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Ofer Gal
Yi Zheng *Editors*

Motion and Knowledge in the Changing Early Modern World

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Chapter 1
Global Motion and the Production of Knowledge

Ofer Gal and Yi Zheng

Abstract Motion defined the world of early modern savants. Whether Chinese, Japanese, Korean, or English, they were taken by the new intellectual challenges and options of a world populated by people and objects moving over lands, oceans and heavens. How are we to tell the history of knowledge at the eve of modernity giving this global experience its due?

1.1 Motion

People living around the turn of the seventeenth century were experiencing motion in ways beyond the grasp of anyone less than a century earlier. Goods and people were crossing lands and oceans to distances never envisioned and in scales hardly imaginable by their recent predecessors. The earth itself was set in motion and the heavens were populated by a whole new array of moving objects: comets, moons, and sunspots. Even the motion of terrestrial objects – so close at hand and seemingly obvious – was being thoroughly reshaped. In the two centuries to follow, this incessant, world-changing motion would transform the creation, interpretation and dissemination of knowledge and the life and experience of the people producing it: savants, artisans, pilots, explorers and collectors. This volume comprises studies of this early modern drama of motion and transformation of knowledge.

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This drama was a global experience. It was not completely new: from the Mongol conquest of Eurasia linking the landmasses to the 'age of discovery' connecting the Atlantic to the Pacific, Asia, Europe, and finally the "New World" became inextricably bound. But by the middle of the sixteenth century, commerce, conquest and exploration across political and geographical borders turned these ties into a close-bound global economic and cultural network: Chinese-Indian spice trade was carried out by Dutch vessels; Peruvian silver, brought by the Spanish, monetized the Chinese economy; Portuguese merchant ships mediated the silk trade between China and Japan and took over internal exchange in the Indian Ocean; Chinese porcelain export dictated economy, finance and taste in both Europe and China. Porcelain trade is a particularly intriguing example of this essential integration: its production in Europe, and with it employment and prosperity, rose and fell according to the prices and availability of Chinese porcelain, themselves subject to Chinese internal political and military vicissitudes. Correspondingly, the style of high-end Chinese porcelain manufactured in Jingdezheng was modified to suit European taste. The cultures and economies in different parts of the globe informed, bounded and cross-fertilized each other.[1]

The emergence of motion as a key cultural-epistemological issue is therefore crucial to the coming to be of modernity in all its facets: as a culture of commerce; of war; of nation; and indeed of knowledge. The primary challenge in understanding this momentous development is to capture it in the global, trans-cultural, in-between places where it was experienced. This is because it is this ubiquity, this inescapable presence of motion, set off, carried out or embodied by humans and objects natural and artificial, that made it an essential force of change in the knowledge people had about the world, and about themselves, and in the means and practices by which they created and disseminated this knowledge.

Yet the methodological tools provided by the historiography of early modern culture in general and that of science in particular are not well-tuned for the task. This has much to do with the way history of science emerged as a discipline. As its name attests, it has always been dedicated to studying the emergence and development of a very particular form of knowledge – *Scientia* – a term as commendatory as it was descriptive. From its very inception, the history of science did not perceive its subject matter to be a historical phenomenon per se, but a unique

[1] *Cf.*, Braudel, F., *Civilization and capitalism, 15th-18th Century*. New York: Harper & Row (1982–1984); Embree, A.T. & C. Gluck, *Asia in Western and World History: A Guide for Teaching*. Armonk: M.E. Sharpe (1997); Finnane, A., "Yangzhou's 'Modernity': Fashion and Consumption in the Early Nineteenth Century." *Positions: East Asia cultures Critique*, 11.2, (2003); 395–425; Frank, A.G., *ReOrient: Global Economy in the Asian Age*. Berkeley: University of California Press, (1998.); Moll-Murata, C., "Guilds and Apprenticeship in China and Europe: The Ceramics Industries of Jingdezhen and Delft." Paper presented to the S.R. Epstein Memorial Conference: "Technology and Human Capital Formation in the East and West", June 18–21, 2008; Spence, J.D., *The search for modern China*. New York: W.W. Norton & Co. (1990); Von Glahn, R., *Fountain of Fortune: Money and Monetary Policy in Chin, 1000–1700*. Berkeley: University of California Press (1996).

epistemological achievement, and took it upon itself to determine what exactly typifies this achievement and warrants its claims of superiority over all other forms of knowledge. It is emblematic of the aspirations and presumptions of the discipline that its founding text, the 1837 *History of the Inductive Sciences*, was composed by William Whewell, who coined the term 'scientist' 4 years earlier and composed his definitive *Philosophy of the Inductive Sciences, Founded Upon their History* completed a decade later (Whewell 1837, 1847).

1.2 Knowledge

History of science, as a discipline, is ill equipped to deal with motion as a global early modern phenomenon, because it has recast the nineteenth century philosophical-methodological assumption about the uniqueness of science into a historical assumption about its unique European nature. This is how the period and events under consideration here – the major changes in practices and modes of knowledge from late sixteenth through the eighteenth century – came to represent a unique expression of European culture, a centrepiece of "our customary periodization of European history," as Butterfield famously put it (Butterfield 1957, 8); or "the most important event in Western history" in the canonical studies of the Scientific Revolution (Westfall 1989, 7). Traditional Euro-centrism, the notion that science represented "a specific kind of 'rationalism' in Occidental culture" (Weber 1920, 1:11), was clearly embedded in the assumption that the great change in epistemic practices in the sixteenth to seventeenth century was distinctively European, but the alleged "fact that modern science arose only in the West" (Huff 2003, 2) was accepted as such even by those interested in non-European knowledge. It was indeed Joseph Needham, the initiator of the great Chinese Science project, who gave it what might be its most famous formulation as 'the Needham question':

> What was it that happened in Renaissance Europe when mathematics and science joined in a combination qualitatively new and destined to transform the world? And why did this not happen in any other part of the world? (Needham 1959, 150).

The assumption that this "combination" is European was thus upheld also by those who were never committed to the supremacy of "rationalism in Occidental culture." Moreover, it is also maintained by those who no longer rest their historiography on the trust in the supremacy of science as a model for rationality and on science's inbuilt propensity for progress. For contemporary science studies, the type of knowledge emerging from the era under consideration is unique, and uniquely European, not because it represents some superior 'Occidental rationality', but because all knowledge and every knowledge claim is particular; bound to a locale, a time, a culture.[2]

[2]This is a leading assumption of textbooks such as Henry (1997) and Dear (2001), as well as broad and ambitious historical-cultural narratives such as Shapin (1994) and Gaukroger (2006).

It is an extremely valuable realization, that knowledge is locally produced; that it is never 'universal' on its own merit but has to be laboriously universalized; and that it always carries the marks of its local origin and the labor put into transporting and universalizing it. It is particularly pertinent to a project like ours, in which the primary challenge is to capture knowledge as it is re-shaped in its motion from one locale to another; as it is created in response to and during motion between localities; and as it defines the local on its own terms, in relation to others, and as a centre or periphery. The difficulty is that historians of science tend to confuse this philosophical insight with a very different historical notion, that "European Civilization at the beginning of the sixteenth century was isolated" (Hall 1962, 1). This claim, as we explained above, is simply wrong.[3]

Indeed, the developments we sketched are well known to economic historians, who realize, as Sanjay Subrahmanyan suggests, that early modern history should be seen as a "global shift with many sources and roots" (Subrahmanyan 1997), a theme Andrew Brennan explores from a more philosophical perspective (Brennan 2002, 2004). Kapil Raj, in his *Relocating Modern Science* (Raj 2010)[4], explores the global circulation of knowledge in the nineteenth to twentieth century, but for the reasons outlined above, it is only very recently that historians of science began to recognize this "global shift" as essential to the history of knowledge in early modernity, of which the rise of the New Science in Europe is an instance, as are the major changes in the Chinese Investigation of Things (*gewu zhizhi*). And the categories by which to tell this history are still very much a matter of discussion.

This does not mean that the role of travel and discovery in the rise of the New Science is ignored. Ocean-faring has been studied for some time as an engine for the development of astronomy and geography, and through them of mathematics[5]; exploration and trade have been analyzed as sources for new natural and artificial objects that challenged old categories and ancient authorities.[6] Yet in these studies both the old categories and the striving to expand and collect are still conceived as particularly European, as are the institutions that establish Europe as the world-centre of knowledge.[7] Similarly, the search in the East for origins of early modern achievements, mainly technological, which were essential for the advancement of 'Science', such as the movable press or the mechanical clock,[8] fail to challenge the traditional image. These studies hypothesize clearly separated cultures, where fragments of the one may be acquired by the other, which in turn re-asserts the question what it is that distinguishes "the West from the Rest" (Landes 1983, 25).

[3] In fact, Hall himself knew it was wrong – his following page is full with evidence to the contrary.

[4] And see also Schaffer et al. (2009).

[5] *Cf.* Cormack (1997) and Alexander (2002).

[6] *Cf.* Daston and Park (1998, 146–159); Bowen (1981, 36).

[7] *Cf.* Harris (1998).

[8] *Cf.* Landes (1983); Needham et al. (1960).

1.3 History

A few recent exceptions demonstrate that the intellectual tide may be turning. In his *Matters of Exchange* (Cook 2007) Harold Cook presents the commercial quest of the early modern Netherlands across the globe as a major driving force behind the New Science, linking objectivity to objects, empiricism to mercantile accountability, and credibility to credit. Correspondingly, Laura Hostetler's *Qing Colonial Enterprise* (Hostetler 2001) analyzes Early Qing efforts to study new lands and people under their rule as analogous to European colonial technologies. In *Confusions of Pleasure* (Brook 1999),[9] Timothy Brook explores the theme from the Chinese side, calling attention to the role of commerce and cross-regional developments in the transformation of Ming (1368–1644) culture and knowledge in a rapidly changing world. In his *Vermeer's Hat* (Brook 2008) he makes the claim symmetrical, demonstrating how deep was the intellectual attention paid to foreign objects in Europe and how important was their flow between Asia, Europe and the New World in shaping politics and knowledge in early modernity. Liam Brockey's *Journey to the East* (Brockey 2007) deals directly with the intellectual challenges of these exchanges, analyzing the need for Jesuit missionaries to negotiate Chinese cultural and socio-political complexities in order for them to fulfil their mission, and the cultural and political price they had to pay for these negotiations – back in Europe and within their own complex ways of compromising the New Science and Counter-Reformation dogma. Correspondingly, Benjamin Elman's *On Their Own Terms* (Elman 2005) suggests a radical alternative to the common account of the arrival of European science to China. Instead of conservative and intransigent Confucian dogma reluctantly engaging with the alien critical and progressive practices and values represented by the New Science, Elman portrays an open-ended and flexible tradition of Investigation of Things as the paradigm of late imperial Chinese knowledge, within which the intellectual consequences of the exchange between the Chinese literati and European missionaries should be understood. Finally, in his *Xiandai zhongguo sixiang de xingqi* (*The Rise of Modern Chinese Thought*, Wang 2004), Wang Hui studies the intellectual history of early modern and modern China within what he terms "the modern world system" and suggests that the latter should be understood "as an actually inter-related, mutually motivating world" (Wang 2004, 1601–2).[10]

Works like these have opened new vistas for the historiography of early modern knowledge, and more generally for the study of the emergence of modernity and modern culture, but their promises and challenges are even wider in scope. At stake is our ability to formulate a concept of culture that will allow us to think about these experiences as global: both in the sense of being essentially interconnected, and in the sense of being different and distinct. We need to be able to think of them as

[9] See also his Brook (1988).

[10] See also Konan (1992).

effects of common causes, and at the same time expressions of variety of places and practices, rather than converging tracks in the progress towards a common goal.

In a very recent paper Carla Nappi stresses the diversity end of this twofold task when she surveys recent attempts at a global history of science and reflects on the meaning and challenges of such historiography (Nappi 2013). For Nappi, the question is methodological: how should history of science be written so it can capture multiple local histories of knowledge and their differences, as well as the different historiographies invested in them. The styles and aspirations of histories of science written outside Europe and North America, she points out, are often diametrically opposed to the progressive, universalist pretence which is so engrained in the work of European historians. Yet the global nature of early modern culture is, first and foremost, a matter of history, rather than methodology: by the turn of the seventeenth century orbits, routes and vessels were at the core of the production and dissemination of knowledge.

Nappi's considerations are nonetheless valid: that motion and exchange were global phenomena does not entail that they were experienced similarly in different places. The stress on their global nature should not reinstate the grand universal narrative of the progress of science. Quite the opposite: it should turn attention to the dialectics by which modern cultures and specifically modern cultures of knowledge shaped themselves. It is a dialectics in which the far away, newly brought to proximity by instrument or vessel, is not only marvelled at and studied, but also reconfigures the close at hand, transforming it as well into an object of wonder. This emphasis on early modern global motion turns our attention, for example, to the mutual determination of self-appointed centres of knowledge and the peripheries which sustained and contested their authority. It also highlights the tensions between the celebration of excess and the struggle to standardize, and between ideologies of universality and the recalcitrance of diverse realities. Early modern means, modes and habits of motion and of knowledge production shaped each other practically and conceptually in these dynamics, the complexities of which our studies attempt to capture.

1.4 The Collection

The collection contains studies of particular travels, expeditions, explorations, and forms of knowledge they conveyed, collected, and produced. It also includes studies of ideas of motion itself, debates over the significance of motion-related knowledge, and institutions and ways of knowing in conjunction with or reaction to the possibilities of motion in this period. They are arranged around three main themes: in *The Savant in Motion and at Home* the knower as traveller and travelling itself are at the centre of discussion, which includes concepts of motion and place that arise from actual and imaginary travels, as well as the emergence of a new sense of home and self-knowledge in face of the increasing velocity and volume of travel. *Dialogues and Sceptics – Traversing Geography and Cultures* comprises studies of

the production, exchange and dissemination of knowledge by and during travels to and from far-away places, from diplomatic mission to scientific exploration, including debates by proponents and sceptics of such travails. And the essays in *Motion as Free Thinking and Social Circulation* discuss the freer movement of ideas as a result of armchair travel and the increasingly multi-directional social mobility of the savant as a class in different parts of the new world-in-motion.

1.4.1 Part I. The Savant in Motion and at Home

What is the relation between traveling and the nascent European New Science? Ofer Gal's study of "Two Bohemian Journeys: Real, Imaginary and Idealized Voyages at the Turn of the seventeenth Century" takes the discussion beyond the confines of knowledge and 'the age of discovery'. Juxtaposing two different seventeenth Century travel accounts – Johannes Kepler's *Somnium* and Fynes Moryson's *Itinerary* – Gal shows the essential role of motion and accounting for motion in early modern knowledge: from records of the mundane, to details of the fantastic. Gal demonstrates that though the two accounts belong to different traditions with different authorial and generic aspirations, both journeys were nonetheless serious knowledge seeking pursuits. While Morison's is a true account of prices and distances, material structures and social institutions taken *en route*, Kepler weaves autobiographic details into a fantastic visit to the moon, but both share subject matter and point of concern in motion, the great intellectual challenge of the early modern era. Gal argues that for both Kepler and Moryson, motion represents the prospect of knowledge attained by change of perspective and the challenge of controlling it by practical mathematics; for both it is a source of terror and a wellspring of hope. And for both, like it was for their contemporary Galileo, motion unifies the world and gives it meaning and structure.

Similarly concentrating on travel – on the idea, practice and structure of motion in knowledge pursuit – Yi Zheng takes us to another part of the changing seventeenth century world, and examines the Late Ming Chinese traveller Xu Hongzu's (1586–1641) travel notes. "*Xiake Youji*: Movement, Records, and Genre Change" reconsiders the significance of Xu's *Notes* in the context of the transformations of Ming (1368–1644) social, economic and literati culture. It suggests that the genre change of which Xu's text is a forerunner is directly related to the increasing importance of spatial movement, and with it the changing forms and practices of knowledge, as well as the roles of the literati-knower. It explores how Xu's method of recording and structuring movement, observations and knowledge in accounting for his travels, not only takes on what might be described as systematic empiricist tendencies, but also defines their limits. It thus differs from prevalent travel jottings as occasion for lyrical expression, affective association and intellectual meditation. Zheng argues that in the process Xu made the kind of knowledge-making his contemporaries discussed and theorized a life-long practice. He devised ways of writing spatial movement as a process of knowing, and the knower as a imperturbable explorer in uncompromising motion.

In "Those who stayed: English chorography and the Elizabethan Society of Antiquaries," Claire Kennedy explores a very different consequence of global motion: the convergence of knowledge with the idea of homeland. She studies how in the late sixteenth century the geographical discipline of chorography – traditionally the study of local countryside, customs, history, and laws – developed in England as a response to political and social needs, notably among them the demands and consequences of the expanding world. She suggests this development promoted a process of defining an English cultural identity, as it did not arise solely from a geographical tradition, but also had a provenance in the study of English law, which was an inherently patriotic endeavour. Kennedy shows that the Elizabethan Society of Antiquaries, formed around 1586, was for its 20-year lifespan largely comprised of gentlemen of distinction within the English political and legal landscape, as well as those noted for their contribution to the geographical tradition, in particular chorographical works. It thus served as a centre for discussions of historical, geographical, and legal subjects, making it a nexus point between cultural and ethnological considerations of what it meant to be English, and mathematical and legal interpretations of the English land. From then on, she argues, the English perception of self that was embodied in this Society would encourage English imperialism, hand-in-hand with a scientific culture based on matters of fact.

1.4.2 Part II. Dialogues and Skeptics – Traversing Geography and Cultures

This developing epistemological interest in 'us' in contradistinction to 'them' is also what underwrites one particular strand of eighteenth century English scepticism. In what she tellingly entitles "'How very little he can learn': Exotic Visitors and the Transmission of Cultural Knowledge in Eighteenth-Century London," Vanessa Smith examines the debates amongst London savants regarding the possibility of exchanges of knowledge between metropolitan and peripheral societies, occasioned by two "exotic visitors" from opposite ends of the globe between December 1772 and July 1776. Beginning with the animadversions of Samuel Johnson, Smith concludes that encounters with Inuit and Oceanic traveler-savants in the streets and salons of London lead both members of the Royal Society and patrons of the arts to question the translatability of ideas across cultural boundaries. She suggests that this scepticism, in which a distinction between ethnographic and practical knowledge is articulated, should be seen as a reaction to the then predominating European philosophical Romanticism. Smith argues that this meta-critical dimension to the dialogues between Europeans and visitors from the peripheries of Empire ultimately constituted one of the most nuanced intellectual exchanges instigated by Enlightenment travel. What becomes clear in her description is that these visits occasioned not a dialogue across cultures and knowledges but a metropolitan debate redefining for itself categories and boundaries of knowledge.

On the other hand, Daniel Trambaiolo shows that from the seventeenth to the eighteenth centuries in another part of the globe dialogues did happen, and with significant impact, when actual geographical and cultural traversal took place, though these dialogues were as often conducted with frustrations and encountered hindrances. In "Diplomatic Journeys and Medical Brush Talks: Eighteenth-Century Dialogues between Korean and Japanese Medicine during the Tokugawa Period (1603–1868)", Trambaiolo tells the story of how the journeys of Korean doctors who travelled to Edo in the entourage of Korean diplomatic embassies presented an unusual opportunity for Japanese doctors to discuss medical topics with their foreign counterparts, who, like them, were also intimately familiar with other traditional forms of East Asian medicine. Through the method of "brush talks," Japanese doctors learnt from the visiting Koreans about topics ranging from their interpretations of the Chinese medical classics to their methods of processing valuable drugs such as ginseng. The potential value of Korean doctors' journeys to Japan as a channel for the transmission of knowledge is especially apparent in these attempted discussions concerning the identification and characteristics of drug products and other plant and animal species. Trambaiolo points out that a divergence of development between Japanese and Korean medical cultures over the course of the eighteenth century meant that both sides experienced increasing frustration in their attempts to engage in dialogue, but the impact of this episode on the transformation of Japanese medical knowledge and practice from the eighteenth to the nineteenth centuries was fundamental nonetheless.

Philip Cho studies the traversal of geographical location and knowledge practices at the regional level, showing how essential was such circulation in the production and dissemination of sericultural knowledge in the Jiangnan region of eighteenth and nineteenth century China. Cho shows that in this period in Jiangnan, performances of sericultural songs and rituals bound communities of practice and circulated technical knowledge, materials, and manpower through an expanding regional network of silkworm temples. He demonstrates that this spread of silkworm temples reflected a complex dynamic between the central court and an increasingly urbanized local religion. Temples like these became the nodes of social networks along which information flowed trans-regionally. Interweaving sericulture religion and technology, local literati then compiled vernacular songs as instructional or doctrinal manuals to explicitly teach Zhejiang innovations to neighbouring areas such as Jiangshu. These instructions highlight the way movement and circulation reconfigured knowledge and its production: the Jiangnan literati criticized ancient sericulture classics for only discussing Northern methods not suitable for Southern climes. Thus Cho argues in "The Circulation of Sericulture Knowledge through Temple Networks and Cognitive Poetics in eighteenth Century Zhejiang," that these Zhejiang manuals asserted a regional identity and introduced local methods for feeding and caring for silkworms but nonetheless relied on and developed trans-regional circulation of knowledge and techniques. The combined use of texts, songs, and rituals was a hybrid social and cognitive technology for transforming tacit craft skill into transferable knowledge for a variety of people across regions.

1.4.3 Part III. Motion as Free Thinking and Social Circulation

According to Charles Wolfe, however, the importance and implication of early modern travel is far beyond what is accorded to physical travel. In his account, the Enlightenment traveler, whom he calls "the early modern radical savant," did not travel so much as he read travel narratives. In "Travel as a Basis for Atheism: Free-Thinking and Deterritorialization in the Early Radical Enlightenment," Wolfe suggests that from Montaigne's cannibals to Locke's talking parrot, from Leibniz' plans to create a race of "warrior slaves" to Diderot's utopian *Voyage de Bougainville*, a kind of 'science fiction' or 'deterritorialization' of the narrative of the familiar, Eurocentric, Plato-to-Hegel narrative of Western philosophy can be discerned. This deterritorialization of early modern European thinking, Wolfe argues, is significantly predicated on the prevalence of travel narratives at the time. He shows that the radical savant who emerges from these narrative inter-spaces is neither the solitary meditator, nor the participant in communal knowledge-gathering projects for national glory, and suggests that a key feature of these artificial travel narratives is that they serve as a basis for proclaiming atheism.

Benjamin Elman also expounds on motion and its relation to systems and institutions of knowledge, though in this case motion is *both* physical *and* social. In his account of social mobility and civil service examination in an increasingly populous and mobile Late Imperial China, Elman shows literati travel as directly indicative of the upward, downward and outward social circulation orchestrated by the imperial examination system. "Late Traditional Chinese Civilization in Motion, 1400–1900" demonstrates that Ming dynasty (1368–1644) was internally the most mobile empire in the early modern world, a tendency increased and expanded spatially outward by the Qing Empire (1644–1912). Throughout the period the Chinese literati regularly travelled along the myriad waterways and roads of their extensive empire, moving up from villages to counties, townships, prefectures, provinces, and the capital to take civil service examinations; then outwards in pursuit of similar (if they succeeded in the exams) or divergent (if they failed) career paths. At the same time, Elman shows that the story is also about the power of the classical knowledge system in the social formation and transformation of Late Imperial China. This is amply demonstrated in the success stories of those who pursued knowledge and statecraft and thence became public officials serving far from home and family. But for Elman a more important part of the story of civil examinations is the one about the ninety-five percent who did not pass them. He highlights the fact that the authority of the classical language and system of thought empowered the civil examinations to gain traction as a cultural gyroscope even in the minds of millions who were failures of this system. Thus more than the thousands of classical literate officials, the institution of classical learning produced millions of literates who after repeated failures became doctors, Buddhist priests, pettifoggers, teachers, notaries, merchants, and lineage managers; besides the astronomers, mathematicians, printers and publishers. And the travel routes, like the pathways of social circulation of late imperial Chinese literati through the examination system, were both centripetal and centrifugal.

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Part I
The Savant in Motion and at Home

Chapter 2
Two Bohemian Journeys: Real, Imaginary and Idealized Voyages at the Turn of the Seventeenth Century

Ofer Gal

Abstract This study concentrates on two travel narratives from the turn of the seventeenth century: Fynes Morison's *Itinerary* and Johannes Kepler's *Somnium*. Though one is real and the other imaginary, and though they belong to different traditions and their authors differ in credentials and aspirations, their subject matter, I suggest, is the same. Both are concerned with motion, the great intellectual challenge of the early modern era. For both Kepler and Moryson, motion represents the prospect of knowledge attained by change of perspective and the challenge of controlling it by practical mathematics; for both it is a source of terror and a wellspring of hope. For both of them, like it was for their contemporary Galileo, motion unifies the world and gives it meaning and structure.

2.1 Introduction

In the early 1590s two young scholars were jolting down journeys through Bohemia which they will publish only many years later, after much belaboring. One was taking a true account of prices and distances, material structures and social institutions. The other was mixing true autobiographic details into a fantastic visit to the moon. Though both journeys were serious knowledge-seeking pursuits, they appear, on first consideration, to represent the opposite sides of the budding New Science: rugged empiricism on the one hand; high-powered speculation on the other. But what they share, I would like to claim, is more fundamental than what separates them. Both Fynes Moryson, the earthly traveler, and Johannes Kepler, the moon dreamer, are seeking a change of perspective. Both wish to understand the view from home by transporting themselves across borders. Both find the view from the

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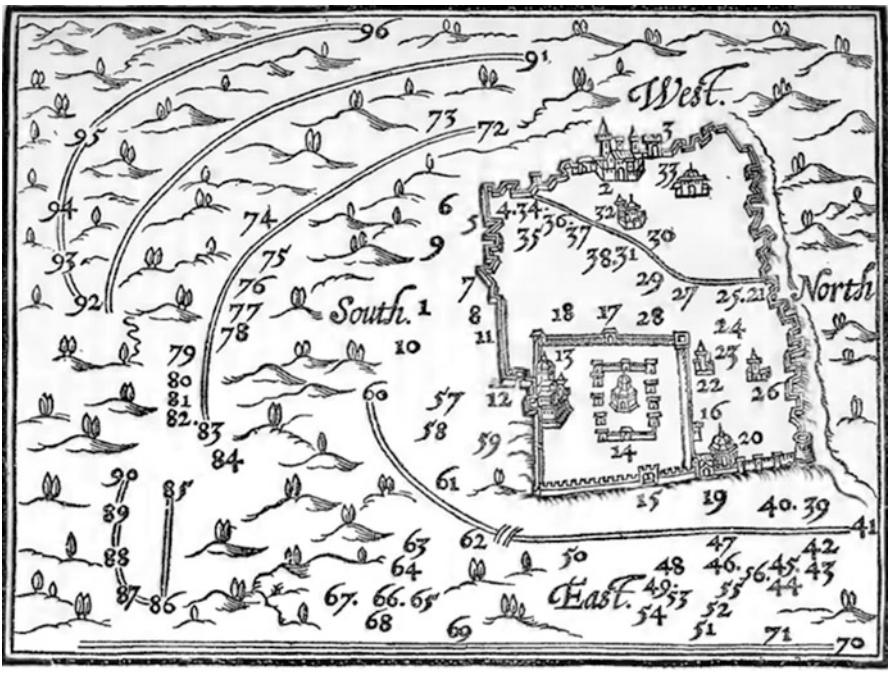

Fig. 2.1 *Jerusalem and its environs. Moryson's* Itinerary, *2:9*

other side exciting, but not mystifying; understandable, yet dangerous; and for both, motion itself is the most important part of the their journey, indeed its main purpose (Fig. 2.1).

2.2 The Journeys

Kepler's *Somnium* (Kepler 1967 [1634]) is a mixture of a fantastic journey—a fanciful rendition of his own travel into the heart of astronomy and his tutelage under Tycho Brahe—and a thorough analysis of the motions of the heavens as they should appear from the moon. The former part is laboriously removed: Kepler tells of a dream, in which he finds a book, in which a man from Iceland tells of his initiation into the knowledge he is about to impart. The Icelander's mother, a witch, leaves him in a spurt of anger to a ship captain, who takes him to the island of Hven, home of Tycho's grand observatory, where he becomes the great astronomer's disciple. Upon return, years later, his elated and remorseful mother, joyous and proud of his new knowledge, introduces him to a daemon, who then spends the lion share of the treatise describing a magical journey to the moon—into the details of which Kepler

carefully weaves complex epistemological musings—and providing a detailed and technical account of the view from there, to both of which we will return below.

Moryson's *Itinerary* (Moryson 1907 [1617]), in contrast, is a straightforward account of real journeys, spanning over 10 years and most of Europe, as well as Turkey and the Holy Land.[1] It comprises a meticulous array of earthly details: prices and distances; currency rates and means of transportation; accommodation possibilities and dietary options; carriage chatter and roadside brawls. It is a journey of privilege, allowed by Moryson's family and scholarly status, and of great financial and personal cost: Moryson never again meets his father, who passes away while he is abroad, and his brother Henry, who accompanies him to the holy land, dies there of the "flux."

Clearly, the two works belong to different genres. Kepler's connotes utopian works such as Bacon's *New Atlantis* (Bacon 1635) and Campanella's *City of Sun* (Campanella 1623); Moryson's—geographic and adventurous writings like Hakluyt's *Diverse Voyages* (Hakluyt 1582) or Camden's *Britannia* (Camden 1587). Clearly, the imaginary journey of Kepler's protagonist, fulfilling particular narrative functions and very definite epistemological ones, should not be confused with Moryson's all-encompassing journal of real travels on land and sea. Even as representatives of the intellectual forces shaping the New Science at the turn of the seventeenth century, the two works seem to reflect opposing tendencies: Moryson's text represents the careful empiricism that we came to associate (correctly or not) with Kepler's and Moryson's contemporary Francis Bacon; Kepler's—the bold mathematical speculation which is epitomized for us (correctly or not) by Descartes, a generation later.

Yet as I claimed above, what Moryson and Kepler share is much more fundamental than their differences. The real hero of their texts, I will argue below, is one: motion. Motion, as a vehicle of knowledge and its primary subject matter, is what both these early modern savants are most engaged in.

2.3 Motion *Per Se*

It is not difficult to recognize that motion itself is what the *Somnium* is about; the very point of Kepler's exercise is to teach his readers to think of themselves as being in motion. This is, obviously, an indirect argument for Copernicanism: the conviction that the earth is stationary is rooted in the seemingly self-evidence of the motions we observe around us. The sun moves from east to west in a whole day—its position in the sky telling the hours; it changes its route slightly from day to day—this change gives us the seasons. How can one perceive it any other way? Kepler's

[1] This is true about its first two volumes; the other two, written in his Devonshire home many years later, provide historical, geographical and what one may call in hindsight ethnological compilations of some of the places he visited on his journeys, ranging from the genealogy of the Danish kings through the precepts of quarrels in Turkey to the habits of English thieves.

idea—imagining how these motions would appear from the moon—is simple and ingenious. He does assume a Copernican outlook—the sun is stationary; the earth rotates on its poles—but he never declares his Copernican allegiance and intentions, and since there is no doubt that *the moon* moves, indeed we are very familiar with its motions, the details of Kepler's analysis appear quite uncontroversial. This makes the resulting scenery all the more scintillating.

The moon, Kepler's readers know, always presents us with the same face, which means that it does not rotate on its poles. This means that for the inhabitants of one side of the moon, the earth, whom Kepler names on their behalf 'Volva', is a constant presence, "fixed in place ... as thought it were attached to the heavens with a nail" (Kepler 1967 [1634], 22). Correspondingly, those of the other side never see it at all, and their nights are "made frightful by as deep an uninterrupted darkness as we have on a moonless night" (Kepler 1967 [1634], 20). These lunar nights, whether within or without the sight of earth, are very long: with no rotation, the moon only changes the face it reveals to the sun when it completes half a revolution around the earth, which means that a day on the moon is what we would count as a lunar month. But for the inhabitants of the 'subvolvan' hemisphere—those who always see earth, appearing some "four times longer in diameter than our moon does to us" (Kepler 1967 [1634], 21), these are beautiful nights, marked by the "wonderful variety of spots" presented to them by the rotating earth, according to which they can tell time at night. We are used to the steady motion of the sun through the day sky and the stars through the night, and our astronomers know to trust those and not the capricious motion of the moon. For the lunar dwellers, in contrast, the sun and stars move very irregularly, and it is the steady rotation of earth that provides a good measure of time, just as its steady position in the heavens provides a stable frame of reference for space.

The lesson is powerful: all is in motion, and all motion is relative. Behind the fairytale façade hides an uncompromising elaboration of the cosmological and metaphysical implications of Copernicanism, as bold as Bruno's[2] and much more precise: there is no origin, no fundamental place of rest to which all heavenly motions can be reduced. The measure of motion is motion.

But it is not only the heavenly motions that engage Kepler. These have to be considered together with earthly motions, which provide both the empirical references for measuring the motions of the stars and the planets and the test for any theoretical speculation about them. Equipped with optical instruments—not only the telescope, yet to be invented when the first versions of the *Somnium* were written, but also his own *camera obscura* contraptions for solar observation—and with an explicit and strongly argued aspiration for a *physica coelestis*—a physical theory of the heavens[3]—Kepler's subject matter is what Galileo will call "actual, real, essential movement" (see below). Departing from the astronomy of

[2]And indeed with similar interests to the Inquisition and almost with as horrendous consequences, though directed at Kepler's mother rather than himself—see below.

[3]Cf. Gal and Chen-Morris 2013, especially Chs. 4 and 6.

old, he is no longer plotting 'anomalies' of planetary positions. Copernicus had transformed earth into a planet, and in that made the planets earth-like, and the images seen through the instruments confirm that they are so—the spotted moon, with its apparent mountains and oceans, in particular. Kepler, the ardent Copernican and enthusiastic instrumentalist[4] is engaged in studying their motions as if they were the solid material bodies we know on earth. He stresses this materiality by embedding his daemon's account of the view from the moon with an array of travels—real, imaginary and fantastic: the narrator's mother's "excursions;" his sea faring to Tycho's island and back; the mother's stories of being "whisked in an instant to other shores" (Kepler 1967 [1634], 14); and the daemon's account of the trip to the moon, which is carefully composed and even more carefully annotated.

Kepler's text is crafty and didactic, Moryson's, in contrast, is almost innocent, and as he is telling of real journeys on this globe, it is not as immediately obvious (perhaps not to him as well) that it is motion—the travel—itself that he is writing about, much more than the places to which it took him. It was an "innated desire to gaine experience by travelling in to forraigne parts" (Moryson 1907 [1617], 1:2) that sent Moryson to his journey, but once on the road, he has much less patience for the "foreign parts" than for the "travelling." To begin with, the trip, though hasty to the degree of breathlessness, is purposeless almost to spite. It is not a pilgrimage—though it does take him to Jerusalem, where he dutifully visits every point of Christian significance, developing in the process a righteous contempt to everything Muslim, as well as a humorous skepticism about the "sundry Christian sects" (Moryson 1907 [1617], 2:29) and a severe "detestation of the Papists Religion" (Moryson 1907 [1617], 2:37). Unlike many of his contemporary countrymen, Moryson was not seeking formal education abroad; according to the DNB, he enrolled in the University of Basel in 1592, in Padua in 1593 and in Leiden in 1594, but the *Itinerary* makes no mention of these occasions and he definitely did not stay long enough in any of these places to take any classes. Moryson's journey does not serve any commercial interest, nor is it a search for adventure—nothing heroic is planned, though some opportunities for mischief force themselves on Moryson along the way, and he acquits himself impeccably (at least according to his own account). In this he is conspicuously unlike the famous travelers of previous centuries. In contrast to Marco Polo, he makes no attempt to establish trade relations. Unlike Ibn Batutah, he has no time or interest in establishing personal relations, even though he is curious about the people he meets, enough to pause in his meticulous description of the Church of the Holy Sepulcher and all its sects and rites because he

> cannot omit an old Spanish woman, who had for many yeeres lived there, locked up in the Temple, lodging every night at the doore of the sepulcher, and having her diet by the Friars almes. Shee said that shee came to Jerusalem to expiate her sinnes by that holy pilgrimage, that shee had then beene there seven yeeres; and in that time had alwaies lived in the Church, and that shee would not refuse any opportunity to goe backe into Spaine, but otherwise would die there, & thereby thought to merit much of God. (Moryson 1907 [1617], 2:32)

[4]Cf. Gal and Chen-Morris 2010.

