elements.

It should be emphasized that authenticity and originality are not always dependent on the alleged purity and uniqueness of religions and vice versa, and that many socalled "original" religions—like the religions of Australian aborigines—are actually the result of a unique syncretism that has not occurred elsewhere. It is difficult to separate religion from the rest of culture. Scholars studying syncretism cannot specify their field of study in advance and must be sensitive to the ways in which people negotiate and redefine the boundaries of their ideas and practices. For example, since Vatican II the Roman Catholic Church has implemented a concerted program of "inculturation" whereby local communities were encouraged to apprehend the Christian message "on their own terms." Is this, too, a type of syncretism? Shaw and Stewart pointed out that global religions-like Christianity, Hinduism, Buddhism, and Islam-have been able to effectively "standardize" their responses to syncretism. They suggested, for example, that antisyncretism within Islam can be seen as a standardized response to global capitalism, labor migration, and travel-not least of which is participation in the hajj. Shaw and Stewart also underscored the need to examine problems of agency, especially when agency is ascribed to religious traditions without reference to religious specialists. A difficulty is that when one ascribes agency to a religion, religions are portrayed as having their own dispositions like "freeflowing rivers." Such is seldom the case.

At times, syncretism is largely intentional, while at other times it is largely unintentional. Whatever the case, there are always unexpected consequences. Syncretism sometimes proceeds from misinterpretations and radical misunderstandings; for example, Christian missionaries working among the Ewe in Ghana identified one Ewe deity, Mawu, as the Christian God and labeled all other Ewe deities as "devils." An unintended consequence of this labeling was that the Ewe devoted a seemingly disproportionate amount of ritual time to honoring their "devils."

It is imperative for scholars to chart the increasingly complex interconnections between syncretism, social change, and resistance. Stewart and Shaw concluded their study of syncretism by suggesting that the term be recast as the politics of religious synthesis. A major focus, they postulated, should be on antisyncretism and the antagonisms shown by agents who are largely concerned with the defense of religious boundaries.

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See also African-American and Caribbean Religions

Further Reading

- Aijmer, G. (Ed.). (1995). Syncretism and the commerce of symbols. Goteborg, Sweden: Institute for Advanced Studies in Social Anthropology.
- Baird, R. D. (1971). Category formation in the history of religions. The Hague, Netherlands: Mouton.
- Bastide, R. (1978). The African religions of Brazil: Toward a sociology of the interpenetration of civilizations. Baltimore: Johns Hopkins University Press.
- Beyer, P. (1994). Religion and globalization. New York: Sage.
- Clifford, J. (1988). The predicament of culture. Cambridge, MA: Harvard University Press.
- Cumont, F. (1956). Oriental religions in Roman paganism. New York: Dover.
- Droogers, A. (1989). Syncretism: The problem of definition, the definition of the problem. In J. D. Gort, H. M. Vroom, et al. (Eds.), *Dialogue and syncretism: An interdisciplinary approach* (pp. 7–25). Grand Rapids, MI: Eerdmans.
- Friedman, J. (1995). *Cultural identity and global process*. London: Sage. Glazier, S. D. (1985). Syncretism and separation: Ritual change in an
- Afro-Caribbean faith. Journal of American Folklore, 98(387), 49–62.
 Greenfield, S., & Droogers, A. (Eds.). (2001). Reinventing religions: Syncretism and transformation in Africa and the Americas. New York: Rowman & Littlefield.
- Herskovits, M. J. (1947). Cultural dynamics. New York: Alfred A. Knopf.
- Lawson, E. T. (2003). Agency and religious agency in cognitive perspective. In S. D. Glazier & C. A. Flowerday (Eds.), Selected readings in the anthropology of religion: Theoretical and methodological essays (pp. 99–106). Westport, CT: Praeger.
- Peel, J.Y. D. (1968). Syncretism and religious change. Comparative Studies in Society and History, 10, 121–141.
- Stewart, C., & Shaw, R. (Eds.). (1994). Syncretism/anti-syncretism: The politics of religious synthesis. New York: Routledge.
- Werbner, R. (1994). Afterword. In C. Stewart & R. Shaw (Eds.), Syncretism/anti-syncretism: The politics of religious synthesis (pp. 212–215). New York & London: Routledge.

Renaissance

The Renaissance was a period defined less by a span of time than by the application of certain ideas to almost every aspect of life. About the mid-fourteenth century in Italy, people realized that the essential values of the Middle Ages no longer suited an environment that was increasingly urban, secular, mercantile, and educated. In particular, city-states, such as Florence and Venice, required a new perspective that validated the lives of the wealthy merchants who governed their communities.

The Italian city-states had been made wealthy as a consequence of the Crusades and the recovery of long-distance

Leonardo Da Vinci, Renaissance Man

The term Renaissance man has come to mean a person with broad interests and abilities. No figure embodies the term more perfectly than Leonardo Da Vinci (1452–1519), as described by biographer Giorgio Vasari.

Truly admirable, indeed, and divinely endowed was Leonardo da Vinci; this artist was the son of Ser Piero da Vinci; he would without doubt have made great progress in learning and knowledge of the sciences, had he not been so versatile and changeful, but the instability of his character caused him to undertake many things which having commenced he afterwards abandoned. In arithmetic, for example, he made such rapid progress in the short time during which he gave his attention to it, that he often confounded the master who was teaching him, by the perpetual doubts he started, and by the difficulty of the questions he proposed. He also commenced the study of music, and resolved to acquire the art of playing the lute, when, being by nature of an exalted imagination and full of the most graceful vivacity, he sang to that instrument most divinely, improvising at once the verses and the music.

Source: Vasari, G. (1892). Lives of the most eminent painters, sculptors, and architects (Vol. 2, p. 366–367). London: George Bell and Sons.

commerce, with Italian merchants dominating the carrying trade between Europe and the Crusader outposts in the Levant (eastern shore of the Mediterranean), ferrying men, equipment, food, and goods across the Mediterranean. The cities of Pisa, Genoa, Amalfi, and Venice dominated this trade, which attracted large numbers of Europeans to the Levant and the Byzantine Empire in the Near East and a few to the Far East. The most dramatic episode in this expansion of Italian trade and influence was the conquest of Constantinople (Istanbul, Turkey) in 1204 by the crusader army of Baldwin of Flanders in northern Europe, an episode that the Venetians used to gain greater influence in the lucrative Eastern markets.

Other Italian cities benefited economically as well, again driven by the vast explosion of money available as a result

Lord, grant that I may always desire more than I can accomplish. • MICHELANGELO (1475–1564)

of trade. Florence was not a seaport but produced the finest woollen cloth in Europe, a product greatly sought by luxury-loving northern Europeans. The huge profits from this trade permitted Florentine merchants to increase their wealth by lending surplus capital at interest, that is, to become bankers as well as merchants. Their banks gave the Italians a virtual monopoly over the money markets of Europe from the twelfth to the beginning of the sixteenth century. A direct consequence of this monopoly was the introduction of stable gold coins that could be used as reliable tender, free from the wild fluctuations of most medieval European coinage. The Florentines introduced the florin in the 1250s; the Venetians introduced the ducat in 1282. These currencies proceeded to dominate the economies of Europe for the next 250 years.

This wealth precipitated social and political problems, however. Merchants did not fit easily into the medieval worldview in which the clergy cared for souls and the landed nobility provided security and government. Tensions arose between the newly wealthy urban merchants -who were educated laymen but not noble-and the traditional ruling elite of the nobility. Venice escaped these tensions because it was surrounded by water with no landed territory dominated by nobles to cause friction; but Florence during the thirteenth century entered a period of great turmoil. The nobles resented the wealth and influence of those whom they considered to be their social inferiors, while the mercantile elite grew increasingly resentful of their lack of political control. The city became a battleground between the old and new elites. a division made more vicious because it was characterized by contemporaries as an ideological struggle between those who supported the sovereignty of the Holy Roman Empire in Italy (Ghibellines) and those whose allegiance was to the pope (Guelfs). The former were generally old noble, landed families; the latter were generally newly enriched families who benefited from recent social mobility and the new mercantile economy.

Fragmented Italy

Italy had not been a united nation since the collapse of the Roman empire. North of the kingdom of Naples Italy remained a mosaic of independent states, ruled by princes or oligarchies of powerful families who received their authority from the Holy Roman emperor or the pope. Because neither the emperor nor the pope enjoyed sufficient authority to suppress the other, Italy remained fragmented until the nineteenth century. However, for the development of the Renaissance, this fragmentation was beneficial because it encouraged competition for the best artists, architects, and writers, and it permitted a degree of economic, social, and political experimentation impossible elsewhere on the continent.

In Florence the Guelf party ultimately triumphed with papal support, and the city reaped the reward of becoming the banker for the pope and the Church. The old feudal families were tamed, disenfranchised, and excluded from government through a mercantile coup d'etat in 1293 that created the republican constitution that would govern Florence throughout the Renaissance. The city became an oligarchy ruled collectively by all adult male citizens who belonged to the twenty-one recognized guilds. It had an elaborate mechanism to forestall tyranny, entrusted to a collective executive of nine men. Even after the de' Medici family managed to assume political hegemony (influence) in 1434 under Cosimo de' Medici (il vecchio, d. 1464), the city remained a functioning republic until the sixteenth century, with the head of the family merely manipulating policy behind the scenes. The greatest of the de' Medicis, Lorenzo the Magnificent (d. 1492), led the city through its celebrated efflorescence of culture and political influence, although he remained throughout his life only a leading citizen and not a prince.

The social, economic, and political revolutions of the thirteenth century in Italy obviously created powerful new groups of citizens with different ambitions and values from the old medieval world characterized by priests, knights, and peasants. The lives of citizens were secular; they were often highly educated and very cosmopolitan, having lived abroad in many places as merchants. Moreover, they were new men, without great names or natural authority to support them: They had made their own way in the world, and they searched for a value structure that could offer comfort to them as bankers who took money at interest, despite the injunctions against usury, who needed advice concerning the government of guilds and cities, who wanted advice on the conduct of families, and who needed a culture that reflected their particular circumstances and that spoke to their role in this world as engaged lay citizens.

Francesco Petrarca (Petrarch, 1304–1374) first articulated this search. Born into an exiled Florentine family, he was a poet, philosopher, cleric, and diplomat. In his Italian poetry he celebrated human love and the desire for fame while advocating good style in Latin to clarify and externalize individual experience. Finally, he was interested in himself and his fellow humans and their experience in this life. He made popular once more autobiography as a genre, and he stressed the validity of the exploration of one's self and one's world.

Petrarch found a model for his ideas and his style in the ancient world. Rome was, after all, an urban, mercantile, secular society, originally republican like Florence, and possessed of a great literature that explored the human condition. He solved the problem posed by pagan authors in a Christian society by stressing that they were good men as illustrated in their writings: Ancient writers, such as the Roman Cicero (d. 43 BCE), could advise the contemporary world in matters of ethics, even though Christian belief was still required for salvation. The ancient world, then, could safely be adopted as a model for both secular life and art: It could be reborn (renaissance).

Wisdom of the Ancients

These revolutionary ideas changed the European perspective, spreading through Italian republics and principalities and then north of the Alps. Human experience was now celebrated, and this life was identified as something worth cultivating and studying. The ancients set a standard for Europeans first to emulate and then to surpass. To accomplish this, people had to recover the knowledge and wisdom of the ancient world; hence, the tools of philology (the study of literature), textual editing, archaeology, and numismatics were developed. To know



The church next to the Ducal Palalce (palace of the Duke) in the Renaissance hill town of Urbino, Italy. The church and the duke's palace were usually the most prominent buildings in Renaissance towns.

ranean trade more difficult and less profitable, even for Italians. Searching for a new route to the East, Christopher Columbus, an Italian sailing for Spain, encountered the Americas in 1492; the Portuguese began exploring the coast of Africa until Vasco da Gama

their fellow human beings, people revived portraiture in sculpture and painting through the use of correct anatomy and physiognomy (the art of discovering character from outward appearance). To reproduce what the eye sees as a tool to share people's understanding of the external world, Brunelleschi invented linear perspective in Italy early in the fifteenth century, and Alberti codified it. Buildings conformed to the precepts of Vitruvius, the Roman architect, and the vocabulary of design and decoration was adopted from the ancients. Taken together, these ideas and practices constitute humanism, which became the central cultural and intellectual expression of the Renaissance; a direct consequence was a new and remarkable self-confidence in human agency. "Man is the measure of all things" and "Man can do anything he wills" became accepted beliefs within the humanist community.

This intellectual, cultural, and artistic revolution paralleled the economic and social revolution that was occurring. The virtual Italian monopoly on the lucrative long-distance luxury trade to the East galvanized peoples north of the Alps to find the means to challenge Italian economic dominance. The end of the Hundred Years' War (1453) and the English Wars of the Roses (1485) stimulated northern commerce; the crusade of rulers Ferdinand and Isabella of Spain against the Moors of Granada created a united Spanish kingdom by 1492. Also, the fall of Constantinople to the Turks in 1453 made Meditersucceeded in 1497 in establishing an ocean route between India and Europe.

These voyages and the commercial connections and newly discovered wealth they brought changed the shape of Europe forever. The center of power on the continent shifted away from the Mediterranean (literally once the center of the Earth, *media terra*) to the Atlantic seaboard. Spain, Portugal, France, England, and later the Netherlands became the dynamic nations, expanding beyond Europe into the empires they were building around the world, extending long-distance trade to places in Africa, the Americas, and the Pacific never contemplated by the Italians.

Renewed Self-Confidence

The result was a renewed self-confidence among Europeans that included a reinforced belief in the power of human beings to comprehend nature. Practical experiments resulted from this belief: Science presupposes the validity of human observation and the ability to interpret it. Newly discovered plants and animals from outside Europe could be depicted through exact illustrations made possible by the Renaissance tradition of naturalism in art; skills such as reliable cartography for navigation were facilitated by related concepts such as linear perspective. Altogether, Europe assumed an energetic, outward-looking attitude that drove the voyages of discovery and the expansion of trade—events that resulted

Galileo Galilei on Religion and Science

... though the Holy Scripture cannot err, nevertheless some of its interpreters and expositors can sometimes err in various ways. One of these would be very serious and very frequent, namely, to want to limit oneself always to the literal meaning of the words; for there would thus emerge not only various contradictions but also serious heresies and blasphemies, and it would be necessary to attribute to God feet, hands, and eyes, as well as bodily and human feelings like anger, regret, hate, and sometimes even forgetfulness of things past and ignorance of future ones.

I should believe that the authority of the Holy Writ has merely the aim of persuading men of those articles and propositions which are necessary for their salvation and surpass all human reason, and could not become credible through some other science or any

in new knowledge through contact with other peoples as well as a reconsideration of the place of Europe in the world, as evidenced by texts such as the English statesman Thomas More's *Utopia* (1516) and the French essayist Michel de Montaigne's essay *Of Cannibals* (printed 1580). Finally, new ideas could spread quickly and reliably through printing, developed in Germany in the mid-fifteenth century.

The decline of the Renaissance followed the decline of the principles that animated it; just as the Renaissance reached different nations at different times, so its eclipse occurred later in the North than in Italy. Events such as the invasion of Italy by King Charles VIII of France (1494) and the ensuing six decades of warfare on the peninsula, together with the loss of control of the Eastern luxury trade and almost continuous war with the Ottoman Turks, sapped both the wealth and the confidence of Italians. Also, the Protestant Reformation (a movement during the sixteenth century to reform the Roman Catholic Church) caused a reaction within the Roman Catholic Church that often manifested itself in hostility to new or unorthodox ideas. The establishment of the Roman Inquisition (1542), the Index of Prohibited Books (1559), and the suppression of free inquiry in schools and universities made dynamic new ideas more other means except the mouth of the Holy Spirit itself. However, I do not think it necessary that the same God who furnished us with senses, language, and intellect would want to bypass their use and give us by other means the information we can obtain from them. This applies especially to those sciences about which one can read only very small phrases and scattered conclusions in the Scripture, as is particularly the case for astronomy, of which it contains such a small portion that one does not even find in it the names of all the planets; but if the first sacred writers had been thinking of persuading the people about the arrangement and the movements of the heavenly bodies, they would not have treated them so sparsely...

Source: Galileo's Letter to Castelli, 21 December 1613. (1989). In M. A. Finocchiaro (Ed.), *The Galileo affair, a documentary history* (pp. 49-50; 51-52), Berkeley: University of California Press.

difficult to accept. In the North the French Wars of Religion (1562–1598), the wars between the Catholic Habsburg ruling house and Protestant princes in Germany and the Netherlands, and the struggle between Europe and the Turks led to a movement away from Renaissance ideals and the economic and social conditions that had given rise to them. Although humanism continued in the form of classical studies, courtly behavior, elite education, and cultural movements in art, architecture, and literature, its energy had been depleted and transformed by the religious, social, and political experiments of the Protestant Reformation, the Counter Reformation (a reaffirmation of the doctrine and structure of the Roman Catholic Church, partly in reaction to the growth of Protestantism), and the artistic and architectural style of the baroque.

Kenneth Bartlett

See also Art—European; Early Modern World; Leonardo da Vinci; Machiavelli, Niccolo

Further Reading

Aston, M. (Ed.). (1996). The panorama of the Renaissance. New York: Thames & Hudson.

Braudel, F. (1981). Civilization and capitalism in the fifteenth to eighteenth century: The structure of everyday life. New York: Harper & Row.

Martyrs are needed to create incidents. Incidents are needed to create revolutions. Revolutions are needed to create progress. • CHESTER HIMES (1909–1984)

- Braudel, F. (1982). *The wheels of commerce*. New York: Harper & Row. Braudel, F. (1984). *The perspective of the world*. London: HarperCollins
- Publishers.
- Brown, A. (1999). The Renaissance (2nd ed.). London: Longman.
- Hale, J. R. (1994). *The civilization of Europe in the Renaissance*. New York: Atheneum.
- Hartt, F. (1994). A history of Italian Renaissance art (4th ed.). New York: H.N. Abrams.
- Jardine, L. (1996). Worldly goods. New York: Nan A. Talese.
- Jensen, D. (1992). *Renaissance Europe* (2nd ed.). Lexington, MA: D.C. Heath.
- Kelley, D. R. (1991). Renaissance humanism. Boston: Twayne Publishers.
- King, M. (1991). Women of the Renaissance. Chicago: University of Chicago Press.
- Nauert, C. G. (1995). Humanism and the culture of Renaissance Europe. Cambridge, UK: Cambridge University Press.
- Scammell, G.V. (1989). The first imperial age: European overseas expansion, 1400–1715. London: Unwin Hyman.
- Tracy, J. D. (1990). The rise of merchant empires: Long distance trade in the early modern world, 1350–1750. Cambridge, UK: Cambridge University Press.
- Welch, E. S. (1997). Art and society in Italy, 1350–1500. Oxford: Oxford University Press.

Revolution—China

R evolution is a twentieth-century phenomenon in China, although the three-thousand-year-old empire had a long history of peasant rebellions and dynastic overthrow. For much of the second half of the twentieth century, the founding of the People's Republic in 1949 was seen as the decisive revolution, or perhaps the completion of earlier incomplete or "failed" revolutions. With the cooling-off of the Communist revolution in recent decades, that metanarrative is open to question and the earlier revolutions of 1911 and 1927 acquire more prominence in the long process of transforming an ancient agrarian-bureaucratic empire into a modern nation-state and industrialized society.

Even the word *revolution* was new in China in the late nineteenth century. Along with many Western ideas about modernity, it came to China from Japan as a neologism formed by taking the ancient Confucian term for a heavenly mandate to rule and putting the word *remove* before it. Thus, *geming* literally means "to remove the mandate" (political legitimacy), but by the early twentieth century Chinese radicals already understood it in the sense of the American or French revolutions—establishment of a new political order. Closely associated with ideas of progress and popular sovereignty, it was manifestly new and foreign, in fact, a response to the military and political humiliations China had suffered at the hands of industrialized Western powers since the middle of the nineteenth century.

The Republican Revolution, 1911

The first revolution came rather unexpectedly, although for more than a decade there had been revolutionary agitation and small-scale uprisings, especially in the south. Most of these were led by Sun Yat-sen (1866–1925) and drew support from overseas Chinese business communities and the new generation of young intellectuals studying what was known as Western learning. Sun's call to overthrow the "alien" Qing dynasty (1644–1912; the imperial family during the Qing dynasty was ethnically Manchu, not Han Chinese) strongly appealed to the ethnic nationalism they had learned largely from the West.

When the revolution broke out, almost accidentally from a botched military coup in the city of Wuhan in eastern central China on the Chang (Yangzi) River, lack of effective leadership in Beijing (the emperor was only a child) combined with widespread frustration over the Qing court's inability to strengthen and modernize China, and imperial authority rapidly collapsed throughout southern and central China. Sun Yat-sen became president of a short-lived provisional government, but the revolution was soon hijacked by China's most powerful military man, Yuan Shikai (1859–1916), a different kind of modernizer. Yuan used his military muscle to squeeze out Sun Yat-sen and his party's elected representatives in the new National Assembly.

The revolution thus ended in apparent failure, with no democracy, no progressive political program, and China torn apart by civil wars after Yuan Shikai's demise. Nevertheless, the rather premature revolution of 1911 had ended 2,100 years of imperial bureaucratic government, replacing the hereditary emperor with a (supposedly)

Statement of the Central Committee of the Chinese Communist Party, 1 February 1947

The Political Consultative Conference, comprising all major political parties, groups and prominent social figures, convened on January 10, 1946 in accordance with stipulations of the summary of Kuomintang-Communist talks in Chungking on October 10, 1945, is universally recognized by the people of the entire country and world powers as the highest political body in China. Until China has a really democratic national parliament, all important internal and diplomatic affairs which would be passed by a parliament in democratic countries should pass through this Conference or obtain agreement of major political parties and groups before they can be regarded as effective.

Since January 10, 1946, however, Chinese Kuomingtang government has not only enacted many arbitrary domestic measures but has also many times singly conducted diplomatic negotiations of a serious nature with certain foreign governments... These diplomatic negotiations include loans from foreign governments, continuation of Lend-Lease, buying and accepting of munitions and surplus war materials, forming of treaties regarding special rights in commerce, navigation, aviation and other economic and legal special rights.

These negotiations and agreements request or permit foreign land, sea and naval forces to be stationed in or operate on the seas, waterways, territories, and in the air of the country, and to enter or occupy and jointly construct or make use of military bases and points strategic to the national defense. They furthermore request or permit foreign military and other personnel to participate in organization, training, transportation and military operations of land, air and naval forces of the country, and to become conversant with military and other state secrets of the country. They also permit such serious matters as foreign intervention in internal affairs.

Those measures of the Chinese Kuomintang government are completely contrary to the will of the Chinese people and they have plunged and will continue to plunge China into civil war, reaction, national disgrace, loss of national rights, colonization and crises of chaos and collapse. In order to rescue the motherland from this calamity, to protect national rights and interests and the dignity of the Political Consultative Conference, the Chinese Communist Party solemnly states: this party will not either now nor in the future recognize any foreign loans, any treaties which disgrace the country and strip away its rights, and any of the above-mentioned agreements and understandings established by the Kuomintang government after January 10, 1946, nor will it recognize any future diplomatic negotiations of the same character which have not been passed by Political Consultative Conference or which have not obtained agreement of this party and other parties and groups participating in the Political Consultative Conference.

Source: *U.S. relations with China with special reference to the period* 1944–1949 (pp. 719–720). (1949). Department of State Publication No. 3573. Washington, DC: Government Printing Office.

elected president, the mandate of heaven with the doctrine of popular sovereignty, and the old type of Confucian scholar-official with "modern men," whether trained in Western-style universities or modern military academies.

The Nationalist Revolution, 1927

It was these modern men—and, with the growth of coeducation in the new schools, some women too—who

carried the revolution to its next stage. The revolution of the 1920s was nominally led by Sun Yat-sen and his revived National People's Party (Guomindang, usually translated as Nationalist Party), but it mobilized much broader and more radical social forces than had the revolution in 1911.

The radicalism grew from several sources. First, there was the disappointment with the results of 1911 as the country fell into political chaos and remained under the domination of the foreign imperialist powers. Second,

there was more rapid growth of the modern sector of the economy, with factories and new social classes—Chinese capitalists and a nascent industrial working class appearing in the coastal cities. Finally, of most direct import, there was the cultural iconoclasm of the New Culture movement, which blamed traditional culture and social habits (Confucianism was a prime target) for China's backwardness. The new universities, notably those in Beijing, were at the center of this intellectual revolution, which emphasized "enlightenment" and a broader concept of revolution.

However, it was two external events that precipitated the politicization of this cultural radicalism. One was the deeply felt disappointment with the Western democracies' decision to let Japan keep control over China's Shandong Province, which the Japanese had taken from Germany during World War I. To Chinese nationalists, this was a gross violation of Woodrow Wilson's principle of self-determination. The Bolshevik revolution in Russia offered an alternative, anti-imperialist vision of national salvation to the pro-democratic capitalist path that had originally attracted Sun Yat-sen. When recruiters from Comintern, Lenin's association of national Communist parties, came to China in the early 1920s, they found eager converts to Marxism and social revolution. They also used financial, military, and political aid to persuade Sun Yat-sen to reorganize his Nationalist Party and launch a renewed revolution against imperialism and warlordism. The newly formed Chinese Communist Party also followed Moscow's guidance by accepting a subordinate position in a revolutionary united front with the Nationalists.

Thus the ideology of the second revolution was much more anti-imperialist in its nationalism and, at least potentially, much more anticapitalist in its social and economic policy, although Sun attempted not to alienate his more conservative supporters in the Nationalist Party and the Comintern insisted that China was ripe only for a bourgeois-nationalist, not a socialist, revolution.

The events of 1927 confirmed the Comintern's thesis in an ironic way. After Sun Yat-sen's premature death from cancer in 1925, tensions grew between the radicals and moderates in the revolutionary movement. In 1926 Chiang Kai-shek (1887–1975), commander of the new



Nationalist Party army based in Guangzhou (Canton), launched the Northern Expedition (1926–1927) against the warlord armies. After successfully liberating the Chang River valley, including the modern metropolis of Shanghai, he broke with his radical allies,

The economic success of Communist China has rested to a significant extent on the physical labor of its people. Here a work gang discusses the day's schedule.



massacred the Communists, and brought the Nationalist Party under his control and formed a new government with its capital in Nanjing.

This marked an abrupt turn away from the radical agenda of the 1920s. Chiang abandoned most of the revolutionary social and economic policies, including Sun Yat-sen's plans for redistribution of land, in favor of militarily imposed political unification and nation building. Chiang and the Nationalist government achieved some success with this course during the Nanjing decade (1927–1937), before a Japanese invasion brought the government and the nation new challenges.

The Communist Revolution, 1949

The Chinese Communist Party had been urban based in the 1920s, organizing industrial workers along conventional Marxist lines. After its defeat in 1927, it moved into the countryside, where Mao Zedong (1893–1976) emerged as the most successful leader of peasant-based revolution. After relocating from south central to northwestern China in the famous Long March of 1935– 1936, a reorganized party under Mao's leadership was positioned to take advantage of the withdrawal of Nationalist government authority from northern China to organize the peasantry in broad areas there to resist the invading Japanese.

During the eight long years of war, while the Nationalists' power and morale waned, the Communists grew in military power and popular support in the countryside of northern China. Combining anti-Japanese nationalism with social and economic improvements for the peasant majority, the Chinese Communist Party, now free of Russian influence, was much more ready for renewed conflict with the Nationalist government after Japan's surrender in 1945. The party's experience during these years—the "Yan'an spirit" of self-reliance, political will power overcoming material difficulties, and faith in the rural masses' innate revolutionary consciousness—was instrumental in gaining popular support and overcoming Nationalist military superiority in the seizure of national power by 1949. It also left a legacy of populist activism and guerrilla war mentality that was not always well suited to solving problems of economic development on a national scale.

The victory of the Communists in 1949 was in part the result of the Nationalist government's collapse from rampant corruption, administrative inefficiency, poor military strategy, and unsolved economic problems such as runaway inflation. But it was also due to the Communists' success in tapping into the main currents of modern nationalist aspirations for a strong, prosperous, and united country as well as the older socioeconomic grievances of the peasantry. That mixture was a potent revolutionary formula that seemed to have potential application throughout much of the Third World.

The Great Proletarian Revolution

In the first two decades of the People's Republic, the Communist Party oscillated between following the Soviet model of a centralized, bureaucratic planned economy and more populist, rural-based strategies for building a modern, industrialized economy and an egalitarian, socialist society. The Great Leap Forward of 1958, with its rural communes, backyard steel furnaces, and frantic mobilization of the masses, was the most dramatic experiment in the Yan'an-inspired unorthodox developmental strategy that Mao favored. A disastrous economic failure, it was followed in 1966 by the Great Proletarian Revolution. Mao, appalled by the loss of revolutionary fervor in the Soviet Union and its new society of entrenched bureaucratic privilege, thought to prevent the same from happening in China by mobilizing frustrated students, low- and mid-level party members, and some elements of the military in a "revolution within the revolution." This would not only remove those high-ranking leaders who were "taking the capitalist road," but also revitalize the entire revolution.

With the help of the politically ambitious commander of the People's Liberation Army, Lin Biao (1908–1971), Mao purged almost all the top party and government leaders, inspired vast numbers of fanatically loyal revolutionary youth (the various bands of Red Guards), and

Chairman Mao on Ideological and Political Purity

Recently there has been a falling off in ideological and political work among students and intellectuals, and some unhealthy tendencies have appeared. Some people seem to think that there is no longer a need to concern oneself with politics or the future of the motherland and the ideals of mankind. It seems as if Marxism was once all the rage but it is currently not so much in fashion. To counter these tendencies, we must strengthen our ideological and political work. Both students and intellectuals should study hard. In addition to the study of their specialized subjects, they must make progress both ideologically and politically, which means that they should study Marxism, current events and politics. Not to have a correct political point of view is like having no soul. . . .

All departments and organizations should shoulder their responsibilities in ideological and political work. This applies to the Communist Party, the Youth League, government departments in charge of this work, especially to heads of educational institutions and teachers.

Source: Mao Zedong, (1966). Quotations from Chairman Mao Tsetung (pp. 142–143). Beijing: Foreign Language Press.

put the country in turmoil for two years. He drew back, however, from completely dismantling the party apparatus that held China together, and the last eight years of his life were characterized by a complicated and somewhat paralyzing covert struggle between the acolytes of the Cultural Revolution's radical socialism and more cautious, economically oriented party bureaucrats.

Postrevolutionary China, 1978 to the Present

With Mao's death in 1976 everything changed, but not right away. After a brief interlude under Mao's chosen heir, Hua Guofeng (b. 1936), by 1978 Deng Xiaoping (1904-1997) emerged as Mao's real successor. Also a veteran revolutionary from the Long March and Yan'an era, Deng abandoned Mao's revolutionary rhetoric, above all the idea of class struggle and continuing revolution, and proceeded to systematically dismantle all of Mao's social and economic policies. Technological expertise replaced mass mobilization as the key to rapid economic modernization, and this meant both educational reform (no more politics before knowledge) and opening the country to advanced scientific technology from the West. Furthermore, economic incentives replaced socialist ideology as the motivator for economic growth. The communes were broken up into family farms. Private enterprise, at first on a small scale, but then on a large scale, was revived, foreign capitalist investment encouraged, and China embarked on the kind of export-driven industrialization that Japan, Taiwan, and South Korea had pioneered so successfully. As market economics gradually eroded the position of stateowned economic enterprises and consumerism spread throughout society, China became an integral part of a globalized capitalist economy. By 1998, little remained of Mao's socialist economy and nothing of his campaign to eradicate the capitalist mentality.

Did all this mean that the revolution was over, or was it, in Deng Xiaoping's formulation, "socialism with Chinese characteristics"? The official ideology remained socialist, and Communism the ultimate goal. But for the present capitalism is being allowed to develop its full productive potential, and successful capitalists are being recruited into the Chinese Communist Party. But the party still retains its absolute monopoly on political power, Deng himself sanctioning the ruthless suppression of the most serious challenge in the Tiananmen crisis of 1989. Whether that makes the government still a revolutionary regime or just another one-party dictatorship is a moot point. Certainly the radical and violent upheavals of China's revolutionary past seem to be history, for now anyway.

The Chinese Revolution in Global Perspective

All great revolutions reverberate far beyond national borders, and the Chinese revolution was no exception. For a time, mainly in the 1960s and 1970s, China appeared

Agricultural Cooperatives in the People's Republic of China

The formation of agricultural cooperatives was a major change effected by the new Communist government in China in the 1950s. The following text (from the Model Regulations for an Agricultural Producers' Cooperative) setting forth government policy states the general principles for collectives and also membership criteria.

Model Regulations

(Adopted on June 30th, 1956 by the First National People's Congress of the People's Republic of China at its third session)

GENERAL PRINCIPLES

Article 1. An agricultural producers' cooperative (the term as used in this document means the agricultural producers' cooperative of advanced type) is a socialist, collective economic organization formed on a voluntary and mutually beneficial basis, with the guidance and help of the Communist Party and the People's Government.

Article 2. The agricultural producers' cooperative, in accordance with socialist principles, converts the chief means of production owned privately by its members into the collective property of the cooperative. The members are organized for collective work, and the cooperative applies the principle of "from each according to his ability, to each according to his work," giving equal pay for equal work, irrespective of sex or age.

MEMBERSHIP

Article 7. All working peasants who have reached the age of 16 and other working people able to take part

to have inherited the mantle of Marxist world revolutionary leadership from an increasingly ossified Soviet Union. This was especially evident in Third World peasant societies, where the Chinese Communists vigorously promoted their experience with peasant-based revolution as a way to break free from capitalist imperialism and achieve rapid modernization. Lin Biao's short essay "Long Live the Victory of People's War!" (1965), succinctly expressed this ambition.

However, Maoism and the Chinese model have had little real impact on political evolution in the Third World. The Naxallites in Bengal failed in attempts to import Maoist-style revolution into India. The most successful practitioners of "people's war," the Vietnamese Communists, depended on the Soviet Union for most of their military hardware, and in any event harbored a deep historic distrust of Chinese. The Khmer Rouge in Cambodia came the closest to being followers, but their ruthlessness exceeded anything in the Chinese experience, and their failure was more absolute. In Africa, Marxist movements leaned towards the Soviet Union. To be sure, there were some echoes of Maoism in Peru's Shining Path in the 1980s, and more recently rural insurrectionists in Nepal have proclaimed themselves Maoists. But on a global scale, it now seems that the Chinese model was much more specific to China's particular historical experience than relevant to peasant societies elsewhere.

There is also the overriding reality that since 1949 the percentage of peasants in the world's total population has continued to drop, until it is now well under 50 percent. With the poor and downtrodden of the twenty-first century more likely to live in urban shanty towns than on the land, how relevant is a rural-based revolutionary strategy? Similarly, the model of radical egalitarianism that appealed to young Western radicals in the sixties and seventies has been almost completely discredited by the revelations of Cultural Revolution atrocities and post-Mao China's cozy relations with the international capitalist order.

Has the revolution left any legacy? Perhaps just the Maoist insistence that oppression and exploitation inevitably arouses resistance. The Chinese revolution was one of the great examples of such resistance, and it may yet be the inspiration for more.

Ralph C. Croizier

See also Mao Zedong; Revolutions, Communist; Sun Yat-sen

in the work of the cooperative may be admitted as members. Applications for membership must be voluntary and approved by a general meeting of members' delegates.

The cooperative shall make every effort to take in as members the dependents of revolutionary martyrs, of soldiers and government workers, and disabled as well as demobilized servicemen (including the military personnel who came over from the Kuomintang armed forces and those who accepted the peaceful liberation of the regions under their control but who have since been demobilized and returned to the countryside). The aged, the weak, the orphaned, the widowed and the disabled should also be admitted as members. New settlers should also be drawn into the cooperative.

Source: Geddes, W. R. (1963). Peasant Life in Communist China: Monograph #6 (p. 56). Ithaca, NY: Society for Applied Anthropology.

Further Reading

Bergere, M. (1998). Sun Yat-sen. Stanford, CA: Stanford University Press. Cheek, T. (Ed.). (2002). Mao Zedong and China's revolutions. New York: Palgrave.

- Dirlik, A. (1989). The origins of Chinese Communism. New York: Oxford University Press.
- Fairbank, J., & Twitchett, D. (Eds.). (1983). The Cambridge history of China. Cambridge, UK: Cambridge University Press.

Fitzgerald, J. (1996). Awakening China: Politics, culture, and class in the nationalist revolution. Stanford, CA: Stanford University Press.

Joseph, W. (Ed.). (1991). New perspectives on the Cultural Revolution. Cambridge, MA: Harvard University Press.

Revolution—Cuba

The term Cuban revolution has really two meanings. The first refers to the actual military campaign that began in December 1956 with the landing by Fidel Castro and close to one hundred men in Oriente Province and triumphed in January 1959 with the victory of the rebel army. The second Cuban revolution began immediately after Fidel Castro's entry into Havana and at least officially continues to this day (December 2003).

Despite its retroactive symbolic and political importance, the actual military struggle of the 1950s was quite limited. Following Fulgencio Batista's coup d'état of 10 March 1952, Fidel Castro emerged as one of the leaders of the opposition to the dictatorship. His status was confirmed by the disastrous attack he led on the Moncada Barracks on 26 July 1953. The romantic failure of this attempt and his subsequent trial (during which he made his famous speech, "History Will Absolve Me") made the twenty-sevenvear-old Castro a political star. Following his pardon and subsequent exile, Castro organized a group of men (Movimiento 26 de Julio) to lead a guerrilla war on the island. The group (including his brother Raul and the Argentine Ernesto "Che" Guevara) was practically destroyed by regime forces upon landing. Thanks to a great deal of luck, some favorable media coverage, Castro's considerable charisma, and the ineptness of the dictatorship's army and police, the small band was able to survive 1957 in the Sierra Maestra mountain range in Cuba.

Beginning in 1958, the rebel army began more ambitious, but still quite limited, military offensives culminating in the battle of Santa Clara of 17 December 1958. Partly due to the appeal of the rebels and the venality and atrocities of the regime, popular sentiment and even that of the American embassy had overwhelmingly gone against Batista by midyear. On New Year's Eve Batista resigned and the government fell into Castro's lap. From the beginning, the limited nature of the conflict produced debates on the relative contribution made by the rebels in the *sierra* and more middle-class opponents in the city or *llano*.(Despite later attempts to emphasize its role, labor was either a fairly passive actor or actually on Batista's side.) Due to later ideological splits this historiographical debate came to be imbued with considerable fervor and importance. Despite these arguments, the important lesson to be taken from this first part of the Cuban revolution was that authoritarian regimes such as Batista's were not so much defeated as they collapsed from their own contradictions and inadequacies. A similar pattern would follow in Nicaragua and Iran in 1979.

The Second Revolution

The second stage of the Cuban revolution began with the traditional dynamics of postrevolutionary politics: the

breaking of alliances, divisions between moderates and radicals, postponement of elections, and the tightening of power by those with the best access to violence. While large parts of the opposition to Batista had been motivated by hatred of the dictatorship, many among Castro's group also sought to address the social inequities rampant in Cuba. While the island did possess a large (by Latin American standards) middle class and Havana appeared to be a first world city, the gulfs between white and black, rich and poor, and town and country were massive. The revolutionary regime faced the classic quandary of wishing to initiate dramatic social changes while respecting the constraints imposed by electoral democracy. Led by the Castro brothers, the regime chose to privilege the former.

By 1961, indications of a more socialist policy had produced the exile of large parts of the middle class and the active opposition of the United States. Having established his control over the armed forces, Castro was able to openly express his alliance with the USSR and defeat an invasion by U.S.-backed exiles at the Bay of Pigs in April 1961. The agreement between the United States and the USSR following the October 1962 missile crisis guaranteed the regime's longevity.

The next four decades saw the revolution proceed through a series of stages. In the first, political authority was further consolidated by Fidel Castro and the Cuban Communist Party. Until 1970, Cuba resisted the "Sovietization" of many aspects of the economy and the society, but following the disastrous "ten million ton" sugar harvest of that year, the regime's autonomy appears to have declined. Over the next twenty years, Cuba behaved fairly much like the standard Soviet satellite with two critical exceptions: It had a much more acrimonious relationship with the United States, and it also followed an adventurous foreign policy, with Cuban military involvement in Angola and Ethiopia and considerable aid presence in many parts of Latin America and Africa. The policies of the



Che Guevara remains a powerful revolutionary symbol around the world. Here, a banner with his photo is on sale in Athens, Greece, in 2003.

regime remained fairly stable and the population enjoyed an increasing standard of living (at least as measured in education, health, and basic nutrition, if not consumer goods). Certainly by the mid-1980s, the revolution was widely admired as a social success (if a political and economic disappointment). The one major crisis involved the departure of over 100,000 Cubans from the port of Mariel in the spring of 1980.

Following the collapse of the Soviet Union in 1991, the island entered the euphemistically named "Special Period." This saw declines in production and consumption by nearly half and a real social crisis with hunger not uncommon by 1993–1994. The regime adopted a limited opening to global capital (but not capital from the United States), which produced a significant improvement in living conditions. Reliance on tourism and remittances (now the two biggest economic sectors), however, brought with it social difficulties. Cuba, for example, has not experienced a civil rights movement or even an oppositional racial discourse. In many ways, racial relations on the island remain frozen in the 1950s, with a significant decline in the black-white gap in living standards but a clearly racist culture and a continued monopoly by whites in high government positions. This also means that whites predominate in the sought-after jobs in the tourist sector. Since the exile population is overwhelmingly white, remittances are also distributed in a racially nonsymmetrical way. This has created something of a "dollar apartheid" in Havana.

Outlook

Whether the revolution, as a political regime or as a social system, can survive the inevitable death of Fidel Castro is not clear, but the level of institutionalization of power is relatively low. Given the proximity of the now wealthy exile community and U.S. interests, it is likely that the revolution will not survive in its current state. Perhaps the most significant disappointment of the revolution is that it was unable to escape the historical tendency toward "sultanistic regimes" led by *caudillos*. In at least this way, the Cuban revolution did not represent a new stage of history, but merely a slightly different variant of an old theme in Latin America.

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See also Guevara, Che; Revolutions, Communist

Further Reading

- Centeno, M., & Font, M. (1997). *Toward a new Cuba?* Boulder, CO: Lynne Rienner.
- Eckstein, S. (2003). Back from the future. New York: Routledge.
- Fernández, D. (2000). Cuba and the politics of passion. Austin: University of Texas Press.
- Pérez, L. (1995). Cuba: Between reform and revolution. New York: Oxford University Press.
- Thomas, H. (1977). Cuba: The pursuit of freedom. New York: Harper & Row.



Revolution— France

The troubles that led to the French Revolution began \blacksquare with the Seven Years' War (1756–1763), a worldwide struggle in which France lost its colonial holdings in North America and India to Great Britain and suffered defeat on the European continent at the hands of Britain's powerful German ally, the kingdom of Prussia. The expenses of war had required King Louis XV (1710-1774) to levy new taxes on his population; and since the nobles were among the richest subjects in the kingdom, he refused to exempt them, despite their historical claims to such fiscal privileges. Paradoxically, this treatment contributed to the education of the king's subjects in egalitarianism. By treating them as equals, the king taught them to think of themselves as equals. Initially the nobility sought only to preserve its own privileges, yet when they saw that the monarchy was inflexible on matters of taxation, they demanded a say in government, thus echoing the Anglo-American principle of "no taxation without representation." In the process they whittled away at absolutism, or the king's right to rule without checks or balances, and prepared the realm for republican government.

Toward a Constitutional Monarchy

In addition to the political arguments raised by fiscal crisis of the Seven Years' War, defeat at the hands of the British provoked a desire for revenge, both at the royal court and in the metaphorical court of public opinion. The American Revolution of 1776 provided the awaited opportunity, and General Washington's victory at Yorktown (1781), which would have been impossible without French support on land and at sea, inflicted a wound on France's great rival. Yet this victory was as expensive as the defeat in the prior war had been, and though Jacques Necker, the finance minister of Louis XVI (1754–1793), had made it appear as though the state's coffers were well

stocked, under his successor, Charles Alexandre de Calonne, it became clear that the kingdom was approaching bankruptcy. Calonne presided over the Assembly of Notables, a hand-picked body of nobles, clergymen, and a few wealthy commoners who were expected to approve his plan for a more participatory government in exchange for the privileged classes' greater shouldering of the tax burden. This plan, which involved elected assemblies for some provinces, was a tacit abdication of absolutism. Still, the Assembly of Notables did not consider itself qualified to approve the revolutionary measures, and instead demanded that the king convene a more venerable and representative body for this purpose: the Estates General. After widespread unrest during the summer of 1788, the king called a meeting of that esteemed group for May 1789 at the royal capital of Versailles.

The Estates General consisted of provincial delegates from the three traditional estates, or classes: the First Estate (the clergy), the Second Estate (the nobility), and the Third Estate (the commoners). Yet it had not met since 1614, after which the increasingly powerful absolute monarchs had succeeded in suppressing this historical check on royal authority. Consequently it was unclear how the three estates would meet, deliberate, and vote. Most nobles favored the procedure of 1614, according to which the estates met separately and voted by order. Yet many members of the Third Estate perceived this as a form of disenfranchisement, since the privileged nobles and clergy would often vote together against the Third Estate. To remedy this injustice some commoners called for voting by head (together as one body) and a "doubling of the Third," in other words, doubling its representation, measures which would have provided parity between the Third Estate and the other delegates. A more radical proposal came from the Abbé Sieyes, a priest who nevertheless sympathized with the Third Estate and who urged its members to break from the Estates General and declare themselves a national assembly. Sieves argued that the Third Estate comprised over 99 percent of France's population and was engaged in its most useful work. The privileged classes, by contrast, were small and parasitical. Therefore the Third Estate should The young are generally full of revolt, and are often pretty revolting about it. • FRANCOIS LA ROCHEFOUCAULD-LIANCOURT (1747-1827)

make the laws by which the nation would be governed. Although most delegates were initially reluctant to adopt such a radical stance, the intransigence of the nobility and the refusal of the king to break the deadlock made the Third Estate increasingly sympathetic to his position.

The Constituent Assembly and the First Constitution

On 17 June a group of deputies from the Third Estate followed Sieves's advice and declared themselves the National Assembly, the sole body authorized to make the nation's laws. They invited members of the other estates to join them, but only as citizens representing the nation, not as delegates speaking on behalf of their castes. Strictly speaking, this was the truly revolutionary act of the French Revolution, since there was no legal precedent for acting in such a manner. (The subsequent storming of the Bastille prison fortress by Parisian crowds on 14 July 1789 showed the force of popular anger, which posed a threat both for the Third Estate deputies and the defenders of the old order, but it was not in itself a revolutionary act.) On 20 June the revolutionary assembly found the doors of its meeting hall locked and proceeded to the most convenient space available, an indoor tennis court. There the delegates took their famous oath not to disband until they had written a constitution for France. After some hesitation, the king accepted this act of defiance, but ordered the deputies of the other two estates to join the National Assembly, thus creating a more conservative body than would have emerged from the initial revolutionary assembly alone.

Indeed, the National Assembly, otherwise known as the Constituent Assembly, created a highly undemocratic constitution, which was completed in September 1791. By establishing stringent property qualifications for voting rights and still higher qualifications for eligibility for public office, the deputies ensured that ordinary people would have little say in the laws that governed them. Only one-sixth of men over the age of twenty-five were eligible to vote. Women, servants, itinerant workers, and slaves (until their emancipation in February 1794) were excluded from political participation. The contradiction between the discriminatory measures of the lawmakers and their egalitarian rhetoric—especially the Declaration of the Rights of Man and Citizen, passed in October 1789—fueled popular unrest. Consequently, alongside the juridical revolution of the legislature, a popular revolution raged in the streets of Paris and other cities, as well as in the countryside.

Despite the limits the Constituent Assembly attempted to place on the Revolution, and despite the prominent role of the king in what was essentially a constitutional monarchy, Louis XVI was averse to the Revolution. He was particularly offended by its nationalization of church property, an expedient designed to back a new paper currency, and its reorganization of the clergy into civil servants required to take an oath to the nation. He therefore plotted to escape with his family to the Austrian Netherlands (today Belgium), where royalist forces would protect him until such time as the Revolution could be suppressed. He was captured by the revolutionary national guard near the border and returned to Paris on 20 June 1791. His attempted flight further discredited the idea of constitutional monarchy and emboldened radicals determined to transform their country into a republic.

Warfare Abroad and the Convention at Home

The delicate monarchical system survived little more than a year after the king's abortive flight. The Constituent Assembly disbanded following the fulfillment of its oath to write a constitution for the nation, and in October 1791 a Legislative Assembly was elected. While this legislature considered questions of domestic importance, it became increasingly preoccupied with international matters. A party of radical "patriots" sought war against Austria and Prussia, countries that were harboring royalist émigrés and issuing hostile statements regarding revolutionary developments in France. The patriots found unlikely allies in conservative royalists within the court who encouraged the march to war for very different reasons. The latter expected an Austro-Prussian victory over the French army, many of whose officers had emigrated at the outset of the Revolution. Thus in April

1792 the king asked an eager Legislative Assembly to declare war on Austria, with other European belligerents joining the fray in the succeeding months.

War transformed the Revolution profoundly. Not only did the revolutionaries use the threat of foreign troops to whip citizens into a patriotic frenzy; the mobilization of troops created a volatile situation in which armed men might turn their weapons against real or perceived domestic threats. As volunteers from the provinces came to Paris to prepare for assignment to the front, they encountered the most radical elements of the urban revolution. They heard the speeches and read the newspapers of the sans-culottes, those "without breeches" (i.e., without the stylish pretensions of the rich), and before taking on Austrian troops they prepared to fight the aristocrats in their midst. Convinced that neither the king nor the assembly would bring liberty and equality, the most radical revolutionaries, now fortified with weapons, mounted an insurrection on 10 August 1792.

After a bloody battle between insurgents and the king's personal guard, the insurgents emerged victorious. The royal family found itself under arrest, and the Legislative Assembly, now fearful of the forces it had summoned into motion, abolished the undemocratic Constitution of 1791 and called for the election of a new legislature known as the Convention. Although women were still excluded from the vote, and indeed would not obtain it in France until 1946, the elections of 1792 were the first application of the principle of "one man, one vote" in modern world history.

A Republic Is Born

Unfortunately, this dramatic movement in the direction of democracy did not solve the country's political problems. During the month and a half between the fall of the monarchy and the first meeting of the Convention, France was governed loosely by the outgoing Legislative Assembly and a self-proclaimed municipal government known as the Commune. In the first week of September, in anticipation of an Austrian march on Paris and an impending massacre of revolutionaries by brigands lurking in the city's prisons, self-appointed judges presided over the

Charles Dickens: Commentary on the French Revolution in A Tale of Two Cities

Charles Dickens (1812–1870) was one of the most prolific and popular authors of the nineteenth century by age twenty-four, when he published Pickwick Papers (1836). It has been estimated that 10 percent of the population in Victorian England were Dickens readers. In A Tale of Two Cities (1859), Dickens provides a stirring account of a popular uprising during the French Revolution, in this case led by the famous, ever-knitting Madame Defarge, whom Dickens introduces in the first few pages of his classic work.

Saint Antoine had been, that morning, a vast dusky mass of scarecrows heaving to and fro, with frequent gleams of light above the billowy heads, where steel blades and bayonets shone in the sun. A tremendous roar arose from the throat of Saint Antoine, and a forest of naked arms struggled in the air like shriveled branches of trees in a winter wind: all the fingers convulsively clutched at every weapon or semblance of

judicial murder of over a thousand prisoners, many of them priests whose only crime had been refusal to take the obligatory oath to the nation. When the feared invasion by foreign armies failed to materialize and Paris calmed down, the newly elected Convention, which declared France a republic early on 22 September, was nevertheless preoccupied with the troubling question of the king's fate. After divisive debates during the fall and winter of 1792–1793, on 21 January 1793, Louis XVI went to the guillotine, a decapitating instrument widely hailed as democratic because it provided an equal death for all culprits. (Prior to the Revolution beheading had been a privilege reserved for the high-born; more painful executions had been the lot of the common folk.)

For many observers in France and around the world, this act of regicide took the Revolution beyond the pale. For devout Catholics in the Vendée region in western France, the killing of the monarch, whom God had chosen to rule over the kingdom, was not merely unjust; it was sacrilege. Partly as a result of this outrage, the revolutionary government found itself involved in a proweapon that was thrown up from the depths below, no matter how far off.

Who gave them out, whence they last came, where they began, through what agency they crookedly quivered and jerked, scores at a time, over the heads of the crowd, like a kind of lightning, no eye in the throng could have told; but, muskets were being distributed so were cartridges, powder, and ball, bars of iron and wood, knives, axes, pikes, every weapon that distracted ingenuity could discover or devise. People who could lay hold of nothing else, set themselves with bleeding hands to force stones and bricks out of their places in walls. Every pulse and heart in Saint Antoine was on high-fever strain and at high-fever heat. Every living creature there held life as of no account, and was demented with a passionate readiness to sacrifice it.

As a whirlpool of boiling waters has a centre point, so, all this raging circled round Defarge's wine-shop, and every human drop in the caldron had a tendency to be sucked towards the vortex where Defarge himself,

tracted civil war in the Vendée, one that would kill at least 100,000 people. Civil war elsewhere in France, particularly in the south, resulted from conflict between centralizing Jacobins, who wished to see Paris take the lead in governing the country, and decentralizing "federalists," who sought greater autonomy for the provinces. Both sides supported the republic and opposed monarchy, but they fought each other as bitterly as revolutionaries fought royalists.

The Reign of Terror

War, both foreign and domestic, provided justification for the revolutionaries' most repressive laws. On the strength of the belief that traitors were endemic, the Convention passed a series of laws depriving suspects in political cases of due process and leading to thousands of judicial murders known as the Reign of Terror. Yet this tyrannical development was not simply a top-down policy. It had its roots in popular fears and resentments. In September 1793, during one of a series of insurrections that characterized the Revolution, armed crowds demanded the already begrimed with gunpowder and sweat, issued orders, issued arms, thrust this man back, dragged this man forward, disarmed one to arm another, laboured and strove in the thickest of the uproar.

"Keep near to me, Jacques Three," cried Defarge; "and do you, Jacques One and Two, separate and put yourselves at the head of as many of these patriots as you can. Where is my wife?"

"Eh, well! Here you see me!" said madame, composed as ever, but not knitting to-day. Madame's resolute right hand was occupied with an axe, in place of the usual softer implements, and in her girdle were a pistol and a cruel knife.

"Where do you go, my wife?"

"I go," said madame "with you at present. You shall see me at the head of women, by-and-by."

"Come, then!" cried Defarge, in a resounding voice. "Patriots and friends, we are ready! The Bastille!"

Source: Dickens, C. (1981). A tale of two cities (pp. 198-199). New York: Bantam Classics. (Original work published 1859)

punishment of "traitors," who were believed to be profiting from the war and hoarding grain while the people went hungry. The Convention responded with the proclamation, "Terror is the order of the day." Institutionally the Terror was centered in the Committee of Public Safety, a group of twelve men who technically reported to the Convention but who for ten months dominated it. Maximilien Robespierre (1758–1794), the most infamous member of this committee, went to the guillotine himself when his enemies, anticipating their own execution, denounced him before the Convention and succeeded in having him prosecuted for treason. Shortly after Robespierre's death on 28 July 1794, the legal apparatus of the Terror was dismantled. At least fourteen thousand people had fallen victim to it during less than a year.

The following year the Convention passed a new constitution, known as the Constitution of the Year III. (The revolutionaries had established a new calendar beginning with the declaration of the Republic in September 1792.) This constitution abolished universal male suffrage and restored property qualifications for political rights. It also dispersed power so widely between a five-man executive branch (the Directory) and a bicameral legislature, neither of which was responsible to the other, that deadlock was the inevitable result. The only way to effect significant political change under the Directory regime (1795-99) was to mount coups d'etat. Thus civilians made alliances with generals, who were increasingly powerful as France reversed early losses in the war with European rivals and began to conquer significant portions of Italy, Germany, and the Low Countries. Napoleon Bonaparte, who overthrew the Directory in the coup d'etat of 18 Brumaire Year VIII (9 November 1799) and ruled as First Consul (and later as emperor) of a new, autocratic regime, was only the last and most successful in a series of military men who participated in such anticonstitutional adventures.

A Continuing Legacy

The French Revolution left an ambiguous legacy. It permanently abolished legal privilege based on birth and guaranteed freedom of religion. (France was the first European country to recognize the civic equality of Jews and Gentiles.) Other gains were more tenuous. With the exception of the election of the Convention, revolutionary France failed to provide real democracy, as either property qualifications or the atmosphere of political terror prevented the voice of the people from being heard. The abolition of slavery in 1794 was reversed by Napoleon in 1803, and permanent abolition passed only during the revolution of 1848. Democracy, moreover, was limited to men, though the principle of equality inherent in revolutionary thinking became a central feature of the female suffrage movement and French feminism more generally. And the advantages of the Revolution must be seen in the context of the pain and suffering produced by denunciations, purges, executions, and war. Whether the gains of the Revolution might have come to pass less violently, in other words, whether the Revolution was necessary, has been and is still much debated. Whatever one's position, the Revolution undoubtedly cast a long shadow over the subsequent two centuries, not only in France but around the world.

When I despair, I remember that all through history the way of truth and love has always won. There have been tyrants and murderers and for a time they seem invincible but in the end, they always fall. • Монандав Gandhi (1869–1948)

Subscribers to revolutionary doctrines as well as conservatives, whose ideology was born of a determination to prevent revolution, would not be who they are if it were not for the French Revolution.

Ronald Schechter

See also Napoleonic Empire; Revolution—Haiti

Further Reading

- Blanning, T. C. W. (1997). The French Revolution: Class war or culture clash? New York: St. Martin's Press.
- Jones, P. M. (1995). Reform and revolution in France: The politics of transition, 1774–1791. Cambridge, UK: Cambridge University Press.
- Sagan, E. (2001). Citizens and cannibals: The French Revolution, the struggle for modernity, and the origins of ideological terror. Lanham, MD: Rowman & Littlefield.
- Stone, B. (2002). Reinterpreting the French Revolution: A global-historical perspective. Cambridge, UK: Cambridge University Press.
- Tackett, T. (1996). Becoming a revolutionary: The deputies of the French National Assembly and the emergence of a revolutionary culture. Princeton, NJ: Princeton University Press.

Revolution—Haiti

The revolution in Haiti began in 1791 and ended in 1804 with the establishment of the Republic of Haiti. It is the only slave revolt in history that led to founding of an independent nation. The Republic of Haiti was the second republic (after the United States) established in the Americas.

Haiti is a small island nation that occupies about onethird of the island of Hispaniola in the Caribbean Sea. It was claimed for Spain by Columbus in 1492 and became a Spanish colony. The indigenous Indian population was soon wiped out by disease and the hardships of slavery and was replaced by slaves imported from West Africa. In 1697 Hispaniola was divided into French and Spanish sectors, with the French colony called Saint Domingue. Saint Domingue quickly became France's richest colony, with a large slave force working on plantations to produce sugar, coffee, cocoa, indigo, tobacco, cotton, sisal, and other agricultural products, all of which flowed exclusively to France. At the time the revolution began, the colony's population comprised about 20,000 whites, 30,000 free people of color (including many of mixed African and French ancestry), 500,000 black slaves, and at least 10,000 Maroons (escaped slaves who lived in settlements in the mountains). Slaves outnumbered non-slaves by about ten to one.

The start of the revolution is conventionally dated to 21 August 1791, but the origins of the revolt go back further in time and are complex. First, people in the colony were already divided about their allegiance to France. For a number of years prior to 1791, many whites and free people of color had been becoming more and more disenchanted with French rule and especially French control of the economy, with all goods flowing to and from France. However, there were also divisions in both groups over loyalty to France, with some remaining strong supporters of French rule. Second, the slave system in Haiti was especially harsh (slaves in other colonies feared being sent there), and there had been frequent slave revolts, while the number of slaves fleeing to Maroon settlements in the mountains was increasing each year. Third, the French Revolution of 1789 weakened French control and created a cry for freedom in Haiti. Finally, Haitian slaves had developed a rural culture of their own centered on their religion (vodun) and extended families. Although often depicted as witchcraft, vodun was and remains a religion with its own set of beliefs, practices, and religious specialists.

What history now sees as the revolution began following a vodun ceremony in which a vodun priest named Boukman and several other men were designated leaders of the revolt. The bloody and destructive revolt pitted black slaves against white plantation owners. Interventions by the French failed, and whites and mulattos fled to the north. Some calm prevailed in 1796 when the religious healer Toussaint Louverture (c.1743–1803) took control in the north and restored order and stimulated some economic activity. In 1801 Napoleon sent 34,000 troops to the island under the command of his brotherin-law, Charles Leclerc. This force failed to retake the colony, although Louverture was taken to France where



he died the next year. The following three years were marked by unrest, rebellions, massacres, and general civil war. On 1 January 1804, a new leader, Jean-Jacques Dessalines (c.1758–1806), declared the independent Republic of Haiti. In 1806 Dessalines was assassinated, leading to renewed north-south civil war, with Henry Christophe (1767–1820) rising to power. Christophe instituted authoritarian rule, and fighting continued on and off until Christophe's death by suicide in 1820.

The years of revolt, massacres, and civil war left Haiti in a dismal state. At least 150,000 people died during the revolution. The new nation had no money, and its plantations and plantation system were in ruins. Land was distributed to individual farmers, but many of the plots were too small to be economically viable. The republic was short-lived and was followed by a series of dictatorships: Between 1843 and 1915 Haiti had twenty-two leadership changes. Most of the people remained extremely poor, although there was a small, rich elite that ruled from the north. Mulattos fled to the north and dominated trade, collecting taxes on both imports and exports.

Haiti's situation was not helped by the hostility of the major world powers—the United States, Britain, Spain, and France—all of whom still benefited from slavery and saw the successful revolt as a threat to their coercive labor systems. The United States was right in this regard, as many slave revolts in the United States were modeled on those in Haiti. Haiti also became the focus of debates about the wisdom of emancipation for slaves and the ability of former slaves to rule themselves. The political instability and weak economy also meant that Haiti remained agricultural (even into the twenty-first century), while Europe and other nations in the Americas industrialized.

In 1838 France granted Haiti recognition after Haiti agreed to pay France 150 million French francs, an outlay that further damaged Haiti's already weak economy. The United States offered recognition in 1862; it occupied the island from 1915 to 1934 following years of Haitian political instability. After series of weak governments in the following decades, the nation came under the dictatorial rule of the Duvalier family from 1957 to 1986. Since then, it has remained poor and has continued to experience political instability, despite or because of (depending on one's point of view) the intervention of the United States. Yet despite its many serious problems, Haiti has developed a rich artistic and literary tradition that is recognized around the world.

David Levinson

See also French Empire; Labor Systems, Coercive; Napoleonic Empire; Slave Trades; Sugar

Further Reading

- Bryan, P. E. (1984). The Haitian revolution and its effects. Kingston, Jamaica: Heinemann.
- Fick, C. E. (1990). *The making of Haiti*. Knoxville: University of Tennessee Press.
- Oriol, M. (1992). Images de la revolution a Saint-Domingue (Images of the revolution of Saint Domingue). Port-au-Prince, Haiti: Editions Henri Deschamps.
- Prioce, R., ed. (1996). Maroon societies: Rebel slave communities in the Americas. Baltimore: Johns Hopkins University Press.

Revolution—Iran

The Iranian Revolution of 1979 was a defining moment in modern Iranian history, a precursor to bringing Islam and Shia (Muslims of the branch of Islam comprising sects believing in Ali and the prayer leaders as the only rightful successors of the Prophet Muhammad) clerics into the center of political authority, an unprecedented notion in the Middle East and the Islamic world of modern times. The Iranian Revolution had its origins in several preconditions that were intertwined with other issues: political oppression, modernization/ Westernization of Iran, and foreign dependency, eventually leading to the collapse of Muhammad Reza Shah's political order and its replacement by an Islamic republic.

Political Oppression

Political oppression in Iran can be traced to Reza Shah, founder of the Pahlavi dynasty. His autocratic role, particularly after 1930, is easily identifiable as an undermining of the constitution, especially when one notes how the deputies of the Majles (Parliament) were handpicked and how the appointments of the ministers were based upon personal loyalty to the shah (sovereign), not to the general public. In addition, events brought about change to the political atmosphere of Iran during World War II. Germany invaded the Soviet Union, and Iran, having already declared neutrality, refused the Soviet and British request that the ally forces be allowed to transport lend-lease material through its territory to the Russians. This refusal by Iran turned the request into an ultimatum and eventually led to invasions and occupation by England and Russia. Reza Shah was forced into exile and replaced with his twenty-two-year-old son, Muhammad Reza Shah.

The young shah's lack of political experience inaugurated a period of political freedom that subsequently produced organized political parties with the authorization to publish their own newspapers, naturally giving birth to a new era of ideological rivalry between political contenders. This rivalry ultimately underwent a series of internal conflicts among the nationalists who dominated the Majles under the leadership of Dr. Mohammad Mosaddeq and the pro-shah faction. To consolidate the nationalists' position in the government, Dr. Mosaddeq in 1949 created the National Front, a coalition representing different groups and political parties. Its primary goal was to restrict foreign interests, particularly the British domination and exploitation of the Iranian oil industry, as well as to safeguard the 1906 constitution that restricted the power of the monarch. The National Front's popularity reached great heights when Dr. Mosaddeg gained the approval of the Majles to nationalize the Anglo-Iranian Oil Company in 1951 and soon after became the prime minister of Iran. British officials called for a boycott of Iranian oil. Through worldwide diplomatic maneuvers, major oil companies boycotted Iranian oil. This boycott nearly brought the Iranian economy to a standstill. The economic hardship of the early 1950s caused a severe strain on the implementation of all Mosaddeq's promised domestic reforms and, in turn, commenced a decline in his popularity.

Fearing the spread of nationalization of domestic industries throughout the Middle East, along with the spread of Communist ideology in Iran, particularly through the popularity of the Tudeh (the masses) Party, the U.S. CIA and British intelligence executed a military coup d'etat against Dr. Mosaddeq's government in August of 1953. After the coup the shah was returned to Iran from his self-exile and resumed control over the nation. He also settled the oil dispute through a consortium of eight European and U.S. companies by agreeing to fifty-fifty profit sharing by the Anglo-Iranian Oil Company. With the throne restored and the support of the United States, the shah began to take extreme measures to ensure the longevity of his dynasty. The first step toward this goal was the creation of an internal security force, with the help of the U.S. CIA and FBI, known as "SAVAK" (Sazeman-e Amniyyat va Ettela'at-e Keshvar or Organization for State Intelligence and Security). Its aim, for all intents and purposes, was to crush and demoralize opposition of any political nature, manipulate the behavior of all citizens, and control and redirect public opinion in the interest of the regime.

In 1958, in response to mounting pressure for democracy, the shah created a two-party system consisting of the Melliyun (Nationalist) and Mardom (People) parties, neither of which had the worthiness of an opposition party. However, in 1975 the two-party system merged into a single-party system known as "Rastakhiz" (resurgence), with membership required for all government employees and other people eligible to vote. Elections to the Majles were held; however, candidates had to have approval of SAVAK. Therefore, true representation of the people, via parliament, never emerged under the shah's regime. Mass censorship of television broadcasting, newspaper circulation, books, and journals and imprisonment of intellectuals, students, and trade unionists boiled over into total political frustration, resulting in mass demonstrations, strikes, and armed resistance against the shah's regime by the late 1970s.

Modernization/ Westernization

The oil settlement of 1953 gave the shah the revenue to continue his father's aspirations of modernization. Since the First Seven-Year Plan (1948–1955) did not achieve

The failure of women to produce genius of the first rank in most of the supreme forms of human effort has been used to block the way of all women of talent and ambition for intellectual achievement in a manner that would be amusingly absurd were it not so monstrously unjust and socially harmful. • ANNA GARLIN SPENCER (1851–1931)

its expectation, the shah initiated a second Seven-Year Plan which began in 1955. However, due to corruption and mismanagement, the plan did not achieve its expected goals. To demonstrate his popularity among Iranians and decrease the pressure for reforms from the administration of U.S. President John F. Kennedy, the shah announced his six-point program popularly known as the "White Revolution" (or the "Revolution of the Shah and the People") in 1963. It encompassed land reform, the sale of government-owned factories to finance land reform, women's suffrage, the nationalization of forests, a national literacy corps, and profit-sharing plans for recruits in industry.

The goals of land reform were twofold: to gain support from the peasants living in agricultural villages of Iran and to eliminate the big landlords as an influential class. Although some big landlords lost their prominence, many retained their large holdings and became modernized commercial farmers and eventually were incorporated into the shah's political elite. Land reform also failed to give sufficient amounts of land and resources to the majority of peasants; thus, a massive migration to the cities began; the cities were not equipped to cope with the massive influx.

The national literacy corps was another important component of the White Revolution. The shah realized that for Iran to become modernized, the people of Iran would have to become more educated. Thus, high school graduate conscripts were recruited to spend fifteen months, in lieu of their compulsory military service of two years, in rural villages or small towns teaching in primary or adult literacy schools. With the help of the literacy corps and the opening of more schools, technical colleges, and universities, the shah succeeded in increasing the national literacy rate from 14.9 percent in 1956 to 74.1 percent by 1976. This increase was a major accomplishment by any modern standards. Nonetheless, these reforms undermined the religious schools and were resented by the cleric class, who had until then held the monopoly on education through their parochial schools. In addition, a higher literacy rate meant that political awareness in the cities, rural areas, and small towns would not be uncommon.

The women's suffrage component of the White Revolution changed the political status of Iranian woman forever. Clerics and conservative families who did not like the emancipation of Iranian woman opposed this suffrage. Consequently, uprisings occurred in the theological seminaries and among shopkeepers in major cities. Clashes between the government and the opposition resulted in imprisonment and exile of the opposition leaders, including a less-prominent clergyman, Ruhollah Khomeini, who would play a major role and become the leader of the 1979 revolution.

Along with the aforementioned reforms, other social and economic reforms were undertaken to further modernize the country. Among the most notable reforms was improvement of the infrastructure of Iran, including the construction of better medical facilities, improvement in the accessibility to health care, reforms in family laws, and expansion of women's rights. The modernization and secularization of Iran made the shah's leadership powerful and secure; however, at the same time his autocratic rule disassociated him from an important segment of society. Although the economic and social reforms brought many improvements, they also alienated many groups, such as the Bazaaris (traditional merchants), who consisted of hundreds of thousands of major merchants, shopkeepers, and artisans who could not compete in a Western-style economy. Lack of a viable political platform also alienated many intellectuals and students.

Foreign Dependency

The British and Soviets had dominated Iranian politics until the early 1950s, but the United States began to alter the role of the two competing powers in Iran after the 1953 military coup. The Truman Doctrine aimed to impede the spread of Communism in Southeast Asia and the Middle East. Because Iran had an extensive border with the Soviet Union, the U.S. administration saw Iran as a candidate for being influenced by Communist ideology. The first sign of the U.S. administration's curbing Soviet influence came in October 1955 when Iran signed and joined the Baghdad Pact along with Iraq, Turkey, Pakistan, and Great Britain. Creation of this pact would ensure Iran of the U.S. military and economic assistance



that it badly needed. This pact, along with an earlier U.S.-Iran mutual defense agreement, set up Iran to receive great quantities of military equipment.

During 1972 the tide turned in favor of the shah. Great Britain had pulled out of the Persian Gulf due to worldwide military cutbacks, and this vacuum was soon filled when the administration of U.S. President Richard Nixon underwrote the shah as the policeman of the Persian Gulf. This underwriting gave Iran carte blanche to purchase up-to-date non-nuclear weapons from the United States. During the 1973 meeting of the Organization of Petroleum Exporting Countries (OPEC), when the shah pushed to increase oil prices, in light of the 1973 Arab-Israeli War and an ongoing oil embargo, the timing was right for him to strengthen his presence as a leader in the region. With increased OPEC oil prices, the Iranian oil revenue augmented from \$2.3 billion in 1972 to \$20.5 billion in 1977, dispersing any monetary obstacle that might have prevented the shah from strengthening his military forces.

With the increase in oil revenue, Iran's annual military budget increased from \$1.8 billion in 1973 to \$9.5 billion in 1977, and the size of the military increased to 410,000 troops. The purchase of arms from the United States alone totaled \$6 billion by 1977. In 1976 the two countries signed a bilateral agreement that anticipated that non-oil and non-military trade between the two countries would reach \$15 billion by 1981. By 1978 more than fifty thousand U.S. military advisors and civilians were residing in Iran with extraterritoriality (or exterritoriality; privilege of immunity from local law enforcement of the host country) privileges. Ironically, the shah had now reinstated the same extraterritoriality act that his father had so fervently abolished in 1928. In general, the Iranian people never forgave Muhammad Reza Shah for that reinstatement.

Other factors leading to the Iranian Revolution included inflation, widespread corruption, inequities in income distribution, and the failure of political reform. Hence, by 1978 a rapidly growing and resounding discontent existed among a majority of Iranians. Strikes and demonstrations became a daily occurrences throughout 1978 and as a result hundreds died in clashes with riot police forces. The shah's inability to curb the situation encouraged the opposition to be more vigorous in their demand to end the monarchy. With the hope that a new government may be able to solve the political problems, he appointed one prime minister after another. They were, however, either old acquaintances or army generals who were already despised or mistrusted by the opposition. His final attempt was to ask Dr. Shahpur Bakhtiar, an opposition figure that had gone to jail for his anti-shah activities, to form a new government. Even though, on January 3, 1979, the parliament gave its approval to the new government, it was too late for Bakhtiar to gain the trust of the people and remedy the situation. As a result, the shah realized that his departure from the country might help ease the discord, so on January 13, 1979, he named a Regency Council to take his place while out of the country. His departure on January 16, 1979, however, marked the end of the Pahlavi era and the monarchy in Iran.

Meanwhile, Ayatollah Ruhollah Khomeini who was unceremoniously forced out of Iraq, where he had been in exile since 1963, was given permission to go to Paris. Suddenly the world's major media personalities discovered a simple religious man who opposed the tyrannical leadership of his native country. Khomeini's message was broadcast to the world and specifically to Iranians via various media outlets. His message was very simple; abdication of the shah and reinstatement of the Iranian Constitution of 1906. In Paris, Ayatollah Khomeini set up an Islamic Revolutionary Council with the task of establishing a transitional government and a few days after his arrival in Iran, on February 1, 1979, he appointed Mehdi Bazargan, a devout Muslim and supporter of Dr. Mossadeq and an anti-shah activist, as the prime minister of a provisional government while Dr. Bakhtiar's government was still in power. Dr. Bakhtiar and his government became increasingly unpopular to the point that he was forced underground and eventually fled the country on February 10, 1979.

Like with any other modern political revolution, a period of uncertainty and political chaos ensued during

the month of February, 1979, in Iran. Almost overnight, hundreds of Islamic Revolutionary courts headed by clerics were set up throughout the country to deal with the former regime's loyalists. High-ranking military officers, former prime minister, ministers, and any who opposed the new government were summarily tried and executed without having any legal representation. Along with the Islamic courts, the formation of a Revolutionary Guard Corps with recruitments primarily from the lower class and those loyal to Ayatollah Khomeini and Islam, was set up to defend the revolution against any possible military coup or civilian opposition. In order to abolish any sign of the old regime, on March 30-31, 1979, Ayatollah Khomeini declared a national referendum to choose the future form of the Iranian government. The choice was either monarchy or an Islamic republic. With this limited choice, after the people had just gotten rid of the monarchical system, they overwhelmingly approved the formation of an Islamic republic over a monarchy. Soon after, the Council of Experts, its members mostly composed of clergy, was set up by Ayatollah Khomeini to draft a new constitution. The most debatable aspect of forming the new constitution was the principle of Velayat-e Fqih (the rule of juristconsult). In Shiism, it is believed that in the absence of the twelfth Imam (one who was the direct descendant of prophet Muhammad through his daughter, Fatima, and his son-in-law and cousin Ali, went into occultation and will return as the Mahdi or Messiah), the most learned jurist, one who knows the divine law and the will of the Mahdi, should be the supreme head of the government. With the approval of the new constitution, Avatollah Khomeini was declared as such a jurist and as head of the new government was given more power than any other previous leader in modern Iran.

By November 1979, it was Ayatollah Khomeini through his mouthpiece, the Islamic Revolutionary Council, who was running the country, not Prime Minister Bazargan and his cabinet. The final showdown between the two political rivals came to a head with the seizure of the American Embassy by so-called "Students Following the Line of the Imam [Khomeini]." Bazargan and his moderate supporters adamantly opposed and condemned this act and demanded an end to the seizure of the embassy and the release of American Embassy personnel. However, Ayatollah Khomeini eventually supported the students and called it Iran's second revolution. Two days after the takeover of the American Embassy, Prime Minister Bazargan resigned and Ayatollah Khomeini and his highranking clerics began to consolidate their political, economics, and social power in Iran.

Farid Mahdavi

Further Reading

Abrahamian, E. (1982). *Iran between two revolutions*. Princeton, NJ: Princeton University Press.

Amir Arjomand, S. (1988). The turban for the crown: The Islamic revolution in Iran. New York: Oxford University Press

Keddie, R. N. (1981). Roots of revolution: An interpretive history of modern Iran. New Haven, CT: Yale University Press.

Milani, M. (1988). The making of Iran's Islamic revolution: From monarchy to Islamic republic. Boulder, CO: Westview Press.

Revolution— Mexico

D uring the first years of the twentieth century a wave of political upheavals swept across much of the world. The principal centers of upheaval—Russia and Iran in 1905, China in 1898 and 1911, and Mexico in 1910—were all centers of ancient civilizations undergoing radical transformations from long-standing systems of cooperative industrial and agricultural production to modern capitalism and foreign influences. In Mexico during the years immediately preceding the upheavals, foreign capitalists backed by most of the domestic elite had taken over the communications, transportation, military, mining, timber, and textile industries, while both groups had taken over formerly village-owned agricultural and ranching lands on a massive scale. At the same time the government had repressed popular resistance and greatly

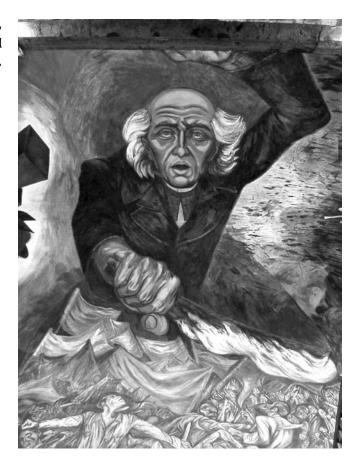
This mural in Guadalajara, Mexico, displays the emotion associated with the Mexican fight for freedom.

increased dictatorial powers at the expense of the popular classes.

The new elite amalgam promoted commercial production at the expense of the rural workers who had enjoyed wide land-use rights for hundreds of years. The amalgam reorganized the peasants and rural workers, moving them from less commercialized village properties and commercial estates, small mines, and artisan-run patios into larger capitalized entities. Foreign-born supervisors (low level management such as foremen) monopolized local authority and enjoyed wage differentials over the workers at an average of twenty-to-one, while managers (those who head an entire plant, mine, or other operation) earned as much as two hundred times their workers' wages. Foreign skilled workers enjoyed preferential treatment in an apartheid setting of segregated housing, unequal salaries, and discriminatory work assignments.

The Mexican Revolution (1910–1920) stemmed from several sources: the alienation of the provincial and local elites who saw their political authority eroded, the dashed hopes of the peasants and workers who faced economic setbacks and even crushing famines instead of the promised well-being, the increasingly dictatorial nature of the regime instead of an expected development of democracy, and the rise of economic nationalism. The revolution began on 20 November 1910, when Francisco Madero, a man of wealth from the northern state of Coahuila, called for all Mexicans to rise up and overthrow the dictatorship. He promised political democracy, equality before the law, and agrarian reform.

Three main groups emerged in the struggle against the dictator Porfirio Diaz. The first group, reflected by Madero and later by Coahuila Governor Venustiano Carranza and the Sonoran oligarchs Alvaro Obregon and Plutarcho Elias Calles, comprised the regional and local elites, who banded together for federalism, local and states' rights, and a nationalism with a more balanced distribution of power between themselves, the national government, and the foreigners. The second group comprised the leaders of the rural working people: Emiliano Zapata, Francisco "Pancho" Villa, and myriad others. The rural masses, who made up 80 percent of the population,



had seen their share of land ownership fall from 25 percent to 2 percent under privatization, and their leaders sought the return of the land to the communities. The third group was comprised of the heads of organized labor, many of them anarchists. During the revolution they created the 150,000-member Casa del Obrero Mundial (House of the World Worker) and committed 5,000 soldiers and more than 500 women field nurses, known as *acratas* (those opposed to all authority) to the struggle. They wanted workers self-management in the factories, land for the peasants, and a reduced role for foreign capitalists. The differences between these three groups and the defenders of the ancient regime led to a complex civil war.

Madero Assumes Power

By the spring of 1911 widespread revolts by rural workers and peasants in support of Madero seized local power and were growing larger. Diaz quickly resigned with an admonition that "Madero has unleashed a tiger —let us see if he can ride it." Assuming power in late 1911, Madero went to war with rural revolutionaries led

Mariano Azuela: The Under Dogs

Mexican author and doctor Mariano Azuela showed the day-to-day fighting between the two factions in the Mexican Revolution. As a doctor in 1914 and 1915, Azuela accompanied the fighting forces on the side of the "under dogs" who for four centuries lived a life of servitude. The novel was published in Mexico and after a few years was translated into many languages and sold worldwide.

On the day General Natera began his advance against the town of Zacatecas, Demetrio with a hundred men went to meet him at Fresnillo.

The leader received him cordially.

"I know who you are and the sort of men you bring. I heard about the beatings you gave the Federals from Tepic to Durango." Natera shook hands with Demetrio effusively while Luis Cervantes said:

"With men like General Natera and Colonel Demetrio Macias, we'll cover our country with glory."

Demetrio understood the purpose of those words, after Natera had repeatedly addressed him as "Colonel."

Wine and beer were served; Demetrio and Natera drank many a toast. Luis Cervantes proposed: "The triumph of our cause, which is the sublime triumph of Justice, because our ideal—to free the noble longsuffering people of Mexico—is about to be realized and because those men who have watered the earth with their blood and tears will reap the harvest which is rightfully theirs."

Source: Azuela, M. (1929). The Under Dogs. London: Brentano's, Inc.

by Emiliano Zapata in the sugar plantations of southcentral Mexico. Madero refused to return the privatized lands or to restore local governments. Then, in February 1913, the army staged a *golpe de estado* (coup d'etat) and killed Madero. This killing led to the nationwide civil war. The rebels made Madero a martyr and rallied the public. This uprising spread rapidly and took on special strength in the North, where the rebels could buy arms by selling confiscated cattle to U.S. dealers. Meanwhile, U.S. President Woodrow Wilson provisioned Mexican dictator General Victoriano Huerta with arms until September.

During 1913 and 1914 the Villistas, an armed movement centered on the states of Chihuahua and Durango, formed under the leadership of town elites, cowboys, miners, and lumberjacks in favor of agrarian reform and political freedom and against debt peonage (form of bondage in which the laborer is held in place through the employer's control of his debt accounts which are not paid off) and segregation. Meanwhile, the state elites of Coahuila, Sonora, and Sinaloa who had supported Madero rallied behind Venustiano Carranza, the former governor of Coahuila. Carranza, like Madero, favored political liberalism. During 1913 and early 1914 Villa's forces marched southward until they controlled most of the North. Then, in April 1914, U.S. armed forces occupied Veracruz with heavy civilian casualties. During the summer the military government collapsed, but in November the U.S. military decided to support Carranza, and a new civil war began. The middle- and workingclass-led Zapatistas and Villistas faced the forces headed by Carranza and the northern elites.

In a monumental step Alvaro Obregon, the military commander of Carranza's forces, gained the support of the Casa del Obrero Mundial by promising that the Mexican Revolution would be the first step toward worldwide proletarian revolution. Disorganized and poorly armed, Carranza's forces fled to the state of Veracruz. There, on 23 November 1914, U.S. General Frederick Funston supplied them with ammunition and arms. By the end of 1914 Obregon commanded more than twenty thousand troops calling themselves "Constitutionalists" because they planned to reinstate the liberal constitution of 1857. As Obregon's troops defeated the Villistas and Zapatistas, Obregon allowed the Casa del Obrero Mundial activists to organize the workers in each city that his forces captured.

The Tide Turns

In January 1915 the fight between the Constitutionalist and Villista armies at El Ebano turned the tide in favor of the Constitutionalists. Using several thousand "red battalion" troopers from the Casa del Obrero Mundial, Obregon crushed the Villistas by using the modern artillery and machine guns provided by the United States. Meanwhile, Carranza announced an agrarian reform program designed to undercut support for the Villistas and Zapatistas. In the spring of 1915 the Villistas and Constitutionalists fought the largest battles of the revolution at Celaya and Leon. The indirect fire of Obregon's artillery and machine guns inflicted decisive defeats on the Villistas. The Villista army dissolved into guerrilla bands, and many soldiers returned to their lives in the small towns and countryside of the North. Reduced to guerrilla warfare, Villa remained a political force, mandating agrarian reform laws, the confiscation of the great estates, and labor laws regulating the northern mining and timber industries.

During 1916 Carranza consolidated his power. He demobilized the Casa del Obrero Mundial and its 350,000 members and red battalions, which totaled more than 4,000 troops. Carrying red and black flags in public demonstrations the Casa del Obrero Mundial proclaimed the goal of workers' control of production, and during the spring of 1916 it paralyzed Mexico City with a general strike. During the summer, however, the army crushed the Casa del Obrero Mundial during a second strike. In the North Villa began executing U.S. citizens, and in March he raided Columbus, New Mexico, to lure President Wilson into an invasion and expose Carranza as a traitor. U.S. General John "Blackjack" Pershing failed to catch Villa, but Carranza and Obregon had a more sophisticated agenda.

In February 1917 delegates from every sector of society promulgated a new constitution that satisfied most aspirations. It stipulated national ownership of natural resources, frontiers, and coastlines; universal male suffrage; land reform and municipal autonomy for the rural working class; and social justice for industrial workers as fundamental objectives for the new government. The revolution defeated the caste system that still characterizes much of Latin America; returned more than 25 percent of the nation's surface, including much of the best land, to the peasantry and rural workers; initiated schooling for the indigenous population; and created a system For reason, ruling alone, is a force confining; and passion, unattended, is a flame that burns to its own destruction. • KHALIL GIBRAN (1883–1931)

of civilian government in contrast to the military dictatorships in support of oligarchy (government by the few) that still plague much of the Western Hemisphere.

John Mason Hart

Further Reading

- Cumberland, C. C. (1974). Mexican Revolution: Genesis under Madero. Austin: University of Texas Press.
- Cumberland, C. C. (1974). Mexican Revolution: The constitutionalist years. Austin: University of Texas Press.
- Hart, J. M. (1978). Anarchism and the Mexican working class, 1860– 1931. Austin: University of Texas Press.
- Hart, J. M. (1987). Revolutionary Mexico: The coming and process of the Mexican Revolution. Berkeley and Los Angeles: University of California Press.
- Hart, J. M. (2002). Empire and revolution: The Americans in Mexico since the Civil War. Berkeley and Los Angeles: University of California Press.
- Katz, F. (1981). The secret war in Mexico: Europe, the United States, and the Mexican Revolution. Chicago: University of Chicago Press.
- Katz, F. (Ed.). (1988). Riot, rebellion, and revolution: Rural social conflict in Mexico. Princeton, NJ: Princeton University Press.
- Katz, F. (1998). The life and times of Pancho Villa. Stanford, CA: Stanford University Press.
- Womack, J. (1970). Zapata and the Mexican Revolution. New York: Vintage.

Revolution— Russia

The Russian Revolution of 1917 was an event of enormous significance in twentieth-century world history. It marked the end of the distinctive society of czarist Russia, the world's largest country, and the beginning of the first large-scale effort to construct a modern socialist society. To many oppressed people it represented a beacon of hope, promising that capitalist exploitation and imperialist domination need not be permanent. However, to most Western capitalist societies, the revolution was a threat of epic proportions challenging private property, existing social structures, parliamentary democracy, and established religion. Its triumph in Russia initiated a deep seventy-year rift in the global community between Communist countries and the capitalist democracies of the West.

The Collapse of Czarist Russia

The first phase of the Russian Revolution occurred in February 1917, when the last czar, Nicholas II, abdicated the throne, marking the end of the Romanov dynasty that had governed Russia for almost three centuries. What had brought czarist Russia to this revolutionary turning point? Factors surely included the ancient inequalities, conflicts, and divisions of Russian society—the great gulf between a small land-owning nobility and a vast peasant class; the dominance of Russians over the empire's many other peoples; the absolute authority of the czar over all other groups in society.

Perhaps more important were the reforms that Russia's nineteenth-century czars made as they attempted to modernize their country and catch up with the industrializing West. They ended serfdom in 1861, but the lives of most peasants did not improve dramatically. They promoted rapid industrial growth but did not anticipate the political demands of a growing middle class or the rising wave of protests by exploited urban workers. Despite modest political reforms and elections to a national parliament (the Duma), the czar's



Russians lie dead and wounded in the street after being shot with a machine gun manned by Bolshevik forces on a building roof.

government was exceedingly reluctant to share political power with other groups in society. As a result, various groups of revolutionaries emerged—many of them committed to socialism. Their activities only worsened the growing tensions of Russian society. However, the pressures of World War I—massive casualties and economic breakdown—prompted mass demonstrations in the capital, St. Petersburg. Women, workers, students, and soldiers took to the streets in February 1917. Even the czar's most loyal supporters deserted him. These circumstances caused Nicholas II to vacate the Russian throne.

Social Upheaval

When the Russian monarchy collapsed, power was assumed by a provisional government, a coalition of leading middle-class liberals from the Duma and representatives of several mainstream socialist parties, the Mensheviks and Socialist Revolutionaries. Although this new Russian government dismantled much of the old czarist state and promised a democratic constitution, its failure to end the economic chaos, to distribute land to the peasants, and to remove Russia from World War I opened the gates to a massive social upheaval during the summer and early autumn of 1917. Soldiers deserted in growing numbers; peasants began to seize the estates of their landlords; urban workers created highly popular grass-roots organizations called "soviets" to manage local affairs and to challenge official state authorities; minority ethnic groups demanded autonomy or independence. Russia was coming unglued and the provisional government increasingly discredited.

The Bolshevik Takeover

These circumstances created an opening for a small radical socialist party that was known as the "Bolsheviks" and that was led by the highly disciplined and ferociously revolutionary Vladimir Ilich Lenin. As the only major socialist party that had not affiliated with the provisional government, it alone was untainted by the failures of that government. Thus, the Bolsheviks grew rapidly in popularity and in numbers of party members, especially in the large cities and among workers and soldiers. Their program, drawn up by Lenin, was far closer to the mood of the masses than that of the provisional government. It called for immediate peace, confiscation of landowners' estates, workers' control in the factories, selfdetermination for non-Russian nationalities, and "all power to the soviets," which meant the overthrow of the provisional government. Lenin insisted that the Bolsheviks seize formal state power from the increasingly unpopular provisional government. On the night of October 24-25, Bolshevik-led armed forces took control of major centers in St. Petersburg, but they did so in the name of the All-Russian Congress of Soviets, which was then assembling in the city. Thus, the Bolsheviks presented their takeover as a defense of the revolution and as a way of bringing a government of the soviets to power. So unpopular had the provisional government become that people put up little initial resistance to what the Bolsheviks called the "October Revolution." During the next several months Bolshevik-led soviets in many other cities also seized power and joined the revolution, at some times peacefully and at other times violently.

Civil War

Few people thought that the radical Bolsheviks could maintain power. Within six months the Bolsheviks found themselves in a bitter civil war against a variety of enemies-supporters of the czarist regime, middle-class liberals who favored the provisional government, and even a number of socialists who were offended at the Bolsheviks' unilateral seizure of power. Three years of bitter fighting ensued before the Bolsheviks staggered to victory in 1921, their hold on Russia, soon to be renamed the "Soviet Union," finally secure. Their opponents were divided, and some of them-known generally as the "Whites"-wanted to restore lost properties to the landlords. The Bolsheviks' identification with the popular soviets and their willingness to endorse peasant seizure of land gave them an edge in competing for mass support. Their ability to integrate a number of lower-class men into the newly formed Red Army and into new When, however, one reads of a witch being ducked, of a woman possessed by devils, of a wise woman selling herbs, or even a very remarkable man who had a mother, then I think we are on the track of a lost novelist, a suppressed poet...indeed, I would venture to guess that Anon, who wrote so many poems without signing them, was often a woman. • VIRGINIA WOOLF (1882–1941)

institutions of local government provided a measure of social mobility for many. Because a number of capitalist powers, including Britain, France, the United States, and Japan, briefly entered the conflict on the side of the Whites, the Communists could present themselves as patriotic defenders against foreign intervention. The Russian Revolution had brought to power a Communist party—the Bolsheviks—which now proceeded to construct the world's first socialist society.

Robert W. Strayer

See also Communism and Socialism; Lenin, Vladimir; Marx, Karl; Revolutions, Communist; Stalin, Joseph

Further Reading

- Acton, E. (1990). *Rethinking the Russian Revolution*. London: Edward Arnold.
- Bonnell, V. (1983). Roots of rebellion: Worker parties and organizations in St. Petersburg and Moscow, 1900–1914. Berkeley and Los Angeles: University of California Press.
- Figes, O. (1997). A people's tragedy: The Russian Revolution, 1891– 1924. New York: Penguin Putnam.
- Fitzpatrick, S. (1982). The Russian Revolution, 1917–1932. Oxford, UK: Oxford University Press.
- Lincoln, W. B. (1986). Passage through Armageddon: The Russians in war and revolution, 1914–1918. New York: Simon & Schuster.
- Pipes, R. (1990). The Russian Revolution. New York: Random House.
- Read, C. (1996). From tsar to Soviets: The Russian people and their revolution, 1917–1921. New York: Oxford University Press.
- Rogger, H. (1983). Russia in the age of modernization and revolution, 1881–1917. London: Longman.
- Suny, R., & Adams, A. (1990). The Russian Revolution and Bolshevik victory: Visions and revisions. Lexington, MA: D. C. Heath.
- White, J. D. (2001). Lenin: The practice and theory of revolution. New York: Palgrave.

Revolution— United States

The American Revolution took place between 1775 and 1783 and pitted colonists of the thirteen British colonies along the Atlantic coast of North America against Great Britain. The revolution was triggered by increased British efforts to control the colonies from 1763 onward, efforts largely designed to expand revenues for the British treasury. New taxes and regulations on colonial economic activity infuriated many colonists, accustomed to their own semi-independent colonial legislatures and considerable commercial latitude. Patriotic societies formed, and leaders began to invoke Enlightenment ideas about liberty and about popular control over government. (The Enlightenment was a philosophic movement of the eighteenth century marked by a rejection of traditional social, religious, and political ideas and an emphasis on rationalism.) Specific issues, such as the indebtedness of many southern planters to British banks, played a role as well. The patriotic Continental Congress assembled and began discussing independence in 1774. Outright clashes between armed militia groups and British soldiers began in Massachusetts in 1775. George Washington was named commander in the summer of that year.

Perhaps one-third of the colonists actively supported the ensuing struggle for independence, whereas another large minority preferred loyalty to the Crown. (Many Loyalists—also called "Tories"—fled to Canada and were stripped of their property.) Partisans included Virginia planters and New England political radicals, who agreed on Britain as a common enemy but disagreed about social change. A number of farmers, in what was still a largely agricultural society, participated in the struggle, as did some African-Americans; the first colonist killed in the struggle was, in fact, an African-American sailor. The colonies declared independence in 1776.

Fighting occurred in both North and South, with British troops, bolstered by German mercenaries, often holding the upper hand. Britain was hampered by cautious tactics but also by frequent overconfidence against the amateur colonial forces. The colonists had numbers on their side—although the actual number of combatants was small, with rarely more than fifteen thousand in the colonists' ranks at any given time. Many militiamen were part-time and ill trained, and funding was also a problem. France, and to a lesser degree Spain and the Netherlands, provided funds and weapons and direct military support

The Colonial Tree summarizes the early history of the United States.

after 1776, and this support was crucial in the latter stages of the revolution.

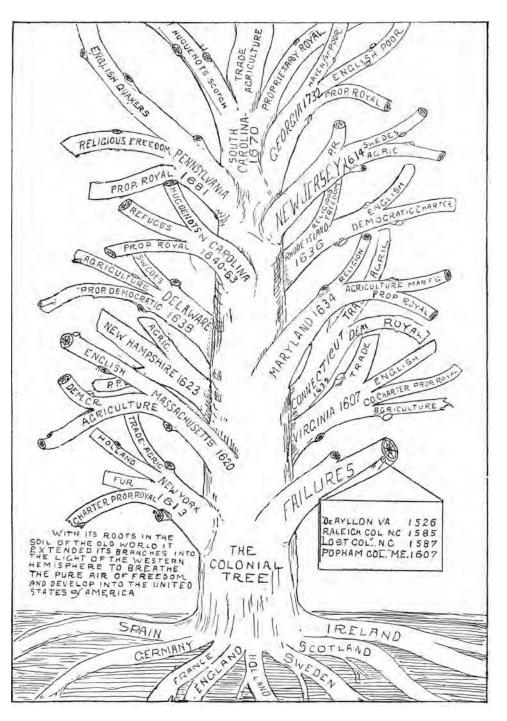
By 1781 fighting concentrated in Virginia, where the British general Charles Cornwallis had to yield to a combined French-American force at Yorktown. Desultory fighting continued for two years before a peace was signed in Paris to recognize the new United States, with territory running from Florida (ceded by Britain to Spain) to Canada, from the Atlantic to the Mississippi River. Britain feared even greater losses to its empire if war were to continue.

Significance

The significance of the American Revolution in world history rests on several bases. It was part of the ongoing colonial struggle among European powers because the opportunity to weaken Britain's position drew the French monarchy into the conflict. The revolution ultimately inspired later changes in British colonial policy toward greater flex-

ibility and decentralization where white settlers predominated; Canada became the first beneficiary during the first half of the nineteenth century. French expenditures in the war contributed to financial crises at home and helped lead to the need to call the Estates General (assembly) to consider new taxes and then to the French Revolution of 1789.

The example of colonial independence, the strong principles embodied in the Declaration of Independence and other writings by U.S. leaders such as Thomas Jefferson, and the institutions ultimately established by the Constitution all inspired revolutionaries and nationalists elsewhere. (During a brief period of confusion, after 1783, the United States attempted a loose confederation; the later establishment of a federal system, with checks and balances among legislature, executive, and judiciary would have the real influence in the long run.) French revolutionaries invoked the revolution in 1789 but also in 1830 and 1848; in the last revolution, a U.S.-style presidency was sought, although the effort misfired. The U.S.



example loomed large in the Haitian and Latin American struggles for independence (1798 and post–1810, respectively) because it provided the first modern instance of decolonization. The South American liberator Simón Bolívar, particularly, cited U.S. precedent in his hopes for a greater Colombia, free from Spanish control.

The U.S. political philosopher Thomas Paine summed up this aspect of U.S. influence, although with some exaggeration, claiming that the revolution "contributed more to enlighten the world and diffuse a spirit of freedom and liberty among mankind, than any human event that ever preceded it."

Comparative Analysis

The revolution also deserves comparative analysis. It was not a major social upheaval, although a new generation of leaders did wrest power from their elders. Despite revolutionary principles, and some ensuing emancipations in northern states, slavery was not systematically attacked. Radical urban leaders such as Sam Adams in Boston were mainly controlled in favor of greater unity against the British, and the social structure and relations between men and women were not significantly altered. The revolution was far less sweeping than its later French counterpart. It was also unusually politically successful, compared with later independence struggles elsewhere, without a long, disruptive aftermath as in many revolutions and the Latin American independence movements. Good leadership and considerable political experience in colonial legislatures may help explain this success. The quick resumption of close economic ties with Britain after the war encouraged the U.S. economy. "New nation" difficulties, so common during the nineteenth and twentieth centuries, were limited in the United States, although rifts between North and South, united during the revolution, would soon resurface.

Finally, the revolution was, of course, a founding event for the United States itself. American nationalism, only tentatively developed before the revolution, was given a considerable boost, and the new political institutions established by the Constitution worked through their formative period during the 1790s and early nineteenth century with impressive success. Opportunities for westward expansion, initially in the territories of the Midwest and deep South, followed from the revolutionary settlement as well. The United States did not emerge from the revolution as a major world power; indeed, it largely stayed free of major foreign entanglements. However, the nation did begin to set its own course.

Peter N. Stearns

Further Reading

Dull, J. R. (1985). A diplomatic history of the American Revolution. New Haven, CT: Yale University Press.

Middlekauff, R. (1985). *The glorious cause: The American Revolution*, 1763–1789. New York: Oxford University Press.

One of the outcomes of the Revolution was the destruction of Native American villages by both the British and the Americans. This drawing shows the burning of an Iroquois village in New York State. The villages and fields of Iroquois who sided with either the British or Americans were often destroyed. Norton, M. B. (1980). Liberty's daughters. Boston: Little, Brown. Wood, G. S. (1991). The radicalism of the American Revolution. New York: Vintage Books.

Revolutions, Communist

uring the twentieth century Communist parties came to power in a number of countries and in a number of ways. In Russia (1917) and China (1949), Communist parties seized power as part of vast revolutionary upheavals that swept away long-established societies and political systems. In sparsely populated Mongolia an independence movement against Chinese control turned for help to the Soviet Union in the early 1920s and subsequently established a Communist state closely allied to the Soviet Union. After World War II Communist regimes were established in several countries of central and eastern Europe, largely imposed by Soviet military forces that had liberated these countries-eastern Germany, Poland, Czechoslovakia, Romania, Hungary, Bulgaria—from Nazi rule. The local Communist parties that the Soviets installed in power initially had some popular support deriving from their commitment to reform and social justice and from their role in resistance to the Nazis. However, in Yugoslavia and Albania Communist parties genuinely independent of the Soviet Union also came to power with considerable popular support.

After Japan's defeat in World War II, its Korean colony was partitioned, with the northern half coming under Soviet and therefore Communist control. In Vietnam a much more locally based Communist and nationalist movement under the leadership of Ho Chi Minh battled Japanese, French, and later U.S. invaders and established Communist control first throughout the northern half of the country and after 1974 throughout the whole country. The victory of the Vietnamese Communists spilled over into neighboring Laos and Cambodia, where Communist parties took power during the mid-1970s. In the Caribbean Fidel Castro led a revolutionary nationalist movement against a repressive and U.S.-backed regime in Cuba and after coming to power in 1959 moved rapidly toward Communism and an alliance with the Soviet Union. Finally, a shaky Communist regime took power in Afghanistan in 1979, propped up briefly only by massive Soviet military support. At its maximum extent during the 1970s, Communism encompassed about one-third of the world's population and created a deep division in the world community.

Communist and Democratic Revolutions

The great Communist revolutions of the twentieth century, especially those of Russia and China, drew upon the "liberal" or "democratic" revolutions of the eighteenth century, such as the American (1776) and particularly the French (1789). Communist revolutionaries, like their French counterparts, believed that violent upheavals could open the way to new and better worlds constructed by human hands, but they worried lest their revolutions end up in a military dictatorship like that of Napoleon after the French Revolution. Like the French Revolution, those of Russia and China also involved vast peasant upheavals in the countryside, an educated urban leadership, the overthrow of old ruling classes, the dispossession of landed aristocracies, the end of ancient monarchies, and hostility to established religion. The Communist revolutions in Russia and China, like the French, "devoured their own children." All three turned on some of their most faithful followers: in the French Terror (a period of the revolution characterized by executions of presumed enemies of the state); in Communist leader Joseph Stalin's purges in the Soviet Union; and in Chinese Communist leader Mao Zedong's Cultural Revolution (1966–1976).

However, the Communist revolutions were distinctive as well. They were executed by highly organized parties guided by a Marxist ideology; they were committed to an industrial future; they pursued economic as well as political equality; and they sought the abolition of private property. In doing so they mobilized, celebrated, and

The Death of Che Guevara

The U.S. government considered Che Guevara a major threat because of his revolutionary beliefs and activities, so government officials had a vested interest in making sure that Guevara was indeed dead. Below is the now declassified text of the official confirmation of Guevara's death sent to the U.S. State Department by the U.S. Ambassador to Bolivia, Douglas Henderson.

On October 16, 1967, the High Command of the Bolivian Armed Forces released the following communiqué, together with three annexes, on the death of Che Guevara:

"1. In accordance with information provided for national and international opinion, based on documents released by the Military High Command on October 9 and subsequently, concerning the combat that took place at La Higuera between unite of the Armed Forces and the red group commanded by Ernesto "Che" Guevara, as a result of which he, among others, lost his life, the following is established:

Ernesto Guevara fell into the hands of our troops gravely wounded and in full use of his mental faculties. After the combat ended, he was transferred to the town of La Higuera, more or less at 8 p.m. on Sunday, October 8, where he died as a result of his wounds. His body was transferred to the city of Vallegrande at 4 p.m. on Monday, October 9, in a helicopter of the Bolivian Air Force. Two medical doctors, Dr. Moises Abraham Baptista and Dr. Jose Maria Cazo, director and intern respectively of the Knights of Malta hospital, certified the death (Annex No. 1) and recorded the autopsy ordered by the military authorities of Vallegrande (Annex No. 2).

With regard to the identification of the deceased and the authentication of the diary that belonged to him, the government requested the cooperation of Argentine technical organizations, which sent three experts, one handwriting specialist and two fingerprint specialists, who verified the identity of the remains and certified that the handwriting of the campaign diary, captured by our troops, coincides with that of Ernesto Guevara (Annex No. 3).

The campaign diary and the book of doctrine (*libro de conceptuaciones*) are documents that contain an account of activities, from the date of his entry (into the guerrilla area) until October 7, and (justify) the judgments that this chief of subversion, the members of the guerrilla bands, and the people, both in this country and abroad, who collaborated with them, deserved. As a consequence, they are documents exclusively for the use of the military.

2. By this means the Military High Command considers complete all information relating to the death of Che Guevara. La Paz, October 16, 1967."

Source: The death of Che Guevara: Declassified. National Security Archive. Retrieved September 30, 2003, from http://www.gwu.edu/~nsarchiv/NSAEBB/NSAEBB5/che10_1.htm

claimed to act on behalf of society's lower classes exploited urban workers and impoverished rural peasants. The propertied middle classes, who were the chief beneficiaries of the French Revolution, numbered among the many victims of the Russian and Chinese revolutions. Communist revolutions, unlike the French and American revolutions, also made special efforts on behalf of women, granting them legal and political equality, sponsoring family reform, and actively mobilizing women for the workforce. Whereas the French and American revolutions spurred political democracy—although gradually —all of the Communist revolutions generated highly repressive authoritarian governments that sought almost total control over their societies, exercised by Communist Party elites or by single leaders such as Stalin, Mao Zedong, or Castro.

Comparing the Russian and Chinese Revolutions

Despite a common Marxist ideology and a disciplined party determined to achieve power, the Russian and Chinese revolutions differed in many ways. In Russia the Communists (Bolsheviks) came to power less than a year after the Romanov czarist regime collapsed in 1917, whereas the Chinese Communist Party had to struggle for decades after the demise of imperial China (1912) before seizing power. Thus, Russia's civil war occurred *after* the Communists took control (1918–1921), whereas in China prolonged conflict between the Communist Party and the Guomindang (Chinese Nationalist Party), led by Chiang Kai-shek, took place *before* the Communists seized power. Furthermore, Russia's Communists based themselves in the cities and drew their most devoted followers from the urban working class, whereas China's revolution occurred primarily in the country's vast rural hinterland, with peasants as a primary source of recruits. This difference reflected the much greater industrial development of the Russian economy. Russia's peasants did join the revolution in the summer of 1917, but they did so spontaneously and without the active rural involvement of the Communist Party that was so important in China.

World war nurtured both of these revolutions, although in different ways. In Russia the Communists gained credibility by opposing their country's participation in World War I, arguing that it was an imperialist conflict that socialists scorned. However, in China the Communists gained much popular support by vigorously leading their country's opposition to Japanese aggression in World War II. China was a victim of imperialist aggression rather than a participant in it, and the Communists cast themselves as defenders of the nation far more decisively than did their Russian counterparts. Furthermore, because theirs was the first Communist revolution, the Russians faced almost universal hostility from established capitalist states. Later revolutions in China, Vietnam, Cuba, and elsewhere had the support of an established Communist power-the Soviet Union-in their struggles. They were joining an already established Communist world.

Robert W. Strayer

Further Reading

- Dommen, A. J. (2001). The Indochinese experience of the French and the Americans: Nationalism and Communism in Cambodia, Laos, and Vietnam. Bloomington: Indiana University Press.
- Figes, O. (1997). A people's tragedy: The Russian Revolution, 1891– 1924. New York: Penguin Putnam.
- Fitzpatrick, S. (1982). The Russian Revolution, 1917–1932. Oxford, UK: Oxford University Press.

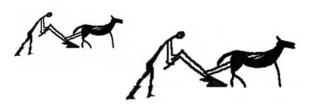
- Fowkes, B. (1993). The rise and fall of Communism in eastern Europe. New York: St. Martin's Press.
- Goldstone, J. (2002). *Revolutions: Theoretical, comparative and historical studies.* Belmont, CA: Wadsworth.
- Grass, J., Corrin, J., & Kort, M. (1997). Modernization and revolution in China. Armonk, NY: M. E. Sharpe.
- Hinton, W. (1966). Fashen: A documentary of revolution in a Chinese village. New York: Vintage Books.
- Perez-Stable, M. (1998). Cuban revolution: Origins, course, and legacy. New York: Oxford University Press.
- Read, C. (1996). From tsar to Soviets: The Russian people and their revolution, 1917–1921. New York: Oxford University Press.
- Rosenberg, W. G., & Young, M. (1982). Transforming Russia and China: Revolutionary struggle in the twentieth century. New York: Oxford University Press.
- Spence, J. (1999). The search for modern China. New York: W. W. Norton.

Ricci, Matteo

(1552–1610) Jesuit missionary

he Jesuit missionary Matteo Ricci (1552–1610) is a L leading figure in the history of the West's interaction with China. Despite the fact that few religious converts were made during his twenty-seven years in China, Ricci did lay the foundation for the early Catholic presence in the "Middle Kingdom," and his scholastic abilities, including his incredible memory and mastery of Chinese language and philosophy, along with his knowledge of mathematics, cartography, and astronomy, impressed many members of the ruling class. Through his translations he introduced the basic tenets of the Christian faith to China, most notably in his work, The True Meaning of the Lord of Heaven, as well as the math and logic of Euclid. Matteo Ricci is remembered for his role in pioneering the early cultural relations between Europe and China.

Born in the Italian city of Macerata, Ricci received his early education at home. In 1561, he entered a local school run by a religious order called the Society of Jesus, commonly referred to as the Jesuits, and seven years later he left Macerata to study law in Rome. In 1571, however, Matteo abandoned his legal studies and



joined the Jesuit Order. Under the tutelage of the famous scholar Clavius, he studied mathematics and astronomy in addition to his religious training, which he received at Jesuit colleges in Florence and Rome. In 1577 Matteo left Italy and, after a brief stay at the University of Coimbra in Portugal where he studied Portuguese, he arrived in the port of Goa in India. While in Goa he taught Latin and Greek at the local Jesuit college and continued to prepare for the priesthood. Ordained in July 1580, Father Ricci was dispatched two years later to Macao on the coast of southern China where he immediately began an intensive program of studying both written and spoken Chinese.

In 1583, Matteo Ricci accompanied Father Michele Ruggieri on a mission to establish a Catholic presence inside China. They settled in Zhaoqing, the administrative capital of the southern provinces of Guangdong and Guangxi, careful not to draw unnecessary attention to themselves while they worked to secure friendship from the ruling class. Abandoning an early strategy of integrating into Chinese society by wearing the orange robes of Buddhist priests, Fathers Ruggieri and Ricci donned the traditional costume of the Confucian literati elite instead. Recognizing that it was this class of society whose toleration, if not assistance, they required, the Jesuit missionaries worked to gain their acceptance by portraying themselves as scholars, moralists, and philosophers, rather than as religious priests.

While in Zhaoqing, Ricci mastered not only the basics of the Chinese language but also the philosophy of the ruling class. Relying on his tremendous memory, he could recite passages from the Four Books of the Confucian codex as well as selections from the classics of ancient literature and history along with volumes of commentaries on Chinese philosophy. This was a remarkable achievement given that no substantial dictionaries or language guides existed at the time. In the summer of 1589, Ricci and Ruggieri were forced to leave Zhaoqing after being expelled by an official who was hostile to the presence of foreigners. The Jesuit fathers then moved north of Gangzhou (Canton) to the town of Shaozhou where they remained for the next six years.

In 1595, after a total of twelve years in the south, Ricci was able to secure permission to travel north into the heart of China. Although he could not gain entry to the capital of Beijing, he did establish himself in the city of Nanchang in central China. Here he continued to cultivate friendships with members of the literati, and in 1597 he was named the superior of the China mission. In the fall of 1598 he was finally allowed to accompany a prominent Chinese official on a trip to the imperial capital. Although his first visit to Beijing was brief, Ricci was convinced that the city was the same as Khanbalic, the capital of Cathay that had been described by the adventurer Marco Polo three centuries earlier. Father Ricci's belief that Polo's Cathay and Ming dynasty China were one and the same was confirmed a few years later by his fellow Jesuit, Father De Goes, who travelled to China overland from India noting the accuracy of Polo's descriptions of the region.

After leaving Beijing, Ricci settled in the secondary capital of Nanjing on the Chang (Yangzi) River where he continued his study of Chinese language and philosophy. He also reworked an earlier version of a map of the world that he had drawn while in Zhaoqing, and this extremely detailed map greatly impressed the local Confucian scholars. After nearly two decades in China, Ricci was at last granted permission to travel to Beijing, and despite efforts by the powerful eunuch Ma Tang to stop his visit, he entered the Chinese capital in January of 1601. The Ming emperor, who was impressed by the Jesuit's gifts, which included a painting that utilized the technique of perspective, something untried up to this time by Chinese artists; two clocks that struck on the hour; and a music instrument called a spinet, granted him permission to reside in Beijing permanently. Ricci spent the final nine years of his life in the Ming capital.

During his time in Beijing, equipped with a command of written Chinese after years of dedicated study, Ricci began to translate European texts for publication. In addition to publishing his revised map of the world, he also oversaw the publication of many of these texts, including a summary of the Christian faith in a work called *The True Meaning of the Lord of Heaven* (1603), the first six books of Euclid's *Elements of Geometry* (1607), and *The Ten Paradoxes* (1608).

In the end it was not Ricci's religious teachings but his scientific knowledge, as demonstrated by his mastery of astronomy and use of sundials, clocks, and prisms, that impressed the Chinese court. His deep understanding of Chinese culture, combined with his willingness to accommodate his appearance and religious views to the traditions of the Confucian literary elite, paved the way for later generations of Jesuit missionaries in China. However, Matteo Ricci's contention that the Chinese practice of Confucian rites, or "ancestor worship," was not a religious practice but a social custom was overturned a century later by the Congregation of Rites in Rome in 1704, a decision that ended an earlier period of cultural accommodation and toleration.

Robert John Perrins

See also Missionaries

Further Reading

Cronin, V. (1955). The wise man from the West. New York: Dutton.

- Dunne, G. H. (1962). Generation of giants: The story of the Jesuits in China in the last decades of the Ming Dynasty. Notre Dame, IN: University of Notre Dame Press.
- Gernet, J. (1986). *China and the Christian impact: A conflict of cultures.* (J. Lloyd, Trans.). Cambridge: Cambridge University Press.
- Harris, G. (1966). The mission of Matteo Ricci, S.J.: A case study of an effort at guided cultural change in the sixteenth century. *Monumenta Serica*, 25(1), 1–168.
- Spence, J. D. (1984). *The memory palace of Matteo Ricci*. New York: Viking Penguin.
- Trigault, N. (1953). China in the sixteenth century: The journals of Matthew Ricci, 1583 –1610 (L. J. Gallagher, Trans.). New York: Random House.
- Young, J. D. (1980). *East-West synthesis: Matteo Ricci and Confucianism.* Hong Kong: University of Hong Kong Press.

Roman Catholicism

See Catholicism, Roman

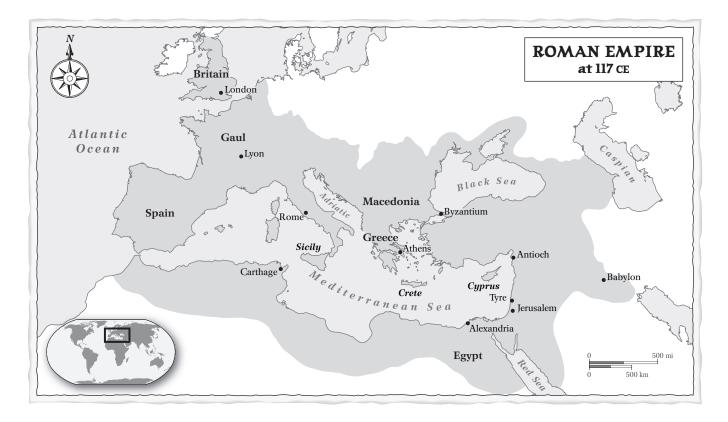
Roman Empire

Originating as a conglomeration of small pastoral communities scattered across seven neighboring hills along the Tiber River of Italy, Rome grew to become the capital of an empire that encompassed all the territories bordering on the Mediterranean Sea, extending from the British Isles to the Arabian Peninsula. Roman imperial authority combined the exercise of political and economic dominance with cultural and ideological sovereignty, enforced through strength of arms. The concept of "empire" in English-language usage ultimately derives from the Latin word *imperium*.

The Roman Republic

According to legend, the city of Rome was founded by Romulus, son of the war god Mars, on 21 April 754/753 BCE. Archaeological evidence indicates that the site was occupied by pastoralists and farmers as early as 1500 BCE but not urbanized until the sixth century BCE under the influence of cities to the north (established by the Etruscans in the area now known as "Tuscany") and to the south (founded by Greek colonists in southern Italy and Sicily). Originally unified under an Etruscan king, the indigenous Latin-speaking inhabitants of Rome had established their city as a republic about 500 BCE. The republic's basic law code, the Twelve Tables (451/450 BCE) defined and guaranteed the fundamental rights and responsibilities of all citizens, but the institutional structures of the state continued to evolve down to about 300 BCE.

The senior magistrates of the Roman republic were the two consuls, elected annually and given chief executive power in civil and military matters, including the command of Rome's armies. Other annually elected officials in the republic included the praetor, who supervised the administration of justice; the quaestors, who oversaw the state's finances; and the aediles, who maintained public order and the city's infrastructure (markets, trade, roads, sanitation, and state-sponsored public entertainments). Every five years two censors were elected to take a census of the entire citizen population and its possessions and



to organize any major allocations of the state's resources that might be necessary. Of these allocations, the distribution of public lands and the construction of new public buildings were the most important.

The censors were also responsible for overseeing the membership of the Senate, appointing new senators, and removing infamous ones from office. The Senate embodied the supreme authority of the Roman state, supervised and disciplined the actions of the magistrates, and possessed ultimate jurisdiction over domestic legislation and the state's foreign relations.

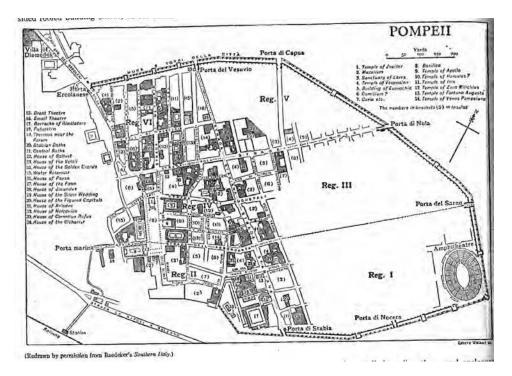
The Senate and executive offices were dominated by the patricians, Rome's hereditary elite. The ordinary citizens, or plebeians, were largely excluded from executive power but exercised a voice in public affairs through their membership in one or both of two citizen assemblies. The centuriate assembly encompassed all citizens whose material wealth was sufficient to require them to provide military service to the state. This electoral body voted for consuls, praetors, and censors. The tribal assembly included all free citizens and voted for quaestors and aediles. This assembly elected its own leaders, the tribunes, who represented the interests of the plebeians in state affairs and came to wield considerable power. The tribal assembly also had the right to propose, deliberate, and vote on new legislation, although such legislation had to be ratified by the Senate.

From Republic to Empire

From its inception the Roman republic was a society prepared for war, with all eligible male citizens expected to bear arms for the state. The Senate had the power to appoint a dictator, an official who would wield absolute power in the state for up to six months in order to see it through a severe crisis, usually violent in nature. The wars during the early centuries of the republic were mostly defensive, and in 390 BCE Rome itself was briefly taken by an army of Gauls; but during the third century the republic began its expansion into a territorial empire. The entire Italian peninsula south of the Po River had come under Roman dominion by 264 BCE. The three Punic Wars fought between Rome and the empire of Carthage (264-241 BCE, 218-201 BCE, 149-146 BCE) led to the expansion of Roman military power and political sovereignty beyond the Italian peninsula into both the western and eastern Mediterranean. This expansion, which was virtually complete by 30 BCE, brought wealth to the citizens of Rome and expanded the opportunities of the Roman elite to exercise political power as civil and military authorities in the newly acquired provinces.

Plan of Pompeii. Archaeological excavation of the buried city provided much valuable information about life in ancient Rome.

The expansion also led to the breakdown of the republic's institutions. As Rome's military commitments expanded, the willingness of its propertied citizens to serve in long campaigns far afield declined. In 107 BCE military service was made voluntary, and propertyless citizens (the *proletarii*) were allowed to enlist. Fighting



under a successful general, the poor could achieve at least the possibility of upward economic mobility. Goods distributed by commanding officers to their men included salaries, plunder, gifts, and plots of land parceled out from conquered colonies. Not surprisingly, loyalty to the general replaced loyalty to the state.

As a result, the first century BCE was marked by a succession of civil wars between Roman generals competing for dictatorial power over the state. These wars culminated in the conflicts between Julius Caesar and Pompey (49–46 BCE) and Marc Antony and Octavian (33–30 BCE). These wars were fought across the entire expanse of Rome's empire, from Spain through Italy to Egypt, and ended in the permanent imposition of monarchic rule upon the Roman state.

The Principate

After Julius Caesar had defeated the last supporters of his rival Pompey, the Senate embraced the ensuing peace and made Caesar dictator for life in 44 BCE. Although he was assassinated two months later by patrician conspirators claiming they were defending the constitution of the republic, Caesar's popularity among his soldiers ensured that the period of uncertainty led not to a restoration of rule by the Senate and popular assemblies but rather to a power struggle between two claimants to the command of Caesar's troops and political authority: his lieutenant Marc Antony and his adopted son Octavian. Open war between the rivals broke out in 33 BCE and ended with the suicide of Marc Antony and his ally Cleopatra, whereas Octavian returned to Rome in triumph. In 28 BCE the Senate appointed him its *princeps* (leader) and in 27 BCE gave him the new title of "Augustus," signifying his supreme authority over the state. These new titles in effect created for Augustus (as Octavian was henceforth addressed) the constitutional power of dictator for life. Although the old institutions and offices of the republic remained in place, Augustus now wielded a permanent sovereignty over all aspects of the state, including the Senate, consuls, assemblies, tribunes, and armies. When he died in 14 CE, Augustus was able to pass on his office to his designated successor, Tiberius (reigned 14–37 CE).

The form of government established by Augustus is known as the "principate." Although the legal authority of the *princeps* was absolute, Augustus and his successors allowed much of the day-to-day administration of the state and its empire to remain in the hands of officers and institutions carried over from the republican period. Under the first two dynasties, the Julio-Claudians (14–68 CE) and the Flavians (69–96 CE), periods of apparent instability did not prevent the system established by Augustus from remaining intact. Despite the excesses attributed by contemporaries to Caligula (reigned 37–41 CE), Nero (reigned 54–68 CE), and Domitian (reigned 81–96 CE), the administrative structures of the principate

Rome as a Naval Power

In the extract below, Polybious (c. 200–c. 118 BCE), a leading historian of Rome, describes the origins of the Roman naval fleet.

... so long as the Carthaginians were in undisturbed command of the sea, the balance of success could not incline decisively in [the favor of Rome]....

It was because they saw that the war they had undertaken lingered to a weary length, that [the Romans] first thought of getting a fleet built, consisting of a hundred quinqueremes and twenty triremes [261 B.C.]. But one part of their undertaking caused them much difficulty. Their shipbuilders were entirely unacquainted with the construction of quinqueremes, because no one in Italy had at that time employed vessels of that description. There could be no more signal proof of the courage, or rather the extraordinary audacity of the Roman enterprise ... It was [at this time] that, the Carthaginians having put to sea in the Strait to attack them, a decked vessel of theirs charged so furiously that it ran aground, and falling into the hands of the Romans served them as a model on which they constructed their whole fleet. And if this had not happened it is clear that they would have been completely hindered from carrying out their design by want of constructive knowledge.

Source: Shuckburgh, E. S. (1889). *The histories of Polybius* (Book 1, p. 22). New York: Macmillan.

continued to function in an orderly and durable manner. When a civil war broke out at the end of Nero's reign, each of the rivals claimed the title of "Augustus." No one considered the possibility of eradicating that office.

Overall, the first two centuries of the principate brought the Roman empire the benefits of peace and material prosperity, reaching an apex under the reigns of Trajan (98–117 CE), Hadrian (117–138 CE), Antoninus Pius (138–161 CE), and Marcus Aurelius (161–180 CE). These emperors ruled over a population estimated at 50 to 70 million, linked together by roads, aqueducts, maritime travel and trade, and a shared imperial culture. The two universal languages of the empire were Latin and What have the Romans ever done for us! • Life of Brian (1979 film)

Greek, and under the principate a large number of the empire's inhabitants spoke both. Much of the inspiration for Roman artistic and literary forms derived from Greek models, whose influence became paramount as soon as Rome first established its military dominance over Greece. The first full blossoming of Rome's cultural achievements coincided with the republic's unraveling during the first century BCE. Many of the finest surviving fruits of Roman literature and architecture, however, were produced under the principate. If the late republic can claim the historian Sallust, the poet Catullus, and the statesman Cicero, the principate can claim, among others, the poets Virgil, Ovid, Horace, and Juvenal; the historians Livy and Tacitus; the philosopher and dramatist Seneca; the essayist and biographer Plutarch; the medical theorist Galen; the astronomer Ptolemy; and the architects of the Colosseum and Pantheon. We should remember, however, that if the prosperity of the empire derived in large part from the *Pax Romana* (the peace the Romans succeeded in imposing on the Mediterranean world and used as justification for their imperialism), it also relied heavily on slave labor, a mainstay of the Roman economy since the conquests of the third and second centuries BCE.

Crisis and Recovery

On 31 December 192 CE, Marcus Aurelius's son and successor Commodus (reigned 180–192 CE) was murdered in a palace coup. He was the first emperor to meet a violent end since Domitian, who was assassinated in 96 CE. Claiming to be the incarnation of Hercules and the most skilled of gladiators, Commodus had emphasized the role of emperor as warrior above any other function of the office. All of the contenders in the subsequent civil war legitimized their claim to the imperial throne through acclamation by the empire's soldiers, each being supported by different contingents of the Roman army. The ultimate victor, Septimus Severus (reigned 193–211 CE), secured his title by presenting himself to the people as a military conqueror. The institutions of the principate gave way to an empire ruled and fought over by competing generals. The results were a marked economic decline, political chaos, and a serious destabilization of the empire's borders.

With military victory now the sole means of legitimating imperial authority, the emperors became substantially more bellicose. Warfare became the norm with the advent of sustained attacks on the empire's borders along several fronts, most threateningly by Germanic peoples along the north and Persians along the east. An emperor's defeat on the battlefield was likely to lead to his assassination, and a victory won by one of his generals proved almost as dangerous. The situation was not conducive to maintaining internal order or external defenses, and both suffered. Among the threats to Rome's territorial integrity, the most dramatic was the revolt of Zenobia, queen of Palmyra. She managed to rule over Syria, Anatolia, and Egypt for several years before being defeated by the emperor Aurelian in 272 CE. The years between 211 CE and 284 CE included a succession of some twenty emperors, averaging four years per reign.

The situation stabilized under the rule of Diocletian (reigned 284–305 CE). Although he came to power as yet another military strongman, he managed to reorganize and thereby stabilize the structure of the Roman state. The most enduring of his reforms included the division of the empire into eastern (Greek-speaking) and western (Latin-speaking) administrative units, the introduction of centralized planning to the Roman economy, and the dramatic expansion of the imperial household staff into a civil bureaucracy that supplanted the obsolete republi-

History is little more than the register of the crimes, follies, and misfortunes of mankind. • EDWARD GIBBON (1737–1794)

persecuted sect to the object of imperial patronage endowed the emperors with a new source of legitimacy independent of both the army and the civil bureaucracy. The association of the one God with the one emperor provided an effective justification for the divinely instituted authority of imperial rule.

The reforms of Diocletian and Constantine, which transformed the Roman state legally and institutionally into an absolute monarchy, also brought about cultural revival and economic recovery. The theologian Augustine of Hippo, the historian Ammianus Marcellinus, the villas whose archaeological remains dot all the former territories of the empire, the numerous monumental Christian churches that survive intact, and the codifications of Roman law under Theodosius II (reigned 408–450 CE) and Justinian (reigned 527–565 CE) are just a few prominent examples of the artistic, literary, and intellectual accomplishments produced by both pagans and Christians between the fourth and sixth centuries.

The Fall of Rome

In spite of these achievements, the same period included a political fragmentation conventionally labeled "the fall of Rome." The organization of the empire into administrative halves created, alongside the political divide, an increasingly pronounced linguistic and cultural separation between the Greek east and the Latin west. When a new

can magistracies and served as an effective counterweight to the power of the army. Constantine (reigned 306–337 CE) cemented the success of Diocletian's reforms with two revolutionary innovations of his own. The founding of the city of Constantinople (modern Istanbul, Turkey) provided the eastern half of the empire with a capital that possessed legal and symbolic parity with Rome. The transformation of Christianity, in turn, from a



A sculpture of a Roman wolf from the classical period.

wave of external invasions commenced during the final decades of the fourth century, the eastern Roman empire centered in Constantinople managed to survive. The western Roman empire, however, lost its territorial integrity and legal identity during the 400s as Germanic leaders established new kingdoms in Italy, France, England, and north Africa. However, historians have come to prefer to describe this process as a "transformation" rather than a "fall." The material and intellectual culture of these new kingdoms remained recognizably that of Rome, while their kings borrowed their political ideology, symbols and rituals of rule, and administrative techniques from the Roman emperors. Furthermore many of these kings either descended from or themselves had been generals in the service of the Roman army (which had relied increasingly on foreign auxiliaries and military officers since the third century). Finally, when the western Roman empire ceased to exist as a separate entity after the deposition of Romulus Augustulus in 476 CE, the emperor in Constantinople simply claimed legal authority over the entire Roman imperium for himself and his successors.

The eastern Roman empire survived as a sovereign state until 1453, having in the meantime provided a prototype for the revival by the Frankish king Charlemagne of a Roman empire that endured in western Europe from 800 to 1806. After Constantinople fell, Russian czars and Ottoman sultans each proclaimed themselves successors to the Roman emperors. Their states survived into the twentieth century and thus, in a way, so did the Roman empire. More significantly, the ideas, symbols, institutions, and laws of that empire have provided models for many other states and governing institutions through the centuries and continue to do so today, a partial explanation for why the events of Roman history can productively be used by politicians, journalists, and scholars to illuminate current social and political concerns.

Scott C. Wells

See also Art—Ancient Greece and Rome; Byzantine Empire; Caesar, Augustus; Caesar, Julius; Constantine the Great; Justinian I

Further Reading

- Adcock, F. E. (1959). Roman political ideas and practice. Ann Arbor: University of Michigan Press.
- Barton, C. A. (1993). The sorrows of the ancient Romans: The gladiator and the monster. Princeton, NJ: Princeton University Press.
- Boatwright, M. T. (2004). *The Romans: From village to empire*. Oxford, UK: Oxford University Press.
- Brown, P. (1982). *Society and the holy in late antiquity*. Berkeley and Los Angeles: University of California Press.

- Brown, P. (2003). The rise of western Christendom: Triumph and diversity, A.D. 200–1000. Malden, MA: Blackwell Publishers.
- Crawford, M. (1982). *The Roman republic*. Cambridge, MA: Harvard University Press.
- Dodds, E. R. (1965). Pagan and Christian in an age of anxiety: Some aspects of religious experience from Marcus Aurelius to Constantine. Cambridge, UK: Cambridge University Press.
- Gruen, E. S. (1974). The last generation of the Roman republic. Berkeley and Los Angeles: University of California Press.
- Lane Fox, R. (1987). Pagans and Christians. New York: Random House.
- Lomas, K., & Cornell, T. (2003). "Bread and circuses": Euergetism and municipal patronage in Roman Italy. London: Routledge.
- L'Orange, H. P. (1965). Art forms and civic life in the late Roman empire. Princeton, NJ: Princeton University Press.
- Pagden, A. (1995). Lords of all the world: Ideologies of empire in Spain, Britain and France c. 1500-c. 1800. New Haven, CT: Yale University Press.
- Scullard, H. H. (1988). From the Gracchi to Nero: A history of Rome from 133 B.C. to A.D. 68. London: Routledge.
- Syme, R. (1939). The Roman revolution. Oxford, UK: Oxford University Press.
- Treadgold, W. (1997). A history of the Byzantine state and society. Stanford, CA: Stanford University Press.
- Veyne, P. (1997). *The Roman empire*. Cambridge, MA: Belknap Press of Harvard University Press.
- Wells, C. M. (1995). The Roman empire. Cambridge, MA: Harvard University Press.

Roosevelt, Eleanor

(1884 - 1962)

Diplomat and humanitarian , wife of President Franklin D. Roosevelt

A nna Eleanor Roosevelt, one of the world's most widely admired and powerful women in her time, was the daughter of Elliott Roosevelt and Anna Hall Roosevelt and the niece of Theodore Roosevelt, the 26th president of the United States. She grew up in a wealthy family that attached great value to community service. It was, however, a family touched by tragedy. One brother died when Eleanor was nine, and both her parents died before she was ten. Relatives raised her and her surviving brother.

When she was fifteen, her family enrolled her at Allenswood, a girls boarding school outside London. The Anyone who knows history, particularly the history of Europe, will, I think, recognize that the domination of education or of government by any one particular religious faith is never a happy arrangement for the people. • ELEANOR ROOSEVELT (1884–1962)

headmistress's intellectual curiosity and taste for travel and excellence awakened similar interests in Eleanor. After three years, Eleanor reluctantly returned to New York in the summer of 1902 to prepare for her debut into society that winter. Following family tradition, she devoted time to community service, including teaching in a settlement house on Manhattan's Lower East Side.

Soon after Eleanor returned to New York, Franklin Roosevelt, her distant cousin, began to court her, and they were married on 17 March 1905 in New York City. Between 1906 and 1916, Eleanor gave birth to six children, one of whom died in infancy. Franklin's carefree ways and constant pursuit of fun contrasted with her serious demeanor, making theirs an odd but fascinating pairing. It also spelled doom for their marriage.

Franklin's decision to enter politics forced Eleanor to take on the job of political wife, first in Albany, New York, and then after 1913, in Washington, D.C. She largely found the seemingly endless social obligations tiresome. America's entry into World War I in 1917 enabled her to resume her volunteer work. She worked for the Navy-Marine Corps Relief Society and the Red Cross. This work revitalized her and increased her sense of self-worth when it was suffering most. Eleanor had discovered that Franklin had been having an affair with her social secretary, Lucy Mercer. Devastated, she offered Franklin a divorce. Knowing it would destroy his political career and possibly cost him his mother's financial support, Franklin refused and agreed to stop seeing Mercer.

The marriage became one of convenience and friendship as it settled into a routine in which both spouses kept separate agendas while remaining respectful of and affectionate toward each other. Their relationship, however, had ceased to be an intimate one. Franklin continued seeing Mercer and others, and, in fact, died in Mercer's company at Warm Springs, Georgia, in April of 1945.

Franklin's determination to remain active in politics after contracting poliomyelitis in 1921 depended upon Eleanor's willingness to help keep his name in front of the public. The work dovetailed well with her desire to work for important causes. She joined the Women's Trade Union League and became active in the New York state Democratic Party. She began studying the Congressional Record and learned to evaluate voting records and debates as a member of the Legislative Affairs Committee of the League of Women Voters.

When Franklin became governor of New York in 1929, Eleanor found an opportunity to combine the responsibilities of a political hostess with her own interests in social causes. The couple's time together in the governor's mansion left her well prepared for her new role after Franklin's election as president of the United States in 1932. Her twelve years as first lady challenged the prevailing attitudes of the day about a woman's role in a marriage and her place in the political process. Serving as Franklin's "eyes and ears," she traveled throughout the nation giving speeches and providing feedback to the president on the public's opinion on programs and social conditions.

The unprecedented range of Eleanor's activities and her advocacy of liberal causes, such as child welfare, housing reform, and equal rights for women and racial minorities, made her nearly as controversial a figure as her husband. In 1939, when the Daughters of the American Revolution refused to let Marian Anderson, an African-American opera singer, perform in Washington's Constitution Hall, Eleanor resigned her membership in the organization and arranged to hold the concert at the nearby Lincoln Memorial. The event turned into a massive outdoor celebration attended by seventy-five thousand people. Her defense of the rights of African-Americans, youth, and the poor helped to bring groups that had formerly been alienated from the political process into the government and the Democratic Party.

Eleanor instituted regular White House press conferences for women correspondents. Wire services that had not formerly employed women had to do so in order to have a representative present to cover the newsworthy First Lady. Beginning in 1936, she wrote a daily syndicated newspaper column, "My Day," and continued it until just a few weeks before her death in 1962 from a rare form of tuberculosis. After Franklin's death in 1945, President Harry S. Truman appointed her a delegate to the United Nations, where she served as chairman of the Commission on Human Rights (1946–1951) and played a major role in the drafting and adoption of the Universal Declaration of Human Rights in 1948. She remained active in the Democratic Party, working for the election of Democratic presidential nominee Adlai Stevenson in 1952 and 1956.

In 1961, President John F. Kennedy appointed her chair of his Commission on the Status of Women, a position she held until shortly before her death. She had not initially favored the Equal Rights Amendment, saying it would actually do more harm than good for women, but she gradually embraced it. While working for the United Nations and for President Kennedy, Eleanor circled the globe several times, meeting with most of the world's leaders. All the while, she continued to write books and articles. Her work during her White House years and after set a standard by which her successors would be judged.

James G. Lewis

See also Human Rights

Further Reading

- Black, A. (1996). Casting her own shadow: Eleanor Roosevelt and the shaping of postwar liberalism. New York: Columbia University Press. Black, A. (1999). Courage in a dangerous world: The political writings of
- Eleanor Roosevelt. New York: Columbia University Press.
- Burns, J. M. (2001). The three Roosevelts: Patrician leaders who transformed America. New York: Atlantic Monthly Press.
- Freedman, R. (1997). *Eleanor Roosevelt: A life of discovery*. New York: Houghton Mifflin.
- Goodwin, D. K. (1994). No ordinary time: Franklin and Eleanor: The home front in World War II. New York: Simon and Schuster.



Roosevelt, Franklin Delano

32ND PRESIDENT OF THE UNITED STATES (1933–1945); LED THE COUNTRY THROUGH THE GREAT DEPRESSION AND WORLD WAR II

As the only child of James and Sara Delano Roosevelt, a noted, wealthy family, Franklin had a privileged, sheltered youth. While a student at the exclusive Groton School in Massachusetts, Franklin developed a sense of social responsibility. He graduated from Harvard University in 1904 and then attended Columbia Law School, where he was indifferent about grades. He dropped out of law school upon admission to the New York bar in 1907 and worked three years for a Wall Street law firm.

Personable and outgoing, Franklin married a distant cousin, the shy Anna Eleanor Roosevelt, on 17 March 1905. Her uncle, President Theodore Roosevelt (also Franklin's cousin), gave the bride away. They had six children, one of whom died in infancy. The Roosevelts stayed active in New York social circles but at the same time devoted considerable energy to the plight of the less fortunate. Although a Democrat, Franklin admired the progressivism of his cousin Theodore and decided early upon a political career. He started by winning a seat as a Democrat in the New York state senate in 1910.

Roosevelt quickly built a reputation as a reformer by taking on the state's Democratic political machine. For his support of Woodrow Wilson at the hotly contested 1912 Democratic National Convention, Wilson appointed him assistant secretary of the navy. Roosevelt served from 1913 to 1920 and gained considerable administrative experience. The Roosevelt name and his progressive image won him the party's vice-presidential nomination in 1920 on the ticket with the conservative Ohio governor, James M. Cox. Roosevelt mounted a vigorous campaign defending Wilson's advocacy of U.S. membership in the League of Nations. The Democrats First of all, let me assert my firm belief that the only thing we have to fear is fear itself—nameless, unreasoning, unjustified terror which paralyzes needed efforts to convert retreat into advance. • FRANKLIN D. ROOSEVELT (1882–1945)

were soundly defeated, but Roosevelt never lost sight of the ideals behind the League.

In 1921, Roosevelt contracted poliomyelitis and permanently lost the use of his legs. Although he could have retired to the family's Hyde Park, New York, estate, he refused to give up his aspirations for public office. Supported by Eleanor and others, he made his return to politics at the 1924 Democratic National Convention with a well-received speech called the "Happy Warrior" and won the New York governorship in 1928 by a narrow margin. His governorship drew on the progressive tradition of his cousin. Its accomplishments included the development of public power, civil-service reform, and social-welfare measures such as relief for the unemployed. Reelected by an overwhelming margin in the 1930 gubernatorial election, Roosevelt soon emerged as a viable opponent to run against the politically vulnerable Herbert Hoover in 1932. By capturing both the Southern and the progressive party elements of the Democratic Party, Roosevelt won the party's presidential nomination and pledged to give the American people a "New Deal."

In July 1932, Roosevelt's Brain Trust, a group of advisors recruited from New York's Columbia University, assembled to examine the causes and remedies of the Great Depression. Free from the pressures of a political campaign, they began planning new government programs to help ease the economic burden in the face of economic collapse. Although he provided no specifics about the New Deal, Roosevelt did discuss conservation, relief, social insurance, and cheaper electricity. Given a choice between the grim, dour Hoover and an exuberant, confident Roosevelt, Democratic voters gave Roosevelt an overwhelming victory in November.

Roosevelt's New Deal program consistently made agricultural recovery a top priority. The Tennessee Valley Authority, which brought cheap electrical power to millions, focused on improving the living and working conditions of folks living in that area. In addition, the New Deal sought to rationalize the business system by temporarily ending bitter economic warfare through the National Industrial Recovery Act and its fair practice codes. The New Deal also ended child labor and introduced unemployment insurance and a social security program that guaranteed income for retired Americans. It encouraged the growth of industrial unionism and national legislation to define maximum hours and minimum wages.

Not everyone supported his programs. Emergency expenditures for relief poured billions into the economy, leading to record federal deficits even though he had promised a balanced budget. If Congress or the courts balked at his programs, he used his executive powers to enact them. Some accused him of introducing a socialist agenda or of undermining free-market capitalism. He deflected the criticism well enough to win a recordbreaking four terms.

In the 1930s, economic recovery took precedent over foreign policy. Nevertheless, the president sought to improve relations with Latin America through his Good Neighbor Policy. He had hoped to keep the United States out of World War II, which began in Europe in September of 1939, but when the New Deal began winding down, he turned his attention to foreign affairs. Adolf Hitler's stunning victories in Western Europe prompted Roosevelt's decision to seek a third term in 1940. Gradually he moved the United States towards a war footing through various programs to arm Britain and the Soviet Union. The Japanese attack on Pearl Harbor on 7 December 1941 and Germany's declaration of war the next day ended American neutrality.

During World War II, Roosevelt and British prime minister Winston Churchill personally determined Allied military and naval strategy in the West. To prevent a repeat of the problems after World War I, Roosevelt insisted on an unconditional surrender. He relied a great deal on the powers of personal persuasion, believing that he could control Soviet leader Joseph Stalin and foster Soviet-U.S. cooperation through a newly created United Nations. Instead, after the war Stalin imposed Soviet-style communist governments throughout Eastern Europe. The strain of wartime leadership sapped Roosevelt's health. He died on 12 April 1945 of a cerebral hemorrhage.

Both beloved and hated during his presidency, Franklin Roosevelt transformed the nation by expanding the powers of the federal government. In the face of the potential collapse of the capitalist system, Roosevelt ushered in the welfare state, in part by managing the economy in order to achieve publicly determined ends. By aiding Britain in World War II, he helped preserve Western liberal democracy and created a bulwark against later Soviet aggression. In the process, he converted the Democratic Party to majority status through its appeal to urbanites, minorities, and working-class voters, and made it the party of liberal reform in the twentieth century.

James G. Lewis

See also World War II

Further Reading

- Dallek, R. (1979). Franklin D. Roosevelt and American foreign policy, 1932 –1945. New York: Oxford University Press.
- Hamby, A. L. (2004). For the survival of democracy: Franklin Roosevelt and the world crisis of the 1930s. New York: Free Press.
- Hoopes, T., & Brinkley, D. (1997). *FDR and the creation of the UN*. New Haven, CT: Yale University Press.
- Leuchtenburg, W. E. (1963). Franklin D. Roosevelt and the New Deal, 1932–1940. New York: Harper and Row.
- McJimsy, G. (2000). *The Presidency of Franklin Delano Roosevelt. Lawrence*: The University of Kansas Press.

Rubber

B etween 1760 and 1940 rubber was converted from a trivial curiosity into a major international industry. It has become central to modern living and crucial to the waging of war. This transformation was not the result of a single breakthrough or even efforts in one country, but was the outcome of a gradual accumulation of technical advances and commercial developments across the world. Rubber latex, obtained by cutting the bark of certain trees, was used in Central and South America for some fifteen centuries before the arrival of Christopher Columbus. It was made into balls and rubber shoes. Although Columbus and subsequent explorers saw these rubber balls, they did not see this strange material as hav-



ing any significance. It was the French scientist Charles de la Condamine, who came across rubber during an expedition to Peru in the 1730s, who first suggested the potential uses of rubber such as waterproofed cloth. He called it caoutchouc from the native name *cahuchu*, meaning "weeping wood." Francois Fresneau, a French engineer who had lived in Cayenne, French Guiana, also promoted the use of rubber and discovered the value of turpentine as a solvent for rubber in 1763. The first important use of rubber (dating from 1769) was the removal of pencil marks, hence its English name "india rubber," which first appeared in the late 1780s. (Contrary to popular myth, the chemist Joseph Priestley was not the inventor of the rubber eraser, and he was not the first person to call the substance rubber.) Rubber-coated cloth was crucial to the development of balloons in the 1780s and 1790s, and suspenders (braces) were being made by 1803. There were two important breakthroughs in the 1820s. The English businessman Thomas Hancock invented the masticator, which allowed better processing of rubber, in 1820, and he continued to revolutionize the industry for over two decades. Meanwhile the Scottish chemist Charles Macintosh replaced Fresneau's turpentine with a hydrocarbon solvent obtained from coal tar in 1823 and used the rubber solution as glue between two layers of cloth. This waterproof material produced a superior raincoat that soon became known as a mackintosh. In 1834, Hancock and Macintosh joined forces to form Charles Macintosh & Co. in Manchester; it became the leading rubber company in the world.

The Vulcanization of Rubber

Despite the efforts of Hancock and Macintosh, rubber was still a problematic material in the 1830s. In cold weather rubber (and rubberized cloth) became rigid, and in very hot weather it was sticky and could even melt. The American inventor Charles Goodyear (1800–1860) found the answer to these problems in 1839. He heated rubber with sulfur and white lead (which accelerated the reaction) to produce a harder material which could withstand changes in temperature. The process, which An encyclopedia drawing summarizing all that one needs to know about rubber, an important raw product during the colonial era.

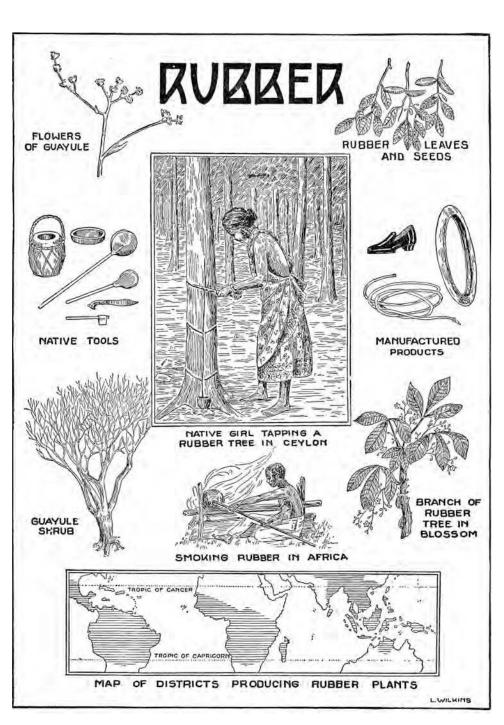
Goodyear called vulcanization, after the Roman god of fire, was then copied by Hancock, who improved the procedure. The extent to which Goodyear was indebted to the earlier work of Nathaniel Havward and the morality of Hancock's conduct remain controversial even today. However it came about, vulcanization laid the basis of the modern rubber industry. At first the uses of vulcanized rubber were relatively mundane, such as boots, overshoes, and air beds. Ebonite, a hard material produced by prolonged vulcanization of rubber, was important as an early plastic, used to make boxes and jewelry.

Rubber became an important material only after the development of the pneumatic tire by the Scottish veterinary surgeon John Dunlop in 1888. Dunlop reintroduced the pneumatic tire (it had originally been patented by the Scottish engineer Robert William Thom-

son in 1846) with the bicycle in mind. In 1895, Edouard and André Michelin took the important step of adapting their bicycle tire to the automobile, thereby establishing the major use of rubber in modern society. Nearly all of the leading rubber companies were founded in this period, including B.F. Goodrich (1880), Dunlop (1889), Michelin (1889), U.S. Rubber, formed by a merger of older firms and later renamed Uniroyal (1892), Goodyear, which had no connection with Charles Goodyear (1898), and Firestone (1900). By 1910, Akron, Ohio, had become the center of the American tire industry.

Rubber in the Far East

When the Michelin brothers invented the automobile tire, the sole source of rubber was tapping of wild trees



in the Amazon river basin. The increased demand for rubber for bicycle tires was an economic bonanza for the Amazonian rubber traders, symbolized by the lavish opera house at Manaus, Brazil, built in 1896. It was, and remains, impossible to establish rubber plantations in the Amazon basin because of the leaf blight that attacks rubber trees there if they are grown close together, yet the harvesting of rubber from wild trees alone was clearly unsustainable. The solution was the development of plantations in Malaya and the Dutch East Indies (now Indonesia). The British government had established plantations in Ceylon in the late 1870s by buying seeds in Brazil (the popular myth that they were smuggled out is incorrect), but the real breakthrough was the planting of rubber trees in Malaya in the late 1890s, following a fall in the price of the leading cash crop, coffee.

Synthetic Rubber

The industrial synthesis of this important natural material was a bold undertaking and took many years to attain success. The first synthetic rubber was made by the English chemist William Tilden in 1882, but it was not economical since it was made from turpentine, which was both expensive and relatively scarce. When rubber prices were high in 1910, attempts to produce synthetic rubber were pursued in England, Germany, Russia, and the United States. The most successful was Bayer's "methyl rubber," made from acetone, which was used by Germany as a rubber substitute during World War I. Interest in synthetic rubber revived in 1925, as the result of an attempt by the British government to restrict exports from Malaya and Ceylon, and synthetic rubber production was started in the Soviet Union, Germany, and the United States in the 1930s. The Soviet industry made a weak synthetic rubber (polybutadiene) from ethyl alcohol and set up the first synthetic rubber factories at Yaroslavl' and Voronezh in 1932. By 1940 production had reached 40,000 to 50,000 tons. The German firm I.G. Farben (formed by a merger of Bayer with BASF and Hoechst in 1925) developed a new class of synthetic rubber called copolymers, one of which turned out to be suitable for tires, while another was oilresistant and was used for gaskets and gasoline hoses. When the Nazis came to power in 1933, they were keen to use these synthetics as a substitute for natural rubber. Within ten years, I.G. Farben had erected three factories and Germany was producing thousands of tons of synthetic rubber. After the war ended, information from the German plants (and deported chemists in the case of the Soviets) assisted the technical development of the American and Soviet industries.

Initial attempts to create an American industry faltered, but progress was rapid when America was cut off from the Far Eastern plantations after Pearl Harbor. Most of the U.S.-produced synthetic rubber, manufactured under government control and called GR-S (Government Rubber-Styrene), was petroleum-based, but some of it was made from maize-based ethyl alcohol to appease the vociferous farm lobby. The decision to keep most of the plants open after World War II was vindicated by the outbreak of the Korean War in June 1950, which was preceded by a rapid increase in the price of natural rubber. The technical improvements introduced during this period, polymerization at lower temperatures and addition of mineral oil, made GR-S competitive with natural rubber. As a result, the industry was privatized by Congress between 1953 and 1955.

The Modern Rubber Industry

West Germany adopted the American petroleum-based technology for synthetic rubber in the early 1950s. Over the next decade, synthetic rubber factories were established in Britain, Italy, France, Japan, and even Brazil, the original home of natural rubber. Synthetic rubber overtook natural rubber around 1960. The American synthetic rubber industry maintained its leading position, despite growing competition from Japan. In tire manufacture, however, the Americans had failed to realize the importance of the radial tire, which had been introduced by Michelin in 1949.

Two roads diverged in a wood, and I—I took the one less traveled by, And that has made all the difference. • ROBERT FROST (1874–1963)

The oil crisis of 1973 had a severe impact on the American industry. Its synthetic rubber production was hit by the quadrupling of the price of its raw material, oil. Radial tires (which can only be made from natural rubber) reduced fuel consumption of automobiles and sales soared in the 1970s, but then Firestone's radial tires were shown to be unsafe and had to be recalled. In the 1980s, all the plants in Akron were closed, Goodrich and Uniroyal merged their tire businesses and then sold the joint operation to Michelin, and Firestone was taken over by the Japanese firm Bridgestone. Since the oil crises of the 1970s, natural and synthetic rubber have settled into an uneasy but enduring co-existence. It now appears unlikely either form will disappear completely. Whatever form it takes, rubber will continue to be important as long as we use automobiles, take flights, or just walk along the road.

Peter Morris

Further Reading

- Barlow, C. (1978). The natural rubber industry: Its development, technology and economy in Malaysia. Oxford, UK: Oxford University Press.
- Blackford, M. G., & Kerr, K. A. (1996). BFGoodrich: Tradition and transformation, 1870–1995. Columbus: Ohio State University Press.
- Coates, A. (1987). *The commerce in rubber: The first 250 years*. New York: Oxford University Press.
- Dean, W. (1987). Brazil and the struggle for rubber: A study in environmental history. Cambridge, UK: Cambridge University Press.
- French, M. J. (1990). *The U. S. tire industry: A history.* Boston: Twayne. Herbert, V., & Bisio, A. (1985). *Synthetic rubber: A project that had to suc-*
- ceed. Westport, CT: Greenwood Press. Korman, R. (2002). The Goodyear story: An inventor's obsession and the struggle for a rubber monopoly. San Francisco: Encounter Books.
- Love, S. (1999). Wheels of fortune: The story of rubber in Akron. Akron, OH: University of Akron Press.
- Morris, P. J. T. (1989). *The American synthetic rubber research program*. Philadelphia: University of Pennsylvania Press.
- Morris, P. J. T. (1994). Synthetic rubber: Autarky and War. In S. T. I. Mossman & P. J. T. Morris (Eds.), *The development of plastics* (pp. 54–69). Cambridge, UK: Royal Society of Chemistry.
- Schidrowitz, P., & Dawson, T. R. (1952). *The history of the rubber industry.* Cambridge, UK: Heffers, for the Institution of the Rubber Industry.
- Slack, C. (2002). Noble obsession: Charles Goodyear, Thomas Hancock and the race to unlock the greatest industrial secret of the nineteenth century. New York: Hyperion.
- Weinstein, B. (1983). The Amazon rubber boom, 1850–1920. Stanford, CA: Stanford University Press.

Rumi (1207–1273) Persian poet

Jalal ad-Din ar-Rumi known as Mevlana (turkicized form of the Arabic word *Mawlana*, which means "our master"), is one of the best-known figures of Muslim spirituality and devotional poetry worldwide. He established his own Sufi order, known as the Mevlevi in honor of its founder. The Mevlevi Sufis (popularly known in the West as the Whirling Dervishes) are based in Konya, Turkey, where Rūmī lies buried. The order is distinguished by its special rites, which include music and a special whirling dance, designed to foster intense contemplation of the Divine Beloved (God).

Rumi was born in Balkh in present-day Afghanistan. His father was a well-known jurist, preacher, and Sufi mystic who combined a knowledge of both the exoteric sciences, such as law and hadith studies, and the esoteric sciences, such as the study of spiritual techniques and practices. When Rumi was about twelve years old, his family fled Balkh in fear of the Mongols, who were drawing close to the city. They traveled through a considerable part of the Muslim world on their way to Mecca, and after performing the pilgrimage there, settled in Konya, where they were received warmly by the Seljuk ruler.

Rumi was given a sound Islamic education that stressed knowledge of the Quran, hadith (sayings of the Prophet Muhammad), Arabic grammar, religious law, principles of jurisprudence, Quran commentary, history, logic, philosophy, mathematics, and astronomy, among other subjects. From his father he also became acquainted with the practices and techniques of Sufism, albeit informally.

In 1231, when Rumi was twenty-four, his father passed away. Rumi, already recognized for his considerable learning, inherited his father's position as professor in religious studies and preacher to the people of Konya. In 1232 the Sufi Burhan al-Din Tirmidhi who had been a disciple of Rūmī's father, moved to Konya, and Rumi began to receive formal training in the mystical ways of

A poem by Rumi

The man of God is drunken without wine, The man of God is full without meat, The man of God is distraught and bewildered, The man of God has no food or sleep. The man of God is a king 'neath darvish-cloak, The man of God is a treasure in a ruin. The man of God is not of air and earth, The man of God is not of fire and water. The man of God is a boundless sea. The man of God rains pearls without a cloud. The man of God hath hundred moons and skies, The man of God hath hundred suns. The man of God is made wise by the Truth, The man of God is not learned from book. The man of God is beyond infidelity and religion, To the man of God right and wrong are alike. The man of God has ridden away from Not-being, The man of God is gloriously attended. The man of God is concealed, Shamsi Din; The man of God do thou seek and find! Source: Rumi. (1898). Selected poems from the Divani Shamsi Tabriz (R. A. Nicholson, Ed., p. 15.). London: Cambridge University Press

Sufism. Rumi's association with Tirmidhi continued until the latter's death in 1240.

For the next four years, Rumi continued his activities as a preacher and as a doctor of law in the Hanafi school of Islamic jurisprudence, gaining widespread renown for his erudition. He also continued his Sufi practices, becoming a master in his own right, which means that he traversed the various stations of the Sufi path and attained the mystical vision of God. His Sufi practices appear not to have had much effect on his outward life as a conventional scholar, jurist, and religious counselor to his people.

All this was to change in 1244 when a charismatic and mysterious individual by the name of Shams al-Din of Tabriz, popularly known as Shams-i Tabrizi, arrived in Konya and entered Rumi's life. Rumi described the transformative aspects of this fateful encounter in his poetry:

I was the country's sober ascetic, I used to teach from the pulpit—but destiny made me one of Thy hand-clapping lovers; My hand always used to hold a Koran, but now it holds Love's flagon; My mouth was filled with glorification, but now it recites only poetry and songs! (Chittick 1983, 3)

Rumi became inseparable from Shams as a friend and spiritual disciple. One prominent scholar said of Shams' influence on Rumi: "(H)e was transformed from a sober jurisprudent to an intoxicated celebrant of the mysteries of Divine Love. One could say that without Shams, there would have been no Rumi" (Chittick 1983, 3). This is only slight exaggeration; the world might well have been deprived of what is now considered to be among the bestselling poetry of all time if the two had never met.

Roughly in the year 1247, Shams disappeared, perhaps killed by Rumi's followers, who were jealous of his influence over their master. Rumi was rendered completely bereft at the permanent loss of his beloved master and companion. But although Shams was no longer a physical presence in Rumi's life, he became immortalized as a fixed, phantom presence in the latter's heart and mind. From this year until Rumi's death in 1273, he stopped his public preaching and wrote poetry incessantly, many of which are Persian ghazals, or love songs, in which he often speaks of the pain of being separated from Shams. However, Rumi frequently invoked the name Shams as the representation of the image of God, the Divine Beloved. The word shams means "sun;" by its invocation, Rumi referred to both his friend and "the Sun of the Sun," the Almighty who is the true Beloved and the Ultimate Reality.

Among his major compositions are the *Diwan-i Shams-i Tabrizi* ("the Collected Poems of Shams-i Tabrizi"), which consists of about 40,000 *ghazals* and quatrains, and the

History is politics projected into the past. • М. N. Роккоvsкy (1868–1932)

Mathnawi ("couplets"), which contains roughly 25,000 verses of mostly didactic poetry. Translations of a major part of his oeuvre into several Western languages are available, and they have helped to establish his reputation as a poet and thinker for the ages: one who preached ecumenism, compassion for one's fellow being, and tolerance in his exquisite poems.

Rumi, in fact, has become the best-selling poet in contemporary America, and his poetry continues to inspire traditional Sufis in the Islamic heartlands and beyond, New Age spiritual devotees, and other mystical practitioners in the West in their devotions. The Mevlevi Sufi order founded by Rumi exists to this day and its adherents perform their popular "folk dances" all over the world. Rumi has, furthermore, become a byword in certain circles for a tolerant, compassionate Islam that serves as an urgent antidote to the more militant version that dominates the news today. Such a multifaceted legacy is a testimony to humanity's exceptional gift for addressing basic concerns in an accessible yet eloquently profound idiom.

Asma Afsaruddin

See also Islam

Further Reading

- Arberry, A. J. (1963). *Tales from the Masnavi*. London: George Allen and Unwin.
- Chittick, W. C. (1983). The Sufi path of love: The spiritual teachings of Rūmī. Albany: State University of New York Press.
- Nicholson, R. A. (1950). *Rūmī, poet and mystic*. London: George Allen and Unwin.
- Schimmel, A. (1978). The triumphal sun. London: East-West Publications.

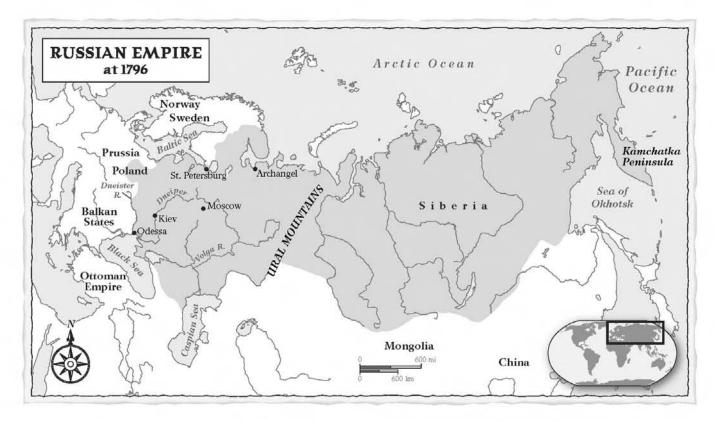
Russian-Soviet Empire

The Russian empire has its origins in the rise of the Principality (*kniazhestvo*) of Moscow in the fourteenth and fifteenth centuries. The Muscovite Grand Princes successfully exploited their position as tax collectors for the Golden Horde, which ruled most of Russia in the wake of the Mongol conquest in 1240, to impose their authority over the successor states to Kievan Rus. By the early fifteenth century, Mongol power had begun to decline. At this time, Moscow emerged as the champion of Orthodox Christianity (the official religion of Kievan Rus since 988) and outmaneuvered Catholic Lithuania to legitimate itself as the "gatherer of Russian lands." After 1480, Grand Prince Ivan III (reigned 1462– 1505) ceased paying tribute to the Khan and proclaimed himself Sovereign of All the Russias. Ivan also seized upon the collapse of Constantinople in 1453 by marrying the last heiress to the Byzantine throne. His successors were increasingly referred to as czars (derived from *Caesar*), while Moscow was proclaimed the "third Rome" and became the center of the Orthodox Christian world.

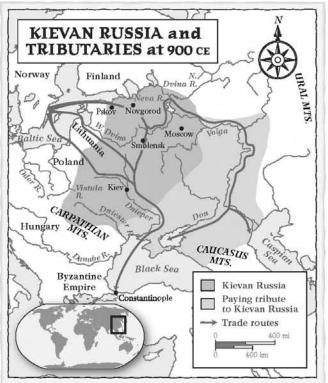
Henceforth, the czar would regard himself as a universal ruler, on a par with the Ottoman Sultan or the Holy Roman Emperor. After the conquest in the 1550s of Astrakhan and Kazan-successor states to the Golden Horde-the czars also began to claim the descent from the Chingizid Khans. They used the popular image of Mongol rule as arbitrary and beyond divine sanction to great effect in the imposition of autocratic rule over the whole of Russian society, although the roots of their despotism lay largely in the difficulty of extracting a sizable surplus, given the country's poor soil and difficult climate. Autocracy reached an apogee with the establishment of the oprichnina (literally 'setting apart'), a policy that imposed the Czar's unbridled terroristic rule over a quarter of the country and (to Ivan's mind) constituted a model for the whole of Muscovy. All these factors have led many writers to conclude that Russian rule was a classic example of "Oriental despotism," whose fundamental essence would remain unchanged through the Soviet period.

Autocracy and Isolation

In the sixteenth and seventeenth centuries, the Muscovite realm formed, by and large, a world unto itself to some, a quintessentially Eurasian civilization. The disintegration of the Mongol-dominated system of the thirteenth and early fourteenth centuries resulted in a diminution of contacts and the growth of regional particularisms across Eurasia. Muscovy's frontiers were not



coterminous with those of any other core area, and its espousal of Orthodoxy greatly limited its exposure to the culture of proximate Muslim or Catholic powers. In the wake of Ivan the Terrible's failure to push through to the Baltic Sea in the Livonian War (1558-1583), the economic and demographic dislocations of the oprichnina, and the Polish invasion, revolts, and dynastic crises of the "Time of Troubles" (1600-1613), Muscovy contracted. Its detachment was further compounded by the closure of its borders and the restriction of external trade by the Romanov czars of the seventeenth century. Some judge the failure to integrate into Europe at this time as an unmitigated disaster, responsible for the perpetuation of Russian autocracy and backwardness, though others contend that the failed incorporation allowed Russia to preserve political and economic independence. In fact, despite autocracy, the seventeenth century saw the empire attain its fastest rate of growth. Russia took advantage of the collapse of Mongol power to colonize lightly populated Siberia by 1649, and benefited from the decline of Poland by incorporating the Ukraine in 1667. Expansion was stimulated by a crusading mentality that encompassed a desire to win converts for Orthodoxy, as well as recognition of the czar as a universal ruler. But it was driven even more by the fur trade and the desire of marginalized groups-runaway peasants, convicts, Cossacks,



merchants, and religious schismatics—to flee autocratic control. Thus, the czars' rule over the new Siberian towns, the Ukrainian Cossacks, and nomadic peoples such as the Oirats and the Nogais remained nominal.

The Soviet Response to the Truman Doctrine

In early 1947, the British government announced that it could no longer financially support Greece in fighting off an insurrection by Communist guerillas. At the same time, there were fears that the Soviet Union intended to expand into Turkey. Diplomats were concerned that if Soviet power moved into the Mediterranean, the Middle East would then be at risk of Communist takeover. In an address that put forth a policy that came to be known as the "Truman Doctrine," President Truman asked Congress for \$400 million to aid Greece and Turkey. The extract below is the Soviet response.

The pathetic appeal of the Tsaldaris Government to the U.S.A. is clear evidence of the bankruptcy of the political regime in Greece. But the matter does not lie solely with the Greek Monarchists and their friends, now cracked up to American Congressman as the direct descendents of the heroes of Thermopylae: it is well known that the real masters of Greece have been and are the British military authorities.

British troops have been on Greek territory since 1944. On Churchill's initiative, Britain took on herself the responsibility for "stabilising" political conditions in Greece. The British authorities did not confine themselves to perpetuating the rule of the reactionary, anti-democratic forces in Greece, making no scruple in supporting ex-collaborators with the Germans. The entire political and economic activities under a number of short-lived Greek Governments have been carried on under close British control and direction.

An Expanding Empire

The character of the empire was partially transformed during the reign of Peter I (the Great) (1682–1725) and that of his successors. The thrust of the Petrine reforms was making Russia militarily competitive with European powers, but in order for this to be achieved the social and cultural foundations of the autocratic regime had to be altered. Peter introduced a standing army, a civil service, and a European-style technical-scientific infrastructure. On this basis, he eventually won the Great Northern War (1700–1721) against Sweden and gave Russia an outlet To-day we can see the results of this policy—complete bankruptcy. British troops failed to bring peace and tranquility to tormented Greece. The Greek people have plunged into the abyss of new sufferings, of hunger and poverty. Civil war takes on ever fiercer forms.

Was not the presence of foreign troops on Greek territory instrumental in bringing about this state of affairs? Does not Britain, who proclaimed herself the guardian of Greece, bear responsibility for the bankruptcy of her charge?

The American President's message completely glosses over these questions. The U.S.A. does not wish to criticise Britain, since she herself intends to follow the British example. Truman's statement makes it clear that the U.S.A. does not intend to deviate from the course of British policy in Greece. So one cannot expect better results.

The U.S. Government has no intention of acting in the Greek question as one might have expected a member of UNO, concerned about the fate of another member, to act. It is obvious that in Washington they do not wish to take into account the obligations assumed by the U.S. Government regarding UNO. Truman did not even consider it necessary to wait for the findings of the Security Council Commission specially sent to Greece to investigate the situation on the spot.

Truman, indeed, failed to reckon either with the international organisation or with the sovereignty of Greece. What will be left of Greek sovereignty when the "American military and civilian personnel" gets to

to the Baltic coast, where he established his "window on the West"—the new capital of Saint Petersburg. With Russia's arrival as a European power, the czar now styled himself Imperator, while the country was renamed from Rus to the latinized Rossiia. A weakened Orthodox Church no longer constituted the empire's main source of legitimacy, which would now emanate from the manifest destiny to expand and the specifically Russian *mission civilisatrice* of the state itself. However, Peter's reforms continued to rely on autocratic means—tributary extraction, mass population transfers, and a newly work in Greece by means of the 250 million dollars brought into that country? The sovereignty and independence of Greece will be the first victims of such singular "defence."

The American arguments for assisting Turkey base themselves on the existence of a threat to the integrity of Turkey territory—though no-one and nothing actually threatens Turkey's integrity. This "assistance" is evidently aimed at putting this country also under U.S. control.

Some American commentators admit this quite openly. Walter Lippman, for example, frankly points out in the *Herald Tribune* that an American alliance with Turkey would give the U.S.A. a strategic position, incomparably more advantageous than any other, from which power could be wielded over the Middle East....

We are now witnessing a fresh intrusion of the U.S.A. into the affairs of other states. American claims to leadership in international affairs grow parallel with the growing appetite of the American quarters concerned. But the American leaders, in the new historical circumstances, fail to reckon with the fact that the old methods of the colonisers and diehard politicians have out-lived their time and are doomed to failure. In this lies the chief weakness of Truman's message.

Source: Doomed to failure (1947, March 15). Soviet News, p. 3.

constituted political police. Subsequent rulers, though they may have freed the nobility (1762), granted the right for the free establishment of industries (1767), liberated the serfs (1861), and permitted the creation of a legislature (the Duma, in 1905), never relinquished their monopoly on political power.

Unlike the empires of Western Europe, the Russian empire was a contiguous and continental power that lacked easily defensible boundaries and therefore pursued a predominately territorialist rather than a maritime strategy. As a result, it pursued expansion in all directions and had to devote an overwhelming part of its state budget to its military. At the same time, Russia remained economically underdeveloped, and some of its colonies-notably Poland (dismembered between 1772 and 1815) and Finland (acquired in 1808)—exhibited greater economic and social sophistication than the Russian core area itself. New Russian territories in the east and south-Crimea (conquered by 1790), the region of Caucasia (subdued by the mid-nineteenth century), and Turkestan (subjugated between 1850 and 1900)-did resemble European colonies, being administered through a mixture of economic extraction and development, civilizing paternalism, and the cooptation of local elites. Unlike Western possessions, however, they had relatively low populations, relatively more colonial settlers, and displayed far fewer differences in terrain, climate and ecology relative to the metropolitan power.

Because of its greater proximity to Europe, Russia was forced to respond to European military, economic, scientific, and technological innovations earlier, but this in turn accounted for its greater dynamism vis-à-vis other tributary and contiguous empires. The Russian empire expanded at the expense of the Ottomans in the Black Sea region and the Persians in Central Asia, and, by the nineteenth century, established hegemony over Chinese Manchuria. Still, its effort to extend its control by incorporating expanding Ukrainian and Belarussian populations-both Orthodox and both heirs of Kievan Rus-into its ethnic core proved less successful than similar efforts by China. The late-nineteenth-century policies of cultural Russification, which affirmed nationality as the third pillar of the regime alongside autocracy and orthodoxy, fared no better than the attempted federalism of the Habsburgs.