Moryson seems to have traveled most of the time without a companion—until the ill-fated union with his brother—and though he mentions interpreters, as well as servants, inn keepers, merchants, coachmen, mariners, officers and priests, he does not divulge their names, even when they are clearly "gentlemen," "masters," or even "the Subasha of Ramma" (Moryson 1907 [1617], 1:462). He never stays more than a few days anywhere, usually not more than a night, and he often returns to a place he just left, only to leave it immediately again. Even Jerusalem, the crown jewel of his destinations and the only one he aims at rather than drifts through; which he painstakingly describes geographically, religiously, economically and culturally; and which takes months to reach by sea and land, does not manage to keep him in for more than 10 days, and these include a trip to Bethlehem and a few days of recovery from sickness. To lesser places Moryson has a significantly shorter attention span. A typical week of his journey looks like the following:

> In the end of the Month of June, and the yeere 1593 ... having seene the united Provinces, I was in doubt by what way I should returne into Italy: and having already passed the two waies of Germany, that by Augspurge, and the other by the Sweitzers, and the way by France being then shut up by the civill warres, the common desire of Travellers not to passe the same way twice, but to see as many new Countries as their course permit; made me resolve to passe through the Kingdomes of Denmarke and Poland, and by the fortified City of Wien in Austria. (Moryson 1907 [1617], 1:112)

He takes "a wagon from Leyden to Utrecht;" continues "to Amsterdam, five miles in three hours space;" then "On Friday in the beginning of the Month of July, at five a clocke in the evening," he takes a boat "eight miles to Enchusen," and "On Saturday ... sayle[s] ... to the Iland of Fly." He intends to continue directly to Hamburg, and only "for the tempestious weather, staie[s] here all Sunday." He continues on "Monday morning," but "sadly," he is prevented from continuing in this back-breaking pace because, symbolically, the anchor breaks and they are forced back to the Island of Fly, "foolishly cursing our fortune and the starres." As it turns out, this Tuesday delay saves Moryson and his fellow travelers from horrible death in the hands of pirates, a realization which finally makes him reluctantly slow down for just one day: "On Wednesday we had a most faire winde, but the terrour of our last escape, made us stay in the harbor" (Moryson 1907 [1617], 1:112–117). Moryson is a curious and observant traveler, but the human and natural sceneries he passes through only mark his very passage. Like Kepler, if less extravagantly, it is motion itself that he is investigating and discussing.

2.4 Galileo on Travel and Pure Motion

The commonality between the terrestrial travels described by Moryson and the celestial motions exciting Kepler is not merely an eager historian's fantasy; Kepler is not the only practitioner of the new science to think that conceptualizing the invisible motions of Earth—around the sun and around its own axis—requires imagining a semi-magical journey relating terrestrial and celestial motions. In the

Copernican manifesto that would lead him to his final years of house arrest, the *Dialogue Concerning the Two Chief World Systems* (Galilei 1967 [1632]), Galileo takes a similar route. He lets Simplicio, his fictional representative of the traditional-Aristotelian world view, pointedly remark that believing with Copernicus that the earth rotates requires "a bald denial of manifest sense." Galileo then turns to Sagredo, his wise interlocutor, to explain why "this motion in common ... remains as if nonexistent to everything that participates in it" (Galilei 1967 [1632], 171). There is no daemon in Sagredo's explanation, but there is a ship, travelling from Venice to Alexandretta. To this ship a pen is attached, "leaving visible marks of its whole trip" (Galilei 1967 [1632], 171–2). "What trace, what mark—what line would [this pen] have left?" asks Sagredo, to which Galileo has Simplicio answering that one can disregard the minute marks affected by the ebbing and flowing of the vessel on the waves and take the line traced by the pen as a "part of a perfect arc." Sagredo then proceeds to invite Simplicio to imagine "an artist ... drawing with that pen ... all the way to Alexandretta." This artist

> would have been able to derive from the pen's motion a whole narrative of many figures, completely traced and sketched ... Yet the actual, real, essential movement marked by the pen point would have been only a line: long, indeed, but very simple. (Galilei 1967 [1632], 172)

Of this real, simple line, however, "no trace would remain." The only visible trace left on the paper would be the "small motions back and forth, to right and left," which are "communicated by the artist's fingers to the pen but not to the paper" drawing "thousand of directions, with landscapes, buildings, animals, and other things" (Galilei 1967 [1632], 172). Yet as enchanting as the products of these "small motions" are to the human eye, they are of little consequence—negligible as the marks of the sea waves on the "perfect arc." The main motion of the ship along its long journey indeed leaves no mark, since the pen shares this motion with the paper and "with everything else in the ship." But even without mark, this "line: long, indeed, but very simple" is "the actual, real, essential movement" of the ship, and so is the grand motion of earth around the sun and around its own poles: unobservable for us who participate in it, but not at all "a bald denial of manifest sense."

The marine travel analogy is no mere rhetorical device for Galileo. Like Kepler, the one implication of Copernicanism he finds most exciting and fertile, and the one powerfully supported by his own instrument, is the abolition of the strict distinction between terrestrial and celestial motions: if one can observe earth-like mountains on the moon, one must assume lunar-like characteristics to earth. Not only does the earth as a whole move like any planet, but so are the terrestrial objects; understanding the supposed celestial motions *of* earth has to be closely related to understanding terrestrial motions *on* it. An epistemological-methodological version of this insight is at the core of Kepler's *physica coelestis*, noted above. The main challenge for the astronomer, as Kepler sets it to himself, is to provide physical and causal explanation for the motion of the heavenly bodies just like we would do for terrestrial ones. The fantastic journey to the moon provides him with what the drawing pen provides Galileo: an opportunity to discuss these challenges in

a poetic, humorous way, permitting imagination to offer creative solutions. If "the moon is a body akin to earth" (Kepler 1967 [1634], 66), travelling in space in similar ways, what will be the meaning of travelling between these bodies? How could one, for example, 'aim' at the constantly moving moon (the answer: when the moon is eclipsed, it is aligned with earth)? Where does the earth's magnetism stop and the moon's begin? What are the temperatures on the moon (the answer: very hot in the sun and very cold in the shade)? Is there an atmosphere there? Kepler's answers are markedly speculative, often jocular, but the undertaking in its entirety is completely serious: to make sense of motion as a universal category, same for all terrestrial and celestial bodies.

2.5 Perspectives

The common enchantment with motion does not mean, of course, that Kepler's (and Galileo's) and Moryson's ways of perceiving what motion actually *is* are equivalent. The astronomers know their marine analogies very well; Moryson, travelling by the ancient land and sea routes, guided by local reckoning, being, as he admits, "unskilfull in Geography" (Moryson 1907 [1617], 2:1), knows little if anything of the new applications of astronomy to navigation. Tellingly, he makes it (in 1593) just across the straights from the island of Hven, the seat of Tycho's grand observatory, a place Kepler, *pace* his quasi-autobiographical story, never visited.[5] But he does not bother to (or perhaps cannot) make the short trip to the island proper, and though he knows that Tycho is a celebrated astronomer, and can tell that "Many Instruments are there placed by him, which him-selfe invented" (Moryson 1907 [1617], 1:127), he is more interested in the gossip about Tycho's false nose and his relations with the Danish king than in any of his discoveries. Still, it may not be worthless to point out that Moryson can take an astronomer as a celebrity (and also that if keen to write a gory tragedy, one can find in these parts of the *Itinerary* "a strong castle" in "Elsinure," as well as "darke fog," and "two chambers wherein the King and Queene lie apart," along with some more helpful tidbits, e.g., that the "Danes [are] scrupulous and jealous").[6]

Moryson's ignorance of the abstract, theoretical considerations of relative motion does not mean, however, that he is not acutely aware of its most fundamental effect—the change of perspective.

The view from the moon changes Kepler's heroes' perspective in a very literal sense: it changes their lines of sight, their *perspectiva*. From different perspectives, the same bodies appear to be moving differently while bodies in motion and bodies

[5]Kepler only joined Tycho in Prague in 1600, after the latter had to relinquish his Hven observatory the previous year.

[6]To the best of my knowledge, this conspicuous relation between the *Itinerary* and *Hamlet* was never studied.

at rest change roles. Understanding that the appearance of motion is relative to perspective is the most crucial insight of the *Somnium*: the fact that *we* do not perceive ourselves as moving does not imply that we are not. Watched from a different vantage point, setting a different *perspective*, we are. Indeed, not only motion, but regularity and order, we saw, are a matter of perspective: the daily motion of the sun and the stars, so regular to us, is chaotic for the Lunarians. They trust the regular motion of their 'Vulva'—our earth—in contrast to the frustratingly complex motion that our moon—which they, its inhabitants, experience as if at rest—presents to us.

For Moryson, change of perspective is both the main motivation for taking his journey and its most fundamental effect: things are done differently in other places; home and its habits look different from afar. This is particularly true about religion: never mind the "Jewes and Mahometans" (Moryson 1907 [1617], 2:32) and "their wicked worship" (Moryson 1907 [1617], 2:8); Moryson cannot contain his astonishment at the "Sects of Christians" he finds on his way, especially in Jerusalem, and their "severall rites of Religion" (Moryson 1907 [1617], 2:29). He describes them in a way which, beyond wry humor of a particularly modern appeal, expresses a true understanding of religious rites as cultural phenomena, subject to mutual influences and reflecting human hopes and fears:

> The Abissines inhabit the South parts of Africk, and subject to their King Preti-Giani. They received the Christian faith of the Eunuch baptized by Phillip, and themselves are baptized not onely with water, but with the signe of the Crosse printed in their flesh with hot Iron, gathering that fire is as necessary to Baptisme as water, out of those words of S. John Baptist; I baptize you with water, but he shall baptise you with the Spirit and fire. Also they use the Jewes and Mahometans circumcision, like wary Notaries, who fearing to faile in their assurance, never think they have used words enough; yet doe they greatly hate the Jewes, and thinke their Altars defiled, if they doe but looke upon them. (Moryson 1907 [1617], 2:32)

2.6 Practical Mathematics

What prevents this anthropological insight from turning into either righteous self-confidence or relativistic cliché is that Moryson, like Kepler, is convinced of his ability to provide adequate translations, and this ability is based on the same means as Kepler's: mathematics.

Moryson's mathematics has little to do with the Platonic dream of a simple, perfect, ideal infrastructure underlying all these human and natural meanderings. It is, rather, a set of practices of conversion. Moryson uses numbers to index his maps (which, to this reader, seems like quite a novelty for the 1590s) and is an avid collector of numerical data: prices; distances; times of travel; number of towns, mountains, rivers; number of doors, gates, pillars; sizes of cities, exact dates. He turns these numbers into a stable network with meticulous tables of exchange rates between "coynes most commonly spent" (Moryson 1907 [1617], 1:v), as well as between "the divers measures of miles in sundry Nations" (Moryson 1907 [1617],

2:vi). He is perfectly aware of "daily alteration of the exchange" (Moryson 1907 [1617], 2:124) and is careful to "Alwaies let the Reader understand, that the value of these moneyes is subject to change in divers Provinces, and more at divers times" (Moryson 1907 [1617], 2:147). In fact, he is quite at a loss to provide a proper account as to how, given this diversity and constant change, these detailed exchange rates should help. The collection is, apparently, instinctive and fundamental; it is simply the right thing to do:

> you may perhaps judge the writing of my daily Expences in my journies to be needles & unprofitable, in respect of the continuall change of prices and rates in all Kingdoms: but they can never be more subject to change, then the affaires of Martiall and civill Policie: In both which, the oldest Histories serve us at this day to good use. (Moryson 1907 [1617], 1:xix)

Kepler's trust in mathematics is of course much more carefully reasoned and legitimized, and owes much more to Renaissance and Mediaeval Neo-Platonism which we commonly associate with the mathematization of knowledge (and which Moryson is apparently oblivious to).[7] In his juvenile *Mysterium Cosmographicum* Kepler develops a commitment to mathematics which is at once ontological and epistemological. Mathematics, he explains, provides the metaphysical infrastructure of the cosmos, with numerical and geometrical relations—the 'mathematicals', as he calls them—determining physical properties of material bodies. This allows him to develop an epistemological argument for the power of mathematics as the prime vehicle of knowledge, being common to human and divine reason, though of course limited in the human and infinite in the divine (Kepler 1967 [1634], 122 and 1997 [1618], 146–7). Kepler even devises a sophisticated account of how the material make up of the cosmos is infused with its mathematical structure. This is affected by the mediation of light, an entity directly and causally involved in the world of matter, even though it is essentially mathematical, "a geometrical body" (Kepler 2000 [1604], 20–22). Indeed, the relations between mathematics and motion were at the core of Kepler's intellectual project. The mathematization of motion—always the paradigm of order-defying change—was the most fundamental challenge to Kepler's physical astronomy, a challenge he met by turning motion itself into the creator of order: "the mind, without imagining certain *motion*, does not discern harmonic proportions" (Kepler 1937 [1518], 233).[8]

Yet in the *Somnium* Kepler takes no recourse to this laboriously structured edifice. The motions of the earth and the moon are given sense, not in relation to a cosmological frame of reference, but in relation to each other. Loyal to his interest in changing perspectives and perhaps careful to balance the fantastical narrative with empirical factuality, the mathematics that Kepler employs in his analysis of motion in the *Somnium* is not the grand scheme dreamt in the *Mysterium* (Kepler 1981 [1596]) and *Harmonices* (Kepler 1937 [1518]), but, like Moryson's, a set of straight forward practices of translation of relative positions, motions and times:

[7] Cf. Gal and Chen-Morris 2012; Gal 2012.

[8] Cf. Gal and Chen-Morris 2013, esp Ch. 4.

> For us in one year there are 365 revolutions of the sun, and 366 of the sphere of the fixed stars, or more accurately, in four years, 1,461 revolutions of the sun but 146 of the sphere of the fixed stars. Similarly, for them the sun revolves 99 times and the sphere of the fixed stars 107 times. But they are more familiar with the nineteen-year cycle, for in that interval the sun rises 235 times, but the fixed stars 254 times. (Kepler 1967 [1634], 17–8)

2.7 Fear and Witchcraft

Motion, in abstract or in practice, to near-by or to remote and exotic destinations, can thus be contained and controlled. Yet this control does not mean that being hauled to Istanbul, Aleppo or the moon loses any of its unsettling effects. Moving away from one's place of origin in search after fortune of war, as it was for Kepler's father (and probably his grandfather—his narrators' father "was a fisherman that died in the ripe old age of 150" (Kepler 1967 [1634], 12)), after adventure and experience (as it was for Moryson and his brother) or after employment (as it was for both Kepler and Moryson), was not only a privilege and a new set of possibilities at the turn of the seventeenth century; it was also a daunting necessity. It was so, traumatically, for the people manning the new vessels of oceanic commerce, but it was also so for Kepler. Once embarking on a career of a 'professional' (the anachronism duly noted), employing universal sciences such as astronomy and astrology (as opposed to the locally-bound medicinal-herbalist expertise of both his real mother's and his narrator's), he consigned himself to a life of wandering after position and salary: from Weil (his birthplace) to Tübingen (his university); from there to Gratz; then to Prague for a decade of prosperity and fame, but then on to the increasingly less glamorous Linz; then Ulm, then Sagan and finally Regensberg. Accepting a position in the imperial court, he subjected his itinerary to the intrigues within the court and the political vicissitudes surrounding it, and many of his journeys took the shape of a quick retreat or a defeated return—to collect overdue salaries or to handle unresolved matters (most crucial of those—his mother's witchcraft trial—was a direct consequence of the *Somnium*, and we shall return to it momentarily).

The political vicissitudes that forced people into real, torturous voyages are very relevant to Kepler's imaginary voyage to the moon and the voyages of the planets that he describes. Kepler makes this clear by not only framing the astronomical issues in the semi autobiographic story of his own voyage, with the somewhat allegorical version of his journey to knowledge, but also by placing it in a very particular time and a very particular political frame of reference. The context he alludes to is the strife which would, a few years later, end his illustrious stay in Prague and send him into a nomadic existence in the final two decades of his life:

> In the year 1608 there was a quarrel between the Emperor Rudolph and his brother, the Archduke Matthias. Their action universally recalled precedents found in Bohemian history. Stimulated by the widespread public interest, I turned my attention to reading about Bohemia, and came upon the story of the heroine Libussa, renowned by her skill in magic. It happened one night after watching the stars and the moon, I went to bed and fell in to a very deep sleep... (Kepler 1967 [1634], 11)

Libussa was a witch; she is chosen as the entry point to the *Somnium* because she is "renowned by her skill in magic." There are many reasons why Witchcraft presents itself to Kepler as such an essential connotation of his ideas that he wraps his narrative in it in three different ways: in these introductory lines, the first of his tract, in the figure of the witch-mother and in that of the daemon-narrator. Kepler did not relinquish this way of presentation even when, as if imitating an Umberto Eco novel, his story transformed itself into horrid reality: his mother was actually charged with witchcraft and nearly lost her life, the trial all but exhausting her son's energy and funds through a six years ordeal (if to believe him, the incriminating part was kept in the printed version of the *Somnium*, which followed the trial, to spite his mother's molesters). Raz Chen-Morris has dealt insightfully with the epistemological role that the daemon plays for Kepler, allowing him to develop his idea of knowledge through shadows.[9] Kepler definitely also gestures towards the relations between the *scientia prisca* of his mother and the novel ideas of modern astronomy, a theme favored by his mentor Tycho.[10]

Yet there is another reason, perhaps more fundamental, for the presence of magic in a tract about motion. Witchcraft and transportation went hand in hand in European imagination from pagan times, through Christianity and into Kepler and Moryson's times of religious strife.[11] With all their (rather successful) attempts to control and domesticate it, motion, especially of the radical sorts discussed by Kepler and Moryson, was frightening. Kepler imagines, and Moryson describes, discomfort, pain and danger. Moryson is anything but gullible: he reports "many ridiculous fables of Witches" (Moryson 1907 [1617], 1:12) from numerous places along his journey, always careful to mark them as such: "foolish superstition" (Moryson 1907 [1617], 2:22), but as the pains of distance grow, he is bound to relax his incredulity. When it comes to the death of his father back home, while he is years away from return and months from reliable news, he carefully recounts a dream in which "a shadow passing by, told me that my father was dead" (Moryson 1907 [1617], 1:38). Moryson encounters thieves, thugs and pirates, and his life is saved by sheer luck more than once, and in none of these occasions is he tempted to turn to the magical. But when his brother is dying on the way, he again finds himself considering omens and premonitions. Motion is directly responsible for Henry's sad death: exhausted from the journey through the Turkish provinces, he contracts "the flux," and his brother's loving decision to put him on a camel rather than a mule turns out to be fatal by making it difficult for Henry to stop when necessary (Moryson 1907 [1617], 2:65–7).

[9]Cf. Chen-Morris 2000, 2001 and especially 2005.

[10]Highlighted by the alchemists populating the basement of the Hven observatory in the famous emblematic frontispiece of his *Astronomiae instauratae mechanica.*

[11]Cf. Stephens 2002.

2.8 The World of Motion[12]

"It is not improbable," muses Kepler in his *Conversations with Galileo's Sidereal Messenger*,

> that there are inhabitants not only on the moon but on Jupiter too or ... those areas that are now being unveiled for the first time. But As soon as somebody demonstrates the art of flying, settlers from our species of man will not be lacking. Who would once have thought that the crossing of the wide ocean was calmer and safer than of the narrow Adriatic Sea, Baltic Sea, or English Channel? Given ships or sails adapted to the breezes of heaven, there will be those who will not shrink from even that vast expanse. (Kepler 1965 [1610], 39)

Whether to another continent or another planet, all journeys are just that—journeys. This is the deep insight that the texts above express: for these agents of early modernity, all is motion, and all motion is one.

Moryson may not have been completely aware that this insight is embedded in his *Itinerary*. For the layman that he was, Tycho was an obscure celebrity and the abstract mechanical speculations of Galileo and Kepler were a remote rumor. But for Kepler, the self-styled new *savant*, anthropologically motivated journeys to other lands, fantastic expeditions to the moon, dreams about the colonization of Jupiter and speculations about the trajectories of the heavenly bodies were very decisively parts of the same project: the establishment of an all-encompassing *physica* of motion, one for heaven and earth.

This, as related above, was the core of the New Science which Kepler shared with Galileo. In 1610 an opportunity to celebrate this intellectual camaraderie presented itself when Kepler, then the imperial astronomer at Rudolph's Prague court, his favorite station in a life of wandering, received for comments Galileo's epoch-making *Sidereus Nuncius* (Galilei 1989 [1610]), though not, at first, the telescope that the book was announcing or an opportunity to put it to use. The outcome was Kepler's *Conversations with Galileo's Sidereal Messenger* (Kepler 1965 [1610]), from which the quotation above is also taken:

> Therefore let Galileo take his stand by Kepler's side. Let the former observe the moon with his face turned skyward, while the latter studies the sun by looking down at a screen (lest the lens injure his eye). Let each employ his own device, and from this partnership may there some day arise an absolutely perfect theory of the distances. (Kepler 1965 [1610], 22)

This is a generous and enthusiastic endorsement, and its theme is, again, harnessing celestial motions to physical considerations. It is not the visual spectacle (which he has yet to witness) that rouses Kepler's excitement with the new instrument; it is the promise it presents to "perfect [the] theory of the distances"—to assign to the planetary motions the physical parameters of any motion, the parameters of distance and velocity. The marvel of the telescope (and similar optical instruments—Kepler is very liberal with his praise, but not enough to reward Galileo with exclusivity) is

[12]The following analysis owes much to the work Megan Baumhammer, who also turned my attention to the relevance of Kepler's *Conversations with Galileo's Sidereal Messenger*.

that they turn distance into a calculable, controllable factor; indeed a mystery-free, manageable parameter of motion. Even at its worst distance becomes nothing but a technological challenge. Once "the art of flying" and "ships or sails adapted to the breezes of heaven" will allow us to overcome the distance to the moon, the terrain we will find there will not be much different than what Moryson found across the "Adriatic Sea, Baltic Sea, or English Channel," as Galileo famously announced:

> the surface of the moon [is] not smooth, even, and perfectly spherical as the great crowd of philosophers believe about this and other heavenly bodies, but, on the contrary, uneven, rough, and crowded with depression and bulges. And it is like the face of the earth itself, which is marked here and there by chains of mountains and depth of valleys. (Galilei 1989 [1610], 40)

"Many peaks tower above the body of the moon ... like the loftiest mountains on our earth," Kepler is happy to endorse Galileo and give him proper credit: this, Galileo "established most firmly by brilliant observations in full accord with the laws of optics" (Kepler 1965 [1610], 25). To be sure, the idea that motion is one and the same in heaven and on earth and distance is but a technical challenge carries even more exciting implications than those of lunar topography. It means, for example, that Kepler's mentor Maestlin's idea that a spot observed on the moon is "a cloud which was spread over a wide area and laden with rain and stormy showers" (Kepler 1965 [1610], 30) is no more mysterious or speculative than Morison's report about "tempestious weather" over Hamburg (Moryson 1907 [1617], 1:115) or more esoteric than the "extremitie of weather" (Moryson 1907 [1617], 2:336) during "The Muster of the Army at Dundalke" (Moryson 1907 [1617], 2:334).

Most excitingly, the uniformity of motion means that we can venture and "suppose that there are living beings on the moon" (Kepler 1965 [1610], 28). This is the possibility that truly intrigues Kepler, and in the *Conversations* he turns to it after considering the telescopes' history and offering some improvement and sophisticated applications. "I enjoyed toying with this idea long ago in a disputation written at Tübingen in the year 1593" he tells Galileo, referring to the first draft of the *Somnium*, as well as to "later on in my *Optics* on page 250, and most recently in my aforementioned lunar geography" (Kepler 1965 [1610], 28). The many references demonstrate how seriously Kepler takes this "toying." It is not just a wild or playful speculation: as the major ontological distinctions—up and down, heaven and earth—get all subsumed under relative motion, the idea of humans occupying other worlds is just a reasonable extension of the New Science aspirations. Why should the behavior of the lunar dwellers deserve any less attention than that of the people of Utrecht of Jerusalem? The claim that "the common people" of Lübeck become violent and inhospitable "once warmed with drinke," (Moryson 1907 [1617], 1: 5), for example, is not much more established than the suggestion that the

> inhabitants [of the moon] express the character of their dwelling place which has much bigger mountains and valleys than our earth has. Consequently, being endowed with very massive bodies, they also construct gigantic projects. (Kepler 1965 [1610], 28)

In a universe of incessant motion, place, splendor or even the presence of human inhabitants cannot tell apart the different 'worlds'. It is left to motion itself to bring about all the detailed properties that distinguish one world from the other:

> Even Bruno, the defender of infinity, holds that each world must differ from the rest in the kinds of motion . . . If the worlds differ in their motions, then they must differ also in their distances, which determine the periods of the motions. If they differ in their distances, then they must differ also in the arrangement, type, and perfection of their solids, from which the distances are derived. Indeed, if you establish universes similar to one another in all respects, you will also produce similar creatures, and as many Galileos, observing new stars in new worlds, as there are worlds. But of what use is this? (Kepler 1965 [1610], 44)

All is motion, and the import of humans in the universe and their relations to its creator, Kepler realizes, need to be re-formulated accordingly. We are no longer unique—there are "inhabitants" on other bodies. We are no longer at the center—this was made clear by Copernicus' theory, which did not only relegate earth from the middle of the cosmos, but also made the world so large that the very concept of center seems to have lost its meaning. And we are no longer at rest. For Kepler, all this could no longer be viewed with dejection. If God has put His creation in motion, if he decreed us humans to move, than it is in motion itself that our responsibility towards Him must consist:

> in the interests of that contemplation for which man was created, and adorned and equipped with eyes, he could not remain at rest in the center. On the contrary, he must make an annual journey on this boat, which is our earth, to perform his observations. So surveyors, in measuring inaccessible objects, move from place to place for the purpose of obtaining from the distance between their positions an accurate base line for the triangulation. (Kepler 1965 [1610], 45)

2.9 Conclusion

People living around the turn of the seventeenth century were experiencing motion in ways which would have been completely beyond the grasp of anyone less than a century earlier. Goods and people were crossing lands and oceans to distances never envisioned and in scales hardly imaginable just a few decades earlier. The earth itself has been set in motion and the heavens were populated by a whole new array of moving objects: comets, moons, sun spots. Even the motion of terrestrial objects, so close at hand and seemingly obvious in its entanglement with the fundamental categories of up and down; heavy and light; natural and forced—even this domestic motion was being thoroughly reshaped. Curious and alert thinkers like Kepler and Moryson were embracing the material possibilities, intellectual challenges and luring dangers which the motion now presented. The astronomer and the traveler may not have been fully aware that they share a subject matter, but their common themes and *topoi* forcefully suggest just that: beyond the differences of vehicles, moving objects and destinations, they are both engaged with motion itself.

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Chapter 3
Xu Xiake's Travel Notes: Motion, Records and Genre Change

Yi Zheng

Abstract This study examines the Late Ming Chinese traveler Xu Hongzu's (1586–1641) travel notes *Xiake Youji* against the background of the transformations in Ming (1368–1644) social, economic and literati culture. It suggests that the genre change of which Xu's text is a forerunner is directly related to the increasing importance of spatial movement and with it changing forms of knowledge as well as roles of the literati-knower at the time. It explores how Xu's method of recording and structuring movement, observations and knowledge in accounting for his travels not only takes on what might be described as systematic empiricist tendencies but also redefines their limits, thus differing from prevalent travel jottings as occasion for lyrical expression, affective association and intellectual meditation. It argues that in the process Xu made the kind of knowledge making his contemporaries discussed and theorized a life-long practice. He devised ways of writing the process of spatial movement as process of knowing, and the knower as imperturbable explorer in uncompromising motion.

3.1 Introduction

Liang Qichao (1873–1929), one of the best-known political and cultural reformers in twentieth-century Chinese history, has set the tenor for modern evaluations of Ming (1338–1644) literatus and traveler Xu Xiake. In his influential *Intellectual History of China in the Last Three Hundred Years*, Liang declares that the two Xus

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of the time—Xu Xiake and Xu Guangqi (1562–1633)[1]—and their oeuvres were *qirenqishu* (extraordinary figures and extraordinary works) (Liang 2007 [1929], 5). According to Liang, what is outstanding about their scholarship is their respective dedication to pragmatic and proto-scientific inquiries, whilst the ruling passion of their day was idealist and metaphysical, or simply connoisseurish addiction (Liang 2007, 6–7). In this Liang has made apparent his own political and intellectual-historical agenda, which is to set Ming idealism, especially what he perceives to be late Ming (1573–1644) intellectual self-indulgence, leading no less to the downfall of the dynasty, against Qing empiricist scholarship. For him the latter heralds modern pragmaticism and science. Liang's pronouncement has since become the standard in modern Chinese understanding of Xu and his place in Chinese cultural and intellectual history.

Xu Hongzu, nom de plume Xiake, was born in Jiangyin county of Southern Zhidi (today's Jiangshu province) in the 14th year of Wanli, Ming dynasty (1587), and died in the 14th year of Chongzhen (1641). As pointed out by most Xu studies, the 50-some-year period of Xu's life coincides with the dynasty's gradual downfall. But few have associated his lifetime with the 100 years from the mid sixteenth to the seventeenth centuries, which is the time of great epistemological shifts and cultural transformations in China in correlation with unprecedented economical and social cultural changes in the wider world (Elman 2005). While Xu Xiake "has been canonized as the ultimate Chinese traveller" (Strassberg 1994, 317), the significance of his travel and travel writing remains a subject of debate. Modern geographers take seriously Xu's records and observations of karst formations in Yunnan. They credit him as the forerunner in scientifically studying karst formation and topography. As one of the few examples of late imperial Chinese scientific achievements, Xu's *Travel Notes* was acknowledged and anthologized by Joseph Needham's history of science and civilization in China, with the famous Needham comment that Xu's "notes read more like those of a twentieth-century field surveyor than that of a seventeenth-century scholar" (Needham 1981, 252). And V. K. Ting (Ding Wenjiang), the Chinese geographer who introduced Xu Xiake to the English-speaking world in the 1920s, called him "essentially a geographical explorer," and claimed that "his spirit is so startlingly modern that it alone would have ranked him as the earliest leader of modern geography in China" (Li 1974, 28).

Xiake Youji (Xu Xiake's Travel Notes) (Xu 1981), consisting of almost 30 years of day-to-day, itinerated records of travels and observations, is indeed Xu's lifework. Julian Ward, in his discussion of the art of Xu's travel writing, however, goes against the grain of prevalent modern interpretations of Xu. He suggests instead that Xu should be read in the context of classical Chinese travel writing, and insists it is the literary value of Xu's work that prevails. But strangely, Ward establishes Xu's literary valiance at the expense of his reliability as a scientific geographer as if these were qualities Xu held in contradistinction—a whole chapter of his book is dedicated to proving that Xu is no scientific geographer but a free and easy wanderer. The evidence Ward uncovers is mainly the importance of divination to Xu

[1]Ming scholar-official, astronomer, mathematician, agricultural scientist and known collaborator of Matteo Ricci and translator of *Euclid's Elements*.

on his journey and the spiritual texture of the jottings (Ward 2001). This reliance on anachronistic demarcations of the scientific and the literary, however, does not help redefine the literary value of Xu's text. Nor does it shed new light on the significance of Xu's travel writing in terms of genre change in relation to the dramatic intellectual shifts of his times. Ward does not replace Xu's writings in the changing Ming literati culture. His evaluation of Xu against the tradition of classical Chinese travel writing is to compare him favorably with Liu Zongyuan (773–819), whose *Eight Records of Excursions in Yongzhou (Yongzhou baji)* is seen to have set the standard for the genre (Ward 2001, 92).

Stephen McDowall, on the other hand, examines closely the practice of travel writing in seventeenth century China by looking into the *youji* (travel jottings) genre, taking as his case in point the "Account of My Travels at Yellow Mountain" by Xu's contemporary and friend, poet, official and literary historian Qian Qianyi (1582–1664). McDowall also departs from the standard readings of travel genres as literal records of traversing verifiable places by looking at the landscape of Qian's essay as the outcome of a complex representational tradition. Drawing on materials from anecdotes, cosmographical sources, gazetteers, to paintings and woodblock prints, McDowall shows us the dynamic world of Late Ming *Jiangnan* (the region that is now the Yangzi delta in Southeast China). Within this context, he demonstrates the extent to which Qian's depiction of Yellow Mountain is informed, not so much by first-hand observation, as by layers of meaning left by generations of travelers before him (McDowall 2009).

Drawing on these (few) works on Xu as a traveler and travel writer, and on travel writing in Ming in general, this study will first reconsider the significance of *Xiake Youji* as part of the Ming travel genre in the context of the transformations of Ming social, economic and literati culture. In particular it will study Xu's travel notes in conjunction with the increasing importance of spatial movement and changing forms of knowledge, as well as the role of the literati-knower at the time. It will explore the intellectual historical implications of Xu's persona, then examine the collected notes as a vanguard of Late Ming transformations of the literati genre. It will study Xu's text in terms of genre change: how its method of recording and structuring movements, observations and knowledge not only takes on what might be described as empiricist tendencies but also redefines their limits. And thus how it differs from, but not in contradistinction to, prevalent travel jottings (such as his friend Qian's) as an occasion for lyrical expression, affective association and intellectual meditation. It will show how Xu created the sense of 'actuality' and 'exactitude' through narrative techniques that highlight movement, physical as well as emotional processes, which are structured by thus depend on quantification and itineration. While the underlying motivation of the textual account—what links the records of the multi-entry, seemingly endless journeys and move the narrative along—emerges as an obsessional economy to move, see and know, there also emerges the persona of a heroic and driven explorer-knower that is as exact as passionate. The discussion will address to what extent is Xu the persona and the jottings his lifework extraordinary (*qirenqishu*) both vis-à-vis his times and the changing genre. It will attempt to understand the changes in the milieu of the changing early modern world of movement and knowledge.