Continued territorial and economic growth generated increasing counter pressures that eventually led to the empire's undoing. Externally, its early successes contributed to the rise of more powerful rivals along its perimeter. In the west, Poland and Sweden were replaced by a united German empire—an industrial powerhouse with a much larger population. In the south, France and Britain propped up the declining Ottoman and Persian

15th Century	Portuguese knights capture Cueta in North Africa from the Muslims.
	Columbus "discovers" the Americas for Spain and colonies are established in the Americas.
	Portugal claims Brazil under the Treaty of Tordesillas.
	Vasco da Gama of Portugal discovers an all-sea route to India.
16th Century	Portugal dominates the maritime trade in South and Southeast Asia.
	The Pacific Ocean is "discovered" by Vasco Nuñez de Balboa of Spain.
	Spain claims the Philippines.
	The Habsburg ruling house of Europe comes to power.
	France establishes a presence in West Africa.
	Portugal's dominance in East Africa and Asia begins to decline.
17th Century	The English, Dutch, and French charter trading companies.
	The English settle Jamestown in Virginia.
	France establishes colonies in North America and the Caribbean.
	Russia colonizes Siberia.
18th Century	France loses American colonies and territory to England and Spain.
	The English lose control of their American colony.
	The Dutch Republic becomes a colonial power with the abolishment of its private
	trading companies.
	The Dutch begin to lose most of their colonies to the British.
	The Spanish empire declines.
	By the time of the Treaty of Paris in 1763, England has become the dominant European colonial power.
19th Century	France under Napoleon regains territory in the Americas.
	Haiti gains freedom from France through a slave revolt.
	Brazil declares independence from Portugal.
	Slavery is abolished by all imperial powers.
	The Habsburg empire is transformed into the Austro-Hungarian empire.
	The German empire is established after the Prussian defeat of France.
	Russia colonizes Poland and Finland, the Caucasus, and Central Asia.
	England, France, Spain, Portugal, Belgium, Germany, and Italy solidify their colonie in Africa.
20th Century	European control of its African colonies intensifies.
	World War I starts when the Austro-Hungarian government declares war on Serbia.
	The end of World War I marks the end of the Austro-Hungarian empire and the German empire.
	Britain and France gain trust territories in Asia.
	The British Commonwealth of Nations is created.
	During World War II Japan takes Asian colonies from Britain, France, and the
	Netherlands.
	Following the end of World War II, the British, French, Dutch, and Portuguese empires shrink as many former colonies become independent nations.
	The Comunidade dos Países de Língua Portuguesa (CPLP) unites eight Portuguese- speaking nations.
	The Russian-Soviet empire disintegrates.



empires, while in the east, a vibrant Japan filled the vacuum created by a retreating China. Victory against Napoleon in 1812–1815 established Russia as the main guardian of political reaction in Europe, but exposure to the ideas of the French Revolution infected its own elite with a dissident spirit. The humiliating defeats of the Crimean War (1855) and the Russo-Japanese War (1905) exacerbated social discontent, as did the rapid industrialization program pursued under Nicholas II at the turn of the twentieth century. The paradox of Russia as both backward and a colonial power widened its identity crisis. The Westernizer–Slavophile debate ultimately resulted in what some regard as a revolutionary synthesis and others as a dead end.

Communist Rule

Czarism succumbed to the combined pressures of the First World War and urban unrest in 1917, but the empire was reconstituted by the Bolshevik Party, which came to power in the October Revolution later that year. As Marxists, the Bolsheviks were dedicated to the replacement of the world capitalist system with proletarian democracy, but the practice of "democratic centralism" favored by their leader Lenin (*Vladimir IlyichUl·ya·nov*) (1870–1924) promoted the Party's control over and



above that of the workers' councils (soviets) in whose name they governed. During the ensuing Civil War (1918–1921), the Bolshevik base corresponded to the old Muscovite core (with the capital reestablished in Moscow), and their eventual victory resulted not in worldwide revolution but in the reconquest of the czarist empire (minus Finland, Poland, and the Baltic states). Subsequently, the Bolsheviks focused their attention on Asia and proclaimed Soviet Russia as the global leader of the anticolonialist struggle. In the same spirit, in 1922, they established the Union of Soviet Socialist Republics, which recognized the formal sovereignty of the non-Russian republics (including the Ukraine, Belorussia, Transcaucasia, and Turkestan), and promoted their cultural autonomy by suppressing overt Russian nationalism. At the same time, central control was cemented by reconfiguring the Bolsheviks as the All-Union Communist Party, and the world's first "affirmative action empire" came into being (Martin 2001).

The Communist Party's monopoly on power, coupled with the country's economic collapse following seven years of war, its international isolation as a socialist state, and the Marxist antipathy to market economics contributed to the USSR turning into a continuation of the Russian empire. Under Joseph Stalin (1879–1953), who emerged as Lenin's successor by the late 1920s, the pursuit of "socialism in one country" denoted gaining complete control of the domestic economy following the collectivization of the peasantry, establishing Marxism-Leninism as the guiding ideology of all social and cultural life, constructing a cult of personality, and prosecuting mass purges and population transfers. The autarkic imperative of Stalin's USSR resembled that of seventeenth-century Muscovy, and authors who characterize the former as a totalitarian state explicitly

This drawing from the late 1800s depicts a Russian peasant family. Although Russia was urbanized and industrialized, the idea of the Russian peasant was a common one throughout Europe. The Novgorod 1000th anniversary monument photographed between 1860 and 1880.

establish its links with earlier autocracy. Moreover, under conditions of monolithic rule, the heightened international insecurity of the 1930s, and especially the Great Patriotic War (the Russian struggle against the World War II Nazi offensive of 1941–1945), non-Russian elites and, in the case of the Crimean Tartars and Kalmucks, whole peoples were regarded as unreliable,

and viciously persecuted, while Great Russian culture and Russification were promoted as important mobilizing forces.

Postwar Superpower and Beyond

The emergence of the USSR as a superpower in the second half of the twentieth century has led some scholars to regard the Soviet empire as the culmination of a singularly successful and uniquely Russian alternative modernity. In the 1930s, Stalin oversaw the mobilization of the USSR's vast resources in the construction of a modern industrial base, and in achieving spectacular rates of economic growth. These factors enabled the Soviet Union to defeat Nazi Germany in World War II and subsequently to become a nuclear power and the main strategic competitor of the United States (though a de facto junior partner in the American-led world order). In the wake of the war, the USSR reincorporated the Baltics, the western parts of Ukraine and Belorussia, and Bessarabia, and conquered East Prussia. Its newly acquired string of satellite states in Eastern and Central Europe, organized on the Soviet model, paralleled the more successful East Asian single-party regimes-Japan, Taiwan, and South Korea- constructed at the same time



by the United States. Because it had now emerged as a predominately urban country, its development model likewise proved attractive to many emerging states of the Third World, especially those ruled by native revolutionary movements (Yugoslavia, China, North Korea, Cuba, Vietnam). The Soviet Union also supported non-Communist clients in Africa, the Middle East, and South Asia. Soviet leaders attempted to develop a socialist division of labor within its sphere of influence, although in practice, exchanges often amounted to colonialist underdevelopment (as in cotton-growing Uzbekistan) and transfers of military technology.

Nevertheless, the realities of being an empire in the twentieth century weighed upon the Soviet Union to a much greater degree than its leaders or totalitarian theorists realized. Its success during the Cold War was largely conjunctural—a product of the temporary vacuum created by the wartime destruction in Europe and Japan. The Soviet "command-administrative" system proved incapable of long-term competition with Western and Asian economies under the conditions of "peaceful coexistence" promoted by Stalin's successors. The stagnation of "socialist development," partial cultural liberalization, the exposing of Stalinist crimes, and increased contacts with the outside world had the effect of demoralizing Soviet elites and undermining revolutionary legitimacy. By the mid-1980s, military overextension and economic contraction convinced sections of the governing elite that the empire had become prohibitively expensive.

Under Mikhail Gorbachev, who led the nation from 1985 to 1991, an attempt at structural reform (perestroika), intended to regenerate economic growth, end the Cold War, and restore faith in the Soviet system instead fully exposed the incompatibility of socialism and empire and transformed the USSR's composition as a union of nominally sovereign republics into a liability. Gorbachev's refusal to prop up and subsidize the unpopular Communist governments in Eastern Europe resulted in the revolutions of 1989, which, together with the erosion of Party power and economic chaos in the Soviet Union itself, prompted the rise of powerful secessionist movements in the individual republics, including the Russian Federation itself. In 1991, the new republican presidents dissolved the Union, but the collapse of the Soviet empire was not inevitable, and, by 2004, new imperial rumblings were evident.

Boris Stremlin

See also Art—Russia; Cold War; Communism and Socialism; Détente; Eastern Europe; Lenin, Vladimir; Marx, Karl; Revolution—Russia; Revolutions, Communist; Stalin, Joseph; World War II

Further Reading

- Brower, D., & Lazzerini, E. (Eds.). (1997). Russia's Orient: Imperial borderlands and peoples, 1700–1917. Bloomington, IN: Indiana University Press.
- Cherniavsky, M. (1959). Khan or Basileus: An aspect of Russian Mediaeval political history. *Journal of the History of Ideas*, 20(4), 459– 476.
- Christian, D. (1997). Imperial and Soviet Russia: Power, privilege and the challenge of modernity. New York: St. Martin's Press.
- Chubarov, A. (1999). The fragile empire: A history of imperial Russia. New York: Continuum.

- Cohen, A. (1997). Russian imperialism: Development and crisis. Westport, CT: Praeger.
- Danilevskii, N. I. (1965). Rossiia i Evropa [Russia and Europe]. New York: Johnson Reprint. (Original work published 1869)
- Dibb, P. (1986). *The Soviet Union: The incomplete superpower*. London: Macmillan.
- Foursov, Y., & Pivovarov, A. (1995–7). Russkaia systema [The Russian System]. Rubezhi [Boundaries], 1–10. Moscow: Vremia.
- Friedrich, C., & Brzezinski, Z. (1956). Totalitarian dictatorship and autocracy. Cambridge, MA: Harvard University Press.
- Gumilev, L. N. (1992). Ot Rusi k Rossii: ocherki etnicheskoi istorii [From Rus' to Russia: Essays on ethnological history]. Moscow: EKOPROS.
- Halperin, C. (1985). Russia and the Golden Horde: The Mongol impact on Medieval Russian history. Bloomington: Indiana University Press.
- Herzen, A. (1907). *Rossiia i Russkie* [Russia and the Russians]. Moscow: Tipographia Russkago t-va. (Original work published 1847)
- Johnson, C. (2000). Blowback: The costs and consequences of American empire (p. 3-33). New York: Owl Books.
- Khodarkovsky, M. (2002). Russia's steppe frontier: The making of a colonial empire. Bloomington: Indiana University Press.
- Kotkin, S. (2001). Armageddon averted: The Soviet collapse, 1970–2000. Oxford, UK: Oxford University.
- LeDonne, J. (1997). The Russian empire and the world, 1700–1917: The geopolitics of expansion and containment. Oxford, UK: Oxford University.
- Lieven, D. (2000). *Empire: The Russian empire and its rivals.* New Haven, CT: Yale University Press.
- Martin, T. (2001). The affirmative action empire: Nations and nationalism in the Soviet Union, 1923–1939. Ithaca, NY: Cornell University Press.
- Pipes, R. (1974). Russia under the old regime. New York: Scribner's.
- Poe, M. (2003). *The Russian moment in world history*. Princeton, NJ: Princeton University Press.
- Rywkin, M. (Ed.). (1988). Russian colonial expansion to 1917. London: Mansell.
- Shanin, T. (Ed.). (1983). Late Marx and the Russian road: Marx and "the peripheries of capitalism." New York: Monthly Review.
- Taagepera, R. (1988). An overview of the growth of the Russian Empire. In M. Rywkin (Ed.), *Russian colonial expansion to 1917*. London: Mansell.
- Vernadsky, G. (1953). The Mongols and Russia. New Haven, CT: Yale University Press.
- Vernadsky, G. (1959). *The origins of Russia*. Oxford, UK: Clarendon Press.
- Wallerstein, I. (1974). The modern world-system: Capitalist agriculture and the origins of the European world-economy in the sixteenth century (p. 301-325). New York: Academic Press.
- Wallerstein, I. (1991). Geopolitics and geoculture: Essays on the changing world-system (p. 1-15). Cambridge, UK: Cambridge University Press.
- Wittfogel, K. (1957). Oriental despotism: A comparative study of total power. New Haven, CT: Yale University Press.
- Yanov, A. (1981). The origins of autocracy: Ivan the Terrible in Russian history. (S. Dunn Trans.). Berkeley: University of California Press.

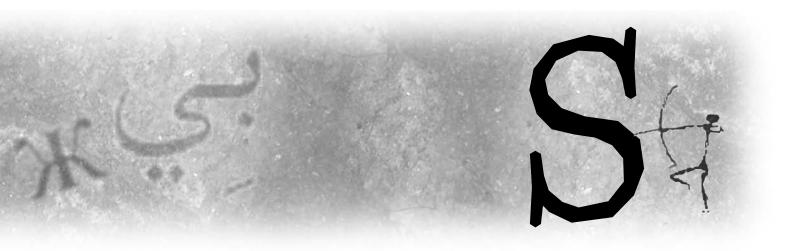
Sacred Law Sailing Ships Saladin Salt Sasanian Empire Science-Overview Scientific Instruments Scientific Revolution Secondary-Products Revolution Secularism Senghor, Leopold Sex and Sexuality Shaka Zulu Shamanism Shinto Siddhartha Gautama Sikhism Silk Roads Sima Qian **Slave Trades** Smith, Adam Social Darwinism Social History Social Sciences Social Welfare Sociology Socrates Sokoto Caliphate Songhai **Spanish Empire** Spice Trade Sports Srivijaya Stalin, Joseph State Societies, Emergence of State, The Steppe Confederations Sugar Sui Wendi Sui Yangdi Sülevman Sumerian Society Sun Yat-sen

Sacred Law

The term "sacred law" generally denotes a body of L laws that are understood by a group of believers to have been divinely revealed. Whereas divine law usually refers to a divinely created natural law or to the unwritten and universal rules of morality, sacred law is intended to govern the actions of humans in the temporal sphere in accordance with the sacred, and often takes the form of positive written laws and oral or customary laws. Sacred law, therefore, leaves room for human interpretation and adjudication of conduct and transgressions of sacred law, usually by a priestly class. Although most, if not all, religions have legal aspects, this article will focus on the sacred laws of the major religions: Hinduism (and by extension Buddhism), Judaism, Islam, and Christianity -religions in which the law is believed to be divinely inspired or revealed, organized in a discernable collection of written or oral codes, and binding over human activities in the temporal sphere.

Hindu and Buddhist Law

Hinduism, the oldest of the major world religions, traces the origins of its sacred law to the earliest written texts, the Vedas, a collection of oral traditions written down in the period around 2000 BCE. Although the Vedas concentrated primarily on rituals devoted to a pantheon of gods, and not on law, the concept of dharmas, moral principles which guide human action in conjunction with *karma* (the force generated by a person's actions to bring about transmigration and to determine the nature



of the person's next existence), is discernable throughout. The dharmas also contributed to the development of the caste system of Hinduism, and thus formed a customary code of social obligations in ancient India. Toward the end of the Vedic period, around 500 BCE, many of the rituals and rules which had developed from oral tradition were collected in texts known as sutras. The Dharmasutras, the rules of daily life, became the first codes of Hindu law. Living according to dharma became one of the "jewels" of Buddhism as well, and therefore, in terms of sacred law, Buddhism and Hinduism share a common origin. In Buddhism, however, the concept of dharma evolved aesthetically, with individuals seeking to achieve an inner tranquility, and it achieved its fullest expression in the Japanese cult of the Buddhist monk Nichiren (1222–1282 CE) and the Lotus school. In India, the Hindu law of dharma became a comprehensive code of personal law, governing marriage and the family, inheritance, and social obligations. In 1772, the British ordered that the Dharmasutras be considered binding as personal law in the Anglo-Indian courts, and thus the Hindu law, in conjunction with English rules of criminal and civil law, remained an effective code in a secularized form in the modern age.

Jewish Law

The Torah, also known as the Pentateuch, is the first source of sacred law for the Jewish tradition; it is a written, substantive law governing Jewish religious, social, and familial obligations believed to have been divinely revealed to Moses during the Exodus from Egypt. During the fifth century BCE, after the Persian emperor Cyrus the Great (c. 550-529 BCE) permitted Jews to return to Palestine following the Babylonian conquest, a number of Jewish scribes provided commentaries on the Torah; some of the most significant are found in the Book of Ezra, and they created the foundations of a comprehensive Jewish jurisprudence. In addition to the Torah, Jewish tradition holds that the sacred law also included a divinely revealed oral law, halakhah. Halakhah, which was comprised of the statements of oral positive law (mishna), commentaries on these laws (gemara) and a number of moral and ethical precepts (haggadah), were put into written form in the third through sixth centuries CE in the Palestinian and Babylonian Talmuds. The mishnas are organized categorically and they cover legal matters ranging from religious observances to dietary laws, contracts and torts, criminal law, family law, and property and legal procedure. In the last few centuries BCE, legal questions turned into sectarian rivalries between the high priests, the Sadducees, who regarded only the Torah as authoritative, and the scribes and laity, the Pharisees, who regarded the oral law as an equal part of divine law. The activities of the Pharisees proved vitally important in Jewish history, as they developed a method of legal study of the law centered on a rabbinic tradition and scholarly communities that became a permanent feature of Judaism. Still, later movements in Jewish history, such as the Hasidic movement of the eighteenth century and the Jewish Enlightenment (haskalah) and secularizing reform movements of the late eighteenth and nineteenth centuries, have significantly challenged the binding authority of Jewish law to regulate the private and public lives of Jews.

Islamic Law

Islamic law (sharia) originated with divine revelation. The Quran, which Muslim tradition holds was divinely inspired, and which is generally believed to have been written by Muhammad (c. 570-632 CE), contains the founding principles of Islamic law, principally, definitions of the holy obligations of believers. The Quran has few direct legal statements, and these are limited to modifications of Arabic customary law. However, once Muhammad had established an Islamic community at Medina in 622, he began to apply the general ethical and moral principles of Islam to matters of secular jurisprudence, thus forming a basis for a specifically Islamic customary law. The application of Quranic ethics to secular affairs developed into an Islamic jurisprudence, by which the juridical goal was the discovery of the exact meaning and application (figh) of Allah's law in secular matters. The founding of the first Islamic dynastic state, the Umayyad dynasty, in Damascus in 661 broadened the focus of Islamic law into areas of civil, commercial, and administrative law. The ninth-century Shafi'i school created a comprehensive Islamic jurisprudence that integrated elements of positive, customary, and natural law. Jurists were first obligated to consult the Quran and the precedents set by Muhammad on matters of law. In cases to which the positive law of the Quran did not directly apply, judges were then to compare elements of the case at hand with established precedent (customary law), and finally to take into consideration matters of public interest and equity (natural law). The Shafi'i school of Islamic jurisprudence became the dominant school of Islamic law, especially within the Sunni communities, and it generally fixed the available sources of law and juridical procedure. However, the Shia tradition, which became especially influential in modern-day Iran, held that secular rulers were divinely inspired descendants of Muhammad, and therefore their legal decisions established a much wider set of case law that jurists might examine for relevant precedents.

Christian Law

The early development of Christianity entailed a break with Judaism and Jewish law. Christian belief considered



Jesus Christ the fulfillment of Jewish law. The mission of Paul (first century CE) to non-Jewish communities within the Roman world, and Paul's insistence that converts to Christianity were not obligated to follow Jewish law, entailed a decisive break between Christianity and Judaism. Intermittent Roman persecution of Christianity in the first three centuries CE made the religion essentially a private cult, one which developed little in the way of laws that governed public life. The conversion of the Roman emperor Constantine (c. 274-337 CE) to Christianity, and the subsequent adoption of the religion as the official cult of the Roman empire, meant that in secular legal matters, the Christian church deferred to the secular powers. The collapse of the Roman empire in the West left the Christian church as one of the only central authorities in western Europe, yet it remained under the dominance of secular kings in legal and jurisdictional matters. The Investiture Controversy (1075–1122 CE) between the Holy Roman Emperors Henry IV and Henry V and Pope Gregory VII, which started as a conflict over lay nomination of bishops, was as much a conflict about whether or not the state had jurisdiction over the affairs of the Church. The outcome decidedly favored the Church, and it emerged as an independent institution, a virtual state, with its own hierarchy and rules of governance. The Church created a system of canon law, the jus novum, that drew heavily from the Roman Code of the Byzantine emperor Justinian, which was newly discovered in the West. The monk Johannes Gratian (d. c. 1160 CE) drew up the full code of canon law, A Concordance of Discordant Canons, in 1140; although not formally a sacred law since it was not held to be divinely revealed, Christian canon law was the first widely used code of law in the West following the collapse of the Roman empire.

Sacred Law and Integrative Jurisprudence

The modern trend by which in some societies the law is viewed as a fixed body of rules set by lawmakers acting out of secular and rational concerns, while in other societies the law continues to be understood as a function of the sacred, has led to what Samuel P. Huntington (1996) called a "clash of civilizations." Nonetheless, even various sacred law traditions contain elements of jurisprudence that would be recognizable to modern secular legal traditions. In other words, despite the fact that sacred law is held by believers to be divinely revealed, these sacred law traditions all contain elements of what Harold J. Berman (1993) called an integrative jurisprudence of positive law (the rules established by the law maker), customary law (the law in a historical and social dimension), and natural law (moral and ethical principles). Thus, the seeming dissonance between the various religious legal traditions, or between religious and secular law, may very well be overstated when considered in terms of common elements of integrative jurisprudence.

Douglas B. Palmer

See also Islamic Law; Religion and Government

Further Reading

- Berman, H.J. (1993). Faith and order: The reconciliation of law and religion. Grand Rapids, MI: William B. Eerdmans.
- Derret, J.D.M. (1963). *Introduction to modern Hindu law*. Oxford, UK: Oxford University Press.
- Edge, I. (1996). Islamic law and legal theory. New York: New York University Press.
- Hecht, N.S. et al. (Eds.). (1996). An introduction to the history and sources of Jewish law. Oxford, UK: Clarendon Press.
- Helmholz, R.H. (1996). *The spirit of classical canon law.* Athens: University of Georgia Press.
- Huntington, S.P. (1996). *The clash of civilizations and the remaking of the world order*. New York: Simon and Schuster.
- Kamali, M. (1989). *Principles of Islamic jurisprudence*. Cambridge, UK: Islamic Texts Society.
- Nanda, V., & Sinha, S. (1996). *Hindu law and legal theory*. New York: New York University Press.
- Neusner, J. (2002). *The Halakah: Historical and religious perspectives*. Leiden: Brill.
- Winroth, A. (2000). *The making of Gratian's Decretum*. Cambridge, UK: Cambridge University Press.

Sailing Ships

During most of human history the most efficient way of conveying goods and people over great distances was by water, especially using wind power, harnessed by sails to propel a vessel. Not until the advent of What prudent merchant will hazard his fortunes in any new branch of commerce when he knows not that his plans may be rendered unlawful before they can be executed? • JAMES MADISON (1751–1836)

steam-powered ships during the nineteenth century did sailing ships cease to be the dominant mode of fast longdistance transportation. Sailing ships date at least to the ancient Egyptians and Phoenicians, although people probably used smaller sailing vessels earlier. Boats were crafted from reeds, skins, and wood, the earliest form of wooden boats being dugouts.

Early sailing ships were built primarily of planks, with the planks either joined end to end by mortise-and-tenon joinery or joined in an overlapping fashion (clinker construction) and fastened by dowels or nails. Sails were made out of woven cloth (cotton, flax, or hemp), although some early Egyptian sails were made from papyrus fibers and other woven grasses. Many early sailing vessels were also outfitted with oars, which provided easier mobility and optional power when wind was absent. Early ships were lateen (square rigged). These methods provided more sail power but less maneuverability than modern rigging with triangular sails.

Antiquity-400 CE

The last fifty years have brought a huge expansion in people's knowledge of sailing ships through the development of underwater archaeology, allowing scholars to study the remains of ships from all periods of history. The earliest archaeological evidence for a water vessel is a birch paddle found at a prehistoric campsite in England from about 6000 BCE. The earliest evidence for a sailing vessel comes from a model sailing raft excavated in Chile. Rafts of logs bound together with a mast and sail were probably the earliest forms of prehistoric sailing watercraft. Skin boats, constructed of animal hides sewn together, were primarily found in northern cultures, particularly the Eskimo, Irish, and northern Russian. Eskimo kayaks and umiaks (open Eskimo boats made of a wooden frame covered with hide) were primarily rowed, although some evidence indicates sail use. Large versions of the Irish curragh, constructed of ox hide, were sailed and took early Irish travelers to the Hebrides, Shetland Islands, and even to Iceland. Reed boats were used primarily in the South Pacific, in the Americas, and among the Marsh Arabs of southern Iraq. Dugout technology is ubiquitous through world cultures, but in the South

Herman Melville: Sailing Ships

Herman Melville's (1819-1891) Moby Dick is considered by many to be the greatest American novel and one of the major works in world fiction. It is the seastory of Captain Ahab's pursuit of the elusive White Whale. It is also the revelation of man's search for cosmic meaning. In the unfolding of its rich themes, the reader hears echoes of the Old Testament, William Shakespeare, and Samuel Taylor Coleridge. In the excerpt below, Melville gives the reader a sense of the conditions on the sailing ship that Ahab captained in his epic quest.

44. The Chart

Had you followed Captain Ahab down into his cabin after the squall that took place on the night succeeding that wild ratification of his purpose with his crew, you would have seen him go to a locker in the transom, and bringing out a large wrinkled roll of yellowish sea charts, spread them before him on his screwed-down table. Then seating himself before it, you would have seen him intently study the various lines and shadings which there met his eye; and with slow but steady pencil trace additional courses over spaces that before were blank. At intervals, he would refer to piles of old log-books beside him, wherein were set down the seasons and places in which, on various former voyages of various ships, sperm whales had been captured or seen.

While thus employed, the heavy pewter lamp suspended in chains over his head, continually rocked with the motion of the ship, and for every threw shifting gleams and shadows of lines upon his wrinkled brow, till it almost seemed that while he himself was marking out lines and courses on the wrinkled charts, some invisible pencil was also tracing lines and courses upon the deeply marked chart of his forehead.

It was not this night in particular that, in the solitude of his cabin, Ahab thus pondered over his charts. Almost every night they were brought out; almost every night some pencil marks were effaced, and others were substituted. For with the charts of all four oceans before him, Ahab was threading a maze of currents and eddies, with a view to the more certain accomplishment of that monomaniac thought of his soul.

Source: Melville, H. Moby Dick (pp.227-228). New York: Dell Publishing Co, Inc.

Pacific large dugouts have outriggers that have sails in addition to oars. Many scholars believe that these sorts of craft made possible human migration throughout the South Pacific.

Plank construction allowing larger ships developed independently in a number of places, including Egypt, England, and China. The earliest evidence comes from Egypt, where vessels were constructed out of cedar planks joined edge to edge but with no internal framing or keel. Because of the unique river conditions of the Nile River, one could float downstream with the current and return under sail upstream. The earliest surviving Egyptian boat, the royal ship of Cheops, dates to 2650 BCE and was excavated in 1954 from a burial pit alongside the Great Pyramid. Many artistic depictions feature Egyptian boats, including seagoing vessels. These depictions invariably show both sails and rowers. Around 1500 BCE Queen Hatshepsut ordered the construction of a fleet of large craft similar to the Nile craft with rowers, a single large mast, and a rudder for a voyage down the eastern coast of Africa. A pictorial account of the voyage remains at a temple in Deir-el-Bahari.

In 1982 researchers found an underwater wreck of an early Levantine (relating to the countries bordering on the eastern Mediterranean) commercial seagoing ship at Ulu Burun off the Turkish coast, dating to 1350 BCE. It was a sturdier craft than Egyptian craft of the time, with a large keel and planks lashed together. Egyptian wall paintings also reveal evidence for Minoan and Mycenaean ships, showing them to be similar in design to Egyptian ships but having only sails and no rowers.

The greatest ancient seafarers, the Phoenicians, sailed ships throughout the Mediterranean Sea, and evidence points to some voyages along the Atlantic coasts of Africa and France. In form, their merchant ships were more similar to Cretan ships than Egyptian ships, with square rigging and often two banks of rowers. The Greeks developed a specialized high-speed warship, the trireme (a galley with three banks of oars, a sail, and a large battering ram on the bow just at the waterline), which could damage and sink enemy ships. The trireme had a single mast and sails that were square rigged, but during battle rowers were used for maneuverability and control. The Greeks used the trireme at the Battle of Salamis in the Saronic Gulf in 480 BCE, when the Athenians defeated a larger Persian fleet and won the Persian Wars.

Researchers have found Roman merchant ships in abundance in the Mediterranean and Black Seas; more than four hundred wrecks have been identified. Roman merchant ships relied exclusively on sail power and were used to transport all manner of goods, including wine, olive oil, marble, and grain. The majority of merchant ships were single or double masted, with square sails, and sometimes a triangular topsail on the main mast. The second mast, in front of the main mast, was rigged with a smaller steering sail called the "artemon." These were medium-sized ships that could haul a cargo of around 300 metric tons. Most impressive in the Roman merchant fleet of the first and second centuries CE were the navis oneraria (transport ships) that carried grain from Egypt and north Africa to the Roman port of Ostia, sometimes 1,200 metric tons in a single voyage.

The earliest northern European planked boats date from 1217-715 BCE. They were relatively small river craft, about 14 meters long, called "Ferriby" and "Brigg" boats. They were discovered in the Humber River in Yorkshire, England, and have a complex sewn-plank joinery. The earliest Asian evidence of planked construction dates to 50 BCE. The Hjortspring boat, discovered in a peat bog in Denmark, dates to 300 BCE and is constructed of plank with lashings holding the boat together and overlapping strakes (continuous bands of hull planking or plates on a ship). Experts think this boat was a forerunner of the clinker (overlapping plank) Scandinavian craft. All of

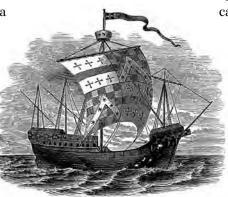
these vessels exhibit shell-first construction, rather than frame-first construction, which would become the standard during the high Middle Ages.

Byzantine ships continued Greco-Roman building practices, including mortise-and-tenon joinery of the planks, as evidenced by the Yassi Ada shipwreck of the seventh century CE, excavated by George Bass in the 1960s. The earliest known clinker boat, the Nydam boat (310–320 CE), is of northern European origin and is about 23 meters long with a double-ended hull, a feature that the Roman historian Tacitus mentioned as characteristic of Scandinavian boats in the late first century CE. These early Scandinavian boats were rowed rather than sailed; sails were not introduced in Scandinavia until around the seventh century CE. With the introduction of the sail the true Viking age began; Scandinavian sailors traveled throughout the North Sea and Baltic Sea and eventually ventured as far as North America and the Black Sea. The Norman invasion of England in 1066 CE, long after the Viking raids had ceased, was carried out using longboats (large oared boats) in the Scandinavian style.

Beginning during the twelfth century in the northern European towns of the Hanseatic League (a league originally constituted of merchants of free German cities), a new kind of sailing vessel was created. The cog was a

round merchant vessel with high sides, built for hauling cargo. Cogs included high structures called "castles" both fore and aft to

house archers or gunners to help protect the ships from raiders. Single masted, square rigged, with a large centerline rudder in the stern, cogs required only a small crew to handle. By the twelfth century inexpensive, machine-sawn planks, made possible by the hydraulic sawmill, replaced split wood planks, and large ships that took advantage of this plentiful supply of planks appeared. Larger cogs were built with more masts,



A sailing ship in the style used by fifteenth-century European explorers.

Robert Fulton's first steamboat on the Hudson River. The steamboat soon became a faster and more reliable replacement for the sailing ship.

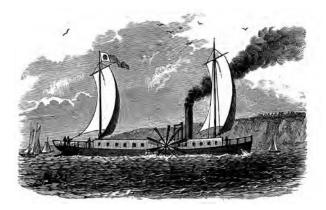
and by the 1400s clinker-plank construction gave way to edge-to-edge planking attached to internal framing.

1350-1700 се

The Venetian galley, ranging from 39 to 50 meters long, often with two banks of oars and one mast with lateenrigged sails, dominated the medieval Mediterranean beginning at the end of the ninth century. By the fourteenth century Venetians began building "great galleys" bigger, longer vessels with two masts for commercial and passenger traffic. During the sixteenth century a new Mediterranean ship emerged, the *galliass*, a huge galley designed for warfare. *Galliasses* had both oars and sails and crews of up to seven hundred. Six *galliasses* fought at the Battle of Lepanto in Greece's Corinthian Gulf in 1571, helping to defeat the Ottoman Turkish fleet. Galleys and *galliasses* also formed part of the Spanish Armada in 1588.

The invention of the carrack during the mid-fifteenth century resulted from the combination of northern and southern shipbuilding influences. Carracks, created in the shipyards of Venice and Genoa, were large modified cogs, with three, four, or even five masts with a variety of sails, both square and lateen rigged. Multiple masts and combination rigging made carracks easy to control and faster than traditional designs. Another innovation was frame-first construction, where planks were nailed to the frame. Carracks were the largest merchant vessels of their time, hauling 362 metric tons, but by the sixteenth century they were hauling 907 metric tons. The English king, Henry VIII, beginning in 1509 built a fleet of "great ships," including two large carracks. Both ships were heavily armed with artillery, and when the wreckage of the Mary Rose was discovered, two thousand arrows in neat bundles were found. Smaller and lighter than the carrack, the *caravel* also appeared during the fifteenth century, probably of Spanish or Portuguese origin. Primarily for commercial use, the *caravel* is known primarily for its use in the great exploration voyages of Christopher Columbus of Genoa, Italy, and Bartolomeo Dias and Vasco da Gama of Portugal.

Growing transatlantic trade during the sixteenth century resulted in the development of oceangoing vessels



such as the galleon. Shorter than a galley, not as bulky or heavy as a carrack, the galleon had three or four masts, with both square and lateen rigging. It had high sides and castles for artillery. Large oceangoing sailing ships were also being developed in China as early as the tenth century CE. During the thirteenth century the Venetian traveler Marco Polo reported seeing four-masted merchant ships during his long stay in China. In 1973 a large thirteenth-century ship was found at Houzhou; it was about 35 meters long, with a keel and double cedar planking on the hull. Writings from the Ming dynasty (1368–1644) describe the voyages of Zeng He in a fleet of nine-masted ships 120 meters long, although researchers have found no such ships. Chinese shipbuilding was suddenly ended in 1550 with an imperial ban on overseas commerce.

The founding of the Dutch East India Company in 1592 propelled the Dutch to the forefront of long-distance trading, eclipsing the Portuguese. The three-masted Dutch flute, a narrow merchant ship that was developed partially to avoid taxation related to the width of the vessel, remained the dominant cargo vessel into the eighteenth century and was soon being built in England, Germany, and Scandinavia. The English and French trading companies, created in response to Dutch maritime power, also owned their own fleets and militia. During the seventeenth century science entered the shipyards, particularly in France, with highly trained naval architects applying mathematics to ship design. Around 1670 the huge castles at the ship's stern began to shrink to reduce weight.

Large naval fleets came to the forefront in warfare during the seventeenth century. The capture of Gibraltar in 1704 by the British was one of the great successes of the British fleet and gave England control of access to the Mediterranean. During the eighteenth century the construction and outfitting of warships took center stage as the rivalry between European powers was waged on the seas through exploration, colonization, and naval battles. In addition to the large warships, battle frigates, adapted from lean, maneuverable commercial vessels, became an important element of the naval fleets of Britain and France.

In 1750 shipbuilders in the British colonies in North America developed an entirely new form, the schooner a small, fast ship with only two masts that initially was used for fishing and trade. The Revolutionary War brought a military dimension to the schooner, which navies used to conduct merchant raids and run blockades. Later slave traders used schooners between Africa and the Americas, particularly after 1820, when slave trade was outlawed by many world governments. The fledgling navy of the United States began with the commissioning of six such ships in 1794, one of which, the U.S.S. *Constitution*, is still docked in Boston.

Longer masts as well as jibs (triangular sails set on a stay extending usually from the head of the foremast) were introduced on European ships during the eighteenth century; all traces of forecastles and aftercastles disappeared; and poop decks were extended to cover the rudder and steering mechanisms, allowing the helmsman to be inside the ship. In 1760 the British introduced copper plating on the bottom planking of their ships to reduce the effects of corrosion and parasites on the hull.

The nineteenth century brought the rise of the large East Indiamen (50 meters long with a beam of 12 meters), which were built in England for cargo rather than speed—the round trip between England and China took about a year. Clipper ships appeared first in the United States in 1820 and were originally intended for the China tea and opium trade but were quickly adapted by British shipyards. One of the fastest British clippers, the *Cutty Sark*, is preserved in dry dock at Greenwich, England. Built in 1869 and famous for its speedy round-trip voyages from England to Shanghai, the *Cutty Sark* is 64 meters long and capable of sailing at 17 knots.

The Eclipse of Sail, 1850–Present

After regular transatlantic steam service began in 1838, only long-distance China trade remained open to sailing

ships because steamers could not haul enough coal to make the journey to China and back. In 1869, with the opening of the Suez Canal in Egypt, steamers began to take over the China trade as well, marking the end of the dominance of sailing ships. By the dawn of the twentieth century sailing ships were used almost exclusively as training and pleasure craft, soon symbolizing luxury rather than efficiency.

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See also Maritime History; Navigation; Piracy

Further Reading

- Anderson, R., & Anderson, R. C. (1977). The sailing ship: Six thousand years of history. New York: Arno Press.
- Bass, G. F. (Ed.). (1972). A history of seafaring based on underwater archaeology. New York: Walker and Co.
- Bauer, K. J. (1988). *A maritime history of the United States.* Columbia: University of South Carolina Press.
- Casson, L. (1971). Ships and seamanship in the ancient world. Princeton, NJ: Princeton University Press.
- Casson, L. (1991). The ancient mariners. Princeton, NJ: Princeton University Press.
- Chapel, H. (1967). The search for speed under sail, 1700–1855. New York: Norton.
- Cipolla, C. (1965). Guns, sails and empires. New York: Barnes & Noble.
- Evans, A. C. (1994). The Sutton Hoo ship burial. London: British Museum Press.
- Gale, N. H. (Ed.). (1991). Bronze Age trade in the Mediterranean. Oxford, UK: Oxford University Press.
- Gardiner, R. (Ed.). (1993). Sail's last century. London: Conway Maritime Press.
- Gould, R. (2000). Archaeology and the social history of ships. Cambridge, UK: Cambridge University Press.
- Irwin, G. J. (1992). The prehistoric exploration and colonization of the Pacific. Cambridge, UK: Cambridge University Press.
- Jobe, J. (Ed.). (1967). *The great age of sail* (M. Kelly, Trans.). Lausanne, Switzerland: Edita Lausanne.
- Levathes, L. (1994). When China ruled the seas. Oxford, UK: Oxford University Press.
- Martin, C. J. M., & Parker, G. (1988). *The Spanish Armada*. New York: Norton.
- Morrison, J. S., & Coates, J. F. (1986). *The Athenian trireme*. Cambridge, UK: Cambridge University Press.
- Souza, D. (1998). The persistence of sail in the age of steam. New York: Plenum.
- Unger, R. W. (1980). *The ship in the medieval economy*, 600–1600. Montreal, Canada: McGill-Queens University Press.



European merchants supply the best weaponry, contributing to their own defeat. • SALADIN (C. 1137–1193)

Saladin (1137/38-1193) Muslim ruler

A l-Malik al-Nasir Yusuf ibn Ayyub Salah al-Din ("righteousness of the faith"), or Saladin, ruled over Egypt, Syria, and Palestine in the late twelfth century, was responsible for the near-total destruction of the Crusader Kingdom of Jerusalem, and founded the short-lived Ayyubid dynasty of Egypt and Syria, northern Iraq, and Yemen. Widely regarded as the epitome of noble, pious, and martial virtues, he was revered in the Muslim Middle East and romanticized in the medieval West. He remains today for Arabs a historical figure of near-mythic proportion.

Yusuf ibn Ayyub was born in Tikrit (in present-day Iraq) to a Kurdish family in the service of the Seljuk sultanate that at that time ruled much of the region. His father entered the service of the ruler of northern Syria, 'Imad al-Din Zangi, and was rewarded with the lordship of Baalbek in Lebanon. In the aftermath of European Christians' failed Second Crusade (1145–1147), Zangi's heir Nur al-Din took Damascus, fulfilling his father's ambition to unite the three great Syrian provinces of Aleppo, Mosul, and Damascus. In the 1160s Saladin accompanied an uncle on a series of missions against Fatimid Egypt, which was regarded as a key territory for the containment of the Crusader Kingdom and which Zangi feared was becoming a Frankish protectorate. Yusuf distinguished himself in these campaigns, and on the death of his uncle in the course of the last of these missions, he managed to take control of the Syrian forces and have himself appointed as vizier to the Fatimid caliph. Taking the honorific title al-Malik al-Nasir ("the king victorious by God"), he became de facto ruler of Egypt. Having consolidated his position in a series of military campaigns, he dissolved the Fatimid caliphate in 1171.

These successes troubled Nur al-Din, who planned to reassert his authority over Yusuf, but died in 1174, before a mission could be launched. Over the course of the following twelve years, in a series of military and diplomatic campaigns, Saladin managed to gain control over Damascus and Aleppo and forced Mosul to submit to his authority. Thus secure and with sufficient manpower to draw on, he was able to launch a decisive campaign against the Kingdom of Jerusalem, which was suffering a period of divisiveness and disarray. After smashing the Crusader forces in a single battle at the Horns of Hattin (near Lake Tiberias) on 4 July 1187, Saladin was able to sweep the Franks from Palestine and western Syria, although his failure to take Tyre (on the coast of southern Lebanon) provided the protagonists of the Third Crusade (1189), Richard I of England and Philip II Augustus of France, with an embarkation point. The Franks captured Acre (on the coast of present-day northern Israel, about 60 kilometers south of Tyre) after a bitter two-year siege, and a new treaty granted Christian pilgrims access to Jerusalem. Saladin died six months later in March 1193.

Saladin's success in uniting the Syrian military classes was due to a number of factors, not the least the force of his own personality: He famously exhibited Arab and Islamic virtues of military prowess, bravery, piety, largesse, and integrity. His skillful use of diplomacy with Franks, Byzantines, and Muslims allowed him to focus his energies, and his ideological program of jihad helped to galvanize popular political support in Syria and beyond. He was fortunate to be assisted by capable and trustworthy subordinates, including his prime minister and ideologue al-Qadi al-Fadil and his brother al-'Adil, who acted as governor of Egypt and who carried out the famous negotiations with Richard I. Saladin preferred to give positions of political responsibility to family members.

The same personal virtues that made Saladin attractive to the Muslim world prompted his adoption by medieval Romance writers as a leading character and a paragon of infidel virtue, a paradox that literary license rationalized variably as the result of a Christian mother, secret conversion, or other factors. In the Muslim world contemporary biographers, such as Baha' al-Din, painted a more realistic but also undoubtedly idealized portrait of Saladin as a pious yet pragmatic king and an advocate of holy war, an image that continues to resonate in the popular consciousness.



The Ayyubid dynasty that Saladin established was essentially a constellation of independent principalities governed by his kinsmen and their descendents. The most important principality was Egypt, which was ruled in turn by al-'Adil and his son al-Kamil, and which survived the thirteenth-century Crusades before being supplanted by the Mamluks in 1250. The longest surviving branch of the dynasty ruled Aleppo until that city's capture by the Mongols in 1261.

Brian A. Catlos

Further Reading

- Baha' al-Din, & Richards, D. S. (2001). The rare and excellent history of Saladin; being the al-Nawadir al-Sultaniyya as'l-Mahasin al-Yusufiyya of Baha' al-Din Ibn Shaddad. Aldershot, UK: Ashgate Publishing.
- Ehrenkreutz, A. S. (1972). *Saladin.* Albany: State University of New York Press.
- Humphreys, R. S. (1977). From Saladin to the Mongols: The Ayyubids of Damascus. Albany: State University of New York Press.
- 'Imad al-Din, Baha al-Din, & Gibb, H. A. R. (1973). *The life of Saladin: From the works of 'Imad Ad-Din and Baha' Ad-Din.* Oxford, UK: Clarendon Press.
- Jubb, M. A. (2000). The legend of Saladin in Western literature and historiography. Lewiston, NY: Edwin Mellen.
- Lev, Y. (1999). Saladin in Egypt. Leiden, Netherlands: Brill.
- Lundquist, E. R. (1996). Saladin and Richard the Lionhearted: Selected annals from Masalik Al-absar Fi Mamalik Al-amsar by Al-Umari. Bromley, UK: Chartwell-Bratt.
- Lyons, M. C., & Jackson, D. (1982). Saladin: The politics of holy war. Cambridge, UK: Cambridge University Press.

Salt

S alt (chemical compound NaCl) is essential for human life. The cells of our bodies exist in a bath of salty fluids; and since we excrete salt by sweating, urinating and spitting, it is necessary to take in appropriate amounts of salt to maintain a steady concentration in our bloodstreams. Since other animals share our salty bodies, a diet rich in meat supplies enough salt to replace losses; but diets that consist almost wholly of grain and other vegetable foods lack enough salt to maintain the salt balance. Resulting shortage manifests itself in a persistent craving for mineral salt, wherever it can be found.

But salt is also an addiction. People who get used to adding salt to their food soon find unsalted food flat and tasteless. This is not usually harmful since kidneys excrete excessive salt into the urine; but a lifetime of eating lots of salt can sometimes bring on dangerously high blood pressure. In practice, consuming some salt is a necessity for vegetable eaters; but most of the table salt people use today and have consumed for centuries, is over and above what our bodies actually require.

Salt in Early History

As long as humans lived as hunters and gatherers, the meat in their diet meant that salt intake was adequate to their bodily needs. But when settled farming villages arose in different parts of the world, beginning about 11,000 years ago, much enlarged human populations soon killed off most wild game animals within reach, so communities came to depend mainly on vegetable foods and had to find ways to supplement them with small but essential quantities of mineral salt.

Fortunately, salt is common. The oceans constitute the earth's most obvious salt reservoir; but salt lakes, salty earth and salt springs exist in desert and some other inland locations. But from the point of view of farmers, geography played a nasty trick on them, since where rain fell regularly and crops grew best, salt was thoroughly leached from surface soils, and carried off to the sea in streams. So in well-watered landscapes local salt supplies were hard or impossible to find.

Just how local populations coped with this problem in Neolithic times is completely unknown, and written records surviving from early civilizations have nothing to say about salt either. But we do know that durable precious objects like gems, shells, flint and obsidian traveled across hundreds of miles in Neolithic times and when the domestication of donkeys permitted caravan trade to get organized, beginning perhaps about 5000 BCE, the radius and regularity of overland trade exchanges increased. So there is every reason to believe that salt and other consumables, like mood-altering drugs, were also exchanged across long distances from the time farming populations first began to feel the craving for supplies of mineral salt.

In Southwest Asia, where wheat and barley farming originated, the closest and richest source of mineral salt was the Dead Sea shore, and it is probably not an accident that Jericho, situated on the Jordan river, and controlling the best route to the Dead Sea, is the earliest fortified site archaeologists have discovered. Dues in kind collected from travelers passing through on their way to gather salt from the shore of the Dead Sea may well have enriched Jericho's rulers and done much to sustain the stronghold they built about 8000 BCE.

Nothing comparably suggestive about long-distance salt trade is known about other early centers of agriculture. But millet farmers in China and Africa, root and rice farmers in Southeast Asia, corn, squash and bean farmers in Mexico, potato and quinoa farmers in Peru all needed mineral salt to supplement their diets as much or more than the wheat and barley farmers of Southwest Asia did. That is because the Southwest Asian cereal farmers acquired a more diversified array of domesticated animals than others, and so had more meat as well as better transport at their disposal.

When what we call civilization brought states and cities and radical differentiation among occupational specialists into being, beginning about 3500 BCE, the salt trade surely grew, if only because larger human populations continued to depend on the crops village farmers produced. But for a long time there is little or no written or archaeological evidence of salt transport and trade that anyone can point to.

Yet we can surmise that where concentrations of mineral salt were not available on land surfaces, people soon learned how to tap the vast stores of salt dissolved in seas and oceans. That required artificial arrangements to construct shallow ponds of seawater, and then allow the sun's heat to evaporate the water until the salt became too concentrated to remain dissolved. It was not hard to discover this technique, since salt is deposited naturally on the seashore wherever natural pools evaporate in summer time. Artificial pond building and tending was therefore probably invented many times over along suitably warm and dry coastlines. Mediterranean and Indian Ocean coasts were especially well suited to salt production, and we can assume that as the technique became familiar, adequate sources of salt for needy farmers were in fact created by deliberate action. After all, it only needed patience to produce mineral salt dependably once picks and shovels had shaped a suitably shallow pond and closed off its inlet.

Salt as a Trading Commodity

Around the shores of the Mediterranean, the practice of evaporating sea salt probably established itself with the spread of agriculture itself. Later, when farming also established itself further north in Europe, where climate was wetter and evaporation slower, it was too cool and it rained too much to allow reliable salt production through evaporation. Instead, first peddlers then ships began to carry Mediterranean salt to the northlands. Records of the salt trade begin to appear in medieval times. By then northerners depended for most of their salt on imports from Mediterranean saltpans.

We know far less about salt production along the coasts of the Indian and Pacific oceans. Still it is very likely that the practice of sea water evaporation spread very widely there within climatic limits, and supplied inland farmers with the salt they needed either through peddling, or by moving it cross-country through systems of reciprocal gift-giving among neighboring farmers. In the Americas an organized salt trade existed among Mayans and Aztecs and salt was also used in religious rituals. But nothing is known of how ordinary farmers got salt. Both Mexico and Peru had dry areas where salt existed on the surface for the taking and evaporating seawater was perhaps unnecessary. In Africa, too, inland salt abounded, and Roman records show that distributing salt mined from surface deposits in the Sahara desert became an important source of wealth for West African rulers when camel caravans began to carry it both north and south of the Sahara after about 300 CE.

In general, then, early farmers were able to get hold of the small amounts of mineral salt they needed to main-

The Salt Tax

The British salt tax spurred Mahatma Gandhi's "Call to Action" in India in 1930. The rebellion against colonial taxation was reminiscent of the well-known North American protests over taxes on tea. There were strikes and pickets, and foreign salt was even dumped into the sea.

Home salt-making— even looking for salt— now became a crime in India; the *malangis* or salt evaporators became almost extinct as a class. For many years unrest and real suffering grew in intensity. Poor Indian peasants, with their vegetarian and frequently monotonous diet, had a great hunger for salt. In 1923, almost a century after Britain had abolished the tax in her own country, the British government, with singular callousness, doubled India's salt tax. Many British parliamentarians protested, with no result.

When Mahatma Gandhi was asked by the All India Congress Committee to initiate a 'call to action,' he made a theatrically brilliant decision. He began a three-week pilgrimage to the sea, gathering followers as he went. On April 6, 1930, Gandhi reached Dandi Beach in Gujarat. After a ceremonial sea bath (salt water, like salt itself, means purity), Gandhi began to pick up salt incrustations which lay free for the taking on the beach. India's fight for independence had begun.

Source: Visser, M. (1989). Salt: The Edible Rock. Much Depends on Dinner (p. 74). London: Penguin.

tain the necessary saltiness of their bodily fluids. The salt they consumed came from multiple, sometimes local, sometimes distant sources, and left next to no trace in archaeological or written records. Distributing the small quantities of salt everyone needed required no special effort or organization; and large-scale transport of salt by ship or caravan remained exceptional.

This began to change in China under the Han dynasty when Emperor Wu-ti, in 119 CE, sought to repair his imperial finances by monopolizing salt and iron, in order to sell these essential commodities to his subjects at artificially high prices. This appears to be the first time a powerful government embraced the idea of taxing salt; and it was not in fact very successful, since the Chinese bureaucracy was not actually able to control salt distribution from the multiple sources along the coast and inlands well. Yet the idea of taxing salt was too enticing to give up since it was something everyone needed and, if government officials could successfully monopolize supplies, both rich and poor were ready to pay a lot for it.

When the technology of salt production in China shifted toward underground mining, effectual monopolization became more nearly practicable. A critical breakthrough occurred under the T'ang dynasty when, about 780 CE, new taxes on salt were dedicated to maintaining the canal and transport system that linked the Yangtse with the Yellow River, thus supplying the imperial capital with food and other resources from the south in far greater quantity than before.

Increasingly efficient and productive underground mining of salt in the inland province of Szechwan was what made it possible to tax salt so heavily as to make it a major source of imperial finance. Techniques were complex and expensive to install. Consequently producing salt from underground became easy to monopolize. What happened was this: Chinese engineers learnt how to exploit underground salt beds in Szechwan by drilling wells, pouring water into them to dissolve the salt and then pumping saturated brine back to the surface. They then passed the brine through a succession of evaporation vats, precipitating mineral salt of varying qualities quicker and in larger quantities than sea water (with only about 3 percent of its weight consisting of salt) could possibly supply. The salt administration under the T'ang and later dynasties became extraordinarily sophisticated, controlling the manufacture, distribution, and sale of salt throughout China, and lowering prices in regions close to the coast so as to compete with illegally manufactured sea salt, which the government was never able to eliminate completely.

Salt manufacture and distribution thus became a major source of tax income for the Chinese government and helped to sustain China's political cohesion across subsequent centuries. The scale and technical efficiency of salt mining in Szechwan was unmatched elsewhere. Indeed it should be recognized as the largest industrial complex on earth before steam engines permitted the rise of Manchester and Birmingham in England after 1780.

Indian and European governments imitated the Chinese in trying to tax salt, but wherever numerous, smallscale salt evaporation sites existed along the seacoast, government monopolies were hard to enforce, and salt taxes remained both unpopular and marginal. But in Central Europe, in and around Salzburg, Austria, underground salt beds existed near the surface, and the Hapsburg monarchy (1273–1918) grew great very largely on the strength of income from taxes on salt, produced, as in China, from underground. The French monarchy tried to do likewise, but since the French coastline abounded in privately managed salt pans, efforts to impose monopoly prices met with indifferent success since even in inland provinces, where the salt tax was most vigorously enforced, smuggling untaxed salt could not be prevented. Everywhere the salt tax remained unpopular, and when the French revolution broke out in 1789 the National Assembly abolished the tax.

Further east, near Cracow in Poland, beds of unusually pure underground salt also existed, and the soil on top of it was so dry that salt could be mined by using picks and shovels, leaving extensive underground caverns behind. Today these caverns run for miles a few yards beneath the surface. Salt merchants from Venice discovered (or enlarged and reorganized?) these mines in the fourteenth century. The salt trade had been important for Venetians from the time of the city's foundation in the sixth century, since the climate along the adjacent coast of the Adriatic was especially dry and well suited to the Mediterranean style of salt-making by evaporation. Venetians (in competition with other Mediterranean seafarers) had supplied salt to northern Europe for centuries; and the expansion of salt production in Poland did not disrupt Mediterranean salt-making and export to the north.

All the same it is likely, though not sure, that Polish salt mines lowered prices and increased the quantity of salt available along the Baltic coast and in Holland. Only careful study of salt prices could tell for sure what hap-



pened; but there is reason to believe that more and cheaper salt began to flow across the Baltic in the fourteenth century since that was when European fishermen began to sail further and further into the Atlantic, preserving their catch by covering the fish with salt and storing them in barrels for days or weeks until they returned home and took their catch ashore. Very likely the Polish government, unlike their Hapsburg neighbor, was too weak to monopolize mined salt, so market prices prevailed. If so, that meant lower prices, since mining Polish salt was comparatively simple, quantities were easy to increase, and shipping down the Vistula was inexpensive. All we know for sure is that after about the midfourteenth century, salt, cheap enough for fishermen to buy and use in large quantities, became available along the Baltic, North Sea, and Atlantic coasts as never before. Some came from Poland, some from old-fashioned Mediterranean salt pans, which could expand production almost as easily as the Polish miners by building more evaporation ponds. Dutch (and other) ships, carrying salt to and fro, kept market prices low for them both.

Historical Implications

This was important for world history, and goes far to explain why European instead of Japanese seamen discovered America. For, even though fishermen do not usually tell where fishing is best, there is good reason to believe that exploration of the breadth of the Atlantic carried European fishermen to the Grand Banks and the shores of Newfoundland some decades before Columbus made his famous voyage. And it is certain that their voyaging, together with what the Portuguese did to explore the coast of Africa, accumulated knowledge of winds and currents and other skills needed for the trans-oceanic voyaging that European navigators achieved so spectacularly between 1492 and 1522.

Nothing similar happened in the North Pacific where Japanese fishermen had boats just as good as what Europeans had, but lacked large amounts of cheap salt, so stayed close to shore where they could get their catch to market within a day or two. Once out of water, fish rot quickly, so catching them across an ocean from where they were sold, as Europeans began to do after about 1450, made no sense without cheap and abundant salt to preserve the catch. Japanese fishermen therefore lost the chance of harvesting salmon and other fish in American coastal waters, and, of course, did not discover America either.

One may therefore argue that Europe's expanding salt supply, by permitting deep sea fishing to flourish as never before, tipped world history towards transoceanic navigation and settlement—an achievement that dominated human history for the next five hundred years by profoundly reshaping global demography, economics and politics. If so, this surely counts as the biggest impact salt ever had on human affairs.

After about 1800, official salt monopolies and systems of taxation built upon them weakened or disappeared, not just in revolutionary France, but in other European countries and in Asia as well. In India, for example, British efforts to maintain salt taxes were never very successful and by the 1930s protest against the salt tax became one of Mahatma Gandhi's ways of mobilizing popular opinion against the Raj, when he went to jail for personally making untaxed sea salt. Even in China the salt administration suffered serious disruption when a long series of rebellions broke out, beginning in 1774 and climaxing with the Taiping convulsion of 1850–1964.

Wherever cheaper and more abundant salt became available, whether from breakdown of tax monopolies or through improved methods of production and distribution, it could be used to preserve meat and other foods as well as fish. This added a good deal to human food supplies in many parts of the world. In the Polish and German part of Europe this was particularly evident, beginning as early as the fourteenth century, for, in addition to salted ham and sausages, sauerkraut, made by salting cabbages, provided a very valuable source of vitamins otherwise seriously lacking from their winter diets.

Eventually, beginning about 1800, all the age-old uses of salt for human consumption and food preservation were eclipsed, at least in scale, when chemists learned how to use salt in various industrial processes. It became an ingredient for manufacturing such diverse items as alkali, analine dyes, rayon and innumerable other new chemicals. A still more recent use for salt is for melting snow and ice from roads in winter. As a result, more than half of the total amount of salt produced annually at the close of the second millennium—something like 225 million tons—was destined for industrial uses. And, strange to say, taxing cheap and abundant salt no longer attracts much attention from the world's governments.

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Further Reading

- Adshead, S. A. M. (1992). Salt and civilization. New York: St. Martin's Press.
- Bergier, J. (1982). *Une histoire du sel* [A history of salt]. Fribourg, France: Presses Universitaires de France.
- Ewald, U. (1985). The Mexican salt industry 1560–1980. Stuttgart, Germany: Gustav Fischer.
- Hocquet, J. (1978–1979). Le sel et la fortune de Venise. Lille, France: Université de Lille.
- Multhauf, R. P. (1978). Neptune's gift: A History of common salt. Baltimore: Johns Hopkins University Press.
- Verlag.Litchfield, C. D., Palme, R., & Piasecki, P. (2000–2001). Lu monde du sel: Mélanges offerts à Jean-Claude Hocquet. Innsbruck, Austria: Berenkampf.
- Vogel, H. (1993). Salt production techniques in ancient China: The Aobo Th. Leiden, Brill.

Sasanian Empire

The Sasanians, or Sasanids (224–641 CE) were responsible for the creation an important empire which included the Plateau of Iran, parts of Central Asia, Arabia, and Mesopotamia. During the height of their power in the seventh century the Sasanians controlled Anatolia (peninsular Turkey), Syria, Palestine, and Egypt as well. They were an important part of the Silk Road economy, which controlled the sale of silk and other luxury goods in Eurasia, and they produced the most recognized monetary system, specifically the coinage known as the silver *drahm*. Their artistic talent and cultural creativity influenced their neighbors, and their history remained a reference point for the later Islamic dynasties that arose in the same area.

Rise of Ardashir I

The Sasanians rose up from the province of Persis (present-day Fars, in southwestern Iran), where Persian customs had remained constant and a historical memory of the past prevailed. Ardashir I (reigned 224–240 CE) was the son of a priest who served at the fire temple of the goddess Anahita in the city of Istakhr. Ardashir was able to conquer the province in the first decade of the third century CE while the nominal ruler of the area, the Parthian king of kings Artabanus VI, was busy with the Romans and fighting off contenders to the throne. By the time Artabanus VI was able to pay attention to the Persian upstart, Ardashir had gathered a large force, composed mainly of the Persian nobility. Ardashir defeated Artabanus VI in 224 and crowned himself king of kings. His coins and inscriptions call him "Ardashir, King of Kings of Iran, who is from the race of gods." It was the first time that the name "Iran" was used to designate the Plateau of Iran as such.

The Empire under Shapur I and the Prophet Mani

Ardashir's son, Shapur I (reigned 240–270 CE), had many military successes. He was able to kill one Roman emperor (Gordian), imprison another (Valerian), and make the third a tributary (Philip the Arab). His armies captured many Roman and Germanic (Gothic) soldiers, who were placed in royal cities as engineers, craftsmen, and laborers. This Roman influence is clearly seen in the city of Bishapur in the province of Persis. Shapur I left several long inscriptions and rock reliefs attesting to his grandeur and power as the king of kings of not only Iran, but also of what he called non-Iran. This means that there was a clear notion of what lands were considered Iran and what parts of the Sasanian empire comprised lands beyond Iran.

During Shapur's reign the prophet Mani (c. 216– c. 274 CE) appeared in Mesopotamia. He was from a Parthian noble family that professed a syncretic, Gnostic A successful woman preacher was once asked "what special obstacles have you met as a woman in the ministry?" "Not one," she answered, "except the lack of a minister's wife." • ANNA GARLIN SPENCER (1851–1931)

religion that combined elements of Zoroastrianism, Buddhism, Hinduism, and Christianity. Central to Mani's religion were the two principles of light and darkness. The realm of light was the spiritual realm, while the realm of darkness was the realm of flesh. The history of the world was divided into three eras: the first era, in which the two principles were separate; the second era, in which the principles were mixed because the realm of darkness attacked the realm of light and entrapped light particles; and the third era, when the ideal state of separation returned the realm of darkness was ultimately destroyed. This religion, known as Manichaeism, became quite popular with the traders and businessmen; consequently it spread along the Silk Road. Shapur I, although a Zoroastrian, allowed Mani to profess his religion freely throughout the empire, which made the Zoroastrian priests resentful. After Shapur's death, the priests contrived to have Mani arrested and then killed. Mani's followers were dispersed and fled to Central Asia and China.

Zoroastrianism in the Sasanian Period

Zoroastrianism, the religion professed by the Sasanians, was the official religion of the empire from the third century. Although other Zoroastrian deities such as Mithra and Anahita were also worshipped, and in fact the Sasanians were the caretakers of Anahita's fire temple, in their inscriptions the Sasanians describe themselves as "Mazda worshipping." That means that Ahura Mazda (Middle Persian Ohrmazd) was the supreme deity. The society was stratified according to the Avesta, the Zoroastrian scriptures, and three major fire temples were established: the Adur Farranbag fire temple for priests, the Adur Gushnasp fire temple for warriors, and the Adur Burzenmihr fire temple for farmers and husbandmen. A host of smaller fire temples were also established throughout the empire where the teacher priests uttered the sacred words and formulas and performed the necessary rituals.

There are two priests from the third century mentioned as the architects of the Zoroastrian state religion and the builders of the Zoroastrian hierarchy. The first is Tosar (or Tansar), who is said to have collected all the traditions relating to the Avesta and compiled an authoritative version during the time of Ardashir I. The next pivotal figure in the history of Zoroastrianism was Kerdir, who surveyed the empire, established the version of Zoroastrian religion which he saw fit, and spread those doctrines. He honored the priests who followed his teachings and punished those who opposed him. Kerdir mentions that he persecuted other religious groups within the empire, namely the Christians, Mandeans, Buddhists, Hindus, and Manichaeans. It was he who instigated the arrest and execution of Mani. He also established many fire temples, and his followers believed that he made a journey to the nether world to find out about heaven and hell and how to end up in one and avoid falling into the other. Kerdir lived through the reign of several Sasanian kings and he rose to absolute power in the second half of the third century.

The Empire in the Fourth and Fifth Centuries

In the early fourth century the wars with the Romans was disastrous for the Persians. King Narses (reigned 293–302 CE) lost several major battles—and his entire harem —to the Romans and was forced to pay a heavy ransom for the harem's release. In religious matters, however, it appears that Narses was able to reduce the power of Kerdir and the priests and give special importance to the goddess Anahita again. Later in the fourth century Shapur II (309–379 CE) avenged the losses of Narses and was able to defeat the Romans. He also was able to defeat the Arab tribes who had attacked and ravaged the southeastern provinces of the empire, which explains his title in the Islamic literature, "piercer of shoulders" (Arabic *dul al-aktaf*).

In the fifth century, during the reign of Yazdegerd I (reigned 339–420 CE), the patriarch of the Nestorian (Christian) Persian church was established at the Sasanian capital, Ctesiphon. Yazdgerd I also married the daughter of the chief rabbi in the Sasanian Empire, from whom the next king of kings, Bahram IV (reigned 388–399 CE) was born. These actions brought a sense that the empire belonged to citizens of all religions: As long as they paid their taxes, they were part of the empire. It was also in the fifth century that the Hepthalites attacked from the east. The Sasanians had to fight the Arabs and the Romans on the southwestern and western front. By the end of the fifth and early in the sixth century, under the rule of Kavadh I (reigned 488–496 CE; 499–531 CE), the society went through a revolution. Using a novel interpretation of the Avesta, the magi (priest) Mazdak helped king Kavadh to reduce the power of the landed nobility, who exerted a lot of influence and were immune from paying taxes. Their lands were redistributed among the people, and new small-landed gentry became the backbone of the state. The power of the clergy, who had supported the earlier status quo, was also reduced.

Khosrow I and His Reforms

Kavadh's son Khosrow I (reigned 531-579 CE) came to the throne after defeating his brother. His first action was to make peace with the Romans and secure the borders of the empire. He then began the capture and persecution of Mazdak and his followers. Once the king had been able to reduce the power of the clergy and the nobility, they again began to bring the empire back to order. Khosrow I, however, did not restore any land to the nobility, but rather made the smaller landowning gentry the backbone of the society and tax infrastructure. Khosrow I surveyed the land and created a new tax system that taxed not only the land but also its produce, to be paid in three installments annually. He also divided the empire into four cantons, one the northeast, one in the southeast, one in the southwest, and one in the northwest. The military was also divided into four sections, one to take charge of the defense of each canton. This was in an attempt to combat the invasions that came from all directions.

Religiously, the Avesta and its commentary (the Zand) were placed under the direction of trusted magis whose interpretation was accepted by the king. The Avesta was written down in its final version, along with its interpretation. The royal chronicle that described the history of Iran, known as the *Khudy-nmag* (Book of Kings) was also written during Khosrow's rule. Khosrow encouraged intellectual inquiry, inviting philosophers from

the Byzantine empire to come to Persia, where they wrote works on Aristotelian philosophy and other sciences for the Persian king. Khosrow also sent to India for books on astronomy, logic, and wisdom literature. Khosrow's minister, Wuzurgmihr, was renowned for his wisdom even in the post-Sasanian (Islamic) period. Such games as chess and backgammon were also introduced to Iran from India at this time. The game of polo was already a kingly sport and played at the time of Khosrow I. Khosrow's court was also known for its opulence: His crown was so big and heavy that it had to be suspended from the ceiling.

Iran in the Sixth and Seventh Centuries BCE

Khosrow II (reigned 590–628 CE), a vigorous ruler, oversaw the conquest of Egypt and the siege of Constantinople, but the Byzantine emperor Heraclius was able to strike back and defeat the Persians. The riches and the opulence of Khosrow II's court and palaces became legendary in the later Islamic period. His love for an Armenian wife of his, Shirin, was recorded in romances and epics, as was the beauty of his horse, Shabdiz. During his rule performers and musicians gained fame, especially the composer-performer Barbad and the female singer Nakisa. The artistic expression of the late Sasanian period is captured in the monuments at Taq-e Bustan and also at Bisitun, where there appears to have been a plan to carve a monumental rock-relief that was never finished.

After Khosrow II, his sons, grandson, and daughters came to the throne. Queen Boran (reigned 630–631 CE) is known to have tried to revive the memory of her father and to bring order to the chaotic empire after his death. Queen Azarmiduxt, the sister of Boran, ruled for a short time as well. Their reigns attest to the fact that women were allowed to rule the Sasanian empire. A series of distant relatives then competed for the throne, ending with the accession of Yazdegerd III (reigned 632–651 CE), the last Sasanian king. By then the Arab Muslim armies were on the march; they defeated the Sasanians in three major battles. Yazdegerd III attempted to gather forces to fight the invaders, but he was murdered in Khorasan by

a local governor who did not want to support the wandering king. His sons and daughters fled to China seeking help. Even his grandson in the eighth century was hoping for the recapture of Iran, but by then the world of Iran had changed and a new dominant force, the Marwanids, were in power.

The Sasanian Legacy in World History

Many Sasanian customs were passed on to the Islamic world, including games such as polo, chess, and backgammon. Wisdom texts from India and Iran and manuals on how to rule and manners of conduct were translated from Middle Persian into Arabic. Iranian administrative practices became the dominant feature of the Islamic administrative system, and the Sasanian silver coinage became the model of Islamic coinage. In the ninth century, with the breakup of the Islamic Abbasid power, claims to Sasanian heritage became a main component of the ideologies of the local dynasties that vied for power on the Plateau of Iran. This fact suggests the enduring power and importance of the Sasanians in the memory of the people of Iran and neighboring lands.

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See also Persian Empire; Silk Roads

Further Reading

- Bivar, A. D. H. (1969). Catalogue of the western Asiatic seals in the British museum: The Sasanian dynasty. London: British Museum Press.
- Frye, R. N. (1984). The history of ancient Iran. Munich, Germany: Beck. Frye, R. N. (1986). Heritage of Ancient Persian. Costa Mesa, CA: Mazda
- Publishers.
- Frye, R. N. (Ed.). (1973). Sasanian remains from Qasr-i Abu Nasr. Cambridge, MA: Harvard University Press.
- Göbl, R. (1971). *Sasanian numismatics*. Brunswick, Germany: Klinkhardt and Biermann.
- Harper, P. O. (1981). Silver vessels of the Sasanian period. New York: Metropolitan Museum of Art in association with Princeton University Press.
- Skjaervo, P. O. (1983). The Sasanian inscription of Paikuli. Wiesbaden, Germany: Dr. Ludwig Reichert Verlag.
- Wiesehöfer, J. (1996). Ancient Persia. London & New York: I. B. Tauris.
- Yarshater, E. (1984). The Cambridge history of Iran: The Seleucid, Parthian, and Sasanian periods: Vol. 3 (Books 1–2). Cambridge, UK: Cambridge University Press.



Zaehner, R. C. (1956). The teachings of the magi. New York: MacMillan. Zaehner, R. C. (1961). Dawn and twilight of Zoroastrianism. New York: G. P. Putnam's Sons.

Science—Overview

The English word *science* derives from the Latin *scire*, "to know." In many languages, the word *science* or its equivalents can be used broadly to mean "a systematic body of knowledge that guides our relations with the world." This is the sense that is present in phrases such as "the social sciences." There have existed many different knowledge systems of this type. All animals with brains have, and make use of, structured knowledge of the external world, so in principle we could claim that even animals depend on some form of science.

Used in a narrower sense, the word *science* refers to the distinctive body of systematic knowledge about the material world that emerged in Europe within the last five hundred years and that underpinned the technological achievements of modern societies. Many societies have had complex technologies, and many have had rich and rigorous systems of religious and philosophical thought, but what is distinctive about modern science is that its theories have been used to generate extraordinarily powerful and effective technologies. As a recent study puts it, "Modern science is not just a thought-construction among others-it entails both an intellectual and an operative mastery of nature. Whereas empirical technology is a feature of every major civilization, the systematic application of scientific insights to change our natural environment ('to conquer Nature by obeying her', as Francis Bacon phrased it) is a creation of Europe alone" (Cohen 1994, 4). Conceived in this sense, science is a distinctively modern way of understanding the world. So, to understand the modern world, we have to understand science.

The idea of a "scientific revolution"—a fundamental transformation in ways of thinking about the world—is central to this view of the role of science in world history.

One never notices what has been done; one can only see what remains to be done. • MARIE CURIE (1867–1934)

Though it is generally accepted that the roots of modern science can be traced to classical Greece and Mesopotamia (although anticipations of modern scientific thought can be found in many different societies, from China to Mesoamerica, and even in some aspects of Paleolithic thought), it is widely assumed that modern science appeared during the scientific revolution of the sixteenth and seventeenth centuries, and its appearance marked a fundamental intellectual shift. As one survey puts it, "The Scientific Revolution represents a turning point in world history. By 1700 European scientists had overthrown the science and worldviews of Aristotle and Ptolemy. Europeans in 1700-and everyone else not long afterwardslived in a vastly different intellectual world than that experienced by their predecessors in, say, 1500" (McClellan and Dorn 1999, 203). Over the next few centuries that revolution transformed human attitudes and human relations with the material world.

However, the notion of science as a revolutionary new form of knowledge raises some complex problems. Was modern science really that different from earlier systems of knowledge? Why has it given modern societies such astonishing leverage over the material world? And is it really true, as some have claimed, that modern science offers a fundamentally superior way of describing reality?

What Is Different about Modern Science?

Answering these questions is not easy. It has proved particularly difficult to show that science offers a more accurate description of the world than earlier systems of knowledge.

Some of the earliest attempts to explain the efficacy of modern science claimed that its defining feature was careful, objective observation of the material world. Whereas most earlier systems of thought relied heavily on religious revelation or on the traditional authority of earlier writers and thinkers, so these claims go, scientists tried to put aside all preconceived notions and observe the world directly and without bias. To ensure the objectivity and precision of their observations, they devised rigorous and The whole history of science has been the gradual realization that events do not happen in an arbitrary manner, but that they reflect a certain underlying order, which may or may not be divinely inspired. • Stephen W. Hawking (b. 1942)

sometimes complex experimental methods. Then, using the results of their observations, they came up with general hypotheses about the nature of reality, using the logical method of induction.

In this view, scientific theories work because they are based on meticulous observation and rigorous logic, which explains why they offer exceptionally accurate and useful descriptions of the world. Galileo Galilei (1564–1642) is often thought to have exemplified the new experimental methods in his observations of the sun and planets through the recently invented telescope and in his experiments rolling balls down sloping planes to study the effects of gravity, while the achievement of Isaac Newton (1642–1727) in formulating general laws of motion is often taken as a paradigm example of the possibilities for radical generalization on the basis of information derived from careful observation. The seventeenth-century English natural philosopher (the contemporary term: now we would say scientist) Francis Bacon (1561–1626) was probably the first to describe the method of induction systematically, but similar arguments about the nature of modern science are still widely

held today. Here, for example, is a modern definition of how science works: "Scientists propose theories and assess those theories in the light of observational and experimental evidence; what distinguishes science is the careful and systematic way in which its claims are based on evidence" (Worrall 1998, 573).

Nine scientists in 1907 in the Tian Shan mountains in Central Asia oberving a solar eclipse through two telescopes.

There is much truth in the inductivist view of modern science. Though examples of careful, empirical observation can be found in all human societies, never before had so many scientific observations been conducted so systematically and with such care and precision, and never before had natural philosophers tried so rigorously to build from them universal theories about the nature of reality. Unfortunately, though, the method of induction cannot guarantee the truth of scientific theories. In the first place, it is now clear that our minds shape and reorganize information as they receive it; so we can never separate observation from theorization in the neat way presupposed in the simplest models of inductive logic.

But the most fundamental problem is logical. Induction leads us from particular observations about the world to general theories about the world. Yet no observations can embrace all of reality, so induction involves a leap of faith that the small sample of reality that we can observe directly is characteristic of the whole of reality. Though it makes sense to rely on theories based on a large body of empirical evidence, induction can never yield conclusions whose truth is certain. (Bertrand Russell's famous



In questions of science, the authority of a thousand is not worth that humble reasoning of a single individual. • GALILEO GALILEI (1564–1642)

example was the inductivist turkey, who observed carefully how, each day, her bipedal servants provided food at a particular time; unfortunately, in mid December, just as the turkey was about to formulate the general hypothesis that food would always appear at the same time, her servants killed her and cooked her for Christmas.) As a result, conclusions based on induction are always subject to modifications, sometimes of the most fundamental kind, as new observations become available. Thus, by carefully observing the position and motion of distant galaxies, using work on variable stars by Henrietta Leavitt (1868–1921), Edwin Hubble (1889–1953) showed that the universe, far from being stable and eternal, is in fact expanding.

Early in the twentieth century, the British-Austrian philosopher Karl Popper (1902–1994) proposed what he hoped was a more reliable apology for science. He argued that science advances through a process of "falsification." As he pointed out, even if it is impossible to prove the truth of any theory reached by induction, it is possible to prove that some theories are wrong. So Popper argued that science should be trusted not because its conclusions are true in any absolute sense, but because it consisted of theories that had been tested rigorously and had not yet been proved wrong. The best known example of a falsifiable idea is perhaps the claim put forward by Albert Einstein (1879–1955) that gravity affected light, a claim he suggested could be tested by seeing if the light from distant stars was bent as it passed behind the sun. The claim was successfully tested in 1919 during a solar eclipse, but what interested Popper was that Einstein's claim was risky: It could have been proved false. Popper argued that ideologies such as Marxism and disciplines such as history did not count as sciences because they did not generate hypotheses that were precise enough to be falsified. Marxism was simply too rubbery: When it was pointed out that the socialist revolution predicted by Marx had failed to materialize, Marxists simply shifted their ground and changed the anticipated date of the revolution.

Unfortunately, even Popper's attempts to distinguish science from other forms of knowledge were shown to be

inadequate as historians of science became aware of the extent to which scientists, too, could cling to outdated theories or tweak their theories to avoid falsification. Despairing of finding any decisive proof of the truth of scientific theories, some philosophers of science gave up. The historian Thomas Kuhn (1922–1996), impressed by the subjectivity and partisanship of real science, argued that the main defining feature of modern science was simply that scientists within each scientific discipline seemed to agree about the discipline's core ideas. Sciences, he argued, were organized around paradigms, or core ideas, such as Newton's laws of motion, or the theory of natural selection. Once firmly established these were rarely subjected to the rigorous testing procedures Popper had taken for granted; on the contrary, there was a powerful element of faith in the work of most scientists most of the time. Paradoxically, Kuhn argued that it was this faith in a core idea that explained the effectiveness of scientific research. Unlike historians, who cannot agree about the fundamental laws by which their discipline works, scientists commit to a certain body of theory and this, he argued, explains why they conduct research in a more coordinated and more effective way than historians. For example, biologists, working within the paradigm of natural selection, know that any observation appearing to threaten the fundamental principle of natural selection is important, so such problems attract many researchers, and eventually their work can lead to new insights that usually support the core paradigm.

But not always. In extreme cases, he conceded, the accumulation of new data and new ideas may lead to the overthrow of an existing paradigm. In the late nine-teenth century, most physicists assumed the existence of an "ether," a universal medium within which all physical processes took place. Unfortunately, experiments on the speed of light by the U.S. researchers Albert Michelson (1852–1931) and Edward Morley (1838–1923), seemed to show that the ether did not exist—the speed of light was uniform in all directions, whereas the existence of an ether ought to have slowed light beams traveling against the ether's flow. It was these anomalies that led Einstein to suggest that the Newtonian paradigm had to be

The difference between a historian and a poet is not that one writes in prose and the other in verse—indeed the writings of Herodotus could be put into verse and yet would still be a kind of history, whether written in meter or not. The real difference is this,

revised. So Kuhn distinguished between normal science, the slow, sometimes plodding process by which scientists flesh out the implications of a well-established paradigm, and scientific revolutions, or periods when an established paradigm breaks down and is replaced with a new one.

Though Kuhn's ideas may have offered a more realistic portrayal of how science actually works, they provided weak support for its truth claims and failed to account for its explanatory power, for it was easy to point to other knowledge systems, including most forms of religion, in which there existed a core body of ideas that were taken on trust but were sometimes violently overthrown. To some, it began to seem that all we could say about science was that it was better at solving the sorts of problems that need to be solved in modern societies. Instrumentalist theories of science argue that it does not really matter whether or not scientific theories are trueall that matters is whether they work. Science is best thought of not as a more or less accurate description of reality, but rather as a tool-the mental equivalent of a stone axe or a computer. Or, to adopt a more precise analogy, it is like a map of reality. As Michael Polanyi has written: "all theory may be regarded as a kind of map extended over space and time". Similarly, Thomas Kuhn has argued that scientific theory "provides a map whose details are elucidated by mature scientific research. And since nature is too complex and varied to be explored at random, that map is as essential as observation and experiment to science's continuing development" (Kuhn 1970, p. 109). Like all knowledge systems, science offers simplified and partial maps of some aspects of the real world. But it is *not* the same as reality.

A last-ditch attempt to preserve the idea that science *can* provide an accurate account of reality is the delightful no-miracles argument advanced by the philosopher Hilary Putnam (b. 1926). Putnam argued that if a theory works, then the simplest explanation of that fact is to assume that the theory provides a good description of the real world. On this argument, it is the success of modern science that justifies its claims to provide accurate descriptions of reality. As Putnam puts it, "The positive argument for realism [the doctrine that science provides an accurate description of the real world] is that it is the only philosophy that does not make the success of science a miracle" (Psillos 1999, 71).

The apparent impossibility of finding any rigorous way of defining what is distinctive about modern science suggests that science may not be as different from other systematic forms of knowledge as is often supposed. All knowledge systems, even those of animals, offer maps of reality that provide more or less accurate guides to material reality. Perhaps, as the historian Steven Shapin has argued, the scientific revolution does not mark as clear an epistemological break as was once assumed. Most seventeenth-century scientists were well aware of the continuities between their ideas and those of the medieval and ancient worlds. Indeed, Newton, like many other scientists of his epoch, continued to study alchemy even as he was laying the foundations of what many think of today as true science. Even the notion of a scientific revolution is a modern idea; the phrase was first coined in 1939, by the philosophical historian Alexandre Koyré (1892–1964).

Developments in the twentieth century have done even more to blur the distinction between modern science and other systematic forms of knowledge. Quantum physics and chaos theory have shown that reality itself is fuzzier than was once supposed, a conclusion that has forced scientists to abandon the nineteenth-century hope of attaining a mechanically perfect description of reality. As a result, the differences between the sciences and the social sciences appear much less clear-cut than they once did. This is particularly true of historical scientific disciplines, such as cosmology or biology. Insofar as they try to describe changes in the past, specialists in these fields face the same dilemmas as historians; far from basing conclusions on repeatable laboratory experiments, they try, like historians, to reconstruct a vanished past from fragments left randomly to the present.

As the borders between the sciences and other modern disciplines have blurred, the idea of science as a quite distinct form of knowledge has become harder to defend. Careful observation leading to technological innovation is a feature of most human societies, while general that one tells what happened and the other what might happen. For this reason poetry is something more scientific and serious than history, because poetry tends to give general truths while history gives particular facts. • ARISTOTLE (384-322 BCE)

theories about the nature of reality are offered in most forms of religion. Inductivist and falsificationist arguments cannot prove the truth of science; at best they highlight the pragmatic fact that scientific theories work because they are based on a larger body of observational evidence than any earlier knowledge systems and are also subject to exceptionally rigorous truth tests.

That line of argument suggests that we examine modern science's place in human life historically, seeing modern science as one of many different human knowledge systems that have evolved in the course of world history. From this perspective, it is striking how, over time, human knowledge systems have had to incorporate more and more information, and how the task of distilling that information into coherent theories has required ever more stringent testing of ideas and yielded theories that were increasingly universal and abstract in their form though increasingly elaborate in their details. Perhaps, then, the main distinguishing feature of modern science is its scale.

As Andrew Sherratt puts it: "Intellectual Evolution'... consists principally in the emergence of modes of thinking appropriate for larger and larger human groupings ...This transferability has been manifested in the last five hundred years in the growth of science, with its striving for culture-free criteria of acceptance...." Because it is the first truly global knowledge system, modern science tries to explain a far greater volume and variety of information, and it subjects that information to far more stringent truth tests than any earlier knowledge system.

This approach may help explain the two other distinctive features of modern science: its astonishing capacity to help us manipulate our surroundings and rigorous avoidance of anthropomorphic explanations. For most of human history, knowledge systems were closely linked to particular communities, and as long as they provided adequate explanations of the problems faced by those communities, their credibility was unlikely to be challenged. But their limitations could be exposed all too easily by the sudden appearance of new problems, new ideas, or new threats. This was what happened throughout the Americas, for example, after the arrival of European conquerors, whose ideas undermined existing knowledge systems as effectively as their diseases and military technologies undermined existing power structures. As the scale of human information networks widened, attempts to integrate knowledge into coherent systems required the elimination of culture-specific explanations and encouraged reliance on abstract universals that could embrace larger and more diverse bodies of information and that could appeal to more diverse audiences. As the sociologist Norbert Elias (1897-1990) wrote in an elegant account of changing concepts of time, "The double movement towards larger and larger units of social integration and longer and longer chains of social interdependencies ... had close connections with specific cognitive changes, among them the ascent to higher levels of conceptual synthesis" (Elias 1998, 179). The change can be seen clearly in the history of religions. As religious systems embraced larger and larger areas, local gods were increasingly supplanted by universal gods claiming broader and more general powers and behaving in more lawlike and predictable ways than the local gods they displaced. Eventually, the gods themselves began to be displaced by abstract, impersonal forces such as gravity that seemed to work in all societies, irrespective of local religious or cultural beliefs.

The Emergence and Evolution of Science

The knowledge systems of the animal world are individualistic; each individual has to construct its own maps of reality, with minimal guidance from other members of its species. Humans construct their knowledge systems collectively because they can swap information so much more effectively than other animals. As a result, all human knowledge systems distill the knowledge of many individuals over many generations, and this is one reason why they are so much more effective and more general in their application than those of animals.

This means that even the most ancient of human knowledge systems possessed in some degree the qualities of generality and abstraction that are often seen as distinguishing marks of modern science. Frequently, it Science has sometimes been said to be opposed to faith, and inconsistent with it. But all science, in fact, rests on a basis of faith, for it assumes the permanence and uniformity of natural laws—a thing which can never be demonstrated. • TYRON EDWARDS (NINETEENTH CENTURY)

seems, the knowledge systems of foragers relied on the hypothesis that reality was full of conscious and purposeful beings of many different kinds, whose sometimes eccentric behavior explained the unpredictability of the real world. Animism seems to have been widespread, and perhaps universal, in small-scale foraging communities, and it is not unreasonable to treat the core ideas of animism as an attempt to generalize about the nature of reality. But paleolithic knowledge systems shared more than this quality with modern science. There are good a priori reasons to suppose that paleolithic communities had plenty of well-founded empirical knowledge about their environment, based on careful and sustained observations over long periods of time. And modern anthropological studies of foraging communities have demonstrated the remarkable range of precise knowledge that foragers may have of those aspects of their environment that are most significant to them, such as the habits and potential uses of particular species of animals and plants. Archaeological evidence has also yielded hints of more systematic attempts to generalize about reality. In Ukraine and eastern Europe engraved bones dating to as early as thirty thousand years ago have been found that appear to record astronomical observations. All in all, the knowledge systems of foraging societies possessed many of the theoretical and practical qualities we commonly associate with modern science. Nevertheless, it remains true that the science of foragers lacked the explanatory power and the universality of modern science-hardly surprising given the limited amount of information that could accumulate within small communities and the small scale of the truth markets within which such ideas were tested.

With the appearance of agricultural technologies that could support larger, denser, and more varied communities, information and ideas began to be exchanged within networks incorporating millions rather than hundreds of individuals, and a much greater diversity of experiences and ideas. By the time the first urban civilizations appeared, in Mesopotamia and Egypt late in the fourth millennium BCE, networks of commercial and intellectual exchange already extended over large and diverse regions. Mesopotamia and Egypt probably had contacts of some kind with networks that extended from the Western Mediterranean shores (and perhaps Neolithic Europe) to Sudan, northern India, and Central Asia, in what some authors have described as the first world system.

Calendrical knowledge was particularly important to coordinate the agricultural activities, markets, and public rituals of large and diverse populations. The earliest calendars distilled a single system of time reckoning from many diverse local systems, and they did so by basing time reckoning on universals such as the movements of the heavenly bodies. This may be why evidence of careful astronomical observations appears in developed Neolithic societies in Mesopotamia, China, Mesoamerica (whose calendars may have been the most accurate of all in the agrarian era), and even in more remote environments such as England (as evidenced by Stonehenge) or Easter Island. The development of mathematics represents a similar search for universally valid principles of calculation. It was stimulated in part by the building of complex irrigation systems and large monumental structures such as pyramids, as well as by the need to keep accurate records of stored goods. In Mesopotamia, a sexagesimal system of calculation was developed that allowed complex mathematical manipulations including the generation of squares and reciprocals.

In the third and second millennia BCE, Eurasian networks of commercial and information exchanges reached further than ever before. By 2000 BCE, there existed trading cities in Central Asia that had contacts with Mesopotamia, northern India, and China, linking vast areas of Eurasia into loose networks of exchange. Late in the first millennium BCE, goods and ideas began traveling regularly from the Mediterranean to China and vice versa along what came to be known as the Silk Roads. The scale of these exchange networks may help explain the universalistic claims of religions of this era, such as Zoroastrianism, Buddhism, and Christianity.

The impact of these developments on knowledge systems is easiest to see in the intellectual history of classical Greece. Here, perhaps for the first time in human history, knowledge systems acquired a new degree of theoretical generality, as philosophers tried to construct general laws to describe the real world. As the writings of the historian Herodotus suggest, the Greeks were exposed to and interested in a colossal variety of different ideas and influences, from North Africa, Egypt, Persia, India, and the pastoralist societies of the steppes. The volume and variety of ideas to which Greek societies were exposed reflected their geographical position and the role of Greek traders, explorers, and emigrants forced, partly by overpopulation, to explore and settle around the many different shores of the Mediterranean and the Black Sea. Faced with a mass of new information, Greek philosophers set about the task of eliminating the particular and local and isolating those ideas that remained true in general. Thales of Miletus (c. 625–547 BCE), often regarded as the first of the Greek natural philosophers, offered explanations of phenomena such as earthquakes and floods that are universal in their claims and entirely free of the notion that reality is controlled by conscious entities.



This Dutch cartoon from 1794 ridicules science. It shows men struggling to inflate a balloon, as laborers haul supplies and dogs struggle with a wagon. Armed soldiers hold back an unruly crowd.

At its best, Greek natural philosophy tried to capture not just this or that aspect of reality, but reality's distilled essence. This project is most apparent in Greek mathematics and in Plato's conviction that it is possible to attain knowledge of a perfect real world beneath the imperfections of the existing world. Greek philosophers were particularly interested in the testing of new ideas, a trait that is perhaps inevitable in societies faced with a sudden influx of new forms of knowledge. The rigor with which ideas were



U.S. President Warren G. Harding escorts Madame Curie down the steps of the White House in the 1920s.

tested is apparent in the dialogues of Socrates, in which ideas are repeatedly subjected to Socrates' corrosive logic (in an ancient anticipation of the notion of falsification), with only the most powerful surviving. Many other societies developed sophisticated methods of mathematical calculation and astronomical observation, and some, such as Song China (960–1279), developed metallurgical, hydraulic, and financial technologies that were unsurpassed until the twentieth century. But few showed as much openness to new ideas or as much interest in the testing of new ideas and theories as the Greeks.

Other societies have responded in similar ways to the exposure to new and more varied ideas. Perhaps Mesopotamia and Egypt, both with relatively easy access to Africa, India and the Mediterranean, count as early pioneers of scientific ideas for similar reasons. And perhaps it is the extensive contacts of medieval Islam that explain the fundamental role of Islam both in exchanging ideas (such as the mathematical concept of zero) between India and the Mediterranean worlds and in preserving and developing the insights of Greek and Hellenic science. Even in the Americas, it may have been the size of Mesoamerican populations and their exposure to many different regional cultures that led to the development of sophisticated calendrical systems from perhaps as early as the second millennium BCE.

entific revolution certainly fits this model. Medieval European societies showed a remarkable openness to new ideas and an exploratory spirit that was similar to that of classical Greece. By the late medieval ages, European contacts reached from Greenland in the west to China in the east. Then, as European seafarers established close links with Southeast Asia in the east and the Americas in the west. Europe suddenly found itself at the center of the first global network of informational ex-

Europe in the era of the sci-

changes. The unification of the world in the sixteenth century constituted the most revolutionary extension of commercial and intellectual exchange networks in the entire history of humanity. Ideas about navigation and astronomy, about new types of human societies and new gods, about exotic crops and animal species, began to be exchanged on an unprecedented scale. Because Europe suddenly found itself at the center of these huge and varied information networks, it was the first region of the world to face the task of integrating information on a global scale into coherent knowledge systems. In the sixteenth century, European philosophers struggled to make sense of the torrent of new information that descended upon them, much of which undermined existing certainties. Like the Greeks, European thinkers faced the challenge of sorting the ephemeral from the durable, and to do that they had to devise new methods of observing and testing information and theories. It was this project that yielded the observational and experimental techniques later regarded as the essence of scientific method.

Thinkers in the era of the scientific revolution not only developed new ways of studying the world, they also created a new vision of the universe. The new vision was based on the work of three astronomers: Nicholas Copernicus (1473–1543), Tycho Brahe (1546–1601), and Johannes Kepler (1571–1630). Copernicus was the first

The secret to creativity is knowing how to hide your sources. • Albert Einstein (1879–1955)

modern astronomer to suggest that the earth might be orbiting the sun; Brahe's careful astronomical observations provided the empirical base for Copernicus's theories, and Kepler's calculations showed that the new model of the universe worked much better if it was assumed that heavenly bodies traveled in ellipses rather than circles. Galileo used the newly invented telescope to show that heavenly bodies were as scarred and blemished as the earth, an observation that raised the intriguing possibility that the heavens might be subject to the same laws as the earth. Newton clinched this powerful unifying idea by showing that both the earth and the heavens-the very small and the very large-were subject to the same basic laws of motion. And this suggested the possibility that the universe as a whole might run according to general, abstract laws rather than according to the dictates of divine beings. Galileo's discovery of millions of new stars also suggested that the universe might be much larger than had been supposed, while Anthony van Leeuwenhoek (1632-1723), the pioneer of modern microscopy, showed that at small scales there was also more to reality than had been imagined. Taken together, the theories of the sixteenth and seventeenth centuries transformed traditional views of the universe in ways that threatened to decenter human beings and throw into question God's role in managing the universe. It was no wonder, then, that many feared that the new science might undermine religious faith.

Since the seventeenth century, the global information exchanges that stimulated the scientific breakthroughs of the scientific revolution have accelerated and affected more and more of the world. The prestige of the new sciences was particularly high in the era of the Enlightenment (seventeenth and eighteenth centuries), and encouraged more and more investigators to study the world using the techniques and assumptions of the scientific revolution. In the eighteenth and nineteenth centuries, scientific investigations yielded powerful new theories in fields as diverse as medicine (the germ theory), chemistry (the atomic theory and the periodic table), the study of electromagnetism (the unified theory of electromagnetism), energetics (theories of thermodynamics), geology, and biology (natural selection). Scientific research was supported by the creation of scientific societies and journals, the introduction of science courses in universities, and the creation of research laboratories by businesses. The last two developments were both pioneered in Germany. The word *scientist* was first used in the 1840s. Meanwhile, the spread of scientific approaches to the study of reality and the increasing scope of scientific theory began to yield significant technological innovations in health care, manufacturing, and warfare. Particularly important were innovations in transportation and communications, such as the invention of trains and planes and the introduction of postal services, the telegraph, the telephone, and eventually the Internet, because these innovations expanded the scale and quickened the pace of information exchanges.

In the twentieth century, a series of new scientific theories appeared that refined the orthodoxies of eighteenth- and nineteenth-century science. Einstein's theory of relativity demonstrated that space and time were not absolute frames of reference, while the quantum theory showed that, at the very smallest scales, reality itself does not behave in the predictable, mechanical ways assumed by earlier theories. Big bang cosmology, which has dominated cosmological thought since the 1960s, demonstrated that the universe, far from being eternal and infinite, had a history, beginning many billions of years ago, while the theory of plate tectonics, which appeared at about the same time, provided the foundations for a unified theory of geology and a detailed history of the formation and evolution of the earth. In biology, Francis Crick (1916-2004) and James Watson (b. 1928) described the structure of DNA in 1953; their work laid the foundations for modern evolutionary theory and modern genetic technologies. Meanwhile, the scale of scientific research itself expanded as governments and corporations began to fund special research facilities, sometimes to fulfill national objectives, as was the case with the Manhattan Project, which designed the first atomic weapons.

Outlook

Recent scholarship suggests that it is a mistake to see modern science as fundamentally different from all other knowledge systems. Like all effective knowledge systems, it is based on induction: on careful empirical observation followed by attempts to generalize. Like all knowledge systems, it is subject to falsification, to the sudden appearance of new realities or new forms of information that may overturn established certainties. What really distinguishes modern science from earlier knowledge systems is the size of the intellectual arena within which its ideas are generated and tested. Its explanatory power and its qualities of abstraction and universality reflect the volume and diversity of the information it tries to distil, and the rigour of the truth tests to which its claims are subjected in a global truth market.

During the past two centuries, science has spread beyond the European heartland to Russia, China, Japan, India, and the Americas. Today it is a global enterprise, and its accounts of reality shape the outlook of educated people throughout the world. Far from diminishing, the flow of new information that stimulated the original scientific revolution has kept expanding as the pace of change has accelerated and the world as a whole has become more integrated. Early in the twenty-first century, the power of science to generate new ways of manipulating the material world, for better or worse, shows no sign of diminishing. Science has given our species unprecedented control over the world; how wisely we use that control remains to be seen.

David Christian

See also Galileo Galilei; Newton, Isaac; Modernity; Scientific Revolution; Time, Conceptions of

Further Reading

- Chalmers, A. (1982). What is this thing called science? (2nd ed.). St. Lucia, Australia: University of Queensland Press.
- Christian, D. (2002). Science in the mirror of "big history." In I. H. Stamhuis, T. Koetsier, C. de Pater, & A. van Helden (Eds.), *The changing image of the sciences* (pp. 143–171). Dordrecht, Netherlands: Kluwer Academic Publishers.

- Floris Cohen, H. (1994). The scientific revolution: A historiographical inquiry. Chicago: University of Chicago Press.
- Frank, A. G., & Gills, B. K. (Eds.). (1992). The world system: Five hundred years or five thousand? London: Routledge.

Gentility of character, and nicety and purity of mind, are found in those who are capable of thinking deeply about abstruse matters and scientific minutiae. • AL-RAZI (864-930)

- Gellner, E. (1991). Plough, sword, and book: The structure of human history. London: Paladin.
- Huff, T. E. (2002). The rise of early modern science: Islam, China, and the West. New York: Cambridge University Press.
- Jacob, M. C. (1988). *The cultural meaning of the scientific revolution*. Philadelphia: Temple University Press.
- Kuhn, T. S. (1970). The structure of scientific revolutions (2nd ed.). Chicago: University of Chicago Press.
- McClellan, J. E., & Dorn, H. (1999). Science and technology in world history: An introduction. Baltimore: Johns Hopkins University Press.
- McNeill, W. H. (1998). History and the scientific worldview. *History and Theory*, 37(1), 1–13.
- McNeill, W. H. (2001). Passing strange: The convergence of evolutionary science with scientific history. *History and Theory*, 40(1), 1–15.
- Mokyr, J. (1990). The lever of riches: Technological creativity and economic progress. Oxford, UK: Oxford University Press.
- Psillos, S. (1999). Scientific realism: How science tracks truth. London: Routledge.
- Salmon, W. C. (1984). Scientific explanation and the causal structure of the world. Princeton, NJ: Princeton University Press.
- Shapin, Steven S. (1996). The scientific revolution. Chicago: Chicago University Press.
- Sherratt, A. (1995). Reviving the grand narrative: Archaeology and longterm change. *Journal of European Archaeology*, 3(1), 1–32.
- Wilson, E. O. (1999). Consilience: The unity of knowledge. London: Abacus.
- Worrall, J. (1998). Science, philosophy of. In E. Craig (Ed.), Routledge encyclopedia of philosophy (Vol. 8, p. 573). London: Routledge.
- Ziman, J. (1978). Reliable knowledge: An exploration of the grounds for belief in science. Cambridge, UK: Cambridge University Press.
- Ziman, J. (2000). *Real science: What it says and what it means*. Cambridge, UK: Cambridge University Press.

Scientific Instruments

We think that we know what "scientific instruments" are. After all, science museums all over the world proudly display collections of the material remains of the activity called "science." Scientific instruments include astrolabes and armillary spheres, chemical glassware and fume cupboards, telescopes and clocks. They are used in laboratories, classrooms, in space, at sea and underground—and many other places besides—and vary in size from massive objects like the particle accelerator at CERN, Geneva, to the tiniest nanotechnology devices that can only be seen with the help of a microscope. They

Elias, N. (1992). Time: An essay. Oxford, UK: Blackwell.

might look impressive, like the gilt brass telescopes of eighteenth-century European observatories, or they might be deceptively plain, functional and compact black boxes packed with electronic circuitry. What links all these instruments is that they were made and used to study the natural world or to tell others about the natural world: activities common to many world cultures. However, the custodians of these collections sometimes have trouble defining what to include under the heading "scientific instruments" and therefore what to collect. Deborah Warner, a curator at the Smithsonian Institution in Washington, DC, in an article entitled "What Is a Scientific Instrument, When Did It Become One, and Why?," explores the changing meanings of the term scientific *instrument* and concludes that the term is problematic. She says that it should not be used as often as it is and should be replaced by terms contemporary with the instruments that are being studied.

Albert Van Helden and Thomas L. Hankins also discuss the ambiguity of the term scientific instrument in their introduction to a collection of essays entitled Instruments, suggesting that the ambiguity inherent in the terms *science* and *instrument* might be a virtue. They believe that we should look at the variety and contexts of the uses of such instruments rather than make a list of which kinds of objects we are to count as scientific instruments. They list four uses to which instruments are put. First, Van Helden and Hankins point out that instruments confer authority and settle disputes-instruments are part of the attempts by practitioners to convince others of the validity of their ideas. Second, and linked to the first use, Van Helden and Hankins point out that instruments are created for audiences, that is, the wider community, including patrons and supporters, who is interested in the practitioners' activities. Third, Van Helden and Hankins suggest that one use of instruments is to act as a bridge between natural science and popular culture, through the symbolic and educational uses of objects. Fourth, Van Helden and Hankins note that the role of instruments changes when they are used to study living things. In none of these four uses is there an explicit statement that people use instruments to find



out about the natural world, but this use is the underlying idea behind the other four: Instruments provide ways of looking at, understanding, and telling others about the natural world.

Recent work in the sociology of scientific knowledge has shown that the actual processes of (Western) scientific researchers and their use of instruments are less objective than the third-person passive-voiced articles reporting their results would have the reader believe. The role of skill and tacit knowledge looms large, and especially so in the use of instruments. Thus, if in the much better-studied case of Western scientific investigation we have much to learn about the ways that people use objects to find out about the natural world, in other world cultures we have even more to learn.

Helene Selin, editor of the *Encyclopedia of the history* of science, technology and medicine in non-Western cultures, believes that to study science in non-Western cultures we must accept that each culture has its own science that defines and predicts natural events and that each science is valid in terms of its culture. She contends that our own science also is a reflection of its culture and that culture is a factor in each step of doing science.

Acknowledging the Western focus of most scholarship on scientific instruments, Van Helden and Hankins suggest that, "Looking at instruments in a non-Western society teaches us that their use and intended purpose is not obvious, and warns us, by reflection, that the role of instruments in Western science is sure to be even more complex . . ." (Van Helden and Hankins 1994, 6).

They suggest that we look at how scientific instruments have worked in humanity's consideration of the natural world—the different uses to which objects have been put. In Selin's terms, we must look at how instruments have worked within the different frameworks that she calls "science"—the ways that people consider and have considered the natural world.

This focus on how objects are used, by whom, and for what purposes means that we can see objects that are superficially similar in function but that relate to people and their activities in quite different ways. For example, navigation at sea in eighteenth-century Europe relied on

I have never met a man so ignorant that I couldn't learn something from him. • Galileo Galilei (1564–1642)

using charts, taking measurements of the altitude of sun and stars above the horizon and the direction of the North Pole-activities linked to instruments such as the compass and the mariner's astrolabe. Turning to the Marshall Islands in the south Pacific Ocean, we find charts made from sticks that map the atolls (coral islands consisting of a reef surrounding a lagoon) and islands, waves and currents, and measurement of direction based on a star compass. However, the ways that these objects are used by the Marshall Islanders are different from the ways that the European charts and compass were used, most significantly in that the Marshall Islanders do not take the charts and star compass to sea with them. The islanders use the charts in the training of navigators rather than in the practice of navigation itself-someone memorizes the charts and the star compass, and the navigation is actually done using mental models of the physical objects.

Cultural Context

The function of scientific instruments can also change as they move from one cultural context to another. During the sixteenth and seventeenth centuries Jesuit missionaries visited China, hoping that by convincing the emperor of the superiority of their astronomical instruments and observations, they could persuade him to convert to Catholicism. The Jesuits took with them the instrument designs of the Danish astronomer Tycho Brahe and taught Chinese metalworkers to make instruments according to these designs, albeit with Chinese-style stands and mounts. These new instruments replaced the thirteenth-century astronomical instruments of the Peking observatory. In his study of astronomical instruments in Ming Dynasty China (1368–1644), Thatcher Deane argues that they were more "useful" as symbols for the emperor's heavenly mandate than as tools for observation. Allan Chapman's study of the Jesuit missions to China shows that they did not need to use the most upto-date instrument designs because their role was more ambassadorial than observational. Thus, the status of the instruments used by the Jesuits changed subtly when physically (and intellectually) located in China rather than in Europe. The Jesuits hoped that this integration could, in the end, lead to the conversion of the Chinese emperor, but the Chinese were happy to select certain benefits offered by the missionaries and take their astronomical and instrumental expertise without following their lead in matters of religion.

The Jesuit missionaries' attempts to convince the Chinese of the superiority of European astronomical (and, by extension, religious) thinking offer an example of the use of scientific instruments in the service of religious conversion. However, as the historian of technology Michael Adas describes, despite the fact that scientific curiosity was a major motivating factor in the Europeans' exploration of the world from the fifteenth century onward, the early explorers and conquistadors did not often use scientific knowledge as a way of gauging their superiority over the people they encountered; that came later with the rise of "scientific racism." Nonetheless, the existence of large cities or complex scientific instruments was included in assessments about how "developed" a particular civilization was. As empire and colonialism gathered pace, division of "science" from "magic" and "superstition" sealed the Western dominance of science and technology, and this edifice is only now being slowly dismantled, with renewed interest in scientific and medical knowledge of non-Western civilizations.

The place of scientific instruments within the process of colonialism is complex. For example, surveying instruments are used in the construction of maps, and evidence indicates that mapmaking was among the strategies used by colonial powers to delineate and therefore control the land they occupied. We might know a little about how, say, Native Americans mapped their world, but we often have little or no evidence to tell us for sure what relationship instruments had to their study of the natural world. Selin cautions against seeing the lack of evidence as a lack of activity, arguing that surely mathematicians in the Pacific Island countries or the Americas were as skillful as more famous people from China or the Middle East. The survival of written records is contingent on many factors, not least on war and colonialism, and because of this fact the study of objects becomes even more important: They provide a source of knowledge about people and their scientific activities that is outside written records and therefore accessible to scholars in cases where the evidence is otherwise somewhat thin or even completely lost.

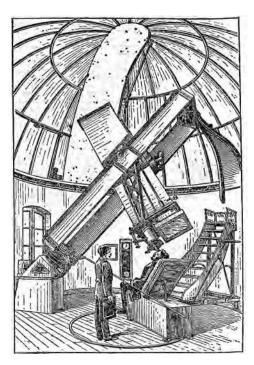
Questions

These few examples show the diversity of ways by which people have used instruments to consider the natural world and the ways in which some scholars have studied them. Instruments can relate to the underlying scientific framework and practices in various ways. Therefore, the problems identified by Warner and by Van Helden and Hankins loom larger when we consider scientific instruments as part of world history. After all, what is to count as a "scientific instrument" when the very category of "science" is opened up to include all the ways by which people measure, predict, and tell others about the natural world? The term is loaded with Western ideals about the

rational, impartial approach to the natural world, which might be difficult to reconcile with other peoples' ways of considering the heavens, the rocks, or the seas. A stick in the ground might be just that, but a stick in the ground casts a shadow, and if someone uses the track of that shadow to measure the passage of time or the seasons, that stick becomes a sundial or a calendar. Should we then call it a "scientific instrument"? Should a museum include that stick in its collection of scientific instruments? If it did, what other information should it record about the ways by which the stick was used so that the link between object and practice is not lost?

Some objects might be classified as scientific instruments all the time—such as an armillary sphere, which models the structure and motions of the heavens. However, even such apparently intrinsically scientific instruments can be used for symbolic or religious purposes wider than the strictly "scientific." Other objects might have the status of "scientific instrument" only temporarily, such as the stick in the ground. Here we have gone far beyond the first explicit definition of the term *scientific instrument*, proposed by the Scottish physicist James Clerk Maxwell in 1876: "Everything which is required in order to make an experiment is called Apparatus. A piece of apparatus constructed specially for the performance of experiments is called an Instrument" (Maxwell 1876, 1).

We have perhaps gone too far for the comfort of some museum curators because allowing objects to temporarily have the status of "scientific instruments" brings in huge numbers of objects that have thus far not been collected or studied as such. If this definition is pushed to its limits, curators such as Warner will have even greater



Telescope equipment in the Paris Observatory in the early twentieth century.

problems determining what is to count as a scientific instrument and therefore what kinds of objects to collect. People interested in how humans look at the natural world and how objects and instruments relate to that activity, though, are less constrained by the practical and physical problems of conservation and storage, and such a broad definition is perhaps less problematic. It might be even beneficial because it opens our eyes to the different approaches that humans have taken to understanding the natural world and the various roles that instruments have played in these activities.

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See also Museums; Science-Overview; Scientific Revolution

Further Reading

- Bud, R., & Warner, D. J. (Eds.). (1998). Instruments of science: An historical encyclopedia. New York: Garland Publishing.
- Chapman, A. (1984). Tycho Brahe in China: The Jesuit mission to Peking and the iconography of European instrument-making processes. *Annals of Science*, 41, 417–444.
- Clerk Maxwell, J. (1876). General considerations concerning scientific apparatus. *The Kensington Museum Handbook* (pp. 1–21). London: Chapman and Hall.
- Harley, J. B. (2001). The new nature of maps: Essays in the history of cartography. London: Johns Hopkins University Press.
- King, D. A. (1987). Islamic astronomical instruments. London: Variorum Reprints.
- Needham, J., Gwei-Djen, L., Combridge, J. H., & Major, J. S. (1986). The hall of heavenly records: Korean astronomical instruments and clocks 1380–1780. Cambridge, UK: Cambridge University Press.
- Pyenson, L., & Sheets-Pyenson, S. (1999). Servants of nature: A history of scientific institutions, enterprises and sensibilities. London: HarperCollins.
- Selin, H. (Ed.). (1997). Encyclopedia of the history of science, technology and medicine in non-Western cultures. Boston: Kluwer Academic.
- Turner, A. (1987). Early scientific instruments: Europe 1400–1800. London: Sotheby's.
- Turner, G. P. E. (1998). Scientific instruments, 1500–1900: An introduction. London: Philip Wilson.
- Van Helden, A., & Hankins, T. L. (Eds.). (1994). *Instruments*. Chicago: Osiris.
- Warner, D. (1990). What is a scientific instrument, when did it become one, and why? British Journal for the History of Science, 23, 83–93.

Scientific Revolution

A lthough historians still debate exactly when it occurred, the Scientific Revolution was a period of monumental change in thought, belief, and cultural and institutional organization that swept Europe between roughly 1550 and 1700. During those 150 years Western science advanced more than it had during the previous fourteen hundred years—since the Greek physician Galen's work in anatomy and the Greek astronomer Ptolemy's work in planetary motion.

More personally, historians generally date the beginning of the Scientific Revolution with the Polish astronomer Nicolaus Copernicus (1473–1543) and his book *De Revolutionibus* (On the Revolutions) and date the ending with the English mathematician and physicist Isaac Newton (1642–1727) and his book *Philosophiae Naturalis Principia Mathematica* (Mathematical Principles of Natural Philosophy).

Before Copernicus and Newton people still saw the world through the eyes of the Greek philosopher Aristotle (384-322 BCE). He thought that the world is composed of four elements: earth, water, air, and fire. The Aristotelian world was a hierarchically structured universe where a clear distinction existed between the destructible space under the moon and eternal celestial space. Because to minds of the time Aristotelian philosophy could answer the most important cosmological (relating to the natural order of the universe) and astronomical questions, people found no compelling reason to dispute him for centuries. His natural philosophy had been accepted-with slight modifications-in the Western world by both intellectuals and the "working" class, by both pagans and Christians, for almost two thousand years.

Nevertheless, as Western thought gradually began to change during the Scientific Revolution, some scientists a handful at first, fistfuls after a while— published works that challenged Aristotelian philosophy. According to the French historian Alexandre Koyre (1892–1964), two fundamental changes occurred during the Scientific Revolution: The previous view of the universe was destroyed, and space was geometricized. "[The founders of modern science] had to destroy one world and to replace it by another. They had to reshape the framework of our intellect itself, to restate and to reform its concepts, to evolve a new approach to Being, a new concept of knowledge, a new concept of science" (Koyre 1968, 20–21).

The world during the Scientific Revolution became an open and infinite universe without any hierarchy. It could be described using the geometry of the Greek Euclid. Celestial phenomena and earthly phenomena were now described by the same physical laws.

Furthermore, scientists were not satisfied with just describing natural phenomena but went further by studying the secrets of nature to explain how nature works. As they worked toward this goal they needed more power-

Galileo—"The Sidereal Messenger" (1610)

... [W]e have a notable and splendid argument to remove the scruples of those who can tolerate the revolution of the planets round the Sun in the Copernican system, yet are so disturbed by the motion of one Moon about the Earth, while both accomplish an orbit of a year's length about the Sun, that they consider that this theory of the constitution of the universe must be upset as impossible; for now we have not one planet only revolving about another, while both traverse a vast orbit only revolving about the Sun, but our sense of sight presents to us four satellites circling about Jupiter, like the Moon about the Earth, while the whole system travels over a mighty orbit about the Sun in the space of twelve years.

ful tools than purely philosophical arguments and therefore began to use mathematics and experiments.

Such a transition was not easy, its course not straight and smooth. Many times the scientists who played a major role in the transition lost their enthusiasm, had doubts, and balked. Isaac Newton, for example, had been passionately engaged in alchemy (a medieval chemical science aiming to achieve the transmutation of base metals into gold), and the German astronomer Johannes Kepler (1571–1630) had to summon great inner strength to transform his thinking from animism (a doctrine that the vital principle of organic development is immaterial spirit) to what we call today "mechanistic" thinking, which holds that natural processes are mechanically determined and capable of explanation by laws of physics and chemistry.

Furthermore, the Scientific Revolution was not an achievement of just a few brilliant minds who conceived and codified new theories and discoveries and made them available to a wider and more receptive audience. The academies and learned societies—such as the Royal Society of London (1692), the Academy of Sciences in Paris (1666), the St. Petersburg Academy (1729), and the Royal Academy of Sciences in Denmark (1742)—played a significant role as the institutions that legitimate such

new ideas. Universities remained more conservative, continuing to support Aristotelian philosophy.

During the Scientific Revolution thinkers also began to channel knowledge into rational systems. For example, in biology the Swedish botanist Carolus Linnaeus (1707– 1778) devised the Linnean classification system, which catalogued all known living creatures into a system that defined their morphological (relating to form and structure) relations. In chemistry a new system of understanding chemicals and elements began when the English scientists Henry Cavendish and Joseph Priestley discovered gases during the latter half of the eighteenth century. In medicine physicians began to understand that the body is a natural system that functions predictably, like a machine. Disease is simply the breaking down of the machine. The science of pathology began, and physicians began to see disease-and recovery from disease-as a rational process.

Copernicus

The astronomer Nicolaus Copernicus boldly claimed that the Earth rotates on its axis daily and revolves around the sun (heliocentric) annually rather than being fixed in the center of the cosmos. Such a claim ran counter to tradition, to the authority of the ancients, and to views of both colleges and churches.

Although relevant ideas had been expressed in antiquity, for example, by the Greek Pythagorean philosopher Philolaos (flourished 475 BCE) and the Greek astronomer Aristarchus (320–250 BCE), Copernicus was the first to attempt to prove the mathematical foundations of the heliocentric system using geometry.

However, for several decades the theories of Copernicus failed to solve some important astronomical problems, such as the orbits of the planets and gravity.

Galileo

The Italian astronomer Galileo Galilei (1564–1642) was the first scientist to formulate the law of the free fall of bodies. According to this law a body that falls from a certain height without friction has constant acceleration, and the distance it covers is relevant to the square of the

What moves men of genius, or rather what inspires their work, is not new ideas, but their obsession with the idea that what has already been said is still not enough. • EUGENE DELACROIX (1798–1863)

time that is needed. Galileo formulated this law in 1604 and made it public in 1632 in his book *Dialogo sopra I due Massimi Sistemi del Mondo* (Dialogues of the Two Chief Systems of the World). He described the law in detail in 1638 in his book *Discorsi e Dimostrazioni Matematiche intorno a due nuove scienze attenenti alla Mecanica e I movimenti locali* (Speeches and Mathematical Demonstrations around Two New Sciences Pertaining to Mechanics and Local Movements).

According to tradition Galileo proved the accuracy of the law with experiments that he performed in the Tower of Pisa, but historical evidence has not fully supported that tradition. On the contrary, he performed experiments using an inclined plane that had been constructed to minimize friction.

Furthermore, Galileo clarified the concept of inertia and expressed it in a form that was not far from the form of the law of inertia that Newton proposed later.

Galileo also was among the first scientists to use a telescope to observe the heavens. He presented one of his first telescopes to the doge (chief magistrate) of Venice, asking that Galileo's professorship be made permanent at the University of Padua and receiving a doubling of his salary.

Galileo's observations of the surface of the moon and the satellites of Jupiter, published in 1610 in *Sidereus Nuncius* (Sidereal Messenger), supported the Copernican system. However, many scientists disputed these observations and questioned the reliability of observations made with a telescope.

To win over such skeptics Galileo used a clever stratagem: He sent his book and a telescope to members of the nobility to gain their political support.

However, the Catholic Church finally forced Galileo to renounce Copernicus's system, and tradition says that after his renunciation Galileo whispered "yet it moves."

Kepler

The astronomer Johannes Kepler published his book *Mysterium Cosmographicum* (The Secret of the Universe) in 1596. When he realized that his theory about the movements of the planets Mercury and Saturn was wrong he began to try to improve the accuracy of his observations.

For this reason in 1600 he became an assistant to the Danish astronomer Tycho Brahe (1546–1601), who established the regular observation of stars and planets on the sky. When Brahe died in 1601 Kepler possessed a huge amount of astronomical observations. From them he finally formulated his famous three astronomical laws: (1) The orbits of the planets are ellipses, with one of their foci the sun. (2) *A line* joining a planet and its star sweeps out equal areas *during equal intervals of time*. (3) *The square* of the sidereal period of an orbiting planet is directly proportional to the cube of the orbit's semimajor axis.

The first two laws were published in 1609 in Kepler's book *Astronomia Nova* (New Astronomy), which shows Kepler's transition from animistic to mechanistic thought.

Newton

Isaac Newton's contributions to the Scientific Revolution were many and included his mechanical universe and his universal laws. His *Philosophiae Naturalis Principia Mathematica* was possibly the most influential scientific book ever published. It contained his laws of motion, which formed the foundation of classical mechanics, as well as his law of universal gravitation. Many scholars also credit Newton with inventing calculus.

The mechanistic concept was the mainstream of scientific thought during the seventeenth century. The concept's most important representative was the French mathematician and philosopher Rene Descartes (1596–1650). He argued that matter is everywhere in the universe and proposed his vortex theory to explain the movement of celestial bodies. He believed that fine matter in the ether forms vortexes around the sun and other stars.

Although science would prove Descartes's theory inadequate, its contribution was important because eventually no one would cite supernatural powers to explain physical phenomena.

Such advances created the necessary setting for the next decisive step—the synthesis of a new view of the world. The person most prominent in creating this new view was Newton, who believed that the orbits of the planets are determined by a central force that is reduced in inverse proportion with the square of the distance. Most people learned about Newton's ideas indirectly by reading the books of the so-called popularizers of Newtonian physics. People have difficulty understanding *Principia* even today. The proofs of the various proposals and theorems follow traditional geometrical methodology, providing the necessary reliability in the framework of his contemporary scientific community.

Principia states the three basic laws of classical physics: the principle of inertia, the principle of action-reaction, and the second law of mechanics, according to which acceleration is proportional to the force acting on a body.

Furthermore, Newton defines the law of universal attraction and uses it to determine the orbits of the planets. In another book, *Optics* (1704), Newton presents his ideas on light. This book is characterized by its persistence on experimental methodology.

The Dutch mathematician Christian Huygens (1629– 1695) and the German philosopher and mathematician G. W. Leibniz (1646–1716) objected to many Newtonian propositions, but their objections did not diminish the wider acceptance of Newton's work.

Dissemination

Many historians feel that the Scientific Revolution was not fully propagated until the eighteenth century. For example, that was when Dutch engineer Peter van Musschenbroek (1692–1761) and the Italian philosopher Francesco Algarotti (1712–1764) undertook the task of making Newton's work better known. Newton's work connected closely with the Enlightenment, which was a philosophic movement of the eighteenth century that was marked by a rejection of traditional social, religious, and political ideas and an emphasis on rationalism.

Among others the French man of letters Bernard Fontenelle (1657–1757) supported the idea that the new scientific method could be applied in politics, ethics, and sociology and that it could be used to determine human behavior in a rational way.

In this setting Denis Diderot (1713–1784) and Jean le Rond d'Alembert (1717–1783) produced their famous French encyclopedia. By the end of the eighteenth century the main physical theories of the Scientific Revolution were spreading in countries such as Spain, Portugal, Brazil, and Greece as conservatives abandoned their resistance to the new worldview.

As a result of this transformation, during the last quarter of the eighteenth century two other revolutions took place in France. One was political, leading to publication of the Declaration of the Rights of Man and of the Citizen in 1789, and one was scientific, transforming chemistry from an alchemical practice into a real science. The French chemist Antoine Lavoisier (1743–1794), played a role in both revolutions, being an opponent of the first and a leader of the second.

The Scientific Revolution was crucial for the development of what we call today "Western civilization." Its intellectual advances were the embodiment of humanity's quest to gain a coherent grasp of nature.

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See also Enlightenment, The; Galileo Galilei; Newton, Isaac; Science-Overview; Scientific Instruments

Further Reading

- Cohen, F. H. (1994). *The Scientific Revolution*. Chicago: University of Chicago Press.
- Field, J.V. (1993). Renaissance and revolution: Humanists, scholars, craftsmen and natural philosophers in early modern Europe. Cambridge, UK: Cambridge University Press.
- Hall, R. H. (1989). The revolution in science 1500–1750. New York: Longman.
- Jacob, M. (1988). *The cultural meaning of the Scientific Revolution*. Philadelphia: Temple University Press.
- Jayawardene, S. A. (1996). The Scientific Revolution: An annotated bibliography. New York: Garland.
- Koyre, A. (1968). Metaphysics and measurement: Essays in the Scientific Revolution. London: Chapman & Hall.
- Lindberg, D. C., & Westman, R. S. (1990). Reappraisals of the Scientific Revolution. Cambridge, UK: Cambridge University Press.
- Osler, M. J. (2000). *Rethinking the Scientific Revolution*. Cambridge, UK: Cambridge University Press.
- Porter, R., & Teich, M. (1992). The Scientific Revolution in national context. Cambridge, UK: Cambridge University Press.
- Rosen, E. (1984). Copernicus and the Scientific Revolution. Malabar, FL: Krieger.
- Shapin, S. (1996). The Scientific Revolution. Chicago: University of Chicago Press.



Secondary-Products Revolution

The most fundamental transformation in human con-L ditions in the last ten thousand years was undoubtedly the beginning of farming, termed the "Neolithic Revolution" by the archaeologist Vere Gordon Childe (1892–1957). In several parts of the world, the cultivation of plants permitted unprecedented aggregations of population and the emergence of village communities. The most rapid development took place in the Fertile Crescent of western Asia, the arc of mountains running parallel to the eastern end of the Mediterranean and enclosing the basin drained by the Tigris and Euphrates rivers, which saw the emergence of urban life around 4000 BCE. This latter event, which Childe termed the "Urban Revolution," was the second decisive turning point in human history and took place as a consequence of the growing scale of interconnections and concentration of resources.

While farming began with the cultivation of cereals and pulses (legumes), the rapid sequence of developments that followed was intimately associated with the keeping of domestic livestock. At first, domesticated animals (sheep, goat, cattle, and pigs) were kept simply as a captive supply of meat. Only later was their potential as draft animals and as suppliers of products such as milk and meat explored and utilized. Early varieties of sheep, for instance, had hairy coats with only a small amount of wool, while primitive breeds of cattle would have yielded only small amounts of milk. By the time of the first urban communities, however, not only were cattle used for pulling wagons and plows, but new species such as the donkey had been domesticated as pack animals for moving supplies. Soon other species of animals joined the list, including horses and camels for transport, complementing the movement of goods by boats-some of which were now equipped with sails. New types of crop came into cultivation, notably tree crops such as olives, dates, and grapes, which could produce liquid commodities such as oil or sugar-rich liquids suitable for fermentation, paralleling the large-scale use of cow's and sheep's milk for ghee (clarified butter) and cheese. Moreover woolly breeds of sheep were in existence, supporting a textile industry that provided one of the major exports of the first cities. It is clear that just as human relationships had grown more complex and diverse, so had the human relationship with crops and livestock, with the domestication of new species and an appreciation not just of the calorific value of plants and animals but of their role as providers of secondary products. The patterns of consumption and technology that arose from these relationships (including alcohol, the plow, horses, wheels, and the wearing of woolen clothes) gave a distinctive character to the societies in which they were present, including the first literate civilizations, and had a major impact on the rest of the world. To signal this transformation in the nature of farming, and in particular the effects that the introduction of these innovations had on neighboring areas such as Europe and the steppe belt (and, ultimately, even China and the Americas), a third "revolutionary" label in the style of Gordon Childe came into use: the secondary-products revolution of the Western Old World.

It is necessary in this inquiry to raise the question of cause and effect. Did innovations in farming practice arise spontaneously, or at least in response to ecological opportunities and growing population densities, and then make possible a growing scale of trade and more complex social arrangements? Or should the causal arrow be reversed, with growing social complexity and centralization making possible experimentation and the exploitation of innovations? Anthropological theorists of successive generations have given different answers, with the ecological emphasis of the 1960s to 1980s (during which time the term *secondary-products revolution* was formulated) giving way to viewpoints stressing social factors and human agency. A balanced view would encompass both perspectives, including on the one hand ecological possibilities and constraints, on the other the

God creates men, but they choose each other. • NICCOLO MACHIAVELLI (1469–1527)

cultural dimension of consumption patterns and economic factors of capital formation and the scale of production. In reality there would have been complex interactions between the two, in a coevolution of material and social relationships.

We may begin with the distinctive ecology of the region. It is no accident that this area, the meeting point of Africa and Eurasia, between the Mediterranean and the Indian Ocean, should so consistently have produced innovations in material and indeed spiritual life. Its diversity of habitats included highlands and lowlands, forests and deserts, steppes and inland seas, whose contrasts both supported distinctive floras and faunas and promoted specialization and exchange. Its long history of mixed farming encouraged experimentation and the emergence of distinctive local specialities. Recent evidence suggests that milk-products were in use by the sixth millennium BCE, perhaps as early as the use of pottery (which would have been important in making use of it). and a similar time depth may be implied for the emergence of woolly breeds of sheep in western Iran. Cattle may have been used for treading grain or even to draw simple threshing sledges. Use of wild olives, grapes, and dates may be equally old in the areas where they grow naturally.

Nevertheless there is a perceptible horizon of change associated with the emergence of the first cities in the fourth millennium BCE. It is in this context that we may first observe the use of donkeys as pack animals and the employment of pairs of draft oxen to pull threshing sledges, plows, and solid-wheeled wagons, as well as the keeping of large numbers of wool-bearing sheep and dairy cattle. Some of these activities are reflected in the earliest uses of writing, in the form of pictographic symbols on clay tablets, recording the delivery of commodities at Mesopotamian temple centers. It seems likely that this new scale of production was instrumental in applying what had previously been small-scale regional specialities on an industrial scale to produce commodities. some of which were used as exports, and that these patterns of production and consumption were propagated throughout the region and beyond, stimulating further adaptations and experiments—for instance in the first use of the horse and the camel. From this viewpoint, there is a striking analogy (as Childe perceived) with the Industrial Revolution in eighteenth-century England and its accompanying agricultural revolution. It is in this context —as the agrarian dimension of the "Urban Revolution" that the secondary-products revolution is best interpreted.

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Further Reading

- Adams, R. M. (1981). Heartland of cities: Surveys of ancient settlement and land use on the central floodplain of the Euphrates. Chicago: University of Chicago Press.
- Barber, E. J. W. (1990). Prehistoric textiles: The development of cloth in the Neolithic and Bronze Ages with special reference to the Aegean. Princeton, NJ: Princeton University Press.
- Burmeister, S. (Ed.). (2004). Rad und Wagen: der Ursprung einer Innovation. Wagen im Vorderen Orient und Europa. [Wheels and wheeled vehicles: The origin of an innovation. Wheeled vehicles in the Near East and Europe]. Mainz, Germany: Philipp von Zabern.
- Childe, V. G. (1936). Man makes himself (The Library of Science and Culture, No. 5). London: Watts & Co.
- Frank, A. G., & Gills, B. (Eds.). (1993). The modern world system: Five hundred years or five thousand? London: Routledge.
- Goodman, J., Lovejoy, P. E., & Sherratt, A. (Eds.). (1995). Consuming habits: Drugs in history and anthropology. London: Routledge.
- Levine, M. Renfrew, C., & Boyle, K. (Eds.). (2003). Prehistoric steppe adaptation and the horse. Cambridge, UK: McDonald Institute Monographs.
- Piggott, S. (1983). The earliest wheeled transport: From the Atlantic coast to the Caspian Sea. London: Thames & Hudson.
- Sherratt, A. (1997). Economy and society in prehistoric Europe: Changing perspectives. Edinburgh, UK: Edinburgh University Press.
- Shortland, A. J. (Ed.). (2001). The social context of technological change: Egypt and the Near East, 1650–1550 BC. Oxford, UK: Oxbow.

Secularism

Secularism believes that everything can be empirically proven. It celebrates a subjective truth that sophisticated people can discern without any pretense to providential inspiration or knowledge. Sins and redemption are not the focus of human life. Personal responsibility and mortality are presumed rather than posterity and mythical prowess. Secularism is in contrast to faiths that

Secularism in Modern India

While secularism is often attributed to western thinkers such as Socrates (c. 470–399 BCE), Plato (c. 428–348 or 347 BCE), Aristotle (384–322 BCE), Martin Luther (1483–1546), Baruch Spinoza (1632–1677), Thomas Jefferson (1743–1826) and other thinkers, secularism clearly remains a highly-disputed issue around the world. Consider this excerpt from an article of 18 March 2004 in the online version of The Hindu, India's national newspaper.

With the countdown to the General Elections on, secularism will be a much-bandied-about subject during the campaign. Unfortunately, those political parties who have been swearing by it all these years have failed to persuade the masses that secularism is good for country. In fact, secularism as defined and propagated today has lost its relevance. The concept as understood by the masses of India stands thoroughly discredited. Hence the question is whether we should redefine secularism to make it acceptable to the masses in the polls, or capitulate to the rising fundamentalism in the country.

believe deeply, and follow, particular religions—such as Christianity, Judaism, and Islam. Secularism is founded on a human-centered comprehension of concrete actions, personal emotions, past histories, and future destinies. Secularism offers a broad array of answers as warranted by varied experiences. By being highly skeptical of individual motives, of institutional interests, and of predestined fates, secularism aims to neutralize the alleged sanctity—and the inherent moral domination of their subsequent role—of any metaphysical deity, sacred scriptures, and, perhaps most importantly, the primacy of clergy, scholars, and politicians who presume to lead societies into perfection by imparting holy messages and spreading their views on how common people should behave.

At its core, secularism provides an ethical framework for understanding nature, the function of the universe, the ideologies of certain collectives, the competing economic interests of a multitude of commercial groups, the contesting political agendas of distinct factions, and the battles of will between ambitious individuals. Rendering When Martin Luther had defined secularism in Europe, it simply meant that the power of the state would be exercised independently of the directions of the Church. Thus, a secular government would act to safeguard the nation-state, even if such action was without Church sanction. Later Marx, calling religion the 'opium of the masses,' defined secularism to completely eschew religion, in fact to debunk the very idea of any religious adherence.

In India, Jawaharlal Nehru and his followers subscribed to the later Marxist re-definition of the concept by which even in public function cultural symbolism such as lighting a lamp to inaugurate a conference or breaking a coconut to launch a project was regarded as against secularism. This orthodoxy induced a reaction in the Indian masses for whom religion was a way of life. Nehru had also failed to define what historical roots ought to be a part of the modem Indian, and what was to be rejected. Instead in the name of 'scientific temper', he rejected most of our past as 'obscurantism'

judgment on whether religion has facilitated peace and harmony or triggered multiple wars of immense cruelty is highly controversial. These opposing propositions engage core beliefs and contrasting world outlooks.

In every civilization and in all regions, a cultural and philosophical reckoning with the defining issue of religious affiliation, if any, was evident. A common theological query was whether there is one omnipotent deity (monotheism), several functional gods (polytheism), or no superior, metaphysical entity at all (atheism) that provides, or should give, moral, political, and professional guidance to individuals and collectives alike. Variants of these approaches (agnosticism, multiple indigenous religions, and unrecorded private introspections) complemented the more widely held convictions. A persistent challenge to scholars, reformers, and most free-thinking persons was to solve the perennial enigma concerning the source of life and its continuity, or even merely respond to it or validate answers given by clergy, philosophers, and politicians.

although in his later years especially after the 1962 debacle he came under the influence of at least one mystic. His orthodox secularism sought to alienate the Indian from his hoary past.

Since nearly 85 per cent of Indians are pan-Hindu in beliefs, and Hindu religion from its inception has been without a 'Church', 'Pope' or 'Book' (in contradistinction to Christianity or Islam), therefore neither Martin Luther nor Marx made any sense to the Indian masses. Since there was little political challenge to Nehru after the untimely death of Gandhiji and Patel, the Marxian secularism concept superficially prevailed in the Indian milieu till his demise in 1964. The masses therefore had humoured Nehru out of respect for him without imbibing his concept of secularism. A conceptual void of what secularism means for India, and what part of history was to be owned however remained to be filled.

Source: Swamy, S. (2004). Redefining Secularism. The Hindu. Retrieved from http://www.hindu.com/2004/03/18/stories/2004031801941000.htm

Faith, especially one that adheres to an omnipotent God, has been a customary answer to the trials and tribulations of mortals. Adherence to specific dogmas became an organizing principle. Whether it is Judaism, Christianity, Islam, Hinduism, or Confucianism, followers of such traditions surrender many of their basic life decisions, and the authority over the evolution of their lives, to an outside entity. Those who hold religious convictions usually expect reward or punishment based on their commitment, conduct, prayers, performance of rituals, and degree of sacrifice.

Classic Times

Both the Greeks and the Romans espoused a framework of peremptory norms that supersede and prevail over humanmade, ordinary stipulations. The Romans aimed to abide by compelling laws, *jus cogens* (literally, compelling laws); the Greeks had natural law. Ostensibly, the authority for proclaiming these moral standards came from mythical gods or ancient forefathers. Nevertheless, the reality was that such rules were issued and interpreted contemporaneously by philosophers, affirmed by politicians, and enforced by soldiers.

The routine creation and enforcement of binding laws, although cloaked in the pursuit of justice, was largely devoid of fearing the wrath of God. However, there was no systematically written secular doctrine articulated. An alternative, secular moral paradigm to secure social equality and moral consistency did not evolve, valiant attempts by learned men such as Socrates (c. 470–399 BCE), Plato (c. 428–348 or 347 BCE), and Aristotle (384–322 BCE) notwithstanding. The rise of Christianity in the first centuries CE and of Islam after the seventh century CE provided guidelines for such cohesion, although at the cost of submission to the supreme authority of organized religions that penalized and crushed most secular, independent thoughts.

The Middle Ages

Throughout medieval times, from the decline of the Roman Empire around 500 CE to the Renaissance in the fifteenth century, the collaboration of insular church and state powers secured a potent hegemony. There was little tolerance and pluralism in what became known as Latin Christendom or in Muslim lands. Parochial institutions and political incumbents branded individuals and groups that dissented from official dogmas as heretics and as infidels. A public challenge to the legitimacy of holy people and sacred documents often led to a painful, premature death at the violent hands of religious authorities. Designating this rigid era as a "dark age" is thus appropriate.

Early Modern Europe

From the fifteenth century onward, especially throughout western and central Europe, a fundamental change transpired. Several elements interfaced. They included the proliferation of trade-oriented city-states that carved economic prominence and political freedom while resenting papal supremacy; the growing independence of competing monarchies; the teachings of Martin Luther (1483–1546) and the subsequent Protestant Reformation; the writings of Baruch Spinoza (1632–1677); and

History, I believe, furnishes no example of a priest-ridden people maintaining a free civil government. This marks the lowest grade of ignorance of which their civil as well as religious leaders will always avail themselves for their own purposes. • THOMAS JEFFERSON (1743-1826)

the advent of scientific research, which discredited preexisting curricula and gradually compromised the influence of religious authorities. Concomitantly, however, oppressive bodies, such as the Spanish Inquisition, targeted any "deviant" private conduct or public expression of thoughts critical of sacrosanct doctrines.

In the eighteenth century, Protestant discourse had a considerable secular component. Virtues, expressed by God-fearing elites, substituted for clerical prescriptions. Virtues consisted of civic commitment, productivity, thriftiness, and frugality aimed at personal benefit and communal activism. Perceptions of what norms should guide common behavior were transformed. Virtue was increasingly applied to the private sphere of ethical character, thus largely replacing the sense of public duty, yet celebrating the accumulation of wealth. Morality and virtue were reduced at least to a degree, to a catalyst for economic activity. This transition from spirituality to practicality was encouraged by the self-serving imperial systems of mercantilism. In part, this perceived cheapening of convictions and rituals by the British led Thomas Jefferson (1743–1826) to support American independence and to espouse a separation of private practices of faith from public state affairs.

Marxism

Karl Marx (1818–1883), a secular political and social maverick, lamented the destructive role of religion on revolutionary political activism and rational ideological discourse. Subsequent totalitarian Communist regimes celebrated atheism. The Soviet Union, for example, while paying homage to fostering intellectual productivity and promoting human dignity, mobilized their resources to eradicate institutionalized religions and any semblance of independent or critical thinking.

Twentieth Century

Even with the increasing impact of globalization, a divergence of class orientations, regional practices, and national patterns is evident. Cultural freedoms foster permissive secular conduct and meaningful inquiries in urbane intellectual elites. Nevertheless, many ordinary people in affluent western countries, especially in North America, are God-believing and God-fearing, sometimes involved as evangelical, born-again Christians. Residents of poor countries in the developing world, often illiterate, also tend to be religious or subordinate to perceived wisdoms. Some disenfranchised people, lacking the basic necessities for existence, renounce earthly hope and seek solace in the afterlife. A lack of basic access to education deprives a huge proportion of humanity from deliberating a more secular framework for their societies, causing them to embrace intolerant fundamentalism.

The Future

The personal, collective, philosophical, scientific, and political quest to know the origins of life, the essentials of humanity, and the meaning of existence is permanent. Similarly, the desire to find whether a deity exists, and, if so, what is the nature of its divinity, will continue in perpetuity. Such deep issues are seemingly insoluble.

Itai Nartzizenfield Sneh

See also Enlightenment, The; Modernity

Further Reading

- Armstrong, K. (1993). A history of God: The 4,000 years quest of Judaism, Christianity, and Islam. London: William Heinemann.
- Asad, T. (2003). Formations of the secular: Christianity, Islam, and modernity. Stanford, CA: Stanford University Press.
- Beck, L. W. (1997). Six secular philosophers: Religious themes in the thought of Spinoza, Hume, Kant, Nietzsche, William James, and Santayana. Bristol, UK: Thoemmes.
- Bruce, S. (2002). God is dead: Secularization in the west. Oxford, UK: Blackwell.
- Motzkin, G., & Gideon, H. (1992). Time and transcendence: Secular history, the Catholic reaction, and the rediscovery of the future. Dordrecht, Netherlands: Kluwer Academic Publishers.
- Ostwalt, C. (2003). Secular steeples: Popular culture and the religious imagination. Harrisburg, PA: Trinity Press International.
- Pocock, J. G. A. (1985). Virtue, commerce, and history: Essays on political thought and history, chiefly in the eighteenth century. Cambridge, UK: Cambridge University Press.
- Rajaram, N. S. (1995). Secularism: The new mask of fundamentalism: Religious subversion of secular affairs. New Delhi, India: Voice of India.
- Silver, M. (1998). Respecting the wicked child: A philosophy of secular Jewish identity and education. Amherst, MA: University of Massachusetts Press.



Senghor, Léopold

African politician

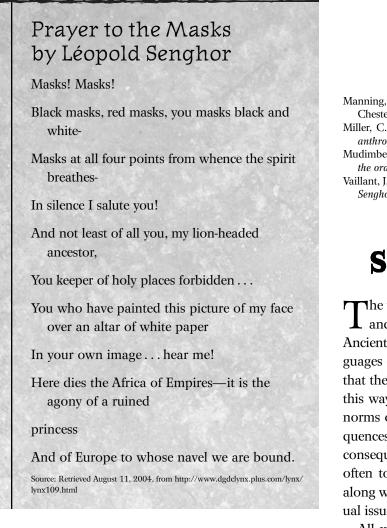
Léopold Sédar Senghor was an African poet, a politician, and a black Frenchman whose life shaped African politics, literature, and the intellectual movement known as "Negritude." He blended French, U.S. Caribbean, and African ideas during a time of historic change.

Senghor was born in Joal, Senegal, as the fifth child of Basile Diogove Senghor and Gnylane Bakhoum. According to family legend, at the moment of his birth he was possessed by a great spirit that had previously dwelled in a large baobab tree. The tree cracked and fell to the ground the moment he was born. Thus, people believed that the spirit had found a new host. His family always referred to him by his birth name, "Sédar," and he was seemingly destined for greatness. His first seven years were spent among the Serer, a matrilineal (tracing descent through the matrilineal line) clan, and he grew up with his mother. His childhood presented him with the problem of competing family claims: those of his mother, his uncle, and his father. He quickly learned to recognize what was appropriate to each and to discipline his own wishes in order to live harmoniously. At age seven he was exposed to his father's world of international trade and to the missionary and French education systems. He quickly grew to understand old and new Europe and Africa. He learned to balance the demands of multiple responsibilities and loyalties. This balance prepared him for his life as a French politician and an African leader.

His greatest disappointment perhaps led him to become a poet and politician. When a racist priest failed to recommend Senghor for seminary school he was crushed. However, when given a second opportunity to attend seminary his response was, "I felt I would not there get the instruments necessary for the liberation of black Africa" (Vaillant 1990, 41). He continued his education in Dakar, Senegal, and in Paris, using poetry and prose as an outlet for his emerging views. His first poetry appeared during the late 1930s at the height of colonial power in Africa. Although he wrote his poetry in French, the language of the colonizer, Senghor gave homage to being black. His poetry celebrated the beauty of African women, the rhythms of the land, and the cultures of Africa, including music, art, poetry, religion, and politics. In his poetry he rejected the subjugated place that European civilization had defined for Africa and Africans. His poetry transcended African, European, and U.S. borders to be widely read and discussed.

As an African living in France, Senghor met Aimé Césaire, who would become his lifelong friend, and this meeting proved another turning point for him. Through Césaire, Senghor was introduced to the Caribbean diaspora (scattering) in Paris, leading black intellectuals, the Harlem Renaissance, its ideas, music, and literature. Studying the advancement of U.S. blacks gave Senghor hope for Africans. As co-founder of the Negritude movement, Senghor sought to infuse African identity with dignity, pride, and honor. The essential objective of the movement was to define black as beautiful against a backdrop of worldwide racial injustice and discrimination. Using literature and poetry, Negritude attempted to rebuild the validity of African culture and to establish a positive image of black consciousness; Negritude held that a special social quality and humanness exist in blackness.

In 1948, after reaching success as a poet, publishing numerous books, and co-founding the cultural journal Présence Africaine, Senghor returned to Senegal and made the leap to politics full-time. His life had prepared him well, and he was the consummate politician. He spoke publicly of broad idealistic goals, he was a shrewd deal maker, and he retained a sense of balance necessary for a Christian leader in a Muslim country. He promoted African socialism, accepting the German political philosopher Karl Marx's ideas that people should not be alienated from the products of their labor. He believed that people have natural rights and that people have to remain free agents and creators of culture. However, he rejected Marxism and Communism because he disagreed with the ideas that social complexities universally fit into the concept of class struggles and with Marxism's



expressed denial of religion. He played an active role in events that led to the end of the French empire in west Africa. In 1960 he was elected as the first president of the Independent Republic of Senegal; he served in this position for twenty years before retiring in 1981. As a poet, a co-founder of the Negritude movement, the first black member of the French Academy, and the first president of independent Senegal, Léopold Sédar Senghor was devoted to bridging cultures.

Lorna Lueker Zukas

Further Reading

- Grinker, R. R., & Steiner, C. B. (1997). Perspectives on Africa: A reader in culture, history, and representation. Cambridge, UK: Blackwell.
- Hymans, J. L. (1971). *Léopold Sédar Senghor: An intellectual biography*. Edinburgh, UK: Edinburgh University Press.
- Irele, A. (1990). The African experience in literature and ideology. Bloomington: Indiana University Press.

Manning, P. (1999). Francophone sub-Saharan Africa, 1880–1995. Port Chester, NY: Cambridge University Press.

- Miller, C. L. (1990). Theories of Africans: Francophone literature and anthropology in Africa. Chicago: University of Chicago Press.
- Mudimbe, V.Y. (1988). *The invention of Africa: Gnosis, philosophy, and the order of knowledge*. Bloomington: Indiana University Press.
- Vaillant, J. G. (1990). Black, French, and African: A life of Léopold Sédar Senghor. Cambridge, MA: Harvard University Press.

Sex and Sexuality

The word *sexuality* is quite new, coming into English and most other Western languages in about 1800. Ancient Greek, medieval Latin, and many other early languages did not even have words for "sex" or "sexual," so that they did not define or classify ideas or behaviors in this way. Every human culture, however, has developed norms of sexual behavior, and provided positive consequences for following those norms, along with negative consequences for deviating from them. World history is often told as a story of interactions between cultures, along with the creation of traditions within cultures. Sexual issues have been central in both of these processes.

All world religions, and most indigenous belief systems, regulate sexual conduct and regard sexual behavior as part of a moral system. This began with early sacred texts, such as the Vedic hymns or the Hebrew Scriptures, and continues to today, when issues such as the ordination of openly gay clergy or the proper form of veiling for women divide religious groups more than differences of opinion about theological matters. Many religions set up different standards of sexual behavior for clergy and laypeople, with priests, monks, nuns, and other religious personnel adopting permanent or temporary chastity as a sign of their holiness. Lay believers may also follow distinctive sexual rules while on religious pilgrimages or other periods of intense spiritual experience.

The earliest written legal codes, and every legal system since, include laws regarding sexual relationships and actions. Hammurabi's Code of Laws, for example, promulgated in ancient Babylon in about 1750 BCE, sets out which sexual relationships will be considered marriage (and thus produce children who can inherit property), the definition and consequences of adultery and incest, the steps necessary for a divorce, and the consequences of various types of sexual assault. Contemporary national, state, and local law codes do the same.

Encounters between cultures may have taken the form of military campaigns or voyages of trade, but permanent contact often brought laws regulating sexual relationships between groups. The Manchus who conquered China in the seventeenth century and set up the Qing dynasty prohibited intermarriage between Manchus and Han Chinese. At about the same time in colonial Virginia, according to a state statute of 1691, "English or other white" people were prohibited from marrying anyone who was "negroe, mulatto, or Indian." Sexual relationships that ignored or defied those laws, particularly between men from the dominant group and women from the conquered or subordinate group, were common in situations of conquest, colonialism, or occupation, but these were generally not regarded as marriage.

Laws and norms regarding marriage and other sexual contacts work to keep groups distinct from one another, and also to preserve hierarchies within cultures, which depend on those in power marrying people which that society defines as "like themselves." In Tokugawa Japan (1600–1868), the four legal status groups-samurai, merchant, peasant, burakumin (an outcast minority group who usually did tasks regarded as unclean, such as handling the dead and butchering)-were prohibited from intermarrying, and in many countries of Europe, rulers (at least in theory) lost their claim to the throne if they married commoners. Along with explicit laws, sexual relations between groups have been restricted through the establishment and fostering of traditions and other forms of internalized mechanisms of control. If children are taught very early who is unthinkable as a marriage partner, and unattractive as a sexual partner, the preservation of cultural boundaries will not depend on laws or force alone. Societies sometimes allow elite men to marry or (more often) to have nonmarital sexual relationships with non-elite women, though they place various restrictions on the children of those unions. The reverse case is much rarer,

We find that the sexual instinct, when disappointed and unappeased, frequently seeks and finds a substitute in religion. • RICHARD VON KRAFFT-EBING (1840-1902)

because the sexual activities of elite women are the most closely monitored in nearly all societies. Thus socially defined categories of difference such as race, nation, ethnicity, caste, noble status, and social class are maintained by sexual restrictions, for if they are not, those distinctions literally disappear. These restrictions are gendered, with women's experience different from that of men.

Cultural Variation in Sexual Categories and Norms

Sexual issues are thus central to world history, and, like every other facet of human life, sexuality is also historically and culturally variable. Some cultures, including modern Western culture, categorize sexuality primarily in terms of "object choice"—if a person desires or has sexual relations with individuals regarded as of one's own sex, that person is "homosexual"; if those individuals are of the opposite sex, the person is "heterosexual." Other cultures categorized sexuality primarily in terms of the role a man took in sexual intercourse. If he inserted something—usually his penis—in another's bodily orifice, he was taking the superior "active" role, no matter what the gender of the other person, whose role was viewed as "passive," and thus inferior.

Both sets of categorizations-homosexual and heterosexual, active and passive-are dichotomous, but many cultures around the world had, and sometimes continue to have, more complex systems of gender and sexual classification. In Australia, Siberia, North America, the Amazon region, Oceania, Central and South Asia, Alaska, and the Sudan, certain individuals were regarded as neither men nor women, or as both men and women, or in some other way as transcending dichotomous gender and sexual classifications. In some cases these individuals appear to have been physically hermaphroditic, either from birth or as the result of castration, though in others their distinctiveness or androgyny was purely cultural. In some cultures such individuals engaged in sexual activities or had permanent or temporary sexual relationships, while in others they did not.

The gender and sexuality of such individuals is complicated and highly variable, but they generally had special ceremonial or religious roles, just as celibate priests, monks, and nuns did and do in Christianity and Buddhism. In south Sulawesi (part of Indonesia), individuals termed *bissu* carried out special rituals thought to enhance and preserve the power and fertility of the rulers, which was conceptualized as "white blood," a supernatural fluid that flowed in royal bodies. The bissu were linked to the androgynous creator deity; they could be women, but were more often men dressed in women's clothing and performing women's tasks. In northern India, divine androgyny is replicated in the human world by religious ascetics termed *hijra*, impotent or castrated men dedicated to the goddess Bahuchara Mata; they are regarded as having the power to grant fertility and so perform blessings at marriages and the births of male children. In Polynesian societies, *mahus* perform certain female-identified rituals, do women's work, and have sex with men, as do the *xanith* in Oman, though this status is temporary and these men eventually marry women.

The best-known example of third-sex categorization is found among certain Native American groups. Europeans who first encountered them thought they were homosexuals and called them "berdaches," from an Arabic word for male prostitute. This term can still be found in older scholarly literature, but the preferred term today is "two-spirit people." Though Europeans focused on their sexuality, two-spirit people (who were usually, though not always, morphologically male) were distinguished from other men more by their clothing, work, and religious roles than their sexual activities. Among many groups two-spirit people are actually thought of as a third gender, so that sexual relations between a twospirit person and a man may have not been understood as "same-sex" in any case. Two-spirit people were regarded as having both a male and female spirit, so they could mediate between the male and female, as well as the divine and human worlds.

Europeans' categorization of two-spirit people as homosexual—the description actually used was "sodomite" —highlights a common issue in cultural encounters. Sexual categories and norms within a culture are often so deeply ingrained that they appear "natural," the result not of human decisions but of divine mandate or the "laws of nature." The sexual practices of other cultures are thus made to fit into the existing scheme, and if they cannot, they are judged unnatural or deviant, and may serve as a justification for conquest. "Unnatural" sexual practices became a standard feature of groups other than one's own, a sign that they were radically "other." Ancient Athenians told about the Amazons, who lived free of men except for brief encounters for purposes of procreation. Early modern western Europeans saw Turks, especially the sultan and his nobles, as sexually lascivious, lolling around in a harem surrounded by beautiful young women. Nineteenth-century British officials regarded Bengali men, who were thinner and had less body hair than they did, as effeminate.

Premodern Sexuality

Despite the centrality of sexual issues to cultural traditions and encounters between groups, until the 1980s the study of sexuality was often trivialized, and seen as a questionable or marginal area of scholarly inquiry. The history of sexuality has since become a booming academic field, but certain areas and periods have received more attention than others.

One of these is ancient Athens, which has traditionally been regarded as a foundation of Western culture and has left many sources, particularly about attitudes toward sexuality among the educated male elite. Plato and Aristotle, the two most important philosophers of ancient Athens, were both suspicious of the power of sexual passion, warning that it distracted men from reason and the search for knowledge. Both men praised a love that was intellectualized and nonsexual, the type of attachment still termed "platonic." (Neither Plato nor Aristotle was concerned about what sex does to women except as this affects men.) Plato developed a dualistic view of both humans and the world, arguing that the unseen realm of ideas was far superior to the visible material world, and that the human mind or soul was trapped in a material body. This mind/body split was a gendered concept, with men associated more with the mind and women with the body. Women's bodies were also viewed as more influenced by their sexual and reproductive organs than

The Kama Sutra on Being a Virtuous Woman

The Kama Sutra *is an ancient Indian guide to the art of love. Known as a frank guide to sexual matters, it also presents much in the way of practical advice as in the excerpt below.*

A virtuous woman, who has affection for her husband, should act in conformity with his wishes as if he were a divine being, and with his consent should take upon herself the whole care of his family. She should keep the whole house well cleaned, and arrange flowers of various kinds in different parts of it, and make the floor smooth and polished so as to give the whole a neat and becoming appearance. She should surround the house with a garden, and place ready in it all the materials required for the morning, noon and evening sacrifices. Moreover she should herself revere the sanctuary of the Household Gods, for says Gonardiya, "nothing so much attracts the heart of a householder to his wife as a careful observance of the things mentioned above."

Towards the parents, relations, friends, sisters, and servants of her husband she should behave as they deserve. In the garden she should plant beds of green vegetables, bunches of the sugar cane, and clumps of the fig tree, the mustard plant, the parsley plant, ... clusters of various flowers such as the ... jasmine, ... the yellow amaranth, the wild jasmine, ... the china rose and others ... She should also have seats and arbours made in the garden, in the middle of which a well, tank, or pool should be dug.

Source: Vatsyayana, (1883). *The Kama Sutra* (R. Burton & F. F. Arbuthnot, Trans., Part 4, Chap. 1). London: The Kama Shastra Society.

men's; Plato described the womb as an "animal" that wandered freely around the body, causing physical and mental problems. (This is why the words *hysteria* and *hysterectomy* both have the same Greek root.) The mind/ body split did not originate with Plato, but his acceptance and elaboration of it helped to make this concept an

important part of Western philosophy. In Aristotle the mind/body split is reflected in the process of procreation (what he termed "generation"), with the male providing the "active principle" and the female simply the "material."

In classical Athens, a hierarchical sexual and tutorial relationship with an older man-who was most likely married-was part of the expected training in adulthood for adolescent citizens. (Only men could be citizens in Athens.) The older man was the "active," or penetrating partner, while the younger took the "passive" role. These relations between adolescent and adult men were celebrated in literature and art, in part because the Athenians regarded perfection as possible only in the male. The perfect body was that of the young male, and perfect love that between an adolescent and an older man, not that between a man and an imperfect woman; this love was supposed to become intellectualized and "platonic" once the adolescent became an adult. How often actual sexual relations approached the ideal in Athens is very difficult to say, as most sources are prescriptive, idealized, or fictional.

In ancient China as well, the idea of a lifelong sexual identity based on the gender of one's sexual partners was not well established, though at certain times there were male homosexual subcultures in which men participated throughout their lives. The best studied of these is one which developed among imperial officials, intellectuals, and actors in the Song dynasty (960–1279), and male homosexuality was not prohibited until the beginning of the Qing dynasty in 1644.

Sexual activity that could lead to children was clearly a matter of state concern, however. During the Neo-Confucian movement of the Song dynasty, educated officials put great emphasis on the disruptive power of heterosexual attraction, viewing it as so strong that individuals alone could not control it; walls, laws, and strong social sanctions were needed to keep men and women apart and to preserve order within the family. In many parts of China, women of the middle and upper classes were increasingly secluded, and even peasant houses were walled; boys and girls were cheap to hire as servants for tasks that needed to be done outside the walls.

The Scarlet Letter

In Hawthorne's famous novel The Scarlet Letter, the hypocrisy of the man who fathered Hester Prynne's illegitimate child, the very Reverend Mr. Dimmesdale who here calls upon her to reveal the man's name, presents a tormented view of sexuality:

"Speak to the woman, my brother," said Mr. Wilson. "It is of moment to her soul, and, therefore, as the worshipful Governor says, momentous to thine own, ill whose charge hers is. Exhort her to confess the truth!"

The Reverend Mr. Dimmesdale bent his head, silent prayer, as it seemed, and then came forward.

"Hester Prynne," said he, leaning over the balcony and looking down steadfastly into her eyes, "thou hearest what this good man says, and seest the accountability under which I labour. If thou feelest it to be for thy soul's peace, and that thy earthly punishment will thereby be made more effectual to salvation, I charge thee to speak out the name of thy fellow-sinner and fellow-sufferer! Be not silent from any mistaken pity and tenderness for him; for, believe me, Hester, though he were to step down from a high place, and stand there beside thee, on thy pedestal of shame, yet better were it so than to hide a guilty heart through life. What can thy silence do for him, except it tempt him—yea, compel him, as it were—to add hypocrisy to sin? Heaven hath granted thee an open ignominy, that thereby thou mayest work out an open triumph over the evil within thee and the sorrow without. Take heed how thou deniest to him who, perchance, hath not the courage to grasp it for himself—the bitter, but wholesome, cup that is now presented to thy lips!"

The young pastor's voice was tremulously sweet, rich, deep, and broken. The feeling that it so evidently manifested, rather than the direct purport of the words, caused it to vibrate within all hearts, and brought the listeners into one accord of sympathy. Even the poor baby at Hester's bosom was affected by the same influence, for it directed its hitherto vacant gaze towards Mr. Dimmesdale, and held up its little arms with a half-pleased, half-plaintive murmur. So powerful seemed the minister's appeal that the people could not believe but that Hester Prynne would speak out the guilty name, or else that the guilty one himself in whatever high or lowly place he stood, would be drawn forth by an inward and inevitable necessity, and compelled to ascend the scaffold.

Source: Hawthorne, N. (1850). *The Scarlet Letter*. Boston: Ticknor, Reed & Fields. Retrieved on August 5, 2004 from http://www.online-literature.com/hawthorne/scarletletter/3/

Female seclusion was also accomplished through footbinding, a practice whose origins are obscure and debated, for contemporary official documents rarely discuss it. Foot-binding does appear frequently in pornography, however, where the pointed shape that bound feet assumed was compared to lotus blossoms—an erotically charged image—and where the hobbled walk of women with bound feet was described as increasing their sexual prowess by lubricating their genitals. That sexual prowess was to be limited to the men on whom they were dependent, however, for unbound feet were seen as a sign of sexual freedom.

A third well-studied area is early modern colonialism. European accounts of exploration and travel almost always discuss the scanty clothing of indigenous peoples, which was viewed as a sign of their uncontrolled sexuality. Hot climate-which we would probably view as the main influence on clothing choice-was itself regarded as leading to greater sexual drive and lower inhibitions. By the eighteenth century, leading European thinkers such as Adam Smith and David Hume divided the world into three climatic/sexual zones: torrid, temperate, and frigid. (Words that still retain their double climatic/sexual meaning.) They-and many other European writers and statesmen-worried about the effects of tropical climates on the morals as well as the health of soldiers and officials, and devised various schemes to keep Europeans sent to imperial posts from fully "going native," adopting indigenous dress and mores. They also linked this climatic/sexual schema with the advancement of civilization; in the torrid zones, heat made people lethargic as well as lascivious, whereas a temperate climate (like that



of Britain) encouraged productivity and discipline along with sexual restraint and respect for women.

The aspect of "going native" that most concerned colonial authorities was, not surprisingly, engaging in sexual relations with indigenous people; as noted above, colonial powers all regulated such encounters. Indigenous peoples were often feminized, described or portrayed visually as weak and passive in contrast to the virile and masculine conquerors, or they were hypersexualized, regarded as animalistic and voracious (or sometimes both). Racial hierarchies became linked with those of sexual virtue, especially for women, with white women representing purity and nonwhite women lasciviousness. Dispelling such stereotypes was extremely difficult and took great effort; African American women in the early-twentiethcentury United States, for example, took great care to hide the sexual and sensual aspects of their lives and emphasize respectability in what the historian Darlene Clark Hine (1998) has called a "culture of dissemblance."

In the colonial world, both sexual and racial categories were viewed as permanent moral classifications supported by unchanging religious teachings that determined what was "natural" and what was "unnatural." Thus same-sex relations were defined as a "crime against nature," and often tried in church courts, along with other sexual crimes such as adultery or fornication. This link between natural and godly began to lessen in intensity during the eighteenth century, but the importance of "nature" in setting boundaries only intensified.

Modern Sexuality

Many scholars see several developments from the late eighteenth through the early twentieth century as creating a distinctively different "modern" sexuality, though most of this research has focused on the West. The most important of these was a change in the basic paradigm of sexuality from religion to science. Church courts in Europe and the European colonies heard fewer and fewer morals cases, as aberrant sexual desires and actions were no longer viewed as sin, but as "degeneracy" or "perversion." They were still "unnatural," but any correction or prevention was to be done by scientifically trained professionals, not pastors or priests. The most important professionals in this new scientific understanding of sexuality were medical doctors. Sex was increasingly regarded as an aspect of health, with doctors determining what was "normal" and "abnormal" based on their understanding of the natural world, not divine sanction.

Western governments sought to promote a healthy society as a way of building up national strength, and anything that detracted from this became a matter of official and often public concern. Masturbation, prostitution, hysteria, pornography, and venereal disease all came to be viewed as sexual issues and health problems, as did what were regarded as more extreme perversions, such as sadism, fetishism, masochism, exhibitionism, nymphomania, and "inversion," a common nineteenth-century term for same-sex desire. These various sexual disorders were labeled and identified in the German physician and neurologist Richard von Krafft-Ebing's landmark book *Psychopathia sexualis* (1886), the first important study in the new medical specialty of sexology.

Masturbation was a matter of concern especially in boys and men; too early or too frequent spilling of sperm might cause them to become weak and feeble, incapable of being good soldiers or workers. A British soldier in Kenya, Robert Baden-Powell, founded the Boy Scouts in 1908 explicitly to teach British boys what he regarded as the right sort of manly virtues and keep them from masturbation, effeminacy, physical weakness, and homosexuality. These were traits he regarded as particularly common among the nonwhite subjects of the British empire, and also among the residents of British industrial cities. If they were not counteracted with a vigorous program of physical training and outdoor life, Baden-Powell and numerous other writers, physicians, politicians, and church leaders predicted an inevitable "race degeneration" or even "race suicide."

Viewing pornography might also lead to weakness, for the new scientific view of sexuality was very concerned with sexual thoughts and desires as well as actions. Pornographic literature had made up a significant share of printed works in Europe since the development of the printing press in the mid-fifteenth century, but was not We're all well aware of the male homosexual problem in this country, which is of course minor, but to our certain knowledge there is not one lesbian in England. • LORD JOSEPH CHAMBERLAIN OF ENGLAND (1836–1914)

legally banned because of its sexual content until the midnineteenth century with laws such as the Obscene Publications Act passed by the British Parliament in 1857.

Prostitution was also regarded primarily as a threat to men's, and thus the nation's, health. Prostitutes in Europe and the British empire, or women even suspected of selling sex for money, were required to submit to examinations for venereal disease, though their customers were not, so efforts to control the spread of disease were ineffectual. Prostitution was generally viewed as a necessary evil, a regrettable concession to the strong sexual needs of lower-class men, certainly preferable to masturbation or same-sex relationships. Commentators in this era-the high point of the industrial revolution-often used industrial or mechanical metaphors when talking about sex, describing sexual drives as surging through the body in the same way steam did through engines or water through pipes. This "hydraulic model" of sex led them to worry about what would happen to men who did not have an outlet; would such "repression" cause them to explode the same way that pipes or engines would if they were blocked?

As they worried about repression and its consequences, sexologists frequently turned their attention to same-sex desire, initially labeling this "inversion," though eventually the word "homosexuality," devised in 1869 by the Hungarian jurist K. M. Benkert, became the common term. During the nineteenth century, individuals had often expressed same-sex desire in very passionate terms, but these were generally regarded as "romantic friendships," expected as a part of growing up and, especially in women, not a sign of deviancy even if they continued throughout an individual's life. The Young Men's Christian Association (YMCA), for example, began in England in 1848 as a Christian men's movement in which young unmarried men were expected to strengthen their character and morality through passionate attachments to one another, a union of souls that would lead to greater love for God. Historians debate whether such friendships should be labeled "homosexual" because this was not yet a category in people's minds, but the medicalization of same-sex desire as a form of sexual deviancy changed attitudes toward them, and intimacy between girls or between boys was increasingly regarded with distrust. By the 1920s, the YMCA's official statements condemned same-sex attraction and espoused a "muscular Christianity," centered on basketball (invented at a YMCA), swimming, and other sports, and on "normal" heterosexual relationships.

In the early twentieth century, same-sex desire may have been expressed less openly in Europe and North America than it had been earlier, but it also became something that more frequently linked individuals in homosexual subcultures, a matter of identity rather than simply actions. Historians have discovered homosexual subcultures and communities—with special styles of dress, behavior, slang terms, and meeting places—developing among men in European cities as early as the seventeenth century, but these became more common in the twentieth century, and more often involved women as well as men.

Heterosexuality also became a matter of identity in the early twentieth century, of a permanent "sexual orientation" that eventually became a legal as well as medical term and a central part of modern Western notions of the self. The word "heterosexual" was originally used by sexologists to describe individuals of different sexes who regularly engaged in nonprocreative sex simply for fun; it was thus a type of perversion, though a mild one. Increasingly the term came to be used for those who were sexually attracted to the "opposite" sex, with the proper development of this attraction a matter of physical and psychological health. "Normal" heterosexual development was also determined by gender, most famously in the ideas of the Austrian psychiatrist Sigmund Freud (1856–1939). Freud developed the notion that human behavior is shaped to a great extent by unresolved sexual conflicts which begin in infancy; girls suffered primarily from penis envy (the recognition that they are lacking something their brothers have) and boys from an Oedipus complex (the desire to kill their fathers so that they can possess their mothers). Freud's ideas were vigorously attacked, sometimes by his former associates, but they had a wide impact in fields far beyond psychology such as literature, art, and education.

The Native American Berdache

The transgendered role was socially defined and accepted in several Native American cultures. Commonly referred to as a berdache, the following example discusses this role among the Klamath of the Northwest coastal region.

One of my informants now in his sixties had been a berdache in his youth. I had observed his general unmasculine behavior but it was not until my visit of the second year that another informant gave the reason. He lives alone, takes pride in his cooking and the care of his house, weaves baskets for sale as women do, and still wears a basket hat, which no Klamath man now will. He is fleshy, slow, and distinctly feminine in gait and gestures, and speaks with the higher pitch of women's voices. Yet his transvestite state was given up nearly half a century ago. He is shrewd enough, though mild mannered, yet I confess that I suspected no abnormality. When about sixteen years old he was at the Dalles where an old woman shaman of the place took a fancy to him. He however was afraid that she would harm him so he put on woman's dress. He wore his hair long, prepared lily seeds, wove mats and baskets; all typical women's pursuits. He has never married. After learning his history I brought up the subject of marriage with him. He claimed that he had once been married, his wife having died twenty years ago, and in answer to the question why he had not remarried replied: "Some men like it that way."

Source: Spier, L. (1930). Klamath ethnography (p. 52). Berkeley: University of California Press.

These scientific and medical studies of sexual attitudes and behavior led to two somewhat contradictory ideas about sexuality. On the one hand, one's choice of sexual partners or sexual behavior was increasingly regarded as a reflection of a permanent orientation, a "sexual identity" as a homosexual or heterosexual. On the other hand, homosexuality and other types of "deviant" sexuality were defined as physical or psychological illnesses, curable through drugs, surgery, or psychoanalytical analysis. Popular and learned books advised readers about how to achieve a "healthy" sex life, and efforts were made to prevent sexual deviance as well as cure it.

Contradictory ideas and differences of opinion about sexuality and its relation to gender continued throughout the twentieth century. The first two editions of the American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders (DSM) listed homosexuality as a psychiatric disorder, but in the 1970s it was removed from this list. Some medical researchers investigated a "gay" gene and variations in brain structure, while others criticized their findings as logically and methodologically flawed, shaped by notions of gender that continued to view homosexual men as in some ways feminized. (Most research on homosexuality in the twentieth century, like most medical research in general, focused on men.) At the same time that discrimination on the basis of sexual orientation was prohibited in many areas—largely as a result of the gay rights movement that began in the 1970s—many people (including some gay rights activists) argued that sexual orientation, sexual identity, and perhaps even gender identity were completely socially constructed and could or should be changed, adapted, and blended at will. They asserted that "sexual orientation" and "gender identity" had indeed been part of "modern" ideas about sexuality, but in a postmodern world such concepts were just as outmoded as Plato's "wandering womb." They celebrated both historical and contemporary examples of two-spirit people and other forms of nondichotomous gender and sexual categories.

Both "modern" and what might be called "postmodern" sexuality are often seen as Western developments, with groups in other parts of the world regarding these as yet another example of cultural imperialism. In some areas, however, individuals and groups have blended traditional indigenous third-gender categories and more recent forms of homosexual or transsexual identity, asserting that toleration or even celebration of those with distinctive sexuality has roots in their own cultures and is not simply a Western import. At the same time, fundamentalists in many religious traditions, including Christianity, Judaism, Hinduism, and Islam, oppose alternatives to heterosexual marriage, and support the expansion of existing laws regulating sexual relationships. It is clear that sexual issues have not lost their power as points of conflict both within and among cultures.

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See also Gay and Lesbian Rights Movement; Marriage and Family

Further Reading

- Boswell, J. (1981). Christianity, social tolerance and homosexuality: Gay people in Western Europe from the beginning of the Christian era to the fourteenth century. Chicago: University of Chicago Press.
- Bullough, V. (1995). Sexual attitudes: Myths and realities. New York: Prometheus.
- Crompton, L. (2003). *Homosexuality and civilization*. Cambridge, MA: Belknap Press.
- Dean, C. (1996). Sexuality and modern Western culture. New York: Twayne.
- D'Emilio, J., & Freedman, E. (1997). Intimate matters: A history of sexuality in America. New York: Harper and Row.
- Foucault, M. (1990). *The history of sexuality: Vol. I. An introduction* (R. Hurley, Trans.). New York: Random House.
- Greenburg, D. (1988). The construction of homosexuality. Chicago: University of Chicago Press.
- Gustav-Wrathall, J. D. (1998). Take the young stranger by the hand: Samesex relations and the YMCA. Chicago: University of Chicago Press.
- Herdt, G. (1994). Third sex, third gender: Beyond sexual dimorphism in culture and history. New York: Zone Books.
- Hine, D. C., & Thompson, K. (1998). A shining thread of hope: The history of black women in America. New York: Broadway Books.
- Hinsch, B. (1990). Passions of the cut sleeve: The male homosexual tradition in China. Berkeley: University of California Press.
- Katz, J. N. (1995). The invention of heterosexuality. New York: Dutton Books.
- Keuls, E. (1985). *The reign of the phallus: Sexual politics in ancient Athens.* New York: Harper and Row.
- Masterson, L., & Jolly, M. (1997). Sites of desire, economies of pleasure: Sexualities in Asia and the Pacific. Chicago: University of Chicago Press.
- McClintock, A. (1995). *Imperial leather: Race, gender, and sexuality in the colonial contest.* London: Routledge.
- Nye, R. (Ed.). (1999). Sexuality. New York: Oxford University Press.
- Pflugfelder, G. M. (1999). Cartographies of desire: Male-male sexuality in Japanese discourse, 1600–1950. Berkeley: University of California Press.
- Phillips, K. M., & Reay, B. (2002). Sexualities in history: A reader. New York: Routledge.
- Porter R., & Teich, M. (1994). Sexual knowledge, sexual science: The history of attitudes to sexuality. Cambridge, UK: Cambridge University Press.