3.2 The Persona

In setting out the changes in late Ming literati cultural practice as the background for Xu's extraordinary intellectual pursuit, it is common to begin with the rapid political decline of the Ming regime. This is so with Andrea Riemenschnitter's elaboration of Xu's role and place in the Ming literati discourse. According to her, Xu's persona and writing created a new image of the traveler and his moral vocation for his contemporaries (Riemenschnitter 2003, 286–324). But more significantly, in her account, as it is in many other accounts of late Ming culture and politics, facts such as bad imperial rulership, uprisings, border conflicts, epidemics and famines are seen as major if not exclusive determinants of cultural change. The intellectual flourishing of the late Ming, interestingly, is then understood as a consequence, a direct but unintended, by-product of this political dark age: "Under a climate of constant menace and severe punishments on account of the court eunuchs' monopoly and, consequently, gross abuses of power, upright intellectuals withdrew from official service and chose to express their moral concerns through artistic, rather than political, means. Fiction, drama, literary criticism, and connoisseurship, and the fine arts flourished. The very old practice of political criticism by means of artistic expression—now clad in the guise of iconoclasm, individualism, and eccentricity—in the early seventeenth century prevailed briefly as a major stimulus for innovative trends" (Riemenschnitter 2003, 288). This capture of a fin de siècle artistic and intellectual splendor as political anomaly, however, while stressing Xu's times as indeed a time of dynastic decline, simplifies the motivations, ambitions and practices of individual and collective Late Ming literati. It casts their multi-faceted and oriented pursuit of knowledge, as well as all innovative cultural trends, as necessary or compelled moral choice. In fact, this over-emphasis on the moral-political is the tenor of Riemenschnitter's otherwise insightful account of an emerging Ming discourse on the traveler's vocation as specialist, based on her reinterpretation of contemporary discussions of *pi* (addiction) (Riemenschnitter 2003, 293).

This kind of caption of late Ming China as politically repressive and intellectually deviant, and its use as the necessary background against which to understand both seemingly orthodox or innovative cultural phenomena, does not actually take into consideration the changing economy, society and culture throughout, before and after Ming, which by all accounts are considerable, and thus fails to perceive the upheavals in late Ming and early Qing Chinese intellectual and cultural history as consequences of a drawn-out and on-going process. Benjamin Elman, on the other hand, in his account of Ming-Qing intellectual history which elaborates on the terms in which an early modern Chinese scientific culture emerged, presents Ming China as closely tied to global markets, albeit unwittingly, expanding on rather than retreating from the much-discussed regional and maritime developments of the Song (960–179) (Elman 2005, 14). The backdrop of Elman's story is the economic transformation and new prosperity which brought about great changes in economic and social relations, including a significant population growth between 1,450 and 1,600, causing the decline of the reach of the relatively static imperial

bureaucracy (a different account of the inefficiency of rulership). These changes in turn affected the status and orientation of the cultural elite, which responded with a concerted epistemological reflection. The consolidation of the Cheng-Zhu philosophical reorganization of knowledge by Ming literati, in Elman's analysis, was an intellectual means to accommodate not only social, political and economic upheavals, but, more fundamentally, the very proliferation of 'things'—objects, events, natural as well as human phenomena: "the quantity and exchange velocity of goods in the marketplace had multiplied exponentially. Ming elites were living through a decisive shift away from the traditional ideals of sagehood, morality, and frugality. Within an interregional market economy of exceptional scope and magnitude, gentry and merchants elites transmuted the impartial investigation of things for moral cultivation into the consumption of objects for emotional health and satisfaction" (Elman 2005, 10). Elman also suggests that as part of Ming literati's self-refashioning in face of dramatic social reorganization, connoisseurship begins to take on specialist tendencies.

Others have also commented on the economical prosperity of Ming China and its effect on cultural formations. Timothy Brook focuses on inter-regional commercial development and its relation to global commercial networks, with consequential increase in mercantile and everyday travel and circulation of travel information (Brook 1998). In fact, according to Wilkinson, about 20–30 merchant manuals and route books are extant from the late sixteenth to the late nineteenth century. Encyclopedias for daily use of the Ming and Qing also not infrequently contain similar travel information (Wilkinson 2000, 168–69).

Only in this milieu and context, the question to what extent or in what ways is Xu's persona as travel writer and his oeuvre extraordinary (*qirenqishu*) becomes significant. Liang is not alone or off the mark in considering Xu original. Xu's contemporary commentators and biographers already portrayed him as a traveler-knower of extraordinary ambition and deeds. In fact, Qian Qianyi, the essay writer of Yellow Mountain and landscaper of introspection, is not only Xu's friend but also his biographer (Riemenschnitter 2003, 287). Whilst Xu's travel and travel notes do seem different in kind from Qian's many-layered and introspective landscape, and their two personas emerge as cultural figures of contradistinction: Xu the dedicated, proto-professional traveler and travel writer, and Qian the traditional literatus, poet, and official-scholar. One should not forget however it is through Qian's sketch that one learns about Xu's well-known ambition. At the point of death, Xu is recorded to have declared to his friend:

> There have been only three men who have made their names in remote areas: Zhang Qian of the Han, who passed through empty deserts but did not catch sight of the Kunlun Mountains, and Xuanzang of the Tang, and Yelu Chucai of the Yuan, who were supported by imperial authority on behalf of their journeys to the west. If a commoner like me—who, with nothing but his walking stick and sandals—was able to explore streams and deserts, to vanquish the Kunlun Mountains, and to roam all over the western territories, can be counted as the fourth, I may die content! (Qian Qianyi, *Xu Xiake zhuan*, XXKYJ 1981, 1194)[2]

[2]For an abridged version, see Li Chi (1974, 25).

It is evident that Xu is the originator of this enduring construction of a persona of himself as an extraordinary traveler.[3] Qian as well as his other biographers are a conscious part of this creation. Xu distinguished himself from previous travelers and explorers by assigning himself the status of a commoner, "who, with nothing but his walking stick and sandals" (XXKYJ 1981, 1194) was nonetheless able to roam far and wide and conquer high and low. Here Xu is most likely making an intellectual and social point. He is differing himself from similarly great but clearly different kinds of travelers. The commoner explorer is relatively rarer, its popularity certainly newer, than the official-en-route and the religious pilgrim, though the figure of the traveling seeker and recorder of knowledge emerging from his travel notes is sometimes reminiscent of the latter. And Xu's deathbed reminder that he is such may be less a moral dissent than an intellectual, social distinction, as Xu's frame of reference is clearly the historical categories and traditions of travel and exploration, and extant kinds of travelers and explorers.

Xu's other friend, Wen Zhengmeng (1574–1636), also alluded to his walking stick and sandals in a letter to him in 1636:

> When you take up your walking stick and put on your sandals this year, which places will you visit? Your former expeditions can already be considered amongst the greatest undertaken. You have already arranged your records and notes (so that they can) guide future travelers and be transmitted to future generations for a 1,000 years. (*Ji Xu Xiake Shu [Letter to Xu Xiake]* XXKYJ 1981, 1183)

In the convention of polite compliments between friends, Wen's comments show both discernment on his part and Xu's extraordinary achievement by emphasizing the uniqueness of Xu's travels and travel records. The importance of the walking stick and sandals as symbols of actual physical spatial movement and exploration, and the new knowledge gained as a result of such movement, echoes Xu's own differentiation of his kind of exploration and ways of recording such exploration as radically distinct from those before him. That is, his kind of knowledge of the world therewith is not based on *fuhui* (copying previous knowledge, usually from book to book), but actually gained or checked on site. Wen also pointed out the other most significant point in Xu's kind of travel and travel writing: that is, it is self-consciously pursued with an eye for the transmission of knowledge to future generations.

Whilst travel became easier, even to the more remote regions of the empire, extensive outdoor travel was advocated by quite a number of prominent Ming literati travelers around Xu's time. Wang Siren (1575–1646) referred to the exploration of scenic sites as a heroic act, and accused the old, homebound sages of lacking in courage. The explorer in his defense of extensive journeying is one who broadens his knowledge by traversing the world while at the same time educating readers with descriptions of what he sees.[4] Yuan Hongdao (1568–1610) too discoursed upon

[3]Riemenschnitter, for instance, has noted Xu's extraordinary ambition in this; Riemenschnitter (2003, 287).

[4]See Wang Jizhong, Preface to "Summons to Travel (*Youhuanxu*)", in *Wang Jizhong zazhu (Miscellaneous Writings of Wang Jizhong)* 2 vols, Taipei: Weiwen chubanshe 1977, 276–278.

the adventurous, heroic quality of travel with admiration. And this is linked to his elaborate classification and theorization of the true connoisseur as knower. Yuan had famously contrasted the study of books—which in his view was an unspecific and secondary method of self-cultivation—with an occupation pursued with dedication according to an individual's own inclination:

> When those among the ancients whose vocation was flowers hear others chatting about some unusual specimens, although the flowers grew in deep valleys or on peaks, in their pursuit of them they would never fear tumbling or falling. Even in the dead of winter and at the height of summer, when their skins were wrinkled like the scales on fish and their sweat was as dirty as mud, they would be oblivious to all. When the flowers were about to bloom, they would sleep next to the flowers. They would observe the flower from its first budding to its full bloom, to the time when it fails and dies on the ground. Only then would they leave . . . Some of them would grow thousands upon thousands of specimens in order to learn every single aspect of their development; . . . Some of them, by smelling the leaves, could then know the size of the flower, and some of them, by looking at the stem, could distinguish between the hues of red and white. These people can be called true connoisseurs of flowers; and they are the true experts. ("Huashi," *Yuan Hongdao ji, Pingshi*, 10, 826)[5]

It is possible to suggest, then, that Xu, through and with his friends as well as like-minded contemporaries, were setting up the terms for defining and enacting a different kind of travel and travel writing, both as theory and practice. The kind of traveler envisioned and enacted here is a keen seeker of knowledge, and traveling in due process becomes an uncompromising pursuit of one's own inclination. But it is nonetheless for the benefit of others—passing on knowledge of the world, both natural and human, observed and recorded en route, to future generations. Furthermore, Xu's categorization through Qian of the different kinds of travel and exploration, and Yuan's classified description of the organization of a real connoisseur's observation and understanding of flowers, make clear that their aim is knowledge. Travel is being refashioned to look like an ambitious pursuit of new approaches to knowledge, which, however, is not envisioned to be so different from extant literati practices as to have ushered in a modern geography against amateur belles-lettres. Here the extreme connoisseur and the new knower are analogous and mutual points of reference. And in Xu's actual travel writings, the interest in divination (as Ward points out) and ancient rituals is to be found amidst the constructions of quantifiable exactitude.

By all accounts Xu is not alone in his pursuit among his peers and in his time, as Liang Qichao would have it. Most of his friends not only helped craft him as the new traveler, they themselves traveled extensively. As noted before, though Qian Qianyi wrote different kinds of travel essays, he was pivotal in propagating Xu's kind of travel and travel writing. Another case in point is that during Xu's southwestern excursion to Jizhu Mountain, in what is now Yunnan Province, he had actually met and exchanged views with quite a few followers of the Taizhou

[5]Qty in Chou, Chih-P'ing, *Yuan Hung-Tao and the Kung-An School*, Cambridge: Cambridge University Press, 1988, 99.

philosophical school, which was known for its this-worldly and plebian tendencies, who had also apparently journeyed there (Jiang 1994, 62). Nor is it that uncommon for Xu, the descendent of an once illustrious gentry-scholar-official lineage, to abandon traditional paths to public recognition—that is, trying harder to pass the official examination to become a state official—in order to make himself the fourth great Chinese explorer. That alternative status or career possibilities for literati by then were becoming less rare can be seen not only in Yuan Hongdao's group portrait of dedicated pursuers of alternative fame and interest, but also in Xu's own family history. As more detailed genealogy of Xu's family (Wu 1994) shows, there were several generations of Xus who detached themselves, either by volition or mischance, from officialdom. Many of them were nevertheless prosperous and enjoyed considerable social and cultural status in the region, even when they chose to become non-official scholars and manage their own land, including engaging in commercial activities. And these choices and alternative fortunes are by no means anomalies but part of the general flourishing of local landed-gentry culture, owing to their relatively independent (from the court) wealth and rising power, which is directly linked to the prosperity and changing economical and social relations of Ming China, especially in the Jiangnan region. One further evidence that Xu's vision and practice is part of rather than beyond his time and place, is that the very possibility of his travel is predicated on the family weaving business managed by his mother, and worked by all the women in the family. It was a business successful enough to sustain the family during his many years' absence, and actually supported his undertakings. The particular cloth woven at the Xu household became a regional brand name (Wu 1994, 1–21).

3.3 The Notes

The timeliness of Xu's kind of travel practice and travel writing suggests different ways of locating his intellectual originality—his historical place and significance, and therewith the social cultural tenor of his times. Xu's *Travel Notes* can be considered an avant-garde text in the sense it leads the way in intellectual ambition and vision in the transformation of the genre. And above all, Xu makes the kind of knowledge pursuit his friends discussed and theorized a life-long practice. In the *Records*, Xu the traveler and savant roamed mountains and rivers, and actually explored them, finding new and checked extant knowledge. More significantly he devised ways of writing the process of spatial movement as a process of knowing, and the knower as imperturbable explorer in uncompromising motion.

Altogether Xu accumulated 600,000 characters on geographical observations, scenic views, hardships, adventures, and other subjects. The extant travel records cover a time span of 26 years from his first note in 1613 to his last entry in October 1639, while the amount of lost records remains unknown. *The Travel Notes*, as corpus, is usually considered as two parts. Part one records his visits and explorations of known mountains and rivers in East, South and Central China.

Some of the places are renowned sites, relatively easy to get to at the time, and have been itinerated into tours. While adhering to the formal conventions of the literati genre of jottings (*biji*), even in these earlier notes Xu departs from the prevalent practice of recording scenes and events *post eventu*, and keeps daily accounts of his travel experience. At least this is an image he cultivates and maintains persistently throughout the *Travel Notes*. These earlier notes already signal changes in aesthetic representation that reach far beyond the conventional landscape symbolism. But even in these more appreciative, more lyrical jottings of the relatively familiar and often already inscribed sites, Xu, like his friend Wang Shixing (1546–1598) in *Wuyue Youcao*,[6] shows there is something else in observing and recording nature: they both consciously emphasize a reliance on personal, direct observations, and strive to extend the boundaries of knowledge and eradicate the mistakes found in existing geographical works.

The second part of Xu's records covers his travels to what is now Southwest China from October 1636 to 1640. It is the longest and generally regarded the most important trip he undertook. Two-thirds of Xu's time in the Southwest was spent in the karst-formation areas. His observations of the topographical and structural characteristics of these formations are indeed perceived by modern geographers as one of the first worthwhile scientific studies of such kind in the world. Xu also devoted much time on this expedition to the discovery and correction of the origins and directions of rivers. His geographical concern can be described as natural, historical and cultural, with an emphasis on changes in natural formations, and historical human transformations of places. In this way he is known to have broken the convention of previous geographical studies, which are often limited to the study of administrative territories, border surveys, localities as centres of production.

What is most significant epistemologically emerging from Xu's jottings, however, is that through them he established new ways of recording the process of movement and observation. In his records the process of spatial movement, and with it a self-conscious observation of movement constructed through the narrative, is not merely an accidental extension—something more systematic and of an unusually long duration—of the convention of *shidikaocha* (field investigation), which is the common practice of classical Chinese geography (Guo 2000, 1), epitomized in Jia Dan of Tang's dictum "*baiwen buru yijian* (one sighting is better than a hundred hearings)" (Guo 2000, 2). Xu's empiricism, which is consistent in the jottings as both content and ways of observing and recording, as well as an aesthetic pursuit in itself, emphasizes systematic verification and correction, employing extensive quantitative description and recording, combining minute observation with study of extant records. And above all, this is structured in a narrative of movement, which highlights not only what is seen, but how he goes about seeing: the physical movement; natural and human vicissitudes in the process, in particular how people

[6]See Wang Shixing, *Wu yue you cao* (Travels Notes of Five Mountains) [microform]: [12 juan]/ [Wang Shixing zhuan; Tu Long ping]. Wangli 21 [1593] Microfilm. Taibei: Guoli zhongyang tushuguan; Canberra: Australia National Library.

from different social backgrounds are involved in each act of arrival and observation; and the organization and orchestration of observation, culminating in an image of Xu the narrator and explorer as a driven, relentless traveling savant who aims to see and know every inch of the ground he covers. In this narrative, the act of knowing is dependent on the structure and consequence of motion. Though one can see from this account that Xu, unlike Yuan Hongdao's flower observer, did like, traveled with and consulted books. Considering the minimum equipment Xu traveled with—a writing brush and a compass, if one were to take the *Notes* literally, the books he carried along were copious: from geographical sourcebooks such as local gazetteers and the bulky Gazetteer of the Ming Empire (*Da Ming yitongzhi*), to literary works and valuable handwritten works he had either brought along or acquired en route. In fact, to rectify the mistakes of the *Da Ming yitongzhi* en route is one of his stated motives in traveling and observation (Ward 2001, 18).

Xu's *Notes* are structured throughout with itinerated details, blending quantified notification of distance and directions with scenic descriptions:

> Twenty-first day: after meal said farewell to Daoist hermit Shao, we descended to Chunyang Pavilion, passing by Taiji Principle Precipice in the east. If one ascends sideways by crossing the Northern Grove, from this point Baofeng Monastery can be reached in half a *li*. I, taking the direction of the Southern Grove's hanging cliffs yesterday, did not come across any path, and therefore today we departed from the big road to Yuhuang Pavilian in order to descend by the precipices . . .
>
> Five *li* westward, the road between range and valley divided into a crossroad. So I ascended sideways in the northwestern direction. I intended to ascend the slope from the northwest, but mistakenly arrived at the range's south by a western path . . . (*Dian you riji jiu*, XXKYJ 1981, 976)

Xu's account in un-variated detail of direction, path and physical traversal are by no means mere recital of 'facts,' which Ward considers "arid wastes" in his evaluation of the art of travel writing, and Xu the travel writer does not emerge from these simply as a forerunner of the Qing *kaozheng* (Evidential Philological Study) school (Ward 2001, 201). These minutiae of the spatial and physical wherewithal of travel and their repetition carry forward the narrative to its aesthetic and 'scientific' end. They are also what Xu intends his audience to see as the segments the sum total of which constitutes his travel and knowing process. One might say they are both the content and structuring blocks of the records, in which aesthetic pursuit and an empiricist discovering spirit are not in contradistinction but supplement each other, which pushed the limit of travel jottings and revised the process of knowing.

The language of Xu's description in the *Notes* are indeed not only based on what Ward anachronistically called "reliable scientific criteria" but also "an array of aesthetic terms," reflecting "both those of the traditional travel diary and those that were prevalent in the late Ming" such as the professed obsession with the natural world (Ward 2001, 201). Xu's obsession though is as much with the natural world as with spatial movement itself. The driving motif of the *Notes* is getting to and actually exploring scenes and things on site at every daily destination. And in the narrative aesthetic objects and targets of discovery, often one and the same, oscillate to take the explorer narrator's attention—natural formations, flora

and fauna, as well as cultural habits and historical customs, affecting the reader equally with the picturesque, the sublime, and the mundane. Xu's *pi* here is in fact manifested more than what is obsessively spelled out in Yuan Hongdao's *huachi*—it is "a physiological craving and compulsion" (Ward 2001, 201). Rather than seeing this physiological obsession with the natural world as evidence against Xu's scientific spirit, though, one should understand such emphatic construction of *pi* in Xu's *Notes* as where individual aesthetic penchant and historical intellectual transformation converge. Thus Xu's records not only anticipated modern geography as twentieth century geographers would have it, or began (albeit unconsciously) what was fully developed in early Qing as the emphatically empiricist Evidential Studies. As transformed literati travel jottings they pushed the limits of this literary convention, as well as the emerging Ming empiricist specialist discourse.

The following is an entry that is often used to show Xu's heroism as an explorer. In his own account, he was prepared to confront the most critical situations whenever he came across a site of geographical interest. The entry is seen to encompass one of Xu's best known adventures (he was climbing a hanging cliff near Yawu Mountain Village, where the Eastern Longchuan River ran through steep rocks):

> Twenty-seventh day: . . . Suddenly I bumped into someone, I took his hand and asked for direction. He said this is Yawu Mountain village and rushed off. Only later I learnt that this is the beginning of the forbidden path, no traveler dares beyond this point, but I blithely and blindly followed my own obsession . . . Seeing this lofty peak for the first time, I was struck by its peculiarity . . . When I made an eastern turn to proceed northward, I suddenly discovered a cave facing east on the upper part of the layered cliffs. I wanted to climb up but could find no path that leads to it, neither could I make up my mind to give up the idea, though I was sorely tempted . . . Eventually, I scrambled upwards. Because of the extreme steepness, after half a *li* there was no more ground for the feet to step on, and I had to clutch firmly to the shrubs for climbing . . . In between this, I found one foothold to fix myself temporarily, which, with my dangling foot and hands, gave me the impression of being pasted flatly onto a wall . . . . After half a *li* I finally reached the northern cliff . . . Consequently, I decided to slide down sitting on my back with both feet stretched forward, while both hands reached backward to grasp the roots. Suspended in the air, I lingered hesitatingly for a moment, then ventured downwards . . . (*Dian you riji jiu*, XXKYJ 1981, 988–991).

Xu's text embodies a different understanding and practice of knowledge. As can be seen in the entries, beyond his pursuit of exact terminologies for measurement and geological phenomena, the quest for details is demonstrated not only in what he saw, but also how he went about seeing and knowing them. Throughout the narrative there is a self-conscious crafting of Xu himself as the obsessed explorer—daring to go where others would not, and therewith achieving what others could not. The excess of physical details in how actually to climb and cling on to cliffs, how to go about seeing and exploring, does suggest a "physiological compulsion." But it is nonetheless a carefully crafted, sustained textual narrative "compulsion," indicating Xu is self-consciously constructing *pi* as the necessary though extraordinary mode of travel and knowing, the excess becoming in the process the content of the travel narrative. In fact, because of its consistency, Xu's *Notes* appears as an incessant

narrative of never-ending movement, in which the construction of actuality (*jin*) and exactitude that are pursued as both aesthetic ideal and necessity for knowledge, depends on the narrating process, of physical movement as well as cognition and emotion. In Xu' *Notes*, I argue, motion itself becomes a value, a necessary component of knowing and appreciating the natural world, and of the knowing subject, as a result of his excessive manifestation of *pi* in the corpus of his travel records. Further, Xu's text exemplifies what it is like to pursue knowledge.

In terms of travel writing, Xu's *Notes* indicates changes at the intersection of extant genres and traditions rather than an opposition to them. The description of scenes and the narrative of movements appear indeed sometimes like what might be collated by Joseph Needham's "twentieth-century field surveyor". But often they also echo enthusiastically the convention of literati mountain (scenic) inscription as demonstrated in his friend Qian Qianyi's *Records of the Yellow Mountain*. The following is an entry from Xu's travels in Yunnan, Dali, the records of which constitute the longest section of his *Notes*:

> The eleventh day: made and ate breakfast early. At dawn, we took off as soon as the carrier arrived. From Shaping we went south for more than one *li*, seeing the Western Mountain branching east sideways, we know it is Longshou Guan, the first peek of Northern Dianchuang Mountain. From Fengyu south, passing the southern branch of Huadian Shao, then turning northeast, we see more mountain peeks behind the Dragon King Temple, turning and twisting from the Woniu Creek of Dengchuan, all the way to Tianma in the north. The one rising up in the south is Dianchang Mountain. Dianchang, which leans east and facing north, actually begins here. That is why the place is called Dragon Head. (When enumerating the nineteen peeks of Dianchang, *Yitongzi* went from south to north, thus mistook the Dragon Tail to be the Dragon head) . . . (*Dian you riji jiu*, XXKYJ 1981, 921)

The description of approaches to Dali is as exact as what appeared in most other entries in terms of geographic and topographical details. The reader can indeed follow Xu's footsteps to witness the same formations and enjoy the same views. Xu again demonstrated his intention to correct the errors in *Daming yitongzi*, reminding us this is indeed a habitual practice throughout the *Notes*. However, in the same passage, Xu also went on site, explored, evoked and appreciated the beauty of the Butterfly Spring and Butterfly Tree, a by then already renowned literati as well as popular tour spot in the region. He made expected cultural aesthetic comments on site, and took from the tree a sprig for souvenir, like a good Ming literati traveler (*Dian you riji jiu*, XXKYJ 1981, 921–922). Xu's record of his visit to the Butterfly Spring shows us that many of the sites even in the far-flung Southwest of the Ming Empire are indeed already culturally inscribed, and access to them are not limited to the extremely adventurous (this is further proven by Xu's visits and records of many other sites in Yunnan). Xu adds to and deviates from such inscription. Xu's travel and writing in this sense are within but exceed tradition. In length, intent and methods it transforms what others at his time may or may not have espoused. Xu's extraordinariness is in the fact that he is always ready to go where others stop and do what others may only have thought about. After passing by and describing the famous Butterfly Spring, Xu the explorer went on his journey:

> From here one can already see the second valley beyond the northern ridge, the mouth of the peeks pressing down like a gate. Because I am not far off, I decided to pursue it further

> north and have a look. In the beginning there was no path. Only after walking about two *li*, near the south of the valley, there appeared a path from the east. Up along this path west, it became steeper and steeper. Some woodcutters came along and asked where I was heading. I said I came to visit the mountain. One of them said: "along this path from the south of the valley straight up there is the route for woodcutters. There is nothing to see. But in the southern valley there is an old Buddhist Cave that is quite unique. However the road to it is blocked by a cliff, and it is hard to pass through. With no one to guide you it will be harder." An old man there then said happily: "Since you came from a thousand *li* away, overcoming danger and hardship, there is no difficulty in me being your guide." Thereupon I took off my gown, carried it on my back together with the branches I took from the Butterfly Tree, and went off. All together we went west for three *li*, then turned south, walked further on a flat route for three *li*, then climbed up the cliff towards the west . . . (*Dian you riji jiu*, XXKYJ, 1981, 922)

As always, Xu's interest here is the wherewithal of getting to and exploring scenes and things on site. But both the writing and narrated content are more than empiricist. The happy drama of encountering helpful woodcutters has a clear message: Xu is indeed an extraordinary but recognizable traveler. His deeds are recognized and affirmed even outside the circle of literati travelers and savants. Overcoming danger and hardship seems indeed accepted and even aspired for qualities for traveling, a knowledge shared by different kind of travelers (woodcutters, guides, merchants, clergy, literati). In this narrative Xu the narrator, with the help of the guide, eventually arrived at the Buddhist Cave, explored the site with courage and great care, then went further on his way. But more significantly, there emerges from these notes an image of an extraordinary but nevertheless recognizable traveler. He is ambitious in his intellectual intent, and persistent in his practice. He has a community of fellow travelers and savants, beyond the circle of his immediate literati friends. And in due course, through the process of traveling and writing, he becomes an adept at the kind of travel and ways of knowing and recording knowledge the *Notes* embodies.

Xiake Youji is in this sense indeed a vanguard text. The persona of Xu as explorer, literatus-aesthete and savant emerges from the corpus of the notes that record the physical, cognitive and emotional details of his travels as an extraordinary traveler, because these travels highlight a process, often in excessive minutiae, of spatial movement the end of which seems the practice of motion itself, making it an extraordinary travel account. But this extraordinary persona/writer and travel/account nonetheless belongs and adds to the emerging Ming specialist discourse. Xu's "passion for the mountains and waters (*shanshui shi pi*)," as Chen Jiru (1558–1639) put it,[7] is like Yuan Hongdao's flower addict (*huachi*). Their theory and practice of *pi* is systematic and sustained, with explicit reference to extant knowledge practice. As intellectual undertaking, *Xiake Youji* is also comparable in terms of ambition and methodology to Li Shizhen's (1518–1593) *Bencao Gangmu* (*Compendium of Materia Medica*); Song Yingxing's (1587–1666) *Tiangong Kaiwu* (*Exploitation of the Works of Heaven*); and Xu Guangqi's (1562–1663) *Nongzheng Quanshu*

[7]See Chen Jiru, "Biography of Mr. Xu Yu'an, accompanied by Wang Ruren (*Yu'an Xu gong jipei Wang Ruren zhuan*)", in XXKYJ, 1981, 1247–1249.

(*Complete Treatise on Agricultural Management*). They all involve extensive quantification, sustained "*shidi kaocha,*" self-consciously empiricist and systematic in the way they record knowledge and in how they pursue knowledge, with an awareness of the cumulative process of knowledge making, and an emphasis on rectifying extant knowledge. More significantly, through their methodologically self-aware presentation (recording) of their long-term practices, sometimes within while often exceeding recognizable tradition, a new persona of the literati-knower emerges (it is also significant to note that while some of them are intimately involved in the Sino-Jesuit intellectual accommodation at the time, others are not). Xu's travel, as demonstrated in minutiae as a process of spatial movement and knowledge practice, is also part of the expanded and extended motion in Ming, enabled by the greater global and regional economic ties and spatial movements. Xu's travel is not only made possible both financially and spatial-culturally by these changes, his kind of motion is recognized as an exemplary part of them in his time. It is his peers, after all, who first found his example admirable, understandable, and extraordinary.

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Chapter 4
Those Who Stayed: English Chorography and the Elizabethan Society of Antiquaries

Claire Kennedy

Abstract In the late sixteenth century, the geographical discipline of chorography – traditionally the study of local countryside, customs, history, and laws – developed in England as a response to political and social needs. It also promoted a process of defining an English cultural identity. This process did not arise solely from the geographical tradition, but also has a provenance in the study of English law, an inherently patriotic endeavour. The Elizabethan Society of Antiquaries formed in or around the year of 1586, and for its 20-year lifespan was largely comprised of gentlemen of distinction within the English political and legal landscape. Amongst this membership, many were noted for their contribution to the geographical tradition in England, particularly those who were authors of chorographical works. This paper will show that the Society of Antiquaries served as a centre for the discussion of historical, geographical, and legal subjects, making it a nexus point between cultural and ethnological considerations of what it meant to be English, and mathematico-legalistic interpretations of the English land. The English perception of self that was embodied in this Society would encourage not only English imperialism, but also a scientific culture based on matters of fact.

4.1 Introduction

> [I]n the studies of Antiquity, (which is alwaies accompanied with dignity, and hath a certaine resemblance with eternity) there is sweet food of the minde well befitting such as are of honest and noble disposition. If any there be which are desirous to be strangers in their owne soile, and forrainers in their owne City, they may continue and therin flatter themselves. For such like I have not written these lines, nor taken the paines. (Camden 1610, v)

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By the turn of the seventeenth century, the New World was opening up to European travellers; it was being discovered, explored, and colonised. The English, in particular, had by this time established for themselves an ideology of imperialism and expansion that had been shaped over a century earlier, informed by an awareness of what it was to *be* English. At the turn of the sixteenth century, thousands of Englishmen were already travelling abroad for educational purposes (Warneke 1995). They travelled to the Continent in order to improve their minds, and furnish their knowledge of foreign cultures, languages, and traditions. However, the benefits of foreign travel as a means of education could easily be outweighed by its inherent dangers, and the best protection that the early modern English gentleman could be armed with when setting out on a journey of discovery, was the knowledge of how he as an *Englishman* was different, and culturally superior, to those he would encounter in his travels. What he required was a thorough grasp of English history. When increasing numbers of young English gentlemen were petitioning the authorities for permission to travel abroad for educational purposes by the end of the sixteenth century, William Cecil, Lord Burghley, is said to have refused passports to those who displayed ignorance of English history (Stone 1965, 699; Warneke 1996). Cecil wanted these men to have an appreciation for English custom and culture; for what it meant to *be* an Englishman. This understanding of what it was to *be* English was a process of self-definition and it did not arise solely as a by-product of geographical and historical study within the early modern English universities. Rather, it has a provenance in the study of English law, an inherently patriotic endeavour. The Elizabethan Society of Antiquaries, it will be shown, serves as a physical manifestation of these concerns; a collaborative enterprise of scholarship – of the type that has been shown to characterise early modern science, in embryonic form – concerned with discovering what it meant to *be* English, through a concern with the English land – its history, customs, and laws. The English perception of self that was embodied in this Society would encourage not only English imperialism, but also a scientific culture based on matters of fact.

As Englishmen began to discover how immense and diverse the earthly globe really was, these new discoveries presented a challenge to the traditional reliance on ancient authority. This brought with it a realisation of the extent to which the English people were ignorant of their own origins. The 'age of discovery' that would open up the globe to European seafarers presented a new challenge to the authority of classical sources of knowledge, and exposed to English scholars their ignorance of their own personal cultural and ethnological history. The Biblical account of the Deluge, and subsequent repopulation of the earth – a belief expressed here, for example, by William Lambarde in his *Perambulation of Kent* of 1576 – went largely unquestioned at the time:

> We read in the first Booke of Moses, that after such time as the order of nature was destroyed by the general floude,... all the nations of the worlde, must of necessitie derive their pedigree from the countrie of Chaldee (or some place nighe unto it) where the Arke of Noah rested... (Lambarde 1826 [1576], 8)

This had, in effect, removed from intellectual consideration the possibility of a prehistoric past for mankind, and established bounds on the ways in which evidence to the contrary could be interpreted. Up until this time, Greek and Roman accounts of classical antiquity had been regarded as authoritative, and throughout the Middle Ages, they were commented on, but never disputed. Alongside the twelfth-century Welsh cleric, Geoffrey of Monmouth's chronicle of Britain's kings, *Historia regum Britanniae*, and Ralph Higden's *Polychronicon*, these narratives provided the historical background to account for all of the archaeological remains within the British Isles. Evidence to the contrary, when uncovered, was either explained away as natural wonder, or accounted for through Biblical, or another, written authority (Piggott 1956, 96).

Established in or around 1586, composed almost entirely of gentlemen, and active for the following two decades, the Elizabethan Society of Antiquaries would play a crucial role in challenging this restricted approach to the study of the past, and in doing so, would foster a national self-definition of what it was to be English. The Society counted amongst its membership some of early modern England's most eminent men. A large proportion of its fellows had undergone legal education, most notably John Doderidge, James Ley, Henry Spelman, and Robert Cotton, and amongst the membership were also the authors of celebrated chorographical works, such as William Camden,[1] Richard Carew, William Lambarde, William Patten, and John Stow. These men used methods of inductive reasoning to collect and interpret data concerning the antiquity and history of Britain, which has been characterised by others as "Baconian" (Decoursey 2004). The collected legal knowledge and experience of the membership made them uniquely positioned for the interpretation of "facts".[2] The heralds amongst them provided an expertise in genealogical research, during a period when social status was largely determined by birth. Their interest in antiquarian and chorographical enquiry was not for the mere "collecting of facts" as antiquarianism has previously been characterised (Momigliano 1950, 286–287), but rather it was motivated by a serious concern with England's laws and customs, that were deeply rooted in the land itself, and its history. The study and understanding of that land, its history and its physical features, both natural and man-made, was also the study and understanding of self, of what it meant to be English.

[1]Camden too had received an honorary admission, (much like a modern honorary doctorate), to Gray's Inn in 1592. A fact that, according to R.J. Schoeck (1958, 104), has escaped general notice, (and is not mentioned in the *Oxford Dictionary of National Biography*'s entry on Camden).