Stanton, D. (1992). The discourses of sexuality: From Aristotle to AIDS. Ann Arbor: University of Michigan Press.

- Wiesner-Hanks, M. (2000). Christianity and sexuality in the early modern world: Regulating desire, reforming practice. London: Routledge.
- Williams, W. L. (1986). The spirit and the flesh: Sexual diversity in American Indian culture. Boston: Beacon Press.
- Young, R. (1995). Colonial desire: Hybridity in theory, culture, and race. London: Routledge.

Shaka Zulu (1787-1828)

Zulu king

Shaka Zulu created an African kingdom that stood as an influential military and economic power at a time when European nations were encroaching on African sovereignty. Shaka's instincts built incontrovertibly the mightiest kingdom in sub-Saharan Africa in the early nineteenth century. He increased the Zulu nation to nearly three million subjects and the Zulu kingdom to thousands of square kilometers. He actively participated in the emerging global economy through trade with Europeans, and his military genius changed the art of African warfare.

Shaka was conceived during an affair between his mother, Nandi, who was a Langeni woman, and Senzangakona, chief of a minor Zulu clan. With Shaka's birth eminent, his mother was forced to become Senzangakona's third wife. The union was turbulent, and Nandi and her son were never fully accepted among the Zulu. Nandi was sent back to her people with her son and an infant daughter. Her return to the Langeni forced repayment of the bride price, which brought shame upon Nandi and her children. They were ostracized, and Shaka was frequently teased. When Shaka was fifteen his mother found a home within the Mthethwa confederacy. This confederacy was formed early in the eighteenth century when the chiefs of several small Nguni clans living in the region between the Thukela (Tugela) and Phongolo (Pongola) rivers (now in KwaZulu-Natal), joined forces under Chief Dingiswayo. It was here that Shaka grew into a strong, self-confident leader.



At the age of twenty-three he was drafted by Chief Dingiswayo into the Mthethwa's best regiment. In the military Shaka found his passion and place in life. He quickly developed into a consummate military strategist. In developing his war strategy he designed new types of weapons, as well as improved fighting tactics. He replaced the longhandled throwing spear with a short-handled, broad blade stabbing assegai. He increased the length of the rawhide shield to fully cover a warrior's body. He implemented an attack formation that allowed his army to advance on an enemy from the middle while simultaneously flanking them to attack from multiple sides. The enhanced shields enabled warriors to block the throwing spears of their opponents and get close enough to stab them. Shaka insisted on conditioning; he trained with his men until they could run barefoot 80 kilometers a day. This gave his army advantages in range and speed of attack. He also introduced the concept of unlimited war: annihilation of enemies to prevent reprisal. Previously warfare consisted of ritualistic displays of fierceness, bravery, and then providing forgiveness to the enemy upon defeat. Shaka instituted an aggressive battle style and insisted on complete submission or genocide upon victory.

Shaka was an innovative leader. He formed age-specific regiments that lived in permanent military settlements and remained on duty for years. Girls of marriageable age were formed into female regiments in these towns. These women provided support and agricultural labor. When a regiment had served its time or was particularly brave and victorious they were retired from service and allowed to marry girls from the female regiment. Shaka himself never married. He refused to produce an heir that might one day challenge him for power. When not fighting, the regiments hunted elephants and hippopotamus for Shaka's ivory trade with the Portuguese at Delagoa Bay. Shaka also traded with the English and Dutch, and he granted them land near Natal to promote trade.

As a Mthethwa warrior, Shaka returned to his mother's people and killed those who had tormented him and ostracized his mother when he was young. He assumed control of the Zulu clan with Chief Dingiswayo's help. Furthermore, when Dingiswayo died in 1818, Shaka Strike an enemy once and for all. Let him cease to exist as a tribe or he will fly in your throat again. • SHAKA ZULU (C. 1787–1828)

became leader of the Mthethwa confederacy. He immediately began to spread his empire; he conquered new lands, created a massive army, and incorporated more and more neighboring polities into the Zulu nation. The wars wrought by Shaka, his generals, and the people he displaced eventually led to massive migration and lethal consequences. The people he attacked were displaced; in their search for new homes they attacked and displaced others. No clan between present-day South Africa and Tanzania was spared this misery. A drought occurring at the same time made cultivation difficult, and people were often displaced before they could reap what they had sown. People wandered from place to place looking for a home. This might be considered the first refugee crisis in southern Africa.

Shaka suffered an emotional breakdown when his mother died in 1827. He went into mourning for a year and insisted his people do likewise, killing thousands for failure to demonstrate adequate sorrow at the queen mother's death. In 1828 Shaka was stabbed to death by his half brother Dingane. However, the state he had created resisted European colonialism for fifty years after his death, and the Zulu people remain a recognizable political force in South Africa today.

Lorna Lueker Zukas

See also British Empire

Further Reading

- Afigbo, A. E., Ayandele, A. E., Gavin, R. J., Omer-Cooper, J. D., & Palmer, R. (et al.). (1992). The making of modern Africa: Vol. 1. The nineteenth century. New York: Longman.
- Atkins, K. E. (1993). The moon is dead! Give us our money!: The cultural origins of an African work ethic, Natal, South Africa, 1843–1900. Portsmouth, NH: Heinemann.
- Brockman, N C. (1994). African biographical dictionary. Santa Barbara, CA: ABC-CLIO.
- Curtin, Philip, Feierman, S., Thompson, L., & Vansina, J. (1995). African history from earliest times to independence. New York: Longman.
- Falola, T. (2002). Key events in African history: A reference guide. Westport, CT: Greenwood Press.
- Gilbert, E., & Reynolds, J. T. (2004). Africa in world history: From prehistory to the present. Upper Saddle River, NJ: Pearson/Prentice Hall.
- Morris, D. (1965). The washing of the spears: The rise and fall of the great Zulu nation. New York: Simon & Schuster.

- Omer-Cooper, J. D. (1966). The Zulu aftermath: A nineteenth-century revolution in Bantu Africa.. Harlow, UK: Longman.
- Ritter, E.A. (1995). Shaka Zulu: A biography of the founder of the Zulu nation. New York: Penguin.
- Shillington, K. (1987). A history of southern Africa. Harlow, UK: Longman.
- Sparks, A. (1991). *The mind of South Africa*. New York: Ballantine Books.
- Warren, P. R. (1999). Landscape transformations and the archaeology of impact: Social disruption and state formation in southern Africa. New York: Kluwer Academic Publishers.

Shamanism

S hamanism is a distinctive complex of social roles, psychospiritual activities, and religio-ecological ideation embodied in the person of a ritual specialist called a shaman. The term shaman comes from the Siberian Tungus (Evenk) *aman* via Russian sources. Shamanism has been intensely studied in Eurasia and the Americas, and extends from the Saami (Lapps) of Finland to the Yamana (Yaghan) of Tierra del Fuego at the southern tip of South America. Scholars have also identified shamanism in Aboriginal Australia, Southeast Asia, and Oceania and more sparsely in Africa, where spirit possession and spirit mediumship seem to be more prevalent.

There are many different approaches to the study of shamanism including anthropology, archaeology, comparative religion, ethnomedicine, history, linguistics, prehistory, psychology, and folklore studies.

History and Distribution

Some scholars claim shamanism displays an ancient heritage discernible in the cave paintings of Paleolithic era foraging and hunting cultures found in southern France and northern Spain. For example, the upper Paleolithic Les Trois Frères cave (c. 14,000 BCE) contains the *Sorcerer of Les Trois Frères*, a famous black painted figure overlooking a gallery of engraved game animals, and interpreted to be a master of animals, a shaman.

Siberia is the locus classicus of shamanism and there is considerable variation from the northwestern Saami (Lapp) shamanism, known only through historical sources first written down in 1180 CE, through to the Turkic Central Asian language group (e.g., Yakut [Sakha], Tuvins, and Khakass), the Mongolian languages (e.g., Mongolian and Buryat), the Tungusic group (e.g., Evenki [Tungus], Even, Manchu), the Paleo-Asiatic (e.g., Chukchi and Koryak) group, and the Eskimo-Aleut group. Shamanism is also found in southern Eurasia in Nepal and India, and throughout Southeast Asia. The Northern and Southern Aslian shamanism of Peninsular Malaysia (Bateg, Temoq, Semelai, and Semaq Bri) is remarkably similar to forms found throughout Siberia. Polynesian mythology also amply attests to shamanic themes and cosmological images.

The distribution of shamanism throughout the Americas also suggests not only great antiquity but also Eurasian origins. Shamanism was brought in several waves to the Americas by hunting peoples who crossed the Bering land bridge between Siberia and Alaska. In the far south of Chilean Patagonia artifacts dating between 11,000 and 8000 BCE have been excavated by archaeologists at Fell's Cave. Here too we find shamanism, extinguished by the genocidal wars of the late nineteenth and early twentieth century, among guanaco hunting Ona (Selk'nam) and the marine hunting and littoral foraging Yamana (Yaghan). Farther north in central Chile we find Mapuche shamanism displaying an almost Siberian character. Although there is no evidence of cultural continuity between the original settlers circa 10,000 BCE and historically known cultures in this region, the pervasiveness of shamanism throughout the cultures of North and South America certainly indicates a very early introduction. Perhaps the penultimate migration into North America is revealed by linguistic evidence linking the Yeniseian family of languages spoken today only by the Ket of central Siberia with the Na-Dene languages of North America, two culture areas steeped in shamanism. This recent finding further deepens our understanding of the circumpolar or circumboreal cultural continuum long recognized by scholars.



The Shamanic Complex

The shaman is a visionary, healer, singer and poet, ecstatic soul traveler, psychopomp, a mediator between his or her social group and the spirit world, a diviner, and a sacrificer. Shamans are specialists in the life and fate of the soul, the travails of their own soul during initiation, and their patient's afflicted soul in a ritual healing performance. These features constitute a complex that frequently lies at the psychospiritual core of a society, and can thus be identified as the religion of many Siberian and circumpolar peoples, as well as the religion of peninsular Malaysia's Temoq, Semelai, and Semaq Bri Orang Asli ("aboriginal") cultures. However, in many other cultures shamanism is just one dimension of a more inclusive religious worldview and in this instance may be more appropriately identified as a belief subsystem as among the Mapuche of Chile and the Uzbeks of Central Asia.

The Shaman

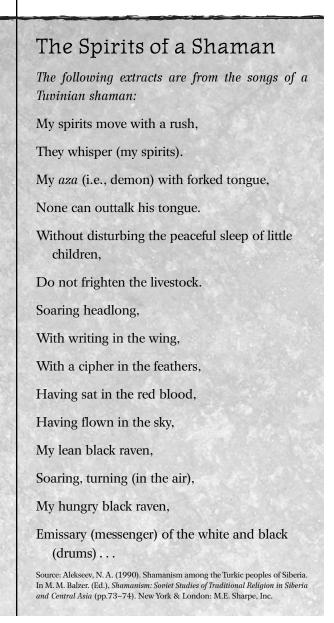
The shaman is a person who is able to break through the planes of ordinary day-to-day life by acquiring a deep and

Having attracted the disease-spirit into the spirit boat, Temoq shaman Pak Loong bin Gudam prepares to send the disease-spirit back to its celestial home.

profound knowledge of the supramundane world. Shamanism has been defined as a "technique of ecstasy" involving the magical flight of the shaman's soul to the sky or to the underworld (Eliade 1964, 4ff.). The shaman is empowered to enter into this world through the acquisition of visionary capabilities, most usually during initiation. These powers are renewed and strengthened with every ritual performance directed toward healing, divination, sacrifice, and various other rites important to the welfare of the group. The powers are embodied in the shaman's cosmographic experience and in the control of familiar and guardian spirits who provide knowledge and direction, and protect the shaman's highly labile and vulnerable soul during a visionary rite. The shaman's altered state of consciousness ranges from intense ecstasy as with some Siberian shamans, to quiet reverie as the Malaysian Temog shaman contemplates the overpowering beauty of the visionary world. At the age of nine the Lakota holy man Black Elk, during an episode of acute illness, gained his visionary powers by ascending into the cloudmountain abode of the powerful Grandfathers, who he realized were the "Powers of the World," the powers of the four directions, the heavens, and the earth below.

Shamanic séances are almost always performed at night, and in many shamanistic societies nighttime is not the absence of daylight, but a qualitatively different type of reality. In almost all societies the shaman is a nocturnal being, a specialist in the existential realities that emerge after nightfall. For the Temoq even seasonality is suspended at night, and the identities that differentiate the diurnal mundane world transform into another dimension at sunset.

Initiation into the shamanic vocation takes many forms throughout the world. In some Siberian societies, the shaman involuntarily experiences a frightening dismemberment by demons or evil spirits. The shaman's reconstitution into a new, spiritually reborn body empowers the shaman to perform supernormal feats. The death and resurrection theme also occurs in the Americas. In contrast, the Temoq shaman knows he is chosen when he has a waking daylight encounter with the spirit of a beautiful young woman dressed in red. The Temoq mountain



journey shaman is then initiated by a master shaman who, during a nighttime ritual performance, places a *cermin*, a "visionary mirror", into the unawakened third eye of the initiand, thus giving the new shaman's soul the power to see and visit all the cosmic regions necessary for healing, and for maintaining the fertility and fecundity of the tropical rain forest.

Throughout tropical South America tobacco intoxication and hallucinogens, such as the *Banisteriopsis caapi* plant (ayahuasca), are used to engender visionary experiences. Although only introduced several centuries ago, tobacco is also used by Siberians and some Temoq shamans to induce an altered state of consciousness. The induction of ecstatic trance states by ingesting hallucinogenic mushrooms is also widespread in Siberia.

Drumming is used throughout Eurasia and in many cultures of the Americas to embrace the suprasensible world of the spirits. In Temoq shamanism intense drumming over several hours, as the author has experienced, induces a soporific state of consciousness, a drowsy state experienced by ritual participants as the temporary loss of their astral body as it travels with the shaman's celestial entourage.

The raison d'être of nearly all shamans is healing. The shaman uses his or her visionary powers to either search out the location of a lost soul or to extract disease-spirits from the body of the afflicted. The retrieval of a lost soul implies that either the shaman or the shaman's spirit allies journey out into the upper or lower worlds. Although the shaman's expertise is at the center of the therapeutic field, healing is almost always a communal event and often an intense social drama.

Shamans are preeminently singers and poets. Whether ecstatic cries of a Siberian Sakha shaman, the long spiritjourney epics of Malaysian Semaq Bri, Semelai, and Temoq shamans, or the low murmuring of Yamana shamans in Tierra del Fuego, almost all shamans vocally express their experience through singing. In some societies such as the Temoq and the Siona of South America, the song is the primary expression of the shaman's power. Indeed, for the Temoq, the term "song" is a misnomer, for only powerless shamans sing "songs," while powerful shamans give fresh and clear voice to visionary experience. The Temoq shaman's singing is replete with the calls of animal and bird familiar and guardian spirits. A beautiful example is the Tuvan shaman's song in *Shu-De* (see Discography).

The Shamanic Worldview

Shamanic activity is couched within a cosmological structure that facilitates the movement of the shaman's soul or spirit from the middle world of human society and the natural world to the upper and lower worlds inhabited by ancestors, guardian and familiar spirits, deities, animal masters, the land of the dead, and frequently the soul of a patient. A multitiered world, often three-tiered, is integrated by an axis mundi—a vertical structure lying at the center of the world and imaged as a tree, a mountain, a pillar, a rainbow, or even a river that flows from the upper world, through the middle world of day-to-day life, to the lower world of the dead as with the hunting and reindeerherding Evenki of the Siberian taiga.

In a ritual performance the shamanic cosmos is symbolically represented in the structure and function of the shaman's venue and in the shaman's costume and musical instrument, such as a drum or rattle. This ritual microcosmos, projected to the "center of the world," embodies core symbolic forms that, variously empowered, enable the shaman to engage spirits and supernatural beings and visit the far-off places necessary for the success of the ritual.

The shaman's costume itself constitutes a religious hierophany and cosmography; it discloses not only a sacred presence but also cosmic symbols and metapsychic itineraries. Properly studied, it reveals the system of shamanism as clearly as do the shamanic myths and techniques. (Eliade 1964, 145)

The Evenki (Tungus) shaman's *kamlanye* performance demonstrates the relation between their shamanic worldview and the structure of the ritual venue. The tepeeshaped tent is either a modified domestic tent or one specially constructed by clan kinsmen several days before the performance. The ordinary tent is used for rites directed at finding lost reindeer or foretelling the future and as a preparatory venue for major rites where the shaman fasts, smokes heavily, and encourages visionary dreams.

Major *kamlanye* performances were held for guiding the soul of a dead person to the underworld, for feeding ancestral souls, and for the expulsion of disease-spirits. The ritual tent, containing a larch sapling positioned next to the hearth and emerging through the smoke hole, is surrounded by a small fenced-off enclosure containing platforms and carvings representing the structure of the world and designed to assist the journey of the shaman's animal-double spirit—his *khargu*—to the lower world. From inside the tent the east-facing shaman sees a dou-



A ritual assistant daubs a wild rubber tiger figure, the spirit of which will accompany a Temoq shaman to the very edge of the world.

ble row of wooden knives and bear spears, and wooden images of salmon and pike familiar and guardian spirits. The shaman's drum (made of larch wood) and drumstick are often imaged as the canoe and paddle by which the shaman travels the shamanistic clan river. In front of the tent entrance is the *darpe*, a gallery of fresh larch saplings with roots skyward, and carved shamanic figures representing the upper world. To the west of the tent the *onang* structure, representing the lower world of the dead, constructed from dead fallen timbers, displays carved larch trees with roots facing downward. In the upper world larch trees grow downward from the soil of the sky vault, whereas they grow upward in the lower world. The larch tree protruding through the smoke vent signifies the world tree integrating the three levels or planes of existence. During a performance the shaman's spirit climbs the cosmic larch tree in his ascent to the upper world.

Similarly, while singing and drumming a Chilean Mapuche *machi* or shaman climbs her *rewe*, a large pole often displaying carvings of her familiar spirits, during a *machitan* or healing rite. Aboriginal shamans in Central Australia climb a pole to signify ascent, and in Malaysia the Temoq shaman, traveling the rainbow shadow snake, signifies his ascent by dancing over the patient with a model of the world tree bedecked with miniature birds and fruit. The vision of Black Elk the Lakota shaman also strongly embodied the image of a life-giving world tree intimately connected to the welfare of his people.

Shamanism Today

Siberian shamans were persecuted and imprisoned and thousands died during the Soviet era. Since the establishment of the Russian Federation shamanism has shown a remarkable resurgence along with reemergent ethnicities in such places as Tuva. A clinic has been opened by shamans in Kyzyl, the capital of the Tuvan Republic, south Russia, where shamanism and Buddhism amicably coexist. Folk groups travel with shamanically inspired repertoires to international venues, and many documentaries have been made on shamanism over the past few years. Native American shamans travel to Mongolia to deepen their calling under the tutelage of Mongolian shamans. In other places shamanism is under pressure not only from missionary activities, but also from globalization, which is seriously threatening the languages and cultures of minority peoples.

In the West, shamanism has captured the imagination of many, and this new form, called neoshamanism, attempts to selectively integrate aspects of indigenous shamanism with a range of concerns from New Age spirituality to transpersonal psychology. Neoshamanism aspires to go beyond modernity by grounding identity within a more inclusive spiritual, psychological, and ecological vision of personal, social, and planetary well-being.

Further Reading

- Anisimov, A. F. (1963). The shaman's tent of the evenks and the origin of the shamanistic rite. In H. N. Michael (Ed.), *Studies in Siberian shamanism.* Toronto, ON: University of Toronto Press.
- Balzer, M. M. (Ed.). (1990). Shamanism: Soviet studies of traditional religion in Siberia and Central Asia. New York & London: M. E. Sharpe.
- Blacker, C. (1975). The catalpa bow: A study of shamanistic practices in Japan. London: George Allen & Unwin.
- Dioszegi, V., & Hoppal, M. (1996). Shamanism in Siberia (Bibliotheca Shamanistica 2). Budapest, Hungary: Akademiai Kiado.
- Eliade, M. (1964). Shamanism: Archaic techniques of ecstasy (Bollingen Series 76). Princeton, NJ: Princeton University Press.
- Faron, L. C. (1968). *The Mapuche Indians of Chile*. New York: Holt, Rinehart & Winston.
- Grim, J. A. (1983). *The Shaman: Patterns of Siberian and Ojibway healing.* Norman: University of Oklahoma Press.
- Halifax, J. (1979). Shamanic voices: A survey of visionary narratives. New York: E. P. Dutton.
- Halifax, J. (1982). Shaman: The wounded healer. London: Thames & Hudson.
- Harner, M. (1982). *The way of the shaman: A guide to power and healing.* New York: Bantam Books.
- Hultkrantz, A. (1992). Shamanic healing and ritual drama: Health and medicine in native North American religious traditions. New York: Crossroad.
- Kendall, L. (1985). Shamans, housewives, and other restless spirits: Women in Korean ritual life. Honolulu: University of Hawaii Press.
- Laird, P. F. (in press). Temoq shamanism: Affliction and healing in a Malaysian rainforest community.
- Langdon, E. J. M., & Baer, G. (Eds.). (1992). Portals of power: Shamanism in South America. Albuquerque: University of New Mexico Press.
- Mumford, S. R. (1989). Himalayan dialogue: Tibetan lamas and Gurung shamans in Nepal. Madison: University of Wisconsin Press.
- Narby, J., & Huxley, F. (Eds.). (2001). Shamans through time: 500 years on the path to knowledge. London: Thames & Hudson.
- Neihardt, J. G. (1972). Black Elk speaks: Being the life story of a holy man of the Oglala Sioux. New York: Pocket Books. (Original work published 1932)
- Nowak, M., & Durrant, S. (1977). The tale of the Nisan shamaness: A Manchu folk epic. Seattle: University of Washington Press.
- Ruhlen, M. (1998). The origin of the Na-Dene. Proceedings of the National Academy of Sciences USA, 95, 13994–13996.
- Salchak, B. (1994). Kham (Shaman Ritual). In Shu-De: Voices from the distant steppe. Compact Disk No. 2339-2. New York: New World Records Ltd.
- Seaman, G., & Day, J. S. (Eds.). (1994). Ancient traditions: Shamanism in Central Asia and the Americas. Niwot: University Press of Colorado.
- Thomas, N., & Humphrey, C. (Eds.). (1996). *Shamanism, history, and the state.* Ann Arbor: University of Michigan Press.
- Van Deusen, K. (2004). Singing story, healing drum. Montreal: McGill– Queen's University Press.
- Waley, A. (1973). The nine songs: A study of shamanism in ancient China. San Francisco: City Lights Books.



Peter F. Laird

Strength does not come from physical capacity. It comes from an indomitable will. • Mohandas Gandhi (1869 - 1948)

tains, and so forth. In ancient usage, anything whatsover which was outside the ordinary, which possessed superior power, or which was awe-inspiring was called kami (Motoori Norinaga, quoted in Tsunoda 1958, 21).

Until the seventh century CE, there was no coherent state in Japan. Instead, various clans controlled their own territories. Historians believe that one of these clan leaders managed to convince other powerful clans of his ability to communicate with the kami. Over the course of the fifth and sixth centuries, the hereditary leader of this clan formed alliances with other clans, and Japan's first state, known as Yamato, was born. The leader of the dominant clan became the sovereign of this state and the "emperor" of Japan. That clan's connection with the kami meant that Shinto was linked with the new ruling family. Three of the most important Shinto shrines, for example, house the regalia that symbolize imperial rule. The Grand Shrines at Ise, which have been rebuilt every twenty or twentyone years since the seventh century, are especially important as the primary site for the reverence of the kami Amaterasu, the deity of the sun and divine ancestor of the imperial family. It is at the Ise shrines that certain Shinto rituals connected with the imperial family, such as the enthronement of a new emperor, are usually conducted.

The institutional and doctrinal character of Shinto during this early period lacked coherence. Its rituals and practices were confined mostly to the social and political elites of the clans; the rest of Japanese society had their own forms of worship, which were only absorbed into Shinto in the nineteenth and twentieth centuries. Shinto became more clearly defined in contradistinction to Buddhism, which arrived in Japan in 538. Korean monks from the state of Paekche brought copies of Buddhist sutras with them to Japan, and many of these monks took up residence in Japan as teachers. Unlike Shinto, Buddhism had a founder, scriptural texts, and an exegetical tradition. Japanese elites were fascinated with Buddhism, which far surpassed Shinto in the sophistication of its teachings and practices. The "magic" of Buddhism, as evidenced by some Buddhist monks' knowledge of medical herbs and healing, also seemed superior to the magic of

Sharia

See Islamic Law

Shinto

hinto is the name for the religious beliefs and prac-Utices that are believed to have developed in Japan prior to the importation of foreign religious traditions from the Asian continent, beginning in the sixth century CE. With rare historical exceptions, the Japanese have not attempted to propagate Shinto outside of Japan, believing that it was the foundation of their cultural heritage and identity. One might conclude that the impact of Shinto in world history has been minor, but this is not the case. Shinto deeply influenced Japan's interactions with other cultures. Moreover, it continues to serve as a major religious and cultural institution in contemporary Japan.

Shinto in the **Premodern Period**

It is difficult to say with any certainty when Shinto began. Shinto had no founder and no scriptural tradition. Rather, the elements of what eventually became identified as Shinto developed over a period of centuries, perhaps from the fourth century BCE to the sixth century CE. During this period, ritual specialists worshipped spirits called kami; Shinto, in fact, literally means the "Way of the kami." While "spirit" is one generally accepted English equivalent for kami, the concept of the kami defies any simple translation. One eighteenth-century scholar of Shinto offered this explanation:

I do not vet understand the meaning of the term kami. Speaking in general, however, it may be said that kami signifies, in the first place, the deities of heaven and earth that appear in the ancient records and also the spirits of the shrines where they are worshipped...It also includes such objects as birds, beasts, trees, plants, seas, moun-

Shinto. During the sixth century, a rivalry developed between the adherents of Buddhism and Shinto priests, and it was during this period that Shinto began to develop a true institutional identity.

Although Shinto never lost its close association with the imperial court, Buddhism was very nearly given the status of a state religion in 745 CE by Emperor Shomu (701–756; reigned 715–749). In addition, Buddhism began to appeal more to the general populace during the eleventh century, as less esoteric, more faith-based schools of Buddhism were introduced. For the most part, Shinto leaders ignored commoner worshippers.

Ryobu Shinto

During Japan's classical and medieval periods (seventh through sixteenth centuries), there were two important developments in Shinto. The first was the emergence, beginning in the ninth century, of an esoteric strain called Ryobu Shinto, a syncretization of esoteric Buddhism and Shinto that equated particular Shinto deities with particular Buddhist deities. In this effort, the Shinto deities were viewed as incarnations of Buddhist gods, so that the latter took precedence over the former. In Ryobu Shinto, Shinto's doctrinal void was filled with Buddhist teachings. Ryobu Shinto was a dominant presence in the world of doctrinal Shinto until ings prior to the seventeenth century, Yoshida Shinto gradually became associated with the imperial court and Yoshida priests became the court's ritual specialists.

Shinto and Modern Japan

During the early modern period, roughly 1600 to 1870, scholars and intellectuals who wanted to purge Shinto of all foreign influences created a new field of Shinto scholarship. These nativist scholars (Japanese: kokugakusha) argued that Shinto must be purified of its long-standing ties to Buddhism, since the latter was a foreign creed. Yoshida Shinto's emphasis on Neo-Confucianism was similarly problematic because Neo-Confucianism was an intellectual import from China. The nativists believed that their mission was to eliminate foreign doctrinal contaminants from Shinto and to replace them with authentically Japanese teachings and values. They argued that these teachings could be found after a careful and thorough examination of Japan's classical literature, especially works composed in the period from the eighth to thirteenth centuries. According to the nativists, once Shinto was properly purified, it could become the basis for asserting a truly unique Japanese culture, which they believed was the only way to rectify the problems of their society. At the same time, the nativists of the early modern period believed that

the fifteenth century.

Yoshida Shinto

A Shinto priest, Yoshida Kanetomo (1435–1511), was dissatisfied with Ryobu Shinto because of its theological emphasis on Buddhism. He reversed Ryobu Shinto's syncretistic hierarchy and introduced Neo-Confucian values and teachings into Shinto. The result was called Yoshida Shinto. Although there were other Buddhist-Shinto blend-



A large Shinto torii gate marks the entrance to a shrine.

Shinto's lack of articulated teachings was one of its unique and valuable features. There was no need to govern the behavior of the Japanese people, they argued, because they were already blessed by the kami with the internal capacity to self-regulate. Another aspect of Shinto that the nativists called attention to, and that continues to be important in contemporary Shinto, is Shinto's the reverence for nature. Scenes of natural beauty, such as mountains,

The Basic Principles Fukkoo Kyoodan (The Light of Happiness) Sect of Shinto

- 1. To believe in a God, the creator of the universe and all living things, who is absolute and eternal and indestructible, and the guiding principle of the human spirit. To reject all false beliefs in superstition, spiritualism and prophecy.
- 2. To inflict no harm physical or spiritual, on oneself or on others; to reject revenge and to love one's neighbour.
- 3. Not to desire the possessions of others.
- 4. To eschew lewdness.
- 5. To avoid falsehood.
- 6. To reflect constantly on thought, word and deed, that they may always accord with the dictates of conscience.

As methods of carrying out these principles:

- 1. To take deep breaths every morning, and thus compose the body and spirit.
- 2. By contemplation to strive to realize the state of *sammai* (samadhi, trance), and to practice a transcendentally religious life.

rock formations, and waterfalls, are believed to harbor their own *kami*. To commemorate the presence of the *kami*, a small shrine is erected, symbolized by a *torii*, a gate-like structure composed of two support beams and a crossbeam.

In 1868, when samural political domination came to an end and the emperor was, in theory, restored to actual power, Shinto was given renewed cultural and political power. Shinto priests advocated that the new government be modeled on the one that had existed before the advent of warrior rule in 1192. Although the effort to resurrect the imperial government of the classical period was abandoned in favor of the creation of a government similar to those of the European powers, the services of Shinto priests were retained by government officials in the movement to establish a state religion. Japanese intellectuals argued that the material and technological successes of the Europeans were rooted, in part, in the strength of their religious values. The Japanese, they believed, needed to identify their own values and foreground them if they were to transform Japan into a strong nation like those of the West. After much debate, chiefly with the Buddhists, the Shinto priests succeeded in the creation and adoption of State Shinto. Thus, Shinto had an instrumental part in the emergence of Japan's modern state.

During the 1930s and 1940s, supporters of State Shinto were vocal supporters of the view that it was Japan's destiny to dominate the rest of Asia. When the tide turned against Japan in World War II, "special attack brigades" were formed, the most famous of which were the suicide pilots who flew their planes into enemy ships. Since the hope was that these pilots could reverse Japan's military decline, the Japanese called them the *kamikaze*, the "wind of the *kami*" in a deliberate invocation of a typhoon that had arrived, apparently in answer to the prayers of Shinto priests, and destroyed the boats of an invading Mongol army in the thirteenth century. Just as the *kami* had saved Japan from the Mongols, it was hoped that they would save it from the Allies.

In the postwar period, one shrine has generated controversy beyond Japan's borders. Yasukuni Shrine in Tokyo was originally built at the end of the nineteenth century to commemorate the souls of those who had fought on behalf of the imperial court in the overthrow of the samurai government in 1868. Later, it became the site for the veneration of soldiers and sailors who had died in subsequent wars, such as the Sino-Japanese War (1894–1895), the Russo-Japanese War (1904–1905), and World War I. In the postwar period, the ranks of those who had died in World War II were included in that

Source: Dore, R. P. (1967). *City Life in Japan: A Study of a Tokyo Ward* (p. 354). Berkeley and Los Angeles: University of California Press.

Selection from Saka's Diary of a Pilgrim to Ise

Saka, a Buddhist monk, made a pilgrimage in 1342 to Ise province in Japan to visit Shinto shrines. His diary of that pilgrimage, excerpted below, stands as a classic work in Japanese literature.

When I entered the second Shinto Gateway to worship it was dark under the pines at the foot of the hill and the branches were so thick-matted that one could hardly discern the Pine of One Hundred Branches. The pines within the Shrine precincts were so dense that even the oblique projecting roof-beams could hardly be made out. When I come to reflect on my condition my mind is full of the Ten Evils and I felt shame at so long forsaking the will of Buddha, yet as I wear one of the three monkish robes I must feel some chagrin at my estrangement from the Way of the Deities. And particularly is it the deeply-rooted custom of this Shrine that we should bring no Buddhist rosary or offering, or any special petition in our hearts. This is called "Inner Purity." Washing in sea water and keeping the body free from all defilement is called "Outer Purity." And when both these Purities are attained there is then no barrier between our mind and that of the Deity. And if we feel to become thus one with the Divine, what more do we need and what is there to pray for? When I heard that this was the true way of worshipping at the Shrine, I could not refrain from shedding tears of gratitude.

Source: Sadler, A. L. (Trans.). (1940). Saka's diary of a pilgrim to Ise. Tokyo: Meiji Japan Society.

number. Government leaders, including the prime minister, have paid official visits to the shrine. This has sparked outrage in both North and South Korea and in the People's Republic of China over what the populations in those countries feel is a show of respect for the dead of an unjust and aggressive war, and a sign that Japanese claims of remorse for the war are not genuine.

Contemporary Shinto

The leaders of the postwar Allied Occupation of Japan (1945–1952) insisted that the Japanese abolish State Shinto. Although the imperial institution was allowed to endure, Shinto itself settled into two major forms. The first, a successor to State Shinto, is a set of practices surrounding the emperor and the imperial court, but purged of prewar ideology. The other developed out of traditions not directly associated with the imperial court. These were the benign practices performed by many Japanese people as a way to mark important events, such as the milestone years of childhood, the coming of age for young adults, and especially weddings.

Shinto manifests itself in the lives of ordinary people in other ways as well. Purification rituals are a common occurrence in contemporary Japan. Metaphors of purity and defilement are central to Shinto. Many Japanese will hire Shinto priests to purify people, places, and objects by driving out evil spirits. A building site is normally cleansed after construction and before it is open to the public. In order to invoke the protection of the *kami*, many Japanese purchase talismans (*omamori*) from shrines for such things as academic success and successful conceptions. On the eve of their high school or university entrance exams, students compose notes inscribed with their wishes for academic success and tie them to tree branches at Shinto shrines. Throughout the year, in all parts of Japan, people participate in festivals that are usually organized around local Shinto shrines.

It is perhaps not inaccurate to characterize Shinto as a religion of practitioners but not believers. While there are some worshippers who observe Shinto exclusively, most Japanese people observe both Buddhist and Shinto practices, exhibiting what some Japanese scholars describe as a kind of psychological "cohabitation." For example, it is not uncommon for families to make offerings in their home at both a Shinto "*kami* shelf" (*kamidana*) and at a Buddhist altar (*butsudan*). The latter is especially important for the veneration of ancestors and recently deceased family members.

Shinto and World History

Although Shinto is not generally considered to be one of the world's great religions, it has had an impact on



world history. It has had its moments of infamy, serving as the pretext for war and invasion. During the 1570s, the war leader Toyotomi Hideyoshi (1536-1598) rose to become the most powerful samurai in Japan, earning the title of imperial regent. In a letter to the Portuguese viceroy in Goa, he cited Japan's special place in the world by invoking Shinto: "Ours is the land of the Gods [kami], and God is mind. This God is spoken of by Buddhism in India, Confucianism in China, and Shinto in Japan. To know Shinto is to know Buddhism as well as Confucianism" (Quoted in Tsunoda 1958, 317). Hideyoshi made it clear that his rule was with the consent of the kami and the emperor, who himself was viewed as a living kami. Empowered with the sanction of Shinto, Hideyoshi ordered the invasion of Korea in 1592, with the eventual goal of subjugating China. Hideyoshi's death put an end to his plans for conquest, but not before Japanese forces had wreaked considerable havoc in Korea. In Japan, however, he was deified and subsequently worshipped as a Shinto kami.

As mentioned earlier, Shinto was also invoked in Japan's rise to militarism and imperialism in the 1930s. The unique "Japanese soul" (Yamato damashii) bespoke innate Japanese superiority and fostered an attitude of contempt for other, lesser peoples.

But Shinto was also instrumental in the emergence of the modern state in a more positive sense, supporting a sense of place and a sense of community. Shinto's deep connections to the Japanese imperial institution survive to this day, helping it to preserve its authority and majesty. Even without a coherent doctrinal tradition,

Two Shinto good luck charms.

Shinto has functioned as the foundation of Japan's cultural identity for more than a millennium.

Mark McNally

See also Japanese Empire

Further Reading

- Akio, A., & Shigemichi, T. (Eds.). (1972). Kinsei Shinto-ron zenki Kokugaku [Early modern Shinto discourse and early nativism]. Tokyo, Japan: Iwanami Shoten.
- Breen, J. (1991). "Shinto and Christianity: The dynamics of the encounter in bakumatsu Japan". *Transactions of the Asiatic Society of Japan* (Fourth Series), 6(6), 49–60.
- Breen, J., & Teeuwen, M. (Eds.). (2000). Shinto in history: Ways of the kami. Honolulu, HI: University of Hawaii Press.
- Devine, R. (1981). Hirata Atsutane and Christian sources. Monumenta Nipponica, 36(1), 37–54.
- Earhart, H. B. (1982). *Japanese religion: Unity and diversity*. Belmont, CA: Wadsworth Publishing Company.
- Fujitani, T. (1996). Splendid monarchy: Power and pageantry in modern Japan. Berkeley and Los Angeles: University of California Press.
- Hardacre, H. (1989). *Shinto and the state*, 1868–1988. Princeton, NJ: Princeton University Press.
- Harootunian, H. D. (1988). Things seen and unseen: Discourse and ideology in Tokugawa nativism. Chicago: University of Chicago Press.
- Maruyama Masao. (1961). Nihon no shisô [Japanese thought]. Tokyo: Iwanami Shoten.
- Maruyama Masao. (1974). Studies in the intellectual history of Tokugawa Japan (M. Hane, Trans.). Princeton, NJ: Princeton University Press.
- Matsumoto Sannosuke. (1972). *Kokugaku seiji shisô no kenkyû* [Studies in the political thought of nativism]. Tokyo: Miraisha.
- Motoori Norinaga. (1997). *Kojiki-den, Book One* (A. Wehmeyer, Trans.). Ithaca, NY: East Asia Program, Cornell University.
- Nelson, J. (1996). A year in the life of a Shinto shrine. Seattle, WA: University of Washington Press.
- Nelson, J. (2000). Enduring identities: The guise of Shinto in contemporary Japan. Honolulu, HI: University of Hawaii Press.
- Nosco, P. (1990). Remembering paradise: Nativism and nostalgia in eighteenth-century Japan. Cambridge, MA: Council on East Asian Studies, Harvard University.
- Ono Sokyo. (1962). Shinto: The kami way. Rutland, VT: Tuttle.
- Ooms, H. (1985). Tokugawa ideology: Early constructs, 1570–1680. Princeton, NJ: Princeton University Press.
- Shinto jiten [Shinto encyclopedia]. (1999). Tokyo: Kobundo.
- Teeuwen, M. (1996). Watarai Shinto: An intellectual history of the outer shrine in Ise. Leiden, Netherlands: Research School, CNWS.
- Tsunoda, R., de Bary, W.T., & Keene, D. (Eds.). (1958). Sources of Japanese tradition (Vol. 1). New York: Columbia University Press.



Siddhartha Gautama

(traditionally dated c. 563–c. 483 bce; more probably c. 463–c. 383 bce) Founder of Buddhism

Siddhartha Gautama discovered and taught a path of liberation from suffering that has shaped the lives of Buddhists across the world for over two thousand years. He presented a vision of human existence that centers on wisdom and compassion, and he established monastic communities for both men and women in which intense meditation has been practiced for centuries. He advised kings and nobles on governing wisely and set forth precepts for lay people that continue to shape lives around the globe. For over two millennia, his life and teachings have had a profound impact on religion, culture, and history in Central, East, and Southeast Asia; and since the nineteenth century many in Europe and the United States have been moved by his vision.

Siddhartha Gautama was born into a ruling family of the Sakya clan in present-day Nepal. The first written sources for his life, the texts of the Buddhist canon in the Pali language, come from long after his death and include legendary motifs, and so there is doubt about how reliable they are. At about the age of twenty-nine, he became dissatisfied with life at the court, saw that life as ordinarily lived is unsatisfactory, and embarked on a religious quest to find a way out of suffering. He studied with various Hindu masters, but the wisdom and meditation practices they offered did not provide the answer he was seeking. He meditated in solitude, and at the age of thirty-five came to a realization that transformed his life. After his enlightenment he was acclaimed by his followers as the Buddha, "the awakened one." Because there are many Buddhas in the Buddhist tradition, Gautama is often referred to as Sakyamuni Buddha, the sage of the Sakya clan.

The Buddha expressed his insight in the Four Noble Truths, which are at the heart of Buddhist life and practice and are his central contribution. The First Noble Truth is that life as usually experienced is unsatisfactory because it is impermanent. All pleasures are transitory, leading to separation and suffering. The Second Noble Truth is that the unsatisfactory character of life arises from craving and grasping at impermanent objects and experiences, seeking lasting pleasure and security that these objects and experiences cannot provide. Ordinary life is marked by a fundamental illusion that there is a permanent, substantial self underlying our experiences. The Buddha taught that there is no such enduring self. All things, including humans, are composites of various factors that constantly change and that are profoundly interdependent. Whatever arises will cease to be.

The Third Noble Truth is the hopeful promise that there can be an end to the unsatisfactoriness of life through freedom from craving. This freedom is called nibbana in Pali or nirvana in Sanskrit. Nirvana, often translated as "extinction," is not complete annihilation. Nirvana is the extinction of craving; it is sometimes compared to the blowing out of a candle. Since craving causes the unsatisfactoriness of life, the extinction of craving brings peace and happiness. Nirvana is also the end of ignorance and thus is identified as unconditioned, absolute truth, which brings wisdom and compassion and ends the cycle of craving, grasping and illusion. Nirvana cannot be defined or comprehended in concepts; it is a religious state that must be experienced to be fully understood. The Buddha described it in negative terms as not born, not produced, and not conditioned. Nirvana manifests itself in the Four Noble Dwelling Places: the virtues of loving kindness, compassion, appreciative joy, and equanimity. The Fourth Noble Truth is the Eightfold Path, which presents a way of life that leads to nirvana. It consists of three stages. The first stage, wisdom, comprises right understanding and right thought. The second stage is morality or ethical conduct and comprises right speech, right action, and right livelihood. The final stage is meditation and comprises right effort, right mindfulness, and right concentration.

Gautama challenged the social mores of his time by forming monastic communities in which all were equal, regardless of the class or caste they came from. Gautama may have been the first person in history to establish a monastic community for women. He taught a meditation practice that focuses on the direct experience of each moment, acknowledging sensations, emotions, and thoughts without grasping at pleasant moments or pushing away unpleasant experiences.

Gautama lived in northern India and Nepal. After his death, the Indian emperor Asoka (d. 232 BCE) promoted Buddhism throughout much of the Indian subcontinent and sent Buddhist missionaries to other parts of Asia, including present-day Sri Lanka, Kashmir, the Himalayas, present-day Myanmar (Burma), and the Greek kingdoms of Bactria in Central Asia. Through these efforts Buddhism began its growth as an international religion.

Leo D. Lefebure

See also Buddhism

Further Reading

- Ling, T. (1973). The Buddha: Buddhist civilization in India and Ceylon. Harmondsworth, UK: Penguin Books.
- Nakamura, H. (2000). Gotama Buddha: A biography based on the most reliable texts (G. Sekimori, Trans.). Tokyo, Japan: Kosei Publishing Company.
- Nanamoli, B., & Bodhi, B. (Trans.). (1995). The middle length discourses of the Buddha: A new translation of the Majjhima Nikaya. Boston: Wisdom Publications.
- Radhakrishnan, S. (Trans.). (1950). *The Dhammapada*. Oxford, UK: Oxford University Press.
- Rahula, W. (1978). What the Buddha taught (Rev. ed.) London: G. Frasier.
- Walshe, M. (Trans.). (1995). The long discourses of the Buddha: A translation of the Digha Nikaya. Boston: Wisdom Publications.

Sikhism

S ikhism is a religion that developed in the Punjab area of the Indian subcontinent in the fifteenth century CE. The founder of the religion was Guru Nanak, who was born in 1469 CE in Talwandi. Guru Nanak was originally a Hindu, but drew upon a range of religious influences in creating his distinctive spiritual message. In his early years he earned his living by keeping financial records,

4000-2500 все	Hinduism	South Asia
1300-1200 все	Judaism	West Asia
500-400 все	Buddhism	South Asia
	Confucianism	China
	Zoroastrianism	West Asia
	Jainism	South Asia
400-221 BCE	Daoism	China
lst century ce	Christianity	West Asia, Europe
3rd century ce	Manichaeism	West Asia
6th century ce	Shinto	Japan
7th century ce	Islam	West Asia
11th century	Orthodoxy	West Asia
15th-16th century	Sikhism	South Asia
16th century	Protestantism	Europe
19th century	Latter-day Saints	North America
	Babi and Baha'i	West Asia
19тн-20тн	Pentecostalism	North
CENTURY		America

When and Where World Religions Began

but was attracted to the religious life, and made a series of journeys to religious sites that were significant to both Muslims and Hindus. It seems that he traveled to Varanasi (Benares), to the very south of India, and also to Mecca. After this long period of pilgrimage, Guru Nanak moved to the village of Kartarpur in the Punjab where he gathered around himself a community of disciples. Towards the end of his life, Guru Nanak selected a man named Lehna to be his successor. From then onward, Lehna became known as Guru Angad.

In his teachings Guru Nanak laid the religious foundations of Sikhism, but his spiritual successors amplified the teachings. After Guru Angad there were eight other Sikh gurus, culminating in Guru Gobind Singh, who died in 1708 CE. The teachings of some of the Sikh gurus, along with those of several Hindu and Muslim teachers, were ultimately gathered together into the definitive scripture, the *Guru Granth Sahib*. The names and dates of the ten Sikh gurus are: Guru Nanak (1469–1539? CE); Guru Angad (1504–1552); Guru Amar Das (1479– 1574); Guru Ram Das (1534–1581); Guru Arjun (1563–1606); Guru Hargobind (1595–1644); Guru Har Rai (1630–1661); Guru Hari Krishen (1656–1664); Guru Tegh Bahadur (1621?–1675); Guru Gobind Singh (1666–1708). It was decided by Guru Gobind Singh that he would be the last person who was guru, and that from then onward, the scripture of the Sikhs, the *Guru Granth Sahib*, would become the guru.

Religious Beliefs

Sikhism is a monotheistic religion that lays emphasis upon the relationship of the individual with God. The Sikh scripture emphasizes the influence of God in creating an ethical unity or the Punjabi *hukam* in the universe. The goal of human beings should be to try to live according to this ethical principle, while at the same time not being egoistic or focused on the self. If the individual tries

diligently to adhere to this way of life, then with the grace of God, it is possible to attain salvation. Sikhs may also use a form of meditation involving the repetition of the name of God, to assist in achieving salvation. The state of salvation is sometimes described by the Punjabi term *sahaj*, which indicates the merging of the individual with the divine.

A Sikh family cross a bridge over the Thames. Founded in India, Sikhism is now a world religion, with Sikhs living in many nations.

When all efforts to restore peace prove useless and no words avail, Lawful is the flash of steel, It is right to draw the sword. • GURU GOBIND SINGH (1666–1708)

In a Sikh community, worship is normally focused upon a *gurdwara*. This is a place of communal worship, in which is kept a copy of the *Guru Granth Sahib*. This scripture is regarded with great reverence by the Sikhs, as it is considered to be one of the principal ways in which God reveals his teachings to humanity. The holy book is kept on a pedestal at one end of a large prayer room, in which when services are being held, men sit on one side and women on the other. Worship at the *gurdwara* may consist of readings from the *Guru Granth Sahib*, the singing of hymns accompanied by music, and also spiritual talks.

After the worship, there is often a communal meal or *langar*. This social custom was instituted by the Sikh gurus to emphasize the equality of all people. In the India of the time, there were a number of prohibitions about food that related to the caste which a person occupied. The Sikh gurus felt that these were inappropriate, and the *langar* was developed to stress the absence of social divisions among Sikhs. Guru Nanak was opposed to extravagant forms of religious ritual, and this is reflected in the relative simplicity of Sikh worship. Sikhism does not



particularly attempt to convert people to its faith. While Sikhs are very proud of their own religion, they also show respect for other faiths.

Historical Development

Sikhism developed at a period of conflict in northern India, exacerbated by the geographical position of the Punjab on the natural invasion route from the north into India. The historical period covered by the Sikh gurus saw intermittent conflict between the developing Sikh community and the Muslim invaders of India. The Sikhs felt, to some extent, the need to defend their community militarily in order to survive. However, relations with the Mughal empire were at times very friendly. Guru Amar Das, for example, was a contemporary of the Mughal emperor Akbar (ruled 1556–1605 CE), and it seems likely that the two men did in fact meet, under very amicable circumstances. Guru Arjan, on the other hand, possibly because of political conflict, alienated the emperor Jahangir (ruled 1605-1627) and was subsequently executed. The emperor Aurangzeb (ruled 1659-1707) instituted a period of stricter observance of Islamic views. There was conflict with the Sikhs, and the ninth guru, Tegh Bahadur, was ultimately executed. His son, Guru Gobind Singh, became leader of the Sikh community, and introduced changes that were to have long-term consequences for Sikhs. Besides establishing the Sikh scripture as Guru, he instituted the khalsa, or community of people who had been formally accepted as Sikhs. Members of the khalsa tend to be recognized by five characteristics: they do not cut their hair; they wear a comb to keep it in order; and they wear a sword, a steel bangle on the wrist, and a pair of shorts beneath their outer garment. These customs have given Sikhs a sense of coherence as a community.

Influence of Sikhism

Although there was some continuing conflict between Sikhs and Muslims, the Sikh community managed to sustain its sense of identity. In recent times, Sikhs have migrated to many parts of the world and set up large and successful communities, for example in Canada and in London. Sikhism has emphasized a number of principles that are of value to the world faith community. It has stressed a respect for other faiths; it has emphasized a sense of social duty, and given great importance to the equality of all human beings.

Paul Oliver

Further Reading

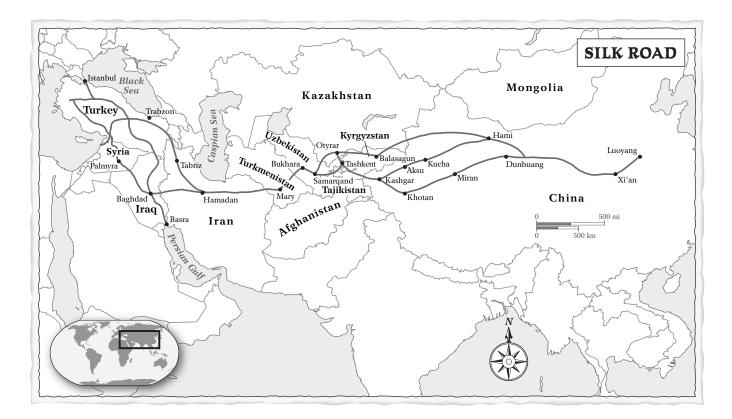
Cole, W. O., & Sambhi, P. S. (1978). *The Sikhs: Their religious beliefs and practices*. London: Routledge & Kegan Paul.

- Gill, D. (2003). World religions. London: Harper Collins.
- Jain, N. K. (1979). Sikh religion and philosophy. New Delhi, India: Sterling.
- McLeod, W. H. (1968). *Guru Nanak and the Sikh religion*. Oxford, UK: Oxford University Press.
- McLeod, W. H. (1997). Sikhism. London: Penguin.
- Sambhi, P. S. (1989). Sikhism. Cheltenham, UK: Stanley Thornes.
- Singh, H. (1985). Heritage of the Sikhs. Delhi, India: Manohar.
- Singh, T. (1964). Sikhism: Its ideals and institutions. Calcutta, India: Orient Longmans.
- Talib, G. S. (1999). An introduction to Sri Guru Granth Sahib. Patiala, India: Panjabi University.

Silk Roads

The Silk Roads were an elaborate and ever-changing network of overland trade routes that linked China, India, and western Eurasia for many thousands of years. Their existence ensured that the history of Eurasia had an underlying coherence, despite the significant cultural differences between its different regions.

A late nineteenth-century German geographer, Ferdinand von Richtofen, first used the label *Silk Roads* in honor of the shimmering lightweight fabric that was their most famous and exotic commodity. But the Silk Roads carried much more than silk—they also carried languages, technologies, artistic styles, goods, and even diseases between the great agrarian civilizations of Eurasia. Scholars began to appreciate the importance of the Silk Roads in the late nineteenth century, during the international contest known as the Great Game, which pitted Russia and Great Britain against each other for influence in Central Asia. To Russian and British officials, Central



Asia seemed a remote backwater, ripe for colonization because of its strategic position. But as European and Russian soldiers, diplomats, and scholars began to scout out the lands of Central Asia, they learned that flourishing trade routes had once crisscrossed the region, supported by ancient cities, some of which had long vanished under desert sands. In the twentieth century, several generations of archaeologists, historians, and linguists undertook the daunting task of recreating the lost world of these ancient trade routes.

For world historians, long-distance exchange routes are of great importance. William McNeill has argued that the exchange of ideas and technologies between different regions may be one of the most important of all engines of change in world history. As the most durable links between major population centers in the largest landmass on earth, the Silk Roads count as one of the most important of all long-distance exchange routes in human history. Study of the Silk Roads has made it apparent that Eurasian history consisted of more than the separate histories of Mesopotamia, Egypt, Europe, India, Southeast Asia, and China. On the contrary, for several thousand years, the Silk Roads ensured that these regions were never entirely disconnected. As Marshall Hodgson noted as early as the 1950s, "historical life, from early times at least till two or three centuries ago, was continuous across the Afro-Eurasian zone of civilization; that zone was ultimately indivisible" (Hodgson 1993, 17).

The Geography and Early History of the Silk Roads

The distinctive way in which the Silk Roads linked the different regions of Eurasia is explained by the large-scale geography of the Eurasian landmass. Eurasia consists of two very different regions. Around its western, southern and eastern rims, in what we can call Outer Eurasia, there lie several subcontinental peninsulas, partially separated from one another by seas and mountain chains. Because these regions are southerly and well watered, agriculture flourished there, so it was there, in Mesopotamia, India, and China, that Eurasia's first agricultural civilizations appeared from about five thousand years ago. Links between the different parts of Outer Eurasia were tenuous enough that each region developed its own cultural and technological styles. Further north, in regions dominated during the twentieth century by the Soviet Union (which we can call Inner Eurasia), climates were harsher and more arid. Few practiced agriculture here, except in parts of modern Ukraine and Central Asia, and there were few towns and cities until recent centuries. This huge zone,

The Silk Roads: Twenty-First-Century Style

Thousands of years after the Silk Roads were first traveled, the ancient routes remain relevant, both literally and virtually. BBC News reported on 26 April 2004 that twenty-three nations signed a historic treaty agreement to build a road system that amounts to a new Silk Road, beginning in Tokyo and terminating in Istanbul. The plan was first put forth by the United Nations in 1959, but Cold War tensions stalled any serious consideration of building the road. A budget and schedule for completion are to be announced in 2006.

The Silk Road was once again in the news when on 27 April 2004, the *People's Daily*, a newspaper published in Beijing, reported that Japan, China, and the Republic of Korea were joining together to build "an electronic" Silk Road to share information technology and build the "competitive ability of Asian enterprises."

But until these two futuristic Silk Road ventures come to fruition, Route 312 runs through the Gobi Desert, paralleling the ancient road and carrying buses with "traders who deal in cell phones rather than silk and spices," according to Rob Gifford, a National Public Radio correspondent who made the trip in August, 2004. Gifford reports that camels are for tourists only, with Chinese travelers preferring motorized vehicles.

Marcy Ross

Sources: China, Japan, ROK to build electronic Silk Road. (2004. April 27). The People's Daily Online. Retrieved July 9, 2004, from http://english.peopledaily.com.cn

Asia signs up to "new Silk Road." (2004, April 26). BBC News. Retrieved July 9, 2004 from http://news.bbc.co.uk

On the road in China: The new Silk Road. (2004, August 4). National Public Radio. Retrieved August 9, 2004, from http://www.npr.org/programs/morning/features/2004/ aug/china_road

largely devoid of agriculture, helped separate the major agrarian civilizations.

Yet the absence of agriculture did not mean that Inner Eurasia was a historical backwater. From about 4000 BCE pastoralist lifeways, based on the exploitation of domesticated animals, began to spread in the steppes of Inner Eurasia. By 2000 BCE pastoralists were grazing their livestock from Hungary to the borders of Mongolia, and in the first millennium BCE pastoralism also spread into Mongolia and parts of Manchuria. Moving with their herds and spending much of their time on horseback, pastoralists were much more mobile than farmers and ranged over large areas. But it was difficult for them to grow and store crops, so most traded with farming communities at the edge of the steppes, exchanging livestock products for agricultural produce and urban manufactures. In this way, pastoralists gradually created farreaching systems of exchange that operated in relays from Siberia to India and from China to the Mediterranean. With the spread of pastoralism, Inner Eurasia, which had once seemed a barrier to communications across Eurasia, became a new channel of communication. How extensive these links could be is suggested by the spread of Indo-European languages from somewhere north of the Black Sea to Xinjiang (northwestern China), India, Mesopotamia, and Europe, borne almost certainly by the spread of pastoralist communities speaking closely related languages.

Early evidence of trade along the Silk Roads comes from the so-called Oxus civilization, a cluster of fortified farming and trading cities built about 4,000 years ago on the borders between modern Afghanistan, Turkmenistan, and Uzbekistan. Here, archaeologists have found Chinese silks, goods from India and Mesopotamia, and pottery and ornaments from the steppes. The archaeological evidence suggests a pattern of cooperation between urban merchants and steppe pastoralists, a pattern that survived into modern times. Eventually, there emerged sophisticated systems of trade, organized in caravans sometimes with hundreds of individuals, often financed by urban merchants, and supplied with urban manufactures and regional specialties. At least by the first millennium BCE, and perhaps much earlier, caravans could stop at special rest stations known as caravansaries established by local rulers or merchants and sometimes fortified. Caravansaries offered accommodation, repair workshops, and food, as well as information about what lay ahead. Between stops, caravans often traveled through lands controlled by pastoralists, who would provide protection (at a price), as well as guides, and who traded goods such

The Silk Road in 1908

This 1908 description provides some understanding of the importance of the southern Afghanistan city of Kandahar as a route for trade goods that flowed east and west across Asia.

Kandahar is one of the principal trade centers in Afghanistan. There are no manufactures or industries of any importance peculiar to the city; but long lines of bazars display goods from Great Britain, India, Russia, Persia, and Turkistan, embracing a trade area as large probably as that of any city in Asia. The customs and town dues together amount to a sum equal to the land revenue of the entire province. The Hindus are the most numerous and wealthiest merchants in Kandahar, carrying on a profitable trade with Bombay and Sind. They import British manufactures, e.g. silks, calicos, muslins, chintzes, broadcloth, and hardware; and Indian produce, such as indigo, spices, and sugar. They export asafoetida, madder, wool, dried fruits, tobacco, silk, rosaries, etc. In 1903-4 the exports to India from Kandahar were valued at nearly 35 lakhs, and the imports at 33 lakhs.

Source: Imperial Gazetteer of India: Afghanistan and Nepal (p. 73). (1908). Calcutta, India: Superintendent of Government Printing.

as hides and horses. Without the consent and cooperation of the pastoralists through whose lands they passed, the Silk Roads could not have functioned at all.

The Silk Roads were not the only exchange networks linking the different agrarian regions of Eurasia. As early as the third millennium BCE, sea routes helped link the civilizations of Mesopotamia and the Indus valley, and in the first millennium CE trade through the southern seas became increasingly important. Nevertheless, for several millennia, the Silk Roads were the most extensive of all trans-Eurasian exchange systems.

The Silk Roads at Their Height

The Silk Roads grew in importance late in the first millennium BCE, when major agrarian empires began muscling in on them from the south, west, and east. Around 529 BCE, Cyrus I, the founder of the Persian Achaemenid dynasty, invaded the lands of pastoralists known as the Massagetae in modern Turkmenistan. Though Cyrus was killed by the Massagetaen queen, Tomyris, his successors established a loose hegemony over much of modern Turkmenistan and Uzbekistan. Two centuries later, Alexander of Macedon conquered much of Central Asia, and a century after that, the Chinese emperor Han Wudi sent an envoy, Zhang Qian, into the same region. Zhang Qian embarked on an epic fourteen-year journey, much of which he spent as a captive of the pastoralist Xiongnu. He returned with enthusiastic reports of the wealth of Central Asia, but the emperor was particularly impressed by accounts of the magnificent "blood-sweating" horses of Fergana. Han Wudi sent an army westwards to claim his share of the wealth traveling through Central Asia, and ever since Chinese rulers have taken a keen interest in Xinjiang and Central Asia. Like Cyrus and Alexander, Wudi found he would have to fight regional pastoralist leaders for control of the Silk Roads, and he embarked on a contest for control of Xinjiang that the Chinese were to continue, with fluctuating success, until the early 1900s.

Further west, Rome's great rival, Parthia (c. 238 BCE-c. 226 CE), which was founded by a dynasty of pastoralists, controlled the western end of the Silk Roads. Parthian rulers protected their monopoly on trade to the Mediterranean, and tried hard to prevent Roman traders from taking alternative routes through India. Though none of the great powers permanently loosened the grip of regional pastoralists on the Silk Roads, their intervention did stimulate trade. Indeed, so abundant is the evidence for exchanges in the final century of the first millennium BCE that many scholars have argued that this is when the Silk Roads really flourished for the first time. At the battle of Carrhae (modern-day Haran, in southeastern Turkey), in 53 BCE, Parthian armies flew silken banners from China; from around 100 BCE, China began to import horses from Fergana; in the Xiongnu tombs of Noin-Ula in the north of modern Mongolia, archaeologists have found textiles from Central Asia and Syria; and



in the steppe tombs of Pazyryk, in the Altay mountains, they have found Persian carpets.

In the second and third centuries of the common era, Central Asia was dominated by the Kushan empire, which had been founded in approximately 45 CE by a dynasty of pastoralist rulers originally from eastern Xinjiang. The Kushan empire traded with Inner Eurasian pastoralists and with the Mediterranean world, India, and China, and Kushan culture was influenced by all these regions. For example, Kushan religious traditions included deities from the steppes, as well as Zoroastrian, Greek, and Buddhist deities, but they were also influenced by Jainism and Vaishnavism, while other religious traditions, including Nestorian Christianity and elements of Confucianism, were also present within the empire. Exchanges along the Silk Roads were particularly vigorous in the sixth and seventh centuries, when the Chinese Tang dynasty (618–907) was unusually open to influences from the West. These influences included musical and artistic styles from Persia, and Buddhism, which reached China from India, traveling with merchant caravans.

Trade was also stimulated by the creation of large and powerful steppe empires dominated by dynasties of Turkic origin, all of which were interested in long-distance trade. In the late sixth century, a Turkic leader, Ishtemi (reigned 552–c. 576), working closely with Sogdian merchants from the trading cities of Central Asia, sent trade delegations as far as Constantinople, and we know of at least one return mission, led by a Byzantine official called Zemarkhos, that probably traveled to Ishtemi's capital in Xinjiang.

A textile merchant in the Silk Road city of Samarkand in the early twentieth century displays silk, cotton, and wool fabrics and carpets.

The following account, written by the Muslim geographer al-Muqaddasi in about 985 CE, gives some idea of the variety of commodities carried along the Silk Roads in the first millennium CE:

from Tirmidh, soap and asafoetida [a strong-smelling resinous herb]; from Bukhara, soft fabrics, prayer carpets, woven fabrics for covering the floors of inns, copper lamps, Tabari tissues, horse girths (which are woven in places of detention), Ushmuni fabrics [from the Egyptian town of Ushmunayn], grease, sheepskins, oil for anointing the head; ... from Khorezmia, sables, miniver [a white fur], ermines, and the fur of steppe foxes, martens, foxes, beavers, spotted hares, and goats; also wax, arrows, birch bark, high fur caps, fish glue, fish teeth [perhaps a reference to walrus tusks, which were carved into knife handles or ground up and used as medicine], castoreum [obtained from beavers and used as a perfume or medicine], amber, prepared horse hides, honey, hazel nuts, falcons, swords, armour, khalanj wood, Slavonic slaves, sheep and cattle. All these came from Bulghar, but Khorezmia exported also grapes, many raisins, almond pastry, sesame, fabrics of striped cloth, carpets, blanket cloth, satin for royal gifts, coverings of mulham fabric, locks, Aranj fabrics [probably cottons], bows which only the strongest could bend, rakhbin (a kind of cheese), yeast, fish, boats (the latter also exported from Tirmidh). From Samarqand is exported silver-coloured fabrics (simgun) and Samarqandi stuffs, large copper vessels, artistic goblets, tents, stirrups, bridle-heads, and straps; ... from Shash [modern Tashkent], high saddles of horse hide, quivers, tents, hides (imported from the Turks and tanned), cloaks, praying carpets, leather capes, linseed, fine bows, needles of poor quality, cotton for export to the Turks, and scissors; from Samargand again, satin which is exported to the Turks, and red fabrics known by the name of mumarjal, Sinizi cloth [from the Fars region, though originally the flax for them came from Egypt], many silks and silken fabrics, hazel and other nuts; from Farghana and Isfijab, Turkish slaves, white fabrics, arms, swords, copper, iron; from Taraz (Talas) goatskins; (Barthold 1977, 235-236)

Traffic along the Silk Roads was never more vigorous than in the thirteenth century, when the Mongol empire controlled almost the entire network from China to Mesopotamia. Like most pastoralists, Mongol rulers valued and supported long-distance trade. Karakorum, the Mongol capital, though far from any of the great agrarian centers of Eurasia, became briefly one of the most cosmopolitan cities in Eurasia; here all of Eurasia's great religions jostled each other, including Buddhism, Nestorian Christianity, Islam, Daoism, and Confucianism, as well as the still-vigorous religious traditions of the

steppes. Italian merchant houses published special travel guides for merchants traveling to Mongolia and China; Chinese officials acted as advisers to the Mongol rulers of Persia; and Muslim merchants managed the tax systems of China.

The cultural and technological integration of Eurasia through the Silk Roads helps explain the technological and commercial precocity that gave Eurasians such a devastating advantage when they encountered peoples of the Americas and the Pacific. The technologies of pastoralism, including horse riding, as well as Chinese inventions such as the compass and gunpowder, which had traveled to Europe along the Silk Roads, gave colonists from Eurasia such a decided advantage.

But as William McNeill has shown, epidemiological exchanges through the Silk Roads were equally significant. The Black Death almost certainly traveled from China through the Silk Roads, but similar epidemiological exchanges between different agrarian civilizations had occurred several times before this. For example, the plagues that devastated

> A rubbing of text from a tomb in China showing the use of Persian (Farsi), Arabic, and Chinese, three languages that traveled along the Silk Roads.

parts of the Roman empire in the second and third centuries CE may also have arrived via the Silk Roads. As McNeill has argued, these epidemiological exchanges help explain why, when peoples from Eurasia eventually encountered peoples from the Americas and the Pacific, they enjoyed epidemiological as well as technological and military advantages: In the more populous areas of the Americas populations may have declined by up to 90 percent after the arrival of Eurasian diseases such as smallpox.

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The Silk Roads in Decline

After the decline of the Mongol empire in the fourteenth century, other trade routes began to assume greater importance, and the relative importance of the Silk Roads declined. More maneuverable ships plied new sea routes that spanned the globe; guns and cannon challenged the military power of pastoralists; and in the nineteenth century, steam engines began to displace horses and camels in the steppes. Meanwhile, as agricultural populations began to settle the lands that became Muscovy and Russia, trade was diverted north and west. Today, Central Asia is still a region of vigorous inter-Eurasian trade, but the Silk Roads count as just one of many different systems of exchange that link Eurasia and the globe into a single system. This makes it all too easy to forget that for perhaps four thousand years they were the main link between the forest dwellers of Siberia, the pastoralists of the steppes, and the agrarian civilizations of China, India, Persia, and the Mediterranean. Because of the Silk Roads, Indo-European languages are spoken from Ireland to India, Buddhism is practiced from Sri Lanka to Japan, and inventions such as gunpowder, printing, and the compass became part of a shared Eurasian heritage. The Silk Roads gave Eurasia a unified history that helps explain the dominant role of Eurasian societies in world history in recent millennia.

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See also Caravan; Inner Eurasia; Pastoral Nomadic Societies; Secondary-Products Revolution

Further Reading

Abu-Lughod, J. L. (1989). Before European hegemony: The world system A.D. 1250–1350. Oxford, UK: Oxford University Press.

Adas, M. (Ed.). (2001). Agricultural and pastoral societies in ancient and classical history. Philadelphia: Temple University Press.

- Barfield, T. J. (1993). *The nomadic alternative*. Englewood Cliffs: Prentice Hall.
- Barthold, W. (1977). *Turkestan down to the Mongol invasion* (4th ed.; T. Minorsky, Trans.). London: E. J. W. Gibb Memorial Trust.

Bentley, J. (1993). Old World encounters: Cross-cultural contacts and exchanges in pre-modern times. New York: Oxford University Press.

Christian, D. (1998). A history of Russia, Central Asia and Mongolia: Vol

1. Inner Eurasia from prehistory to the Mongol empire. Oxford, UK: Blackwell.

- Christian, D. (2000). Silk roads or Steppe roads? The Silk Roads in world history. *Journal of World History*, 11(1), 1–26.
- Drège, J.-P., & Bührer, E. M. (1989). *The Silk Road saga*. New York: Facts on File.
- Franck, I. M., & Brownstone, D. M. (1986). The Silk Road: A history. New York: Facts on File.
- Frank, A. G., & Gills, B. K. (Eds.). (1992). The world system: From five hundred years to five thousand. London: Routledge.
- Hodgson, M. G. S. (1993). The interrelations of societies in history. In E. Burke III (Ed.), *Rethinking world history: Essays on Europe, Islam, and world history* (pp. 3–28). Cambridge, UK: Cambridge University Press.
- Hopkirk, P. (1980). Foreign devils on the Silk Road: The search for the lost treasures of Central Asia. Oxford, UK: Oxford University Press.
- Khazanov, A. M. (1994). Nomads and the outside world (2nd ed.). Madison: University of Wisconsin Press.
- McNeill, W. H. (1977). Plagues and peoples. Oxford, UK: Blackwell.
- McNeill, W. H. (1991). The rise of the West: A history of the human community. Chicago: University of Chicago Press.
- Rossabi, M. (1999). The Silk Roads: An educational resource. *Education about Asia*, 4(1), 16–20.
- Whitfield, S. (1999). *Life along the Silk Road*. Berkeley & Los Angeles: University of California Press.



(c. 145–86 bce) Chinese historian of the Han dynasty (206 bce–220 ce)

Sima Qian (in the Wade-Giles romanization system his name is romanized as Ssu-ma Ch'ien) was the first true historian of China. Although there had been earlier historical works, mostly in the form of state chronicles or collections of documents and anecdotes, Sima Qian was the first person to write a history of China under his own name, and the history that he produced—the *Shiji* (*Records of the Grand Historian*) —provided a model for Chinese historians over the next two thousand years.

Most of what we know of Sima Qian's life comes from the last chapter of the *Shiji*, which included his autobiography. There we learn that his father, Sima Tan (d. 110 BCE), was a court astrologer to Emperor Wu of the Han Dynasty (reigned 141–87 BCE). As a young man Sima Qian received a classical education and traveled

Sima Quian's Letter to Ren An

After speaking up for a general who had fallen out of favor, Sima Quian (c. 145–86 BCE) chose to face the severe penalty of castration dictated by an angry emperor (rather than take the option of committing suicide) so that he could complete his history of China Shiji (Records of the Grand Historian). In a letter to his friend Ren An (excerpted below), Sima Quian explains his reasons for choosing to live.

A man has only one death. That death may be as weighty as Mount Tai, or it may be as light as a goose feather. It all depends upon the way he uses it.... Yet the brave man does not necessarily die for honor, while even the coward may fulfill his duty. Each takes a different way to exert himself. Though I might be weak and cowardly and seek shamelessly to prolong my life, I know full well the difference between what ought to be followed and what rejected. How could I bring myself to sink into the shame of ropes and bonds? If even the lowest slave

extensively. At the age of twenty he entered government service as a "gentleman of the palace." Eventually he inherited his father's office of grand astrologer, a position that combined record keeping with the interpretation of natural phenomena and, equally important, gave him access to the imperial library. His father had started a history, and on his deathbed Sima Tan begged his son to continue his efforts. It is not clear how much Sima Tan had actually written, but Sima Qian went on to complete a comprehensive history of China from its legendary beginnings to his own age.

Besides the *Shiji*, Sima Qian's surviving works include a letter to a friend, Ren An, explaining his actions in what is known as the Li Ling affair. Li was a capable Han general who had led his army deep into the territory of the Xiongnu nomads on China's northwestern frontier. When his forces were surrounded and defeated he had surrendered, provoking Emperor Wu's wrath. Officials at court who had been praising Li only days before now joined in a chorus of condemnation. Sima spoke up for the general and in doing so offended the emperor and was sentenced to castration. Where other men might have and scullion maid can bear to commit suicide, why shouldn't one like me be able to do what has to be done? But the reason I have not refused to bear these ills and have continued to live, dwelling in vileness and disgrace without taking leave, is that I grieve that I have things in my heart that I have not been able to express fully, and I am shamed to think that after I am gone my writings will not be known to posterity....

I have gathered up and brought together the old traditions of the world which were scattered and lost. I have examined the deeds and events of the past and investigated the principles behind their success and failure, their rise and decay, in one hundred and thirty chapters. I wished to examine into all that concerns heaven and man, to penetrate the changes of the past and present, completing all as the work of one family.

Source: Ban Gu. Han shu (chap. 62). Retrieved June 30, 2004, from http://sll.stanford.edu/projects/wworld/highlights/ww/demo/letter.html

chosen suicide rather than mutilation, Sima reluctantly accepted his humiliating punishment so that he could have time to finish his history.

The Shiji comprises 130 chapters: twelve basic annals, which recount earlier dynasties and the reigns of individual emperors in the Han; ten chronological tables correlating major events in the feudal states (both autonomous states in the pre-imperial Zhou dynasty and also semi-independent kingdoms within the Han empire); eight treatises on ritual, music, pitch-pipes, the calendar, astronomy, state sacrifices, waterways, and economics; thirty chapters on various hereditary houses (these were devoted to the feudal lords), and seventy "arrayed traditions." The arrayed traditions are biographical chapters that often combine the life stories of two or three individuals who knew each other or were in some way similar (such as the philosophers Laozi and Han Feizi). The traditions also include group biographies of assassins, scholars, harsh officials, wandering knights, imperial favorites, diviners, and money makers. In addition, six of them describe various nomadic peoples that lived on China's borders.

Being born is like being kidnapped. And then sold into slavery. • ANDY WARHOL (1928–1987)

Further Reading

- Durrant, S.W. (1995). The cloudy mirror: Tension and conflict in the writings of Sima Qian. Albany: State University of New York Press.
- Hardy, G. (1999). Worlds of bronze and bamboo: Sima Qian's conquest of history. New York: Columbia University Press.
- Sima Qian. (1958). Ssu-ma Ch'ien: Grand historian of China. (W. H. Nienhauser, Jr., et al., Trans.). New York: Columbia University Press.
- Sima Qian. (1993). *Records of the grand historian* (B. Watson, Trans.) New York: Renditions-Columbia University Press.
- Ssu-ma Ch'ien. (1994). The grand scribe's records. (W. H. Nienhauser, Jr., Ed.; W. Cao, S. W. Galer, W. H. Nienhauser, & D. W. Pankenier, Trans.). Bloomington, Indiana: Indiana University Press.

Slave Trades

C lave trades began with the onset of agricultural soci-Deties. As hunter-gatherers also became farmers, they settled down at least temporarily, defending their lands from both nomads and other farmers. The ensuing wars vielded prisoners, who then became convenient forced labor for the victors. More wars in an area meant more available slaves, who then could be sold to others in exchange for food, copper, and later money. This exchange was particularly true in Mesopotamia, India after the Aryan migrations, China under the Zhou dynasty (1045–256 BCE), and the Greek city-states. For example, in Sumeria in southern Mesopotamia this labor was used to perform the constant maintenance of irrigation canals as well as to build ziggurat temples. Egypt and Harappa (in the Indus River valley of modern Pakistan) had far fewer slaves until outsiders attacked, and their societies became more warlike than before in response. China and India had fewer slaves than Mesopotamia and Greece. Strong central governments that reserved slavery largely to themselves and that were blessed with more peasant farmers than they needed condemned fewer individuals to being outright chattel (an item of tangible property except real estate and things connected with real property) in eastern Asia.

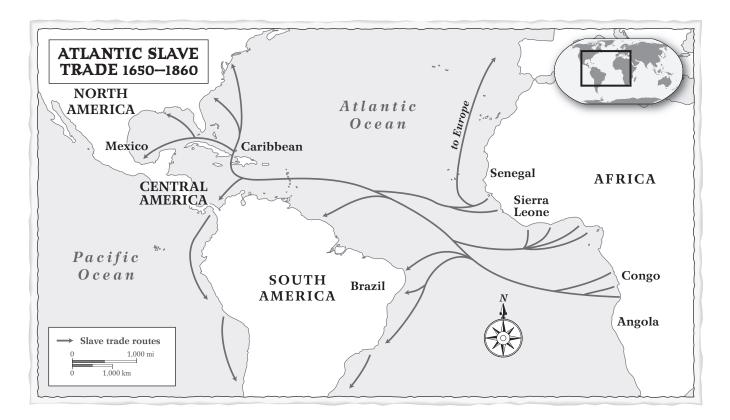
Empires transmitted both slavery and slave trades. The Mediterranean world witnessed upsurges in the number of people in bondage with the imperial expansion of Athens, of Alexander of Macedon, and then of Rome.

Sima Qian ended most chapters with a brief appraisal prefaced by the phrase "The Grand Astrologer remarks." Otherwise, his interpretive comments are sparse and, at least for his accounts of early history, he borrowed extensively from already existing records. This has led some to view Sima Qian, for better or worse, as a cut-and-paste historian. Yet the unusual structure of his history allowed him considerable leeway to shape the perceptions of his readers through his editing. For instance, Confucius, who was by no means a feudal lord, got his own chapter in the hereditary house section—a sign of the importance Sima Qian attached to him, and unflattering details about particular individuals can show up when they are mentioned in the biographies of others.

There is a tremendous amount of information contained within the *Shiji*, but its fragmented, overlapping structure means that details about pivotal figures may be scattered over several chapters. It is a book that cannot be mastered one time through, and in its original form -written on thousands of bamboo slips-it would have been even more difficult to handle. Nevertheless, Sima Qian's literary style and bold innovations inspired later historians. His work became the first of the "Standard Histories," of which there are now twenty-six, although unlike the Shiji the later histories limited their focus to a single dynasty, and many enjoyed official sponsorship. Yet they continued Sima Qian's basic format of annals, treatises, and arrayed traditions (the hereditary houses were omitted as the empire became more centralized).

From our perspective today, the *Shiji* is a significant cultural expression of the political trend in Sima Qian's time toward consolidation. Just as the Han emperors had worked to bring "all under heaven" under their control, so Sima tried to bring together all of China's history, geography, and culture within a single work. Sima himself believed that, having met failure and disgrace in his own life, he was writing primarily for future generations. In this ambition he certainly succeeded.

Grant Hardy



Prisoners whose families could not afford or arrange a ransom were quickly sold and resold. Slave trades came to Gaul, in what is now western Europe, and Britain. Thanks to senatorial policy, the center of Mediterranean slave trading moved from the island of Rhodes to the smaller yet more accessible island of Delos to the even more convenient Rome itself. In addition, as historian Keith R. Bradley has noted, "piracy and kidnapping contributed to Delos's ability, according to [the Greek geographer] Strabo, to dispose of tens of thousands of slaves in a single day, its volume of traffic being specifically geared toward Roman demand" (Bradley 1989, 22). On a smaller scale, in the Americas slavery and the slave trades blossomed long before Columbus. Mayan citystates enslaved defeated opponents, keeping some of them ultimately as objects to sacrifice to the gods. In the Andean region the Mochica celebrated the actual moment of enslavement during war through exquisite pottery art.

While the Americas remained isolated from intercontinental contacts and thus from long-distance slave trading, Africa became a center of large-scale human trafficking with the domestication of the camel during the first millennium CE and the spread of Islam into the lands south of the Sahara Desert after 800 CE. The transSaharan caravan trade mainly exported gold for basic commodities such as salt, but it also spread faith in Allah as well as toting captive women and children for sale as domestics and concubines in Arab caliphates (the offices or dominions of successors of Muhammad as temporal and spiritual heads of Islam). This trans-Saharan slave trade was small in comparison to the later transatlantic one, but it unfortunately accustomed western Africans to the idea of exporting human beings centuries before the Portuguese came to their coasts.

Monotheistic religions intensified and justified slave trades, particularly in Africa and around the boundaries between Christian and Muslim states such as in Iberia (modern-day Spain and Portugal). Muslims, in particular, viewed slavery as a prelude to conversion, but actual conversion did not preclude enslavement. Enslavement was just too profitable and necessary for converts to be allowed to go free. Accordingly, crusades and jihads (holy wars) dehumanized the enemy, making them fit to be treated as disposable property.

When the Roman empire itself declined in western Europe after 200 CE, slavery and the slave trades also declined and disappeared there. Feudalism and serfdom emerged eventually to provide cheap and reliable sources of agricultural labor for governing elites. Serfdom

Justifying Slavery in the West Indies

The following message from Alonso Zuazo, judge of Hispaniola (the island which now comprises Haiti and the Dominican Republic), was sent to Cardinal Zimenes, regent of Spain on 22 January 1518.

Indeed, there is urgent need for Negro slaves, as I have written to inform His Highness, and in as much as Your Lordship will see that part of my letter to His Highness, I shall not repeat it here, except to say that it is urgent to have them brought. Ships sail from these islands for Seville to purchase essential goods such as cloth of various colours as well as other merchandise, which is used as ransom in Cape Verde whither the goods are carried with the permission of the King of Portugal. By virtue of the said ransom, let ships go there and bring away as many male and female Negroes as possible, newly imported and between the ages of fifteen to eighteen or twenty years. They will be made to adopt our customs in this island and they will be settled in villages and married to their women folk. The burden of work of the Indians will be eased and an unlimited amount of gold will be mined. This is the best land in the world for Negroes, women and old men, and it is very rarely that one of these people die.

Source: Williams, E. (1994). Documents of West Indian history (pp. 144–145). Brooklyn, NY: A&B Books. (Original work published 1963)

supported local subsistence farming, whereas slavery persisted in and around the Levant (countries bordering on the eastern Mediterranean) to support large-scale cultivation for export. What the historian Philip Curtin has called "the plantation complex" (Curtin 1990, ix) began with Arab sugar planters in Mesopotamia using African and local prisoners of war about 800 CE. This complex gradually spread westward to the Levant, then to Cyprus, then to Crete, then to Sicily, then to Atlantic islands such as the Canaries, then to Sao Thome, and then finally to Brazil. Slave trades followed this westward trek, supplying the foreign, coerced workers for lucrative sugar plantations that needed vast numbers of workers to cultivate many acres in order to be profitable. Yet, slave trades also developed from south to north and from west to east. As noted, sub-Saharan Africa supplied Islamic caliphates with concubines and domestics, whether in Cordoba, Jerusalem, Mogadishu, or eventually Delhi. Yet, these slaves were a mere fraction of the global number of slaves. When Europeans thought of slaves before the fall of Constantinople (modern Istanbul, Turkey) in 1453, they usually thought of the Slavic peoples caught in the wars between Muslims, Mongols, and Russians around the Black Sea. In fact, the word slave comes from this medieval association of forced labor with Slavs. More widely, before 1500, the Indian Ocean with its Arab and Muslim merchants had the largest volume of world trade and slave trade: after 1500 the Atlantic Ocean with its European merchants and African collaborators became more and more a center of world trade as well as of slave trade.

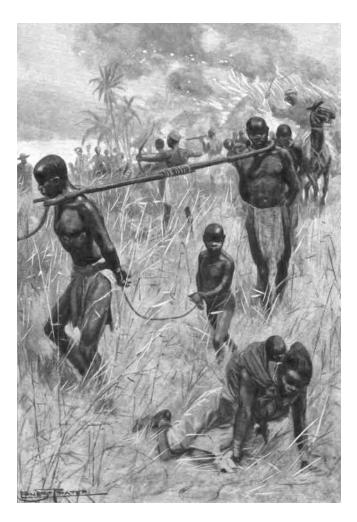
The New World

The making of the European "New World" was predicated upon the procurement of coerced labor. Even Columbus realized early on that he would have to generate riches and not just to steal them from Native American cultures. Schemes for a quick and gushing fortune required a lot of drudgery, which nearly all explorers and planters had come to the Americas to avoid. Parasitically, they at first tried to use the Native Americans as their slaves, but the Columbian Exchange of diseases decimated that source of labor. Accustomed to "European" diseases because of international trading contacts, enslaved Africans increasingly replaced sick and dying Native Americans, particularly in coastal, tropical, and disease-ridden areas prime for growing sugar and other lucrative crops. This switch to African labor in the Americas took a while, however.

From 1500 until 1650 slave trading was not the main activity along the western African coast that it would become later. The Portuguese, who initiated European contacts with western African kingdoms, were there mainly for the gold and, to a lesser extent, for pepper, ivory, and leopard skins. Elmina Castle in Ghana began as an entrepot (intermediary center of trade and transshipment) for precious metals and other exotic luxuries in the 1480s, but it eventually became a factory for holding slaves for exports. It was taken over by the Dutch in 1637. By 1700 the Swedes, Brandenburgers, Danes, Britons, French, and the Dutch had established similar factories along the western African coast that was formerly devoted to the gold trade. Elmina Castle itself became less significant as rivals such as Cape Coast Castle took away more and more of the business themselves.

The slave trade became the most contested type of mercantilist capitalism whereby governmental monopolies from Europe tried to trade exclusively with African states one on one without any entrepreneurial inference from either side. For example, *asientos* were contracts by which Spain outsourced the work necessary to keep its American colonies supplied with slaves, particularly young adult men who were thought to be the best suited for arduous field labor by Europeans. Starting in 1518 the Spanish Crown licensed favored companies, usually Portuguese, for a fee to bring in a quota of young adult men. Women (who performed most of the farm work in western Africa), children, and the elderly could be counted only as fractions toward fulfilling the fixed, contracted number. After other European countries besides Spain and Portugal realized that colonies could be viable only with African slavery, they set up their own slavetrading monopolies. The English Parliament commissioned its own Royal African Company for that purpose in 1672 after a venture in the 1660s had failed. Parliament limited participation to merchants from London. Although leading to unprecedented profits for Londonbased merchants, this policy of limited participation enraged merchants from other ports such as Bristol,

This illustration from a United States missionary book shows Africans being taken into slavery by Muslim Africans. It is notable for the absence of white people, who were involved in the slave trades. who, in turn, lobbied successfully to have the monopoly ended in 1698. The Royal African Company, however, continued to be a major player in the business until it was absorbed into another yet another licensed company in the 1740s. The actual profits from the slave trade were smaller than people thought at the time. A few merchants tripled their investment on the Middle Passage (the voyage of African slaves to the Americas), but that was the talked-about exception rather than the rule. On average the overhead, the constant turnover in personnel, and the unforeseen dangers due to on-board rebellions and bad weather reduced the yield to the standard 10 percent, which was in line with the yields of less exotic ventures. Thus, on their own, the profits from slavery and the slave trade were not enough to make Britain the first industrial







nation, but they were enough to add to the demand needed to make it the first full-blown consumer society. At any rate, during the eighteenth century, when this trade was at its height, Britain dominated the export and transfer of enslaved Africans to the Americas. After the Treaty of Utrecht in 1713, the British gained the *asientos* of the Spanish empire in addition to their own factories and markets. The guinea, a large-denomination British gold coin, was named for the lucrative nature of the slave trade along the Guinea coast.

Guns

Yet, even the British, with their maritime superiority, relied heavily on the eager and self-interested participation of African governments and elites out for their own profits. The disintegration of the Songhai empire in Sudan after 1591 stimulated the further political fragmentation of western Africa into more than three hundred microstates and even more stateless societies, which, in turn, set the stage for numerous territorial and religious wars fueled by the introduction of guns into the area by the Portuguese. Local rulers wanted more guns, particularly after 1650 when the accuracy and durability of guns improved dramatically. In order to get these guns, rulers traded gold initially and later mostly prisoners from neighboring clans and countries. Farther south, one ruler of the Kongo kingdom, Nzinga Mvemba, tried to use the Portuguese against internal opposition and neighboring rivals. He and members of his family even converted to Christianity to cement this alliance. Of course, this fighting within and outside Kongo produced prisoners, stimulating more Portuguese interest and involvement in the country than the ruler had originally wanted. He moved to confront the Portuguese, but it was too late. After the Portuguese had insinuated themselves into Kongolese trade, he could not preclude the long-term effects of civil war, resulting famines, and the slave trade upon his country. The Europeans also needed African help in part because of the disease environment, for which they were not prepared. Most sailors and agents along the western African coast never returned home to enjoy what little income they had gleaned from the slave trade. Because yellow fever and malaria were dangerous to their own European employees, both governments and freelancers preferred African and biracial (of mixed white and black ancestry) contractors who could work at interior trading posts without getting sick.

Overall, the transatlantic slave trade, with its infamous Middle Passage, ensnared roughly 11 million people between 1443 and 1870. Historians continue to debate the exact number of slaves, but the difference in numbers largely comes about because of the question of at what point in bondage historians should start counting. In 1969 Philip Curtin, using slave ship and archival records, published the first well-documented attempt to count how many people were enslaved by the transatlantic slave trade. More recently other scholars have pointed out that if historians use only slave ship records that show how many of the enslaved boarded for the Middle Passage, that leaves out the millions more who perished in forced marches to the coastal factories. Historian Joseph C. Miller has noted that, in reference to the Angolan slave trade, only 64 percent of the people initially detained would actually make it alive to the slave pens of Luanda for embarkation to the New World. However horrific and brutal itself, the Middle Passage was truly only a transition from frequent fatalities along the trails to the ships to even more mortality after slaves were in the Americas, particularly after they were in the death traps of sugar plantations and precious metal mines. Miller estimates that two-thirds of those people seized in Angola during the late eighteenth century would have died by the fourth year of being a slave on a Brazilian plantation.

Demographics

Slaves became increasingly male, younger, and hailed from more southern locations in Africa by the nineteenth century. As David Eltis and David Richardson have recently concluded, "the demographic characteristics of the coerced migrant flow from Africa changed from one of rough balance between males and females and the presence of some children in the seventeenth century, to one in which males and children predominated by the nineteenth century" (Eltis and Richardson 2003, 55). This relative lack of enslaved women for export spared western and central Africa from complete demographic and economic collapse, but it failed to mitigate the long-term underdevelopment decried by scholar and activist Walter Rodney. The triangular trade of guns for slaves to produce druglike staples for a world market addicted African kings and elites to European weapons and manufactured goods and thus inhibited the growth and enhancement of local industries outside of slave trading. When the slave ships stopped coming, local leaders scrambled to find appropriate substitutions.

Indeed, after European countries and the United States started to abolish the transatlantic slave trade after 1807 and then slavery itself after 1833, slave trades were again primarily associated with interior Africa, the Islamic world, and the Indian Ocean basin. Although Brazil and Cuba would continue to import slaves long after other plantation societies had ceased to do so, slave trades actually increased most in volume and frequency within Africa after 1800 as jihads proliferated and sellers looked for alternative markets. Most deceptively, a most virulent wave of European imperialism in Africa and Asia during the late nineteenth century was rationalized in part as an effort to stamp out slavery and slave trades. Accordingly, slave trades today are met with disapproval from the global community, with the genocidal wars in the Sudan and its ensuing human chattel being the most glaring instance.

Charles Howard Ford

See also Imperialism; Labor Systems, Coercive

Further Reading

- Bradley, K. R. (1989). Slavery and rebellion in the Roman world, 140 B.C.-70 B.C. Bloomington: University of Indiana Press.
- Burkholder, M. A., & Johnson, L. (2001). *Colonial Latin America* (4th ed.). New York: Oxford University Press.
- Curtin, P. D. (1990). The rise and fall of the plantation complex: Essays in Atlantic history. Cambridge, UK: Cambridge University Press.
- Eltis, D., & Richardson, D. (2003). West Africa and the transatlantic slave trade: New evidence of long-run trends. In G. Heuman & J. Walvin (Eds.), *The slavery reader* (pp. 42–57). London: Routledge.

- Harris, J. E. (1998). Africans and their history (2nd ed.). New York: Meridian.
- Klein, H. (1999). The Atlantic slave trade. Cambridge, UK: Cambridge University Press.
- Manning, P. (2003). Why Africans? The rise of the slave trade to 1700. In G. Heuman & J. Walvin (Eds.), *The slavery reader* (pp 30–41). London: Routledge.
- Miller, J. C. (1988). Way of death: Merchant capitalism and the Angolan slave trade, 1730–1830. Madison: University of Wisconsin Press.
- Mintz, S. W. (1985). Sweetness and power: The place of sugar in modern history. New York: Penguin Books.
- Northrup, D. (Ed.). (1994). *The Atlantic slave trade*. Lexington, MA: D. C. Heath Company.
- Thomas, H. (1997). The slave trade: The story of the Atlantic slave trade, 1440–1870. New York: Simon & Schuster.
- Thornton, J. (1992). Africa and Africans in the making of the Atlantic world, 1400–1680. Cambridge, UK: Cambridge University Press.



See Labor Systems, Coercive; Slave Trades



(1723–1790) Scottish economist

A dam Smith, a famous Enlightenment economist, is considered the father of modern economic theory and of the principles of capitalism.

Adam Smith was born in Kirkcaldy, Scotland, in 1723 as the posthumous son of a customs comptroller. The only child of a widowed mother, he remained very close to her to the end of her life. Smith never married, but kept a steady company of friends, including the philosopher David Hume and the historian Edward Gibbon.

After spending his early years at home, he matriculated at Glasgow College in 1737 at the age of fourteen. After three fruitful years at Glasgow he went on to Oxford University, which was a disappointment. Like contemporary Scottish intellectuals, Smith found Oxford University to be anti-Scot, stagnant and uninspiring, and generally unfit to promote intellectual activity. However, he stayed

Extract from Adam Smith's Theory of Moral Sentiments, 1759, II.II.11

Every man is, no doubt, by nature, first and principally recommended to his own care; and as he is fitter to take care of himself than of any other person, it is fit and right that it should be so. . . . Though his own happiness may be of more importance to him than that of all the world besides, to every other person it is of no more consequence than that of any other man. Though it may be true, therefore, that every individual, in his own breast, naturally prefers himself to all mankind, yet he dares not look mankind in the face, and avow that he acts according to this principle.

at Oxford for six years, and was less critical of it than his contemporaries. His studies through the years covered mathematics, Greek, Latin, moral philosophy, and other topics. In 1746 he returned to Kirkcaldy and his mother, with whom he stayed, unemployed, for two years.

In 1748 Smith successfully started as a lecturer at Edinburgh University. In 1751 he obtained the Chair of Logic, and one year later the Chair of Moral Philosophy, a position he held for twelve years, during which he wrote his first significant work, Theory of Moral Sentiments, published in 1759 to popular acclaim. The Theory was based on his university lectures and focused on morals for the common man, based on the concept of "fellow-feeling." Crudely explained, fellow-feeling is our imagining the feelings of another person reacting to a situation, thus feeling a milder version of his feelings. That feeling gives rise to sympathy, and through that, to righteousness or its opposite. As an example Smith mentions our sympathy for a man whose son has been killed; we sympathize with, or fellow-feel the pain of his loss as we imagine our feelings if it was our son, and we naturally approve of his wish for justice and revenge. Right action in this case is seeking justice, which for Adam Smith includes revenge, in a manner approved by the general audience. It causes the feelings of righteousness in others because the sense of fellow-feeling makes them feel that there is a right response, in this case justice and revenge. If the man's son instead died from an incurable illness, the general audience would sympathize with his loss as before, but it would give rise to general feelings of disapproval if the man wanted to see the doctor hanged, as the doctor had done nothing wrong. The feelings of righteousness thus depend on what appears to the general audience to be an appropriate response to a given situation. Right action is thus the action that naturally gives rise to general feelings of righteousness, while wrong actions are those that give rise to general disapproval.

In 1764 Smith gave up his position to become tutor to the young Duke of Buccleuch on his two years' tour of Europe, mainly France and Geneva. It gave Smith the opportunity to meet with famous French philosophes such as Tourgot, Rousseau, and Voltaire, and to participate in the famous salons led by the leading ladies of Paris, one of whom reputedly fell in love with him.

The beginning of the tour was less auspicious. During nine months in Touraine Smith found little intellectual stimulation and started to write a new book to fight boredom. It took ten years before it was published, but it became his lasting legacy, An Inquiry into the Nature and Causes of the Wealth of Nations, commonly known as Wealth of Nations. It is debated whether Smith's Wealth of Nations was a truly original work, or simply a structured compilation of economic thoughts making their way round the Parisian salons. Certainly, France acquainted Smith with both defenders and attackers of the economic theories of physiocracy (economic theory, originally promoted by Quesay, court physician to Madame Pompadour, promoting the theory that land and agriculture is the only basis of real wealth) and mercantilism, and probably his own later attacks were at least inspired by the criticisms already prevalent.

In 1766, Smith returned to Britain, visiting London for six months, then on to Scotland. There he continued his work on the *Wealth of Nations,* wrote other minor works, and oversaw new editions of his *Theory*. During those years, Smith held no formal positions, although attempts were made to get him a new tutorship or a position with the East India Company. It is not from the benevolence of the butcher, the brewer, or the baker, that we expect our dinner, but from their regard to their own interest. We address ourselves, not to their humanity but to their self-love, and never talk to them of our own necessities but of their advantages. • ADAM SMITH (1723-1790)

The publication, in 1776, of *Wealth of Nations*, universally admired for its theories and the quality of its writing, brought Smith to the academic forefront. It is debatable whether Smith changed his concept of human nature from his *Theory* to the *Wealth of Nations*. In the latter he clearly states that self-interest is rightly the basic motivation of human action—especially economic action—while the former is more unclear as to whether self-interest alone is a basis for moral action. The discussion is of particular interest to those who argue that the ideas in the *Wealth of Nations* came from the French philosophes. Whether Smith is considered original or not, it must be conceded that his work gave the clearest organized presentation of those ideas and brought them from the specialized discussion forums to the general reader.

Smith focused on topics such as the division of labor, self-interest as the main principle of economics, national wealth as represented by production capacity rather than by stocks of gold (introducing in a rough form the concept of gross national product), free markets, a theory of real price, a theory of rent, and not least, the principles of the market forces. In short, he described the theoretical basis of the economic system known today as capitalism. Notably, his theory of the division of labor did not consider the new industrial revolution, but was entirely based on human labor. His most famous example is that of the pin makers. He explains how one man completing all the processes of making a pin by himself can produce a maximum of ten pins a day, while ten men cooperating and specializing in each part of the process can produce 48,000 pins a day. The advantage of specialization is made clear, but it is characteristic of Smith that he was aware of disadvantages as well, and pointed out that the workers in time became bored and lost the feeling of connection to their work, a problem that Karl Marx dealt with nearly a century later. While his theories on specialization, self-interest, national wealth, and market forces have generally been accepted, those on real price as determined by the labor it takes to produce or procure an item and rent based on use and reasonable profit are commonly considered confused, a fact that he admitted himself. In total, however, the Wealth of Nations must be considered the first detailed work of modern economic theory, and its comprehensiveness has ensured its continued importance in the field of economics.

In 1778 Smith was made commissioner of customs for Scotland, which allowed him a comfortable salary for life, added to a pension from his old student, the Duke of Buccleuch, giving Smith economic liberty. His remaining years were mainly spent making revisions to his earlier works, especially the *Wealth of Nations*, and participating in discussions with his contemporaries. In 1784, his mother, with whom he lived most of his life, died, leaving him desolate and in rapidly declining health. In 1790 he published his last work, a new edition of his *Theory*, which was shortly followed by his death and the burning of virtually all his unpublished papers in accordance with his own wish.

Martha A. Ebbesen

Further Reading

- Fitzgibbons, A. (1995). Adam Smith's system of liberty, wealth, and virtue. Oxford, UK: Clarendon Press.
- Muller, J. Z. (1995). Adam Smith, in his time and ours: Designing the decent society. Princeton, NJ: Princeton University Press.
- Rae, J. (1895). Life of Adam Smith. London: Macmillan.
- Ross, I. S. (1995). The life of Adam Smith. Oxford, UK: Clarendon Press. Ross, I. S., & Mossner, E. C. (Eds.). (1977). The correspondence of Adam Smith. Oxford, UK: Clarendon Press.
- Smith, A. (1790). The theory of moral sentiments (6th ed.). London: A. Millar. (Original work published 1759)
- Smith, A. (1904). An inquiry into the nature and causes of the wealth of nations (5th ed.). London: Methuen. (Original work published 1776)
- Vaggi, G., & Groenewegen, P. (2003). A concise history of economic thought. New York: Palgrave Macmillan.
- Werhane, P. H. (1991). Adam Smith and his legacy for modern capitalism. New York: Oxford University Press.

Social Darwinism

Proponents of social Darwinism sought to link evolutionary processes with perceived levels of societal development attained by different people (usually grouped by races) throughout history or evaluations of what they were capable of attaining in the future. In the late nineteenth and early twentieth centuries, the highly variable and often very amorphous ideas associated with social Darwinism were pondered and debated by academics, politicians, and polemicists in societies across the globe. Very generally, social Darwinism claimed that people, groups of people, and whole societies were subject to natural selection, just as plants and animals in the natural world are. Social Darwinist standards were widely used to compare national-and very often what were then deemed racial-virtues and shortcomings, to explain the dominance of some peoples and the subjugation of others, and to exhort the citizenry of countries from Great Britain to Japan to hold on or aspire to world power. They propelled social pundits, such as the British philosopher Herbert Spencer (1820-1903) and the British civil servant Benjamin Kidd (1858–1916), whose writings later generations would find pompous, poorly documented, and contentious in the extreme, to the status of international celebrities. Social Darwinist assumptions informed the research and theorizing of scholars in fields as disparate as geology, biology, sociology, psychology, history, and political economy. And they profoundly shaped the worldviews and policies advocated by key global leaders, including Teddy Roosevelt (1858–1919), who championed U.S. expansionism as proof of the nation's virility, the genro (elder statesmen) who oversaw the Meiji Restoration (1868) in Japan, Sun Yat-sen (1866–1925), the leader of the Nationalist revolution in China, and European imperialist proconsuls, such as Lord Curzon (1858-1925) of Great Britain and perhaps the most influential French colonial administrator of the era, Herbert Lyautey (1854 - 1934).

Darwin's Evolutionary Theories and Social Darwinism

To speak of the global impact of the ideas associated with social Darwinism is rather incongruous because the term itself is something of a misnomer. The Darwin to whom it refers, Charles Robert Darwin (1809–1882), was a nineteenth-century British scientist who won fame (and in some circles vehement censure) worldwide for being

the first thinker to develop fully the theory of evolution by natural selection, but in fact the idea of the evolutionary development of the earth's living creatures and the planet itself had been proposed by a number of thinkers in the century before Darwin, and a contemporary naturalist, Alfred Wallace (1823–1913), first argued in the late 1850s that the mechanism that drove the evolutionary process was the survival of those species that were able to adapt best over long time spans to the changing environments in which they found themselves. So the ideas were not unique—or even original with— Darwin.

Beginning in the 1970s, the careful study of Darwin's personal correspondence has shown that at least to some degree he shared the social Darwinists' conviction that evolutionary development had created variations among different peoples or ethnic groups that had become innate or (in the parlance of the time) racially inscribed. But in fundamental opposition to the supposition that competition between types (or races) within (particularly the human) species provided the impetus for the evolutionary process, which was accepted by virtually all of those who subscribed to social Darwinist thinking, Darwin himself had stressed the competition between species for suitable niches within a given ecological setting. In fact, the vivid conceptualization of evolution as a process centered on myriad "struggles for survival," was not Darwin's but borrowed from Herbert Spencer, who had done none of the arduous scientific research needed to back up this or his other grand theories. Also at odds with those who espoused so-called social Darwinist views was the fact that Darwin's evolutionary process was not necessarily directional in the sense of the steady improvement of species over time. Thus, though species survived because they would adapt to existing environmental conditions, there was no guarantee that they would continue to adjust to changing conditions over time or that their adaptations would insure the persisting betterment of the species itself or even its continuing existence. This view contrasted sharply with the views of later theorists, for whom progressive development was essential to the

Selection from Sir Francis Galton's Hereditary Genius

An early classic in the study of psychology, Francis Galton's Hereditary Genius (1869) is considered the first quantitative analysis of mental ability. In the extract below, Galton discusses the "classification of men according to their natural gifts."

I have no patience with the hypothesis occasionally expressed, and often implied, especially in tales written to teach children to be good, that babies are born pretty much alike, arid that the sole agencies in creating differences between boy and boy, and man and man, are steady application and moral effort. It is in the most unqualified manner that I object to pretensions of natural equality. The experiences of the nursery, the school, the University, and of professional careers, are a chain of proofs to the contrary. I acknowledge freely the great power of education and social influences in developing the active powers of the mind, just as I acknowledge the effect of use in developing the muscles of a blacksmith's arm, and no further. Let the blacksmith labour as he will, he will find there are certain feats beyond his power that are well within the strength of a man of herculean make, even although the latter may have led a sedentary life. Some years ago, the Highlanders held a grand gathering in Holland Park, where they challenged all England to compete with them in their games of strength. The challenge was accepted, and the well-trained men of the hills were beaten in the foot-race by a youth who was stated to be a pure Cockney, the clerk of a London banker.

Source: Galton, F. (1869). Hereditary genius: an inquiry into its laws and consequences (p. 14). London: Macmillan.

domination and ultimately the survival of successful species or certain types within the human family. As these differences suggest, it is far more accurate to use the term *social evolutionist* than the term *social Darwinist* for those who have stressed the struggle for survival among humanity's different ethnic groups as a key driving force in global history.

Social Darwinism, Race, and Eugenics

Although Darwin's writings on evolution proved a challenge to a wide range of established nineteenth-century beliefs, whether the biblical account of creation or ways of conceptualizing time and space across a diverse span of cultures, in terms of their adaptation by advocates of social Darwinism, their impact on thinking about race was perhaps the most critical. Social Darwinist theorists believed that superior capacity for environmental adaptation and for survival in the violent competition between different human groups, usually classified according to one of a number of racial hierarchies, were the main determinants of the degree of evolutionary advance those groups had achieved and would be able to sustain. Though many adherents of social Darwinism believed that it was possible for racial or national groups as a whole to improve through evolutionary development, they usually viewed this as a process that would take millennia, if not eons.

Perhaps a majority of those who have held that evolutionary changes have produced innate (or racial) differences among major human groupings have also been monogenesists; that is, they believed that all human groups are descended from the same act of creation. But polygenesists, who argued for different creations for each racial group they sought to distinguish, remained a force to reckon with in some intellectual circles until late in the nineteenth century.

By the end of the nineteenth century, the social Darwinist stress on the struggle for survival and racialized hygiene became stock concerns for those who embraced eugenicist agendas for the mental and physical improvement of ethnic, national, or "racial" groups, as well as the segregation, or elimination, of inferior peoples. Working from the premise that only the fittest physical types could—or deserved to—endure, eugenics activists campaigned against social welfare programs they argued perpetuated the undesirable genetic endowments of the When women are the advisers, the lords of creation don't take the advice till they have persuaded themselves that it is just what they intended to do; then they act upon it, and if it succeeds, they give the weaker vessel half the credit of it; if it fails, they generously give her the whole. • LOUISA MAY ALCOTT (1832–1888)

poor, the mentally retarded, or infirm. Those who shared these extreme positions felt little remorse about what appeared at the end of the nineteenth century to be the imminent extinction of groups like the American Indians, Australian aboriginal peoples, or the Polynesians. The inferior intelligence, physical strength, and even moral capacity—as the eugenicists judged it—of these peoples were offered as justifications for claims that the disappearance of the original Australians or Americans was inevitable, and indeed a good thing. In the first half of the twentieth century, the rise of regimes driven by racial ideologies was informed in varying ways by this combination of social Darwinian and eugenicist claims. The insistence of right-wing Japanese ideologues, for example, on the homogeneity of the Japanese "race" was linked to assertions of the fitness of the Japanese people for imperial expansion and the domination of inferior, more racially heterogeneous peoples. In roughly the same decades, the Nazi's invocation of similar linkages was even more extreme. Drawing on the phobic anti-Semitism of Adolf Hitler (1889–1945), Nazi propagandists, party leaders, and physicians called for the prohibition of miscegenation and ultimately the incarceration, sterilization, removal or utter extermination of peoples considered a danger to the Aryan Volk (people), including Jews, gypsies, and the mentally impaired.

License for Aggression Worldwide

Social Darwinist beliefs were used to justify military aggression, imperial conquests, and costly arms races between the great powers from the late nineteenth century into the second half of the twentieth. These beliefs were critical components of the ideologies and popular convictions that fueled the mid-twentieth century race wars, such as those between the Germanic peoples of the Nazi empire and the Slavic peoples of eastern Europe and Russia and between the Japan and the United States in the 1940s, which proved to be the most costly in terms of lives lost, material destruction, and environmental devastation in all of world history up to that time. In part due to the catastrophes wrought in its name, social Darwinism was discarded by most intellectuals in the post– World War II era. But in often bowdlerized form social Darwinist thinking persists in the popular imagination of societies worldwide, informing best-sellers on how to succeed in the "dog-eat-dog" culture of modern business, formulas for success in the ongoing international competition for overseas markets and technological breakthroughs, or accolades for jingoistic politicians' calls for military aggression against perceived enemies. And it even continues to make its influence felt in the scholarly world, in the form of highly contentious arguments on the differential achievements, and levels of intelligence claimed to be displayed what continue to be seen as distinct human groups in various phases of or throughout human history.

Michael Adas

See also Race and Racism

Further Reading

- Clark, L. (1984). Social Darwinism in France. Birmingham, AL: University of Alabama Press.
- Greene, J. C. (1981). Science, ideology, and world view: Essays in the history of evolutionary ideas. Berkeley and Los Angeles, CA: University of California Press.
- Hawkins, M. (1997). Social Darwinism in European and American thought, 1860–1945. New York: Cambridge University Press.
- Hofstadter, R. (1944). Social Darwinism in American thought. Boston: Beacon Press.
- Pusey, J. R. (1998). Lu Xun and evolution. Albany, NY: State University of New York Press.
- Stocking, G. W. (1987). Victorian anthropology. New York: Free Press.

Social History

The term *social history* can have several related definitions. The basic definition involves the exploration of the history and the historical role of groups who are outside the mainstream of power: working classes and peasants, slaves, women, the young—the list can be considerable, but the purpose is consistent. Social historians argue that these groups have a serious history, stretching

from early in the historical record, and that this history powerfully shapes the activities of states, intellectuals, military leaders—the greats who more commonly populate the historical narrative. Social historians are also interested in exploring the histories of a wide range of human activities, contending that these, too, have a serious past that helps explain how human beings function at various points in earlier times and indeed in the present. These activities and experiences can include leisure, work, emotions, the senses, crime, family relationships—the list is essentially as long as our capacity to define aspects of the human condition that change over time.

Some social historians have argued that their approach involves a basic orientation to the whole of human history; others are content with a substantial reshuffling of their discipline's standard topics list.

Good histories have always included some social history ---some attention to ordinary people and some awareness that human life consists of activities that affect each other. within which politics, for example, has a place but not a monopoly on attention. Formal social history, however, began to be defined in France during the 1930s and was picked up in the English-speaking world during the late 1950s-1960s with a host of important works. Since its inception as a clear subfield of history more generally, social history has evolved. Initial efforts concentrated strongly on topics such as social protest, class structure, and mobility, with great interest in quantitative research and links with sociology. By the 1980s interests were shifting toward more qualitative efforts-sometimes called the "cultural turn"-and alliances with anthropology. Currently, as the cultural turn recedes a bit, scholars are discussing new directions and revivals of older emphases.

Social history and world history have a productive but sometimes uncomfortable, and still incomplete, relationship. Social history was focused and active at least a decade before the rise of serious modern interest in world history, and the separate beginnings inevitably raise issues of coordination. Furthermore, world history was often defined particularly in terms of the doings of great people—kings, general, and philosophers. Some partisans even argued that, because the lives of ordinary people are rather similar across societal lines, with shared poverty and oppression, they do not warrant much world historical focus, at least until modern developments brought the masses more prominently into the picture. This is an outdated argument, which no world historian would now embrace, but it did color the relationship between social history and world history for some time. For its part social history was often conceived of in terms of great place specificity. Several of the pathbreaking U.S. entries into the definition of what was long called the "new" social history centered only on New England. French studies often focused on individual regions because of their particular geography and traditions. Other social historians used nations as units because of the social impact of political systems and national cultures. Source materials also dictated this rather narrow geographical impulse. Because they explore unfamiliar aspects of history, often involving groups who left little explicit documentation, social historians have frequently been tied to regional or national data sets, which are not always easy to access even on this level. Finally, social historians during the 1980s began to pay increasing attention to cultural factors, beliefs, and forms of expression and discourse-with the "cultural turn." As with cultural anthropology, to which the cultural approach was closely related, this attention usually encouraged social historians to take reasonably small areas as their essential purview. Thinking on a global scale was difficult.

Subjected Peoples

Yet, social history has obvious bearing on world history and vice versa. Both disciplines typically deal extensively with peoples subjected to the control of others. In fact, scholars usually conceive of African history in socialhistorical terms, as it has surged during the past three decades—with attention to activities of peasants and workers and to popular resistance to and collaboration with outside authorities—as an alternative to older approaches that privileged colonial governments and discounted African history outside their purview. The insights from women's history, as a branch of social history, concerning not only women themselves but also



larger social frameworks, have been irresistible to world historians, and projects designed to incorporate women's history into world history have been endemic (belonging to a particular people or country), if not yet fully conclusive, for two decades. Finally, social history itself has reached a new point of self-definition early in the twentyfirst century, and appeals to reconsider geography are growing, suggesting more intensive linkage in the future.

Social history and world history remain somewhat separate. Many topics of social history, particularly the exploration of behaviors well outside the realm of politics and formal intellectual life, have yet to find a world historical application. Often, in fact, scholars have explored these revealing topics mainly in a Western context, and the topics lack as yet sufficient breadth even for significant comparative statements.

Social history is much concerned with the daily life of average people. This photo is of a sample of lamps unearthed in archaeological digs in Jerusalem in the nineteenth century.

Yet, the connections are impressive as well, and they will surely expand as scholars in both disciplines interact more closely.

First, even in social history's early years, a number of larger statements suggested important linkage with world history. One of the deans of French social history, Fernand Braudel, wrote persuasively of some common social structures around the Mediterranean, providing a shared framework for daily lives and ordinary people despite apparent national and religious barriers. Research of this sort, aimed at defining regions not according to religion or political systems, but rather in terms of agricultural patterns, village types, and popular cultures, could serve as a vital component of world history if the approach expanded to additional regions. Some historians and anthropologists dealing with family structures launched a somewhat similar effort to define basic family types-around household size, kinships systems, and the like—on a global basis, again often combining regions held distinct in most accounts of specific civilizations or separating regions within a presumed single civilization.

Second, without assuming that common people are everywhere alike, scholars realized by the 1980s that social historical findings in one society might have applicability in others. A seminal work in Western social history, E. P. Thompson's Making of the English Working Class, explored the value systems involved in labor protest as the Industrial Revolution took shape. A key element was what Thompson called the "moral economy," a set of expectations about work loads, treatment by employers, skill levels and training, and other job-related issues, that artisans had developed before the advent of modern, machine-based factory industry. New conditions, including novel pressures on work time and pace, violated the moral economy, which in turn both motivated recurrent protest and shaped protest goals. This moral economy turned out to be highly relevant to protests by other traditional workers, peasants as well as craftspeople, against the advent of more capitalistic economic arrangements, including those imported under the framework of an increasingly global economy during the

It should be known that history is a discipline that has a great number of approaches. • IBN KHALDUN (1332-1406)

nineteenth century. James Scott was instrumental in showing the relevance of the moral economy in protest movements in south and southeastern Asia; following his lead other scholars applied it also to the history of Latin America. Here, then, was another huge potential in linking social history and world history: the applicability of significant reactions first studied in one area to other areas despite substantial differences in prior economic and cultural structures. In this case also, as with the early efforts at a social history-based regionalization, great opportunities exist for further work based on common human responses to roughly comparable challenges.

As world history has gained ground, two other applications provide the most common linkages with social history. The first application is comparative. Comparisons of social structures or social experiences constitute an obvious way to utilize one of the standard world history approaches, with its emphasis on individual societies or civilizations analytically enhanced by discussing differences and similarities while also acknowledging the standard social history preference for geographically specific research.

Relying on work by area specialists, many world historians thus compare basic social systems in the classical period (c. 1000 BCE-500 CE) and after, noting the similarities, but more obviously the differences, among India's caste system, the slave-based system common in the Mediterranean, and the social system in China as it was (partially) shaped by Confucian values. Scholars have devoted more intensive analysis to slave systems themselves, probably the best-developed comparative category in social and world history. Comparison between ancient Mediterranean and later Middle Eastern slavery and its more recent U.S. counterpart highlights the greater range of occupations, and often the higher political status, of the earlier systems, although connections existed between Roman and U.S. slave laws. Comparisons within the Americas have emphasized the greater physical brutality and higher mortality rates of the Latin American and Caribbean systems, compared to that of North America, despite the greater racism that surrounded the institution in the United States. Recent comparative research has also extended to nineteenth-century processes of emancipation. Fruitful comparison has, finally, applied to Russian serfdom and South African slavery and race relations, along with U.S. examples.

Other Topics

Other major social history topics are just beginning to find comparative voice. Gender comparisons remain tentative, although scholars have made interesting analyses of Christian and Islamic impacts on women in the postclassical period (500 CE-1450 CE). Scholars have devoted considerable attention also to the less-unequal gender systems of a few nomadic peoples such as the Mongols, compared to those in civilizations. Comparisons of feminisms have mainly stayed within a North American-European orbit (including Russia). However, research on women in Asia and Africa inevitably invokes the more familiar Western historical experience, at least for comparative suggestions. The same applies to histories of the urban working class and to labor movements and also to the growing field of the history of disabilities. Researchers also make rich global comparisons of city types and of migration patterns. With all this, comparative opportunities remain considerable, particularly for those aspects of social history that involve the wider range of human experience, such as the emotions or the senses. Even the conditions of the elderly have drawn more comparative treatment from anthropologists than from historians, who continue to treat the history of old age mainly within a Western context.

The second widespread application of social history to world history involves efforts to develop chronological models of social change that will apply to many societies in a given time period or across several periods. Some of these models explore the results of intersocietal contacts or the impacts of global forces such as trade—the two other main approaches to world history besides comparison.

Before the early modern period, that is, before the sixteenth century, patterns are not easy to discern. Because of the considerable separation among major societies, regional developments often seem distinctive beyond



general similarities such as patriarchal family structures. Contacts can be explored, for example, the Chinese adaptations of Buddhism in light of Confucian beliefs about women and family hierarchy. Chinese influence on Japan during the postclassical period worsened women's status, but not to Chinese levels, while ironically providing some elite Japanese women opportunities to innovate in Japanese cultural forms (left to them because Chinese forms were more prestigious) or Buddhism. Islam's limited influence on gender relations in sub-Saharan Africa was often noted by travelers such as the Arab traveler and author Ibn Battutah.

Some scholars, seeking more general patterns, have hypothesized a trend for the status of women to deteriorate in agricultural civilizations through time. The argument is as follows: More effective political power, as governments become more sophisticated, reduces women's informal voice. Growing prosperity provides an economic margin for elite men to treat upper-class women more ornamentally. A more cultivated aristocracy, turning from war, contributes to such ornamentalism as well (women often gain functions when men are away at war). Patterns of deterioration can be traced in Tang China (618–907 CE), postclassical India, and the later Islamic Middle East. However, many exceptions exist, with periods of greater women's assertion in business or intellectual life, so the model remains tentative at best.

Generalizations become firmer when global forces can be more clearly identified. Significant social history was built into the world economy theory, applied from the early modern period onward. According to the theory's formulators, a society's position in the world economy (assuming significant involvement) determined a characteristic labor system—from the coercive labor of peripheral societies (Latin America, Poland) to sharecropping in semiperipheral societies to low-paid wage labor in core economies. The theory has often been criticized, but it continues to deserve attention for its capacity to correlate social and economic change through time on a global basis. Correlations muddy by the later nineteenth century, with the abolition of serfdom and slavery, but a strong relationship between position in the capitalist global economy and working conditions continues to hold. Current discussions about the impact of globalization on economic inequality derive directly from earlier world economy patterns and issues.

Other Models

World economy theory is not the only applicable model for global, or at least extensive, social change. The Columbian Exchange (the mutual biological exchange of foods, animals, diseases and people between the Americas and Afro-Eurasia) demonstrates the important effect of early modern biological interactions (foods, animals, diseases, slaves) on population levels in the Americas, Africa, Asia, and Europe. Recent research has devoted greater attention to the impact of colonialism on gender relations, through a combination of economic shifts, including women's loss of manufacturing jobs and cultural and legal influences.

Additional patterns of global social change during the nineteenth and twentieth centuries-beyond the acceleration of the world economy and, for a considerable time, imperialism-are somewhat less well defined. Attention to the dynamic of modern revolutions has always maintained a social component, involving attacks on the ruling class and discussions of the mix of social groups carrying these attacks forward along with a revolutionary political agenda. Some scholars during the 1980s disputed the social-historical basis of the French Revolution of 1789, through greater emphasis on ideology, but it is being restored in modified form, with implications for the wider set of Atlantic revolutions through the mid-nineteenth century as well. Revolutions during the twentieth century called attention to conditions and roles of peasants, along with other revolutionary elements, from Mexico and Russia early in the century through Cuba and other Latin American risings from the 1950s to the 1970s. The impacts of revolutions, similarly, can be measured through degrees of social change, for example, in the extent to which the previously dominant landholding class was displaced. The social bases and results of movements of national liberation are harder to



define but also receive attention. Here, and to an extent with revolutions as well, involvement of women, which was often followed by subsequent constraints, adds to the social dimension of one of the twentieth century's major developments.

More broadly still, some social historians have grappled with larger processes of twentieth-century social change, associated with the decline of the traditional aristocracy (a virtually universal phenomenon wherever this class had a foothold) and the rise of a professional/managerial middle class. Comparing the precise patterns of professionalization within a larger set of trends combines the two main facets of social history on a global scale. Interpretations have applied particularly to industrial societies, headed by Japan and those in the West, but they can increasingly apply to other societies with a burgeoning middle class, such as China, India, and many parts of Latin America.

Consumerism is another phenomenon increasingly receiving attention in terms of global social change. Changes in popular culture and a blurring of traditional social boundaries-class, gender, age hierarchies -were wrapped up in modern consumerism as it fanned out from the West during the nineteenth and twentieth centuries. Systematic analysis remains sparse for a subject that long seemed too frivolous for serious historical attention. However, fascinating case studies are spreading. An examination of comic books in Mexico shows how a U.S. artifact was both taken up and modified by a neighboring culture from the 1930s onward. Current research on Islam shows the growing adoption of practices such as gift and card exchange during Ramadan, a fascinating innovation in a religious holiday traditionally devoted to abstinence. As with other global patterns, including, by the 1990s, "global history" itself, opportunities for significant generalization mix with challenges for comparative analysis.

During the past decade world historians have been attempting wider incorporation of social history topics and materials, constrained in part because of unevenness of research results concerning different societies. More recently, social historians have committed to an active discussion of a wider geographical compass for their own work. Much remains to be done to bring the two disciplines into fruitful union, but the prospects are increasingly promising.

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See also Adolescence; Childhood; Marriage and Family; Oral History

Further Reading

- Blackburn, R. (1997). The making of New World slavery: From the Baroque to the modern, 1492–1800. New York: Verso.
- Braudel, F., & Reynolds, S. (Trans.). (1976). Mediterranean and the Mediterranean world in the age of Philip II. Berkeley and Los Angeles: University of California Press.
- Fredreickson, G. M. (1982). White supremacy: A comparative study in American and South African history. New York: Oxford University Press.
- Goody, J. (1969). Comparative studies in kinship. Stanford, CA: Stanford University Press.
- Kolchin, P. (1987). *Unfree labor: American slavery and Russian serfdom*. Cambridge, MA: Belknap Press of Harvard University Press.
- Patterson, O. (1982). Slavery and social death: A comparative study. Cambridge, MA: Harvard University Press.
- Perkin, H. J. (1996). The third revolution: Professional elites in the modern world. London: Routledge.
- Scott, J. C. (1976). The moral economy of the peasant: Rebellion and subsistence in Southeast Asia. New Haven, CT: Yale University Press.
- Skocpol, T. (1979). States and social revolutions: A comparative analysis of France, Russia, and China. Cambridge, UK: Cambridge University Press.
- Stearns, P. N. (2000). Gender in world history. London: Routledge.
- Stearns, P. N. (2001). Consumerism in world history: The global transformation of desire. London: Routledge.
- Wallerstein, I. (1974). *The modern world-system: Capitalist agriculture and the origins of the European world-economy in the sixteenth century.* New York: Academic Press.

Social Inequality

See Apartheid in South Africa; Colonialism; Displaced Populations, Typology of; Freedom; Genocide; Holocaust; Human Rights; Indigenous Peoples Movements; Matriarchy and Patriarchy; Race and Racism; Social Darwinism

Social Reform

See Consumerism; Gay and Lesbian Rights Movement; Green or Environmental Movements; Indigenous Peoples Movement; Women's Emancipation Movements; Women's Reproductive Rights Movements; Women's Suffrage Movements

Social Sciences

C cholarship and instruction at contemporary universi-Uties are organized into disciplines that are often grouped together into a comprehensive set of discipline types. In the United States, the division is often into natural sciences, social sciences, and humanities. The social sciences typically include anthropology, economics, political science, and sociology but the boundaries are not fixed. Psychology inhabits a borderland between social and natural science, and history is sometimes grouped with the social sciences and sometimes with the humanities. For example, an article on some aspect of indentured service in eighteenth century America could appear in an economics journal, a political science journal, a sociology journal, or a history journal. At the same time, each social science discipline includes many subdisciplines, each of which has its own journals, scholarly meetings, and often their own paradigms.

Of all the social sciences, only history appears to go back to ancient times. However, this is somewhat deceptive, because the social sciences existed in some form long before their modern names took hold, and history also went through a transformation in the nineteenth century. For example, Aristotle, Mencius, Li Ssu, Machiavelli were political scientists long before the term *social science* was coined, while the modern historical method dates only to the nineteenth century.

The Natural Sciences

The social sciences emerged as modern disciplines after the natural sciences and in imitation of them. In English, though not in other languages, the word *science* used alone generally refers to natural science, which tends to put the social sciences in the position of having to defend their right to be called sciences. Social science can best be understood in its dual aspect as an imitation of natural science and in contrast to natural science.

Humans have acquired knowledge about nature and about each other since before they were fully human. More systematic knowledge was developed by literate civilizations around the world in the last millennia BCE. In spite of the considerable achievements of the Arabs, Babylonians, Chinese, Egyptians, Greeks, and others, the natural sciences in their modern form did not emerge until the scientific revolution of the seventeenth century.

Two remarkable characteristics of modern natural science are its high degree of consensus about method and the rapid advance in the creation of knowledge. Scientists are largely in agreement about what is known in their field, what the problems are, how to go about solving those problems, and what constitutes a solution. This consensus is now often called a *paradigm*, a term coined by the historian and philosopher of science Thomas Kuhn in *The Structure of Scientific Revolutions*.

The social sciences do not generally operate within such agreed-upon paradigms. If a new disease appears in the world, scientists can usually figure out the cause, how it is spread, and some of the measures to take to prevent the further spread. By contrast, when war breaks out, the level of consensus among social scientists is far lower and the number of approaches to explaining the war are much greater.

From Natural Science to Social Science

Newton's success in formulating a universal law of gravitation made a great impression on thinkers in the eighteenth century, spawning numerous attempts to create an analogous science of human society. The philosopher David Hume (1711–1776) aspired to become the Newton of what he called the "moral sciences," while the early nineteenth century utopian socialist Charles Fourier (1772–1837) believed he was the Newton of psychology. The most successful of these Newtons was Adam Smith (1723–1790), the founder of modern economics. In 1776, he published *The Wealth of Nations*, which set out to explain the circulation of goods in human societies. For Smith, the force that moved goods was self-interest, just as gravity was the force that moved heavenly bodies.

The ever-increasing success of the natural sciences in the nineteenth century intensified the call for a science of society. Auguste Comte (1798-1857) was the most famous propagandist for a new social science. Comte argued that human thought went through several stages, culminating in a scientific stage. Different areas reached the scientific stage at different times. Now, Comte argued, it was the turn of *sociology*, a term he coined for the new science of society. Comte is often believed to have advocated that sociology imitate physics, but Comte did not believe that there was just one method for all the sciences. Instead, he believed that each field had to develop its own method. Physics was mathematical, but biology, Comte believed, had its own nonmathematical method, and he argued that sociology would have to develop yet another method.

Another important difference between the natural and the social sciences is that unlike physicists and biologists, social scientists may inadvertently change the humans they study. When an entomologist studies wars among ants, no matter what she learns, it will not

An anthropology student sorting artifacts recovered from an archaeological site. He is part of a team studying traditional farming techniques and social life in eighteenth century New England.

affect how and when ants conduct war, but when a political scientist or sociologist studies human war, the results may alter human behavior and even negate the results of the study.

Professionalization and Specialization

In the nineteenth century, the sciences became increasingly specialized, professionalized, and institutionalized. Men, and it was almost always men, became full time physicists, chemists, or biologists. Departments were set up at universities, and journals specializing in a single discipline were founded. The modern scientific disciplines were born, and as the twentieth century progressed, subdisciplines multiplied. Scientific knowledge, both theoretical and practical, increased rapidly. Science became one of the pillars of modern industrial civilization. The social sciences followed the same course as the natural sciences. By the end of the nineteenth century, various fields of social science—anthropology, economics, political science, psychology, and sociology—had achieved



the institutional form we now typically encounter as departments in colleges and universities.

ANTHROPOLOGY

Anthropology is usually divided into physical anthropology and cultural anthropology. Physical anthropologists, who study the physical characteristics of human beings in all their variability, generally reject race as a biological category and concentrate instead on complex genetic variability. This can be very useful to historians for example, DNA evidence can help trace human migrations for which there is inadequate documentary evidence.

For cultural anthropologists, culture includes all the ways humans learn to behave. They are best known for studying the culture of "primitive" peoples—small, nonliterate societies. Among their discoveries is the finding that the people who live in these simpler societies are quite complex in their ways of life. In the latter part of the twentieth century, as isolated small societies became scarce, anthropologists began to adapt their techniques to more modern societies, and the anthropological definition of the term *culture* entered into common language, as in "Latino culture" or "corporate culture."

The findings of cultural anthropologists are of great interest to world historians, who are interested in the progression from one type of society to another. By looking at hunter gatherers now, or in the recent past, historians can catch a glimpse of of how all humankind lived before the development of agriculture. By reading studies of autonomous horticultural societies and of larger chiefdoms they can see how more complex politics developed as sovereign units became larger.

Economics

As Adam Smith said, economics is the study of how goods and services circulate. Most economists study market or capitalist economies in which exchanges of goods and services are largely voluntary, and even when economists study non-market phenomena, such as taxes and government services, they use techniques adapted from studying markets. Of the social sciences, economics is the most like



a natural science. Economists use mathematics extensively and most work within an agreed-upon paradigm.

Economics is usually divided into microeconomics and macroeconomics. Microeconomics is the study of markets for individual goods and the behavior of individual economic units, including both individuals and companies. Macroeconomics is the study of whole economies, usually at the level of a country, but including international economics. Macroeconomics is more relevant for historians, who often want to include a discussion of the economy in their studies.

History and economics meet in the well-established field of economic history, a subfield of both economics and history. Economic historians study one of the most important aspects of the human past, economic changes, using techniques of both economics and history.

Development economics, which studies how some countries became more developed than others and as a result have higher standards of living, is a related subfield. The questions it asks is of vital importance to the poor of the world, but also crucial to understanding how the world developed in the last two centuries.

Unfortunately there is no consensus among economists on the necessary and sufficient causes of economic development. Economic historians can teach us a great deal about how Britain became the first industrialized nation, but do not agree about why Britain, not France or China, was the first to industrialize.

Political Science

Political science, the study of how people are governed or govern themselves, goes back to Confucius and Mencius in China and Plato and Aristotle in Greece. These ancients were concerned with how the state worked and, more importantly, with how the state should work. The tradition of examining these questions continued with such familiar writers as Niccolo Machiavelli (1469– 1527), John Locke (1632–1704), and James Madison (1751–1836). The intellectual descendants of these political theorists continue to work within the field of political science, and their subfield is called political philosophy. As its name implies, political philosophy is The Social Sciences are good at accounting for disasters once they have taken place. • CLAUDE T. BISSELL (B. 1916)

close to philosophy in method and content. It is also close to intellectual history, but there is a difference. A political philosopher and an intellectual historian may look at the same subject-for example, James Madisonbut the political scientist will tend to look at Madison for what he can tell us about politics, while the historian will try to show how Madison's thinking is a product of his time. The modern field of political science emerged at the end of the nineteenth century. As the name implies, many of the new political scientists wanted to make the discipline more scientific. They wanted it to be more relevant and more empirical so it would be better able to study the state as it worked in reality. Most contemporary political scientists belong to this tradition and carefully study various aspects of present-day politics in a democracy, including voting behavior, the influence of lobbying, and the relationship of state and local governments. Some political scientists use mathematical techniques and, as in other social sciences, there is a lively debate within the field about just how scientific political science is. For the study of world history, the most important subfields of political science are political philosophy, international relations, and comparative government.

Psychology

Psychology, the study of both the mind and the brain, belongs to both the social and the natural sciences. Although the focus of psychology is on the individual, not the group, it is considered a social science because the individual is embedded in one or more groups. Psychologists, like other social scientists, apply their knowledge to human problems, ranging from mental illness to career choices, and a large proportion of psychologists work outside of the university. Many aspects of psychology are of interest to historians. The study of the authoritarian personality can throw light on dictators and their followers; the study of the effects of stress on individuals and groups may help explain historical circumstances. Some findings of social psychology suggest reasons why human groups are sometimes vicious and sometimes altruistic. Psychohistory, a subfield of history, uses psychology's insights to illuminate the personalities of major historical figures such as Martin Luther (1483–1546), Mohandas Gandhi (1869–1948), and Adolph Hitler (1889–1945), as well as to analyze political movements. For students of world history, one interesting and controversial question is: How much has human psychology changed over time? Neither historians nor psychologists are agreed on whether, or in what ways, the human psyche is different now than it was two hundred or two thousand years ago. Here psychology meets anthropology and we can ask to what extent human psychology is the product of culture.

SOCIOLOGY

Sociology is the study of human groups from the very small to the very large. Unlike anthropologists, who generally study small traditional communities (Gemeinschaft), sociologists tend to study modern, relatively impersonal urbanized societies (Gesellschaft). They study myriad aspects of these societies, from marriage to bureaucracy to social mobility. In the nineteenth century, the founders of sociology formulated grand historical theories. Among the main practitioners of this protosociology were Comte (the inventor of the word sociology), Herbert Spencer (1820-1903), a social Darwinist who popularized sociology, Karl Marx (1818-1883), and Alexis de Tocqueville (1805–1859). Each of these thinkers explained historical change, mainly European historical change, in terms of a different but broadly evolutionary general theory. In the late nineteenth century sociology became an academic discipline because of the work of men like Emile Durkheim (1858-1917) in France and Max Weber (1864–1920) in Germany, who retained a broad historical outlook while abandoning the interesting but unproven grand theories of their predecessors. A classic example of the use of sociology to illuminate historical trends is Weber's famous work The Protestant Ethic and the Spirit of Capitalism, which shows how the Protestant mentality contributed to the rise of capitalism.

The nineteenth century saw numerous attempts to understand the problems of society: poverty, crime, race, social conflict, and so forth. At the same time, more

Prayer carries us half way to God, fasting brings us to the door of His palace, and almsgiving procures us admission. • QURAN

Further Reading

- Cohen, S. (1972). Folk devils and moral panics. London: MacGibbon & Kee.
- Comte, A. (1842). Cours de philosophie positive. Paris: Bachelier.
- Durkheim, E. (1933). The division of labor in society (George Simpson, Trans.). New York: Macmillan. (Original work published 1893)
- Elias, N. (2000). *The civilising process* (Rev. ed.). Oxford, UK: Blackwell. Erikson, K. T. (1966). *Wayward Puritans*. New York: Wiley.
- Goudsblom, J. (1977). Sociology in the balance. Oxford, UK: Blackwell.
- Khaldûn, I. (1958). *The Muqaddimah: An introduction to history.* London: Routledge & Kegan Paul.
- Mann, M. (1986–1993). *The sources of social power*. Cambridge, UK: Cambridge University Press.
- Nisbet, R. (1969). Social change and history: Aspects of the Western theory of development. New York: Oxford University Press.
- Skocpol, T. (1979). States and social revolutions. Cambridge, UK: Cambridge University Press.
- Spencer, H. (1888). *The study of sociology* (14th ed). London: Kegan Paul, Trench.
- Wallerstein, I. (1974–1989). The modern world-system. New York: Academic Press.
- Weber, M. (2001). *The Protestant ethic and the spirit of capitalism*. New York: Routledge. (Original work published 1904)
- Wolf, E. (1981). Europe and the people without history. Los Angeles/ Berkeley: University of California Press.

Social Welfare

A ll nations around the world have some type of welfare system, but countries differ in how much they spend on welfare as compared with social insurance and in how much they spend on welfare relative to the size of their overall economy. Social welfare specifically defines various institutions and services whose primary purpose is to maintain and enhance the physical, social, intellectual, or emotional well-being of people. It also frequently refers to the university, government, or private programs that cover a variety of objectives in the broad areas of social work, social services, and human services. But the extent and meaning of the term varies between countries, although the United Nations has begun to develop an international application.

The scope of the term *social welfare* has changed with the times, having been extended to new institutions as they were established, such as antipoverty programs, social security, and family planning. For example, it was

systematic ways of examining such problems were undertaken and governments began to publish more systematic statistics. In the twentieth century, as sociology became a profession, sociologists began to develop more rigorous approaches to the study of society, and especially of social problems. Sociology, as it developed in the twentieth century, can be contrasted with economics. Economists assume a society made up of rational individuals, each of whom is trying to maximize her or his personal wellbeing. For sociologists, economic interactions are important, but sociologists are interested in how they are embedded in wider social interactions. Economists generally believe voluntary exchanges between free individuals are mutually beneficial. Sociologists, on the other hand, emphasize that free exchanges are not so free because they are constrained by all sorts of social conditions such as the inequality of power and social norms. Sociologists stress that people are not poor or "deviant" because of their personal deficiencies. They are interested in the fact that some individuals and groups have more power than others and in the way they use their power to dominate and gain the material and psychic advantages available in their society. Not surprisingly, sociologists are often critical of society as it is.

A Natural Partnership

The social sciences and history, especially world history, are natural partners since both study the same phenomenon: collective human life. Unfortunately, much of the time they travel in separate compartments. This is partly due to the high level of specialization of modern scholarship. It is difficult to keep up with the main developments of even one discipline, and keeping up with several is beyond any person's capacity. Interaction between fields of study is also difficult because different disciplines have very different ways of approaching how humans interact. However, it remains important for world historians to learn from and use all the social sciences.

Daniel Klenbort

England's Ordinance of Laborers, 1349

England's Ordinance of Laborers of 1349 prohibited helping the needy because it was believed that such aid might encourage idleness.

Because a great part of the people, and especially of workmen and servants, late died of the pestilence, many seeing the necessity of masters, and great scarcity of servants, will not serve unless they may receive excessive wages, and some rather willing to beg in idleness, than by labor to get their living; we, considering the grievous incommodities, which of the lack especially of ploughmen and such laborers may hereafter come, have upon deliberation and treaty with the prelates and the nobles, and learned men assisting us, of their mutual counsel ordained:

That every man and woman of our realm of England, of what condition he be, free or bond, able in body, and within the age of threescore years, not living in merchandise, nor exercising any craft, nor having of his own whereof he may live, nor proper land, about whose tillage he may himself occupy, and not serving any other, if he in convenient service, his estate considered, be required to serve, he shall be bounden to serve him which so shall him require; and take only the wages, livery, meed, or salary, which were accustomed to be given in the places where he oweth to serve, the twentieth year of our reign of England, or five or six other commone years next before.[I]f any reaper, mower, or other workman or servant, of what estate or condition that he be, retained in any man's service, do depart from the said service without reasonable cause or license, before the term agreed, he shall have pain of imprisonment. And that none under the same pain presume to receive or to retain any such in his service.

Item, that no man pay, or promise to pay, any servant any more wages, liveries, meed, or salary than was wont, as afore is said; nor that any in other manner shall demand or receive the same, upon pain of doubling of that, that so shall be paid, promised, required, or received, to him which thereof shall feel himself grieved, pursuing for the same; and if none such will pursue, then the same to be applied to any of the people that will pursue; and such pursuit shall be in the court of the lord of the place where such case shall happen.

Item, if the lords of the towns or manors presume in any point to come against this present ordinance either by them, or by their servants, then pursuit shall be made against them in the counties, wapentakes, tithings, or such other courts, for the treble pain paid or promised by them or their servants in the form aforesaid; and if any before this present ordinance hath covenanted with any so to serve for more wages, he shall not be bound by reason of the same covenant, to pay more than at any other time

only in the 1950s that education came to be included in the general context of social welfare. By its very nature, the concept of social welfare is an evolutionary one changing within societies and times according to the nature of individual or family responsibility versus the community's social responsibility.

Historical Development

. . .

Before the 1600s governments throughout the world seldom took responsibility for relieving poverty. Charity, in the form of medical care, shelter, or financial help, came from relatives, neighbors, or religious groups. In fact the earliest welfare laws, such as the Statue of Laborers that passed in England in 1349, prohibited helping the needy because it might encourage idleness.

The modern development of social welfare began with the Act of the Relief of the Poor established in England in 1601. This Elizabethan Poor Law established secular responsibility for the care of the needy by making local government units, which were called *parishes*, responsible for their own poor. Very soon the first poorhouses, workhouses, and almshouses were established, but the terrible conditions at the institutions discouraged all but the most desperate from seeking relief in them. was wont to be paid to such person; nor upon the said pain shall presume any more to pay.

Item, because that many valiant beggars, as long as they may live of begging, do refuse to labor, giving themselves to idleness and vice, and sometime to theft and other abominations; none upon the said pain of imprisonment shall, under the color of pity or alms, give any thing to such, which may labor, or presume to favor them toward their desires, so that thereby they may be compelled to labor for their necessary living.

We command you, firmly enjoining, that all and singular the premises in the cities, boroughs, market towns, seaports, and other places in your bailiwick, where you shall think expedient, as well within liberties as without, you do cause to be publicly proclaimed, and to be observed and duly put in execution aforesaid; and this by no means omit, as you regard us and the common weal of our realm, and would save yourself harmless. Witness the king at Westminster, the 18th day of June. By the king himself and the whole council.

Like writs are directed to the sheriffs throughout England.

Source: White, A. B. & Wallace, N. (Eds.) (1915). *Source problems in English history*. New York: Harper and Brothers Publishers. Retrieved from http://www.fordham.edu/halsall/seth/ordinance-labourers.htm

English poor law legislation was transported to the American colonies, but over time the American colonies and later the states began to help provide additional aid. Soon the role of the government in social welfare became a crucial, controversial issue in American political and social policy. Article I, section 8, of the U.S. Constitution conferred on Congress the power "To lay and collect Taxes, Duties, Imposts and Excises, to pay the Debts and provide for the common Defense and general Welfare of the United States." The controversy over this section of the Constitution was one of interpretation: Did it enable Congress to enact social welfare legislation? Apparently, Money is better than poverty, if only for financial reasons. • Woody Allen (B.1935)

President Franklin Pierce did not think so. In 1854 he vetoed legislation that would provide federal aid to the states in the form of land for the care of the insane, saying that such legislation would set a precedent in the care of the indigent that could lead to federal participation in measures for the care of other indigents.

Only the Great Depression that began in 1929 changed the general view of the public toward social welfare and led to a dramatic shift in responsibility from the state to the federal government. The establishment of federal assistance programs for dependent children, the blind, and the elderly began with the Social Security Act of 1935, as well as old-age and unemployment insurance programs.

Several new welfare programs were created in the 1960s as part of President Lyndon B. Johnson's War on Poverty in the United States, including the Food Stamp Program and Medicaid. And throughout the 1960s Congress passed laws providing incentives for welfare mothers to find jobs.

Welfare throughout the World

Many European countries provide for their needy through national programs that benefit all of their citizens. These countries have programs that provide free medical and hospital care, family allowances, and retirement pensions. Typically, European countries, especially the Scandinavian countries, spend a larger share of their economy on welfare and social insurance than other countries do and have such comprehensive programs that they are sometimes called "welfare states."

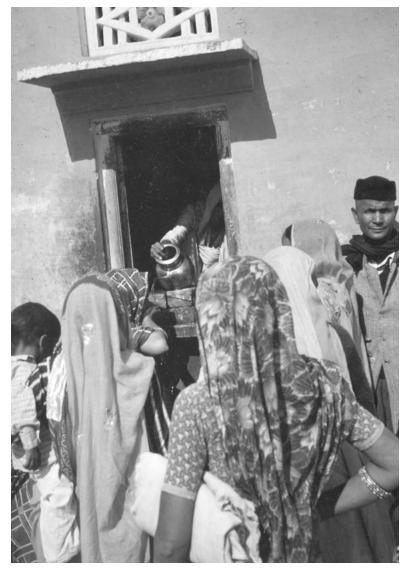
The United Kingdom, Canada, Australia, and the United States provide a larger share of aid through public assistance than do the continental West European nations, but these nations spend a larger share of their economy on aid to the poor.

Japan and other East Asian countries such as South Korea and Singapore rely more on privately funded welfare, much of which is provided by employers and families themselves. Because of this practice, government Free drinking water being distributed to villagers in India by a Hindu charity organization.

spending on social welfare programs in these countries is low by international standards.

Many countries in Africa, Latin American, the Middle East, and Asia have lower overall budgets for welfare than other nations, But South Africa does have one of the betterdeveloped social welfare systems. Many countries in Latin America have well-developed welfare systems, with Uruguay having a particularly generous system, as does the Philippines. Many South Asian countries and Middle Eastern countries provide smaller benefits and serve fewer recipients.

Welfare in the United States mainly helps people who live below the poverty line and takes the form of a number of public assistance programs, such as Medicaid, cash aid programs, and the Food Stamp Program. Other welfare programs include public housing and energy assistance. The federal government also finances and administers nutrition programs for low-income families, free or low-cost school lunches, and federal aid to college students from needy families.



International Agencies

A number of international agencies play a vital role in social welfare, particularly in helping the less-developed countries to develop social welfare systems and train personnel to run them. At the international level many voluntary agencies exist to provide assistance and encouragement for improvement in conditions throughout the world. Nongovernmental international agencies deal with problems of refugees, child welfare, rehabilitation of the disabled, and similar matters. For example, the World Health Organization, the United Nations, and the League of Red Cross Societies all provide crucial services.

Controversies

Criticism of the welfare system ranges over a number of social and economic issues. Some people criticize welfare programs for not providing enough benefits to eliminate poverty. However, spending on welfare would have to increase greatly to eliminate poverty and many people believe the cost of welfare is already too high.

Jaclyn A. LaPlaca

See also Famine; Human Rights; Modernity

Further Reading

- Axinn, J., & Stern, M. J. (2001). Social welfare: A history of the American response to need. Boston: Allyn and Bacon.
- Bell, W. (1987). Contemporary social welfare. New York: Macmillan.
- Dixon, J., & Kim, H. S. (1985). Social welfare in Asia. London: Croom Helm.
- Flora, P., & Heidenheimer, A. J. (1985). The development of welfare states in Europe and America. New Brunswick, NJ: Transaction Publishers.

England's 1601 Act for the Relief of the Poor

England's 1601 Act for the Relief of the Poor marked the beginning of the modern development of social welfare. The Act established secular (non-church) responsibility for the care of the needy by making local governments (called parishes) responsible for their own poor. Although poorhouses, workhouses and almshouses were all established, terrible conditions at these institutions discouraged all but the truly destitute from seeking relief. Nevertheless, the Act is an important milestone in the history of social welfare and the excerpt below offers an interesting comparison to England's earlier Ordinance of Laborers of 1349.

Be it enacted by the Authority of this present Parliament, That the Churchwardens of every Parish, and four, three or two substantial Housholders there, as shall be thought meet . . . shall take order from Time to Time, by, and with the Consent of two or more such Justices of Peace as is aforesaid, for setting to work the Children of all such whose Parents shall not by the said Churchwardens and Overseers, or the greater Part of them be thought able to keep and maintain their Children: And also for setting to work all such Persons, married or unmarried, having no Means to maintain them, and use no ordinary and daily Trade of Life to get their Living by: And also to raise weekly or otherwise (by Taxation of every Inhabitant, Parson, Vicar and other, and of every Occupier of Lands, Houses, Tithes impropriate, Propriations of Tithes, Coal-Mines, or saleable Underwoods in the said Parish, in such competent Sum and Sums of Money as they shall think fit) a convenient Stock of Flax, Hemp, Wool, Thread,

- Goodin, R. E. (1999). *The real worlds of welfare capitalism*. New York: University of Cambridge Press.
- Katz, M. B. (2001). The price of citizenship: Redefining America's welfare state. New York: Metropolitan Books.
- Kohler, P. A., & Zacher, H. F. (1982). The evolution of social insurance, 1881–1981. New York: St. Martin's Press.
- Leiby, J. (1978). *History of social welfare and social work in the United States.* New York: Columbia University Press.
- Levine, D. (1988). Poverty and society: The growth of the American welfare state in international comparison. New Brunswick, NJ: Rutgers University Press.
- Wilensky, H. L. (2002). Rich democracies: Political economy, public policy, and performance. Berkeley: University of California Press.

Iron, and other necessary Ware and Stuff, to set the Poor on Work: And also competent Sums of Money for and towards the necessary Relief of the Lame, Impotent, Old, Blind, and such other among them being Poor, and not able to work, and also for the putting out of such Children to be apprentices, to be gathered out of the same Parish, according to the Ability of the same Parish, and to do and execute all other Things as well for the disposing of the said Stock, as otherwise concerning the Premisses, as to them shall seem convenient.

. .

And be it also enacted, That if the said Justices of Peace do perceive, that the Inhabitants of any Parish are not able to levy among themselves sufficient Sums of Money for the Purposes aforesaid; That then the said two Justices shall and may tax, rate and assess, as aforesaid, any other of other Parishes, or out of any Parish, within the Hundred where the said Parish is, to pay such Sum and Sums of Money to the Churchwardens and Overseers of the said poor Parish, for the said Purposes, as the said Justices shall think fit, according to the Intent of this Law: And if the said Hundred shall not be thought to the said Justices able and fit to relieve the said several Parishes not able to provide for themselves as aforesaid ; then the Justices of Peace, at their General Quarter-Sessions, or the greater Number them, shall rate, and assess as aforesaid, any other of other Parishes, or out of any Parish within the said County, for the Purposes aforesaid, as in their Discretion shall seem fit.

Source: England's 1601 Act for the Relief of the Poor. Retrieved from http://users.ox.ac.uk/~peter/workhouse/poorlaws/1601frames.html

Sociology

Had sociology stayed true to it origins, it would be more central to the study of world history than it now is.

Like most bold statements, that one needs to be immediately qualified. It is rarely possible to pinpoint, chronologically or geographically, the absolute beginnings of a broad intellectual tradition. Geographically, it has to be recognized that there were, and are, many different national sociological traditions, and concerns with history-let alone world history-have not been central to all of them. Chronologically, a key insight in comparative history and sociology-the analogy between the interconnected institutions of a society and the interconnected parts of a living organism-can be traced back as far as Aristotle's Politics. Sociologists are also fond of tracing their ancestry back to Ibn Khaldûn's Muqaddimah of about 1380 (1958); often described as a "philosophy of history," it is also one of the earliest discussions of the possibility of a social science and of long-term social change in world history, and it introduced concepts of undoubted sociological significance, such as social cohesion.

Precursors

Nevertheless, the emancipation of sociology from the shackles of political and moral philosophy that it shared with so many other disciplines in the humanities and social sciences is usually seen as beginning in the French and Scottish Enlightenments and gaining momentum through evolutionary thinking in the nineteenth and early twentieth centuries. Through a study of history since classical times, in his De l'esprit des lois (The Spirit of the Laws), first published in 1748 (1949), Montesquieu distinguished between three forms of government-republics, monarchies and despotismsless on the basis of who exercised power and still less on their respective moral qualities, and more according to how it was exercised and why each form arose to fit societies of different kinds. Other precursors of a historically orientated sociology include Adam Ferguson (1723-1816) and the Marquis de Condorcet (1743-1794). Ferguson stressed the interdependence of people with each other in societies, and in his Essay on the History of Civil Society (1767) he traced humanity's progression from "savagery" to the "refinement" of "civil society" (an idea that returned to great prominence in the late twentieth century, especially in connection with the collapse of Communist regimes in Eastern Europe). Condorcet's

The only thing you will ever be able to say in the so-called 'social' sciences is: "some do, some don't." • Throop III, Kelvin (20th century)

Esquisse d'un tableau historique des progrès de l'esprit humain (Sketch for a Historical Picture of the Progress of the Human Mind, 1955 [1795]) similarly traced the entire progress of human society through a series of ten stages from "savagery"—when humans were little better than the animals—to a vision of an egalitarian and enlightened future. Ferguson and Condorcet's visions of uninterrupted human progress set a pattern for many nineteenth-century theories of social evolution, in which human societies traveled from savagery through barbarism to civilization.

Auguste Comte— The Law of Three Stages

Montesquieu, Ferguson, and Condorcet were only "precursors" of sociology, however, in at least a literal sense, since the word *sociology* had not yet been invented. The dubious honor of coining the term belongs to Auguste Comte (1798–1857). Perhaps more clearly than anyone before (unless it were Ibn Khaldûn), Comte was concerned with the possibility of a social science, the systematic study of society and the accumulated knowledge resulting from it that would help to guide and improve social development. He called this science "sociology." At that time the modern division of the social sciences into many institutionally distinct disciplines—anthropology, archaeology, economics, political science, psychology, as well as sociology per se-had not yet come about, so it must be understood that by sociology Comte meant the social sciences at large, including the study of world history. He advanced a "law of three stages," but it was not about savagery-barbarism-civilization; it was rather about three stages in the development of human knowledge. At each stage a different general principle predominated in the ways in which human beings sought explanations of the natural and social world that they inhabited. During a long *theological* stage, explanations were offered in terms of gods and spirits. There had followed a *metaphysical* stage, when explanations were offered in terms of abstractions such as "reason"; this transitional phase was fairly clearly modeled on Renaissance and Enlightenment thought in Europe. Finally, the



modern world was witnessing the emergence of a *positive* or scientific stage; in the early nineteenth century the word *positif* was nearly a synonym in French for "scientific." Comte used it to signify the rejection of the speculative philosophy of the past, which had so often advanced propositions in forms incapable of being tested against observable facts. But Comte, the founder of philosophical positivism, was by no means a positivist in the sense that was later caricatured as "crude positivism." He did not believe that scientific knowledge could be based on observation alone; observation had to be guided by theoretical ideas, but theories had to be modifiable in the light of observation. The corpus of knowledge grew through the interplay of the two mental operations directed at theoretical synthesis and at the observation of empirical particulars. The law of three stages was linked to Comte's notion of a "hierarchy of the sciences." Looking at the history of the main areas of knowledge, he contended that the positive or scientific stage had been reached first in mathematics (which at that date was mistakenly believed to be an empirical discipline), then by astronomy, physics, chemistry, and biology; topmost in the hierarchy and last in development came the new discipline of sociology. The areas of knowledge higher in the hierarchy could not be *reduced* to the lower but represented a higher level of synthesis, the attainment of the scientific stage at lower levels being preconditions for the emergence of the higher. Astronomy had in Comte's view entered the scientific stage in antiquity; physics and chemistry had been placed on a scientific footing much more recently; the biological sciences were undergoing rapid development in his own lifetime. Each advance up the hierarchy of the sciences represented an increase not only in humankind's understanding of, but also in its control over, first physical, then organic, and finally social forces. In industrial society, when sociology had attained the scientific stage, social affairs would be studied and then regulated scientifically. Comte encapsulated this idea in his slogan savoir pour prévoir, prévoir pour pouvoir (know in order to foresee, foresee in order to be able [to act]). These central ideas of Comte'sdespite there being a fairly high proportion of nonsense in his voluminous writings—contain a valid kernel that is still relevant to understanding world history.

Comte's influence was especially marked on the work of Herbert Spencer (1820-1903), who combined it with newly prevalent evolutionary ideas to produce an ambitious comparative-historical taxonomy of the forms of human society. His influence was in turn strongly felt in the development of sociology in the United States (for example, through William Graham Sumner, 1840-1910) and (with Comte) in the work of Emile Durkheim (1858–1917). In the student textbooks, Durkheim, Karl Marx (1818-83), and Max Weber (1864-1920) are now often depicted as the three founders of the modern discipline of sociology (a curiously unsociological view that diminishes the extent to which they all stood on the shoulders of giants). Yet all three continued their precursors' central concern with understanding the long-term development of human society, so it is paradoxical that in the science they are supposed to have founded this concern became steadily less important as the twentieth century ran its course. The decades after the World War II saw the spread of what has variously been called "developmental agnosticism" (Wittfogel 1957), "hodiecentrism" (Goudsblom 1977) and the retreat of sociologists into the present (Elias 1987). This tendency may in part be the outcome of the sociological profession's wish to measure its achievements against the utilitarian yardstick of usefulness in rectifying the ills of contemporary society. It also had deeper intellectual roots.

The Retreat into the Present

The fact that in the Victorian age, and perhaps for some decades in the early twentieth century, there was a widespread and uncritical assumption that the new "civilized" industrial societies were *superior* to other ways of life especially those that Europeans encountered in their colonies and Americans in the course of their westward expansion—led to an equally uncritical and comprehensive rejection by sociologists (and even more strongly by anthropologists) not just of the idea of progress, but of all study of processes and stages of long-term social



development. The genocides of the Nazi era served as the most awful warning of the dangers of regarding categories of human beings as superior and inferior; Sir Karl Popper (1945, 1957) and Robert Nisbet (1969) forged intellectual links between political tyranny and the pursuit of "inexorable laws of historical destiny," which helped for a while to make developmental perspectives almost taboo for may sociologists.

The retreat into the present had, however, begun earlier. The rise after the World War I of the approach within anthropology known as 'functionalism', associated especially with Bronislaw Malinowski and A. R. Radcliffe-Brown, had a strong but markedly delayed impact on sociology. Functionalism involved studying societies as systems of well-meshing "parts" at a given point in time. It was at the peak of functionalism's influence in sociology during the two decades after the World War II that Talcott Parsons (1902-79) dominated American sociology, and American sociology dominated the world. In anthropology functionalism had begun as a methodological rule of thumb in field work: It was a reaction against the tendency of Victorian evolutionary anthropologists to resort to "conjectural history" in seeking to explain the customs of preliterate societies, when for the most part any firm evidence about the past of such societies was lacking. Seeking synchronic relationships between patterns that could actually be observed in the field made better sense for anthropologists than speculating about their origins in past time. Why the same ahistorical approach should have had such appeal to sociologists studying societies blessed with abundant written records of their own past development gives more pause for thought. Although functionalism was in retreat in sociology by the late 1960s, developmental agnosticism was then reinforced through the influence of French structuralism, which had drawn its original inspiration from the shift in linguistics from diachronic to synchronic investigations led by Ferdinand de Saussure (1857–1913). The same cast of mind can be seen in the so-called poststructuralist Michel Foucault (1926-1984) and even casts a shadow on the sociology of Pierre Bourdieu (1930–2002), leading French intellectuals who have attracted numerous followers in sociology across the world. Foucault presents a particularly relevant paradox: He appears on the surface to be studying processes of historical change, but on closer scrutiny he can be seen to depict the dominance of static "discourses" that are mysteriously supplanted through unexplained historical *ruptures* into new dominant discourses.

Historical Sociology

By the end of the twentieth century, there was a definite revival of historical concerns among sociologists, although historical sociology was now generally seen as one among many minority interests or subdisciplinesrather than the central preoccupation that it was for many of the discipline's founders. An interest in world history, or in very long-term processes of social change, is however the province of a minority of a minority, among sociologists as among historians. (In this field it is, furthermore, sometimes difficult to distinguish between historically minded sociologists and sociologically minded historians.) A useful distinction can be drawn between two types of historical sociology. The first may be called simply the sociology of the past. In this kind of research, sociological concepts and theories are used to investigate groups of people living in some specific period in the past. This kind of research does not differ fundamentally from research into groups of people living in the present: It is merely that documents form a larger part of the evidence than they would generally do in research into the present, for the very practical reason that dead people cannot fill in questionnaires or respond to interviewers. As against this sociology of the past, other sociologists seek to discern and explain longer-term structured processes of development.

The distinction is not hard and fast. For example, Norbert Elias's *The Court Society* (1983)—among his works the most widely admired by historians—deals with a relatively closely defined place and period (France and its royal court in the century before the French Revolution), but his underlying concern is with more general processes of development. Still less is the distinction one of academic worth. Many of the finest examples of historical sociology are instances of the sociology of the past. To put it perhaps oversimply, their impulse is comparative rather than developmental.

The scale on which comparison is pursued or invited varies enormously. At one end of the scale, two widely admired books may be mentioned: Kai T. Erikson's Wayward Puritans (1966) and Leonore Davidoff's The Best Circles (1973), studies respectively of deviance in colonial New England and of behavior in nineteenth-century London high society. They are excellent examples of the sociology of the past. Their value, however, is not dependent on the fact that they are studies of the *past*: They are in effect contributions to the understanding of deviant behavior and of endogamous status groups irrespective of time. The arrow of time may also be reversed for comparative purposes: A present-day study may prove stimulating when studying the past. For example, Stan Cohen's modern classic, Folk Devils and Moral Panics (1972)-a study of battles between rival groups of motorcyclists and motor-scooter riders in Britain and of the public reaction to them-might usefully be read by historians laboring at the large body of research on witch crazes in the past.

Other examples of the sociology of the past, but on a more macrosociological scale, are studies like Barrington Moore's *Social Origins of Dictatorship and Democracy* (1966) and Theda Skocpol's *States and Social Revolutions* (1979). They explicitly set out to study comparable episodes at different periods in different societies. Taking a small number of episodes, they attempt to generalize to similar situations, past, present, and future. Yet they do not advance any theory of social development over the longer term.

The minority of the minority are those sociologists whose interest centers on the construction of modes of long-term developmental processes. They include notably Immanuel Wallerstein, whose *The Modern World-System* (1974, 1980, 1989) is in effect a massive attempt at an historical disproof of David Ricardo's apparently timeless "law of comparative advantage," showing how initially small inequalities in ties of interdependence between societies and economies have been magnified over time to produce massive differences today between what are euphemistically called the "North" and the "South." Another example is that of Norbert Elias, whose massive The Civilising Process (2000 [1939]) advances a theory of state formation based on a study of Western Europe during the second millennium AD and links that to changes in the psychological makeup (or habitus) undergone by individuals as they become gradually more subject in the course of generations to the social constraint imposed by the monopolization of the means of violence by the state apparatus. Charles Tilly's work has also centered on state formation processes. Abram de Swaan's In Care of the State (1988) shows how the development of compulsory education, income maintenance, and public health policies followed a similar sequence over 500 years in Britain, Germany, France, the United States, and the Netherlands, because a process of the collectivization of risk overrode very different ideological assumptions in the various counties. Michael Mann's The Sources of Social Power (1986, 1993) traces the changing relationship between economic, ideological, military, and political bases of power over the entire course of human history. Finally, it should be recognized that Marxist scholars kept alive the sociological interest in long-term processes of change when they were least fashionable. Perry Anderson's Passages from Antiquity to Feudalism (1974a) and Lineages of the Absolutist State (1974b) are classics of that tradition.

In conclusion it should be mentioned that—perhaps in response to the hodiecentric mood that prevailed in their discipline for several decades—historical sociologists have shown considerable methodological self-awareness. Notable contributions in this area are Charles Tilly's *Big Structures, Large Processes, Huge Comparisons* (1984); the extensive debate about the relevance of rational choice theory in historical sociology (Coleman and Fararo 1992); and that about the entire "scientific" basis of historical sociology provoked by Goldthorpe (1991,1994; cf. Hart 1994, Mann 1994).

Stephen Mennell

Further Reading

- Anderson, P. (1974a). *Passages from antiquity to feudalism.* London: NLB.
- Anderson, P. (1974b). Lineages of the absolutist state. London: NLB.
- Cohen, S. (1972). Folk devils and moral panics. London: MacGibbon & Kee.
- Coleman, J. S., & Fararo, T. J. (Eds.). (1992). Rational choice theory: Advocacy and critique. London: Sage.
- Comte, A. (1842). Cours de philosophie positive. Paris: Bachelier.
- Davidoff, L. (1973). The best circles. London: Croom Helm.
- De Condorcet, M.-J.-A.-N. D. M. (1955). Sketch for a historical picture of the progress of the human mind. London: Weidenfed & Nicolson. (Original work published 1795)
- De Montesquieu, C. S. B. (1949). *The spirit of the laws*. New York: Hafner. (Original work published 1748)
- de Swaan, A. (1988). In care of the state. Cambridge, UK: Polity Press.
- Elias, N. (1983). The court society. Oxford, UK: Blackwell.
- Elias, N. (1987). The retreat of sociologists into the present. *Theory, Culture and Society*, 4(2–3), 223–249.
- Elias, N. (2000). *The civilising process* (rev. ed). Oxford,UK: Blackwell. (Original work published in German in 1939)
- Erikson, K. T. (1966). Wayward Puritans. New York: Wiley.
- Ferguson, A. (1767). A history of civil society. Edinburgh, UK: A. Millar.
- Goldthorpe, J. H. (1991). The uses of history in sociology: Reflections on some recent trends. *British Journal of Sociology*, 42(2), 211–230.
- Goldthorpe, J. H. (1994). The uses of history in sociology—A reply. British Journal of Sociology, 45(1), 55–77.
- Goudsblom, J. (1977). Sociology in the balance. Oxford, UK: Blackwell.
- Hart, N. (1994). John Goldthorpe and the relics of sociology. British Journal of Sociology, 45(1), 21–30.
- Khaldûn, I. (1958). *The Muqaddimah: An introduction to history.* London: Routledge & Kegan Paul.
- Mann, M. (1986–1993). *The sources of social power*. Cambridge,UK: Cambridge University Press.
- Mann, M. (1994). In praise of macro-sociology—A reply. British Journal of Sociology, 45(1), 37–54
- Moore, B., Jr. (1966). Social origins of dictatorship and democracy. Boston: Beacon Press.
- Nisbet, R. (1969). Social change and history: Aspects of the western theory of development. New York: Oxford University Press.
- Popper, K. R. (1945). *The open society and its enemies*. London: Routledge & Kegan Paul.
- Popper, K. R. (1957). *The poverty of historicism.* London: Routledge & Kegan Paul.
- Skocpol, T. (1979). States and social revolutions. Cambridge, UK: Cambridge University Press.
- Spencer, H. (1888). *The study of sociology* (14th ed.). London: Kegan Paul, Trench.
- Tilly, C. (1984). Big structures, large processes, huge comparisons. New York: Russell Sage Foundation.
- Wallerstein, I. (1974, 1980, 1989). The modern world-system. New York: Academic Press.
- Wittfogel, K. A. (1957). Oriental despotism: A comparative study of total power. New Haven, CT: Yale University Press.



Socrates

(с. 470–399 все)

Athenian philosopher and provocative teacher

Socrates was born just at the time that Athens was beginning to experience empire; he grew as the Athenian empire was growing; he survived the long and fratricidal war with Sparta, which destroyed Athenian power; he witnessed Athens's ultimate defeat; he was slain by a new democracy seeking to reestablish itself out of the ashes of the old.

For much of that time, he had acted as a teacher to the wealthy young men of the city, although without taking payment. He taught within a tradition of traveling thinkers and lecturers (Sophists), whose speculations about and interrogations of the natural world represented a genuine attempt to understand the structure and order of things. The style of these Sophists was deductive rather than experimental, and their consuming interest was the description of reality. Such men made their living as itinerant teachers and their reputation suffered principally because they had either to teach for pay or to accept the support of a wealthy patron.

While Socrates, superficially at least, belonged in this tradition, he was neither itinerant (he lived his life in Athens) nor did he accept pay (despite apparent poverty). Furthermore, he was less interested in seeking to describe the natural world as he was in probing the authenticity of knowledge, and exemplifying and seeking moral integrity. Moreover, he did not teach through exposition, but through relentless questioning of his subject. To Socrates, philosophy was, essentially, a conversation rather than a lecture.

For some decades, Socrates had lived a more or less conventional life. An Athenian citizen, he was wealthy enough to serve as hoplite in the Athenian army (the heavily armored hoplites provided all of their own equipment). As a warrior, he had distinguished himself in battle, serving with distinction in three bloody engagements during the Peloponnesian War: Potidaea, Amphipolis,

Socrates Meets His Death

In the extract below from Plato's dialogue, the Phaedo (116A), a servant sadly brings Socrates the hemlock that will kill him.

Then the servant of the Eleven came and stood by him and said, "Socrates, I shall not have to reproach you, as I do others, for being angry with me and cursing me when, on the instructions of the archons, I tell you to drink the poison. I have found you during this period the noblest and most kindly and best man who has ever come here; and now, I am sure, you are not angry with *me*, but with those who you know are responsible. So now—you know what I have come to tell you—good-bye, and try to bear the inevitable as easily as you can." He burst into tears, turned round, and went away.

and Delium. According to one story, he saved the life of the brilliant young politician, Alcibiades, at the Battle of Potidaea. At that time, Alcibiades was both his student and constant companion although not, surprisingly, his lover.

Socrates was married to Xanthippe, who bore him two sons. He also fulfilled other duties of a citizen. Socrates was serving as president of the Athenian Assembly in the days after the disastrous Battle of Arginusae. In this Pyrrhic victory, the Athenian fleet had triumphed over a Spartan navy, but a storm in the aftermath of the battle had prevented the victorious Athenians from returning to the site of the battle to collect the casualties in the water. As a result the generals were all accused together, a process which—although highly popular—was contrary to Athenian law. Socrates voted against the proposal, although without support. The entire board of generals was found guilty and executed.

Socrates again demonstrated his personal integrity when, after Athens's defeat in 404 and the imposition of a narrow pro-Spartan regime ("The Thirty Tyrants"), he refused a request to arrest a citizen charged with a political offense. Despite his public refusal to cooperate with the tyrants, he was never entirely free of political suspicion after their fall and the restoration of democracy, since a number of them had been his students. It was as much the political activity of his students, most particularly Alcibiades and Critias, as his iconoclastic teaching that led, in 399, to his being charged with impiety. This meant, for the purposes of the charge, bringing new gods into Athens and, more significantly, corrupting the minds of the young. Found guilty by the court, he was sentenced to death and executed through the administration of the poison hemlock.

Our principal sources for Socrates' life and teachings are two of his students, Plato and Xenophon. Both wrote dialogues in which Socrates, as the central character, engages in conversation with a variety of people. Curiously, Plato's Socrates and that of Xenophon are quite different people, with different views and different ways of speaking. They are both, in turn, quite different from the burlesque Socrates lampooned by Aristophanes in his play *The Clouds*.

Whether his views are accurately represented by Plato or Xenophon, or neither, Socrates remained deeply influential, both in terms of his focus and his method. This is reflected by the fact that the Sophists who preceded him, and whose interests lay in understanding the natural world, are referred to as "pre-Socratics," and the dialectical method of teaching that he used is commonly referred to as "Socratic questioning." He himself wrote nothing, and thus his teaching can only be apprehended through the works of others. Whether he intended this or not, it seems, in retrospect, entirely appropriate.

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See also Greece, Ancient; Plato; Political Thought

Further Reading

Annas, J. (1986). Classical Greek philosophy. In Boardman, J., Griffin, J., & Murray, O. (Eds.), *The Oxford history of the Classical World* (pp. 237–238). Oxford, UK: Oxford University Press.