[2]The very concept of a "fact" took its shape from the legal arena, and was subsequently adopted in other intellectual endeavours, becoming a habit of English thought by the late seventeenth century. The Roman and canon law systems made a distinction between matters of fact and matters of law from the twelfth century onward: "fact" or "factum" in law implied human actions, that is, the act, or crime, that had been committed at some point in the past. (Shapiro 1999, 9)

The introductory quote above, from Camden's *Britannia*,[3] promotes a direct relationship between an interest in Britain's past with the desirable qualities of "nobility" and "honesty": personal qualities that have also been seen to factor in explanations for the assessment of the truth of new knowledge claims (Shapin 1994). Those who are ignorant of their own past, willing to remain as "strangers in their owne soile, and forrainers in their owne City", are unworthy of his attentions. He had taken seriously Abraham Ortelius' direction, to "restore antiquity to Britaine, and Britaine to his antiquity" (Camden 1610, 5), when they had met in England in 1577. Through the *Britannia*, he intended to explain the history of the most ancient Britons, expose the origins of the English people through a topographically arranged collection of local histories, and identify the British cities mentioned in the geographical guides of antiquity, such as Ptolemy's *Geography* (Rockett 1995, 831). He aimed to:

> ... renew ancientrie, enlighten obscuritie, cleare doubts, and recall home Veritie by way of recovery, which the negligence of writers and credulitie of the common sort had in a manner proscribed and utterly banished from amongst us. (Camden 1610, 4)

While Camden's goal may have been a corrected historical narrative, he also succeeded in moulding a national profile from the local materials that he assembled (Rockett 1995). He recommends his labours to the "well bread and well meaning men which tender the glory of their native Country" (Camden 1610, 5). The great interest that the English were beginning to take in their own history during this period demonstrates a concern with maintaining a national and cultural identity of Englishness, evident not only through the popularity of chorographical works such as Camden's, but also in the popularity of historical theatre during this period. Shakespeare's historical plays, written between 1589 and 1612, were intended to satisfy public demand, covering the entire period of English history from Richard II to Henry VI, in addition to *King John* and *Henry VIII* (Rowse 2003 [1950], 85). Travellers too appeared in Shakespeare's plays, and other popular works of literature and drama from the 1590s through the seventeenth century. The fear that the traveller might lose his cultural identity was evident in the regular assertion of the capacity for the Englishman to return home, "out of love with [his] nativity" (Shakespeare, *As You Like It*, Act IV, scene i; Warneke 1995, 60–61). Possessing an intimate historical and geographical knowledge of the land of his birth not only helped to preserve and protect the English gentleman's identity, but also reinforced his standing in good society, as Camden implies above. It would also provide him with the means by which to shape, and control it, from a political and legal perspective, as will be shown below.

[3]Camden's *Britannia* was a complete chorographical study of England, Scotland, and Ireland; first published in Latin in 1586, and dedicated to William Cecil, Lord Burghley. The London, 1586 publication was followed by seven more Latin editions: London, 1587; London, 1590; Frankfurt, 1590; London, 1594; 1600; 1607; Frankfurt, 2 vols., 1616. There were also two English editions: London, 2 vols., 1610; 1637.

The study of the law of England was also a patriotic[4] undertaking, motivated by this desire amongst the learned English to determine a territorial identity, and establish themselves as separate, different, and superior to their Continental counterparts: an ideology that would serve them well during the period of English imperialism and expansion.

In the establishment of matters of fact, or truth, in early modern England, to be a gentleman was a good indicator of reliability. But to be a gentleman trained in the law was even better – they are the real experts in adjudication. Experience with the common law, in the English courtroom, or time spent in the Inns of Court, created a better ability to judge "truth" and "fact", and provided a higher qualification for "knowing" (Shapiro 1999, 10–12). Equally important in this economy of truth was one's connectedness with, through knowledge and ownership of, the land itself. The common law, particular to England alone, developed out of a rigidly controlled feudal system, in which the most fundamental concern was the nation's greatest source of wealth, the land.

The common law was not taught in the English universities. Rather, it was necessary for scholars to proceed to the Inns of Court, either directly or after some university education, in order to become acquainted with the common law. The Inns of Court and Chancery were perceived by possible Society fellow George Buck to be part of a collection of centres of learning in London, which, together, constituted a university: the "third university of England". The Inns were a place where a considerable portion of the English gentry went to grow up, learn about life, and establish useful contacts. They became acquainted not only with gentlemanly pursuits, such as singing, music, dancing, sport, and taking part in Revels (Fortescue 1660, 115), but also gained an initiation into the process of governance, each Inn being self-governed.[5] Those who did not intend to take up the law as a profession acquired enough legal knowledge to assist them in running their own counties and estates (Baker 2011).

For Society fellow John Doderidge, English common law was "worthily imputed to be the Science of Sciences; and that therein lies hid the knowledge almost of every other learned science" (Doderidge 1631, 34–35). Another Society fellow, John

[4]"Patriotic" is employed here to reflect the original usage of "patriot" to mean "a lover of one's country", ("patriot, n. and adj.," OED Online). In his *Perambulation of Kent*, Society fellow William Lambarde describes Richard Harrys, "Fruiterer to King Henry the 8." as an "honest patriote": "For this man, seeing that this Realme (which wanted neither the favour of the Sunne, nor the fat of the Soile, meete for the making of good apples) was neverthelesse served chiefly with that Fruit from forrein Regions abroad... brought plantes from beyonde the Seas, and furnished this ground with them, so beautifully...", thus ensuring that the English people were fed with fruits of the English soil. (Lambarde 1581, 222–223)

[5]In each Inn, the whole society of masters made orders for its regulation, and elected three or four governors to act as an executive governing body, once a year. The full assembly of the society was known in each of the Temple societies as a "Parliament"; in Lincoln's Inn, the "Council"; in Gray's Inn a "Pension". (Baker 2011)

Davies, who would serve as Attorney-General for Ireland from 1607–1619, after Society meetings had come to a close, would write:

> For the *Common lawe* of England is nothing else but the *Common custome* of the Realme: And a *custome* which hath obtained the force of a lawe is always said to bee *Ius non scriptum* . . . but being onely matter of *fact* and consisting in use & practise, it can been recorded and registred no where, but in the memory of the people . . .
>
> And this *Customary law* is the most perfect, & most excellent, and without comparison the best, to make & preserve a commonwealth . . . (Davies 1615, Preface)

The learned gentlemen of the Elizabethan Society of Antiquaries thus represent, on a local or micro-scale, both a physical and conceptual centre: embodying the legal, literary, geographical, historical, and social practices that would come to shape the English identity, well into the seventeenth century, and allow it to establish itself as a global, or macro-centre, in the long-distance networks (Harris 1988; Law 1986) of knowledge-gathering and knowledge-producing, that would come to the fore in the early modern period. The inductive, Baconian, method of natural philosophy, in which laws of nature are ultimately based upon truth-statements about nature, is reliant on experienced and credible adjudicators, in order to transform mere observations of the natural world into "facts" (Shapin 1994). The socio-cultural and historical investigations that this new method engendered would present its practitioners with an entirely new vision of England, both of its past, and for its future. That the new philosophy would also incorporate a mathematical approach, to a greater extent than was deemed necessary by Bacon, is perhaps also a result of the role of geography in this narrative, and the desire to physically investigate, measure and map, and thus know, the English land in topographical detail. An historical and geographical approach to the study of England gave rise to a new vision of England, and a direct association between Englishness and the land. While, for Elizabethans, the land and the monarch were a united entity, with an advocating of service "to king and country" being a recurrent theme, throughout the seventeenth century this would shift towards a focus on the land in particular, divorced from the monarch. This new perspective played a role in shaping an ideology of patriotism, and loyalty to the nation, in which it became possible to legally execute a king.

4.2 The Geography of Knowledge

The narrative of the 'age of discovery' is also a narrative about travel between centres and peripheries, and about the geography of knowledge, that is, the spatial and temporal distribution of the objects and people required for the construction of natural knowledge (Harris 1988, 272). The interaction between centres and peripheries occurs on both the macro- and the micro-level (Burke 2000, 55): at the macro-level, for example, through the long-distance corporations that established

networks between the major cities of Europe, such as Lisbon, Seville, Rome, Amsterdam, and London, and the New World and Asia; on the micro-level, between "seats of knowledge" – the monasteries, universities, and libraries, as well as the public spaces of cities themselves, to which people congregated for the purpose of sharing knowledge. The Elizabethan Society of Antiquaries too serves as an example of a centre at the micro-level.

This is also, then, a story about how England made a centre of itself, and the surge of interest in the detailed history and topography of England during the early modern period (Cormack 1997) was an essential part of this process. A conceptual shift, from the direct association of England as the monarch, to England as the land itself, occurred with the shift from the chronicle tradition to chorography in the sixteenth century – perpetuated by the rediscovery of Ptolemaic geography and the rise of the professional surveyor (Cormack 1997, 166) – and this necessitated a re-envisioning of Englishness itself. This paradigm shift was a crucial step in the development of an imperial ideology, and in the rise of the new science.

The centre-periphery model has received some attention in history of science studies (Harris 1988; Latour 1987, 219–237; Law 1986), but has been criticised for failing to take sufficient account of flows of knowledge, and for failing to address the politics of imperialism. In order for the English to establish a culture of imperialism, it was first necessary for England to make a centre of itself. For the English, this process of centring was one of self-discovery. In coming to know themselves, through their ethnological and geographical history, and through their culture and custom, Englishmen came to know what it was to *be* English. The members of the Society of Antiquaries represent a highly illustrative example of how this process occurred; in establishing themselves as a micro-scopic centre, and promoting an ideology of Englishness as separate, different, and superior to other peoples, that allowed England to establish itself as a centre on a macro-scopic level. The Society was a place where legalistic and mathematically precise, and cultural and ethnological perspectives of the English land could have a meeting point. Up until the sixteenth century, the island nation had remained on the margins of Europe, geographically, intellectually and culturally isolated, but had developed into an imperial power by the mid-seventeenth century, claiming the rights to mercantile, colonial, and imperial power, as the pre-eminent Protestant nation (Cormack 1997, 12). The study of geography would – as Lesley B. Cormack has argued in *Charting an Empire* – play a major role in this development, going hand in hand with the process of self-definition that study of local history, genealogy, and chronology as practised by England's antiquaries and chorographers, would provide:

> As English people began to see themselves as a nation separate from the Continental theater, they could study that theater with more interest and yet remain disinterested observers . . . The ideology of supremacy intrinsic in geographical investigation [. . .] supplied an attitude toward England and the rest of the world that encouraged the growth of the English Empire. (Cormack 1997, 228)

4.3 The Elizabethan Society of Antiquaries

> About fourty two years since, divers Gentlemen in London, studious of Antiquities, fram'd themselves into a College or Society of Antiquaries, appointing to meet every Friday weekly in the Term, at a Place agreed of, and for Learning sake to confer upon some questions in that Faculty, and to sup together. The Place, after a meeting or two, became certain at Darby-house, where the Herald's Office is kept: and two Questions were propounded at every meeting, to be handled at the next that followed; so that every man had a sennight's respite to advise upon them, and then to deliver his opinion. That which seem'd most material, was by one of the Company (chosen for the purpose) to be enter'd in a Book, so that it might remain unto posterity. The Society increased daily; many Persons of great Worth, as well noble as other learned, joining themselves unto it. (Spelman 1698, 63)

In the early part of the seventeenth century, Sir Henry Spelman undertook a study of the English legal calendar, and the origins of its four terms. The idea for this inquiry had come about as the result of a meeting of former members of the "College or Society of Antiquaries" in 1614, who were attempting to re-establish themselves after the period of a 7 year lapse. The resulting report, *The Original of the Terms*, which Spelman then prepared for discussion at a second meeting that was never to eventuate, survived in two autograph copies and one transcript.[6] One of these[7] also includes the prefatory "The Occasion of this Discourse", part of which is quoted above, which Spelman added to his treatise on editing it in the late 1620s (Van Norden 1950). Although the documentary record of the Society is rich, "The Occasion" is the only known first-hand account of its foundation. It describes the Society as it was: the times and places of its meetings, its membership, and its transactions.

This College or Society of Antiquaries – it is referred to as both in manuscripts – formed in or around the year of 1586, and remained active for just over two decades (Van Norden 1946, 71–118). It was perhaps the oldest learned society in England, its meetings having come to an end half a century before the incorporation of the Royal Society.[8] From Spelman we know that meetings were held every Friday during the law terms, at Derby House, the seat of the College of Arms.[9]

The documentary record of the Society is plentiful, in both manuscript and published form; 100 and 98 of its "discourses" – short etymological and archaeological studies prepared for Society meetings – are now extant, forty-one of which have

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[6]According to Van Norden (1946), autograph copies: 1. Bodley MS *e Mus*. 107, fols. 1–31 (accession number 3695; acquired by the Bodleian Library between 1647 and 1655). "The Occasion" is on fols. 1, 2.; 2. A relic of Spelman's own library, now in the John Rylands Library, Manchester.

Transcript: British Museum: *Sloane* MS 2504, item 1, fols. 2–28b.

[7]The Bodley autograph.

[8]Manuscript evidence for Society meetings exists from 38 meetings held from 27 November 1590, up to 21 June 1607, with a lapse during the plague years from 1594 to 1598. (DeCoursey 2004)

[9]Which burnt down in the Great Fire.

only circulated in manuscript form.[10] Isolated "discourses" have appeared in print (Van Norden 1946, 31), but Thomas Hearne's *A Collection of Curious Discourses*, represents the most comprehensive compilation of the Society's proceedings, containing 154 of the "discourses" (Hearne 1775). Letters exchanged by members, rolls of members, notices of meetings and texts of reports made at meetings are still in existence (Van Norden 1946, 24–25), but more significantly, the "Cotton Petition", a request for royal endorsement of a project to assemble a state library of historical documents, to be supported and maintained by the Society as a national academy of history, also survives. That they desired their labours to have some impact on the wider intellectual community is evident in this unfulfilled ambition, as well as in the directive that the "most material" of their investigations be "enter'd in a Book, so that it might remain unto posterity". There are two manuscript copies of this petition, a full text and a fragment comprising only the last half, both in the Cottonian library. Neither one is a Cotton autograph, however, and the names affixed to it are not signatures, but Linda Van Norden provides sufficient grounds for connecting the petition with the Society of Antiquaries (Van Norden 1946, 23; 418). It is addressed to Elizabeth, and the names of three members are affixed to it: Robert Cotton, James Ley, and John Doderidge. This document, which can be dated between 1592 and 1603, provides a general picture on how the Society viewed itself, and what it believed its purpose to be (Van Norden 1946, 12). In sum, the petition tells us that, at the moment of its design, there was already in existence a company of learned gentlemen who met for the purpose of historical and antiquarian research and discussion.

Aside from these primary materials, the Society is referred to, in published (chorographical) works, by two fellows during its active years – William Camden's aforementioned *Britannia*, and Richard Carew's *A Survey of Cornwall*. In addition, two accounts of its organisation and membership have been left by early contemporaries, (William Burton, and Edmund Bolton), who were the friends or acquaintances of fellows, and antiquaries themselves.

4.4 "Divers Gentlemen in London, Studious of Antiquities": The Fellows

The exact membership of the Society is unknown but Spelman, a founding member, identifies at least 37 names (DeCoursey 2004). His list almost certainly contains errors or omissions however, and more names can be added from Hearne. All, with

[10] "Manuscript copies of the 'discourses' have been preserved in at least 37 collections, 26 of which, including all the major ones, are in the British Museum. Eight are in the Bodleian Library at Oxford; one is in the Cambridge University Library, two were until 1936 in the Gurney Library at Keswick Hall in Norfolk, since which time one of them has been in the John Rylands collection at Manchester." (Van Norden 1946, 28–30)

the exception of John Stow (one of their most honoured and valued members), were gentlemen; a large proportion of which were landed gentlemen, often lords of manors (DeCoursey 2004). Almost all were university educated (with slightly more being from Oxford than Cambridge), and a high number were lawyers by profession, or had connections with the Inns of Court (Schoeck 1954); ten of the antiquaries having served at some time in the senior ranks of the teaching faculty at the Inns (Jones 1988, 22). Many were, or became knights,[11] and 4 were heralds.[12] Many served as Members of Parliament;[13] 15 served as Justices of the Peace, enforcing the laws made by Parliament and the central authorities (Jones 1988, 25), and four served their counties as High Sheriff.[14] The organisation may have had as many as 45 fellows (Van Norden 1946, 261), and a list of membership, and some speculation on possible memberships, can be found in the Appendix. If, following Van Norden, we take only those men whose membership in the Society of Antiquaries is established by its own documentation as confirmed, the assembly numbered around 40 and in terms of class, education, professional training, and experience in public service, the members of the Society of Antiquaries formed a largely homogeneous gathering. The dominant class amongst the assembly were lawyers, with more than three-quarters having had legal training (Van Norden 1946, 261). The comparatively small number of heralds, who were responsible for the granting of arms, cannot have been due to unfriendly relations with the College of Arms, as Society meetings were held at Derby House, but was perhaps due to the factious state of the College itself.[15] Nevertheless, many members of the Society not only exhibited heraldic interests, but

[11] "In the active years and among the active fellows only Carew had a title, that of viscount. Carew and Cope were knights of Elizabeth, Bourgchier, Compton, Cotton, Davies, Dethicke, Doderidge, Lake, Leigh, Ley, Spelman, Whitlocke were dubbed by James I on occasions ranging over the last 4 years of the College. St George was dubbed, and Compton, Cotton, and Ley were created peers, after the antiquaries had ceased to meet regularly." (Van Norden 1946, 267)

[12] "William Dethicke had been a member of the College of Heralds for almost 20 years before he succeeded his father as Garter-Principal-King-at-Arms and in the same year became a charter member of the College of Antiquaries and their permanent host. Camden, Thynne, and St. George were fellows of the College of Antiquaries before they became heralds. In 1597 Camden was made Richmond Herald for a day and then Clarenceux-King-at-Arms; St. George became Windsor Herald in 1602 and Norroy-King-at-Arms in the following year; after many fruitless applications, Thynne was at last made Blanche-Lyon Poursivant in 1601 and Lancaster Herald in 1602. The abundance of papers on heraldic topics in the later years of the College follows these preferments." (Van Norden 1946, 285)

[13] Of the 15 who served as Justices of the Peace, ten were also members of Parliament during the active years of the Society. Between 1586 and 1604, 19 Society members served in Parliament. The J.P.s were: Beale, Bowyer, Broughton, Carew, Davies, Fleetwood, Lake, Lambarde, Leigh, Ley, Patten, Savile, Spelman, Tate, Whitlocke. The M.P.s were: Beale, Bourgchier, Bowyer, Broughton, Carew, Cotton, Davies, Doderidge, Fleetwood, Hakewill, Hartwell, Heneage, Lake, Lambarde, Leigh, Ley, Oldesworth, Savile, Spelman, Tate, Townshend, Whitlocke. (Lambarde and Savile were M.P.s only before the Society was active, Whitelocke only after). (Jones 1988, 25)

[14] Carew, Lambarde, Spelman, and Wiseman.

[15] "[T]he factious state of the college may have limited the membership of heralds, for fear they would bring their quarrels with them." (DeCoursey 2004)

also displayed a considerable degree of deference to the heralds, who were expert in genealogy, as well as legal and linguistic research.[16] A concern with social status is apparent in the antiquaries own "discourses" and other published works, and it is not surprising that they expressed the belief that although "gentleman-like qualities" could be acquired through education, gentility could only be determined, ultimately, through genealogical means. James Whitelocke cites John Fortescue on the antiquity of the Inns of Chancery, demonstrating the association between study of the law, and gentility:

> He [Fortescue] saith their education in those places at that time was in study of the chiefest points of law in the inns of court, of the grounds and originals of the law in the inns of chancery, in music, in armory, and generally in gentleman-like qualities, as he setteth it down. Their expences, saith he, is yearly twenty marks, and that is the reason he alledgeth why they were the men of the best state and quality that were brought up there by reason of that charge. (Whitelock 1775a, 79–80)

And in his *The Third Universitie of England*, George Buck would write:

> And because that by auncient custome and by old orders of the houses of court and chancery all those which were admitted into these houses were, and ought to be Gentlemenne, and that of three discents at the least... (Buck 1615)

Buck goes on to argue that, the admittance or matriculation of "the sonnes of Graziers, Farmers, Marchants, Tradesmen, and Artificers" to the Inns did not give them gentlemanly status, as "no man can be made a Gentleman but by his father ... for Gentilitie is a matter of race, and of bloud, and of discent, from gentile and noble parents." It is, perhaps, a great irony that this treatise was originally published as an Appendix to John Stow's *Annales*, the only Society fellow who was not a gentleman.

Most of the fellows were indeed landed gentlemen, whose responsibilities for their land not only took them out of London often, even during the Law Terms when meetings were held but, according to Carew and Spelman, had the eventual repercussion of bringing about the termination of the Society, due to the scattering of its members about the countryside.[17] Regular meetings of the Society of Antiquaries

[16]Throughout the "discourses" are 30 flattering allusions: to the heralds as a class, the legal antiquaries as a class, to the linguists, or to other speakers at the same meeting. Almost a third of these allusions are to the heralds. (Van Norden 1946, 399)

[17]Helen Jones disputes this claim, pointing out that Spelman himself did not live in London until 1612. She suggests that the Society's primary motivation had been the uncertainty of England's political future, resulting in a search for precedent concerning the rules of inheritance and succession to the throne. Her focus on the members' professional and political motivations leads her to conclude that James I's "mislike" of the Society's proposed 1614 revival, and his suspicions about the group's political intentions during this period of political instability, were "soundly based on fact", due to their role in his own placement on the throne, and in preparing the populace in advance for his accession. (Jones 1988)

declined during the terms of 1607 or 1608, until gradually reaching a cessation. Despite Spelman's attempt in 1614 for a revival, described in "The Occasion", Edmund Bolton could say in 1619, "The thing itself is absolutely vanished" (Gough 1770, xvii).

Where the Society of Antiquaries has been mentioned in scholarly literature, it has been within the context of, broadly speaking, historical or geographical research, and its most significant and direct contribution is considered to be in the creation of the "modern method" of historical research, in essence reiterating the conclusion reached by Van Norden (1946, 488). Despite the interdependent relationship of these two approaches – historical and geographical – they remain deficient in accounting entirely for the motivation behind these "divers Gentlemen in London, studious of Antiquities," who "fram'd themselves into a College or Society". Despite what truth there may be to Van Norden's claim that the Society "performed another service in going out of existence", because the discontinuance forced its fellows to correspond and collaborate with Continental scholars, and freed them from "the nationalism to which the College of Antiquaries had restricted them" (Van Norden 1946, 488–490), this claim neglects an awareness that this nationalism was a larger concern, of which the Society itself was a symptom. A concern with the English land itself, that was a unique combination of ethnologically-nationalistic and legalistic perspectives, drawn from historical study, engendered attitudes in these men that would also be evident in the development of the new science, that was concurrently emerging. It does not seem imprudent to suggest a shared narrative of influence between the two.

4.5 "Studious of Antiquities": Their Activities

The fellows of the Society of Antiquaries were men with demanding and distinguished professional lives; not solely scholars or historians, but members of the middle and upper level gentry, landowners, middle-rank civil servants, active throughout the country as lawyers and judges, Justices of the Peace, and heralds (Jones 1988). It was not only the writers of county chorographies amongst them who would travel widely throughout England; the 15 members who served as Justices of the Peace were able to travel unquestioned and inconspicuous, throughout England, meeting with individuals across the entire social spectrum, but particularly those of the political class (Jones 1988, 20). It was only in England that this "peculiar combination of prominent but private status with major public function" (Gleason 1969, 116) existed, due to the unusually close relationship between local administration and national parliament. The number of serious crimes rose during Elizabeth's reign, and probably reached a peak between 1590 and 1620 (Sommerville 1999 [1986]). The necessity of the office of the Justices of the Peace in a society in which there was no police force, nor standing army to keep the peace, is fairly self-evident. Gentlemen carried, and on little provocation used, their swords. The antiquaries concern with keeping the peace is plain from their own "discourses": the practise of "unlawful combat", wrote James Whitelocke, arose

amongst "private men upon private quarrells ... upon poynts of honor or disgrace, as they term them" (Whitelocke 1775b, 190). Another Society fellow would write, anonymously:

> ... For never, or very seldom would the common-wealth be in quiet, which always, and by all means ought to be preserved, if it should be lawful for men, so often as they be injured by words, to challenge the combat; for so daily murders and mischiefs would arise thereof, which the quiet of the common-wealth seeketh to avoid. (Anonymous 1775, Vol. 2, 209–210).

The state required the active cooperation of local élites to govern effectively, and the Justices of the Peace were essential to this task. Their position in society was both a consequence of, and reinforced by, the uniquely English social forces of their communities (Gleason 1969, 118), and they were fit for the task because of their social origins, educational experience, and personal authority.

The heralds were responsible for granting and designing all new arms, and setting rules of precedence, and they were required to keep records of all existing arms throughout the realm. This necessitated a vast amount of genealogical research, requiring them to travel a great deal on tours of inspection known as "provincial visitations". The College of Arms, an hierarchical organisation itself, was under the authority of the Earl Marshall of England, and four Society fellows served amongst its Officers. The Society was also well represented on the Council of the North, and the Council for Wales and Marches, and the Privy Council; the whole of England and Wales were under the complete surveillance of these three bodies, and there was nothing that was too personal, local, or trivial too escape their interest (Jones 1988, 31). The collective potential for real access to control that the Society of Antiquaries possessed is really quite significant. Its fellows had not only their fingers on the pulse of the nation at the local county level, but also a hand in the central administration of the Elizabethan parliament.

4.6 "That Sweet Name of England": The Motivation

> And surely that sweet name of England hath been of singular estimation among and above all other nations; insomuch as let an Englishman be in company among people of sundry other nations, you shall have him admired of them all, yea, and both of man and woman more favoured and respected than any other in the company, as one that carrieth more courteous, friendly, and lovely countenance before all other people, according to Gregorie's words. (Agard 1775a, 97)

The English antiquarian movement during the sixteenth century assisted in the establishment of an intense level of patriotism amongst the English people that expressed itself through an ideology of imperialism. Various attempts to explain the rise of English antiquarianism during this period have been made, as well as attempts to provide an accurate definition, or description, of all that this practice encompassed (Mendyk 1989; Momigliano 1950). It has been viewed as a side effect

of the English Reformation (Adams 1917), and as an expression of nostalgia for the medieval age and "Modern" defence of English progressive culture (Tuve 1939).

An examination of the Society of Antiquaries own "discourses" reveals an intense focus on England, and its national culture. The quotation above is taken from Arthur Agard's discourse on the diversity of names of England. The questions propounded at Society meetings were necessarily focused on England – the wording of questions typically confined the answers to English matters, and members were bound by an agreement amongst themselves to consult English sources only (Van Norden 1946, 358). Again from Agard:

> Soe keepinge my self within the lystes of the articles agreed on at our first assemblies, whereof this was one (that as neere as might be, thee moste proufes of our questiones should be produced from our home writers, evidences, lawes, and deedes, and not from forreyners and straungers ignorant of the state and government of our country) . . . (Agard 1775b, 160)

The description of the antiquarian movement as an expression of "profound nationalism" (Douglas 1939; Van Norden 1946, 438) seems more than justified: their choice to restrict themselves to English subjects and sources being a fine illustration of this. That this English study of self established attitudes of separateness and superiority over other nations (Cormack 1997), is exemplified in the words of Agard above. The large quantity of manuscript material released after the dissolution of the monasteries in England that became available to the antiquaries stimulated not only a consciousness of the nation's past, but was entirely necessary for the establishment of an ideology that would encourage an imperialist future.

The antiquaries based their study upon original, rather than derivative, evidence; bringing together and examining what documents they possessed within their own libraries. This limited their investigations, and hence the Cotton Petition requested the foundation of a national library of "divers Auncient bookes & monuments of Antiquity rare & wyche otherwise maye perishe" (quoted in Flügel 1909, 265–268), along with the nationally acknowledged right to make use of it. The importance of libraries, in general, increased after the invention of the printing press but, within universities, libraries were still considered in some places to be unnecessary: the University of Leuven still claimed in 1639 that the professors were "walking libraries" so a physical library was not a necessity (Burke 2000, 56). At the Inns of Court, reading facilities were minimal also; members had to rely on small, private libraries, or borrow books and manuscripts from other members (Baker 2011, 17). The antiquaries appealed:

> That yt may please the Queenes Maiesty to encorporate the persons studious of antiquity for the better preservation of the said Library & encrease of knowledge in that behalfe.
>
> The name of this Corporation be the Accademye for the studye of Antiquity and Historye founded by Queene Elizabeth. or otherwise as yt shall please her Maiesty. (quoted in Flügel 1909, 265)

It is apparent from the "Reasons to move the furdrance of this Corporation", that a primary objective of this academy would be the return of public documents back into public possession.

The Cotton Petition had failed, possibly because of the objection from ministers, who recognised the potential dangers that antiquarian research might present for a parliament where debate on questions of the day was largely based on the use of precedent (Handley 2004), or perhaps "for want of patronage, either because the Queen disapproved it, or because she overlooked it, or because she died" (Van Norden 1946, 429). There is no record of its presentation to the Queen, nor is there a presentation copy extant. This failed attempt to further legitimise antiquarian research through the establishment of a national academy and library possibly motivated Cotton's decision to treat his own library, the collection that would later become the basis for the British Library, as an open resource. He had begun allowing other Society members access to the collection, and to borrow from it, in the late 1590s.

There exists a rhetoric of utility and patriotism throughout the proposals regarding the Society's establishment, and the vulnerability of national archives to destruction, misuse, or loss, is considered to be a threat to the honour of England and its monarch (Herendeen 1988, 194). An acknowledgement that there is a difference between public and private knowledge is a recurrent theme in histories of knowledge, and for the many Society members active in government roles – several serving as members of parliament – this is a distinction that would have been of deep concern to them. The question as to what kinds of knowledge ought to be public, and what should remain private, remained a controversial one throughout Europe during this period, in relation not just to "secrets of the state" themselves (Burke 2000, 83).

4.7 "Evidences, Lawes, and Deedes": Access to Authority, Access to Power

Arthur Agard, Society fellow, would classify the public records of England into two broad categories: first, what he called *arcana imperii*, documents concerned with matters of estate and the Crown only; and second, legal and financial records concerning both the interests of the Crown, and the rights, tenures, and titles of subjects (Wernham 1956, 11). Only the more formal legal and financial documents in this latter group were considered public records, in the sense that the public could access them regularly, subject to the payment of a fee. The *arcana imperii*, on the other hand, along with some of the documents considered to be a part of the second group, were the private documents of the King, his courts, and government: except in cases where special grace and favour were shown to a subject, they were generally inaccessible. But in a political and legal landscape where the law was based on custom, access to records gave one a greater access to authority.

Throughout the sixteenth century, public interest had not called for any wider access – a concern for what was contained in public records was chiefly a matter for litigants, landowners, and taxpayers, rather than students of English history,

and until the later part of the century, little concern for better care, preservation, and ordering of records was evident (Wernham 1956, 12). Both public and official attitudes did little to impede a dispersal of the archives amongst many repositories and custodians. This was in contrast to attempts for centralisation during the fourteenth century, to establish the Tower of London as a central clearing house, to which records of the Exchequer, the Common Law Courts, and the Chancery would be brought and, if not stored, at least indexed. By the end of the century, transfers had ceased, however, and the Tower became a repository purely for the Chancery, aside from those records already there residing. Through the fifteenth century decentralisation went further: records of the Courts of King's Bench and Common Pleas accumulated in their own treasuries, Exchequer records piled up in various houses and offices in the recently extended Palace of Westminster, and the various subordinate offices within all of these courts amassed archives of their own. An entire family of new courts and administrative and financial offices fostered into existence by the Tudor kings – Star Chamber, Requests, Augmentations, First Fruits and Tenths, Wards and Liveries, and more – were each left to care for, or neglect, their own archives, as they so desired. The more ancient records were still in the Tower, or the Abbey, at the accession of Elizabeth, and the more recent records were in the possession of whichever court or department had produced them: the preference for the archives of each court to be in its own custody is a reflection of the fact that the public's chief concern with records was from the position of litigation, so litigants – or their attorneys – could access them more easily: "The Elizabethans and Jacobeans were no less litigious than their forefathers and the new Tudor courts gave them even more opportunities for litigation" (Wernham 1956, 15). Plentiful cause for dispute came with the many changes to land-ownership, due both to royal sales, and confiscation of church property. Officials too preferred to have their records in their own custody, and this had a significant effect on the condition and preservation of records: those busy in the current administration and daily routine of the courts had little time for the consideration of the archives of the nation that resided within their care. Despite the concern shown for these documents by the Society of Antiquaries in the "Cotton Petition" at the turn of the sixteenth century, this would not change until the constitutional conflicts of the Stuart period raised legal issues that were broader and more generalised in scope. The search for legal documents required for a prolonged lawsuit between Parliament and the King was elevated to the level of historical research, alongside the continued growth of antiquarian studies in general. The methods, as well as the historical research itself of the fellows of the Society of Antiquaries, would play a significant role in this turn of events. A large proportion of the Society's own "discourses" were concerned with the various aspects of the administration of justice in England, and its offices. Society fellow William Hakewill's most enduring legacy, based on detailed study of records, was to establish the legal foundation for the parliamentary position in the contest for power between the king and parliament during its early stages, which would culminate in the civil war (Doyle 2004).

William Lambarde was not only author of the first county chorography, his *Perambulation of Kent*, but his *Eirenarcha: or of the Office of the Justices of the*

Peace, a manual that served as a guide for those serving in that capacity – the importance of which to the administration of England has been explained above – became a necessary item, and the standard authority on the subject (Gleason 1969, 2; Jones 1967, 112). Explaining the origin of the office itself:

> For Justices of the Peace were not ordained (as some have thought) to the ende to reduce the people, either to an universall unanimitie (or agreement) of mindes, which is indeed a thing rather to be wished for, than to be hoped after: Neither is it any part of their office, to forbid lawfull suites and controversies (whiche neverthelesse be disagreements of mindes:) But to suppresse injurious force and violence, mooved against the person, his goods, or possessions. (Lambarde 1581, 7)

Lambarde was appointed Master in Chancery extraordinary in 1592, and Master in Ordinary and Deputy Keeper of the Rolls in 1597, where he had considerable authority. He was made Keeper of Records in the Tower of London in 1601, by Elizabeth herself, and he succeeded in compiling an index to these records, and presented it to her 2 weeks before his death in 1601. Two other Society fellows[18] held positions in Chancery – the department responsible for drafting royal Acts, and the "court where every item of procedural habit was recorded" (Jones 1967, 15).

The significance of the greater access that this would have allowed to the strictly controlled "monolith of documents" (Jones 1967, 16) held there, for the investigation into legal precedent by the antiquaries, cannot be overstated. Many of the early records contained there were written in Anglo-Saxon – a language that few could read – and this uniquely positioned those Society members who were expert in that skill[19] to examine, and state authoritatively, what past practise has been, and exercise greater influence over future practise (Jones 1988).

4.8 Conclusions

The Elizabethan Society of Antiquaries met for a period of just over two decades in Derby House, the seat of the College of Arms, in order to "confer upon some questions in that Faculty" of the antiquity of English culture and its institutions. Its membership was composed of educated men – lawyers, judges, administrators, politicians, knights, heralds, and landed gentlemen – engaged in a collaborative scholarly enterprise. That they desired their labours to have some impact on the wider intellectual community is evident in the directive that the "most material" of their investigations be "enter'd in a Book, so that it might remain unto posterity", and in their unfulfilled ambition to assemble a state library of historical documents, to be supported and maintained by the Society as a national academy of history.

[18] Robert Bowyer and Arnold Oldesworth.

[19] William Camden, Robert Cotton, William Lambarde, and Henry Spelman could all read Anglo-Saxon.