Taplin, O. (1990). Greek fire: The influence of ancient Greece on the modern world. New York: Atheneum.



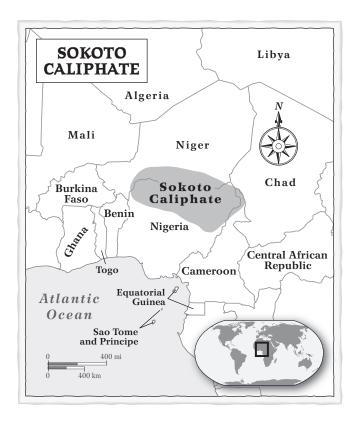
Sokoto Caliphate

The Sokoto caliphate was a nineteenth-century West African state that for nearly a century (c. 1808– 1903) extended a particular form of Islamic rule across much of the Sudanic region south of the Sahara and north of the West African forest zones. Formed following a successful jihad proclaimed by Usman dan Fodio (1754–1817) and initially led by his kinsmen, Sokoto was intended to be a theocratic state unifying Usman's people, the Fulani, and enforcing their political hegemony over other societies, especially the Hausa states that had previously dominated the region.

Origins of the Jihad

Himself the son of a Fulani teacher, Usman dan Fodio studied with a variety of *shaykhs* (Arabic: teachers, or *shehu* in the Hausa language) in the Quranic schools of what is now northern Nigeria. As his knowledge grew, so did his reputation among the Sufi Muslims who shared his devotion to the Islamic Qadiriya Sufi brotherhood popular in the region. He gradually amassed a following among the local population and attracted numerous students. Continuing to preach, he increasingly contrasted what he saw as the righteous path required of faithful Muslims with the debased religious practices he believed were prevalent among the Muslim Hausa rulers in the region.

As his fame spread and the numbers of his followers grew, the local Hausa ruler of Gobir—a nominal Muslim —made efforts to prevent his further teaching. The situation deteriorated until conflict between Usman's followers and the state, ostensibly over the enslavement of Muslims, led to war in 1804. At that point, Usman dan Fodio began a series of pronouncements encouraging Muslims throughout the region first to flee (an action analogous to the Prophet Muhammed's flight to Medina) what he described as persecution, writing a number of religious and political tracts explaining his position and laying out his vision of proper Islamic governance. Even-



tually elected caliph amongst his Fulani followers, Usman then proclaimed a jihad of the sword against rulers who refused to adhere to what he described as the pure ways of Islam.

Establishment of the State

The warriors who responded managed to vanquish Gobir by 1808 and soon turned their attention to other Huasa states in the region. Many who had grievances against these states and their rulers came to the Usman seeking his approval for their efforts. To those whose cause he perceived as just, Usman gave a flag that announced that they waged their campaigns with his support. Yet he refused to proclaim himself the expected Madhi (a messiah figure) whom many Sufi Muslims believed would deliver the faith from its numerous challenges.

As wise in the ways of the world as he was in matters of the faith, dan Fodio recognized that he was skilled neither at war nor the administration of a state. These tasks he delegated to his brother, 'Abd Allah bin Muhammad, and his second son, Muhammad Bello (1781–1837). They were the leaders who organized further military campaigns and later the decentralized

'Uthman dan Fodio on the Proper Nature of Government

I say—and help is with God—the purpose of the Muslims in their governments is to strip evil things from religious and temporal affairs, and introduce reforms into religious and temporal affairs, and an example of stripping evil things from religious and temporal affairs is that every governor of a province should strive to fortify strongholds and wage holy war against the unbelievers, and the war-makers and the oppressors, and set up a military station on every frontier, and combat every cause of corruption which occurs in his country and forbid every disapproved thing. An example of introducing reforms into religious and temporal affairs is that the gover-

state structure of Sokoto. Each conquered Hausa state was assigned to an emir who ruled under Usman's authority and in accordance with Islamic law, subject to removal if he deviated from that path. By some estimates, Sokoto was the largest African state anywhere on the continent in the early nineteenth century.

Supporters of Usman dan Fodio continued to plan for further expansion of the state. After his death in 1817, authority passed to Muhammad Bello, who ruled as the sultan of Sokoto, building upon his father's legacy. Also a literate and respected interpreter of Islamic tradition, his many writings continued the traditions previously established for the state and added to them, making the Sufi dedication to the expectation of deliverance by the Mahdi the prevailing orthodoxy of the state.

Internal Problems

During the middle of the nineteenth century, however, Sokoto was beset by many difficulties. Efforts to conquer the state of Bornu to the west were never successful, and Bornu's ruler objected in a letter to Muhammad Bello that the forces of Sokoto were not only attacking a people committed to reforming the faith but were enslaving Muslims captured there. (Slavery was not forbidden to Muslims and was practiced in many Islamic societies, but enslaving fellow Muslims was generally frowned upon.) Sokoto derived much of its wealth from slavery, both as a supplier of slaves for the slave trade and in its dependnor of every country shall strive to repair the mosques, and establish the five prayers in them, and order the people to strive to read the Qur'an, and make (others) read it, and learn knowledge, and teach it; and that he should strive to reform the markets and set to rights the affairs of the poor and the needy, and order the doling of every approved thing. These... are the qualities of the way of the Muslims in their governments, and he who follows them in his emirship, has followed the way of Paradise, which is the straight way.

Source: Hiskett, M. (Trans.). (1960). Kitab al farq: A work on the Habe[Hausa] Kingdoms. Bulletin of the School of Oriental and African Studies, 23, 569–570.

ence on slave labor on its plantations and for the tending of its cattle. Some of these slaves were certainly Muslims.

These practices troubled some of Sokoto's religious leaders, but often seemed minor distractions to the goal of maintaining an Islamic state. Political authorities paid greater attention to defeating numerous rebellions on the fringes of the state and also to dealing with dynastic struggles within the Sokoto elite itself and among emirs of its various quasi-independent provinces. These disputes were generally resolved successfully through traditional military means and thus, inadvertently, served to diminish any modernizing tendencies, which in any case were suspect in a conservative, theocratic state.

British Conquest

Although the Sokoto caliphate was among the most dynamic African political entities at the beginning of the nineteenth century, it was much less so at the start of the next. In Frederick Lugard (1858–1945), who was appointed high commissioner of the British Protectorate of Northern Nigeria in 1900, Sokoto confronted a challenge it could not easily match. Lugard did not favor a diplomatic settlement that might have avoided war, preferring instead a conquest, which he assumed would be welcomed by the Hausa and poorer Fulani, whom he believed were disgusted by corruption and deviations from Islamic law. But he underestimated the nature and strength of belief even among the common citizenry. Realizing the British might, even at great cost, defeat one Sokoto emirate after another, the sultan at that time, Attahiru dan Ahmadu (ruled 1902–1903), debated with advisers the best course to follow. But in March 1903 the British forced his hand, defeating his ill-equipped armies at the city of Sokoto itself and effectively bringing an end to the independence of the caliphate. The sultan, however, rallied all who would follow him—and there were many, to the surprise of British officials—in a flight toward Mecca to avoid submission to invaders they considered infidels. British forces tracked their progress and, in July 1903 during what some observers describe as a needless battle, the sultan and almost all who had joined him were killed.

The state continued under British rule with more moderate leaders who were willing to submit to British authority. But the traditions of political Islam espoused by Usman dan Fodio and put into practice during the century of independent rule in Sokoto still remain in the political culture of northern Nigeria. As the influence of British rule diminished late in the twentieth century and as local Islamic traditions reemerged in their place, the impact of a strict observance of Islamic law continued into the twenty-first century.

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See also Islamic World

Further Reading

- Clarke, P. B. (1982). West Africa and Islam: A study of religious development from the 8th to the 20th century. London: Edward Arnold.
- Crowder, M. (1968). West Africa under colonial rule. Evanston, IL: Northwestern University Press.
- Fisher, A. G. B., & Fisher, H. (1971). Slavery and Muslim society in Africa. Garden City, NY: Doubleday.
- Hiskett, M. (1984). The development of Islam in West Africa. London: Longman.
- Hiskett, M. (1994). The sword of truth: The life and times of Shehu Usuman dan Fodio (2nd ed.). Evanston, IL: Northwestern University Press. Last, M. (1967). The Sokoto caliphate. London: Longman.
- Levtzion, N., & Pouwels, R. (Eds.). (2000). *The history of Islam in Africa*. Athens: Ohio University Press.
- Lewis, I. M. (Ed.). (1980). *Islam in tropical Africa*. London: International African Institute.
- Shagari, S. U. A. (1978). Uthman dan Fodio: The theory and practice of his leadership. Lagos, Nigeria: Islamic Publications Bureau.

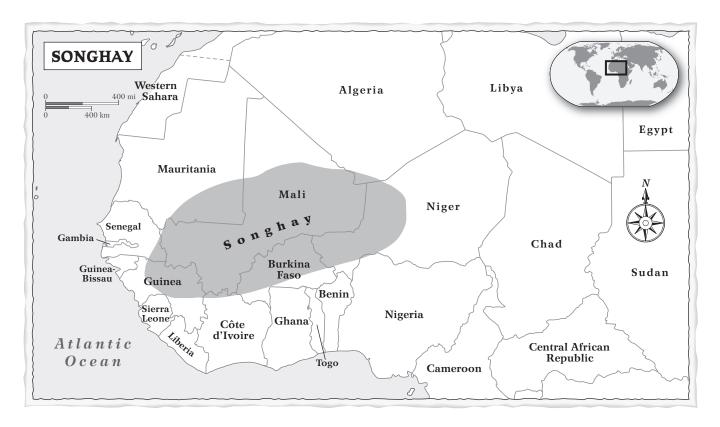
Songhai

The Songhai (Songhay) empire was the third of the L early great states of the western Sudan, preceded first by the Wagadu empire (Ghana; flourished in the first millennium CE) and then Mali (flourished mid-thirteenthmid-fifteenth century). The Songhai empire was made up of many different peoples who gained their livelihood from the Niger River and its bordering lands. Fishermen called Sorko built and operated riverboats and canoes. The Gow hunted river animals such as crocodiles and hippopotamuses. People known as Do farmed the fertile lands bordering the river. All of these together came to be known as Songhai. The empire developed out of the Kingdom of Gao that had been established by the tenth century. By the second half of the fifteenth century the state was expanding along both sides of the Niger River, which flowed in a great curve through the entire country from west to east. At its peak, Songhai stretched from the area of Nioro du Sahel, near the border of what are now southern Mauritania and western Mali, to Agadez in the modern Republic of Niger. In 1591, after some eight hundred years of existence in one form or another, this western Sudanic state lost its independence to an invading Moroccan army.

Scholarship and Evidence from the Niger Bend

During the sixteenth century, when the Songhai empire was at the height of its power, the city of Tombouctou (Timbuktu) was a great center of learning with hundreds of Quranic schools and many learned scholars writing on a variety of subjects. Until recently, the most highly regarded sources for the history of Songhai through the Moroccan invasion (1591) have been the seventeenthcentury Tombouctou historians Ibn al-Mukhtar who wrote *Ta'rikh al-fattash* (Chronicle of the searcher) and ^cAbd al-Rahman al-Sa^cdi, who wrote *Tarikh al-sudan* (Chronicle of the Sudan). The latter has been translated into English by John Hunwick in *Timbuktu and the Songhay Empire* (1999). Another important new source for

	Kon Fronts in the History of A friday State	
	Key Events in the History of African State	
8th century bce	Cush (in southern Egypt and northern Sudan) invades and conquers Egypt; Shabaka of Cush establishes Egypt's twenty-fifth dynasty.	
6th century bce	Meroë becomes the capital of Cush.	
l st millen- nium ce	Wagadu (Ghana) empire flourishes.	
lst-3rd century ce	Kingdom of Cush flourishes, engages in trade with Rome.	
Mid-3rd century ce	Aksum replaces Cush as principal supplier of goods to Rome.	
Early 6th century ce	Aksum loses its Nile Valley and southern Arabian provinces.	
6th century	Nubian kingdoms (Nobadia, Makuria, and Alodia) flourish.	
8th century	City of Aksum abandoned.	
9th-14th Century	Centralization of political power in central Africa leads to the formation of the kingdom of Kongo.	
10th-12th Century	Hausa states emerge.	
c. 1150–early 14th century	Saifawa dynasty rules in Kanem, in the Lake Chad basin.	
Early 13th century	Wagadu reduced to a tribute-paying vassal of Soso and Mali.	
13th century	Nubian kingdom of Alodia begins to disintegrate.	
13th-14th Century	Loose alliance among the seven Hausa states.	
Mid-13th- mid-15th century	Mali empire flourishes on the Upper Niger River.	
1290-1450	Great Zimbabwe flourishes in southern Africa.	
15th century	Empire of Songhai is expanding.	
15th century	The East African island of Kilwa is a leading trading center.	
1591	Songhai loses its independence to invaders from Morocco.	
17th-18th Century	Bornu, in the Lake Chad basin, is one of the largest states in Africa.	
1808-1903	Sokoto caliphate flourishes in West Africa.	
1818-1879	Zulu kingdom flourishes.	



Songhai history is a large collection of inscriptions that were written on tombstones beginning as early as 1013 CE. These have been translated and studied by P.F. de Moreas Farias in his *Arabic Medieval Inscriptions from the Republic of Mali* (2003). Farias has convincingly called into question the historical accuracy of the Tombouctou chronicles. The Hunwick and Farias books are essential to any study of Songhai history.

The Kingdom of Gao

In addition to the people collectively known as Songhai, the camel-riding Sanhaja of the Sahara were prominent in the Niger Bend region. The Sanhaja, known locally as Tuareg, settled on the left bank of the Niger at a place that came to be known as Gao, or, as the North African traders called it, Kawkaw. By the tenth century the Songhai chiefs of Gao established it as a small kingdom, taking control of the peoples that lived along its trade routes. Tombstone inscriptions mention two early Songhai dynasties, perhaps indicating simultaneous regional rule. The earliest, which dated from at least 1083–1084 CE went by the title Muluk, with queens possibly sharing power and bearing the title Malika. The other dynasty's rulers were known as Za or Zuwa, of whom the Tombouctou chronicles make the questionable claim that there were thirty-two (the alleged first Zuwa named Alavaman appears to be entirely mythical). Between 750 and 950, Gao became an increasingly important southern terminus in the trading of goods across the Sahara. Commerce in gold, salt, slaves, kola nuts, leather, dates, and ivory brought revenue from taxes that were levied on all goods moving in and out of the empire. Because of this rich trade, Gao became the capital of Songhai. Recently revealed evidence indicates that Mali gained at least intermittent control of Gao toward the end of the thirteenth century and retained it into the first half of the fifteenth century. Sometime during Mali's hegemony a new dynasty took power, with the rulers carrying the title of Sii (a contraction of Sonyi, a Manding term). The earliest of the historically documented Sii was Sulayman Dama, who attacked the Malian province of Mema sometime before 1464.

Sii Ali Beeri (reigned 1464–1492)

Sii Ali Beeri expanded the kingdom of Gao westward throughout the Niger Bend and developed it into the Songhai empire. Sii Ali had a large, well-disciplined army that included cavalry and a fleet of riverboats to transport troops. His imperial expansion included the conquest of both Tombouctou and Jenne, which became the second and third most important cities of the empire after Gao. Having won every battle he ever fought and holding power for twenty-eight years, Sii Ali died in 1492 while returning from a military campaign.

Askia Muhammad the Great (reigned 1493–1528)

In 1493 Sii Ali's son Abu Bakr Dao (Sii Baru) was defeated in battle by Muhammad Abu Bakr Ture, founder of a new dynasty whose leaders would be known by the title "Askiya," which had been a rank in the Songhai army since the first half of the thirteenth century. Askiya Muhammad's devotion to Islam brought relief to the urban Muslim populations who had at times been treated harshly by Sii Ali. The askiya's piety also contributed to his prestige and power when he went on pilgrimage in 1497-1498 and the Abbasid caliph of Cairo (not Mecca as it is usually stated) named him caliph, or commander of the faithful, in the western Sudan. As one of the greatest of the Songhai rulers, Askiya Muhammad strengthened and extended the empire that had been created by Sii Ali. He created a professional full-time army and built up the Songhai cavalry, expanding Songhai's control far beyond the territories of the Middle Niger. Under Askiya Muhammad the Great, as he came to be known, the Songhai empire established tributary lands northward to the salt pans of Taghaza in the Sahara, westward to former territories of the Mali empire, and eastward to the Tuareg sultanate of Agadez. The empire eventually became so large that its army was divided into two, one for the western provinces based in Tombouctou, and one for the eastern provinces based in Gao. Having grown old and blind, Askiya Muhammad was deposed by his son Musa in 1529, though he lived until 1538.

We know the names of thirty-seven of Askiya Muhammad's sons by his various wives and concubines, though he is thought to have had many more. These sons were mostly half-brothers, and as they grew up they began to compete for power and to quarrel among themselves. Beginning with Askiya Musa (reigned 1529–1531) and ending with Askiya Ishaq I (reigned 1539–1549), the reigns of the four askiyas after Muhammad the Great were characterized by bloody struggles for power.

Askiya Dawud (reigned 1549–1582) and his sons

Askiya Dawud is regarded as the third of Songhai's greatest rulers. He commanded many far-ranging military campaigns, and during the thirty-three years of his reign, as important offices became vacant, he appointed his own sons to the positions, thus eliminating from high office the offspring of other sons of Askiya Muhammad. From his time forward, all Songhai's rulers were descendants of Askiya Dawud. However, after he died in 1582, warfare once again broke out among brothers competing for power.

With the exception of the sickly Askiya Muhammad al-Hajj (reigned 1582–1586), Askiya Dawud's sons continued the kinds of deadly power struggles that had characterized the reigns of Askiya Muhammad's offspring. In 1588, during the reign of Muhammad Bani (reigned 1586–1588), a bloody confrontation between two imperial officers at the Tombouctou port of Kabara led to a civil war that weakened the Songhai armies and contributed to the empire's subsequent vulnerability to outside invasion. In 1588 Askiya Ishaq II (reigned 1588–1592) came to power, and it was during his rule that Songhai suffered its most devastating defeat.

The Moroccan Invasion of 1591

In 1590, encouraged by a scheming runaway Songhai slave who claimed to be the askiya's brother, Sultan Mulay Ahmad of Morocco wrote to Askiya Ishaq II demanding, among other things, payment of tax on the salt mine of Taghaza, which was in disputed territory halfway between Songhai and Morocco. Askiya Ishaq II replied with a challenging message, which Sultan Ahmad answered by sending an expedition to attack Songhai. The Moroccan army set out at the end of 1590 with around four thousand fighting men both mounted and on foot, many armed with muzzle-loading firearms. They were led by Jawdar Pasha, an Islamic convert of Spanish

A modern warrior in chainmail shirt from the era of the Songhay Empire; Kano, Nigeria, 1965.

origin who was a eunuch. The decisive battle between the Moroccan and Songhai armies took place on 12 March 1591 near Tondibi, 48 kilometers north of Gao on the Niger River. The Songhai army suffered heavy losses and retreated across the Niger River, shielded by a courageous rearguard that fought to the death.

Askiya Ishaq II offered the Moroccan invaders 100,000 pieces of gold and 1,000 slaves on the condition that they leave Songhai and withdraw to Marrakech. When Sultan Mulay Ahmad heard that Jawdar Pasha was inclined to accept the peace offering, he replaced him with Mahmud Pasha, who fought and defeated Ishaq II late in 1591. Fleeing to the ancient Songhai homelands, Ishaq was deposed in favor of Muhammad Gao, who was later treacherously murdered by Mahmud Pasha. Under Nuh, a brother of Muhammad Gao, Songhai continued to resist the Moroccan occupation with guerrilla tactics. For two years they fought successful skirmishes against Mahmud Pasha and his troops. Failing to defeat Nuh, Mahmud finally gave up and returned to Tombouctou, but the Songhai were never able to recover their empire.

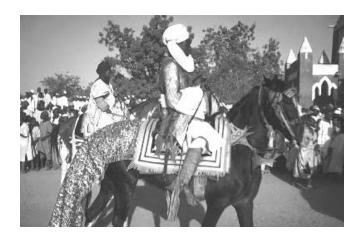
The Arma of Today's Mali

The Moroccan invaders established permanent garrisons in all the major cities of Songhai, including Gao, Tombouctou, and Jenne. The Arabic word for *shooter*, as the Moroccan musketeers were called, was *al-rumah*, so the occupying soldiers were called Ruma. Within a generation or so the Ruma lost their connection with Morocco, and by around 1700 there were few of their descendants who could speak Arabic. In the Songhai language Ruma evolved into Arma, the term by which the descendants of the Moroccan ruling elite came to be known. The Arma still form a social class in the cities of Jenne, Tombouctou, and Gao in the Republic of Mali.

David C. Conrad

Further Reading

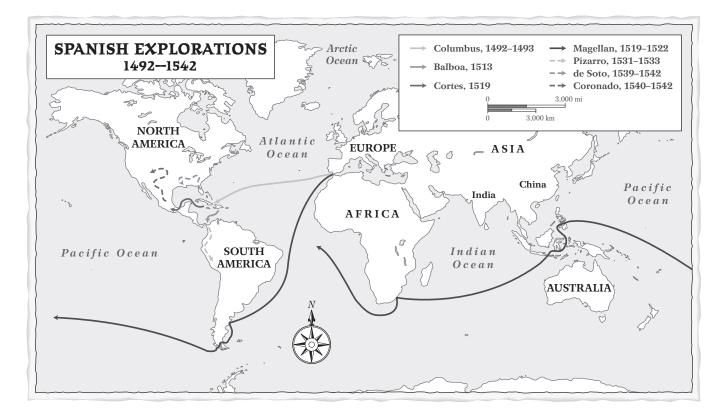
Farias, P. F. de M. (2004). Arabic medieval inscriptions from the Republic of Mali: Epigraphy, chronicles and Songhay-Tuareg history. London and Oxford, UK: Oxford University Press/British Academy.



- Gibbal, J.-M. (1994). Genii of the River Niger. Chicago: University of Chicago Press.
- Hale, T. A. (1990). Scribe, griot, and novelist: Narrative interpreters of the Songhay empire. Gainesville: University of Florida Press.
- Hunwick, J. (1999). Timbuktu and the Songhay empire: Al-Sa^cdi's Ta'rikh al-Sudan down to 1613 and other contemporary documents. Leiden, Netherlands: Brill.
- McIntosh, R. J. (1998). *The peoples of the Middle Niger: The island of gold.* Malden, MA: Blackwell Publishers.
- Saad, E. N. (1983). Social history of Timbuktu. Cambridge, UK: Cambridge University Press.
- Stoller, P. (1989). Fusion of the worlds: An ethnography of possession among the Songhay of Niger. Chicago: University of Chicago Press.
- Stoller, P., & Olkes, C. (1987). In sorcery's shadow: A memoir of apprenticeship among the Songhay of Niger. Chicago: University of Chicago Press.

Spanish Empire

he Spanish empire forms a crucial component of any L understanding of world history during the first global age (c. 1400–1800 CE). At its height, it extended around the globe; the activities of its officials and subjects, many of whom never set foot in Europe, established and maintained a significant number of the period's economic, political/military, and cultural networks; and its territories produced some of the most desirable products of global commerce. The concept of a "Spanish empire" has become increasingly controversial, however, because this entity never existed during the first global age in the sense of a political unit, Spain, that directed an overseas empire, created and retained for the benefit of the metropolitan center. Instead, before the early nineteenth century, a territorially huge, composite monarchy tied together under the rule of a single dynasty a variety of domains, which included the Crown of Portugal between



1580 and 1640. The accession of a new monarch, Charles IV (1748–1819), was still marked in Manila when the news finally arrived in 1790 with cheers of "Castile, Castile," and leaders of a newly constituted country of Spain only decided in 1837 to govern its remaining overseas territories by special laws.

Historiographical Controversies

Two types of ideological position drive most of the really contentious debates about the history of this composite monarchy. First, a large number of contemporary countries originated entirely or in part with the independence of its domains, and the resulting nationalistic historiographies, including that of the modern country of Spain, embody understandings of the putative empire. From their differing local perspectives, historians of each of the resulting nations pictured the empire in a manner that justified costly independence wars and explained serious nineteenth-century economic and political problems. Second, in order to construct a tidy narrative for a geographically messy subject, some historians present "Spain" in the first global age as a developing, centralized state, whose strength at any time was determined by its autonomy in formulating policy and its capacity to shape society, while others challenge this vision as a useful way to understand this monarchy's history.

The royal cosmographer Juan Bautista Muñoz (1745-1799) convinced the Crown to establish in 1781 the magnificent Archive of the Indies in Seville to preserve the record of the administration of the Hispanic monarchy's vast Castilian domains. In part because of this resource, historians have concentrated heavily on the monarchy's administrative networks involving the interactions among various court officials and councils and the royal viceroys, governors, high commissioners, judicial tribunals and justices, trade and taxation officials, and major municipal councils. The emphasis on administrative interactions produces a picture of a system much more unitary and under the control of royal authority than was ever true. A different impression emerges when greater attention is devoted to connections between locations that involved lineage networks, the regular orders or church administration, the investors, managers, and workers (slave and free) who developed agricultural and mineral resources, the merchants who organized vast commercial networks in the face of incredible obstacles, and the massive world of fraud and clandestine networks of production and smuggling. The roles of women have only been made somewhat visible in the last few decades. In general

15th Century	Portuguese knights capture Cueta in North Africa from the Muslims.
	Columbus "discovers" the Americas for Spain and colonies are established in the Americas.
	Portugal claims Brazil under the Treaty of Tordesillas.
	Vasco da Gama of Portugal discovers an all-sea route to India.
16th Century	Portugal dominates the maritime trade in South and Southeast Asia.
	The Pacific Ocean is "discovered" by Vasco Nuñez de Balboa of Spain. Spain claims the Philippines.
	The Habsburg ruling house of Europe comes to power.
	France establishes a presence in West Africa.
	Portugal's dominance in East Africa and Asia begins to decline.
17th Century	The English, Dutch, and French charter trading companies.
17TH CENTURY	The English settle Jamestown in Virginia.
	France establishes colonies in North America and the Caribbean.
	Russia colonizes Siberia.
10 0	
18th Century	France loses American colonies and territory to England and Spain.
	The English lose control of their American colony.
	The Dutch Republic becomes a colonial power with the abolishment of its private trading companies.
	The Dutch begin to lose most of their colonies to the British.
	The Spanish empire declines.
	By the time of the Treaty of Paris in 1763, England has become the dominant European colonial power.
19th Century	France under Napoleon regains territory in the Americas.
	Haiti gains freedom from France through a slave revolt.
	Brazil declares independence from Portugal.
	Slavery is abolished by all imperial powers.
	The Habsburg empire is transformed into the Austro-Hungarian empire.
	The German empire is established after the Prussian defeat of France.
	Russia colonizes Poland and Finland, the Caucasus, and Central Asia.
	England, France, Spain, Portugal, Belgium, Germany, and Italy solidify their colonie in Africa.
20th Century	European control of its African colonies intensifies.
	World War I starts when the Austro-Hungarian government declares war on Serbia.
	The end of World War I marks the end of the Austro-Hungarian empire and the German empire.
	Britain and France gain trust territories in Asia.
	The British Commonwealth of Nations is created.
	During World War II Japan takes Asian colonies from Britain, France, and the Netherlands.
	Following the end of World War II, the British, French, Dutch, and Portuguese empires shrink as many former colonies become independent nations.
	The Comunidade dos Países de Língua Portuguesa (CPLP) unites eight Portuguese- speaking nations.
	The Russian-Soviet empire disintegrates.



terms, research on the domains of other Iberian Crown governments remains more poorly developed than that on Castile.

The Domains of the Hispanic Monarchy

The traditional chronological limits for the history of this composite monarchy are the marriage in 1469 of two first cousins, the "Catholic monarchs" Ferdinand and Isabella of Trastámara, and the defeat at Ayacucho (modern Peru) of the last Bourbon army in the continental Americas on 9 December 1824. In between, the territorial extent of the monarchy's realms varied a great deal, and events continuously influenced the patterns of interactions among its domains and at times could inflect them significantly. Isabella (1451–1504) inherited the crown of Castile, which already included the Canary Islands, on her brother's death in 1474, and Ferdinand (1452-1516) obtained the crown of Aragón when his father died in 1479. The Crown of Aragón was a composite monarchy consisting of the kingdoms of Aragón and Valencia and the principality of Catalonia in the Iberian Peninsula, the counties of Cerdanya and Rosselló north of the Pyrenees, and the island kingdoms of Majorca, Sardinia, and Sicily. After a decade of fighting, the Muslim emirate of Granada surrendered on 2 January 1492 and became a Castilian domain. Ferdinand added the kingdom of Naples to the Aragonese domains when the ruling Trastámara branch died out in

A Spanish traveler carved this message in a canyon wall in central New Mexico in 1709.

1504, and in 1512, he conquered the Iberian kingdom of Navarre, which he added in 1515 to the Crown of Castile. By this time, Castile's domains had expanded significantly in the Caribbean region as a result of the four expeditions of Christopher Columbus (1451–1506) and those of adventurers drawn to the region in search of wealth.

Isabella's death brought to the Castilian throne her daughter Joanna (1479-1555) and Joanna's husband Philip of Habsburg (1478–1506), son of the Holy Roman Emperor Maximilian I (1459-1519) and ruler of the Low Countries and the Franche-Comté on the west bank of the Rhine. Due to Joanna's signs of mental illness and the growing political instability after death removed Ferdinand as Aragonese ruler and Joanna's regent in Castile, her elder son with Philip, Charles of Habsburg (1500-1558) became joint ruler of the Iberian Crowns. When his grandfather died, Charles was elected Holy Roman Emperor as Charles V, which united the destinies of the Crowns of Aragón and Castile, the realms of the Habsburg Rhine and Low Countries, and the dynasty's holdings in Central Europe, although the latter would eventually be ceded to Charles's younger brother Ferdinand.

Expansion During the Reign of Charles V (1516–1556)

Charles's Castilian territory expanded enormously with the defeat of the Aztecs in 1521, the beginning of Inca subjugation in 1532, and a series of long voyages intended to turn the vast Pacific Ocean into a Castilian zone from the Americas to the Philippine Islands. Regions of the viceroyalties of New Spain, with its capital at Mexico City, and Lima would eventually produce about 80 percent of the world's silver, for which demand was particularly high in China and South Asia. After the death of the Milanese ruler Francesco Sforza, Charles gained a major financial and production center when he took control of the Duchy of Milan, and he continued the efforts, begun in 1497 with the conquest of Melilla, to add North African enclaves.

The terrible destruction of American peoples by epidemic diseases, war, the collapse of complex economic

Aztec Suffering

This poem was written by Aztec survivors of the Spanish Conquest. In it they lament their suffering.

Flowers and Songs of Sorrow

Nothing but flowers and songs of sorrow are left in Mexico and Tlatelolco, where once we saw warriors and wise men. We know it is true that we must perish, for we are mortal men. You, the Giver of Life, you have ordained it. We wander here and there in our desolate poverty. We are mortal men. We have seen bloodshed and pain where once we saw beauty and valor. We are crushed to the ground; we lie in ruins. There is nothing but grief and suffering in Mexico and Tlatelolco, where once we saw beauty and valor. Have you grown weary of your servants? Are you angry with your servants, O Giver of Life? Source: Leon-Portilla, M. (1990). Border Fears (p. 149). Boston: Beacon Press.

and political regimes, and harsh conditions of forced labor motivated the Dominican friar Bartolomé de Las Casas (1474–1566) and other Iberian authors to develop sophisticated ideas about economic policy, constitutional thought, human rights, and international relations. These would provide an important intellectual context for the eighteenth-century development of distinctive American identities and of the Liberal constitutionalist movements that would do much to reshape world political history in the second global age.

Revolt, Expansion, and Rivalry

Subsequent developments within the global monarchy were shaped in fundamental ways during the reign of Charles's son Philip II (1527–1598) by the revolt that began in the late 1560s in his Low Countries domains, the organization of Manila in the Philippine Islands as a connecting point between American silver production and the enormous Chinese appetite for this product, and by Philip's successful assertion in 1580 of his claim through his mother to the throne of Portugal, as Philip I. From the Dutch rebellion and resulting eighty years of military conflict to 1648, the United Provinces of the Netherlands emerged as a potent commercial and political opponent, and by the mid-seventeenth century, Amsterdam had become the financial center of European activity in the world economy. The emergence from 1571 of regular commercial interactions between Acapulco and Manila gave the Castilian government broader interests in the vast Pacific region and produced significant flows of Chinese immigrants, merchants, and products toward the Philippines. The crown of Portugal brought with it not only rule over Castile's neighboring Iberian kingdom but even more significantly, over Portugal's extensive non-European domains.

The European and Mediterranean wars of Charles V and Philip II placed great pressure on the Habsburg dynasty's financial resources. The long, fragile commercial links among Hispanic global domains and the monarchy's role as the military bastion of reformed Roman Catholicism made Castilian and Portuguese positions in the global economy attractive targets for intervention and attack by the Dutch, English, and French Protestants. During the reigns of Philip's son and grandson, Philip III (1578–1621) and Philip IV (1605– 1665), matters deteriorated further. The Dutch East



The central square with cathedral and government buildings of Spanish design in Guanaxuato, Mexico.

India Company (Verenigde Oost-Indische Compagnie, or VOC) used methods similar to those of the Portuguese to secure important chunks of the European share of Indian Ocean and East Asian commerce, and other Dutch commercial interests asserted increasing control over another significant component of the global economy, the Atlantic slave trade. Moreover, the Dutch took over the sugar-producing regions of northeastern Brazil and gained footholds in the Caribbean and North America. English and French groups also became more active on a global scale in the wake of such dramatic Dutch successes. The contraband trade, always important from the beginning of the global economy, increased notably everywhere as merchants and officials sought to avoid arbitrary royal seizures of bullion and other goods and a Crown fiscal and monetary regime oriented exclusively toward military commitments too extensive for the Hispanic monarchy to fulfill.

In addition to the Dutch war, the monarchy found itself embroiled with the revived French monarchy under the Bourbon dynasty in contests that would eventually cost it the Aragonese domains north of the Pyrenees, the Franche-Comté, and some territory in the southern Low Countries. European conflict focused, however, on the terrible Thirty Years War (1618-1648), which centered on the Holy Roman Empire, whose Habsburg emperors were the cousins of the Hispanic rulers. Faced with weakened elite support, riots, evasion, and fraud everywhere, the government of Philip IV's favorite, the Count-Duke of Olivares (1587–1645), pulled ever more administrative functions toward Crown institutions and officials in Madrid, further alienating those elsewhere and making it increasingly difficult to achieve royal aims in the face of widespread disobedience. The most damaging manifestations of discontent surfaced in 1640 when the Iberian Habsburg dynasty was confronted with rebellions in Catalonia, which it would only recover in 1653, and Portugal, whose independence under rule by the Braganza dynasty would be conceded in 1668 when Philip IV had been succeeded by a sickly infant who reigned as Charles II (1661–1700).

The Bourbon Dynasty and American Independence

When Charles II finally died without direct heir, a genuinely global war began, to decide whether the Hispanic monarchy would be ruled by a member of the Austrian branch of the house of Habsburg or of the French Bourbon dynasty headed by king Louis XIV (1638–1715). The long War of the Spanish Succession was finally ended by the Treaty of Utrecht in 1713, which awarded the throne to Philip V (1683–1746) of Bourbon, Louis XIV's grandson, but stripped away control of the southern Low Countries and the Italian domains, except Sardinia (Naples and Sicily would later be recovered by the dynasty). For more than a century, Creole elites in the Americas and Philippines gained greater control and influence over royal and church offices and institutions, often in violation of existing statutes, and especially after the monar-

chy's difficulties during two major world wars of the mid-eighteenth century (1740–1748 and 1756– 1763), in the latter of which the British captured Havana and Manila in 1762. Bourbon ministers felt that these domains required greater supervision and that their economies needed to be transformed in order to produce more revenue for their defense.

Wealthy Creoles were squeezed out of Crown administrative positions by peninsular appointees, excise taxes were levied on widely consumed products, and labor controls over indigenous peoples were challenged in order to bring them into a money economy in which their purchases could be taxed. Rather than play its traditional role of assisting Creole elites to maintain their disproportionate share of production and political authority, the Crown was increasingly seen by many of them as an arbitrary, destabilizing entity, especially after significant uprisings of Native Americans, urban plebeians, and African slaves appeared to confirm Creole claims that Bourbon policies placed control by the "civilized" minority in jeopardy. British maritime successes during conflicts with revolutionary France exposed the weak connections between Madrid and the monarchy's overseas domains. Napoleon's imposition in 1808 of his brother as Spain's ruler occasioned independence uprisings in the Americas, and the restored Bourbon monarch Ferdinand VII (1784-1833) faced too much postwar poverty and political turmoil in his peninsular domains to hang on to more than Cuba, Puerto Rico, and the Philippines.

Research Challenges

Although the legal and administrative regimes of the various Hispanic domains influenced the histories of each, economic, religious, subaltern, and clandestine interactions created alternative stories every bit as decisive



Hernando Cortes (1485 -1547), conquerer of the Aztec and Mexico.

in forming the complex reality of such a vast territorial conglomerate as the Hispanic monarchy. In the end, the histories of each place were fundamentally shaped by their shifting relationships with other constantly changing locations, and until researchers develop the means to integrate such multivariate and multidimensional interactive webs, we will not approach an adequate grasp of the processes driving the history of this monarchy or the world within which it was deeply integrated during the first global age.

J. B. Owens

See also Isabella I; Magellan, Ferdinand; Mesoamerican Societies

Spain's "Just Title" to the Indies

Francisco de Vitoria (d. 1546) was a Spanish theologian who wrote on concepts that became a foundation for early international law. Here he outlines Spain's "just title" to the Indies.

- The Spaniards have the right to travel in the countries in question and to live there, provided they do no harm to the natives and the natives do not seek to prevent them... in which case the Spaniards may justly wage war against them... this would be the first title which the Spaniards might have for seizing the provinces and sovereignty of the natives.
- 2. The Spaniards have the right to preach and declare the gospel in barbarian lands. If war were necessary to achieve this just end, it should be waged with moderation and a sense of proportion.... And with an intent directed more to the welfare of the aborigines than to their own gain.... This would be a second lawful title whereby the Indians might fall into the power of Spain.
- 3. If the Indian princes attempt to force any of the converted aborigines to return to idolatry, this would constitute a third title.
- 4. The Pope may give converted Indians to a Christian sovereign and dethrone infidel rules,

with or without petition from the Christians. This would be another title by which Spain might acquire just sovereignty over the New World....the Pope may, in the interest of the Faith and to avoid danger, exempt all Christians from obedience and submission to infidel rulers.

- 5. The Spaniards may intervene and dethrone rulers, if necessary, to rescue innocent people from an unjust death, such as cannibalism.
- 6. True and voluntary choice by the Indians of the Spaniards as rulers would be a sixth title.
- 7. The Spaniards could justly take up the cause of allies and friends . . .
- 8. The Spaniards might assume the burden of a mandate to fit the natives for admission to the international community upon a basis of equality...it might be maintained that in the natives' own interests the sovereigns of Spain might undertake the administration of their country, providing them with prefects and governors for their towns, and might even give them new lords, so long as this was clearly for their benefit.

Source: Hanke, L. (1949). The Spanish struggle for justice in the conquest of America (pp. 151–152). Philadelphia: University of Pennsylvania Press.

Further Reading

- Altman, I. (2000). Transatlantic ties in the Spanish empire: Brihuega, Spain, and Puebla, Mexico, 1560–1620. Stanford, CA: Stanford University Press.
- Bakewell, P. (1997). A history of Latin America: Empires and sequels, 1450–1930. Malden, MA: Blackwell Publishers.
- Burkholder, M. A., & Johnson, L. L. (2001). Colonial Latin America (4th ed.). New York: Oxford University Press.
- Cañizares-Esguerra, J. (2001). How to write the history of the new world: Histories, epistemologies, and identities in the eighteenth-century Atlantic world. Stanford, CA: Stanford University Press.
- Díaz-Trechuelo, L. (2001). Filipinas: La gran desconocida (1565–1898) [Philippines: The great unknown (1565–1898)]. Pamplona, Spain: Ediciones Universidad de Navarra.
- Elliott, J. H. (1989). Spain and its world, 1500–1700: Selected essays. New Haven, CT: Yale University Press.
- Flynn, D. O., Giraldez, A., & von Glahn, R. (2003). Global connections and monetary history, 1470–1800. Aldershot, UK: Ashgate.
- Frank, A. G. (1998). ReORIENT: Global economy in the Asian age. Berkeley: University of California Press.

Herzog, T. (2003). Defining nations: Immigrants and citizens in early mod-

ern Spain and Spanish America. New Haven, CT: Yale University Press.

- Hillgarth, J. N. (2000). *The Mirror of Spain*, 1500–1700: *The formation of a myth*. Ann Arbor: University of Michigan Press.
- Israel, J. I. (1997). Conflicts of empires: Spain, the Low Countries and the struggle for world supremacy, 1585–1713. London: Hambledon Press.
- Kamen, H. (2003). Empire: How Spain became a world power, 1492– 1763. New York: HarperCollins.
- MacLachlan, C. M. (1988). Spain's empire in the New World: The role of ideas in institutional and social change. Berkeley: University of California Press.
- Phelan, J. L. (1967). The kingdom of Quito in the seventeenth century: Bureaucratic politics in the Spanish empire. Madison: University of Wisconsin Press.
- Ringrose, D. R. (1996). Spain, Europe and the "Spanish miracle," 1700– 1900. New York: Cambridge University Press.
- Santaella Stella, R. (2000). Brasil durante el gobierno español, 1580– 1640 [Brazil during the Spanish government, 1580-1640]. Madrid, Spain: Fundación Histórica Tavera.
- Stein, S. J., & Stein, B. H. (2000). Silver, trade and war: Spain and America in the making of early modern Europe. Baltimore: Johns Hopkins University Press.

- Subrahmanyam, S. (1993). The Portuguese empire in Asia, 1500–1700: A political and economic history. London: Longman.
- Valladares, R. (2001). Castilla y Portugal en Asia (1580–1680): Declive imperial y adaptación [Castile and Portugal in Asia (1580-1680): Imperial slide and adaptation]. Louvain, Belgium: Leuven University Press.
- Weber, D. J. (1992). *The Spanish frontier in North America*. New Haven, CT: Yale University Press.

Spice Trade

Sive luxury products and highly valued for their preservative, medicinal, and aromatic qualities. The spice trade holds a special place in the history of world trade in late medieval times and the early modern period, because spices were an important motive for the expansion of the trade between Europe and Asia.

Five spices have dominated the world trade—pepper, cinnamon, cloves, nutmeg, and mace—and all of them were grown in Asia. Pepper came from Southwest India (called the Malabar coast in the seventeenth century), Sumatra, Java, and Borneo. Cinnamon was exclusively grown in the coastal lands of Sri Lanka. Cloves, nutmeg, and mace came from a number of islands in the Eastern part of the Indonesian archipelago. Cloves grew on the Maluku islands of Ternate, Tidore, Makian, Motir, and Bacan. Nutmeg and mace, its derivative, came only from the five tiny Banda Islands.

Before 1500 there were already some important entrepôts, such as Melaka, Calicut, Hormuz, and Aden, that supplied consumer markets in China, India, and Europe. Asian consumption outranked European in these years: The Indian consumption of fine spices was twice that of the European, and Chinese markets absorbed 75 percent of the Asian pepper production. Spices reached Europe via the Persian Golf and the Red Sea and the caravan routes via Smyrna, Aleppo, and Alexandria, where merchants from Venice, Genua, and Marseille bought these exotic Asian products. This trade system would be greatly undermined by the Portuguese, who found the seaway to Asia just before 1500.

The Portuguese success was detrimental to Venice and for some time it looked as if Lisbon would eliminate Venice as a spice-trading port. But the Portuguese trade slumped in the middle of the sixteenth century, which enabled Venice to restore part of its former position. Pepper was by far the most import of all the Asian products that the Portuguese carried home on their ships, making up about 60 percent of the cargo. The last decade of the sixteenth century, when Dutch and English merchants launched a trade offensive in order to drive the Portuguese out of the European-Asian trade, marked the beginning of a new era in the spice trade. Merchants in London founded the English East India Company in 1600; merchants in the Netherlands followed shortly after and constituted a United Dutch East India Company (Verenigde Oost-Indische Compagnie, VOC) in 1602.

As a result the old trade route via the Levant no longer played a role and all pepper and fine spices from Asia reached Europe via the sea route along the Cape of Good Hope. In 1619, the English and the Dutch companies formed a cartel in an effort to control the spice trade in the Indonesian archipelago. Soon after this agreement, however, Anglo-Dutch relations in the East were disturbed again. The Dutch, resolute and ruthless in their actions, succeeded in establishing a world monopoly in the fine spices. First they conquered the Banda islands (1621); then they killed or deported the local population and replaced them by workers who grew the nutmeg trees in plantations. Later they succeeded in ousting all their competitors from the Maluku Islands and concentrated the cultivation of cloves on Ambon. In 1658, the VOC drove the Portuguese from Sri Lanka and thus gained a world monopoly in cinnamon.

The VOC never had a monopoly in pepper—the market for pepper was much larger than the market for other spices and the production areas much more widespread. The Dutch directors estimated the yearly consumption in Europe at about 7 million pounds, and by 1688 it probably increased to around 9 million pounds. It was beyond the power of any company to control this market completely, but the VOC was the most important player and did control some of the production areas.

Spices: Where They Originated

Туре	Location
<i>Allspi</i> ce	Jamaica
Anise seeds	Greece and Egypt
Caraway seeds	Europe and Asia
Cardamom	India
Cayenne pepper	Mesoamerica
Celery seed	Italy
Chili	Mesoamerica and South America
Cinnamon	Sri Lanka and India
Cloves	Southeast Asia
Coriander seeds	Southern Europe and West Asia
Cumin seeds	North Africa
Ginger	Southeast Asia
Mustard seed	Mediterranean
Nutmeg	Indonesia
Paprika	South America
Peppercorns	Asia
Poppy seeds	West Asia
Saffron	Asia
Star Anise	China
Turmeric	Southeast Asia
Vanilla beans	Mesoamerica

Managing the monopoly of the fine spices became a central part of the policy of the directors of the VOC. They showed some remarkably modern features in their trade policy. For example, in the first half of the seventeenth century the company sometimes paid its dividends in cloves—partly motivated by the notion that distributing cloves on a wider scale would stimulate consumption. The monopoly urged the establishment of a price policy in Asia. They wanted sales prices in India, for instance, to be high enough to make it unattractive for European rivals to buy spices there and ship them to Europe, which would undercut the VOC monopoly in Europe. On the other hand, they didn't want prices to be so high that Indian consumers would try to find alternative ingredients. In Europe, measures were taken to ensure that the advantage of the monopoly would not fall into the hands of the merchants who bought these spices on the yearly auctions. There was a risk that these merchants would drive up consumer prices in the period between the auctions to such a high level that consumption would decrease. Therefore the directors built up large stocks of spices in Europe, which enabled them to withdraw the spices from the auctions and to set a fixed price.

Monopoly spices remained an important and profitable item for the VOC until the very end of its existence in the final decades of the eighteenth century, and they provided a base for the Dutch company to include new trade articles in the European-Asian trade that its European rivals lacked. Several factors were responsible for the decreasing export of spices to Europe after 1700, but the loss of volume was compensated by higher prices, making spices in the eighteenth century even more exclusive than they had been.

Around the 1770s the French tried to cultivate cloves and nutmeg on the isle of Mauritius, but these efforts largely failed and were not a threat to the Dutch monopoly. It was only after 1800 that the spices from the Malukus were grown in other parts of the world—cloves on the east coast of Africa (Zanzibar) and nutmeg in the West Indies (notably Grenada). By then spices had lost their special position and become a minor article in world trade, and by 2000, the total volume of spices traded (with pepper still the most important) was only 10 percent of the world's coffee trade.

Femme Gaastra

See also Dutch Empire

Further Reading

Disney, A. R. (1978). Twilight of the pepper empire: the Portuguese trade in Southwest India in the early seventeenth century. Cambridge, MA: Harvard University Press. Gaastra, F. S. (2003). *The Dutch East India Company. Expansion and decline.* Zutphen, Holland: De Walburg Pers.

Pearson, M. N. (Ed.). (1996). Spices in the Indian Ocean world. In An Expanding World (Vol. 11). Aldershot, UK: Variorum.

Rosengarten, F. (1996). The Book of Spices. New York: Pyramid.

Sports

r porting activity is grounded in human physiology and \bigcirc a love of movement that all humans share at birth and embrace throughout life. This is demonstrated by the popularity of such recreational pursuits as walking and swimming, and by a wide variety of physical pastimes, such as hunting, fishing, skating, skiing, and sailing. The word *sport* derives from the Middle English word *disport* meaning to frolic, play, or amuse oneself. In modern usage, however, sport includes the elements of competition, physical prowess, and rules. In this sense sport mainly refers to organized activities such as cricket, basketball, or soccer and excludes recreational activities such as walking or hunting. It also leaves out games such as bridge, chess, or poker. A broad definition of sport includes recreational activities and games, but a narrower definition limits sport to athletics of a competitive nature.

It is helpful to think of sports as a form of cultural expression that reflects a culture's history and character. As with other performed forms of cultural expression, sports appeal to the emotions and to aesthetics. Moreover, as with all arts, larger issues of society involving economics, politics, technology, religion, architecture, and social questions can be observed in the circumstances of sports. As the social historian Jacques Barzun observed in 1954, "Whoever wants to know the heart and mind of America had better learn baseball, the rules and realities of the game—and do it by watching first some high school or small town teams" (Barzun 1954, 159). Sports sociologist D. Stanley Eitzen has updated this observation: "Baseball, then, represents what we were-an inner-directed, rural, individualistic society. It continues to be popular because of our longing for the peaceful past" (Eitzen 1996, 23).

There is no evidence that sports are necessary for human existence. Although a particular sporting contest If you must play, decide on three things at the start: the rules of the game, the stakes, and the quitting time. • CHINESE PROVERB

might enflame passions and spark a riot, there are no instances of sports starting or ending wars. Two world wars, a cold war, and numerous regional conflicts, for instance, have occurred during the time of the modern Olympic Games. Sports do not drive the economies of the world, nor do they determine foreign policy, and there is no quantifiable evidence that they are necessary in schools. There exists much anecdotal testimony, however, about the usefulness of the arts, including sports, for creating multidimensional, interesting individuals. Athletic events, for example, prompt conversations that cut through all divisions of society, and sports metaphors sprinkle the language: "on target," "level playing field," "sticky wicket," "throw in the towel." Sports are a universal phenomenon that can be found with all peoples and in all times, and they invite cross-cultural comparisons to help ascertain what it means to be human.

Influences on Sports

Geography, vocation, religion, entertainment, Eros, and warfare have all influenced sports. It is easy to see the general influence of geography: People in cold climates invented skiing and ice skating, for example, and those bordering water were interested in boating and swimming. Hot, desert climates cautioned against excessive exposure of the body. As far back as the fifth century BCE, the Greek historian Herodotus noted that people in the Middle East kept themselves covered and thought nudity was shameful. On a more intimate level, geography involves the location of stadiums or sports venues and their influence on people's lives. Ancient Greeks valued their *gymnasion* for physical and intellectual stimulation, for example, and modern U.S. universities make room for stadiums on their campuses.

Vocation has inspired sports such as the rodeo, in which cowboys show off their skills at roping, branding, and bronco busting. Religion was significant in the ball games of the Maya and the bull jumping of the Minoans, and has been a source of inspiration for modern athletes. Sports for entertainment can be seen in the crowd scenes in the temple carvings at Nineveh, in the friezes of ancient Egypt, and in the contemporary phenomenon of ESPN, a television channel dedicated to twenty-four-hour sports



broadcasts. More evidence can be seen in the ruins of Greek and Roman hippodromes, built for chariot races; and the ruins of Roman arenas, built for gladiator fights. These are comparable to the new stadiums U.S. cities build in order to attract "big league" sports teams.

The erotic nature of sports has been a taboo subject, but is explicit in the art of ancient Greece, particularly on the trade pottery decorated with active, naked athletes. Ancient Egyptians painted nude acrobats and athletes on their tomb walls. Modern sports such as figure skating, gymnastics, swimming, diving, and body building, all of which expose the human body, possess an unspoken but obvious erotic aspect.

The most important inspiration for sports, however, has been warfare. In the ancient Olympic Games (776 BCE–393 CE) most of the skills tested by the events had fighting applications. Javelin throwing was one of the most apparent, but the contestants also ran, jumped, boxed, wrestled, threw a discus, raced chariots, and rode horses. One of the most popular events was the *pankration*, a combination of wrestling and boxing with almost no holds barred. The two combatants fought until someone surrendered. In 564 BCE Arrachion, a pankrationist, while being strangled in a bout, won by dislocating his opponent's toe. Arrachion died, but the judges crowned

his corpse with the olive wreath of victory. The final event of the ancient games was a running race in which the men wore armor and carried a shield, a concluding tribute to the importance of warfare in sports.

The influence of combat can also be seen in Native American contests. Eastern Woodlands Indians played a ball game that was the prototype of lacrosse. The artist George Catlin (1796–1872) observed a Choctaw match in the 1830s in which some six to seven hundred players tried to throw a small ball through goals placed approximately 250 meters apart. They used a meter-long stick with a netted hoop on the end to catch and hurl the ball without touching it. There was a great deal of running, yelling, hitting in the face and shins, and fighting until a hundred goals were scored. Afterward the winners claimed their wagers, everyone took a drink of whiskey, and the Indians returned home. They called their game *baggataway*, which translated into "little brother of war."

Sports in the Premodern World

During the years of the Middle Ages in Europe (500– 1500), the upper class sponsored tournaments to keep sharp the fighting skills of the knights, while the lower classes practiced archery. For pastimes, the elite hunted



on horseback with falcons and played shuffleboard in their castles, while the peasants pursued crude games of football between villages, as well as bowling, field hockey, and games of quoits in the stables. Archery was a sport for the

In the late twentieth century basketball became one of the most popular sports around the world. Here, young men in Shanghai, China, in 2003 play in a basketball tournament.

Indigenous Sports at the Asia Games

While many global sports such as basketball and football (soccer) developed in the west and then diffused elsewhere, some went in the opposite direction. One example is the sport called footbag in the West that derived from the Southeast Asian village sport of sepak takraw. The following describes the game as played in Burma in the 1800s.

A very common amusement amongst Burmans, rarer amongst Talaing and still rarer amongst Kareng, is a game of ball called *khyee-loon*. The ball is made of open wicker-work and is struck with the sole of the foot, the elbow or any part of the body except the toes and hands. There are no sides but half a dozen lads or men join and standing in a ring endeavor to keep the ball off the ground, any one near whom it descends striking it upwards.

Source: Gazetteer of Burma (p. 394). (1883). New Delhi: Cultural Publishing House

yeomanry of England and a passionate activity for the urban bourgeoisie of western Europe.

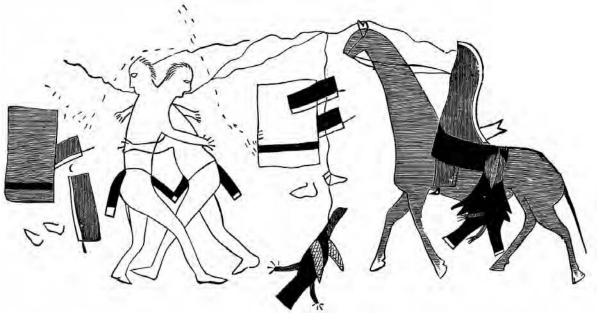
Marco Polo, traveling in Asia, recorded a large, monthlong hunting expedition by Khubilai Khan in 1275 that included members of the court, family, and administrative officers using elephants, hunting dogs, horses, and ten thousand falconers to capture herons, swans, storks, and other game. The elite also played a form of polo, a horse game known from the Middle East to the Far East. Chinese court women played astride donkeys or ponies. Other Chinese, both men and women, played *cuju*, a game like soccer that utilized a ball stuffed with hair, and also enjoyed a game reminiscent of the present-day sport footbag (often called Hacky sack, after one manufacturer's brand of footbag): People in a circle tried to kick a small deerskin ball in the air. People in Asia, moreover, practiced varieties of martial arts for personal discipline and defense after the invention of martial arts in the sixth century. Sports in precolonial sub-Saharan Africa are less well known, but there are examples of canoe races and, of course, wrestling, a sport that seems to have been universal throughout Africa.

Modern Sports

Modern sports evolved mainly in the West during the time of the industrial and scientific revolutions, and the demographic surge of population from the countryside to the city. The British sociologists Norbert Elias and Eric Dunning and the U.S. historian Allen Guttmann have analyzed the differences between premodern and modern sports that accompanied this major societal shift. Elias and Dunning developed a theory about a "civilizing process" whereby people learned to control emotion and aggression in sports to reduce injury. Examples of the civilizing process include the adoption of gloves in boxing. Guttmann developed a list of distinguishing characteristics of modern sport: secularism, equality (equal rules for all participants), bureaucratization (organizational control), specialization (specific positions and roles played in a game), rationalization (rules and training for efficient skills), quantification (an emphasis upon measurement by numbers), and record keeping. Other historians have added the use of publicity and public announcements to the list. This definition of modern sports is widely accepted by sports historians. The process of adopting these characteristics is sometimes called "sportification."

Western sports spread globally as a result of individual enthusiasm, Christian missionary work, sports organizations, military occupation, and the Olympic Games. Soccer, the world's most popular sport, began as a game in British boys' schools in the mid-nineteenth century. It spread to Europe, Africa, and South America through transplanted British schoolmasters, traveling students, interested businessmen, posted soldiers, and visiting sailors. Soccer and cricket, another British sport, spread throughout the British empire, supported by the colonial administrations and by the British army, which used sports to forestall boredom and promote physical conditioning.

In some cases, enthusiasts helped spread sports. This was the case with baseball, as when A. G. Spalding (1850–1915), a professional baseball player and later manager and eventually president of a baseball team, sent teams abroad to promote the sport. The Marylebone Cricket Club, the arbiter of cricket, dispatched touring teams to Australia that eventually resulted in a biannual international match called the Ashes.



A Native American pictograph depicting a wrestling match.

Christian missionaries inspired by "muscular Christianity," a pedagogy that combined sports and religion to produce moral people, also took Western sports into Africa and Asia. The muscular Christian mentality helped to spread the sports of table tennis, tennis, track and field, soccer, and basketball. Most significant of these missionary organizations was the nonsectarian Young Men's Christian Organization (YMCA), an organization founded in London in 1844 that was particularly active from 1850 to 1920. It established branch associations in cities around the world that promoted Christianity and athletics. It commonly constructed pools to teach swimming and gymnasiums to teach basketball and volleyball, games invented by YMCA instructors. James Naismith (1861–1939) put together, tested, and refined the rules of basketball in 1891; the game was not only popular in the YMCA, but also in school systems. In terms of numbers of participants and fans, basketball, along with soccer, became one of the most widespread sports in the world.

Because of the lack of comparable statistics it is difficult to measure the most popular modern sports, but in terms of the quantity of national sports organizations dedicated to a particular sport, the leaders are soccer, basketball, tennis, track and field, and volleyball. To a lesser extent American football, cricket, baseball, rugby, skiing, boxing, judo, car racing, cycling, swimming, and table tennis can be included. From that list a bias toward sports that originated in the West is evident. A major exception is judo, which was synthesized by Jigoro Kano in Japan from several schools of unarmed combat in the last part of the nineteenth century. Judo became popular as a participant sport after World War II, adopted the characteristics of modern sports, and became a part of Olympic competition in 1964.

The Modern Olympic Games

Although well-known transnational sporting contests include the America's Cup in sailing (1857), Davis Cup in tennis (1900), Ryder Cup in golf (1927), Asian Games (1951), Commonwealth Games (1930), and World Cup in soccer (1930), the most important event for the globalization of sport has been the quadrennial Olympic Games that began in 1896. It was the dream of the Frenchman Baron Pierre de Coubertin (1863–1937) to promote world peace through sports competition and a revival of the ancient Olympic Games. He persuaded seventy-eight delegates from nine nations at a meeting at the Sorbonne in Paris in 1894 to support the idea, and the first meeting took place in Athens. Although the statistics are in question, the first games seem to have involved 311 athletes from 13 nations performing for 70,000 spectators. The Olympic Games have persisted since 1896, although they were not held during World War I or World War II, and they were disrupted by major boycotts in 1980 and 1984.

Sports and music have become the universal languages. • PHILIP H. KNIGHT (B. 1938)

The Olympics have been a showcase for the world's best athletes and for rivalries between political ideologies. The Cold War antagonism between the United States and the Soviet Union reflected in the games between 1952 and 1992 resulted in technological improvements in equipment, venues, and training, the erasure of the amateur code that had hitherto excluded professional athletes, and the acceleration of female participation in sports. Title IX of the United States' Educational Amendments Act of 1972, which ordered equal treatment for female athletes in schools, was instituted in large part so U.S. female athletes could compete more successfully against Soviet bloc female athletes in athletic competitions.

Commercialization of Sports

The commercialization of sports, driven by the fantastic amounts of money produced by advertising on televised events, has created international stars such as boxing wit Mohammad Ali (b. 1942), basketball wizard Michael Jordan (b. 1963), and soccer phenomenon David Beckham (b. 1975). Their endorsement of products has helped to create an international market for sports equipment, affected labor markets in Asia, and enhanced the growth of companies such as Nike that market the majority of sport-



This Japanese woodcut from 1877 shows a British-style polo match.

ing gear and equipment in the global market. Professional sports stars have thus become an international commodity.

One disturbing aspect of international competition has been the increasing use of performance-enhancing drugs, a trend that started with Soviet weightlifters in 1952. Illegal drug use was carried to an extreme by East Germany until the disintegration of the Soviet bloc in 1991, and it has been continued in a systematic way in China. Performance enhancement with anabolic steroids, testosterone, human growth hormone, and possible gene alteration, however, is not limited to China; it has spread worldwide and penetrated to the lower ranks of athletes. The use of such drugs threatens the fundamental concept of fair competition and reaches beyond athletics to raise a question about changes in human physiology that may even affect the definition of a human being. How this problem is addressed will have a profound effect on the future of competitive sports.

David G. McComb

See also Games; Leisure

Further Reading

- Baker, W. J. (1988). Sports in the Western world. Urbana: Illinois University Press.
- Barzun, J. (1954.). God's country and mine (p. 159). New York: Vintage Books.
- Eitzen, D. S. (1996). The structure of sport and society. In Sport in contemporary society: An anthology (5th ed.) (p. 23). New York: St. Martin's Press.
- Guttmann, A. (1994). *Games and empires*. New York: Columbia University Press.
- Levinson, D., & Christensen, K. (Eds.). (1996). Encyclopedia of world sport. Santa Barbara, CA: ABC-CLIO.
- McComb, D. G. (1998). *Sports: An illustrated history*. New York: Oxford University Press.
- Van Bottenburg, M. (2001). Global sports. Urbana: Illinois University Press.



Srivijaya was a major trading state and Buddhist cultural center, based in southeastern Sumatra, which loosely controlled a regional empire in western Indonesia and the Malay peninsula between the seventh and



eleventh centuries CE. The fortunes of Srivijaya were closely related to conditions surrounding the Indian Ocean maritime trade that linked East Asia and Southeast Asia to the Middle East and East Africa.

Early Indonesian Commerce and Trading States

The Malay peoples who formed Srivijaya benefited from a strategic position for maritime commerce and intercultural exchange. The Straits of Melaka between Sumatra and Malaya had long served as a crossroads through which peoples, cultures, and trade passed or took root. The prevailing climatic patterns in the South China Sea and Indian Ocean allowed ships sailing southwest and southeast to meet in the Straits and exchange goods. Some Malays specialized in maritime trade to distant shores. By the third century BCE Malay sailors procured cinnamon grown in China. The cinnamon was carried, possibly by the same Malays, to East Africa or Arabia, from where it was transported to Europe.

By early in the common era small coastal trading states based on lively ports had emerged in the Malay Peninsula and Sumatra; these enjoyed an international reputation as sources of gold, tin, and exotic forest products. Between the fourth and sixth centuries the overland trading routes between China and the West along the Silk Roads through Central Asia were closed off by insecurity and warfare between rival tribal confederations, increasing the importance of the oceanic connection. Just as various Central Asian societies became important because of international commerce, some Southeast Asians benefited from the growth of seagoing trade between China and Western Eurasia.

Beginning around the first century CE, Indian traders and priests began regularly traveling the oceanic trade routes, settling in some of the Southeast Asian states, where they married into or became advisers to influential families. They brought with them Indian concepts of religion, government, and the arts. Hinduism and Mahayana Buddhism became important in the region, especially among the upper classes. By 800 a Buddhist world incorporating many distinct societies stretched from the Indian subcontinent eastward to Japan, and it included the Straits of Melaka. Some Indian-influenced kingdoms in Southeast Asia were based largely on agriculture, such as the inland Khmer kingdom of Angkor. Others depended heavily on maritime trade, including the states alongside the Straits of Melaka. These contrasting patterns represented a skillful adaptation to the prevailing environment.

Mercantile Kingdoms in Sumatra

Throughout the first millennium CE a complex and increasingly integrated maritime trading system was gradually emerging that linked the eastern Mediterranean, Middle East, East African coast, and India with the societies of East and Southeast Asia. A vigorously mercantile variation of Indian-influenced culture emerged to capitalize on this trend.

In the later seventh century the Sumatran state known as Srivijaya (in Sanskrit the name means "Great Victory") began to exercise more influence over many of the small trading states in the Straits region, eventually forming a loosely controlled empire over a wide region. Based in the riverine port of Palembang, Srivijaya used its gold, a naturally occurring resource in that part of Sumatra, to cement alliances. Srivijaya's control was not centralized; rather, the empire was a federation of linked trading ports held together by a naval force that both combated and engaged in piracy. Srivijaya's kings forged a close political and economic relationship with the powerful Buddhist state ruled by the Sailendra dynasty in central Java, a highly productive rice-growing region.

Srivijaya was also a major center of Buddhist observance and study, attracting thousands of Buddhist monks and students from many countries. In 688 a Chinese Buddhist pilgrim and ordained monk, Yi Jing, stopped off in Sumatra after some two decades of travel in India and Ceylon (present-day Sri Lanka). He was impressed with the vitality of the Srivijayan practice and the devotion of the rulers, and he advised other Chinese Buddhist pilgrims to sojourn for several years in Srivijaya before proceeding to India.

Srivijaya exercised considerable power over the international commerce of the region and maintained extensive trade ties with China. Srivijaya also became a fierce rival of the aggressive Cola trading kingdoms of southern India, with whom it fought repeated battles. By the eleventh century, destructive conflicts with the Colas and rival kingdoms in East Java reduced Srivijayan power in the region, and the Srivijayan political center moved north to the East Sumatran ports of Jambi and Melayu. Eventually several states in Java, North Sumatra, and Malaya became more influential, and the increasing activity of Chinese trading ships undermined Malay shipping. By the fourteenth century Srivijaya had lost much of its glory.

Eurasian Trade and Islamic Expansion

While Srivijayan power faded, the Indian Ocean routes between Southeast Asia and the Middle East grew even more important between 1000 and 1500, becoming the heart of an extensive trade network. The trading system linked China, Japan, Vietnam, and Cambodia in the east through Malava and the Indonesian archipelago to India and Sri Lanka, and then connected westward to Persia, Arabia, Egypt, the East African coast as far south as Mozambique, and to the eastern and central Mediterranean. Over these routes the spices of Indonesia and East Africa, the gold and tin of Malaya and Sumatra, the textiles, sugar, and cotton of India, the cinnamon and ivory of Ceylon, the gold of Zimbabwe, the carpets of Persia, and the silks, porcelain, and tea of China traveled to distant markets. Many of these products reached Europe, sparking interest there in reaching the sources of the riches of the East.

Like the Mediterranean, the Indian Ocean developed a spatial unity. No particular state dominated the trading route. The dynamism depended on cosmopolitan port cities like Hormuz on the Persian coast, Kilwa in presentday Tanzania, Cambay in northwest India, Calicut on India's southwest coast, Guangzhou in southeastern China, and the ports along the Straits of Melaka. These trading ports became vibrant, cosmopolitan centers of international commerce and culture with multinational populations.

Trade networks helped foster the expansion of Islam and the rise of Melaka. Sunni Islam spread widely in the Southeast Asian archipelago from the thirteenth through sixteenth centuries. A common Islamic faith and trade connections linked societies as far apart as Morocco and Indonesia. Islamic culture was a globalizing force, dominating huge sections of Africa and Eurasia. By the fourteenth century Islam was well established in northern Sumatra. Some Hindu-Buddhist rulers of coastal states in the Malay Peninsula and Indonesian islands, anxious to attract the Muslim Arab and Indian traders who dominated interregional maritime commerce and attracted by the cosmopolitan universality of Islam, adopted the new faith.

The spread of Islam coincided with the rise of the great port of Melaka, on the southwest coast of Malaya, which in the early 1400s became, like Srivijaya before it, the region's political and economic power as well as the crossroads of Asian commerce. Melaka also served as the main base for the expansion of Islam in the archipelago, including into the Srivijayan heartland, displacing Buddhism and Hinduism. Like Srivijava, Melaka also played a crucial role in international trade. Merchants from around Asia rapidly transformed the port into the region's major trading entrepôt and major link for the Indian Ocean maritime trading network. Gradually, like Srivijaya, Melaka established a decentralized empire over much of coastal Malaya and eastern Sumatra. Today only a few ruins and artifacts hint of the once-great Srivijaya, but its greatest port, Palembang, is a bustling center for Indonesia's oil industry, with a mostly Muslim population.

Craig A. Lockard

Further Reading

- Hall, K. R. (1985). Maritime trade and state development in early Southeast Asia. Honolulu: University of Hawaii Press.
- Heidhues, M. S. (2000). Southeast Asia: A concise history. London: Thames & Hudson.
- Kathirithamby-Wells, J., & Villiers, J. (Eds.). (1990). The southeast Asian port and polity: Rise and demise. Singapore: Singapore University Press.
- Lockard, C. A. (in press). Lands of green, waters of blue: Southeast Asia in world history. New York: Oxford University Press.
- Marr, D., & Milner, A. C. (Eds.). (1985). *Southeast Asia in the 9th to the* 14th centuries. Singapore: Institute of Southeast Asian Studies.
- Shaffer, L. N. (1996). *Maritime Southeast Asia to 1500*. Armonk, NY: M. E. Sharpe.

In place of the old bourgeois society, with its classes and class antagonisms, we shall have an association, in which the free development of each is the condition for the free development of all. • KARL MARX (1818–1883)

- Tarling, N. (Ed.). (1992). The Cambridge history of Southeast Asia: Vol. 1. Cambridge, UK: Cambridge University Press.
- Taylor, J. G. (2003). Indonesia: Peoples and histories. New Haven, CT: Yale University Press.
- Wolters, O. W. (1967). Early Indonesian commerce: A study of the origins of Srivijaya. Ithaca, NY: Cornell University Press.
- Wolters, O. W. (1970). *The fall of Srivijaya in Malay history*. Ithaca, NY: Cornell University Press.

Stalin, Joseph

(1879–1953) Leader of the Soviet Union

It is hard to foresee a time when the figure of Stalin will cease fascinate or to provoke historical controversy. Born Iosif Vissarionovich Dzhugashvili, the son of a shoemaker and a domestic servant, Stalin grew up poor. He left his hometown in 1894 to study at the Tiflis Theological Seminary and by 1901 he was active in the Russian Social-Democratic Workers' Party, casting his lot with the Bolshevik wing of the riven party in 1904. He first met Vladimir Lenin (1870–1924) in 1905 and was selected by Lenin to join the party's Central Committee in 1912. In that year he also became editor of the party's daily, *Pravda*, and adopted the name Stalin (Man of Steel).

After the March Revolution of 1917 Stalin joined Lev B. Kamenev (1883–1936) in taking charge of Bolshevik affairs, but he seems to have played no major role in the Bolshevik seizure of power on 7 November 1917. Serving as people's commissar for nationalities (until 1922) in the newly established Soviet government, Stalin supported the reincorporation of as much of the former czarist empire into the new Soviet entity as possible. By way of compensation, the 1923 constitution of the Union of Soviet Socialist Republics, which reflected Stalin's thinking on nationalities, gave the absorbed ethnicities cultural autonomy in their own national territory.

In April 1922 Lenin nominated Stalin for the new post of party general secretary, a position that Stalin quickly exploited, making key appointments himself, including to positions that were supposed to be elective. Soon a large number of those holding key posts were beholden to Stalin and supported his drive for power.

Stalin maintained a cautious support of the 1921 New Economic Policy, a program that permitted limited capitalism, until 1927, when he held up a decline in grain sold to the state by peasants-understandable in light of low purchasing prices offered by the state—as proof of hoarding by a putative incipient rural class of capitalists ("kulaks") who, he claimed, sought to bring down the Soviet regime. He used a quasi-military expedition to the Urals and Siberia in January 1928 to legitimate that claim and held a show trial three months later of more than fifty mining engineers accused of sabotage to prove the unreliability of what he called bourgeois specialists. The fabricated charges went unchallenged by party moderates, permitting Stalin to justify a call for more vigilance, remove the moderates from the Politburo, and, by 1929, effect a vast mobilization of the country of several fronts simultaneously.

During the first of the central government's Five-Year Plans (1928–1932), target quotas for production were continually raised to patently unrealistic levels. At the same time, a cultural revolution was proclaimed, with the aim of extirpating all vestiges of "bourgeois" cultural and scientific life. The third main component of Stalin's "revolution from above," collectivization, was officially justified as a leap to a higher form of economic organization. As implemented by Stalin, however, it was simply a way of assuring a dependable annual quantity of grain from a newly enserfed peasantry. In response, farmers across the USSR slaughtered half their livestock rather than turn the animals in to the collective farms. The state retaliated by branding all peasants who resisted as kulaksultimately 5-7 million people-who were executed, deported to the swelling labor camps, or exiled to the most inhospitable regions. In the case of Ukraine and the North Caucasus, where resistance was greatest, Stalin's response was close to genocidal. Between 3 and 5 million perished of hunger as grain was being sold abroad to purchase machinery. An entire fourth of the Kazakh population-1 million-was wiped out as well.

Stalin's Five-Year Plan

In the extract below, Joseph Stalin explains his "Five-Year Plan" (1928–1932), which spelled the end of the limited form of capitalism permitted by Lenin in small businesses and farms.

What was the fundamental task of the Five-Year Plan? ...

The fundamental task of the Five-Year Plan was, in converting the U.S.S.R. into an industrial country, fully to eliminate the capitalist elements, to widen the front of socialist forms of economy, and to create the economic base for the abolition of classes in the U.S.S.R., for the construction of socialist society.

The fundamental task of the Five-Year Plan was to create such an industry in our country as would be able to re-equip and reorganize, not only the whole industry, but also transport and agriculture—on the basis of socialism.

The fundamental task of the Five-Year Plan was to transfer small and scattered agriculture to the lines of large-scale collective farming, so as to ensure the economic base for socialism in the rural districts and thus

Whether because of pressure from highly placed pragmatic party leaders or as a result of the 1932 suicide of his wife, Stalin's second Five-Year Plan featured more realistic targets than its predecessor. By the mid-1930s, the results of the plan included unprecedented urbanization, wholly new cities such as the steel center Magnitogorsk, large dams on the Dnieper and Volga, and the development of a new iron and coal mining center in the Kuznetsk Basin in southern Russia.

At the 1933 Central Committee meeting, Stalin declared that the closer the USSR came to achieving its utopian goals, the more desperate its enemies would become, requiring increased vigilance. Already angered by the Politburo's reluctance to approve the death penalty for Mikhail Riutin, a highly placed opponent, Stalin became more incensed when, at the Seventeenth Party Congress in February 1934, he lost his title of general secretary, becoming simply a co-secretary along with Sergey Kirov (1886–1934), who was more popular with the delegates.

It is against this backdrop that the assassination of Kirov, which was apparently facilitated by the secret police, took place on 1 December 1934. The next day a law was published allowing the secret police to arrest, try, and execute alleged "terrorists" without recourse to the law courts. Between late 1936 and mid-1938 Stalin decimated the highest echelons of the party, state, economy, and army. By the waning of this vast purge, about 3.5 million had been arrested and perhaps 1 million executed (although official KGB-FSB figures list only 681,000). Forced-labor camps, which had become a

major component of the economy supplying labor for canal building, logging, mining, and other activities, continued to be maintained at a level of more than 2 million prisoners until Stalin's death. Also during the 1930s, Stalin initiated the deportation of whole nationalities living near Soviet frontiers whose loyalties were deemed questionable: Poles, Germans, and Koreans.

With the rise of Nazi Germany, the USSR joined the League of Nations in 1934 and sought to spur collective security agreements against fascist aggression. Faced with a flaccid response by the Western powers, Stalin concluded a nonaggression pact with the Hitler regime on 23 August 1939. This gave Hitler a free hand to attack in the West. The two signatories divided up Poland, and the USSR occupied the Baltic states and Bessarabia (in present-day Romania).

Seeking a territorial cushion for the defense of Leningrad (as Petrograd was renamed in 1924), Stalin provoked a war with Finland in 1939–1940. Ultimately able to force the Finns to cede territory, the Soviet victory came at a huge cost in the lives of Soviet soldiers— 250,000 deaths as opposed to 25,000 for the Finns exposing the weakness of the Red Army in the wake of Stalin's purges and encouraging Hitler to make early plans for an invasion of the USSR.

A self-deluded Stalin prevented the mobilization of Soviet forces on the eve of the German invasion of 22 June 1941, thus insuring the capture of 3 million Soviet prisoners of war, the destruction of the Soviet air force, and the extension of German dominion to the gates of Moscow and Leningrad by late autumn. Forty percent to eliminate the possibility of the restoration of capitalism in the U.S.S.R.

Finally, the task of the Five-Year Plan was to create in the country all the necessary technical and economic prerequisites for increasing to the utmost the defensive capacity of the country, to enable it to organize determined resistance to any and every attempt at military intervention from outside, to any and every attempt at military attack from without.

Source: Stalin, J. (1942). Selected writings (p. 242). New York: International Publishers.

of the USSR's population fell under German control, including its major grain-growing regions and half of its industrial infrastructure.

Stalin's early strategic blunders (and failed gambit in late 1941 to conclude a separate peace) as direct commander of the "Great Fatherland War" were overcome by inspired choices of commanders and by an unprecedented effort to relocate thousands of factories from the western region to safety beyond the Volga River. Another 3,500 factories were built from scratch, and these efforts enabled the Soviet war economy to increase its production of materiel by 400 percent from 1940 to 1944, dwarfing the German output by the latter part of the war. The Battle of Stalingrad, from November 1942 to February 1943, broke the back of the German war machine. Victory was purchased at an incalculable cost in human lives; more than 25 million Soviet citizens died premature deaths as a result of combat, capture, famine, or Nazi genocide. This total also includes the hundreds of thousands of members of entire nationalities accused of collaboration with the Nazis (including the Chechens, Ingush, Kalmyks, Crimean Tatars, and Soviet Germans), who perished en route to desolate destinations of exile in Kazakhstan and Uzbekistan.

Stalin exploited the delay of the Allies in opening a second front to make a moral claim at Teheran and Yalta for decisive Soviet influence in shaping the political face of postwar Europe. But differences in interpretation surfaced glaringly at the 1945 Potsdam Conference. At issue was the political future of Germany, now divided into occupied zones, and that of the other Eastern and Central European countries. The ensuing Cold War was marked by crises such as the Berlin blockade of 1948–1949 and the Korean War (1950–1953), in which Stalin's role was central.

Stalin's insecurities, although driven by his increasing paranoia, also had a basis in the weakness of the Soviet Union after the war. Hiroshima and Nagasaki only underscored the disparity of strength between the United States, with its mere 550,000 combat deaths (and 60,000 war-industry deaths), and his own country, now racked by a new famine. Not wanting foreigners to see Soviet weakness or Soviets to see foreign strength, Stalin shut the country to outside influences. A menacing ideological campaign against "cosmopolitanism" and "kowtowing to the West" targeted Jews and intellectuals, who were held to be insufficiently patriotic. Meanwhile, Stalin's continued to cultivate his own cult of personality. He personally injected himself into a number of scientific and cultural issues, from his endorsement (and editing) of Trofim D. Lysenko's attack on Mendelian genetics to the certification of I. I. Pavlov's theory of conditioned reflexes as the only valid explanation of behavior. Even the Soviet Union's first atomic bomb was timed in September 1949 to commemorate Stalin's seventieth birthday.

Questions surrounding Stalin's historical role refuse to recede. What was the connection of the czarist system of rule to that of Lenin, and of Lenin's to that of Stalin? Was Stalin a major creator of the bureaucratic-terror regime, its creature, or both? To what extent did he have a defining effect on the Soviet system, or, to put it another way, would the Soviet system likely have evolved in a similar direction under other leaders? How did Stalin himself view his role in history? Was his foreign policy motivated more by a Machiavellian opportunism and defensive caution or by some enduring ideal of world Communist revolution? And finally, how much will his legacy of dictatorial hypercentralization, a corrupt administrative hypertrophy, state terrorism, fear, tribute taking and a failed and obsolescent modernization weigh on the futures of the successor states to the Soviet Union?

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See also Russian-Soviet Empire

Further Reading

- Conquest, R. (1986). Harvest of sorrow: Soviet collectivization and the terror famine. New York: Oxford University Press.
- Conquest, R. (1990). *The great terror: A reassessment*. New York: Oxford University Press.
- Khlevniuk, O. V. (1996). Politbiuro: Mekhanizmy politicheskoi vlasti v 1930-e gody [Politburo: Mechanisms of Political Power in the 1930s]. Moscow: ROSSPEN.
- Lewin, M. (1985). The making of the Soviet system: Essays in the social history of interwar Russia. New York: Pantheon.
- Service, R. (1997). A history of twentieth-century Russia. Cambridge, MA: Harvard University Press.
- Souvarine, B. (1972). *Stalin: A critical survey of Bolshevism*. New York: Alliance Book Corporation.
- Trotsky, L. D. (1941). Stalin: An appraisal of the man and his influence. New York: Harper & Brothers.
- Tucker, R. C. (1973). Stalin as revolutionary, 1879–1929: A study in history and personality. New York: Norton.
- Tucker, R. C. (1990). Stalin in power: The revolution from above, 1928– 1941. New York: Norton.
- Ulam, A. B. (1973). Stalin: The man and his era. New York: Viking.
- Volkogonov, D. A. (1991). *Stalin: triumph and tragedy*. London: Weidenfeld & Nicholson.
- Zubkova, E. (1998). Russia after the war: Hopes, illusions, and disappointments, 1945–1957. Armonk, NY: M. E. Sharpe.

State Societies, Emergence of

The earliest state societies emerged, both in the Old World and New World, after several thousands of years of village life that was based on domesticated plants and animals and storable surplus of agricultural products. Their emergence was not gradual and indeed was often rapid. The earliest state societies emerged independently, evolving in their regions, although contacts took place prehistorically among regions. The earliest states differed considerably, but we can characterize all as highly stratified and differentiated societies in which lived farmers in the countryside and urban residents, royalty and slaves, merchants, priests, craftspeople, elites, and peasants.

Most of the earliest states were not territorially extensive; rather, they were a collection of politically independent cities (or city-states) that shared a cultural tradition and interacted as "peer-polities." The earliest cities were not small but rather covered several square kilometers in which lived tens of thousands of people. They were centers of innovation in the arts and the recording of information, including the first writing, which appeared in some but not all of the earliest cities and states, and they contained massive ceremonial monuments, such as temples, pyramids, palaces, plazas, and large works of art. These monuments were designed by architects in service to kings and gods, enriched by the products of craftspeople and traders, and were built by thousands of laborers who owed their existence and livelihoods to the highest stratum of society.

In the Old World the first cities and states appeared in Mesopotamia and Egypt by about 3200 BCE, in the Indus River valley in Asia by about 2600 BCE, and in north China by about 1700 BCE. In the New World the first cities and states emerged in South America along the Peruvian coast and in the central Andes by about the middle of the first millennium CE, in the Maya region of lowland Mesoamerica (Mexico and northern Central America) by about 200 CE, and in the highland region of Mesoamerica, in the cities and states of Monte Alban and Teotihuacán, by about 200 CE. New archaeological and historical research into the emergence of the first states has altered considerably what scholars think about these societies.

The Old World

In Mesopotamia in southwestern Asia the earliest and best-known city-state was Uruk, which at about 3200 BCE reached a size of about 3 square kilometers with a population of about twenty thousand. A few hundred years earlier in Mesopotamia, only modest villages had flourished, none with a population of more than a few hundred. In Uruk the first writing in the world was invented, transforming earlier systems of recording information. The first texts on clay tablets were mainly economic records of deliveries to and disbursements from temples and palaces. However, about 15 percent of the texts consisted of lists of ranks and professions, cities, and names of trees, stones, and even the gods. In short, the first



writing was accompanied by the creation of the first schools and materials for the education of scribes.

The city of Uruk was dominated by a precinct of temples, storehouses, treasuries, and other ceremonial buildings and plazas. New forms of art were created, from large, carved stone vases to small cylinder seals on which a miniature scene was depicted and an inscription placed. These seals were then rolled over wet clay, either on tablets or on pottery vessels, to indicate the ownership of a commodity or responsibility for a transaction. Uruk, like other Mesopotamian cities at the end of the fourth millennium and beginning of the third millennium BCE, was the center of a limited area that included two or three towns, a few hamlets, and farmsteads. The capital cities of the city-states (microstates) contained most of the population in Mesopotamia, the countryside having been substantially depopulated with the growth of the big cities. No political unity existed among the cities and citystates, although the culture of the cities was distinctively and commonly Mesopotamian. Political unification in Mesopotamia did not occur until almost a thousand years after the emergence of the first microstates, and it did not last long because the Mesopotamian cities reestablished their venerable autonomy.

In contrast to Mesopotamia, Egypt, although lying geographically near Mesopotamia and having contact with it in prehistoric times, was an entirely different kind of state. Instead of a state of politically independent city-states, Egypt at about 3200 BCE was unified, its northern part (Lower Egypt) and southern part (Upper Egypt) brought together into a single state in which it remained for most of the next three thousand years. Egyptian unity made sense because Egypt was mainly a long strip of land along the banks of the Nile River and the land of the Nile River delta. The Nile's predictable and mostly reliable floods provided not only necessary water but also the fertile silts that were the basis for agricultural productivity.

After thousands of years of small villages, urban systems quickly appeared during the late fourth millennium BCE, the first being Hierakonpolis in Upper Egypt, which reached a size of nearly 3 square kilometers, about the size of Uruk and about the same time but not as densely settled, having a population of nearly ten thousand. The first writing in Egypt, hieroglyphic writing, differed in nearly every respect from Mesopotamian writing and appeared at about the same time. The subject of the first Egyptian texts was mainly a celebration of Egyptian kingship and had little to do with the economy of the land. From the start Egyptians displayed a strong sense of political order and stability that was guaranteed by the king and the gods.