A concern with the English countryside, its greater parts, customs, history, and laws is evident throughout not only the "discourses" but also in the published works of the Society's individual members, and it is a great irony that the very subject matter which brought these men together, may also have been responsible for their dispersal, as Carew and Spelman had claimed. A greater concern with knowing England, and its material past, produced a correlative concern for "knowing one's own". The rise of the modern surveyor, who brought "newly legalistic", and "newly rationalistic" attitudes to tenurial relationships, land measurement, and estate planning (McRae 1993), is also a mark of this new interest, occurring during roughly this same period. "Discourses" concerning, the etymology and variety of land measurement, as well as the antiquity of England's division into shires, demonstrate this interest amongst the Society membership; although the surveyor himself was a man of a different social stature to those who were members of the Society. Society members themselves would most likely have been the employers of surveyors, rather than surveyors themselves, whose status as professionals was still only emerging during this period. That the topic was of interest to its members is of note, because they were owners of land during a time when the perception of what it meant to be a land-owner was shifting. The medieval perception of land-ownership as a stewardship over the land and its tenants, entailing social duties, rights and privileges, was moving to a stricter, more legalistic recognition of the socio-economic relationship between owners and tenants (McRae 1993, 334–335). The significance of this shift is most dramatically illustrated by the change in public perception of the largest owner of land in England, the Crown. The perception that the measurement-based rendering of the English countryside into cartographic form during the early modern period was an exercise in objectivity is an erroneous one (Harley 1988, 58): this was not a "value-free" or "neutral" enterprise, but rather the representation of the connection between the land-owners, and their legal property.

It is a curious development that the concept of "fact" has become so closely associated with the discipline of science – to the extent that it is taken for granted that this relation has always existed – when its origins are in the law. The meaning of the word becoming associated with "matters of fact", supposedly "theory neutral statements" about the natural world, was a development that occurred during the sixteenth century. In English law, the term "fact" had two related meanings. It might refer to any human act, or series of acts, of the past or future, of legal significance, or, it might refer to the criminal act of which the defendant was accused: "The act, the fact, thus required proof" (Shapiro 1999, 10). The "fact" was not considered true or believed until satisfactory evidence had been provided; in the legal context, "fact" did not mean an established truth, but the alleged act, or deed, that was under contention. Legal, and other kinds of dictionaries also made a distinction between "matters of deed" and "matters of record": the reliance on witness testimony was of critical importance in criminal cases, but written records were considered to be more reliable in civil cases, as they were not vulnerable to the imperfections of human memory (Shapiro 1999, 12). This would give rise to the use of the term "deed" as a legal document itself, most commonly regarding ownership of property, or legal rights. Again, the association between the English land itself, custom, the

historical record, and the law is evident. What would become the Royal Society's accepted format for the presentation of scientific "facts", the experimental report – including the place, date, and names of witnesses – would receive its socio-cultural legitimation from this pre-existent practice.

The fellows of the Society of Antiquaries were gentlemen in a position to access, know, manipulate, and control each aspect of the socio-political landscape of early modern England. Although it was the English gentleman who would become the main actor in early modern natural philosophy, a period of consolidating what it meant to be English, and a gentleman, was prerequisite in this process. An essential stage in the conceptual, as well as operational, process of establishing England as a global centre in the early modern period was served, and personified, by these legal antiquaries. The Society's existence serves as an illustration, and a fundamental component, of the early modern development of an English perception of self, that would encourage and allow for the emergence of the imperial principles, and the scientific culture, that would follow. The micro-scopic centre they created, for the discussion of historical, geographical, and legal subjects, became a point of nexus between cultural and ethnological considerations of what it was to be *English*, and mathematico-legalistic interpretations of the English *land*. They were part of a greater movement that would culminate in the shift from locating one's loyalty to "country" in the Crown, to the land itself. The later political ramifications of this historically-based understanding of the common law, that was perpetuated by the antiquarians, would be through the promotion of the claims of parliament against royal prerogative, eventually leading to civil war, and the execution of Charles I.

Appendix

A list of membership of the Society of Antiquaries must contain at least the following:

Arthur Agard; Robert Beale; Henry Bourchier/Bouchier; Robert Bowyer; Richard Broughton; Richard Carew; Richard or John Clyffe; William, second Baron Compton; Walter Cope; Robert Cotton; John Davies (and another unidentified man of that surname); William Dethick; Dr Thomas D'Oyly; John Dodderidge; Sampson Erdeswick; William Fleetwood; William Hakewill; Abraham Hartwell; Michael Heneage; Joseph Holland; William Jones[20]; Charles Lailand[21]; Thomas Lake; William Lambarde; Francis Leigh; James Ley; Arnold Oldisworth; William Patten;

[20] Van Norden doubts Jones' membership: "Jones was a Welsh antiquary exchanging notes on the origins of their own people with the Welsh fellow of the College of Antiquaries is evident both from names and from subject matter. He may have written not so much from antiquary to antiquary as from Welshman to Welshman. Neither Tate's questions nor Jones's answers give evidence that Jones was a fellow of the College." (Van Norden 1946, 203)

[21] "All we know of Lailand is that he was the scribe who copied and signed with his name 'the names of all those w^{ch} were somoned att this tyme.' His signature on this paper is alone not enough to justify the inclusion of him on a definitive roll of members." (Van Norden 1946, 203).

Robert Plott; John Savile; Henry Spelman; Richard St. George; John Stow; James Strangman; Thomas Talbot; Francis Tate; Francis Thynne; William Thynne/Thinne; Robert Weston; James Whitelocke; Thomas Wiseman (DeCoursey 2004).

The membership of Lancelot Andrewes,[22] Edmund Bolton, Hugh Broughton, Edward Coke, and Hayward Townshend is less certain (DeCoursey 2004).

There is further confusion over the membership of the Society due to the existence of letters written by Edmund Bolton, to James I, Charles I, and the Marquess of Buckingham between 1618 and 1628. Bolton's objective was to request patronage for an English academy to be built on the foundations of the older Society, but with a far more elaborate structure, and he made at least ten separate efforts toward this end during this 10-year period (Van Norden 1946, 34). In addition to the names previously cited, Bolton's list of the membership of the Society of Antiquaries adds the following (controversial) names: Sir Fulke Grevile, John Selden and Sir Edward Coke[23]; Ralph Brooke[24]; Gilbert Dethicke[25]; Robert Glover; Sir William Segar; Richard Carew; (the other?) Davies; William Vallans; Henry Fanshawe; Sebastian Benefield; Edmund Bolton (himself); Thomas Brudenel; Sir William Sedley; Sir George Buck (or Buc); Henry Ferrare; Sir Roger Owen; Sir Edward Philips; Sir Henry Billingsly; Bartholomew Clark; Edmund Cosin[26]; Sir Daniel Donn, Benedict Barnham, Dr John Cowell, Peter Manwood, Sir Henry Savile, Provost of Eton; Walter Raleigh; and Sir Philip Sidney[27], with the Earl of Shrewsbury; Lord William Howard; Henry Fitzalan, Earl of Arundel[28]; Thomas Sackville, Earl of Dorset; Henry Herbert, Earl of Pembroke; William Cecil, Lord

[22] "... one of the best prose writers and the most distinguished churchman of his time. A society into which Andrewes would be invited must have been more than an assembly of lawyers; it must have cultivated literary and theological, as well as legal, erudition. One is tempted to give the College the benefit of the doubt regarding its acceptance of Launcelot Andrewes. But, as I have shown, both the doubtful sources and he text itself of the one document that appears to relate to the College of Antiquaries make this document inadmissible as evidence that Andrewes ever became a member." (Van Norden 1946, 202–203)

[23] "John Selden and Sir Edward Coke were friends of fellows of the College, Bourgchier, Camden, Cotton, Spelman, at least at a later period than the meetings of the society, and these legal antiquaries represent the same kind of scholarship as that fostered within the circle. They were, like the majority of the members, associated in the Inns of Court. Selden could hardly have become an active participant, however, even in the last days of the College of Antiquaries: he was too young. In the 'Vita ... Cottoni,' Thomas Smith gives Selden a tentative place among the last arrivals. Coke's remaining outside this circle is difficult to understand. But neither name appears on any document of the College itself." (Van Norden 1946, 34)

[24] "Camden's public quarrel with [Ralph] Brooke, occurring in the most active year of the College, would cast some doubt on Brooke's membership at that time, even if there were documents to show that he was a member at some time. But there is no such evidence." (Van Norden 1946, 228)

[25] Dismissed (by Van Norden) as he died before 1586. (Van Norden 1946, 228)

[26] Dismissed (by Van Norden) as there is no record of him later than 1580. (Van Norden 1946, 228)

[27] Sir Philip Sidney: died in 1586, so could have been a founder but not an active member. (Van Norden 1946, 228)

[28] Also died before 1586.

Burghley; and John Lumley, Baron Lumley elevating the social tone of the assembly. This list of unauthorized names would add ornament to the Society, to a greater extent than those that are genuine, as it includes not only scholars and literary personalities of the age, but also seven powerful lords, including the Queen's chief advisor. The only members of the peerage that the Society could claim from its own records are William Compton, who became Earl of Northampton in 1618, and James Ley, created Earl of Marlborough in 1625–1626, both occurring long after the Society of Antiquaries ceased to meet (Van Norden 1946, 225).

Bolton's insertion of Raleigh's name into the list of membership, composed only a year or less after his execution for high treason, in this invitation to the king to reassemble and incorporate a national academy "proves Bolton's unquestioning belief that Raleigh had once belonged to that order", writes Van Norden. Literary historians such as William Oldys, Sidney Lee, and Harrison Ross Steeves have taken Raleigh's membership for granted based on Bolton's word alone, and the suggestion is not without merit:

> If Raleigh was a fellow of the Elizabethan College of Antiquaries, he was its most brilliant ornament. And he could have been one of them. He had an enthusiasm for history, the explorer's spirit characteristic of the group as a whole and of its more creative members as individuals, and the nationalism. Furthermore, he was in London in years when the College was holding regular meetings. But none of the documents of the College records his name. (Van Norden 1946, 229–230)

Bolton's manuscript is the only nearly contemporary source listing Raleigh as a fellow of the Society, and it is, as Bolton himself explains, without supporting evidence: he says these are "living persons fit to keep up and celebrate that Round Table; some of whose names I have seen quoted and heard often-times cited as authoritative" (Gough 1770, xvii). His authority is further weakened by his having written anonymously, his own confession that his information is second-hand, and by inclusion of his own name on his list. Van Norden's judgment that "[w]here documentary evidence does not support it, his testimony is not acceptable" (Van Norden 1946, 226), seems entirely justified. Steeves, on the other hand writes:

> If the ... Manuscript is not vulnerable ... the society is vastly more significant from every aspect, literary, social, and political, than merely as a quiet gathering of serious scholars. Its influence, if Sidney, Sackville, Raleigh, and Cecil were actually members must have been been [sic] far greater than we have any reason to believe from extant historical accounts (Steeves 1970, 34).

Indeed, Van Norden notes that the mere detail that a "bookishly intelligent contemporary" thought they were members "establishes the good credit of the society and the undoubted prestige of belonging to it" (Van Norden 1946, 231).

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Part II
Dialogues and Skeptics—Traversing Geography and Cultures

Chapter 5
'How Very Little He Can Learn': Exotic Visitors and the Transmission of Cultural Knowledge in Eighteenth Century London

Vanessa Smith

Abstract Taking the animadversions of Samuel Johnson as its starting point, this essay explores an eighteenth-century skepticism regarding the possibility of exchanges of knowledge between metropolitan and peripheral societies. It suggests that encounters with Inuit and Oceanic traveller-savants in the streets and salons of London lead both members of the Royal Society and patrons of the arts to question the translatability of ideas across cultural boundaries, and to articulate a distinction between ethnographic and practical knowledge. It argues that this meta-critical dimension to the dialogues between Europeans and visitors from the peripheries of Empire ultimately constituted one of the most nuanced intellectual exchanges instigated by Enlightenment travel.

5.1 Introduction

Between December 1772 and July 1776 London society entertained exotic visitors from opposite zones of the globe. An Inuit party was brought back to London from Labrador by the merchant George Cartwright in late 1772: Attuiock, 'Ickconcoque, his youngest wife; Ickeuna, her daughter; (a child under 4 years of age), Tooklavinia, Attuiock's youngest brother; and Caubvick his wife' (Cartwright 1792, 262). Initially they took up lodgings in London. In February 1773 the party moved to Marnham in Nottinghamshire, to the house of Cartwright's father William and unmarried sister Catherine. At the beginning of May Cartwright prepared to return with them to Labrador; however just as they were about to depart, Caubvick was diagnosed with smallpox. She was eventually to recover, but the rest of the party succumbed one by one over the course of late June and early July, and all died

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at Plymouth. Mai (known to the British as Omai) was a native of Raiatea, in the Society Islands, who arrived in London approximately a year later, in July 1774. He had joined the *Adventure*, companion vessel to James Cook's *Resolution*, at Huahine on September 7 1773, and sailed in her to Tonga and New Zealand. He remained almost two full years in England before returning to the Society Islands with Cook's third voyage. During his visit he was introduced to George III and Queen Charlotte at Kew, dined with the Duke and Duchess of Gloucester, met the Duchess of Devonshire, visited the Earl of Sandwich's Hinchinbrook estate and Cambridge University, sat for a portrait by Joshua Reynolds, and attended the House of Lords, the opera, theatre and pantomime.

While both visits had intricate agendas of mutual prestige enhancement that will be discussed later in this essay, they were clearly understood to be primarily about knowledge exchange. But of what kind? The fact that both sets of visitors came from oral cultures makes any attempt to answer this question from the evidence of the archive highly constrained.[1] There is no counter-archive of Inuit or Polynesian records of these encounters.[2] Samuel Johnson presciently observed that, questions of literacy aside, the circulation of information between geographically remote cultures was necessarily restricted by the absence of a comfortably shared language. James Boswell reported that Johnson: 'did not give me full credit when I mentioned that I had carried on a short conversation by signs with some Esquimaux who were then in London, particularly with one of them who was a priest. He thought I could not make them understand me' (Boswell [1791] 2008, 537).

The question of 'conversation by signs' had recently been addressed in a document know as the 'Hints', penned by James Douglas, 14th Earl of Morton, who was president of the Royal Society from 1764 to 1768. This supplementary text to the Admiralty Instructions for Cook's first voyage was designed for communication at the point of contact, in peripheral rather than metropolitan locations, and predicated upon the potential for misunderstanding that Johnson recognized. Morton advocates:

> Amicable signs may be made which they could not possibly mistake.—Such as holding up a jug, turning it bottom upwards, to shew them it was empty, then applying it to the lips in the attitude of drinking.—The most stupid from such a token, must immediately comprehend that drink was wanted.
>
> Opening the mouth wide, putting the fingers towards it, and then making the motion of chewing, would sufficiently demonstrate a want of food. (Cook 1955, 514–15)

[1]For a detailed discussion of the issue of oral cultural contributions to a globally conceived intellectual history see Smith (2013).

[2]Marianne P. Stopp has collected oral accounts of the visit of another Labrador Inuit woman, Mikak, whose British sojourn is briefly referenced in this chapter, making a case that these go some way towards establishing a supplementary archive of her visit (Stopp 2009, 54). Stopp acknowledges various conflations and metaphors that prejudice these accounts: however, this essay will isolate equivalent discursive debts and projective impulses informing British written accounts.

Morton's 'amicable signs' make heavy work of eating and drinking, demonstrating how the simplest and most basic of gestures must be broken down into complex code in the absence of shared language. What might be carried across, when signage inevitably makes such a meal of things?

Boswell and Johnson pursue the question of cross-cultural knowledge communication over a number of dialogues. On another occasion they concur:

> that a great part of what we are told by the travellers to the South Sea must be conjecture, because they had not enough of the language of those countries to understand so much as they have related. Objects falling under the observation of the senses might be clearly known; but every thing intellectual, every thing abstract–politicks, morals, and religion, must be darkly guessed. (Boswell [1791] 2008, 723)

In Boswell and Johnson's formulation, travel is an inherently anti-Cartesian mode of knowledge acquisition. Only that which can be apprehended by the physical senses can be transmitted to the traveler: abstract knowledge cannot be communicated without shared language, and risks falling into the realm of projection, 'conjecture', the 'darkly guessed'. The distinctive last phrase, which combines a veiled reference to Corinthians' promise of revelation with allusion to the skin colour of exotic races, complicates the project of acquiring knowledge from Indigenous interlocutors rather than the validity of that knowledge. Unlike later racialist speculators, Boswell and Johnson do not question the existence of abstract thought among non-Europeans, only its communicability. Much of the archive of the London visits of the Inuit and Mai, far from testifying to ethnographic communication, consists of representations of misunderstanding. Moments of misrecognition are typically translated into a reflexive mode of *self*-knowledge acquisition by fashionable commentators, who tend to figure each interaction between Inuit or Society Islander and Londoner as a dialogue between Old World-weariness and the wide-eyed insightfulness of uncorrupted Natural Man. Johnson, however, countered this trend by insisting that no knowledge at all could be secured through travel. Some nine months after Cook's return from his second circumnavigation, on April 2, 1775, Boswell dined with the celebrated navigator at the house of Sir John Pringle, then president of the Royal Society. Subsequently he reported to Johnson, 'that while I was with the Captain, I catched the enthusiasm of curiosity and adventure, and felt a strong inclination to go with him on his next voyage'. Johnson greeted Boswell's excitement with derision, snorting, 'Why, Sir, a man *does* feel so, till he considers how very little he can learn from such voyages' (Boswell [1791] 2008, 722).

Johnson's devaluation of the learning produced by travel, which persists throughout the *Life*, takes two forms. The first, evident in his comment on the Inuit visitors, concerns transmission. His suspicion of communication in the absence of shared language extends to all forms of travel account, as necessarily conveying only redacted knowledge. Most of the facts of Tahitian life, scandalous and otherwise, with which London was abuzz at the time of Mai's visit were derived from John Hawkesworth's maligned *Voyages,* his long-anticipated compilation of the journals of Byron, Wallis and Cook, which had appeared in 1773. But Johnson dismisses Hawkesworth's as second hand information, too far removed from its object: 'as a book that is to increase human knowledge, I believe there will not be much of

that. Hawkesworth can tell only what the voyagers have told him' (Boswell [1791] 2008, 537). And even as humble raconteur, Hawkesworth has been misinformed. After Boswell's meeting with Cook, Johnson declares himself 'much pleased with the conscientious accuracy of that celebrated navigator, who set me right as to many of the exaggerated accounts given by Dr. Hawkesworth of his Voyages' (Boswell [1791] 2008, 722). Elsewhere he proclaims 'These Voyages, (pointing to the three large volumes of *Voyages to the South Sea*, which were just come out) *who* will read them through? A man had better work his way before the mast, than read them through' (Boswell [1791] 2008, 1304). Although such comments suggest that eyewitness experience can ratify 'far-fetched facts',[3] Boswell and Johnson also, as we saw, interrogated the accuracy of first hand accounts of the foreign. The only knowledge travel can produce is that which can be verified by the traveller's own senses: communicated knowledge is fundamentally compromised. Boswell and Johnson's criticisms here are more sophisticated than the widespread generic distrust of the 'travel liar',[4] throwing not the character of the individual traveler, but the very fabric of their communications, into doubt.

Johnson's second, related issue is with the content of the learning acquired. Johnson repeatedly dilates on the notion that 'very little' can be learned from what he consistently refers to as 'savage' cultures; that no information of worth can be extracted from such cross-cultural encounters. When Boswell adduces Oceanic seamanship: 'They have the art of navigation', Johnson replies 'A dog or a cat can swim'. When he invokes Tahitian creative arts: 'They carve very ingeniously', Johnson ridicules, 'A cat can scratch, and a child with a nail can scratch' (Boswell [1791] 2008, 1,304). Johnson's contrarian refusal to acknowledge that Oceanic expertise might ever constitute an advancement upon metropolitan learning is, however, more subtle than simple denigration. Relentlessly throughout the *Life* he highlights the non-transferable aspect of Indigenous knowledge. The breadfruit, widely cited as a miraculous South Seas production, becomes an object lesson here, pointing not just the insufficiency of 'natural' substitutes, but the difference between a curiosity and an object of knowledge, between ethnographic and useful information:

> BOSWELL. 'I am well assured that the people of Otaheite who have the bread tree, the fruit of which serves them for bread, laughed heartily when they were informed of the tedious process necessary with us to have bread;–plowing, sowing, harrowing, reaping, threshing, grinding, baking.' JOHNSON. 'Why, Sir, all ignorant savages will laugh when they are told of the advantages of civilized life. Were you to tell men who live without houses, how we pile brick upon brick, and rafter upon rafter, and that after a house is raised to a certain height, a man tumbles off a scaffold, and breaks his neck; he would laugh heartily at our folly in building; but it does not follow that men are better without houses. No, Sir, (holding up a slice of a good loaf,) this is better than the bread tree' (Boswell [1791] 2008, 538).

[3]The phrase is taken from Neil Rennie, whose book of the same title investigates the increasing influence of empiricism in accounts of travel to the Pacific (Rennie 1995, esp. 30–54).

[4]The classic text on the phenomenon of the travel liar is Adams, 1962. Jonathan Lamb develops a sophisticated argument about skepticism and eyewitness accounts of travel in Lamb (1997).

Johnson's reiterated charade of lack of interest in Oceanic cultures spells out a contention that the information brought back by travelers, at least from those cultures understood to be 'savage', can have no application in 'civilized life'. Different from his questioning of the translatability of abstract concepts via the medium of insufficient vocabulary, this latter critique constitutes a rejection of the possibility of transmitting *things*: nuggets of fact, objects of use, forms of practice. What Boswell ultimately defends in Johnson as a rigorous resistance to the fashionable extraordinary: 'No man was more incredulous as to particular facts, which were at all extraordinary; and therefore no man was more scrupulously inquisitive, in order to discover the truth (Boswell [1791] 2008, 537)', is rather an assertion that the quotidian exotic has no place in the metropolis. Breadfruit, navigation, carving—the Oceanic everyday—are inappropriate to British everyday life, and unsubstitutable for British equivalents. Johnson assertion that, upon consideration, very little can be *learned* from voyages depends, then, upon an understanding of knowledge as useful rather than ethnographic, as transferable rather than reified. None of the facts or objects brought from the South Seas and marveled at by London society can be used or applied in metropolitan life, though they may be ornamental, coveted, and serve as prompts for fantasies such as Boswell's. For Johnson, the exogenous and extraordinary figure as curiosities, not contributions; they can only ever produce redundant or extraneous knowledge.

In disparaging Tahitian natural and cultural practices and insistently using the label 'savage' to describe Tahitians, Johnson is being more philosophical than xenophobic. His argument is with an ethos of Noble Savagery associated with Rousseau that renders curiosity ideological, and favours simplification over modern technological development. Boswell had himself been much influenced by Rousseau in his early career. Not long after his first meeting with Johnson he had sought an audience with the *philosophe* at his retreat at Motiers (Danziger 1995, 27–9; Blanton 2002, 36), and he subsequently achieved his first success with the *Account of Corsica*, a work indebted to Rousseau for both subject matter and treatment. That Johnson's swipes at Boswell's 'cant in defence of savages' (Boswell [1791] 2008, 1304) are attacks on Rousseau is most apparent when he interrogates the notion of 'natural' man:

> A gentleman expressed a wish to go and live three years at Otaheite, or New-Zealand, in order to obtain a full acquaintance with people so totally different from all that we have ever known, and be satisfied what pure nature can do for man. JOHNSON. 'What could you learn, Sir? What can savages tell, but what they themselves have seen? Of the past or the invisible they can tell nothing. The inhabitants of Otaheité and New Zealand are not in a state of pure nature; for it is plain they broke off from some other people. Had they grown out of the ground, you might have judged of a state of pure nature'. (Boswell [1791] 2008, 751)

For many of London's literary and philosophical observers, Rousseau's reformulation of Hobbes's natural man as naturally virtuous provided a context for welcoming what were understood to be Noble Savages to the English capital. The emphasis of their accounts of the visitors, which vary, and at times fluctuate, between the satirical and the sentimental, is less upon the ethnographic knowledge they embody than the

reflection they offer and the questions they pose for metropolitan values. Johnson's assertive provincialism can be understood, in this context, primarily as opposition to imported French ideas, rather than imported Oceanic artifacts. By resisting the fashionable interest in new things from across the equator, and with them, new ideas from across the Channel, Johnson claims to be shoring up an epistemology that threatens to be undermined by novelty.

What is apparent from this first taste of metropolitan discussion about the new information transported to London from the Arctic and equatorial extremes, is that no knowledge could circulate in the eighteenth century outside of a conversation about what knowledge is. These conversations were, without doubt, ideologically laden and discursively inflected. However a simple analysis of their prejudices or rhetorical economies would fail to do justice to the complexity of their engagement with issues of knowledge communication, which are certainly as incisive and self-reflecting as recent scholarly formulations. Both British commentators and Indigenous visitors of the later eighteenth century interrogated the politics of identity performance, accumulated and manipulated social and cultural capital, were complicit in mutual authorisation, assessed the incommensurability of their material cultural values. They sensed when wonderment became projection, learned to laugh with and not merely at one another, and contributed to an early commentary on the now much noticed slippage in Enlightenment discourse between the terms curiosity and curiosities, particularly as prefixed by the word 'human'.[5] In the remainder of this chapter I shall look in detail at some accounts of the two visits, and the questions they raise for considerations of knowledge in motion during the 1770s.

5.2 Substitution

Interest in the Inuit and Oceanic visitors was not merely fashionable and Rousseauist, as Johnson implies. It was as intense within the Royal Society as the Salon; informed by Enlightenment as well as counter-Enlightenment theories of knowledge. No one was keener than Joseph Banks to entertain and cross-examine the visitors, and he was far from an armchair exoticist. Banks had visited both Labrador and the Society Islands, tirelessly recording and collecting their natural and cultural productions. In conversing on repeated occasions with the Inuit and hosting Mai he sought to enhance several related projects of knowledge: to add further detail to his botanical data, applying Linnean classificatory principles; to advance understanding of the place of man in nature and the development of global human society; and to assess the resources of their Arctic and Equatorial cultures with a view to extending possibilities of trade. Banks was also, as a number of recent commentators have noted, using hospitality to make a knowledge claim. As interlocutor and host he secured for himself the public role of Indigenous expert

[5]For example Benedict (2001).

and interpreter, one from which he had been threatened with displacement when he was substituted as naturalist on Cook's second voyage.[6]

Both the Inuit party and Mai were, from Banks's point of view, themselves substitute cultural informants. Banks had joined the expedition of the H.M.S. *Niger* to Newfoundland and Labrador, in what is frequently figured as itself a radical substitute for the conventional aristocratic male's Grand Tour, and between 11th May and 28th October 1766 had studied and collected the geology, flora and fauna of the coast north of St John's, Newfoundland and of Chateau Bay, Southern Labrador. He failed however, to meet any of the Inuit people 'supposed to be the oringinal [sic] inhabitants of the Countrey', and expressed disappointment that he never 'had the Least Connextion with them tho the French we are told had' and therefore had been able 'to Learn Very little about them' (Lysaght 1971, 132). Banks sailed on the *Endeavour* with James Cook in August 1768, around the same time that Hugh Palliser, the Governor of Newfoundland, directed Captain Francis Lucas to bring an Inuit woman Mikak, her six year old son Tutauk and a thirteen year old boy Karpik, (the latter destined to be trained for the Moravian mission) to England (Stopp 2009, 48). Mikak lived with Lucas in London, and met representatives of the highest ranks of the English nobility, including the Duke of Gloucester, the Earl of Bathurst, and the dowager Princess of Wales. She also sat, with her child, for a touching portrait by the esteemed portraitist John Russell, which accurately depicts her costume and tattooing (Stopp 2009, 49). The work had been commissioned by Banks, who was so disappointed to have missed this opportunity to meet an Inuit in person that he compensated himself with an eloquent representation. She and Tutauk returned to Labrador with Lucas in the summer of 1769, while Banks was in Tahiti.

If the Inuit Banks eventually met in 1772 were substitutes for the absence of human interactions on his Newfoundland/Labrador voyage, and for his purely figurative encounter with Mikak, the logic of substitution in which Mai was entangled attested to a more personal loss. As Mikak was departing London for Labrador, Banks was recording in his journal his pleasure in learning that Tupaia, the Raiatean priest who had been a significant guide and interlocutor during his sojourn in Tahiti, had resolved to travel to England in the *Endeavour*. Like Mai, Tupaia came from Raiatea, where he had been a high priest of the dominant war god Oro. He was an authority on Society Islands religion, history and culture; a linguist and a traveller; a navigator and ethnographer. He greatly assisted the *Endeavour* crew as it navigated through the Society Islands, around New Zealand and up the east coast of Australia (attesting to the usefulness of those Oceanic seafaring skills that Johnson was so quick to disparage), and acted as interpreter of other Oceanic languages during the early part of the voyage—a role of immense authority, that saw him understood and later remembered by Maori as the leader of the expedition.

[6]Johann Reinhold Forster had replaced him after his attempts to redesign the *Resolution* to accommodate 'all kind of curious things, for use, amusement and pleasure', modifications for which he 'had put himself to very great expence', lead to the ship being declared top-heavy, and restored to its original form (Elliot and Pickersgill 1984, 7).

However he died at Batavia, and Banks deeply regretted the missed opportunity of his anticipated visit to London.

Both Cartwright's Inuit and Mai may be understood, then, as compensatory figures for Banks. Yet Mai is distinguished from his first appearance in British narratives by his depiction as not merely substitute but poor substitute. Cook, who had taken another Society Islander, Hitihiti, a high-ranking Boraboran, on board the *Resolution* at around the same time Mai joined the *Adventure*, but failed to entice him to continue back to England after he had journeyed across the Antarctic and back through the South Pacific, was circumspect as to Mai's merits as 'sample' Society Islander:

> I at first rather wondered that Captain Furneaux would encumber himself with this man, who, in my opinion, was not a proper sample of the inhabitants of these happy islands, not having any advantage of birth, or acquired rank; not being eminent in shape, figure or complexion. For their people of the first rank are much fairer, and usually better behaved, and more intelligent than the middling class of people, among whom Omai is to be ranked. (Cook 1777, 169–70)

Mai's unfitness to represent the Society Islands in London is figured here primarily as an issue of social rank, with Oceanic hierarchies understood to be compatible with those of London society. In the preface to his *A Voyage Round the World*, George Forster made a different negative comparison, figuring Mai as the sensual child to Tupaia's self-regulating adult:

> He was not able to form a general comprehensive view of our whole civilized system, and to abstract from thence what appeared most strikingly useful and applicable to the improvement of his country. His senses were charmed by beauty, symmetry, harmony, and magnificence; they called aloud for gratification, and he was accustomed to obey their voice. The continued round of enjoyments left him no time to think of his future life; and being destitute of the genius of Tupaïa, whose superior abilities would have enabled him to form a plan for his own conduct, his understanding remained unimproved. (G. Forster 2000, 11)

As Harry Liebersohn notes, in Forster's lexicon, Tupaia and Mai 'stood for the extremes of local expertise and entertainment value that one could obtain from native informants' (Liebersohn 2006, 149). He regarded Mai as ill-equipped to synthesize his observations, or to glean useful knowledge as opposed to pleasurable experience from his visit. Unlike Johnson commenting on Boswell's exchanges with Inuit, Forster points the finger not at problems inherent to cross-cultural communication, but at the character of this particular mediator of intercultural instruction.

5.3 Fluency

Recent efforts to assess the value of Mai's visit, to himself and to others, have perpetuated a representation of this Oceanic visitor as substitute cultural specimen. E. H. McCormick reports that 'Banks carried off this heaven-sent replacement for the lamented Tupia, lodged him in his town house, and launched him on a meteoric

social career' (McCormick 1977, 95), a depiction that Anne Salmond replicates in her two more recent accounts of his visit: 'For Banks, who had hoped to bring Tupaia to Britain, his advent was a godsend. He carried Mai off and lodged him in his townhouse' (Salmond 2003, 296); 'By mid-1774, however, Banks's glamour was fading. Ma'i's arrival was a godsend, and Banks whisked the young islander off to his town house' (Salmond 2009, 191). Rüdiger Joppien has no hesitation in stressing Mai's status as exemplar rather than informant, calling him 'a curiosity, a visually striking personality, and a living experiment' (Joppien 1979, 82). And in her discussion of Joshua Reynolds's portrait of Mai in Oriental styled white tapa cloth, for which he sat during his London sojourn, Jocelyn Hackforth-Jones writes that 'in Tahiti, white tapa was reserved for those of highest or chiefly status, *ari'i*. Thus Mai may have been using the process of sitting for this portrait as part of a strategy to (mis)represent himself as belonging to a higher class' (Hackforth-Jones et al. 2007, 49). Such analysis in no way dislodges eighteenth-century suppositions that Mai was a déclassé sample.

Over the course of more than thirty years' recent Pacific scholarship, then, Mai figures as both substitute and trophy, offered strategic hospitality, preemptively failing to measure up. Contemporary commentators, on the other hand, while recognizing the complexities of investment in the social capital represented by and attributed to Mai, nonetheless acknowledged the main object of his visit to be mutual knowledge acquisition. Linguistic expertise therefore emerged as the primary grounds of social contestation. Frances Burney made claims for the priority of her brother James, both in Mai's affections and as appropriate mediator of the cultural knowledge he brought to London, on the basis of his competence in Tahitian. James was second lieutenant to Captain Furneaux on the *Adventure*. After the ship had docked at Portsmouth he accompanied Mai on his initial journey to London, presenting him to the First Lord of the Admiralty, the Earl of Sandwich, and immediately after that to Banks and his naturalist colleague Daniel Solander, as well as James's father, Charles Burney. Fanny wrote a partisan account of the meeting, based on her father's report, in a letter to her sister Susan of late July 1774, in which she represented a change of guard in Pacific exploratory authority as evidenced through the issue of fluency:

> He speaks a few English words—& Capt. Furneaux a few Otaheite words.—they had got Mr Banks there, on purpose to speak with him—but Mr Banks has almost forgot what he knew of that language. But you must know we are very proud to hear that our *Jem* speaks more Otaheite than any of the Ship's *Crew*.—this Capt. F. told my father, who was Introduced to this stranger as Jem's Father—he laughed, & shook Hands very cordially, & repested with great pleasure the name thus *Bunny*! O! *Bunny*! immediately knowing who was meant, & the Capt. says that he is very fond of *Bunny*, who spent great part of his Time in studying the Language with him. (Burney 2009, 41)

The reverse paternalism manifest in an introduction through which the father's merits become vouchsafed by the virtues of the son offers a reflection of Banks's displacement by the new Tahitian favourite James Burney. According to Fanny, the advantage Banks has lost is not, as Salmond suggests, the 'fading glamour' of the erstwhile exotic traveler, but the practical skills of communication that allow for the transmission of knowledge.

The same emphasis persists in Fanny's description of her own initial meetings with Mai. The first, in late November, followed Mai's attendance with Banks and Solander at the House of Lords. Fanny had been 'confined' with a cold, and 'did not chuse to appear till Mr Banks & Dr Solander were gone'. When she eventually emerged, she 'found Omai seated on the Great Chair, & my Brother next to him, & talking Otaheite as fast as possible. You cannot suppose how fluently & easily Jem speaks it [. . .] As soon as there was a *cessation* of talk, Jem Introduced me' (Burney 2009, 60). More, even, than with the foreign visitor, Fanny is fascinated by the spectacle of her brother's proficiency in communication: the first and greatest marvel of the encounter is not Mai's transformation into a Londoner (something that also preoccupies her), but Jem's transformation into a Tahitian.

Just over a year later Mai makes his way to her father's door once more, and communication is again the focus:

> He has learnt a great deal of English since his last Visit, & can, with the assistance of signs, & Action, make himself tolerably well understood. He pronounces English in a manner quite different from other Foreigners, & sometimes unintelligibly. However, he has really made a great proficiency, considering the disadvantages he labours under, which render his studying the Language so much more difficult to him, than to other strangers; for he knows nothing of *Letters*, & there are so very few Persons who are acquainted with his Language, that it must have been extremely difficult to have Instructed him at all. (Burney 2009, 193–4)

Fanny spells out, albeit with much courteous hedging, the practical foundations of Johnson's earlier skepticism regarding the possibility of 'conversation by signs' with Indigenous visitors. While she wishes to credit Mai with a facility in language acquisition to match her brother's, she is forced to admit that he labours under substantial disadvantages. The absence of a culture of writing in his home society, and the fact that very few in London know the rudiments of his language, mean that he constitutes a very different kind of exotic visitor from those at large in Britain who come from Europe, or from European settlements or colonies. He is the extra-foreign 'Foreigner', whose difference is at a remove so great that it threatens mutual intelligibility.

What does this mean for the communication of knowledge? Fanny is remarkable among her contemporaries for commenting on, rather than simply enacting, the circumvention of exchange that the encounter with such ultra-foreignness promotes. She continues, 'As we are totally unacquainted with his Country, Connections, & affairs, our Conversation was necessarily very much confined, indeed it wholly consisted in Questions of what he had seen here, which he answered, when he understood, very *entertainingly*' (Burney 2009, 194. Radical difference necessitates, not a commensurate opening out of perspective, but rather a fundamental solipsism. Fanny's conversation under the circumstances is reported as a kind of natural philosophic dialogue, in which Mai is quizzed, not about Tahitian navigation, carving and breadfruit, but English opera, theatre and horse riding, and his epigrammatic responses recorded with approval. Finally he is pressed to convey a single item of cultural knowledge. Fanny's musicologist father 'asked him very much to favour us with a song of his own Country, which he had heard him sing at Hinchinbrooke'

(66). The request, it transpires, is disingenuous, and designed simply 'to afford us very great entertainment, of the *risible* kind' (Burney 2009, 197). Fanny declares this sole sample of Society Islands culture to be 'barbarous':

> Nothing can be more *curious*, or less *pleasing*, than his singing Voice, he seems to have none, and *Tune*, or *air*, hardly seem to be *aimed* at; so queer, wild, strange a *rumbling of sounds* never did I before hear; & very contentedly can I go to the Grave if I never do again. His *song* is the only thing that is *savage* belonging to him. (Burney 2009, 197, 196)

Equally, by her own admission, his song is the only thing 'belonging to' Mai that had been enquired into.

Anecdotes of Mai typically replicate this solipsistic mode of cultural enquiry, offering a British practice or object to Mai for sampling, and then recording his response. Here those very purported limitations of his language become beneficial, allowing a process of defamiliarisation to occur, by which the everyday is returned to the enquirer as poetry. Horace Walpole admired Mai's description of ice, reporting, 'Omiah, the native of Otaheite, breakfasted with Mr. Conway to-day, and learns to skate. He had no notion of ice, and calls it stone-water; a very good expression' (Walpole 1843, 355). And Mai's 'blunt' words were made use of some 20 years after his return to Tahiti, in a pamphlet on the perils of tobacco use:

> When it is offered to you in this way, think of the conduct of *Omiah*, a native of *Otaheite*, who was brought to *London* by Captain *Furneaux*, when a certain Lord presented him his golden Snuff-box, and invited him to take some; the innocent savage, having gained little acquaintance with European refinement, bluntly replied: "I thank you, my lord, my nose is not hungry". (Clarke 1797, 30)

Such anecdotes imply that the knowledge the exotic visitor can provide is reflective rather than substantive. Indigenous observers in London enable the jaded subjects of 'European refinement' to see their own world anew, through the eye and formulations of the cultural innocent.

5.4 Performance

If these kinds of depictions figure the Indigenous interlocutor as part Diderot-esque Noble Savage commentator and part Idiot Savant, there is also much evidence to suggest that these visitors were knowing players of a variety of roles in the metropolis. This is particularly apparent in the accounts of the Inuit visit, in which exhibition played a prominent role, and borders of class were traversed. The entry of the party into London, as reported by Cartwright, is pure theatre. They came ashore at Westminster and found themselves 'immediately surrounded by a great concourse of people; attracted not only by the uncommon appearance of the Indians who were in their seal-skin dresses, but also by a beautiful eagle, and an Esquimau dog; which had much the resemblance of a wolf, and a remarkable wildness of look'. While the pageant is clearly designed to attract maximum attention, and

Cartwright later devised specific exhibition days on which the public could view the Inuit spectacle, he simultaneously disavows crowd intrusion throughout his account, and the ostensibly unsought publicity it necessitates. Initially the group took up lodgings in Leicester St; however he recalls, 'In a few days time, I had so many applications for admittance to see the new visitors, that my time was wholly taken up in gratifying the curiosity of my friends and their acquaintance; and the numbers who came made my lodgings very inconvenient'. Cartwright therefore took a house in Little Castle Street, Oxford Market, which he opened to 'my friends for a sight of the Indians' on Tuesdays and Fridays 'to comply with the incessant applications'. 'On those days', he writes, 'not only my house was filled, even to an inconvenience, but the street was so much crowded with carriages and people, that my residence was a great nuisance to the neighborhood' (Cartwright 1792, 1:267). Cartwright's use of the terms 'friends' is doubly obfuscating, obscuring the fact that he charged admission to the presence of the Inuit visitors, and implying that this was an elite crowd of known individuals rather than a mob of strangers.

The troubled relationship between friendship and profit motives, watching and performing, and high and low cultural entertainment continues to be explored as the narrative progresses. The Inuit were asked to swap their skin clothing, with its 'dirty appearance and offensive smell' for cloth garments 'preserving their own fashion in the cut'. The party participates in this self-costuming: 'I provided a quantity of broad-cloth, flannel, and beads, together with whatever else was necessary; and the women now having leisure to work, and being excellent tailors, soon clothed them all anew'. The women share with Cartwright in the work of fashioning clever Inuit approximations, designed for metropolitan viewing (but not smelling). Thus clad, they attended the opera at Covent Garden upon invitation, enjoying the performance of *Cymbeline* from the King's box. Yet Cartwright suggests that the real fulfillment of the evening for the Inuit came, not as audience members, but once again as actors: 'their pride was most highly gratified, at being received with a thundering applause by the audience, on entering the box' (Cartwright 1792, 1:268). At a parade of the regiment in Hyde Park they find themselves again incommoded by crowds as keen to view them as the soldiers, and are invited into a special reserved space, where they can observe, but also be observed, unobstructed (Cartwright 1792, 1:271–2).

The visit to Cartwright's father's house at Marnham is presented in his account as a renewing country idyll: 'I soon found the country agree much better with their inclinations, as well as their health, than London. Here they could enjoy fresh air and exercise, without being distressed by crowds of people gathering around them whenever they stirred out; which was always the case in town' (Cartwright 1792, 1:265/2). The physical restoration of the Inuit is attributed explicitly to nature and the absence of crowds, and implicitly to the class elevation of their contacts: the mob is absent, and they pursue aristocratic leisure activities, hunting, visiting, dancing and taking country walks. However the letters of Cartwright's sister Catherine give a slightly different sense of the continued pressures of self-display to which the Inuit were subjected. She recollects that 'the curiousity [sic] that raged in the environs

of Marnham is not to be imagin'd: for above a month we never stirred without a Mob; and all our acquaintance far & near came to see them'. She goes on to make clear that the Inuit family distinguished between upper and lower class occasions of exhibition, willingly accommodating themselves to the former but resenting the latter. She reports that, at a demonstration of a hussar skirmish put on for them by a cavalry troop quartered nearby:

> Our Innuets were plac'd on the most advantageous spot & had 3 dragoons prancing in a semi-circle behind them to keep the mob off, a compliment they thoroughly comprehended & enjoy'd, as it was extremely disagreeable to them to be stared at in the rude manner they were by the Kip-pa-loots (common people) for they were the An-gi-coke (great people) and in Labradore [sic] the Angicoke never condescend to associate with the Kippaloots, nor the Kippaloots with the Pim-ma-ja (servants). They and the Gentlemen of this Iglo (house) and a number of other Gentlemen dined at Retford with the Officers. It seems after dinner Ikkyuna at my Father's request as usual took a few turns up & down the table in her seal skin jacket. (Stopp and Mitchell 2010, 405)

In both cases, what has been offered as entertainment *for* the Inuit devolves into a spectacle centred *on* the Inuit: however while they happily rise to the occasion of the elite dinner, they make clear that any equation of a public demonstration for them with a display of themselves to the public would be considered insulting.

The most exclusive of their entertainments comes upon their return to London. Cartwright records that they were taken to Court 'where their dresses and behaviour made them greatly taken notice of' (Cartwright 1792, 1:266/2). Here again, observation and notice become part of the compliment paid to the visitors by the elite, rather than part of the insult afforded by the mob. The accounts of the Inuit visit, then, manifest an etiquette of cultural scrutiny and knowledge transfer, in which aristocratic contexts ensure the imparting of genuine information, whilst more public displays have the character of carefully manipulated side-show. Catherine's letters, as will be clear from the passage quoted above, convey the eagerness with which she sought and accuracy with which she transmitted knowledge of the visitors' vocabulary and cultural values. While she frames her correspondence in Rousseauist terms, referring to the Inuit as 'pure Children of Nature' whose advent was wish-fulfillment ('how fortunate I was to obtain one of my wildest wishes, and of its answering beyond expectation' (Stopp and Mitchell 2010, 403)), she also carefully sounds out the syllables of Inuit terminology, and reports on costume, houses, social and religious ranks, mortuary ritual and gender relations. Moreover, she makes clear that this knowledge is communicated in a context of sociable exchange—'we us'd to talk and laugh by the hour' (Stopp and Mitchell 2010, 405)—which, although characterized by some of the aspects of projection and solipsism we witnessed in Fanny Burney's account, is also notable for its respectful reciprocity. Catherine figures herself as having listened to and learned from the group, consistently referring to them, for example, as 'Innuets (for that is what they call themselves & not Esquimaux)' (Stopp and Mitchell 2010, 403). She evidences, as do many of the Inuit and Mai's London interlocutors, a diffident desire to become educated in correct Indigenous usage and terminology. Joseph Banks's interactions

with the Inuit also fell under the banner of elite exchange, and were reported in the social pages of *Lloyd's Evening Post* for 4–6 January 1773:

> Mr. Banks and Mr. Solander have paid frequent visits to the Esquimaux Indians, under the care of Captain Cartwright, and express themselves extremely satisfied with the observations and behaviour of these people [. . .]. These ingenious Gentlemen, [. . .] are inquisitive to mark the discriminations of the human character in every part of the world. (Lysaght 1971, 86–7)

As the notice makes clear, knowledge gleaned from social interaction with the Inuit was being incorporated by Banks and Solander into a typological system. The ambiguity of the phrase 'satisfied with the observations . . . of these people' highlights a slippage in certain sources (though absent from Catherine Cartwright's strongly affectively engaged letters) between figuring Indigenous visitors as subjects and objects of knowledge, as commentators and specimens.

George Cartwright was equally concerned that Britain and British society put on their best performances for the Inuit. Impressing foreign visitors had direct and material consequences for voyagers and merchants seeking return hospitality. He writes:

> I omitted nothing, which came within the compass of my pocket, to make their stay in England agreeable, or to impress them with ideas of our riches and strength. The latter I thought highly necessary, as they had often, when in Labrador, spoken of our numbers with great contempt, and told me they were so numerous, that they could cut off the English with great ease, if they thought proper to collect themselves together. (Cartwright 1792, 1:266/2)

Catherine Cartwright argues a strong distinction between her brother's treatment of his Inuit party and a competing Inuit exhibition in Bristol, offered by the agent of a merchant who had brought over a brother of Tooklavinia's, 'I-mich-toke by name & Ang-nu-toke his wife'. Catherine is incensed by various aspects of the visitors' situation, comparing these unfavourably with her brother's unstinting hospitality:

> [The agent] treated them in a quite different manner, instead of making it a present pleasure to his Indians he hired for them one little dirty miserable room at a distance from his own house & all they had to eat was plates of scraps from his own table; bought each course cloth & a few beads, & had them made up in an absurd style, being neither in their taste, nor ours but between both, & these they wore the very few times they were permitted the honor of going to his house & being exhibited to some of his friends & to a play they were at. The other cloaths he provided for ym [them] were downright English—an old waistcoat, breeches, & surtout of his own was Emicktoke's attire; a linsey woolsey nightgown, plain apron & handkerchief with everything else suitable thereto was Angnutoke's. (Stopp and Mitchell 2010, 409)

Questions of hospitality, hierarchy and authority continue to be conflated in significant ways here. The meanness of the accommodation and costume offered to this Inuit party, and the limitation of their aristocratic encounters, is understood to have produced less authentic ethnographic data for their audiences. Their 'downright English' outfits are servant's garb, cheating them of appropriate translation into English society and their audience of an encounter with genuine Inuit subjects. Like her brother, Catherine is aware that the impressions received by the visitors have consequences: 'At Bristol the two Indian Brothers met and you may be sure

compar'd notes' (Stopp and Mitchell 2010, 409). Yet the 'Bristol Indians' are, after all, subjected to a poor man's equivalent of Cartwright's own bi-weekly exhibition. They are also taken to the theatre and entertain selected elite guests at their host's home, and are made to switch their traditional costume for a more assimilated version. Catherine, however, emphasizes the significance that degrees of approximation assume in the transmission of cultural knowledge. The costume substitution that her brother initiated, which merely involved a replacement of fabric, while the Inuit retained control of design and manufacture, is accorded a different degree of authenticity to the Bristol agent's neither-fish-nor-fowl concoction of Inuit dress, which falls inelegantly between cheap fantasy and déclassé assimilation. Once again, the relationship between the 'proper sample' and authentic knowledge is vexed.

5.5 Disappointment

Despite the shared pressure towards enthusiasm necessitated by mutual cultural performances, where London as much as the exotic visitor was on show, and there was an understanding that, even in the absence of literacy, Indigenous 'notes' were being taken and 'compar'd', a recurrent sense of skepticism, indeed of disappointment, dogs the records of these encounters. In the more astute accounts, this translates into a consciousness that what has been 'discovered' amounts at best to mutual projection. There is a rhetorical rhythm to these texts in which the 'wonder of the new world', in Stephen Greenblatt's phrase,[7] with all its implicit reciprocity, gives way to an equally reciprocal sense of deflation; of insuperable untranslatability.

Candid about his motives for impressing the visitors, Cartwright speaks of the 'contempt' he and his men experienced from Inuit in Labrador, and which he hoped to counteract by exposing them to all that British knowledge and power had effected at home. Yet repeatedly in his account the experiment is threatened with failure. Here he records Attuiock's response to a tour of London highlights:

> I took Attuiock with me and walked beyond the Tower. We there took boat, rowed up the river, and landed at Westminster Bridge; from whence we walked to Hyde Park Corner, and then home again. I was in great expectation, that he would begin to relate the wonders which he had seen, the instant he entered the room; but I found myself greatly disappointed. He immediately sat down by the fire side, placed both his hands on his knees, leaned his head forward, fixed his eyes on the ground in a stupid stare; and continued in that posture for a considerable time. At length, tossing up his head, and fixing his eyes on the ceiling, he broke out in the following soliloquy: 'Oh! I am tired; here are too many houses; too much smoke; too many people; Labrador is very good; seals are plentiful there; I wish I was back again'. (Cartwright 1792, 1:268–9)

[7] Greenblatt subtitles his book 'Marvelous Possessions' (1991) with this phrase.

Cartwright attributes Attuiock's stymied enthusiasm to a quantifiable cultural limitation. Unused to the proliferation of objects he witnesses on his excursion through London, he is ill-prepared to extrapolate from these the processes of their production:

> I could plainly perceive, that the multiplicity, and variety of objects had confounded his ideas; which were too much confined to comprehend any thing but the inconveniences that he had met with. And indeed, the longer they continued in England, the more was I convinced of the truth of that opinion; for their admiration increased in proportion, as their ideas expanded; til at length they began more clearly to comprehend the use, beauty, and mechanism of what they saw; though the greater part of these was lost upon them, as they would have been upon one of the brute creation. (Cartwright 1792, 1:269)

One can sense Cartwright's frustration emerging in the denigrating remarks that he fails to suppress in both passages, which attempt to reassert a claim to superiority that is rebuffed during the course of the anecdote. Yet nested within this struggle with narcissistic injury is an insight about incommensurability. Cartwright suggests that points of comparison are necessary for new knowledge to be appreciated. A lack of these continues to weigh against Cartwright's attempts to overcome Inuit contempt. At Marnham, we are told,

> The face of the country did not pass unobserved by them, and their expression was 'The land is all made', for they supposed we had cut down the woods, and levelled the hills. In the former supposition they were certainly right; and I do not wonder at the latter, since they would naturally suppose that all the world was like the small part of it which they had formerly seen [. . .]. How the inhabitants of London were supplied with food, I could never make them fully comprehend, any more than I could the number of people by which the metropolis was inhabited. Their arithmetic goes no higher than the number twenty-one; therefore, the best I could do, was to tell them, that a certain number of large whales would serve them for one meal only. Nothing surprised them more, than to meet with a man who assured them that he could not shoot, had never killed an animal, nor seen the sea in his life. (Cartwright 1792, 1:265-6/2)

More is at stake in such excursions, Cartwright has made clear, than there was in Mai's ice-skating or snuff-taking adventures, and consequently the idiosyncratic poetics of Indigenous comprehension are less appreciated. Difference seems unbridgeable, and the similes that might bear knowledge between cultures too localized and fragile to sustain the effort. The resemblance between the fed-up conclusions of the Inuit, overexposed to metropolitan marvels, and Dr Johnson's curmudgeonly remarks, quoted at the beginning of this chapter, in the face of equivalent overexposure to London fashionable enthusiasm for the marvels of Tahiti, is striking. On both sides, in these early days of their mutual cultural elucidation, resistances started to surface, and a kind of homesickness was asserted: 'No, Sir, (holding up a slice of a good loaf,) this is better than the bread tree'; 'Labrador is very good; seals are plentiful there; I wish I was back again'. Surfeit of novelty produces exhaustion with wonderment, and a desire for the familiar. And on both sides, the diagnosis is the same. Knowledge won't travel without a shared conceptual framework. Indigene and Londoner 'considers how very little he can learn from such voyages'.

If Indigenous mediators could not be relied upon to represent cultural objects and the 'mechanisms' they embody faithfully back in their home societies, voyagers gambled instead on the possibility that objects might speak for themselves, loading the visitors with tokens of acquired culture for the return journey. Mai returned to the Society Islands with, among other things, 'a collection of miniature figures (of soldiers, animals, coaches and so forth) which it was imagined he could use in his attempts to describe European life'. He also brought fireworks, a barrel organ, two drums and a suit of armour, and was equipped with cooking utensils, iron tools, some furniture, seeds and livestock; what Harriet Guest aptly describes as a 'curious assortment of the functional or useful and the frivolous or ornamental (Guest 2007, 158). Yet in these efforts, the Indigenous visitors' metropolitan hosts were destined for a different kind of disappointment: one less easy to reconcile with agendas of knowledge sharing and the claims to superior civilisation that underwrote them. George Forster wrote of Mai's return to the Society Islands:

> He carried with him an infinite variety of dresses, ornaments, and other trifles, which are daily invented in order to supply our artificial wants. His judgment was in its infant state, and therefore, like a child, he coveted almost every thing he saw, and particularly that which had amused him by some unexpected effect. To gratify his childish inclinations, as it should seem, rather than from any other motive, he was indulged with a portable organ, and electrical machine, a coat of mail, and a suit of armour. Perhaps my readers expect to be told of his taking on board some articles of real use to his country; I expected it likewise, but was disappointed. (Forster 2000, 11–12)

Forster's critique, with its familiar savage/child analogy, can nonetheless be situated most immediately within a late eighteenth-century critique of luxury that returns us, again, to Johnson's comments on fashionable enthusiasm and its remoteness from knowledge sharing.

Like Johnson defending loaf over breadfruit, Forster presses on the question of applied knowledge. 'It can hardly be supposed', he ruminates of Mai, 'that he never formed a wish to obtain some knowledge of our agriculture, arts, and manufactures; but no friendly Mentor ever attempted to cherish and gratify this wish' (Forster 2000, 11). Mai's trinkets are reified, abstracted from use or circulation. From them very little can be learned. The disappointment expressed by both Indigenous visitors and their metropolitan hosts in the insufficiency of parting gifts, and the lack of fit in method and practical knowledge to which they attest, is however, as this essay has indicated, only a part of a far-reaching dialogue about the value and practicability of knowledge sharing that was transacted between Londoners and Indigenous visitors at the end of eighteenth century. At a moment when the ethos of trade was set to displace the ethos of exploration, these mutually enquiring conversations established that in it was in the realm of epistemological rather than material exchange that travel had begun to expand the mind.

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Chapter 6
Diplomatic Journeys and Medical Brush Talks: Eighteenth-Century Dialogues Between Korean and Japanese Medicine

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Abstract During the Tokugawa period (1603–1868), Japanese doctors generally learned about the medical ideas of their counterparts elsewhere in East Asia only through the medium of imported books, and there were few circumstances under which they could meet directly with foreigners. The journeys of Korean doctors who travelled to Edo in the entourage of Korean diplomatic embassies thus presented an unusual opportunity to discuss medical topics with doctors from outside Japan who were intimately familiar with traditional forms of East Asian medicine. Japanese doctors hoped to learn from the visiting Koreans about topics ranging from their interpretations of the Chinese medical classics to their methods of processing valuable drugs such as ginseng. However, a divergence between Japanese and Korean medical cultures over the course of the eighteenth century meant that both sides experienced increasing frustration in their attempts to engage in dialogue.

6.1 Introduction[1]

Between the seventeenth and the nineteenth centuries, the Tokugawa shogunal government (*bakufu*) confined legitimate foreign trade to a limited number of

[1]Chinese, Korean and Japanese names in this essay are given in East Asian order, with the family name preceding the given name; the only exception to this rule is the names of historians writing in English, which are given as they appear in these historians' English-language publications. When using a single name only, I adhere to the Japanese historiographic convention of using given names for historical figures active before 1900 and family names for later historical figures and historians.

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channels and imposed severe restrictions on the movement of people into and out of Japan. Few foreigners visited Japan during this period, but those who visited often had an impact disproportionate to their numbers. The Chinese refugees who fled to Japan following the Manchu invasions brought with them the continental sophistication of late Ming literati culture; the Dutch visitors who made annual trips from Nagasaki to Edo supplied information concerning European customs, geography, politics, science and medicine; and the Koreans who participated in diplomatic embassies to Edo offered opportunities to learn about a neighboring country about which many Japanese were intensely curious.

The twelve diplomatic embassies sent from Korea to Japan between 1607 and 1811 fulfilled a variety of functions in sustaining good relations between the two countries. During the early seventeenth century, Japanese and Korean rulers were seeking to rebuild peaceful relations following Toyotomi Hideyoshi's disastrous invasions of the peninsula between 1592 and 1598. The Korean court sought to obtain the repatriation of Koreans who had been brought back to Japan as prisoners and to obtain information about a neighbouring country that had proven its potential for causing trouble, while the newly established Tokugawa shogunate sought to exploit the pomp and ceremony of diplomatic relations to bolster its own domestic legitimacy (Toby 1984). Over the course of the seventeenth century, the threat of military confrontation faded into the background and the embassies began to take on the character of a conventional diplomatic ritual; as a consequence, they were increasingly treated as valuable opportunities for cultural interaction and exchange.

Those traveling with the embassies typically included between 400 and 500 Koreans, several hundred samurai from the Japanese domain of Tsushima, and several thousand individuals involved in transportation and provisioning. At each stage along the six-month return journey of over 2,000 miles, local scholars, artists, and doctors participated in entertainments involving eating, drinking, music, painting, poetic composition, and conversation on a wide variety of topics. From 1682 onwards, each of the Korean embassies included a Medical Expert (K. *yangŭi*, J. *ryōi*) to allow Japanese doctors to learn more about their art from elite Korean practitioners. Earlier Korean embassies had included Medical Officers (*ŭiwŏn*) to attend to the needs of Koreans who fell sick during the journey, but it was only after 1682 that medical dialogues became an important aspect of the embassies' cultural significance. The records of dialogues between Korean and Japanese doctors during the eighteenth century offer us an unusually direct view of the range of possible cultural and epistemic implications of early modern East Asian doctors' motion across national boundaries.

As Tashiro Kazui has pointed out, the initial impulse for the 1682 petition probably came from within Tsushima domain (Tashiro 1999, 39–41). Tsushima was a small island domain in the Korea Strait, and because of its location had long acted as an intermediary between Korea and Japan for both trade and diplomacy. Although the samurai of the Sō house who governed Tsushima were politically subordinate to the Tokugawa shoguns in Edo, the island's economy was closely tied to its trade with the Korean peninsula. Tsushima maintained a permanent presence on the peninsula

in the form of the Japan House (*waegwan*), a walled compound in the port of Pusan housing approximately five hundred Tsushima merchants and officials who engaged in a lucrative trade of Japanese silver for Korean ginseng and facilitated diplomatic communications (Lewis 2003; Hellyer 2009, 39–42).

During the seventeenth century, Tsushima doctors had often sought out Korean teachers, either by travelling to the Japan House or by studying with Korean doctors invited to Tsushima for this purpose. However, this latter possibility came to an end in 1678 after Tsushima had attempted unsuccessfully to obtain permission for these Korean doctors to travel all the way to Edo. When Tsushima subsequently petitioned for the inclusion of a Medical Expert in the diplomatic embassies, it was presumably hoping to partially mitigate the effects of the new restrictions and to ensure that a few Korean doctors would be able to transmit their learning to Japanese doctors in Tsushima and as far away as Edo. The bakufu itself took a close interest in the visits of the Korean Medical Experts and ensured that its own medical officials would have privileged access to them while they were residing in Edo. However, there were also numerous opportunities along the route for the Koreans to meet with Japanese doctors who did not occupy official medical positions.

The conversations between Korean and Japanese doctors were carried out through the medium of "brush talks" (C. *bitan*, K. *p'ildam*; J. *hitsudan*), a form of written communication peculiar to East Asia. Korean and Japanese interpreters accompanying the embassies were able to speak both languages, but few Korean or Japanese scholars were able to converse with each other through speech, and in the settings of ritual banquets and entertainments they communicated with each other almost exclusively through written classical Chinese, which they had typically studied from an early age and were able to read and write with some fluency. Because there was widespread curiosity about the embassies and because the written form of the brush talks lent itself easily to reproduction, brush talks as a genre of performance gave rise to brush talks as a genre of publication.

Hŏ Kyungjin has recently examined the surviving examples of published brush talks on medical topics and concluded that doctors and booksellers sought to publish their brush talk conversations as soon as possible after they had taken place in order to take advantage of this curiosity while it lasted (Hŏ 2010). One of the earliest surviving published medical brush talks, Kitao Shunpo's *Medical Conversations Between Japan and Korea* (*Sōkan idan* 1711), may have helped to inspire the later development of the genre, but it is also true that later published brush talks varied considerably in format. Some adhered closely to the original form of the brush talk conversations, incorporating poetic exchanges and small talk alongside questions and answers of medical interest; others were edited from the original sequence of the conversation into a more logical sequence of ideas and topics; others incorporated more extended questions and answers that were not "brush talks" at all, but were written out and answered separately from the meetings that took place in person.

The broader significance of the Korean embassies remains a controversial subject. Ronald Toby has analyzed the response of Tokugawa society to the visiting Korean's exotic appearance and behavior and concluded that "through reenactment

and representation, the alien embassy became permanent and omnipresent… It was an instrumentality for the construction of 'Korea'… and by extension it was a means for creating 'Japan'." (Toby 1986, 423). Burglind Jungmann (2004) has argued that the embassies played a significant role in facilitating exchanges of visual culture and painting styles between the two countries, while Fuma Susumu (2006) and Woobong Ha (2006) have shown that the embassies helped Korean scholars become aware of new styles of philological scholarship in Japan that contrasted strongly with the Korean orthodoxies of the period. However, not all historians have taken a positive view of the embassies' role in promoting cultural exchange. Nam-lin Hur has argued that prejudices on both sides tended to hinder the development of genuine mutual comprehension, noting that "what [the visiting Koreans] observed, or tried to observe, in Tokugawa Japan was what they had taken for granted even before encountering the Japanese" (Hur 2007, 452), and that the Japanese attitude that "Koreans had come thousands of miles in order to pay respect to the 'glorious authority' of the divine country" (461) encouraged them to exploit available opportunities to demonstrate their own cultural superiority; he has thus proposed that we should see the frequent failures of these encounters to result in mutual respect or comprehension as rooted in a cultural dynamic of ethnic opposition and "heterophobia" (466).

In relation to the medical brush talks, it is perhaps most fruitful to regard these different perspectives as complementary rather than contradictory.[2] Discussions of medicine were less ideologically charged than those concerning social and political issues or the interpretation of the Confucian classics, but they nevertheless reveal the inherent possibilities for both friendly dialogue and conflict that were latent in these transnational encounters. The nature of the conflicts that arose in the course of the medical discussions suggests that we should not be too quick to interpret Korean and Japanese scholars' willingness to write dismissively of their counterparts as primarily "ethnic" in character: as I shall argue below, their antagonisms arose less from ethnic prejudice than from the existence of distinct sets of cultural and epistemic values. The divergence of Japanese and Korean medical cultures meant that when these two cultures came into contact, participants on both sides could feel superior to each other, not because of their ethnic status as "Korean" or "Japanese" but because of their different ideas about what was most important in medicine. One of the unforeseen consequences of the medical brush talks was that both the Korean and the Japanese participants came to develop a clearer understanding of their own assumptions concerning the nature of medical learning and the appropriate forms of medical practice.

[2]The medical brush talks have recently attracted the interest of a number of Korean historians, who have built on the foundations laid by earlier Japanese historians (e.g. Miki 1962, 311–318; Yoshida 1988), comparing the medical brush talks with dialogues on Confucian scholarship (Kim 2008a, b) and examining their significance as a publishing phenomenon (Hŏ 2010).

6.2 Chinese Medicine, Korean Medicine and Japanese Medicine

During the seventeenth century, the elite doctors of Korea and Japan had shared a common set of assumptions concerning the range of Chinese medical treatises that they regarded as canonical and the appropriate methods of diagnosis and treatment. This cosmopolitan style of East Asian medicine had its origins among the scholarly doctors of fourteenth and fifteenth-century China. It placed great emphasis on the need to assess subtle variations in symptoms, appearance, pulse, lifestyle, history and environment in order to develop suitable remedies that were appropriate to individual patients' unique circumstances and disease manifestations (Leung 2003). Korean doctors, who had enjoyed ready access to Chinese medical books, had been able to familiarize themselves with new medical ideas within a short period after their emergence in China; in Japan, however, these new ideas often arrived only after a long delay, and it was not until the seventeenth century that this new style of scholarly medicine became widely adopted. Japanese doctors' discussions on medicine with the visiting Koreans were thus shaped by a conventional assumption that Japan had more to learn from Korea than Korea had to learn from Japan, an assumption that was not unique to medicine but was common to many areas of scholarly learning and which faded only gradually over the course of the eighteenth century, as Japanese scholars and doctors began to develop a greater sense of pride in their own country's achievements.

Japanese doctors hoped to learn from visiting Koreans not only about their understanding and use of ideas and practices of cosmopolitan medicine derived from China, but also about forms of medical learning distinctive to Korea itself. Korean doctors had been writing about "local medicines" (*hyangyak*) since at least as early as the thirteenth century, collecting and preserving their findings in compilations such as *Prescriptions of Local Medicines for Emergency Use* (*Hyangyak kugŭppang* c.1236) and *Standard Prescriptions of Local Medicines* (*Hyangyak chipsŏngbang* 1433) (Suh 2008). This tradition of studying local medicines had enabled Korean doctors to develop a sense of local identity despite their continuing adherence to the fundamental doctrines of cosmopolitan medicine derived from China, and it also served as one source of inspiration for eighteenth-century Japanese doctors who began to take an interest in the medical practices and medicinal products of their own country (Trambaiolo 2013).

The Korean treatise that exerted the greatest influence on Tokugawa medicine, Hŏ Chun's *Precious Mirror of Eastern Medicine* (*Tongŭi pogam* 1613), presented an epitome of late Ming medical learning but also incorporated descriptions of local Korean species, their medicinal uses, and their native names written out in the Korean phonetic script (*hangul*). When the Tokugawa bakufu sponsored the reprinting of the *Precious Mirror* in 1724, its primary aim was to provide a single convenient book on medicine for "doctors who lacked book collections" (Yokota 1998, 15; Umihara 2007, 28), but the descriptions of Korean species also aroused considerable curiosity among Japanese herbalists. This curiosity had begun

to develop even before the reprinting took place: within a few days of receiving a Korean edition of the *Precious Mirror* from Tsushima officials in 1718, the bakufu scholar Hayashi Hōkō had asked Tsushima to make use of its Korean contacts to find out more about the Korean species listed and about their differences from similar Japanese species (Tashiro 1999, 63–71). After its reprinting in Japan, the *Precious Mirror of Eastern Medicine* became the standard text through which Japanese doctors learned about "Korean" medicine, and a substantial proportion of their questions to visiting Korean doctors during the eighteenth century sought to develop a better understanding of its contents.

Throughout this period, Japanese doctors were also familiarizing themselves with the ideas contained in new Chinese medical books imported directly to Japan through Nagasaki and then published by commercial booksellers in Kyoto, Osaka and Edo (Mayanagi 1997). These books included treatises by doctors who had lived through the calamitous epidemics of the late Ming dynasty and developed novel doctrinal conclusions and therapeutic strategies, such as Wu Youxing's *Discourse on Warm Epidemics* (*Wenyi lun* 1642) and Guo Zhisui's *Jade Standard for Sand-Rashes and Swellings* (*Sha zhang yuheng* 1675); treatises that aimed to reconstruct the original content of ancient medical classics, such as Yu Chang's *In Praise of the Discourse on Cold Damage Disorders* (*Shanghan shanglun pian* 1648); and the *Imperially Commissioned Golden Mirror of the Orthodox Lineage of Medicine* (*Yizong jinjian* 1749), which incorporated descriptions of previously unfamiliar techniques such as smallpox inoculation. The Korean doctors who visited Japan were rarely familiar with these books, and in response to questioning from Japanese doctors could only state apologetically that "the customs of our country mean that we are not familiar with the Chinese books of recent ages" (Niwa 1748, 1:4a).