Cities in the Indus River valley, in today's Pakistan and north India, emerged extremely rapidly after a long period of farming communities. By about 2600 BCE the most famous cities of Mohenjo Daro and Harappa flourished, both of about 2 square kilometers and more than thirty thousand inhabitants. At least a half-dozen other major cities also existed along the Indus River and its many branches and also along another major river, now dried up completely. As in Mesopotamia, the Indus River valley cities were politically independent, although their material culture had characteristic commonalities. The decorations on pottery, the use of standard weights and measures, and the Indus valley script were shared among the cities.

Mohenjo Daro was a carefully constructed metropolis. A ceremonial center included a variety of structures, such as an audience hall and ritual bath. The residential section of the city was separated from the ceremonial center and included both prosperous and less-prosperous houses, well-developed plumbing facilities, and broad boulevards. Indus valley traders journeyed inland to secure precious metals and overseas as far as the Persian Gulf, where their characteristic weights and measures have been found. The Indus valley culture disappeared about 1900 BCE; that is, the big cities grew to such an extent that they could no longer be supported by the farmers in the countryside while village life continued. The Indus valley script, consisting of symbols drawn on seals and pottery, was much more limited than either Mesopotamian writing or Egyptian writing and has not been successfully deciphered.

From small villages that characterized the north China plain for millennia, large settlements, but with modest populations, emerged at the end of the third millennium BCE. The earliest cities and states in the region appeared during the early second millennium. Erlitou at about 1700 BCE was 3 square kilometers with about forty thousand inhabitants; Zhengzhou at 1500 BCE was equally large; and Anyang at 1100 BCE may have had 100,000 people. These cities were composed of separate ceremonial areas, cemeteries, craft production areas, and residential areas. The cities were the capitals of territories that attempted to control natural resources and trade routes. Unification of these territories did not occur until the third century BCE.

Researchers have found a number of royal graves at the Anyang cemeteries. They are impressive subterranean structures entered by ramps and contain rich bronze vessels and jades and the bodies of retainers who accompanied royal figures into the afterlife. Researchers also have found "oracle bones." These were the shoulder bones of cattle and also turtle shells that were inscribed with the first known writing in China. The people of Anyang threw the bones into fires and interpreted the resulting cracks to predict the success or failure of royal persons. After the demise of the earliest cities and of the Shang dynasty (1766–1045 BCE), China experienced a variety of governments and wars that led finally to unification.

The New World

In lowland Mesoamerica the earliest cities and states emerged in the Maya region during the early years of the Common Era. During the preceding two centuries, however, large cities and vast ceremonial complexes, such as the site of El Mirador, had appeared. El Mirador, however, had no characteristic Maya writing, and thus we do not know about the rulers who must have built the magnificent pyramids and temples there. The first villages in the Maya region appeared only about 1000 BCE, so the transition to states occurred much more rapidly in this region than in any of the Old World examples.

The earliest Maya cities were enormous. Tikal's central core of monumental structures and plazas, ceremonial causeways and residential areas was not less than 16 square kilometers, and outlying structures extend much farther. The population of Tikal numbered not less than fifty thousand. Other cities were of the size and population of Tikal, but smaller cities existed as well, although the characteristics of Maya cities-the ceremonial structures, pyramids, causeways, inscribed stelas (stone slabs or pillars)-were shared by all of them. Some cities, such as Tikal, achieved control over their rival cities, but large cities such as Caracol were always rivals of Tikal. Maya script, originating during the third century CE-but perhaps having some earlier precursors, according to recent discoveries-recorded dynastic histories, alliances, and wars. During the last centuries of the first millennium CE, most of the Maya cities in the southern lowlands in Guatemala were substantially abandoned; in the northern lowlands in Mexico Maya cities adapted to new circumstances and survived.

In the Mesoamerican highlands in southern Mexico, the earliest cities and states at Monte Alban (in the modern state of Oaxaca) and Teotihuacán, not far from Mexico City, emerged during the last centuries BCE and the early centuries CE. Monte Alban, the capital of a threevalley region, was situated on an easily defended hill. It had a population of sixteen thousand and then grew to about thirty thousand before its collapse about 750 CE. Teotihuacán was probably the largest city of the ancient new world. At about 200 CE it covered 20 square kilometers and was occupied by an estimated 120,000 people.

The ceremonial complexes at Teotihuacán included six hundred pyramids, the largest of them flanking the "Street of the Dead." Curiously, because Teotihuacán and the Maya had plenty of contacts, Teotihuacán had no writing system to record its complex transactions and administration. At Monte Alban people used a form of writing, limited and undeciphered, but it seems unconnected to the Maya script. The collapse of Teotihuacán was spectacular. A conflagration (apparently set by an unknown individual or group) destroyed the structures along the Street of the Dead but was not designed to engulf the residential apartment complexes of the city or the craft areas. The site was venerated by the subsequent Aztecs and is occupied today. God forbid that India should ever take to industrialism after the manner of the west... keeping the world in chains. If [our nation] took to similar economic exploitation, it would strip the world bare like locusts. • Монандая Gandhi (1869–1948)

In South America, on the northern coast of Peru and in the central Andes Mountains, the first cities and states emerged during the early centuries CE in the former and about 600 CE in the latter. Although the two regions are different—the former requiring utilization of maritime resources in addition to maize cultivation dependent on irrigation, the latter having an agricultural regime of potatoes, quinoa (a pigweed whose seeds are used as food), and maize—they had similar lines of development. The earliest settlements were ceremonial centers; afterward cities emerged. On the coast the earliest states appeared in the Moche Valley, where elaborate burials during the first centuries CE were followed by the first cities.

In the central Andes the cites of Tiwanaku and Wari emerged about 600 CE and grew to imposing dimensions —about 6 square kilometers. Wari was the more densely occupied of the two sites, with an estimated population of thirty thousand. The two sites were the centers of regional influence, and Wari, in southern Peru, established an empire that extended to the coast and to the north in the interior. Both sites collapsed during the last centuries of the first millennium CE. Wari presaged the rise of the Inca in many respects, establishing an imperial system, distinctive administrative architecture, a road system, and the earliest quipus (knotted ropes), which encoded a sophisticated recording system (although it was not a form of writing).

The earliest states worldwide emerged when populations were attracted to settlements, transforming them into cities and resulting in depopulation of the surrounding countryside. The earliest cities grew as defensive locations offering military protection from neighbors, as the locations of central shrines and pilgrimages, as environmentally favored locations for agricultural production, and/or as key points on trade and communication routes. The territories controlled by cities, and their states, varied considerably. Some states were small—city-states often co-existing with other city-states—whereas others were territorially expansive, such as Egypt, or centered on single cities that controlled their regions, such as Teotihuacán or Wari. For human civilization there was no turning back from the way of life in the earliest cities and states. Larger states and empires emerged, trade and warfare increased, and the pace of innovation in social life increased exponentially and often in unpredictable ways.

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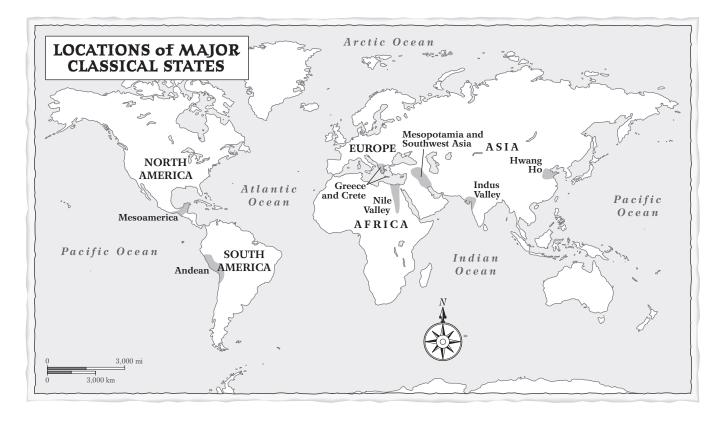
See also Agrarian Era; China; Harappan State and Indus Civilization; Mesoamerican Societies; Mesopotamia; State, The

Further Reading

- Cowgill, G. (1997). State and society at Teotihuacán, Mexico. Annual Review of Anthropology, 26, 129–161.
- Kemp, B. (1989). Ancient Egypt: Anatomy of a civilization. London: Routledge.
- Liu, L., & Chen, X. (2003). State formation in early China. London: Duckworth.
- Moseley, M. (2000). *The Incas and their ancestors* (2nd ed.). London: Thames and Hudson.
- Pollock, S. (2000). Ancient Mesopotamia: The Eden that never was. Cambridge, UK: Cambridge University Press.
- Possehl, G. (2002). The Indus civilization: A contemporary perspective. Walnut Creek, CA: Altamira.
- Scarre, C., & Fagan, B. (2003). Ancient civilizations (2nd ed.). Upper Saddle River, NJ: Prentice Hall.
- Sharer, R. (1994). The ancient Maya (5th ed.). Stanford, CA: Stanford University Press.
- Trigger, B. (2003). Understanding early civilizations. Cambridge, UK: Cambridge University Press.
- Yoffee, N. (2004). Myths of the archaic state: Evolution of the earliest cities, states, and civilizations. Cambridge, UK: Cambridge University Press.

State, The

As the term is commonly used today, *state* denotes a politically organized body of people occupying and usually acting as the dominant authority over a clearly defined territory. The term has been used variously in studies of world history, however. At times and in a very general sense, the word has been applied to any set of political institutions that exist separately from small kinship groups. Archaeologists and anthropologists have identified states based on material evidence from prehistoric times. Some historians find states in the first written



records that indicate there are authority figures outside the family. However, other historians, especially of Europe, anchor the term in the modern era and are reluctant to use it even to refer to medieval-era governments, the institutions of which did not share basic similarities with today's states. Still again, scholars of the many empires in world history frequently identify states at the center of the political systems they study.

Amid all the variety, and some uncertainty, over what a state is in world history, the meaning of the term has been most heavily influenced by European examples. For historians of Europe, the modern notion of the state came about with the political institutions and ideologies that emerged between the sixteenth and early nineteenth centuries. The process of state-building in Europe gathered together institutions of political power and authority that in the Middle Ages had been more dispersed compared to the situations in many other parts of the world.

The basic institutions that arose in this process, which culminated in the nineteenth and twentieth centuries, include a civil bureaucracy and a military, for exercising authority over territory and people and control over the instruments of violence. The resulting modern states make laws, levy taxes, issue currency, and administer other structures that organize many features of daily life for their inhabitants.

The relationship between a state and its inhabitants is often cast in terms of *citizenship*, defined by some set of rights and responsibilities that distinguishes citizens those regarded as permanent residents of the state—from noncitizens. Often, but not always, the citizens of a state are also bound together by a long history of ethnic or racial identification. (Such groupings of people are frequently referred to as *nations*, because some—like Palestinians, Scots, Tibetans, and many others—do not occupy their own independent state.)

States also wage war and negotiate treaty agreements with other states. Within their territory, states claim to exercise *sovereignty*, which refers to a form of exclusive jurisdiction or supreme authority dating back to the time of absolute monarchs in Europe. Modern states developed as part of a system of sovereign political entities subject to conventions clearly outlined for the first time in the 1648 Treaty of Westphalia, which ended the Thirty Years War between the Holy Roman Empire, France, and their respective allies. More broadly, Westphalia concluded about a century of European conflicts sometimes known collectively as the wars of religion.

States are great engines moving slowly. • Philip James Bailey (1816–1902)

At the time of Westphalia, the principle of national sovereignty was manifested in a rejection of the supremacy of religion (in the form of the Catholic Church and its Protestant rivals) in international affairs. Westphalia established the authority of rulers, rather than the Catholic Church and its national proxies, over religion in their own territories, and it put an end to centuries of states intervening by force in the religious affairs of other states. With the rise of secularism since that time, and the rise and fall of nineteenth-century colonial imperialism, the principle of national sovereignty has come to mean that no state can legitimately interfere in the internal affairs of other states. The globally accepted tenets of national sovereignty are today enshrined in the 1948 Charter of the United Nations.

Thus, the formation of what have been called either "modern" or "national" states has conventionally been viewed as a European historical process, with the states that emerge in the nineteenth century as the outcome of changes taking place over the previous several centuries.

One influential view of European state formation stresses the dynamic of raising ever more revenues to pay for war-making and bureaucratic growth. Viewed in this manner, successful European state-makers are those rulers who are able to collect sufficient resources and manpower to compete successfully with their rivals. A second important perspective on modern state formation stresses the changing foundations of authority relations between rulers and subjects, focusing specifically on the demise of royal rule and its replacement by various forms of republican rule and popular sovereignty. State-making seen from this perspective involves new ideas and institutions, including citizenship and representative forms of government.

Development of Non-European States

These distinct approaches to the study of modern European state formation offer two ways to understand the character of state transformations beyond Western Europe in the nineteenth and twentieth centuries. Each has its problems. When modern state formation is conceived as a process based on the export of democratic ideas and republican institutions to other parts of the world, the outcomes did not always match expectations. Many Latin American countries, for example, had established political independence from colonial rule by the 1820s, yet despite aspiring to emulate European political institutions, Latin American states did not become very similar to the republican democracies of Western Europe.

When modern state formation culminating in nineteenth-century European forms of government is understood in terms of competition among sovereign state-makers, the extension of their relations to other parts of the world does not yield the same dynamics of state formation because colonialism creates political relations unlike those of either domestic or international relations within Europe.

Nevertheless, the two approaches matter because they were both pursued by political actors outside Europe. The extension of European political competition beyond Europe also included efforts by nineteenth-century governments, such as those in China, Japan, and Thailand, to emulate the institutions and articulate the ideals of such states as Britain, France, Germany, and the United States. Several late nineteenth-century Asian governments understood themselves to be vulnerable to the advance of Western domination, which they decided could only be resisted by fighting fire with fire: many of these Asian governments therefore attempted to replicate the institutions responsible for the wealth and power the Western states possessed.

Asian peoples saw many examples of what befell societies unable to resist European imperialism. They saw the formation in conquered territories of colonial governments that robbed native elites of political authority and autonomy. The system of Western imperialism and colonialism imposed new forms of state power over subject populations in Africa and Asia. Colonial states in the late nineteenth century ruled their subject populations in a mixture of direct and indirect ways. The British ruled the Malay peninsula indirectly, through local lords, while they established direct colonial rule over much of what So, we appeal to Edo hia (all Edo) to heed to our warnings; learn to subordinate the interest of self to that of the whole community; see yourself first as ovbiedo (child of Edo) before a member of this party or that Society. It is only by so doing that the strength in you will come out and be sustained... • OBA EREDIAUWA (TWENTIETH CENTURY)

became India. The Dutch established bureaucratic control over Java and parts of Sumatra and relied on less-direct forms of rule over areas further from their center of power. To expand their late nineteenth-century colonial bureaucracies, the Europeans turned to groups they already controlled to provide personnel to rule others. For instance, the British used Indian immigrants as lowerlevel bureaucrats in Burma, while the French used Vietnamese in Cambodia and Laos, and the Dutch used Javanese in Borneo and Sumatra.

African and Asian cases of colonial rule that took shape in the second half of the nineteenth century, and most of which continued for nearly a century or longer, illustrate a set of systemic political relations quite distinct from those characterizing sovereign states of the Westphalian system. At the same time, colonialism can be viewed as the extension of competition among European powers and the United States from an Atlanticcentered arena to the world at large. Where Western powers did not establish formal colonial rule, the project of state transformation is often still cast in terms of responses to foreign challenges. Success was defined by the formation of institutions and the expression of ideas developed in the West.

Challenges for Historical Interpretation

Difficulties in successfully duplicating European forms of the state outside Europe have often been attributed to the failure of non-Western political leaders to build proper institutions and espouse appropriate beliefs, because of either inability or unwillingness. Until recently, scholars generally ignored the processes of state formation and transformation in different parts of the world that did not fit neatly into Western categories, or else they considered only those activities that fit the categories applicable to Europe. It was easy to assume that traditional practices for which there were no obvious Western parallels would eventually be replaced by modern ones; the substitution of modern for traditional also meant the replacement of native by foreign. It was therefore difficult to recognize that the challenges faced by some states prior to major contact with the West might continue to be relevant.

In China, for example, the capacities and commitments of the late imperial state to the maintenance and stability of an agrarian political economy meant that a successful twentieth-century Chinese state had to address challenges familiar to its predecessors, including those of water control, land clearance, and soil erosion; these issues don't often fit into general analyses of the Chinese state cast in terms of what Euro-American states do. In recent times, the turmoil faced by some states governing largely Islamic populations has been associated with the absence of the secular-religious division of authority that emerged in Europe with the Treaty of Westphalia. The features of neither the Chinese nor the Islamic states fit norms of state formation based on European experiences. Since together they account for a considerable portion of the world's experiences with modern state making, our ideas about general patterns of state formation need to be revised and expanded in order to accommodate these and other examples where factors distinct from those important in European experiences matter greatly. Even in cases, including several in Southeast Asia, where colonialism has been assumed to be the dominant state-making influence, resistance to colonialism drew upon both non-Western religious beliefs and traditions as well as on the political ideas and practices of Western societies.

Twentieth-century states in Africa and Asia extend the range of variation among states. They exist in regional contexts quite different from those that characterize Europe and the Americas. In earlier centuries many of the diplomatic relations in East and Southeast Asia followed ritual forms acknowledging the Chinese emperor as symbolically superior. For some of China's neighbors, political deference facilitated economic access to the vast extent and wealth of the agrarian empire; for others, these tributary relations in fact involved reciprocal gifts through which the nominally inferior parties derived economic benefits in return for agreeing not to violate the empire's northern borders. Tributary language and rituals also offered Asian states a format within which to



engage their smaller neighbors; Vietnam, for instance, presented tribute missions to the Chinese emperor while it entertained on a more modest scale others over which it occupied a ritually superior position. Historians who introduce East Asia into modern world history by following the British and other Westerners as they flexed their political and economic muscle across the nineteenth-century globe have highlighted the ways in which Asian states were forced to accept the diplomatic conventions of European states in their external relations. Less frequently examined are the ways in which states within East Asia dealt with each other as part of a larger set of relations also involving Western powers. Some Korean leaders, for instance, sought to protect their country from Japanese political pressures in the 1870s and 1880s by calling upon their tributary relationship with China for protection.

This persistence of East Asian diplomatic forms through the late nineteenth century reflects the continued presence of a regional system of political relations that cannot be understood simply as derivatives of Western forms. Viewing interstate relations from a regional perspective helps to fill out a picture usually drawn only from Western perspectives. Regional contexts are also important for understanding twentiethcentury diplomatic relations. Japanese imperialism and colonialism during the first half of the twentieth century, for instance, involved not only competition with the West, but also displacement of the Chinese empire as the political center of the greater East Asian region.

mation of the European Union, in other words, draws upon practices emerging from both the European domestic state-making tradition and the system of international state relations that initially framed the competition among these states.

Although the system of sovereign state relations initiated by the Treaty of Westphalia continues to inform the way states are expected to engage each other, much else happens beyond this diplomatic framework. In international affairs, states are the main actors, but recent changes such as those in Europe make the traditional conception of national sovereignty seem less secure than before. The European Union is a new kind of state, at least from a European perspective. In terms of geographical scale and social diversity, however, it begins to approach what had been more typical of empires in earlier times, even as it is organized according to democratic ideas and institutions.

Therefore, to keep *state* as a general term that historians can use both for very early and for more recent forms of political organization, they need to recognize a greater diversity of institutions and ideologies that states have embodied. This in turn allows people to see the different ways the histories of states continue to affect the diversity of state forms and activities in the contemporary world.

R. Bin Wong

See also Nation-State

The Persistence of Diversity

The importance of regional context obtains in other parts of the world as well, including Europe itself, the birthplace of the ostensibly global state system. During the second half of the twentieth century, the incremental unification of Europe—characterized by shifting conceptions of the relations among many European states from "foreign" relations to a new kind of "domestic" relations—has been a transformation more easily viewed in regional rather than global terms. The for-

Further Reading

- Bendix, R. (1978). *Kings or people: Power and the mandate to rule*. Berkeley: University of California Press.
- Paul, J. A. (2001). Nations and states. Retrieved July 1, 2004, from the Global Policy Forum Web site: http://www.globalpolicy.org/nations/ natstats.htm
- Philpott, D. (2003). Sovereignty. In Edward N. Zalta (Ed.), *The Stanford encyclopedia of philosophy* (Summer 2003 ed.). Retrieved July 1, 2004, from the Stanford University Web site: http://plato.stanford. edu/archives/sum2003/entries/sovereignty/
- Tilly, C. (Ed.). (1975). The formation of national states in Western Europe. Princeton, NJ: Princeton University Press.
- Tilly, C. (1992). Coercion, capital, and European states, AD 990–199. Oxford, UK: Blackwell.

Steppe Confederations

S teppe confederations are large and militarily powerful state-like structures that emerged many times in the steppes of Eurasia from the first millennium BCE to the eighteenth century CE. Perhaps the most famous was the Mongol empire created by Genghis Khan in the thirteenth century. Steppe confederations appeared in regions dominated by pastoral nomads, and for this reason they were very different from the states of the agrarian world. To understand them fully, it is important to be clear about these differences, but regardless of those differences, steppe confederations could be so powerful and so influential that it seems foolish not to regard them as states. This essay treats steppe confederations as a distinctive type of state and uses the phrase "steppe confederations" interchangeably with the phrase "pastoralist states."

Nomadic pastoralists may have lived in the steppes of Eurasia from as early as the fourth millennium BCE. As the archaeologist Andrew Sherratt has shown, their distinctive way of life was made possible by technological changes that enabled pastoralists to exploit domesticated livestock more efficiently by using not just their meat and hides but also their "secondary products"their traction power, wool, milk, and manure. These could be used while the animals were still alive, so the "secondary-products revolution" greatly increased the amount and variety of resources available to livestock herders, making it possible for entire communities to live almost exclusively from their livestock. By making it possible for communities to exploit the arid steppes, which were too dry to be farmed, pastoralism permitted the settlement of the huge belt of arid grasslands that extends from Manchuria to Mesopotamia and across North Africa and into East Africa. The most powerful steppe confederations have appeared in the steppes between Manchuria and eastern Europe. Here, the animal of prestige was the horse, though sheep, camels, cattle, goats, and yaks were important components of herds in different regions.

Building Steppe Confederations

The appearance of steppe confederations is curious because pastoralists appear to lack the crucial preconditions for state formation. Pastoralism is far less productive than most forms of farming, so it usually supports smaller and more scattered populations. Because most pastoralists are mobile, they also have little reason or opportunity to accumulate large stores of wealth. Finally, pastoralists live most of the time in relatively self-sufficient small groups so that, except in times of war, they need few of the organizational services that states provide. Small populations, limited wealth, and a high level of selfsufficiency make the appearance of pastoralist states something of a puzzle. How was it possible to build powerful states under such conditions?

The first answer is that pastoralists had military advantages that partly compensated for their demographic and economic weakness. Pastoralist lifeways naturally inculcated military skills, for pastoralists had to learn how to hunt-which required mastery of weapons-how to navigate over large distances, and, particularly in the arid lands of Eurasia, southwest Asia, and northern Africa, how to ride. The physical demands of dealing with large animals and the harshness of steppe and desert climates inured pastoralists to physical hardships, an advantage in warfare, while frequent raiding provided regular military practice. Though associated mainly with males, military skills were also widespread among women in pastoralist societies. Many accounts, including the ancient Greek historian Herodotus's tales of "Amazons," show that pastoralist women could be formidable fighters, and many steppe burials of women contain large stocks of weapons and armor. The military prowess of pastoralist communities is evident as early as the fourth millennium BCE, for steppe tombs (or *kurgany*) from that period contain weapons as well as goods produced in neighboring agrarian communities. Doubtless some of these goods were acquired through trade, but there can be little doubt that even the earliest pastoralists, like their descendants, often used the threat of force to exact tribute. The earliest written accounts of pastoralist lifeways all stress the significance of military skills among pastoralists. In his famous account of the Scythians, written in the fifth century BCE, Herodotus reported that Scythian leaders organized annual meetings at which those who had not killed an enemy in the previous year were shamed. In the first century BCE, the Han historian Sima Qian wrote of the Xiongnu, who lived in modern Mongolia, "The little boys start out by learning to ride sheep and shoot birds and rats with a bow and arrow, and when they get a little older they shoot foxes and hares, which are used for food. Thus all the young men are able to use a bow and act as armed cavalry in time of war. It is their custom to herd their flocks in times of peace and make their living by hunting, but in periods of crisis they take up arms and go off on plundering and marauding expeditions" (1961, 2: 155). Unlike peasants, pastoralists needed little training before going to war.

The role of kinship in pastoralist societies explains why pastoralist communities could rapidly form large military alliances. Nomadic pastoralists normally lived in small groups of related individuals linked to neighboring groups by ties of kinship or fealty. Family or clan leaders would take important decisions about migration routes or handle conflicts with neighboring families and clans. But violent conflict was common, partly because of the extreme volatility of pastoralist lifeways. Entire herds could be lost in spring frosts or because of epidemic diseases, and those affected by such disasters often had little choice but to steal livestock from other pastoralists. Such conflicts could prompt the rapid formation of local military alliances as local leaders sent riders to seek the support of other pastoralist leaders to whom they were linked by kinship, friendship, allegiance, or past obligations. Where the threat was on a large enough scale, the same mechanisms could bring together huge armies, linking pastoralist tribes over large areas. Herodotus records that in 513 BCE, when the Persian ruler Darius invaded the Black Sea steppes through modern Romania and Moldova, "The Scythians reasoned that they were not able to resist Darius' army in a straight fight on their own, and so they sent messengers to their neighbors" (1987, 4: 119). Though not all communities joined the alliance against Darius I, a large number did, and Darius eventually had to retreat in the face of sustained and highly effective guerilla attacks.

Mongolia, 2ND CENTURY BCE Xiongnu Central Asia, China **5TH CENTURY CE** Huns Eastern Europe Eastern Avars 6TH CENTURY CE Europe **Turkic Empire** Mongolia, 6TH CENTURY CE China. Central Asia, West Asia ASIA Second Turkic Mongolia, 7th century ce China, Central Asia EMPIRE **Uighur** Dynasty Central Asia 8TH CENTURY CE 13TH CENTURY CE Mongol Empire China, Central Asia, Mongolia, Russia, West Asia 17TH CENTURY CE Jungar Empire Mongolia, China

Alliances also formed to conduct booty raids. As the supporters of the future Genghis Khan made clear when they elected him their khan in about 1190 CE, they expected to become rich under his leadership: "When you are made *qan*, we, galloping as a vanguard after many enemies, will bring in girls and *qatuns* (i.e., ladies) of good complexion, palace tents, ... geldings with fine rumps at a trot, and give them to you" (Christian 1998, 391–392).

Forming effective armies in response to external threats or the prospect of booty was one thing; creating a permanent alliance powerful enough to conquer neighboring states and stable enough to be regarded as a state was quite another matter. As the political theorist Ellman Service has argued, states are distinguished from weaker political systems because they have mechanisms to prevent splitting along tribal lines. "The

Major Steppe Confederations

Enthusiastic partisans of the idea of progress are in danger of failing to recognize... the immense riches accumulated by the human race. By underrating the achievements of the past, they devalue all those which still remain to be accomplished. • CLAUDE LEVI-STRAUSS (B. 1908)

state," argues Service, "is a system specifically designed to restrain such tendencies" (Cohen & Service 1978, 4).

In the agrarian world, large and productive populations generated flows of wealth that could be used to weld regional leaders into a single political system, or to buy the services of armies. However, pastoralist communities generated little in the way of surplus wealth. So, to create a stable tribal alliance, pastoralist leaders had to institutionalize the lure of the booty raid. To bind different tribes into a durable political and military system, pastoralist leaders had to secure a steady flow of wealth from neighboring agrarian regions. It was the creation of such stable mechanisms of tribute taking that turned temporary military alliances into the pastoralist equivalents of states. Though normally exacted from "outsiders," these flows were the functional equivalent of the taxes that sustained agrarian states. The anthropologist Thomas Barfield has analyzed how such stable flows of tribute were established for the first time late in the first millennium BCE, across the northern Chinese borders. In what was really a systematic form of extortion, the Xiongnu, based in modern Mongolia, threatened to launch devastating raids into China's agrarian regions unless they were bought off with annual tributes in foodstuffs, silks, and other valued goods. "Just make sure," a Xiongnu official once explained to Chinese envoys, "that the silks and grainstuffs you bring the Hsiung-nu [Xiongnu] are the right measure and quality, that's all... If the goods you deliver are up to measure and good quality, all right. But if there is any deficiency or the quality is no good, then when the autumn harvest comes we will take our horses and trample all over your crops" (Christian 1998, 192). As long as Chinese states continued to pay tribute, Xiongnu leaders could lavish gifts on their followers and maintain their loyalty. The key to success lay in the plausibility of the threat, and only a pastoralist leader who had achieved unquestioned authority over large contingents of steppe soldiers could make such threats with credibility. So in the steppes, state-building normally began with a skillful and charismatic leader creating an exceptionally disciplined following.

Establishing stable flows of tribute from large agrarian states was extremely difficult, which is why pastoralist states appeared much later than the first agrarian states and were also less common, more fragile, and more ephemeral: Few lasted more than a generation or two, as they depended so much on the charisma and skill of their founders. However, once a state had been created, there was much that farsighted leaders could do to stabilize them. The most natural step was to launch new wars of conquest that could supply more booty and remind existing tribute payers of the dangers of nonpayment. Eventually, however, all successful pastoralist leaders found they had to build durable bureaucratic and political structures, similar to those of the agrarian world. Even before they became supreme leaders, the most farsighted steppe leaders often built up elite military units or bodyguards that were organized bureaucratically, bound closely to the overall leader, and kept apart from the traditional structures of kinship. The starkest example of such a strategy can be found in Sima Qian's description of how Maodun, the founder of the Xiongnu confederation, built up a highly disciplined personal following. Maodun ordered his followers to shoot at any object towards which he aimed his arrows, and executed those who refused to obey. He aimed, first, at one of his favorite horses, killing all those too fearful to follow his example; then aimed an arrow at his favorite wife, once again executing those who failed to shoot; then he aimed at his father's horse. Finally, he aimed an arrow at his own father. After replacing his murdered father, Maodun deliberately broke up kinship structures amongst his followers, organizing them in units of ten that owed allegiance to each other rather than to kinship units.

At the very top of any successful steppe confederation, the key to stability lay within the ruling family. It was vital to secure the succession and it was vital that the successor be an able leader. This was perhaps the most difficult task to achieve; we can be sure that all steppe leaders thought hard about it, and some, including Genghis Khan and Maodun, succeeded in handing power over to sons who were competent enough to hold their empires together. Below the ruling family, structures were created to bind regional leaders to the state. All the most powerful steppe leaders, beginning with Maodun, organized regular meetings of regional leaders. These pastoralist "parliaments" offered the chance to keep an eye on potential rivals, to take rudimentary censuses, to consult about policy, to share worship, and even to hold competitions in a pastoralist equivalent of the Olympic games (of which the modern Mongolian Naadam festival is a survivor). Successful steppe leaders also built palaces or capital cities, with the help of artisans from the agrarian world, in order to demonstrate their wealth and display their prestige. The Mongols, the most successful of all pastoralist leaders, used advisers from conquered regions to help them construct elaborate fiscal systems, rapid communications systems using post-horses, and written laws. As they became more reliant on the resources and the commercial and bureaucratic skills of the agrarian world, some steppe leaders, such as the Seljuks, the Ottomans, and the Mongol rulers of China, eventually moved their capitals into the agrarian world, turning pastoralist states into conventional agrarian states that retained little but a symbolic memory of their pastoralist origins.

Major Steppe Confederations

Powerful alliances of pastoralist leaders may have appeared as soon as pastoralism itself emerged, from the fourth millennium BCE. Certainly, the archaeological evidence suggests that even this early, there were militaristic migrations of pastoralist peoples over large areas. By the first millennium BCE, written evidence appears of largescale pastoralist attacks, such as the Cimmerian and Scythian invasions of northern Mesopotamia and Anatolia through modern Azerbaijan. By this time, some steppe leaders were being buried in very large, elaborate tombs with slaves, horses, and huge hoards of wealth, which indicates their wealth and power. And it is clear that Scythian leaders north of the Black Sea exacted tribute from farming communities in modern Ukraine and the Crimea. But none of this evidence suggests the existence of steppe confederations or true pastoralist states, that is, of stable systems of rule capable of sustained tribute taking from neighboring agrarian states.

The first steppe confederation that really fits this definition was the Xiongnu confederation created by Maodun in Mongolia early in the second century BCE. Knowing his father favored a younger brother, Maodun built up the disciplined following of soldiers described earlier, and used it to overthrow his father and remove his father's closest allies. Having established his unquestioned supremacy among the Xiongnu, he then turned on two large neighboring confederations, looting them and enriching his followers. Finally, just as the Han dynasty was establishing itself in northern China, he led devastating booty raids into the region, eventually defeating the first Han emperor, Gaozu (reigned 206-195 BCE). In 198 BCE Gaozu negotiated the first of a series of treaties under which he recognized Maodun as an equal, promised him a royal bride, and agreed to send him annual "gifts" of silk, wine, grain, and other goods. Meanwhile, the Xiongnu had also established tributary relationships with other tribes of pastoralists, and with the many small towns and communities of modern Xinjiang and the Tarim basin, as well as with some of the cities of Central Asia. Their authority soon reached from Manchuria to Central Asia, making the Xiongnu state one of the largest of all pre-modern states. The relationship with the Han was the key to Xiongnu power simply because of the huge wealth and prestige that the relationship brought them. It was maintained for almost 60 years until a more powerful Han ruler, Wudi (reigned 141–87 BCE) decided that the price demanded by the Xiongnu was too high, and launched a decades-long war on the Xiongnu. Though weakened and never again the diplomatic equals of the Han, regional Xiongnu leaders retained significant power for the best part of three centuries.

The history of the Xiongnu was to be repeated several times during the next two thousand years. In 552, a dynasty known as the Ashina created the first Turkic empire. Like the Xiongnu state, the first Turkic empire was created from a base in Mongolia. It also owed much



to the charisma and skills of its founders, the brothers Bumin and Ishtemi. Within fifteen years of its creation, it reached from Manchuria to the Volga river, negotiating on equal terms with all Eurasia's superpowers: China, Persia, and Byzantium. However, the empire fell apart within two generations of its founding, partly because of conflicts within the ruling family. A second Turkic empire was established in 683 and lasted until 734, though it never reached as far west as its predecessor. It was overthrown by a Uighur dynasty that lasted for almost a century, until 840.

The greatest of all the steppe empires was created by a Mongol ruler, Temüjin (c. 1160–1227), in the early thirteenth century. Like Maodun, Temüjin made his way in a hostile environment of vicious tribal and personal conflict. He built up a loyal and disciplined following, and in 1206, at a gathering of regional leaders he was elected overall khan, or *Chinggis Qan* (from which derives the traditional Anglicized version of the name, Genghis Khan). Genghis Khan led Mongol armies in wars of conquest in northern China and Central Asia. After his death, his successors conquered the rest of China, Russia, and Persia. In the 1260s his grandson Khubilai Khan briefly claimed sovereignty over Mongolia, China, Central Asia, Russia, and Persia—the largest land empire ever created.

Other pastoralist states were created in Mongolia in the sixteenth and seventeenth centuries. The Jungar empire, created in western Mongolia in the late seventeenth century and crushed by China's Qing dynasty in 1758, probably counts as the last great steppe confederation.

The largest and most influential of steppe confederations emerged in the steppes north and west of China, probably because from there they could extort wealth from the largest and wealthiest power on earth. But other steppe confederations appeared further west. At the western end of the steppes, the most powerful pastoralist confederations appeared in Hungary, from where they could extort the wealth of the Roman and Byzantine empires. The best known of these states are those of the Huns (in the fifth century) and Avars (sixth century), though earlier pastoralists too had briefly extorted wealth from their agrarian neighbors in eastern Europe. Both the Hun and Avar states extracted large amounts of wealth from their neighbors, but neither survived as a major power for more than a generation, perhaps because the steppes of Hungary offered too small a base for really large pastoralist armies. In Central Asia there appeared many powerful pastoralist alliances, some of which endured for several generations. The geography of Central Asia denied them the possibility of extorting wealth on the scale of the Mongols or even the Huns; their wealth came from the many small oasis city-states of the region. The most powerful of the Central Asian steppe confederations, the Kushan empire (c. 45-c. 230), based its power primarily on agrarian communities, and, despite its pastoralist origins, should really be counted as a pastoralist dynasty ruling agrarian states. The same could be said of the Seljuks, who conquered much of Central Asia in 1040 and went on to conquer much of Persia, Mesopotamia, and Anatolia within a generation.

North and west of the Caspian Sea, the peasant migrations that were to lay the foundations for the emerging states of Russia created new opportunities for pastoralist leaders to exact tribute. The Khazar empire was established along the western shores of the Caspian sea in the early seventh century by rulers from the Turkic Ashina dynasty. It lasted for more than three hundred years and was eventually destroyed in 965 by an army from Kievan Rus' (a principality with its capital at Kiev). Its heartland remained in the lands just north and west of the Caspian, and its rulers always retained a sense of their pastoral origins. It exacted tribute from neighboring pastoralists and from agricultural communities in the lands of modern Russia and Ukraine; it also became a major international power, negotiating on equal terms with both Baghdad and Constantinople. Its wealth came from a wide variety of sources, from local tributes, from taxes levied on trade, and from taxes levied on agrarian populations in the Caucasus and Rus'. After the Mongol conquest of Rus' in 1237-1241, the heirs of Genghis Khan's eldest son, Jochi, established a state often known as the Golden Horde or the Kipchak khanate. For more than a century this state successfully exacted tribute from the Caucasus and from Rus' before fragmenting into smaller regional states, none of which managed to establish such stable flows of tribute.

Steppe Confederations in World History

Though it makes sense to regard them as states, steppe confederations were very different from the agrarian states that give us our conventional images of statehood. Built with limited resources, steppe confederations had to rely mainly on external sources of revenue, taken by force from agrarian communities very different from their own. The military skills inculcated by pastoralist lifeways made pastoralists formidable in warfare, but establishing stable systems of tribute was possible only under the most powerful and skillful of steppe leaders. Maintaining durable flows of tribute was much more difficult than mounting periodic booty raids, which explains why so few pastoralist leaders succeeded in creating true pastoralist states, and why pastoralist states rarely survived for more than two or three generations. But when pastoralist states did emerge, they could prove extremely powerful and extremely influential. They were some of the largest states that have ever existed, and their impact on Eurasian history was at times revolutionary.

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See also Inner Eurasia; Pastoral Nomadic Societies; Secondary-Products Revolution; State, The

Further Reading

- Barfield, T. J. (1993). The nomadic alternative. Englewood Cliffs, NJ: Prentice Hall.
- Barfield, T. J. (1989). The perilous frontier: Nomadic empires and China. Oxford, UK: Blackwell.
- Ch'ien, S. [Sima Qian]. (1961). Records of the grand historian of China (B. Watson, Trans.). New York: Columbia University Press.
- Christian, D. (1998). A history of Russia, Central Asia and Mongolia: Vol 1. Inner Eurasia from prehistory to the Mongol empire. Oxford, UK: Blackwell.
- Christian, D., & Benjamin, C. (Eds.). (1998). Worlds of the Silk Roads: Ancient and modern: Silk Roads Studies, II. Turnhout, Belgium: Brepols.
- Davis-Kimball, J. (2003). Warrior women: An archaeologist's search for history's hidden heroines. New York: Warner Books.

- Di Cosmo, N. (1999). State formation and periodization in Inner Asian history. Journal of World History, 10(1), 1–40.
- Di Cosmo, N. (2001). Ancient China and its enemies: The rise of nomadic power in east Asian history. Cambridge, UK: Cambridge University Press.
- Golden, P. B. (2001). Nomads and sedentary societies in Eurasia. In M. Adas (Ed.), Agricultural and pastoral societies in ancient and classical history (pp. 71–115). Philadelphia: Temple University Press.
- Herodotus. (1987). *The history* (D. Grene, Trans.). Chicago: University of Chicago Press.
- Khazanov, A. M. (1994). Nomads and the outside world (2nd ed). Madison: University of Wisconsin Press.
- Khodarkovsky, M. (2002). Russia's steppe frontier: The making of a colonial empire, 1500–1800. Bloomington: Indiana University Press.
- Morgan, D. (1986). The Mongols. Oxford, UK: Blackwell.
- Sherratt, A. (1981). Plough and pastoralism: Aspects of the secondary products revolution. In E. Hodder, G. Isaac, & N. Hammond (Eds.), *Patterns of the past* (pp. 261–305). Cambridge, UK: Cambridge University Press.

Stone Age

See Foraging (Paleolithic) Era; Human Evolution— Overview; Paleoanthropology

Sudanic Kingdoms

See Nubians; Wagadu Empire

Sugar

The familiar white crystals in the sugar bowl on the breakfast table are virtually pure sucrose, an organic chemical defined technically as a disaccharide carbohydrate. Other common disaccharides are lactose, the sugar found in milk, and maltose or malt sugar. Sucrose is a product of photosynthesis, the complex biochemical process whereby green plants use light energy to combine aerial carbon dioxide and hydrogen from soil water into

The Economic Rationale for the Sugar Industry in the Colonial Caribbean

The following description of the sugar industry in the Spanish Caribbean was written by Bartalome de las Casas in his Historia de las Indias (1559). It tells just how profitable the sugar industry was and how it was more profitable than earlier ventures elsewhere.

When the Jeronimite friars who were there saw the success with which the Bachelor was carrying on this industry, and that it would be very profitable, in order to encourage others to undertake it, they arranged with the judges of the Tribunal and the officers of the crown to lend 500 gold pesos from the funds of the royal treasury to anyone who should set up a mill, large or small, to make sugar, and afterwards, I believe, they made them other loans, in view of the fact that such mills were expensive

In this way and on this basis a number of settlers agreed to set up mills to grind the cane with horse-

rings of carbon atoms to which atoms of hydrogen and oxygen are attached, usually in the same ratio as in water (hence "carbohydrate"). It is found in the sap of many plants, where it functions as stored energy, but the commercial article—and the substance usually meant when people speak of sugar—is chiefly extracted from sugarcane or sugar beet.

Sucrose is composed of two simple carbohydrates, likewise very prevalent in nature: glucose (also called dextrose and grape sugar), which occurs in fruits, plant juices, and honey, as well as in blood, and fructose (levulose or fruit sugar), which occurs in the free state, notably in honey. Sucrose is easily inverted by acid hydrolysis or enzyme action into glucose and fructose, both monosaccharides (so named because they cannot be reduced to smaller carbohydrate molecules) that share the same chemical formula but differ in atomic structure and are interconvertible by chemical and biological reactions. Fruits, young vegetables, floral nectar, and the sap of certain plants and trees owe their sweet taste to the presence of different sugars. As a saccharide, sucrose is also related to starch, another form of stored energy consisting of long branching chains of glucose molecules.

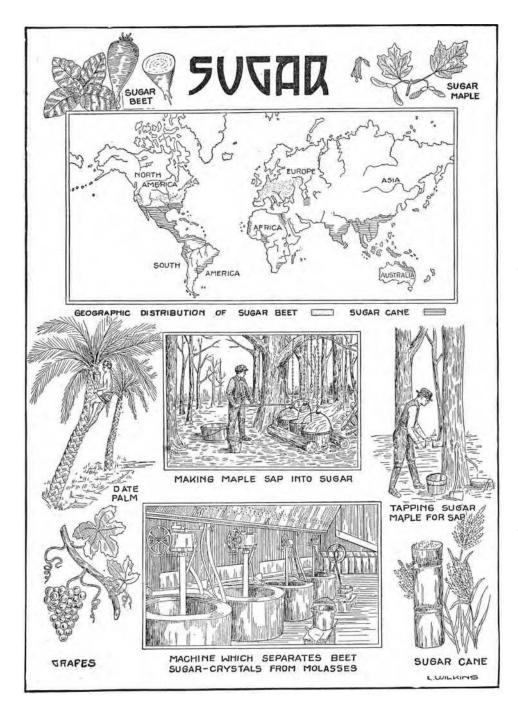
power, and others, who had more funds, began to build powerful water-run mills, which grind more cane and extract more sugar than three horsepowered mills, and so every day more were built, and today there are over thirty-four ingenios on this island alone, and some on Sant Juan, and in other parts of these Indies, and notwithstanding, the price of sugar does not go down. And it should be pointed out that in olden times there was sugar only in Valencia, and then later in the Canary Islands, where there may have been seven or eight mills, and I doubt that that many, and withal the price of an arroba of sugar was not over a ducat, or a little more, and now with all the mills that have been built in these Indies, the arroba is worth two ducats, and it is going up all the time.

Source: Ortiz, F. (1947). Cuban Counterpoint: Tobacco and Sugar (pp. 261–262). (H. de Ones, Trans.). New York: Knopf.

Multiple Sources

These affinities explain how sugar can be obtained from two quite dissimilar botanical sources: sugarcane, a perennial giant grass grown in the tropics and subtropics for its stalks and exploited industrially for more than two millennia, and sugar beet, a temperate-zone biennial of the goosefoot family, which has been harvested for the sugar in its roots for barely more than two centuries. They also explain how sugar has more recently been partially replaced in manufactured foods and beverages by starchbased sweeteners. And they explain minor sweetener sources, some going back to ancient times, such as boileddown grape juice; fig and date syrup; the sap of palms, the maple tree, and sweet sorghum; and the exudations from certain trees and shrubs. Like sugar, honey-the first concentrated sweetener known to humans-is ultimately a product of photosynthesis. Bees making honey and humans processing cane or beet to crystal sugar are basically doing the same thing-both extract dilute sugar solutions from plants and convert them into forms easier to handle and storable by evaporating unwanted water.

All forms of sugarcane are species or hybrids of the genus *Saccharum*, a member of the large family of



This encyclopedia chart shows sources of sugar and methods of production. Interestingly, it ignores the plantationbased sugar industry of the Caribbean.

finally reaching the New World in 1493, with the second vovage of Columbus. The expansion of the industry in the Western Hemisphere had two effects: First, it increased the supply of sugar in Europe, making it less of a costly rarity. Even so, British per capita sugar consumption in the early 1700s is estimated to have averaged just four pounds a year, or about a teaspoonful a day. Second, it linked sugar production with slavery and plantation agriculture on a scale far greater than anything previously seen in the Old World, with lasting political, economic, social, and cultural consequences.

Sugar beet, on the other hand, a type of *Beta vulgaris* L. (red garden beet, Swiss chard, and fodder beets are of the same species), is a child of science. The plant is known to have been used as a vegetable and medicinally in Greek and

Gramineae. Their botanical derivation from ancestors in northern India or China is still debated, but cane probably became a cultivated food plant, originally selected for chewing, in eastern Indonesia, New Guinea, or the Philippines from about 4,000-3,000 BCE. It eventually spread eastward across the Pacific and northwestward to India—where crystalline sugar has been made since at least the fifth century BCE— and thence by way of Persia and the Mediterranean basin to the Atlantic seaboard, Roman times. But it was not until 1747 that a German professor, Andreas Sigismund Marggraf (1709–1782), reported having extracted from red and white beets a substance identical with cane sugar. Toward the end of the 1700s, another scientist, Franz Carl Achard (1753– 1821), began to grow white beets for sugar, opening the world's first beet sugar factory in Silesia in 1802. Expanding under the umbrella of state protection, beet sugar production became an important driver of the agricultural and industrial development of nineteenthcentury Europe.

Whether starting from cane and beet, a sugar factory in essence performs a series of solid–liquid separations: (1) extraction of the juice, with fiber or pulp the residue; (2) purification of the juice, removing nonsucrose substances; (3) concentration of the purified juice to syrup; (4) crystallization of the sucrose in the syrup by further evaporation; (5) separation of the crystals from the syrup. While some high-quality raw cane sugar is sold for consumption, most undergoes additional refining —on-site or in a separate plant—by washing and redissolving the crystals and further clarifying and decolorizing the resulting solution. The clear syrup is then again boiled until crystals form or is made into liquid sugar. White sugar can also be produced directly after a more thorough

purification of the juice, as is now done in some cane sugar factories and throughout the beet sugar industry.

A Staple Commodity

No fewer than 115 countries produced sugar in 2004, but just five areas-Brazil, India, the European Union, China, and the United Statesaccounted for around 55 percent of global output. World consumption of sugar from industrial-scale processors amounted to some 130 million metric tons, white quality, equivalent to about 21 kilograms per person. Roughly threequarters came from sugarcane and the rest from sugar beet. In addition, on the order of 12 million metric tons of indigenous types of cane and palm sugar were produced by small rural enterprises, mainly in Asia and Latin America. Average annual per capita sugar consumption by country ranged from less than 10 kilograms to more than 60 kilograms, depending on economic factors



The sugar plant.

as well as national habits and tastes. At higher living standards sugar is mainly consumed as an ingredient of processed foods and drinks, where it now competes against high-fructose syrups, made chiefly from corn, particularly in the United States.

Like starchy foods, sugar is a source of dietary energy, providing nearly 4 kilocalories (about 16 kilojoules) per gram. As such it is often denounced as "empty calories." In one sense the charge is true—even raw sugar supplies practically no minerals, vitamins, fiber, or protein and excessive consumption contributes to obesity. In a more important sense, however, the charge misses the point. Whereas potatoes or rice can be eaten alone by the plateful, it is hard to swallow even a teaspoonful of sugar without dissolving it in a liquid. Sugar is first of all a sweetener, although in that

> role it can be replaced by high-intensity sweeteners. But it also fulfills other functions, acting as a binder, stabilizer, and bulking agent. It caramelizes on heating to form complex coloring and flavoring substances, and part of it is inverted during food preparation, the resultant monosaccharides reacting with other recipe components to lend aroma and browning to the final article. This increases the color, luster ,and flavor of bread crust, for example. Well known, too, is sugar's antimicrobial effect in fruit preserves, jellies, and jams, where a high concentration of dissolved sugar inhibits the growth of spoilage microorganisms.

> Ultimately, what has made sugar a staple food is that it enhances the beverages and foods in which it is ingested.

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Further Reading

Blume, H. (1985). *Geography of sugar cane*. Berlin: Albert Bartens.



- Deerr, N. (1949-50). The history of sugar. London: Chapman and Hall. Galloway, J. H. (1989). The sugar cane industry: An historical geography
- from its origins to 1914. Cambridge, UK: Cambridge University Press. International Sugar Council. (1963). *The world sugar economy: Structure and policies*. London: I.S.C.
- McGee, H. (1984). On food and cooking: The science and lore of the kitchen. New York: Charles Scribner's Sons.
- Mintz, S. W. (1985). Sweetness and power: The place of sugar in modern history. New York: Elizabeth Sifton Books, Viking.
- Smartt, J., & Simmonds, N. W. (Eds.). (1995). Evolution of crop plants. Essex, UK: Longman Scientific & Technical.
- Timoshenko, V. P., & Swerling, B. C. (1957). The world's sugar: Progress and policy. Stanford, CA: Stanford University Press.

van der Poel, P. W., Schiweck, H., & Schwartz, T. (Eds.). (1998). Sugar technology: beet and cane sugar manufacture. Berlin: Albert Bartens.

Sui Wendi

(541–604 ce) Founder of China's Sui dynasty (581–618)

mperor Sui Wendi oversaw the reunification of China ${f L}$ for the first time since the fall of the Han dynasty in 220 CE. During the brief Sui era and the Tang dynasty (618–907) that followed, China emerged as the cultural and political model for much of East Asia. A cautious but effective administrator, Sui Wendi initiated a number of governing reforms that were the precursors of both the civil-service examinations and state bureaucracy that were utilized by subsequent dynasties until the early twentieth century. Under the reign of Sui Wendi, Buddhism, a religion imported from South Asia, flourished in China and came to play an important role in the shaping of Chinese culture alongside the native philosophies of Confucianism and Daoism. In an effort to cement the union of northern and southern China and to improve internal transportation and communications within the empire, Sui Wendi initiated the building of a series of canals and waterways commonly referred to as the Grand Canal, a project that linked his kingdom's two major rivers, the Huang He (Yellow River) and the Chang Jiang (Chang, or Yangzi, River). The stability and prosperity that were ushered in during Sui Wendi's reign were disrupted when his son, Sui Yangdi (569-617), succeeded the throne in 605, but the cultural, economic, and institutional foundations upon which the Tang dynasty would later build were laid by the first emperor of the Sui.

Sui Wendi was the reign title of Yang Jian, who was born into an aristocratic family from the region west of the ancient capital of Chang'an in northwest China. Yang Jian's family had for six generations not only served as officials to the region's Turko-Mongol rulers, but also intermarried with the local non-Chinese elites. As a youth, Yang Jian received his education first at a Buddhist temple and later at an imperial academy in the Western Wei capital, where he was taught the basic tenets of Confucian philosophy. Through the influence of his father, Yang Jian received his first minor official post at the age of thirteen. He was quickly promoted over the next few years, and when his father died in 568, Yang Jiang inherited his title, becoming the Duke of Sui and an important figure in the Northern Zhou court.

In addition to performing well in his administrative positions, Yang Jian was also a gifted military commander who proved himself during the wars between the competing Chinese states of the sixth century. In return for his loyalty and service in the campaign against the Northern Qi kingdom, he was given the title of 'Pillar of the State' by Emperor Wu, the Northern Zhou emperor, and appointed military commander and administrative governor first over the Great Plain in northern China, and then over the newly conquered southern regions. When Emperor Wu died in 578, he was succeeded by the Crown Prince Yuwen Bin, who was also Yang Jian's son-in-law. The new ruler quickly proved to be an unstable tyrant who dismissed many of the kingdom's most able officials. Fortunately, Yang Jian, as the emperor's father-in-law, was spared during these purges, but when Yuwen Bin abdicated after only eight months in power and transferred the throne to his six-year-old son, Yang Jian's position became less tenable. The situation at the court deteriorated in the spring of 580, when the retired emperor threatened his wife and father-in-law with death. At that point, Yang Jian organized a coup against the ruling house.

In the late summer of 580, the Zhou forces were defeated. This military victory was followed by a massive

purge of the royal family, during which almost sixty persons were murdered at the court, including the young emperor, Yang Jian's grandson. The Sui dynasty was founded in 581 in northern China, although all of the southern regions were not pacified until 589.

Once in power, Yang Jian, now the emperor Sui Wendi, began to consolidate his power and to persuade his subjects that he had not usurped the throne. Claiming that he was restoring the glory and stability of the Han dynasty, Sui Wendi had court scholars write works praising his leadership, as well as edicts that improved his genealogy by conferring honors and titles on his father, grandfather, and even great-grandfather. Sui Wendi also secured the support of religious leaders by granting land and making donations to both Daoist and Buddhist temples and monasteries. Nor was Confucianism ignored during Sui Wendi's reign; the emperor fostered the development of imperial Confucianism by supporting a statesponsored school in the capital.

One of the most pressing challenges that Sui Wendi faced was recruiting officials to govern his growing empire. During his reign, Sui Wendi introduced a system of official selection that involved a personal interview and examination by high officials for a limited number of candidates who demonstrated promise but who were not from aristocratic families. Not only did Sui Wendi believe that talent and merit should be rewarded, but he was also aware of the dangers of corruption within his bureaucracy. To limit this problem, he introduced the rule of avoidance, which dictated that an official could not serve in his place of origin, as there was a danger that an official could favor his family or friends if posted to his home town. To prevent officials from forming new friendships and bonds of obligation, all officials were rotated to new postings every three years. These administrative reforms formed the basis of the Chinese bureaucracy for the next fourteen hundred years.

With support from many sectors of the population Sui Wendi was able to solidify his position and to subdue the last independent Chinese kingdoms, Liang (587) and Chen (589). In addition to waging military campaigns, supporting the development of Buddhism, and reforming the bureaucracy, Sui Wendi also undertook a massive construction project aimed at solidifying his union of northern and southern China. In order to transport the economic and agricultural wealth of the south northward to his capital, and to facilitate the movement of troops and communications, Sui Wendi initiated the construction of a series of canals to link his capital to the Huang River and to link this northern river to the Chang in the center of his kingdom. Begun in 584 and completed during the reign of his son in 605, the Grand Canal was a massive engineering project that symbolized China's new confidence and prosperity.

Robert John Perrins

See also China

Further Reading

- Bingham, W. (1941). The founding of the T'ang dynasty: The fall of Sui and rise of T'ang. Baltimore: Waverly Press.
- Dien, A. E. (1990). State and society in early medieval China. Stanford, CA: Stanford University Press.
- Fairbank, J. K., & Twitchett, D. C. (Eds.). (1979). The Cambridge history of China: Vol. 3, Part I. Sui and T'ang China, 589–906. New York: Cambridge University Press.
- Hucker, C. O. (1975). China's imperial past: An introduction to Chinese history and culture. Stanford, CA: Stanford University Press.
- Pan Yihong. (1997). Son of Heaven and heavenly qaghan: Sui-Tang China and its neighbors. Bellingham, WA: Center for East Asian Studies, Western Washington University.
- Wright, A. F. (1978). The Sui dynasty. New York: Alfred A. Knopf.



(569–617 CE) Second emperor of China's Sui dynasty (581–618)

Sond son of Yang Jian (Sui Wendi), the Sui dynasty's founder. Sui Yangdi has generally been portrayed by Confucian historians as an immoral ruler and despot. Ruling from 605 to 618, Sui Yangdi not only continued the construction of the Grand Canal, a project begun by

The sudden political revolutions which strike the historian most forcibly are often the least important. The great revolutions are those of manners and thought. • GUSTAVE LEBON (1841-1931)

his father, but also initiated several other major projects of his own, including work on the Great Wall, and the rebuilding of the cities of Luoyang on the Huang (Yellow) River to serve as an eastern capital and Yangzhou on the Chang (Yangzi) River to serve as a southern capital. Sui Yangdi also moved to extend Chinese control over neighboring territories by sending armies to the west against the nomadic peoples of Central Asia, to the south against the Vietnamese, and to the east in an attempt to conquer the Korean kingdom of Koguryo. These wars, coupled with the taxes and forced labor that were required for the massive public-works projects, resulted in widespread hardship and resentment, and eventually led to the collapse of the dynasty.

Yang Guang's career began early, when at the age of thirteen he received from his father the titles Prince of Jin and Governor of Bingzhou, a strategically important post on the northern frontier. The emperor also arranged for his son to be married to a princess from the former Liang kingdom in southern China. At the age of twenty, Yang Guang was charged with leading an expedition against the state of Chen, the last independent state in southern China. The campaign was a success and marked the culmination of the Sui reunification of China. Yang Guang was rewarded for his role in the pacification of the south with his appointment to the position of viceroy stationed at the capital of Yangzhou. Aside from periodic trips to report to his father and mother at the imperial capital of Chang'an, Yang Guang remained in Yangzhou for much of the next decade, where he supervised the integration of the southern population and economy into the newly unified empire.

Although his family's roots lay in the northwest region of China, Yang Guang, perhaps due to the influence of his wife, became increasingly fond of the culture of southern China. While serving as viceroy in Yangzhou, Yang Guang worked to cultivate the loyalty of the empire's new southern population. Using his increasing fluency in the regional Wu dialect as well as the personal relationships made possible by his marriage, Yang Guang emerged as a champion of his subjects and secured their support for the new dynasty. In an effort to diffuse anti-Sui sentiments among the former Chen aristocracy, Yang Guang appealed to their religious convictions and issued orders for court-appointed scholars to recopy Buddhist scriptures and texts that had been destroyed during the civil war. He also supported the repair and construction of Buddhist temples and monasteries throughout the area under his command, in addition to hosting banquets for local monks and abbots. Yang Guang not only patronized the dominant religion of southern China, he also supported the building of two Daoist monasteries in the southern capital and the appointment of Confucian scholars who had formerly served the Chen kingdom to positions within his administration.

During a visit to his mother at the imperial capital in 600, Yang Guang became convinced that his elder brother, the crown prince, was unsuitable to succeed to the throne. Yang Guang began to gather allies from among the military commanders and aristocracy and to plot against his brother. Later that year he presented his father with enough real and manufactured evidence that the emperor issued an edict deposing the crown prince. Yang Guang was shortly afterwards proclaimed crown prince and left southern China to assume his new position at Chang'an. Following his mother's death in 602, Yang Guang was charged with much of the day-to-day administration of the empire. When his father died in the summer of 604, Yang Guang assumed the throne under the reign name Sui Yangdi.

In an effort to placate the powerful gentry and aristocratic families of northern and central China, and to have his administration closer to the eastern and southern reaches of the empire, Sui Yangdi moved the capital 300 kilometers east to the city of Luoyang. Between 612 and 614, in an attempt to restore the former borders of the Han period, Sui Yangdi also initiated three failed attempts to conquer the Koguryo kingdom in northern Korea. These expeditions were unsuccessful, as were similar attempts to pacify the Turks in the northwest in 615 and 617. Despite these military failures, Sui Yangdi did establish military colonies along his borders and some political control over the lesser tribes of the northern steppes. The military defeats, coupled with the hardship brought about by the construction of the Grand Canal, the capital city of Luoyang, and the repairs to the Great Wall, led to rebellion throughout the empire. By 617 rival claims to the throne were appearing throughout China as civil war broke out. In 618 Sui Yangdi was assassinated and the dynasty that his father had founded collapsed. China remained divided into many petty states and kingdoms until the new rulers of the Tang dynasty reunified China five years later.

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See also China

Further Reading

- Bingham, W. (1941). The founding of the T'ang dynasty: The fall of Sui and rise of T'ang. Baltimore: Waverly Press.
- Dien, A. E. (1990). State and society in early medieval China. Stanford, CA: Stanford University Press.
- Fairbank, J. K., & Twitchett, D. C. (Eds.). (1979) The Cambridge history of China: Vol. 3, Part I. Sui and T'ang China, 589–906. New York: Cambridge University Press.
- Hucker, C. O. (1975). China's imperial past: An introduction to Chinese history and culture. Stanford, CA: Stanford University Press.
- Pan Yihong. (1997). Son of Heaven and heavenly aaghan: Sui-Tang China and its neighbors. Bellingham, WA: Center for East Asian Studies, Western Washington University.
- Wright, A. F. (1975). Sui Yang-ti: Personality and stereotype. In A. F. Wright (Ed.), *The Confucian persuasion* (pp. 47-76). Stanford, CA: Stanford University Press.

Wright, A. F. (1978). The Sui dynasty. New York: Alfred A. Knopf.

Xiong, V. C. (1993). Sui Yangdi and the building of Sui-Tang Luoyang. *The Journal of Asian Studies* 52(1), 66–89.

Süleyman

(1494–1566) Ottoman sultan

In Europe, which trembled at the appearance of his armies more than once, Süleyman I was known as "the Magnificent." Throughout the Islamic world, he was better known as Kanuni, "the Lawgiver," and was believed to embody the highest principles of justice and harmony in a ruler. For his force of will and his many accomplishWhat men call empire is world-wide strife and ceaseless war. In all the world the only joy lies in a hermit's rest. • SÜLEYMAN, SULTAN (1494–1566)

ments, Süleyman deserves consideration as one of the great leaders of history. As sultan of the Ottoman empire, Süleyman pursued a policy of militant Islam and imperialism. Süleyman's deep faith in God and upbringing in the warrior traditions of the Ottoman Turks required that he should someday lead armies in battle, defeat infidels in the *dar al-harb* ("abode of war"), and give law and provide order for the faithful in the *dar al Islam* ("abode of Islam"). Süleyman's father, Selim the Grim (1470–1520), had extended the Ottoman empire past the frontiers of Kurdish and Turkmen potentates into what is now northern Iraq and had conquered Egypt, Syria, and the Arabian Peninsula, bringing the holy cities of Mecca and Medina under Ottoman control.

The Ottoman empire was not a hereditary monarchy, nor was it elective. Nevertheless, by killing his brothers and their descendants, Selim had cleared the way for the ascension of Süleyman by the time Selim died of cancer in 1520.

The young sultan appears to have been confident, proud, and forceful. According to the ambassador from Venice, Süleyman rewarded his supporters by showering them with gifts and punished those who had not shown loyalty during his ascension. He gave clemency to those who allegedly had committed crimes against his father, and most important, he rewarded his bodyguard—the janissaries—with liberal cash disbursements. The janissaries were slave soldiers who were supplied by a levy upon the children of Christians. These soldiers trained with the composite bow and firearms and provided Süleyman with a powerful army. The young sultan had cultural interests as well: He wrote highly esteemed poetry, and he commissioned the architect Sinan to beautify the Ottoman capital of Istanbul.

War in the name of religion was at the heart of Süleyman's view of the world and his understanding of what it meant to be leader of the Ottoman state and its people. Holy war would not only content the janissaries, but also win the favor of God. Süleyman's subjects shared in the belief that God would approve of such warfare and reward the devout with prosperity. Early in his reign, Süleyman demonstrated his abilities as leader of the faithful in the constant small-scale raids and reprisals that raged back and forth on the border between the Ottoman empire and the Christian kingdom of Hungary. On 16 February 1521, Süleyman marched out of Constantinople at the head of an army that numbered more than 100,000 men. Forty Turkish galleons sailed up the Danube River in support, and ten thousand wagons brought powder and shot. Süleyman's army eventually captured the Serbian capital of Belgrade. When the defenders of this town surrendered, they were massacred. It is not known whether Süleyman approved of this atrocity or not. On 18 August 1521, the cathedral of Belgrade was consecrated as a mosque. Even as the great victory was celebrated at home, Süleyman planned yet further conquests.

More often than not, over the next forty-five years, the sultan could be found at the head of his armies. In 1522, after five months of siege, Süleyman subdued Rhodes, the Christian base of piracy in the Mediterranean. Four years later, Süleyman led a major invasion of the kingdom of Hungary, on 29 August fighting the decisive battle of Mohács in which the Hungarian king Louis II (1516–1526) was slain and his countrymen utterly defeated. Between 1528 and 1529, Süleyman led his victorious armies into the heart of central Europe and lay siege to the Habsburg capital of Vienna. This marked the furthest extent of Süleyman's advance into Christendom. Far from their depots of supplies and confronted by unexpectedly stiff resistance, Süleyman's forces withdrew to Istanbul, but Süleyman was undeterred in his dream to become "Lord of the Age."

The Ottoman empire's other great rival in the world was the Safavid empire of Persia. The Safavids had adopted Shiite Islam as their state religion, their messianic mission clashed with the Sunni Islam of the Ottoman empire. Süleyman invaded Safavid territory and in 1534 captured Baghdad and most of Iraq. Southern Yemen fell in 1539, and in 1546 the sultan's armies captured Basra, in southern Iraq. The Shiite tribes in the south of Iraq stubbornly resisted the Ottomans, however, and the region was never completely subdued. Meanwhile, renewed war with the Habsburgs continued to pre-



occupy Süleyman to the end of his reign. In 1565 Süleyman unleashed his forces on the Christian stronghold of Malta; the ensuing siege failed disastrously at the cost of between twenty thousand and thirty thousand men. The next year, Süleyman died leading an Ottoman army in yet another campaign against the Habsburgs in Hungary.

The most famous and lasting achievement of Süleyman's reign, the creation of a single legal code for the entire Ottoman empire that reconciled Islamic law with the law of the sultans, was not actually the work of Sülevman himself, but was the accomplishment of a legal expert named Ebu's-Su'ud Efendi. In the decades that followed the fall of Constantinople in 1454 and throughout the early sixteenth century, Islamic legal experts had slowly codified the laws of the sultans. By the time of Süleyman, this work was nearly completed, and sultanic laws had been mostly regularized and replaced the many local laws and customs of the empire. The great problem was how to reconcile Islamic law with the legal code of the sultan. As a high-ranking judge, Ebu's-Su'ud used his authority to issue a fetva (fatwa)—"a proclamation issued by a qualified religious authority in response to questions of law and usage" (Goffman 2002, 76)-to bring the two codes of law into harmony. Ebu's-Su'ud also added the title of caliph, meaning leader of the entire Islamic community, to the many titles of Süleyman, making the sultan the ultimate religious authority for all Muslims.

In Islamic tradition, Süleyman the Lawgiver will always be remembered as the "second Solomon," a monarch who embodied a perfect concept of justice in accord with the Quran. His reign marked a period of justice and harmony for those of the Islamic faith.

George Satterfield

See also Ottoman Empire

Further Reading

Bridge, A. (1983). Suleiman the Magnificent: Scourge of heaven. New York: F. Watts.

Goffman, D. (2002). The Ottoman empire and early modern Europe. New York: Cambridge University Press.



- Hammer-Purgstall, J. F. von. (1827–1835). Geschichte des Osmanischen Reichs (History of the Ottoman Turks). Pest, Hungary: Hartleben.
- Imber, C. (1997). *Ebu's-su'ud: The Islamic legal tradition*. Stanford, CA: Stanford University Press.
- Lybyer, A. H. (1978). The government of the Ottoman empire in the time of Suleiman the Magnificent New York: AMS Press.
- Merriman, R. B. (1966). Suleiman the Magnificent, 1520–1566. New York: Cooper Square Publishers.

Sumerian Society

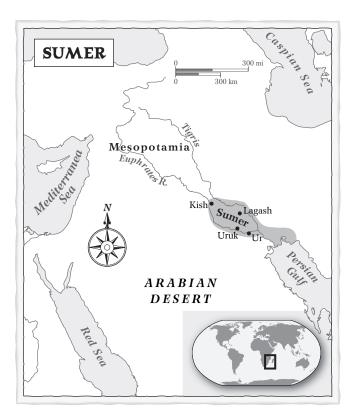
The Sumerians were people who immigrated to southern Iraq during the fourth millennium BCE and led the development of one of the first advanced civilizations in ancient southwestern Asia. At its height the geographical extent of Sumerian society likely reached from the modern city of Baghdad in Iraq to the shores of the Persian Gulf, a total area of roughly 16,000 square kilometers. The climate in the area called "Sumer" was harsh and foreboding because of high temperatures and soil that was for the most part arid and infertile. It was a land devoid of mineral deposits, stone, and trees. Overcoming such difficult environmental factors required a high degree of social organization, task specialization, and centralized administrative oversight.

For more than a millennium the Sumerians were more than equal to the challenge. Their history is a testament to ingenuity and perseverance in the face of seemingly insurmountable odds. From the time when the first Sumerian city-states were established (c. 3500 BCE) to the demise of the third dynasty of Ur (c. 1950 BCE) Sumerian political leaders, scholars, and artists left an indelible mark on the cultural landscape of ancient southwestern Asia. Their mastery of mud-brick architecture, irrigation, pottery manufacture, and reed work, along with their invention of cuneiform writing and innovations in education, visual arts, literature, music, and jurisprudence, were the foundations for later Babylonian and Assyrian cultural advances in these areas.

Sumerian society was both urban and agrarian. Cities were the focal point of social, political, and economic life. However, they were dependent on the villages and lands surrounding them for agricultural products, raw materials, and labor. Sumerian cities also relied on trade with one another and with cities well outside of the Fertile Crescent (a semicircle of fertile land stretching from the southeast coast of the Mediterranean around the Syrian Desert north of Arabia to the Persian Gulf). Such trading relationships probably extended east to the cities of the Indus River valley and west to the shores of the Mediterranean. The first permanent human settlements in Iraq date to about 4500 BCE, and the complex relationship between them-characterized at times by cooperation and at other times by conflict-provides the backdrop against which the history of Sumerian society unfolds. The area between the Tigris and Euphrates Rivers was, early on, inhabited by at least two distinct groups of people. One group is sometimes referred to as "proto-Euphrateans of Ubaidans." The first term means that they were indigenous to the area adjacent to one of Mesopotamia's two principal rivers, the Euphrates. The second term classifies them according to the site (Tell Ubaid) where the physical remains of their culture were found. We know some elements of their language from isolated elements retained in the Sumerian lexicon. Also present in the area were peoples whose language was part of the Semitic branch of the Afro-Asiatic phylum (group).

Unknown Origins

The Sumerians were, in fact, newcomers to what was a thriving locus of cultural exchange during the fourth millennium BCE. Archaeological and linguistic evidence suggests that they migrated to southern Iraq about 3500 BCE from elsewhere. Scholars have posited many points of origin, none of which has garnered universal consensus. One promising hypothesis places their homeland in an area near the Caspian Sea. The blending of these disparate cultures led to the emergence of a recognizable complex of traits fully distinguishable as Sumerian in nature.



The historical horizon of Sumerian society extends from the fourth through the second millennia. Sumerian scribes left behind an enormous number of economic records, dedicatory inscriptions, myths, and other sources that can be used to reconstruct Sumerian history. From these sources one discovers Sumer's more important cities, such as Eridu, Ur, Erech, Lagash, Umma, Nippur, Kish, Eshnunna, and Shuruppak. One also learns of the exploits of some of these cities' most memorable kings, such as Etana, Lugalbanda, Gilgamesh, Ur-Nanshe, Sargon, Naram-Sin, Gudea, Ur-Nammu, and Shulgi. Although the history of Sumer is not easily subdivided into distinct periods, one can legitimately characterize it as one dominated by competition between independent cities and their leaders for ascendancy. This competition was enacted on a political stage that included actors outside of Mesopotamia (the region of southwestern Asia between the Tigris and Euphrates) as well.

Scholars generally agree that Sumerian culture reached its high point in the so-called Ur III period (the third dynasty of Ur) during the reign of Ur-Nammu and his successors (c. 2050 BCE–1950 BCE). Under their leadership Sumer enjoyed a century of military strength,

political stability, economic growth, and artistic flowering. With its collapse after military incursion from the Elamites of Iran, Sumerian society enters its twilight years. Within two centuries the Sumerians would cease to exist as an identifiable ethnic group, and their cultural legacy would become the inheritance of the kings of the first dynasty of Babylon, the best known of which was Hammurabi. Sumerian would gradually become the lingua franca (common language) of the educated classes. The cuneiform writing system developed by Sumerian scholars to record their language would be borrowed and adapted to write the native Semitic language—Akkadian—of the new king and his empire. The art and literature of Sumer would constitute the classical corpus of knowledge from which Babylonian teachers would draw in educating their youth. That knowledge would also provide the models upon which new myths, epics, and legends would be based to reflect the ethos (distinguishing character, sentiment, moral nature, or guiding beliefs) of this new dynasty and its populace.

Daily existence in Sumer was focused on the family. Arranged marriages were the norm, as were both nuclear and extended families. Offspring, both biological and adopted, were well cared for. Divorce was permissible. Women enjoyed many legal rights, including those entitling them to own property and participate fully in the Sumerian economy.

Sumerian life also centered on the rhythms of its cities, the populations of which may have been as low as ten thousand and as high as fifty thousand. Political life in Sumer underwent a gradual evolution that led ultimately to the rise of monarchic rule. This rule took the place of a more democratic form of government in which cities were overseen by governors *(ensis)* and bicameral ruling assemblies. Military threats were addressed by temporary military leaders *(lugals)*, who served only until such threats were averted. In time the office of *lugal* evolved into that of hereditary king. Each city contained a religious sanctuary consisting of a stepped tower (ziggurat) with a shrine at its apex and a temple with a shrine *(cella)* that housed a statue representing the tutelary deity of the city. Baked mud bricks were used in the construction of both. Painted cones (inserted into the mud walls), frescoes, and other decorative designs were used to adorn the walls of temples. This sacred complex was the heart of a city and reflected a key Sumerian precept-that is, that the city, its land, and inhabitants belong to its patron or matron god. The Sumerian pantheon consisted of several thousand anthropomorphic deities who, although unseen, held sway over virtually every aspect of life. Among the more noteworthy deities were An (the sky god), Ki or Ninhursag (the goddess of Earth), Enlil (god of air), Enki (god in charge of fresh waters), Utu (the sun god), Nanna (the moon god), and Inanna (the goddess identified with Venus as the morning and evening star). These deities were part of an assembly, a divine royal family, that administered the universe and its affairs. Sumerians maintained a good relationship with these deities through sacrifice, prayer, and the exercise of proper stewardship of what was their earthly domain. In time Sumerians also developed the idea that each person has a personal god who can carry his or her petitions to the members of the divine assembly. This god became the focus of special devotion by those Sumerians who were the god's devotees.

Sumerian theology acknowledged the presence of the numinous (the spiritual and suprasensual) in everyday life while maintaining a pragmatic orientation. It held values such as truth, freedom, and compassion in high regard. One of the Sumerian monarch's chief responsibilities was to create an environment in which these values would thrive. Sumerian theology also posited that all aspects of the tangible and intangible worlds are governed by divinely created regulationscalled "me" in Sumerian-that ensure their continual and harmonious operation. Sumerian theology also acknowledged the generative power of the divinely spoken word. Thus, gods in the Sumerian pantheon were thought to have the power to conceive of ideas mentally and bring them into being through the medium of speech.

Death and Rebirth

The mysteries of death and rebirth were of particular fascination to Sumerian theologians. Death represented not the end of existence, but rather the gateway into another life in the Underworld. Although this life was not of a quality equal to that of life on Earth, it did represent a continuation of existence beyond the grave. Several myths and rituals provide a window onto the larger spectrum of Sumerian beliefs about death and rebirth, perhaps the most important of which is the sacred marriage rite. Each year a festival celebrating the New Year was held at the temple of Inanna. There the reigning monarch would assume the identity of the dying vegetation god, Dumuzi, and mate with the high priestess of Inanna, who served as the human embodiment of this goddess. Their sexual union was believed to guarantee fertility for Sumer during the coming year. One can also see this as a confident assertion of the preeminence of the forces of life over those of death and dissolution.

Sumerians cherished the life of the mind. They developed a writing system based at first on the recording of pictograms on clay tablets with a pointed reed stylus. These tablets were then baked to harden and preserve them. Later a technological shift to a stylus with a triangular tip resulted in the development of wedge-shaped signs that were used to represent individual sounds, words, and concepts. This writing system, cuneiform, was employed at first for record-keeping purposes. It was well suited to convey essential features of their language, which is unrelated to any form of speech past or present. Later cuneiform was brought into the service of the palace, temple, and *edubba* (school) to preserve political, religious, educational, and artistic texts. The edubba trained those people who were headed toward careers in government or in temple service. Such training seems to have been afforded almost exclusively to men. The curriculum required that one learn the art of writing and that one become conversant in the categories of phenomena in the natural world and the Sumerian social milieu. Extensive lists of such phenomena (e.g., flora, fauna, occupations, etc.) were compiled and maintained. Thus,

The Revolution has not yet succeeded. Comrades, you must carry on! • SUN YAT-SEN (1866-1925)

memorization was one of the mainstays of the Sumerian educational process.

Achievements in the arts and expressive culture were also noteworthy. Sumerians excelled in literary forms such as poetry and in music, sculpture, and carving. Sumerian craftspeople were especially well known for cylinder seals. These small objects were engraved with scenes from nature, myth, and daily life. When they were used to seal containers, these scenes would become visible as impressions on the moist clay.

The world owes a tremendous debt to Sumerian society. Its intellectual, religious, and artistic achievements are the foundation upon which many cultural advancements, particularly in the Western world, are based.

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See also Mesopotamia

Further Reading

- Edzard, D. O. (2000). The Sumerian language. In J. Sasson (Ed.), *Civilizations of the ancient Near East*. Peabody, MA: Hendrickson Publishers.
- Hayes, J. H. (2000). A manual of Sumerian grammar and texts: Vol. 5. Aids and research tools in ancient Near Eastern studies (2nd rev. ed.). Malibu, CA: Undena Publications.
- Jacobsen, T. (1976). The treasures of darkness. New Haven, CT: Yale University Press.
- Jacobsen, T. (1997). The harps that once . . .: Sumerian poetry in translation. New Haven, CT: Yale University Press.
- Kramer, S. N. (1971). The Sumerians. Chicago: University of Chicago Press.
- Kramer, S. N. (1981). History begins at Sumer: Thirty-nine "firsts" in recorded history (3rd rev. ed.). Philadelphia: University of Pennsylvania Press.
- Kramer, S. N. (1983). Sumerian history, culture, and literature. In D. Wolkstein (Ed.), *Inanna, queen of heaven and Earth: Her stories and hymns from Sumer*. New York: Harper & Row.
- Kramer, S. N. (1998). Sumerian mythology: A study of spiritual and literary achievement in the third millennium B.C. (Rev. ed.). Philadelphia: University of Pennsylvania Press.
- Roux, G. (1983). Ancient Iraq (3rd ed.). Harmondsworth, UK: Penguin Books.
- von Soden, W. (1994). The ancient Orient: An introduction to the study of the ancient Near East (D. G. Schley, Trans.). Grand Rapids, MI: Eerdmans.





Chinese revolutionary

C un Yat-sen was the most prominent figure in the D movement that overthrew the Manchu Qing dynasty (1644-1912) and established the Republic of China, and the founding leader of the Chinese Nationalist Party (Guomindang). Sun was born in Xiangshan county in Guangdong province. After beginning his education in China, in 1879 Sun was sent to live with his elder brother in Hawaii, where he learned English while attending the missionary-operated Iolani School. After returning to China, Sun pursued European medical training in Guangzhou (Canton) and in Hong Kong, but quickly put aside his career as a doctor to focus on politics. Qing China had been subject to humiliating unequal treaties since the Opium Wars, and now appeared increasingly vulnerable in an age of aggressive Western imperialism. In 1894 Sun traveled to Tianjin and petitioned the powerful official Li Hongzhang to undertake rapid reforms to modernize China. Li did not respond. Defeat in the Sino-Japanese war followed soon after.

Having failed to promote reform from within, Sun began to work for the overthrow of the Qing dynasty. He returned to Hawaii, and created the Revive China Society to promote revolution. Most of his support came from fellow Guangdong natives, some of whom were members of secret societies that had long embraced an anti-Manchu ideology. In 1894 Sun's first attempt at organizing a revolt in Guangzhou was foiled by Qing authorities. Sun fled to Hong Kong to avoid arrest. Forced to leave by British authorities, Sun proceeded to Japan, Hawaii, and the west coast of the United States trying to raise funds and gather support. While visiting London in 1896 Sun became the subject of a bizarre international incident in which he was held prisoner in the Chinese legation. Sun was able to get word of his captivity to friends, who brought his predicament to the



attention of the press. When Sun was released he became an instant celebrity.

Over the next fifteen years Sun tirelessly promoted the revolutionary cause. Unable to return home, he traveled among overseas Chinese communities in Southeast Asia, Japan, and North America to raise funds and support. After 1900 he was introduced to young Chinese intellectuals in Japan sympathetic to the revolutionary cause, extending his connections beyond his original Guangdong base. In 1905 Sun published a newspaper editorial declaring that China needed nationalism, democracy, and government promotion of peoples' livelihood. Repackaged as the Three People's Principles, these became the centerpiece of Sun's revolutionary ideology; he repeatedly redefined these terms over the next two decades. In 1905 Sun became the director of the Chinese Revolutionary Alliance, which brought together a diverse group of supporters of revolution.

Initially, the expatriate revolutionaries made little progress as the Qing dynasty struggled to remake itself in the early years of the twentieth century. But when governmental reforms stumbled after 1908, the revolutionaries gained a growing following in China. Nevertheless, when the Wuchang army garrison rose up in October 1911 to spark the revolution, it was a surprise. Sun Yatsen was in the United States, and rather than returning to China directly, he headed to Europe to seek foreign support for the revolutionary cause. Upon his arrival in Shanghai in late December he was greeted as a hero by the revolutionary forces, now in control of major cities in central China. On 1 January 1912 Sun was sworn in as the provisional president of the new Republic of China.

But Sun's triumph was short-lived. The revolutionary forces negotiated an end to the war with Yuan Shikai (1859–1916), a Qing official with a record as a reformer and strong support from the powerful northern army. Sun resigned the Presidency and supported the selection of Yuan as his replacement. The Revolutionary Alliance was remade into a democratic political party, and renamed the Nationalist Party. Led by Song Jiaoren (1882–1913), the new party won victory in assembly elections in 1913. But Yuan refused to become a figurehead: He arranged Song's assassination and in the "second revolution" drove Sun and his supporters out of government and established a dictatorship. Yuan's subsequent effort to establish himself as emperor failed miserably, Beijing's authority collapsed, and power was divided among regional warlords.

Sun Yat-sen tried desperately and unsuccessfully to restore his vision of a unified Chinese republic from 1914 to 1920. Frustrated by foreign support for Yuan, he turned to Japan, and offered major concessions in return for Japanese support, without success. After Yuan's death, Sun sought to restore the 1912 constitution, but the warlords would not cooperate.

In the early 1920s Sun began to establish a political base in Guangzhou and to reconstitute the Nationalist Party. In 1922 he sought out the aid of Comintern, the association of national Communist parties founded by Vladimir Lenin (1870–1924), in reorganizing the Nationalist Party on a disciplined Leninist model. Sun, while admiring the successes of Lenin, never embraced Marxism. Sun's own Three People's Principles-now taking on an increasingly socialist and anti-imperialist flavor-formed the ideological orthodoxy of the renewed Nationalist Party. Meanwhile a United Front was formed with the fledgling Chinese Communist Party, and a talented cadre of young Nationalist and Communist leaders, including Chiang Kai-shek (1887-1975) and Zhou Enlai (1898-1976), came to Canton. Sun, now convinced that his vision could only be fulfilled by a strong army, formed a military academy and began to train an army for the planned northern expedition to destroy the warlords and unite the country.

In January 1925, Sun made one last effort at a peaceful unification, traveling to Beijing at the invitation of northern warlords Duan Qirui (1865–1936) and Zhang Zuolin (1873–1928). Before these talks could produce results, Sun fell ill with cancer, and he died on 12 March.

Sun's death deprived him both of seeing the success of the Northern Expedition and the end of the warlord era and of witnessing the bitter break between Chiang Kaishek's Nationalists and the Chinese Communist Party. As a result Sun has a unique role in the symbolism of modern China: Admired across the political spectrum, he became an icon celebrated for his tireless patriotism and his advocacy of a strong, modern China. Historians' assessments of Sun have varied. While Chinese scholars often treat Sun as a near sacred figure, Western scholars have been less admiring. Critics view Sun as a symbolic rather than as a substantive figure, as a man who advocated change but was rarely in a position to execute it. But Sun's role in linking China with overseas Chinese communities and his advocacy of technocratically oriented models of industrial development seem prophetic of China's place in the globalizing world that has emerged since the end of the Cold War.

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See also China; Revolution - China

Further Reading

- Bergere, M. C. (1998). Sun Yat-sen (J. Lloyd, Trans.). Stanford, CA: Stanford University Press.
- Fitzgerald, J. (1996). Awakening China: Politics, culture and class in the nationalist revolution. Stanford, CA: Stanford University Press.
- Schiffrin, H. (1968). *Sun Yat-sen and the origins of the Chinese revolution.* Berkeley and Los Angeles: University of California Press.
- Wei, J. L., Myers, R. H., & Gillen, D. G. (Eds.). (1994). Prescriptions for saving China: Selected writings of Sun Yat-sen. Stanford, CA: Hoover Institution Press.
- Wilbur, C. M. (1976). *Sun Yat-sen: Frustrated patriot*. New York: Columbia University Press.
- McNeill, William H., 'History and the Scientific Worldview', History and Theory, 37, 1(1998): 1-13.