One of the most important ways in which the Japanese medicine of the eighteenth century diverged from that of Korea was through the emergence of "Ancient Medicine" (*kohō*), a school of medical thought and practice that aimed to revive the medical practices of Chinese antiquity but also emphasized the role of direct observation in shaping medical knowledge. Ancient Medicine doctors rejected as too speculative many of the traditional concepts of East Asian medicine and preferred to describe diseases as far as possible only in terms of their manifest symptoms. They were known for their reliance on aggressive therapies such as vomiting, sweating and purging. The high value that the Ancient Medicine doctors placed on direct observation also encouraged them to undertake anatomical investigations and eventually contributed to the growing interest in European medical and anatomical knowledge during the later decades of the eighteenth century. The most influential of the Ancient Medicine doctors, Gotō Konzan (1659–1733), Kagawa Shūan (1683–1755), Yamawaki Tōyō (1705–1762), Yoshimasu Tōdō (1702–1773), and Nagatomi Dokushōan (1732–1766), were active primarily in Kyoto, but by the second half of the eighteenth century these doctors' disciples had helped spread their ideas to all parts of Japan. The clinical practices and epistemological attitudes of Ancient Medicine represented a radical departure from the earlier traditions of medicine that most Korean doctors still upheld, and they could sometimes become a source of disagreement and even conflict between the visiting doctors and their hosts, as we shall see below.

6.3 Brush Talks in the Transmission of Medical Learning

For the Korean doctors accompanying the embassies, the medical dialogues were framed by the experience of several months of continuous travelling through Japan during which they gradually became familiar with the peculiar interests of Japanese doctors as they were asked to answer similar questions by different doctors along the route. The Japanese doctors had a very different perspective on these encounters, not only because they remained among their own familiar surroundings but also because their interactions with the Koreans typically came to an end after only a few days. Although the longer period of the embassies' stay in Edo made it possible to develop closer relationships with the Korean visitors, and doctors in other parts of Japan might hope to meet with the Koreans during both the outward and the return journeys, Japanese doctors' experiences of these interactions were framed not so much by the context of the individual embassies' journeys to Edo and back as by the discontinuous accumulation of knowledge about Korean medicine over the course of multiple embassies.

For many Japanese doctors, the importance of the published records of earlier brush talk conversations as a source of information about Korean medicine was second only to that of Hŏ Chun's *Precious Mirror of Eastern Medicine*, and several Japanese doctors in later embassies asked questions concerning the responses that had been given by earlier Korean Medical Experts. An example of this pattern of interaction can be seen arising from the response of Ki Tu-mun, the Medical Expert of the 1711 embassy, to a question from the Japanese doctor Kitao Shunpo concerning the illnesses *rōsai* 癆瘵 and *denshi* 傳屍, widely feared contagious diseases that could cause afflicted individuals to die either suddenly without warning or through gradual wasting away.[3] In response, Ki Tu-mun claimed that these diseases had existed in Korea in the past but were no longer found there in the present; he suggested that if it were necessary to treat these diseases, appropriate therapies could be derived from those of the Ming-dynasty Chinese doctor Yu Tuan (Kitao 1713, 1:6b–c).

During each of the two subsequent Korean embassies, Japanese doctors asked the visiting Medical Experts for clarification of what Tu-mun had meant by these claims, and whether they believed he had been correct. In 1748, Kawamura Harutsune sought to follow up on Ki Tu-mun's remarks by asking Cho Hwal-am whether there had been any changes in Korea during the intervening period, and Hwal-am gave a response quite different from Tu-mun's: he pointed out that because these diseases tended to occur in rural Korean villages and because doctors themselves were reluctant to approach afflicted patients, they generally knew little about these diseases' occurrence and treatment (Kawamura 1748, 2:1a–2a). Yamaguchi Ansai raised a different question when he met with the Medical

[3]These disease categories were later assimilated to the Western disease category of tuberculosis (Johnston 1995).

Expert Yi Chwa-guk in 1764, asking how it was possible that Koreans could escape from a disease that Japanese doctors since ancient times had been unable to treat effectively. Was it because Koreans were endowed with stronger constitutions, or was it because of movements of *qi* or climatic factors? Chwa-guk replied that contrary to Kim Tu-mun's assertions, the disease was indeed present in all countries and had nothing to do with movements of *qi* or climatic factors, and he offered his suggestions for treatment (Yamaguchi 1765, 2:1b–2b). Although consecutive embassies were typically separated by gaps of many years, the written form of the brush talks and their publication within Japan allowed each generation to pick up the conversations where their predecessors had left off.

The potential value of Korean doctors' journeys to Japan as a channel for the transmission of knowledge can be seen most clearly in discussions concerning the identification and characteristics of drug products and other plant and animal species. Japanese doctors practicing Chinese medicine often had to rely on herbal medicines imported from the continent, since not all of the ingredients of the formulas listed in Chinese treatises could be obtained from indigenous Japanese sources. Throughout the Tokugawa period, medicines imported from China and Korea represented a significant proportion of the total value of the drug trade within Japan. Yet although Japanese doctors possessed both a supply of these imported drugs and detailed written descriptions of medicinal species in Chinese treatises such as Li Shizhen's *Systematic Materia Medica*, these descriptions could not convey the subtle variations in colour, tactile qualities, odour and flavour that were necessary to distinguish between drug varieties whose appearance was superficially similar but whose therapeutic value might be very different. It was only through the sorts of personal interactions that the Korean embassies' motion through Japan made possible that this type of knowledge could be effectively communicated, since the embassies gave Korean and Japanese doctors a rare opportunity to meet with each other not only to discuss the drugs that they used in their practice, but also to view, touch, and taste them.

Kitao Shunpo presented a series of discussions on drugs at the very beginning of the published version of his brush talks with Ki Tu-mun in 1711, focusing primarily on the drug *shajin* 沙参 (Lilyleaf ladybell, *Adenophora* sp.). Shunpo first presented Tu-mun with a *shajin* root obtained in Japan from Chinese traders and asked to hear Tu-mun's opinion on the sample, since the Chinese naturalist Li Shizhen had written that *shajin* roots could be easily confused with those of ginseng or other species. In cases such as this, the problem of identification was especially severe because the commercially traded drug product consisted of the root alone, while other parts of the plant such as the stem, leaves, and flowers had been removed before shipment. Tu-mun declared that the root was indeed a sample of Chinese *shajin* after examining its visual appearance and chewing on it to assess its flavor. Tu-mun's motion from Korea to Japan was thus an essential stage in conveying his understanding of the drug to the Japanese doctor (Kitao 1713, 2a).

In other cases, the Korean doctors could also present drug samples that they had brought with them from Korea to discuss with their Japanese hosts. A typical example of this type of interaction took place during the embassy of 1764, when

the Medical Expert Yi Chwa-guk allowed the Japanese doctor Yamaguchi Ansai to taste a sample of the highest grade of Korean ginseng that he had brought with him from Korea as part of his own personal drug collection (Yamaguchi 1765, 2:10a). By carrying this ginseng on his person as he travelled through Japan, Chwa-guk offered an implicit guarantee of its quality that would not have been associated with the commercially traded ginseng reaching Edo through the hands of intermediary traders, who were not carrying the drugs for their own personal use and whose claims about the quality of their products would naturally be subject to suspicion. The price for ginseng could vary substantially according to its supposed quality, and merchants might be tempted to modify the appearance of ginseng that they sold by soaking or trimming the roots; the further a commercial drug sample had travelled from its point of origin, the greater the suspicion that such an alteration might have taken place. The drugs carried by the Korean Medical Experts had a privileged epistemic status deriving from the unusual circumstances of their motion through Japan, a type of motion that was all the more important because very few Japanese naturalists had the opportunity to travel beyond Japan to visit the countries where these drugs originated.

6.4 Ginseng

Ginseng was by far the most important of the several dozen varieties of drugs imported to Tokugawa Japan from Korea. During the final decades of the seventeenth century, Japanese consumption of imported ginseng had reached the point that the resulting outflow of silver became a major concern for the bakufu, and high ranking officials proposed that the bakufu should take active steps towards developing domestic sources of the drug either by searching for Japanese ginseng growing in the wild or by cultivating ginseng using seeds or seedlings imported from the continent. Such a policy of promoting domestic ginseng production was not entirely unprecedented, but it did face formidable obstacles. Historical records from tenth century Japan indicated that "ginseng" had once been submitted as tribute to the Heian court from certain Japanese provinces, but it was far from certain that the species referred to in these records were not some other plant species that had been mistaken for ginseng. There had also been instances of the importation of ginseng seeds or seedlings to Japan during the first half of the seventeenth century, but for unknown reasons these early attempts at importation and cultivation failed to generate a self-sustaining domestic supply (Tashiro 1999, 28–29). The new effort to cultivate Korean ginseng did not begin in earnest until after the eighth shogun Tokugawa Yoshimune came to power in 1716 (Kasaya 2001, 175–180). Tsushima domain officials managed to obtain Korean seeds and seedlings and sent these to Edo on several occasions between 1721 and 1728, while the bakufu also sought to obtain seedlings of Manchurian ginseng from Chinese merchants in Nagasaki (Imamura 1940, 4:230–245). Several decades of sustained effort eventually resulted in success, and in 1746 the bakufu issued a decree allowing

the sale of Japanese cultivated ginseng descended from the Korean seedlings obtained through Tsushima. Throughout this period, herbalists, medicine merchants, and bakufu officials had sought to learn all they could about ginseng, sending queries through Tsushima domain officials, questioning visiting Chinese doctors and merchants in Nagasaki, and posing questions to the Medical Experts and other Korean doctors who visited Japan in the retinue of the diplomatic embassies. Since ginseng on the continent was generally harvested wild rather than cultivated, these questions yielded few direct insights into cultivation methods. However, Japanese doctors remained eager to learn more about the topic from visiting Koreans.

During their protracted investigations into the characteristics of local ginseng-like plants and the methods needed to cultivate imported ginseng varieties, Japanese doctors had become acutely aware that different growth conditions and processing methods could alter the appearance, flavour, and perhaps also the medicinal qualities of ginseng. "Flavour" had traditionally been regarded as a subtle intrinsic quality of drug substances that was not necessarily identical to the apparent flavour perceived by the tongue, but many doctors were inclined to suspect that a difference in perceived flavour was also indicative of a difference in efficacy.

However, there were also obvious precedents that might have prompted eighteenth-century Japanese doctors to think about processing ginseng in order to alter its flavour. During the seventeenth century, a Chinese refugee from the Qing conquest had identified a Japanese species closely related to Korean ginseng (*Panax japonicus*, known as *chikusetsu ninjin* ["bamboo-segment ginseng"] or *hige ninjin* ["whisker ginseng"]), and during the same period that some Japanese herbalists were seeking to cultivate Korean ginseng from imported seeds and seedlings, others were developing methods for processing native Japanese ginseng in an attempt to render its flavour and efficacy equivalent to that of the Korean product. Some medicine merchants were so confident in their processing methods that they falsely sold their processed Japanese ginseng as imported Korean ginseng or as Japanese cultivated Korean ginseng (Imamura 1940, 2: 499–503). Conversely, Tamura Ransui, who had been one of the key figures in the efforts to cultivate ginseng in Japan, thought that he could see faint imprints of binding, cloth texture and bamboo latticework on imported Korean ginseng roots, suggesting that these roots had been processed according to methods similar to those used for Japanese ginseng (Tamura n.d., 5a–b). The Ancient Medicine physician Kagawa Shūan also argued for the value of ginseng processing methods, since he believed that the bitter flavour of native Japanese ginseng varieties was only an incidental characteristic that did not affect their therapeutic usefulness but arose as a consequence of different methods of processing and cultivation; he therefore proposed that Japanese ginseng could be used effectively as a ginseng substitute if it were brewed together with liquorice root to balance the harshness of the flavour (Kagawa 1738, 46b–f). By the middle years of the eighteenth century, the differences between Korean ginseng, Chinese ginseng, and Japanese cultivated Korean ginseng, together with the pharmacological implications of different growth conditions and processing methods, had thus become subjects of widespread confusion and disagreement among Japanese doctors.

These differences among ginseng varieties were therefore obvious subjects about which to question visiting Koreans, who were generally more than willing to assume the role of experts on this topic. Shin Yu-han recorded that his Japanese hosts asked him about ginseng processing methods when he was visiting the country as Composer of Documents (*chesulgwan*) in the 1719 embassy (Imamura 1940, 5:124). When the embassy of 1748 was passing through Osaka on its way towards Edo, the Japanese doctor Naomi Genshū offered Cho Hwal-am a sample of Japanese ginseng to evaluate, but Hwal-am declared that although its overall appearance resembled ginseng, its bitter flavour and its pattern of striations meant that it was clearly something else (Naomi 1748, 1:8a–b). Hwal-am faced similar questions from the doctors whom he met in Edo: Niwa Seihaku asked him about different varieties of ginseng and related plants, including those that grew in Japan and those brought to Japan by Chinese merchants (Niwa 1748, 1:3b–4a, 2:5b–8b, 3:3a), while Kawamura Harutsune tried unsuccessfully to persuade Hwal-am that his father had developed a method for processing bitter Japanese ginseng that did not make use of liquorice or other herbal drugs but nevertheless imparted a sweet flavour and physiological effects that were similar to those of imported Korean ginseng (Kawamura 1748, 1:17b). Hwal-am seems eventually to have grown tired of having to repeat his criticisms of Japanese ginseng, for when the Osaka doctor Momota Kinpō asked him to evaluate a root of Japanese ginseng, he simply smiled and did not reply (Watarai 1748, 3:9a). When the embassy was stopping in Osaka on its return journey from Edo, Hwal-am explained to Naomi Genshū why he thought that even Japanese cultivated Korean ginseng would be unlikely to have the same medicinal properties as true Korean ginseng: "Ginseng is not a thing that can be transplanted. In our country we have tried transplanting ginseng into gardens, but it soon decays." (Naomi 1748, 2:8b). Like the many doctors who continued to argue that ginseng imported from Korea was superior to that grown within Japan, Hwal-am believed that the potency of a drug was inseparably associated with the place and environment of its growth and that transplanting it to a new location meant that it could no longer be considered the same drug. Because of such beliefs, the bakufu's drug import substitution policies achieved only partial success in their attempt to reshape patterns of trade in medical goods; the types of motion involved in such trade were shaped by local environment and terrain in ways that were not easily altered.

Yet although Korean Medical Experts consistently sought to persuade their Japanese interlocutors that that genuine ginseng grew only in Korea and that it required no processing prior to its medicinal use, several Japanese doctors also recorded that the Koreans had eventually proven willing to pass on knowledge of "secret" processing methods. Kawamura Harutsune managed to persuade Cho Hwal-am to reveal his secret methods by claiming that his grandfather's disciple had received them from Ki Tu-mun in 1711, but that the written account of this method had subsequently been lost; he thus implied that it would not constitute a betrayal of secrecy for Hwal-am to transmit these methods to him once again. Although Harutsune did not publish a description of the "wonderful" secret method that Hwal-am transmitted to him, he noted that he had submitted this information

to the bakufu in addition to keeping a copy at home (Kawamura 1748, 18a–b). The knowledge of these processing methods seems to have remained a closely guarded secret for some time afterwards, for Tamura Seiko tried to employ a similar strategy to elicit knowledge of secret processing methods from Yi Chwa-guk during the embassy of 1764; this time, Seiko referred back to Cho Hwal-am's transmission of such methods to Kawamura Harutsune as a precedent. Chwa-guk at first denied that there were any such methods and insisted that the many Japanese doctors who had been asking him about them were simply mistaken, but in the face of persistent questioning he eventually relented and revealed his "secrets" to Seiko (Tamura 1764, 1:10a–18b). When Chwa-guk met with Yamada Tonan just three days later, he once again sought at first to deny the existence of processing methods, but subsequently relented and revealed his "secret" methods to Tonan as well (Yamada 1764, 4b–5a).

All of these Japanese doctors wrote in the published versions of their brush talks that the transmission of secret methods had taken place, but they did not publish any information about the methods themselves, and it is thus difficult to know how to interpret these half-hearted attempts to maintain secrecy. Imamura Tomo has noted that there is indeed little evidence for the existence of processing methods in Korea during this period, and suggested that when Chwa-guk supposedly revealed his "secret method" to Tonan, he simply invented one in order to bring an end to Tonan's importunate questioning (Imamura 1940, 5:124–125). If there were indeed genuine secrets that might have allowed Japanese ginseng producers to compete with Korean ginseng producers on an equal basis, it is difficult to believe that the Korean Medical Experts would have been willing to allow their transmission; however, if the methods that the Korean doctors "revealed" were only minor variations on methods that were already well known, it is surprising that the Japanese doctors who received them would have sought to maintain such "secrets" by omitting the information from the published versions of their brush talks. It is possible that the reason these Japanese doctors refused to make these secrets public was precisely that the secrets involved no genuinely new information: these doctors might have hoped to gain in reputation by claiming possession of secrets transmitted to them by foreign visitors, and once the Koreans had departed there was no risk that the emptiness of these secrets would be exposed. However, any such explanation must remain speculative in the absence of additional evidence.

In 1764, several Japanese doctors also asked the visiting Korean Medical Expert Yi Chwa-guk for his opinion concerning "Cantonese ginseng," an unusual ginseng-like root that Chinese merchants had been bringing to Japan since 1747. Although most Japanese doctors did not realize this at the time, this drug was in fact American ginseng (*Panax quinquefolius*), which had been harvested in the forests of North America and brought to China by French and British merchants as a trade good since 1727 and whose shipping to Nagasaki by Chinese merchants probably began not long afterwards. The appearance and characteristics of American ginseng were close enough to those of traditional East Asian ginseng varieties that it seemed plausible that these drugs could perhaps be used interchangeably. However, the American ginseng was also falsely sold as Korean or Chinese ginseng and the pharmacological and legal status of Cantonese ginseng were thus highly controversial. Just a few

months before the arrival of the Korean diplomatic embassy of 1764, the bakufu had issued a decree forbidding the sale of Cantonese ginseng, and this prohibition remained in place until 1788 (Imamura 1940, 2:496–499; Hellyer 2009, 74–75). Yi Chwa-guk in any case flatly rejected the idea that this drug could be seen as equivalent to true ginseng, and suggested instead that it might be a variety of *shajin* (Tamura 1764, 1:18a; Yamada 1764, 4b–5a). Since most Japanese doctors at this stage already believed that Cantonese ginseng was distinct from Korean ginseng, Chwa-guk's expression of this opinion only served to confirm their existing suspicions.

6.5 Communication, Confrontation and Cultural Conflict

Although the embassies offered chances for personal interaction between Korean and Japanese doctors, the nature of the Koreans' journey through Japan could detract from the quality of cultural exchanges. Not only were the periods during which individual Japanese doctors could meet with the Korean doctors extremely brief, but the Korean doctors themselves were often suffering from physical exhaustion and the psychological strains of travel. Cho Hwal-am complained that his exposure to wind and dew during the sea journey from Korea had left him with a severe headache, damaged his spleen and stomach so that he had trouble eating and drinking, and left him unable to recover from his illness even after taking medicine for several days. The Japanese doctor Kan Dōhaku expressed concern that Hwal-am's repeated meetings for brush talks were delaying his recovery further, but Hwal-am pointed out that he was not in a position to refuse them (Kan 1748, 11b). Yi Chwa-guk also fell ill during his journey through Japan, and this experience may have exacerbated his annoyance at the poor quality of Japanese medicines: towards the end of one evening's discussions with the Japanese doctor Tamura Seiko, Chwa-guk produced from his medicine box a sample of charred magnolia bark (*kōboku*) obtained from Japanese drug merchants, and placing it alongside a sample that he had brought with him from Korea demanded that Seiko examine the two samples and state which one had been prepared correctly. Seiko expressed his own regrets for the fact that Japanese medicine merchants often over-processed the medicines that they sold, and explained that competent Japanese doctors would never use such badly charred magnolia bark, but Chwa-guk nevertheless launched into a diatribe accusing Japanese doctors of paying attention only to writing and neglecting real practice (Tamura 1764, 2:7a–10a). Although Chwa-guk quickly apologized for this outburst, he made similar disparaging remarks in his brush talk with Yamada Tonan the following evening, claiming that Japanese doctors sought only to cultivate "talent" at the expense of "virtue" (Yamada 1764, 5b–6a). However much these accusations may have been provoked by personal frustrations, they also expressed a sense of the deeper conflicts between the Korean visitors and their Japanese hosts that lay beneath the outwardly polite conventions of the brush talk meetings. Despite their many shared interests and assumptions as practitioners of medicine within

the broader East Asian tradition, these Korean and Japanese doctors nevertheless encountered each other not simply as individuals, but also as representatives of distinct medical cultures with different ideas about what it meant to be a doctor and what counted as medical knowledge.

Differences in social and political organization between Korea and Japan meant that the elite Korean and Japanese doctors who met with each other as the embassies travelled through Japan occupied quite different positions in their own respective societies, and thus had different assumptions about what it was appropriate for doctors to know and how it was appropriate for doctors to act. In Korea, where the political class was constituted by a *yangban* elite that reproduced itself socially and ideologically through civil service examinations based on the orthodox interpretations of the Confucian classics, doctors and other technical experts belonged to the intermediate *chungin* class. Although the top ranks of doctors were also required to pass examinations on a range of medical classics, their status was never as high as that of *yangban* scholars who mastered the study of Confucian learning (Hŏ 1990). High-ranking *yangban* scholars might also seek to become acquainted with medical learning, but this was a personal goal rather than one that formed part of their social and official functions. Tokugawa Japan never adopted a system of civil service examinations as a primary mechanism of controlling access to political power, and although the bakufu and domain lords encouraged the development of Confucian scholarship, the Confucian scholars whom they supported never managed to establish themselves in a position of ideological dominance analogous to that of their counterparts in China and Korea and were often treated by default as just another class of technical expert (Unoda 2007). Many of the Japanese scholars who defined themselves as "Confucians" (*ju*) earned an income through the practice of medicine; at the same time, there was a widespread assumption that the education of elite doctors should extend beyond medical treatises to include a broad range of Chinese and Japanese classical learning, and the overlap between the social categories of doctors and Confucian scholars was thus much greater in Japan than in Korea.

As Kim Ho has pointed out, Korean visitors to Japan often remarked on these differences between the "scholarly paradigms" of the two countries (Kim 2008b, 86). When Shin Yu-han visited Japan in the retinue of the 1719 embassy, he noticed that the Japanese seemed to esteem doctors more highly than Buddhist monks or Confucians, and that Confucians who were unable to obtain positions as domain administrators often ended up employed in military or medical roles. As a consequence, many of the talented Japanese individuals with whom Yu-han interacted during his journey were doctors. Kim In-gyŏm, who visited in 1764, observed that whereas an examination system like that of China or Korea could allow talented individuals to take up political careers, the hereditary character of official employment in Japan meant that many such individuals ended up practicing medicine instead.

The comparatively greater extent to which Japanese doctors cultivated their literary abilities could become a source of embarrassment for visiting Korean doctors. In 1748, Cho Hwal-am apologized that he was not a literatus (K. *munsa*, J.

bunshi) and was unskilled with the brush, but he was nevertheless willing to engage in exchanges of Chinese poetry and even asked Noro Genjō to write out a Japanese poem (*waka*) in phonetic script (Noro 1748, 1:25b, 2:9b). In 1764, Yi Chwa-guk was more determined to avoid these sorts of literary exchanges and repeatedly declined invitations to engage in poetic exchanges: he insisted that since he was accompanying the embassy as a Medical Expert, poetic composition was beyond the scope of his skills and responsibilities (Kamei 1764, 5b; Yamada 1764: 1b). On the other hand, Korean visitors did not shy away from expressing criticisms of the Japanese social and political order. In 1748, Cho Hwal-am asked Kan Dōhaku whether he was unaware of the harm caused by "feudalism" (K. *ponggŏn*, J. *hōken*), alluding to the fact that in contrast to the more centralized political structures of China and Korea, much of Tokugawa Japan was governed by samurai houses with hereditary authority over territorial domains. Dōhaku deflected the question by claiming that it was an inappropriate topic for discussion between doctors, but he also advised Hwal-am to read the essays of Ogyū Sorai's disciple Dazai Shundai on the topic of feudalism in order to understand why the Korean system was not necessarily superior (Kan 1748, 6b).

Discussions about drug materials and other plants and animals uncovered more fundamental differences between Japanese and Korean assumptions about the qualifications for medical practice. These discussions concerned one of the fields of learning in relation to which the Japanese doctors held the greatest hopes for their encounters with visiting Koreans, but it was also the area in which they experienced their greatest disappointments. Following a series of meetings with members of the Korean embassy of 1719 that failed yield any substantial new insights into the species described in the *Precious Mirror of Eastern Medicine*, one Tsushima domain official complained that Koreans were so concerned with passing their examinations that few of them took an interest in the sorts of practical questions that the Japanese had hoped to discuss with them (Tashiro 1999, 87). In 1748, one of the first things that bakufu medical official Niwa Seihaku did upon meeting Cho Hwal-am was to present his Korean visitor with a list of names of Korean species that he had been unable to identify; Hwal-am promised to look over the list and to provide as much information as possible, but also added that "in our country, doctors and medicine gatherers are distinct. Doctors do not gather these things for themselves, so there is much that we do not know about these things." Seihaku pressed him further on the issue, insisting that doctors should at least have sufficient knowledge of *materia medica* to distinguish between false and genuine samples of a drug, but in the end he obtained little of the information that he desired (Niwa 1748, 1:2b–3b).

In 1764, Yi Chwa-guk admitted in a brush talk conversation with Tamura Seiko that "our country's doctors do not gather drugs, but only read books and discuss principles" (Tamura 1764, 1:18a; cf. 2:6a–b). Five days later, the precocious young scholar Yamada Tonan taunted a Korean official reputed to be knowledgeable about medicine with the accusation that his inability to identify plant species represented a departure from the medical customs of antiquity (Yamada 1764, 7a–8b). This official had declined to answer Tonan's question about the Korean name of the plant known in Japanese as *omoto* (*Rohdea japonica*), claiming that these sorts of

questions were appropriate for people who gathered herbal medicines but did not lie within the scope of medicine itself. After a vigorous exchange of accusations and counter-accusations, the brush talk ended when the Korean official set aside his brush and began talking in Korean with Yi Chwa-guk (who had been standing to one side while this exchange took place), after which the two Koreans left the room without further comment.

The increasingly confident attitude that eighteenth-century Japanese doctors displayed in their interactions with the visiting Koreans stemmed in part from their pride in the distinctive achievements of the Ancient Medicine doctors.[4] In brush-talk discussions during the seventeenth and early eighteenth centuries, Japanese doctors had sought clarifications from the Koreans about their difficulties in understanding and applying the doctrines of the Song, Jin, Yuan and Ming dynasty treatises that doctors of both countries would at that time have regarded as fundamental to medical learning. The earliest suggestion of the idea of Ancient Medicine arose in Kitao Shunpo's discussions with Ki Tu-mun in 1711, but Shunpo raised the question of doctors who "admire the Han and Tang and are not interested in the Song and Yuan" only in passing, and he did not identify these doctors as representing a distinctively Japanese phenomenon (Kitao 1713, 33a). In 1748, the Osaka doctor Momota Kinpō asked Cho Hwal-am to comment on Korean doctors' use of sweating, vomiting and purging remedies, the typical therapeutic strategies of Japanese Ancient Medicine; but after Hwal-am's reply that Korean doctors often used sweating and rarely used vomiting or purging, their discussion simply passed on to other topics (Watarai 1748, 1:4b). When the embassy of that year reached Edo, Niwa Seihaku asked Hwal-am for his opinion on the relative merits of "scholarly medicine" (*gaku i*) and "formula medicine" (*hō i*), which was one way of formulating the difference between Ancient Medicine and more traditional forms of scholarly medical practice, but Hwal-am declined to offer a definitive response (Niwa 1748, 3:4b).

It was not until the embassy of 1764, when many of the doctors who met with the visiting Koreans were advocates of Ancient Medicine, that this novel style of medical practice became a prominent topic in the brush talk discussions. The Koreans in this embassy first learned about Japanese doctors' new enthusiasms even before reaching the main islands of Japan when they stopped on the small island of Ainoshima and met with Kamei Nanmei, a scholar and doctor who had returned the previous year from a brief period of study in Kyoto (Yoshida 1999; Fuma 2006; Kim 2008b). Despite his youth, Nanmei had already attained some distinction in his studies of classical scholarship and medicine, taken respectively under the scholar-

[4]The development of quasi-nationalistic pride in the achievements of Ancient Medicine paralleled the slightly earlier development of pride in the scholarly and literary achievements of Itō Jinsai, Ogyū Sorai, Dazai Shundai and Hattori Nankaku, but with slightly different chronology. Ogyū Sorai's popularity within Japan was at its peak around the time of the 1748 embassy, when his style of scholarship featured prominently both in the brush talk conversations themselves and in the prefaces to the published versions. By contrast, Ancient Medicine was in 1748 still at an early stage of its emergence as an important phenomenon, and did not begin to feature prominently in the brush talks 1764. For further discussion of this parallel, see Kim (2008a).

monk Daichō and the Ancient Medicine doctor Nagatomi Dokushōan. Throughout the Koreans' stay on Ainoshima, Kamei Nanmei exchanged poems with the Korean visitors and discussed various scholarly matters. In response to questioning by one member of the Korean party, Kamei Nanmei enumerated the remarkable medical books that Japanese doctors had produced in recent years: Yamawaki Tōyō's *Record of the Organs* (*Zōshi* 1759) and *Principles of Medicine* (*Yōjuin isoku* 1751), Kagawa Shūan's *Selected Pharmaceuticals* (*Ippondō yakusen*, 1731–1738) and *Remarks on Medicine* (*Ippondō kōyo igen* 1788), and Nagatomi Dokushōan's *Investigations into Vomiting Formulas* (*Tohō kō* 1763) and *Miscellaneous Notes on Roaming at Leisure* (*Man'yū zakki* 1764). These were very recent works, some still unpublished and circulating only in manuscript at the time of the embassy, and when the Koreans encountered this unfamiliar style of medical thought they were often quick to reject it. When the embassy was passing through Osaka the following month, the Medical Officer Nam Ch'u-wŏl commented after leafing through a copy of Yamawaki Tōyō's *Record of the Organs*: "The scholars of your country are fond of spouting forth strange ideas, but I did not know that you also have strange intestines. In our country, we consistently follow the old rules of the Yellow Emperor and Qibo [the legendary Chinese medical sages whose dialogues were represented in the *Yellow Emperor's Inner Canon*], and we do not seek new doctrines. To know these things by cutting is the behavior of a fool, but to know these things without cutting is the ability of a sage—do not be confused about this!" (Kitayama 1764, quoted in Yoshida 1988, 58).

It was also while the Koreans were staying on Ainoshima that Yi Chwa-guk first encountered the aggressive empiricism and scepticism that were characteristic of the Ancient Medicine doctors' epistemology and rhetoric. Kamei Nanmei explained to Chwa-guk that during the previous 30 years a group of Japanese doctors had revived the methods of Ancient Medicine, taking Zhang Zhongjing's *Discourse on Cold Damage and Miscellaneous Illnesses* as a model and relying exclusively on the three therapeutic methods of sweating, vomiting and purging; Chwa-guk agreed that emulation of Zhang Zhongjing was a worthy aim, but objected to the idea that the medical art could be restricted to these three methods alone. Nanmei stood firm in his assertion that these three methods were the only legitimate therapies, but admitted that Japanese doctors had great trouble treating certain illnesses, such as *tenkan* 癲癇 (seizures), *rōsai* 勞瘵 (phthisis), and *kakuitsu* 嘔噎 (dysphagia), and he asked whether Chwa-guk could tell him of any formulas that in his experience had proven effective. The thrust of Nanmei's question lay in his use of the term "experience," a concept that was central to Ancient Medicine epistemology, but Chwa-guk missed its significance and gave an answer based primarily on textual sources: he distinguished between depletion seizures, repletion seizures, and seizures associated with different internal organs and viscera, and contrasted the easily treated *yang* seizures, which occurred once or twice daily, with the much less easily treatable *yin* seizures, which occurred just two or three times each month. The concepts of *yin* and *yang*, fundamental categories of East Asian medical thought throughout much of its history, had been severely criticized by Ancient Medicine doctors as speculative metaphysical notions with no place

in medical discourse. When Nanmei politely asked if Chwa-guk could clarify his use of these terms, Chwa-guk merely repeated the standard doctrine that *yin* and *yang* syndromes could be distinguished by pulse diagnosis—rapid and full pulses corresponded to *yang* syndromes, while slow and depleted pulses corresponded to *yin* syndromes—and Nanmei was unimpressed: "In that case, you are saying that when seizures occur once or twice a day, the pulses should be rapid and replete, but when the seizures occur once or twice a month, the pulses should be slow and depleted. But if you examine this against the facts, it isn't necessarily true." Chwa-guk had no response to this line of reasoning, and after an awkward pause he diverted the conversation towards a discussion of pharmacological topics (Kamei 1764, 5a–7a).

A similar case of failure to engage in productive interactions can be seen in Chwa-guk's conversations with the Japanese doctor Yamaguchi Ansai on the topic of epidemic diseases. Yamaguchi Ansai's understanding of these diseases was shaped by the writings of seventeenth-century Chinese doctors, including Wu Youxing's *Discourse on Warm Epidemics* (*Wenyi lun* 1642) and Guo Zhisui's *Jade Standard for Sand-Rashes and Swellings* (*Shazhang yuheng* 1675); these Chinese writers had rejected earlier ways of explaining epidemics in terms of malign conjunctions of calendric and celestial factors, and had proposed instead that epidemics were caused by miasmas (C. *liqi*) that entered the body through the nose and mouth (Hanson 2011). Ansai asked Chwa-guk about these diseases, their physiology, and their treatment, and alluded repeatedly to his own assumption that these diseases arose from miasmatic causes, but Chwa-guk apparently failed to notice Ansai's use of miasmatic terminology and offered answers based on the assumption that they arose from calendric conjunctions (Yamaguchi 1765, 1:4a). Korean doctors were not unaware of miasmatic understandings of epidemic disease: in 1748, Cho Hwal-am had alluded to miasmatic ideas in his responses to questions from Kawamura Harutsune, although he did not necessarily adhere to them consistently (Kawamura 1748, 2:1b–2a, 32a–b). The fact that Ansai and Chwa-guk failed to engage in any substantial discussions on this topic suggests that the circumstances of their meeting were not conducive to recognizing or acknowledging their differences of opinion, and the episode highlights the limitations of these brush talks as a medium for intellectual exchange. The restricted duration of the interactions between Japanese and Korean doctors and the framing of their interactions through the conventions of diplomatic ritual all tended to discourage them from addressing their differences in ways that might have facilitated productive resolutions.

6.6 Conclusion

Historians have sometimes assumed that brush talks between Korean and Japanese doctors were an important mechanism for the exchange of medical knowledge (e.g. Nakao 2007, 173–175), but there is little evidence that these meetings had any lasting impact on medicine in either country. Despite the potential that these

encounters between Korean and Japanese doctors seemed to hold for the exchange of ideas and for the transmission of new learning, the conflicting expectations of the Japanese and the Korean participants and the restricted duration of their interactions meant that these meetings often failed to live up to their promise. The Korean Medical Experts were unable to answer many questions on the topics of greatest interest to their Japanese hosts, and despite outward displays of respect for their Korean guests, many of the Japanese doctors placed little value on the types of medical learning that the Korean Medical Experts had cultivated at home. It might thus be possible to see these meetings as constituting little more than a piece of pageantry in the motion of the Korean embassies across Japan: just as the early Tokugawa bakufu had exploited diplomatic relationships to consolidate its own domestic legitimacy, many eighteenth-century Japanese doctors sought to transform their meetings with Koreans into a strategy to gain respect among their own peers, a goal that did not always encourage them to engage in productive intellectual exchange. Nevertheless, the Korean embassies provided an unusual set of opportunities for Japanese doctors to understand their own country's medical culture through interactions with their Korean contemporaries. They articulated this understanding gradually, through a series of brief personal encounters that were separated by intervals of many years and whose experience was transmitted from one generation to the next through manuscript and printed records of brush talk conversations.

Taken as a whole, this cumulative record of interaction reflected the gradual divergence of Korean and Japanese medical cultures over the course of the eighteenth century. The rapid development of Japanese medical learning in the late eighteenth and early nineteenth centuries is often attributed to Japanese doctors' efforts to study and translate European medical treatises, beginning with Sugita Genpaku's famous translation of a Dutch anatomical treatise, *New Book of Anatomy* (*Kaitai shinsho* 1774). However, the confrontations between Japanese and Korean doctors described above all occurred well before the translation of European texts had begun to exercise any significant influence over Japanese medicine, and the medical discussions were carried out almost entirely within the framework of East Asian medical ideas. Japanese and Korean doctors had found the resources within the East Asian medical tradition to articulate very different visions of medical practice and to develop contrasting cultures of medical knowledge, and the encounters made possible by the Korean embassies forced the participants on both sides to confront these contrasts directly.

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Chapter 7
The Circulation of Sericulture Knowledge through Temple Networks and Cognitive Poetics in Eighteenth Century Zhejiang

Philip S. Cho

Abstract The circulation of sericulture technology and religion were shaped by social historical factors as well as cognitive processes. The spread of silkworm temples in Zhejiang reflected a complex dynamic between imperial rule and local popular religion related to crafts. Temples were the nodes of social networks along which information flowed in the form of ritual and song.

7.1 From the Court to the Countryside

In eighteenth and nineteenth century Jiangnan, performances of sericulture songs and rituals bound communities of practice and circulated technical knowledge, materials, and manpower through an expanding regional network of silkworm temples. Popular religious folk songs and rituals often encoded not just the experience of raising silkworms but also much of the technical knowledge. Interweaving sericulture religion and technology, local literati compiled these vernacular songs as instructional or doctrinal manuals to explicitly teach Zhejiang innovations to neighboring areas such as Jiangsu. The editors criticized ancient sericulture classics for only discussing Northern methods not suitable for southern climes. As with the contemporary innovations in medicine, these Zhejiang manuals asserted a regional identity and introduced local methods for feeding and caring for silkworms.

The spread of silkworm temples in Zhejiang reflected a complex dynamic between the court and an increasingly urbanized local religion. Sericulture rituals and temples suddenly proliferated in eighteenth century Hangzhou, Jiaxing, and Huzhou, the primary areas for raising silkworms in Zhejiang. These began as rural shrines and celebrations that gradually moved to urban centers, first in the primary

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cities of the region then in secondary ones. In wealthy homes, performances of sericulture songs allowed elite audiences to vicariously feel the sweat and breadth of sericulture labor. These imagistic performances elicited intense emotions on special occasions.[1]

Historians have generally assumed the spread of silkworm temples was a result of the Qianlong Emperor's (1735–1796) revival in the late eighteenth century, of the rites and temple to the Empress Lei Zu (嫘祖), the legendary chief sericulturalist. This ceremony was the counterpart to one for the Divine Husbandman (神農 Shen Nong), together signifying the proper social order as encapsulated in adages such as, "Men plow and women weave." This revival has served as evidence of the success of a powerful imperial agenda to educate the populace about virtue.[2]

A closer examination shows that the urbanization of sericulture temples were local initiatives with little connection or funding from the court. People continued to worship a variety of silkworm deities and often simply adapted rituals used in rural areas. Qing, as well as other dynasties', attempts to standardize the gods were often illusory as people accepted only the name of an imperially sponsored god, but continued to worship local gods their own way. Community pact rituals, in which allegiance was to be sworn to the emperor, were often changed by local elites to pledge loyalty to a dominant local lineage.

Expanding this network of religious technology, officials from Huzhou set up sericulture offices and silkworm temples in neighboring areas such as Zhen Jiang. Seeking to revive local economies, they transplanted mulberry trees and workers to try and duplicate Huzhou's success. These officials also explicitly used sericulture songs and rituals as both teaching aids and organizational tools to synchronize labor activity. In the process, some sericulture promoters such as Shen Bingcheng eventually even became silkworm gods themselves.

Prior to the eighteenth century, the few existing silkworm temples clustered around Huzhou, the primary city of the region. Rural silkworm festivals began around the secondary cities of Xiushui and Puyuan, which jointly held celebrations every 3 years, and spread outwards towards the coast. (See Appendix A for more details.)

7.2 Rural Silkworm Festivals

Rural silkworm festivals and activities bound communities through religious worship into translocal networks through which the technology and culture of sericulture circulated.[3] Prior to the mid eighteenth century, there are almost no records

[1] Whitehouse 2008.

[2] See Mann 1991 and Bray 1997. See also Cho 2011. Permission from the CAS to expand and develop Cho's 2011 work for an English audience.

[3] Chinese Primary Sources 参见: [8], 卷8, 第169–188页; 卷12, 第270–285页; 卷15, 第309–344页; 卷16, 第344–353页; 卷17, 第353–358页。[10], 卷下, 第777页。[5], 卷4, 第905–907,

Fig. 7.1 Distribution of sericulture fairs and temples prior to 1736

of silkworm temples in the lower Jiangnan area. Villagers, instead, communally worshipped a variety of silkworm deities at rural celebrations such as the Field Silkworm Festival that were widespread throughout the region (Fig. 7.1, Appendix A). Usually on the third or fourth day of the lunar New Year in February, elders would collect money and plant a pole in a nearby vacant field. Thatch or firewood was bound around the pole and, in later periods, either a flag or a woven reed tent was placed over the pole to create a temporary structure for worship. One seventeenth century observer vividly recounts a lively scene in Puyuan County of villagers watching special performances of plays, music, and dragon dances. One the third and final day, the people would gather around the tent and sing songs to praise

911页; 卷11, 第413–421页; 卷13, 第422–432页。[12], 卷2《地理下·风俗五十一》; 卷9《祠祀·坛庙一》。[4], 卷3, 第11页; 卷10, 第34页。[2], 卷140, 第41页。[3], 卷2, 第?页; 卷3, 第112页。[9], 卷4.第164、169、457–463、468–476。[11], 卷1, 第147页; [13], 卷1《农桑六·风俗四》; 卷2《风俗五·物产五》; 卷7《寺观》; 卷8《祠祀三》。

the silkworm gods. Spirit mediums would foretell of the coming silkworm rearing season. Finally, the structure was then set on fire, heralded by the clash of cymbals, beat of drums, and crackle of fireworks thundering in the night sky.

Such religious celebrations facilitated social and technological exchange. For instance, every 3 years during the time of Pure Brightness in early April, Xiushui and Puyuan Counties would jointly (as did Shimen County independently) celebrate the beginning of the silkworm season by holding a Spirit Festival to pray to the silkworm deities. Young women would dress up as silkworm maidens and stand atop a building decorated with various kinds of silk. Men and women would come from far and wide to mill about in the rowdy market scene.

Interlinked by waterways, nearly every town also celebrated with boat races. In Shimen, people would gather at the Dragon Silkworm Temple for the Dragon Silkworm Festival, beating drums and flying flags in their boats to pray to the silkworms. In Haichang, a village elder would dance to direct a boatload of characters who were dressed as a Buddhist monk, a capped Daoist priest, a lavishly gowned palace official, and an armored soldier. The elder would forecast the upcoming prices for mulberry leaves and silk by the number of fingers he held up.

Rather than cloistered in the home, women throughout the region went on pilgrimages called *ta qin*g (踏青), or *stepping out in spring*. They would either make themselves, or purchase from Buddhist temples, silkworm flowers made of cut cocoons or paper to don in their hair and paste onto their silkworm-egg baskets. Women would then take the eggs to be blessed by spreading them out onto tombs, as in Haichang, or a remote mountain temple in Mount Han (see Fig. 7.3), which drew pilgrims from Huzhou, Tongxiang, and Deqing.

Silkworm festivals and pilgrimage routes were also accompanied by bustling markets. Women and their families would purchase the necessities for rearing silkworms before the period of Silkworm Taboos, when everyone shut their doors to all visitors and bunkered in their homes.

Rural religious festivals and temples were thus centers of cultural, economic, and technological exchange. For example, people in Haiyan traveled to these festivals in Wuxing to learn a technique for feeding silkworms. Not surprisingly, when early twentieth century reformers sought to teach western methods for egg rearing, they set up their experimental station in a silkworm goddess temple.

Silkworm temples suddenly proliferated in the eighteenth century while rural festivals disappeared. These temples also went through a process of urbanization as patrons gradually moved them closer to cities.

7.3 Urbanization of Silkworm Worship and Establishment of Temples

Local officials and potentates sought to gain control over the religious centers of sericulture production by moving them to urban areas and establishing officially sanctioned sericulture temples and rites (Fig. 7.2, Appendix B). As one local literati

Fig. 7.2 Distribution of temples from Qianlong Reign (1736–1795) onward

noted, silkworm festivals were originally rural people's rituals, but city-folk became increasingly involved, especially for entertainment. After 1750, nearly every town in Huzhou and Jiaxing had a silkworm temple, often located within the temple to the City Wall God or to the Yellow Emperor. In Jiashan County, for example, the temple to the Ancestor Silkworm was moved from an ancestral hall outside the city to a Daoist pavilion within the city proper.

This urbanization process involved both appropriating the lands of Buddhist and Daoist temples and subjugating popular silkworm deities under the local official pantheon. For example, in 1811 a local official in Changxing named Yan Junshou (延君壽) ordered silk producer Sun Xingquan (孫星泉) and others to move the Silkworm Ancestor temple from its rural location on Mount Zi to a temple just outside the main city gates. Then in 1867, a charitable philanthropist, Zhong Lin (鐘麟), once again moved the temple to within the City Wall God Temple by converting a Daoist one.

The number and distribution of temples dramatically expanded at the end of the Qianlong reign. In 1794, a local official named Xing Yu (邢瑒) from Xiushui memorialized to Ji Qing (吉慶), the Censor of Zhejiang province, stressing the importance of bringing sericulture worship under government control by establishing an official silkworm temple and ceremony. Sericulture, Xing Yu noted, was as

vital as agriculture to the people's livelihood in Hangzhou, Jiaxing, and Huzhou. Villagers worshipped a variety of deities such as the Horse Head Goddess and Xiling Shi. Every year they prayed to the Silkworm Spirit behind the Yellow Emperor's temple. However, the people had never worshipped through a government performed grand sacrificial ceremony.

Emperor Qianlong, after questioning Ji Qing, bestowed a placard to the Silkworm Temple. Every spring and fall, a sacrificial ceremony was to be performed using an ox and sheep. The ceremonial instruments were to be like those for Shen Nong's rite.

Taking advantage of this mandate, Xing Yu, Xu Shuanggui (徐雙桂, District Magistrate of Jiaxing), and Zhan Xiaoceng (战效曾, District Magistrate of Xiushui), converted an old Buddhist temple into one for the Ancestor Silkworm. Instead of the imperially proscribed ceremony, they instituted a standard rite of burning wood to pray, like the rural Field Silkworm Festival. Young and old would swarm to the celebration, held jointly by Jiaxing and Xiushui. Within the temple they also set up wooden statues of the Yellow Emperor and the Silkworm Spirit. To the east sat the Horse Head Maiden and to the west the Three Maidens who controlled the price of mulberry leaves.

A close examination of sericulture temples and rites reveals that the development of silkworm temples was the result of local initiatives by powerful elites and low-level officials. Among the patrons were families involved in the silk industry such as Sun Xingquan and, as we will see later, Shen Bingzhen (沈炳震). The local officials were mostly of the District Magistrate level. Many such as Shi Lemi (什勒密), Dai Yu (岱毓), and Xu Shuanggui were Manchu bannermen. Other patrons such as Bao Zhen (鮑鉁), Li Tinghui (李廷輝) and Gong Jun (龔濬) were portrayed as virtuous scholar-officials who sought to restore the spiritual life of the people by re-establishing shrines and temples. He also promoted agriculture by building dikes and introducing techniques for irrigating fields. Bao Zhen, for example, became famous for cracking down on corrupt officials who extorted exorbitant taxes from the people. As acts of meritorious charity, he used his own money to restore a collapsed bridge and rebuild the silkworm temple, even to the point of putting himself into debt, which led to temporary imprisonment.

Imperial power may have created a favorable political climate under which local potentates could take the lead. Yet, the ability to standardize the gods was illusory. Even after the government decreed an official Ancestor Silkworm Goddess rite in 1794, the primary deities in temples varied, including not just the Ancestor Silkworm Goddess but also the Silkworm King or Emperor. The standard ceremony that was supposed to mirror the rite of Shen Nong also differed.

Imperial supervision and support were superficial. In a revealing statement, one official noted that the spring silkworm ceremony was to be paid through local taxes of 4 *liang* of silver, and the fall ceremony by funds provided by the imperial government. Even this minor imperial support was only supposed to be temporary because in 1802 the government, seeking to save money, ordered that both ceremonies be paid through by local taxes. The mystery however, pondered

official Lu, was that although he had examined all the tax and revenue books, there were no records of imperial funds nor did he have any idea how the festival money had been collected.

At issue, underlying much of the rhetoric about virtue, was control over the social and ritual bonds of an industry vital to local life, economy and tax revenue. Discussing the various sericulture gods, local leaders in Wuxing and Wucheng noted that the people understood the importance of ceremony and worshipping the gods. However, commoners did not understand the proper chain of authority and mixed the deities up. People simply prayed to report their good and bad deeds and receive blessings. The temple fairs and markets were chaotic. This situation meant that people were always stepping over their social boundaries and breaking social norms.

Describing the situation in Wuxing, Bao Zhen explained how the tax revenue from the three Wu districts were the first in the realm and among them Wuxing was the most affluent. The people there primarily stressed sericulture but had never had a specialized temple to pray to the Ancestor Silkworm nor did they properly honor the gods with the right sacrificial vessels, foods, and drink. Instead they relied on graven images in mountain and earth temples of a woman with flowing sleeves on horseback like the Horse Head Maiden or the Horse Cry Buddha. Hence, he collected money, measured the ground, set the foundation, gathered the materials, paid the craftsmen, and employed petty officials to manage the work. At the center of the Golden Lotus Pagoda was a spirit kitchen to worship a wooden idol of Xilingshi (西陵氏) accompanied by other silkworm goddesses to each side.

None of this, he stressed, was done by imperial command. Hence, there was only a temple rather than an official altar. A monk held the keys to the door and would open it at the appropriate times and make prognostications for the following silkworm season. In the spring and fall a procession of staff officers (僚屬 *liaoshu*) and gentry (紳士 *shenshi*) would make sacrifices and report, beating drums and playing music in something *like* an official rite (一如典禮 *yi ru dian li*). From then on, the women raising silkworms and country-folk (邑人 *yi ren*) would come in droves to learn how to respectfully worship the silkworm spirit (Fig. 7.3).

7.4 The Cognitive Poetics of Sericulture Folksongs

Music and poetry are among the most ancient and universal technologies shaping human societies by facilitating group cohesion and knowledge transmission. Scholars in the humanities and sciences have examined how rhythm, rhyme and tone aid working memory by metering speech as well as coordinating behavioral or conceptual scripts. Reuven Tsur's pioneering work in cognitive poetics further emphasizes how religious music and verse can either directly elicit strong feeling or simply allow an audience to perceive it. More recently, cognitive neuroscientists have investigated how music-evoked emotions can modulate activity throughout all limbic and paralimbic structures at the foundation of neuroaffective mechanisms.

Fig. 7.3 The 13th Annual Silkworm Goddess Festival at Mount Han, April 4th, 2008. Since the 1980s, numerous histories have claimed the antiquity of the silkworm temple and pagoda at Mount Han. This is not, however, supported by the historical record. According to Qing dynasty local gazetteers, villagers came to the mountain to worship the silkworm deities. However, the pagoda and temple originally belonged to other gods. In the 1990s, the local cultural bureau and a tourist company converted the structures to revive the silkworm celebration. Silkworm "Maidens" at the restored silkworm goddess temple at Mount Han 含山

Joint musical performance also results in various forms of physiological synchrony within a group.

Despite these insights, historians of science, technology, and medicine have largely ignored how music and poetry bound communities of practice and circulated technical knowledge within them. A few noted exceptions include Angela Leung's work on popular medical instruction, Dieter Kuhn's analysis of the *Rhapsody of Women Weavers*, and my work on craft and healing rituals Kuhn Dieter (1995). More research, however, is needed to understand how culture and cognition influenced each other in the circulation of technical knowledge in the pre-modern world.

Popular sericulture folksongs were often sung at festivals to worship the silkworm deities. Such songs outlined the entire process of raising silkworms and intertwined the technical details of work with religious rituals (see Appendix C).

Mid Qing erudites and officials of the Hangzhou, Jiaxing, and Huzhou area such as Shen Bingzhen and Fang Guancheng (方觀承) recounted how they traveled collecting such songs to learn from the common people and spread innovation. The songs they compiled and annotated, along with those by Dong Lizhou (董蠡舟) and Dong Xun (董恂) were widely circulated in sericulture manuals and local gazetteers. Ethnographic studies in the 1980s have also found remarkably similar songs still sung in rural areas of the region.

Unlike poems aimed at literati, these songs were not written in an elegant style, emphasizing either some cosmological harmony or an idealized gender division of labor as embodied in imperial sericulture rites. Instead, the songs are mostly crude and simple. They emphasize the entire family's involvement in the work and the importance of ritual measures at every stage of rearing silkworms to ward off and exterminate pestilence and evil spirits and to invite blessing and fortune from various deities.

The songs provide story schemas and the ritual, procedural scripts, for the technique of raising silkworms. As Charles Egan has pointed out for *yue fu* poetry set to music, the oral culture of folk songs and written culture of the literati were not clearly separate. Sericulture folk songs reflected the interaction of oral and written culture. Meter, rhythm, rhyme, and formulaic language were flexible tools for oral composition during performance. However, these poetic structures were not all the songs relied upon to convey knowledge. The songs drew from a shared understanding between performer and audience. The songs relied on the cognitive use of metaphoric time and space through story grammar and ritual. This is the case of the analogy of raising silkworms as children and of silkworms climbing up a "mountain" as pilgrims.

7.5 Washing and Preparing the Silkworm Eggs

The songs begin the sericulture season with an invocation to the Horse Head Goddess and ritual recipes for washing silkworm eggs. On the twelfth day of the twelfth lunar month, women would steam buns in the shape of cocoons or the 12 animals of the lunar cycle. Silkworm eggs were divided into "salt eggs," which produced fine and hard cocoons, and "(limestone) powder eggs," which produced cocoons that were large and loose. The different eggs were seasoned appropriately by generously sprinkling them with either salt or limestone powder from burnt or ground clamshell. Eggs that were not seasoned were called "bland eggs" (淡種淡种 dan zhong). As one commentator of the songs notes, these eggs easily became sick and produced cocoons that were not durable, thick, or heavy.

Once the buns had finished steaming, other ingredients such as rape and the flowers from a kind of bean were added to the boiling water. As the soup cools, a stick of incense was lit and a gong struck as the family worshipped the stove god and Horse Head Goddess. When the incense burned out, the soup had cooled enough

and was scooped up with the hands and poured over the eggs to soak them. Once another stick of incense had burned out, the eggs were removed and rinsed in cool strong tea and allowed to soak for a week to a fortnight. Once rinsed in pure water and dried, the eggs were hung out onto eaves of the house in the winter frost for a night.

To ward off pestilence, the family draws an arc of limestone chalk in front of the doorway and puts up new pictures of the doorway spirit. Men especially, worship the white tiger and eat snails. Spirit mediums and other prognosticators are also called in to choose auspicious times.

***Dong Lizhou's Nan Xun Sericulture Folk Songs* 董蠡舟南潯蠶桑樂府**

(Stanza 1)

Washing the Silkworm [Eggs] 浴蠶:

隔歲招搖指星紀,農事告登蠶事始

Marking the end of the year, Zhao Yao (7th Dipper Star) points to the (completion) of the stars' cycle; the agricultural work completed sericulture work begins.

盡攜布種置中庭,一宵露置冰霜裏

Carrying all the cloths on which the silkworm eggs are spread, set them in the middle of the courtyard; place them for an evening outdoors in the ice and frost.

取潤還須茗汁淹,漉以蜃灰糝以鹽

To moisten the eggs, it is still necessary to immerse them in tea; drizzle clamshell powder or sprinkle salt [over the eggs]

田家一例鋤非種,先事全將醜類殲

Like farmers [tilling], cull the unfit eggs; the first order of business is to completely exterminate the bad eggs.

轉眼已過百五日,老婦版盆羅滿室

In the blink of an eye 105 days already passes; the old wife stacks the egg sheets to fill the room.

粉糍祀灶為祈蠶,蒸來翠釜湯餘熱

[Make] rice buns worshipping the stove god to pray for the silkworms; the green copper pot for steaming [the buns] is still very hot.

油籃豆莢花叢叢,摘取一握投湯中

The rape and the bean pods bloom in clusters; gathering up a handful throw them into the soup.

挹湯滃種令霑浥,更借茅簷薄日烘

Scooping up the soup with the hands, pour it over the eggs to soak them; afterwards use the thatched eaves [of the house to hang the eggs sheets], the weak sun dries [them]

摒擋忽忽日過午,何暇挑青禳白虎

(continued)

(continued)

Tidying up hastily, the day passes into afternoon; how is there free time to celebrate eating field snails and singing chants to the white tiger?

呼兒換卻舊門神,還待布灰畫作弩

Call the children to change and take down the old [picture] of the door spirit; [one] still needs to place the ashen-powder, drawn to make [the shape of an archer's] bow.

***Dong Xun's Nan Xun County Sericulture Folk Songs* 董恂南潯蠶桑樂府**

(Stanza 1)

Inundating the Eggs 潞種种

嘉平二七良日逢,以水浴種當去冬

The 14th day of the 12th lunar month is an auspicious day to come across; washing the eggs in water ought to be done the winter before.

今年又到清明夜,浴蠶例與殘年同

Once again approaching the evening of Qingming; the routine of washing the silkworms is the same as the year before.

門神競向白板貼,以灰畫地如彎弓

[Everyone] vies to paste the door spirit on the white boards [of the entrance]; using ashen-powder [they] draw on the ground [an arc] like a bent bow.

祈禳白虎辟蠶祟,欲趨其吉先祛凶

Pray and chant to the white tiger to ward off evil spirits [that harm] silkworms; [if one] wants to hasten good fortune first drive off bad luck.

婦姑忙忙不得暇,磨米作團虔且恭

The wives and maidens are busy, receiving no time to rest; grinding flour to make buns [they are] pious and reverent.

蒸團水香潞布上,採摘花片撬其中

The water from steaming the buns is fragrant, gush it over (egg) cloth; pick flower petals and mix them in.

一年蠶計此初事,能慎厥始斯有終

In a year's planning of sericulture [work], this is the first step; only if [one] is able to be careful in the beginning will there be an end.

深閨努力促緅業,拮据忙月無餘功

In the innermost chambers exert all [one's] energy frantically doing needlework; [because during the] poor and busy month [of raising silkworms] there won't be any extra strength [for anything else].

7.6 Stages of Feeding and Sleeping

As the silkworms mature, they go through three or four stages of sleep. In addition to selling silk flowers and charms, Buddhists temples often kept night watches for the villagers to wake and feed the silkworms. Songs such as the *Hymn on Caring for Silkworms* were performed to proclaim the times in the silkworm lifecycle.

The oral transmission of many of these songs is reflected in the variety of Chinese characters used to denote the same specialized term. This indicates that when the songs were written down there was no standard character but only close homophones. For example, nearly all the songs use a specialized term, "*lan si*" 嬾思懶思, 攬絲揽丝 or "*lan shi*" 嬾食懶食, to refer to the slow feeding and sluggish behavior of worms just before the third or fourth stage of dormancy. Yet, Dong Lizhou, Dong Xun, and Fang Guancheng all borrow a variety of characters, sometimes even more than one in a song, that sound similar but would normally have very different meanings.

The silkworm's third out of four stages of sleep is often referred to in contemporary literature as "*chu huo*" 出火 literally meaning "to exit fire." This means that the worms no longer need to be incubated against the body or by fire. The phonetic rather than idiomatic origins of this term is indicated by how song commentators sometimes instead use the characters "*chuo huo*" 輟火辍火. The word for pupae, which in modern Chinese is "*yong*" 蛹 is denoted in some ancient texts with a rarely used character "*yu*" 蜮, pronounced the same as the word for "foolish" 愚. As one commentator notes, local people borrow the character "*nu*" 女, meaning woman, because it sounds closer to the vernacular.

***Fang Guancheng's Hymn on Caring for Silkworms* 看蠶詞**

(Versus 18 and commentary)

抽飼齊看吐喙,沸絲又到揚花。已見考娘箔滿,須教繕婦燈遮

[Just before the 4th sleep] separate out the worms that are at the same stage of [sluggish] feeding, watch as they spit out of their mouths, the precursors of silk known as the "bubbling up or blooming" of silk [atop the leaves and branches]. One can already see the silkworm tray is filled with the mature silkworms

(Commentary: 眠皆同大起後六七日視蠶身喉足明必**嬾食**)

Shen Bingzhen's Sericulture Folk Songs 沈炳震蠶桑樂府

Catching and Sleeping 捉眠

Line 1:

朝來新見紅**嬾思**,蠶眠應在下春時

In the morning I see the worms are at the stage of being sluggish and ready for sleep; the silkworm period of dormancy ought to be in the second half of spring.

(continued)

(continued)

***Dong Xun's Nan Xun County Sericulture Folk Songs* 董恂南潯蠶桑樂府**

Catching and Sleeping 捉眠

Line 1:

三眠四眠種各異,欲眠不眠**攬絲**未

During the third and fourth dormancy the worms are each different; wanting to sleep but not yet sleeping, could it be that the worms are at the stage of being *sluggish and ready for sleep?*

Line 2:

小姑纔向筐簿看,道是今番不須飼

The maidens have just inspected the baskets; they say that now [we] must not continue feeding [the worms]

Line 3:

紛紛多見紅**嫩思**,只在黃昏眠可遲

Looking at the whole melee [of worms] at the stage of being sluggish and ready for sleep; only at dusk does sleep come late.

7.7 Sickness and Pollution

Many of the rituals procedures described in the songs involve hygiene against physical and spiritual pollution and disease. During pilgrimages, women pasted flowers on their baskets and in their hair as spiritual protection as they traveled to have their silkworm eggs blessed. These "silk flowers," (絲花 *si hua*) often sold at Buddhist temples, could at times also have medicinal purpose. As one commentator notes, what villagers call silk flowers refers to a kind of wild rose, whose leaves are dried and ground into a powder. When applied to the eggs, the powder would help stimulate the worms to emerge. The ash from bran chaff was an alternative and was also good to treat silkworms that had a form of illness indicated by discoloration, sometimes referred to as "heat poisioning 熱毒".[4] Worms that were fed this nutritional supplement along with rice and green bean flour required a third less mulberry leaves, which was critical during frequent shortages, and produced whiter and more durable silk. As the worms matured, families would clean out the waste and refuse from feeding the silkworms and burn the dried twigs in the form of a dog to rid the house of spiritual pestilence in a ritual similar to burying a straw man.

[4]See Dong Lizhou's Sericulture Folk Songs, stanza and commentary on "first sleep." See also Cheng Yitian's commentary and Ballad on Caring for Silkworms, verse 10.

Fang Guancheng's Hymn on Caring for Silkworms* 看蠶詞 *(Verse 10)

糝粉斑糠早具,香楓細箬均攜。桑分家町野町,炭採梅溪畫溪

Sprinkle powdered bran chaff prepared early, fragrant maple and thin palm leaves have all been brought in, mulberry trees are divided into those around the house and those in the fields, silkworm charcoal can be found in Meixi and Huaxi districts.

***Dong Lizhou's Nan Xun Sericulture Folk Songs* 董蠡舟南潯蠶桑樂府**

Removing The Weeds 出薙

Line 7/9 枯莖薙出芻狗陳,明日晨炊可代薪

Weed away the dry (mulberry) branches and set up a straw dog; when cooking the next morning this can be used in replace of kindling.

Line 8/9 豈徒爨下供所乏,更得草人土化法。

This is not merely to supply [firewood] that is lacking under the stove; but also to achieve [the same ends] as the transformative ritual technique of burying a straw person [to rid someone of illness].

7.8 Maturation and Celebration

As the worms reach maturity, they crawl up a lean-to or tent like structure from which they hang to spin their cocoons. This is called "ascending the mountain." Pointing out how some people are educated in classics but ignorant of practical matters, Fang Guancheng recounts how once an official new to Huzhou chastised villagers because he thought they literally meant that the worms climbed a mountain. For two nights, the people chant the prayer "The silk must be white, the cocoons must be heavy." At the end, the village sings and worships the silkworms goddess in the fields at the Zhao Tian Can festival.

Fang Guancheng's Hymn on Caring for Silkworms

Verse 21

草縛參差似樹,繭攢磊落如星。吐盡千絲萬縷,受人幾度丁寧

The stalks are tied together unevenly like trees, the cocoons pile up in myriad clusters like stars. When the spinning is done there are countless strands of silk. The people who collect [the cocoons] are too few and must be urged on.

(Commentary: 祝之雲,絲須白,繭須重,諄諄不已*)*

(continued)

(continued)

Pray softly and repeatedly chant without stopping: "The silk must be white, the cocoons must be heavy."

Verse 26

驗取青闌合緒,除蠒透柴坳。禮獻大眠夏候,祥騰巨春郊

Examining the cocoons, select the best and tie their ends together, discard the extraneous fluff and poor quality silk. The rite of proclaiming the final sleep is at the end of summer. Auspiciously the fire from the large bonfire dances in the spring suburbs.

Commentary: 三眠既成百室賽祀之獻大眠元旦至上元村民以竹葦束炬然之名照田蚕)

With the completion of the third sleep the people worship the spirits, the rite is called proclaiming the great sleep. From the first of the year till the lantern festival (15th day) the villagers use bamboo bundles and light them on fire. This is called lighting the field silkworms.

7.9 The Use of Popular Religious Songs in the Dissemination of Sericulture Innovations

Reflecting the interaction among different strata of society, local erudites recorded and commented on popular religious songs and used them to disseminate technical knowledge. Songs were particularly favored as teaching aids because they were comprehensive yet simple to understand. For example, Liu Guyu (劉古愚), vexed by his illiterate wife's hard-headedness, rewrote the contents of Liu Qingli's (劉青藜) *Sericulture Essentials* as a folk song entitled *Song on the Main Points of Raising Silkworms.*[5] He then had his wife chant the song by heart to learn ancient sericulture techniques so that she may improve them. Such a method, he thought, would remove barriers in communicating technical knowledge and improve the possibility of innovation.[6]

More often, local erudites sought to learn the popular songs and rituals of sericulturalists and use them to transfer innovations to other regions. By the eighteenth and nineteenth centuries, sericulture folk songs from the Hangzhou, Jiaxing, and Huzhou region, were widely used in this manner. Huzhou erudites such as Fei Xingpu (費费星甫) argued that folksongs, such as Shen Bingzhen's collection, were important because ancient sericulture classics were mired in the

[5]Liu Qingli 劉青藜(山西), Sericulture Essentials 蠶桑備要. 1896. Beijing. National Library Rare Book Collection.

[6]Liu Guyu 劉古愚(陝西), Song on the Main Points of Raising Silkworms 養蠶歌括. 1897. Beijing National Library Rare Book Collection.

old northern methods which were not suitable for current conditions in the south (北法多而南法少 . . . 泥古而不宜今).[7]

Similarly, Fang Guancheng argued that environmental conditions such as the soil in Huzhou were the opposite of ancient times. He and his compatriots repeatedly castigated so-called educated gentlemen who ate lavish meals and adorned themselves in rich silks, yet knew nothing about raising wheat or silkworms. It was necessary to probe the principle of these things. Learning from the peasants was important because they too possessed knowledge. Fang Guancheng noted, "The common people rhyme ballads about their [sericulture] customs, each line ties together the steps in the process, and the people sing this so that it will be passed on forever." As a revival of Song sericulture rites, the ballad he compiled was then performed with eight musicians as an official ceremony to proclaim the times of the silkworm growing stages.

One of the best examples of the use of sericulture folksongs to spread innovation is how Shen Bingzhen's *Sericulture Folksongs* came to be widely distributed in the Jiangnan region in sources such as the *Primer on Western Wu Sericulture* 西吳蠶略 西吴蚕略, *Account of Huzhou Sericulture* 湖蠶述湖蚕述, and *Huzhou Gazetteer* 湖州地方誌志.

According to the Shen family genealogy or Jiapu 家譜谱 and local gazetteers, Shen Bingzhen came from an influential family in Huzhou, which patronized numerous temples and religious festivals. Although one of the brightest scholars of the land, Shen Bingzhen had little ambition for an official post and even when given the opportunity was soon dismissed for pointing out his superior's mistakes. As he was keenly interested in the classics of ceremony and ritual, when the Qianlong government decreed an official sericulture rite, Shen Bingzhen went to the countryside to study local folk customs.

At a bonfire festival for silkworms, most likely a Field Silkworm Festival, Shen Bingzhen asked a village elder about the worship songs that people sung to the silkworm spirits. The elder replied that only at the end of each stage do they sing praises to the spirits (賽神 *sai shen*); hence there were a series of songs which explain the entire process of raising silkworms from beginning to end. However, the songs had never been recorded and were inelegant. The elder then suggested that Shen Bingzhen record and revise the folk songs. After obtaining and embellishing 20 stanzas, Shen Bingzhen gave them to the villagers who had gathered together asking for them and the elder was overjoyed.

In 1869, Shen Bingzhen's grandson Shen Bingcheng (沈秉成) was appointed Surveillance Commissioner (觀察 *guan cha*) of the city of Zhen Jiang 鎮江 In Jiangsu Province. War and famine had ravaged the once large farming region, leaving the people destitute and without livelihood. To revitalize the local economy, Shen Bingcheng initially spent his own money to try and promote sericulture.

[7]Fei Xingpu 費星甫, Primer on Western Wu Sericulture 西吳蠶略. Beijing National Library Rare Book Collection.

However, the problem was greater than expected as the people had never before planted mulberry trees or raised silkworms.

Shen hence ordered his assistant Xu Xuejie (徐學堦) to gather several of the local officials and erudites to discuss the matter. They worried that raising sufficient funds would take too much time. Two of the officials finally set up a loan fund to which Shen Bingcheng and several of his neighbors contributed as charity.

A sericulture office was set up at the southern outskirts of the western end of the city. A group of officials and city leaders then divided up the responsibility of managing the office. Shen purchased mulberry trees from Jiaxing and Huzhou in Zhenjiang, and distributed them to the villagers. Moreover, he selected skilled sericulturalists from his hometown in Huzhou to teach the local people methods for planting mulberry trees and raising silkworms. Many Jiangsu villagers who had worked in Huzhou silk factories also returned.

As a teaching aid whose "words were simple yet comprehensive in meaning," the office distributed the sericulture folk songs that Shen Bingcheng's grandfather, Shen Bingzhen, had collected. To these 20 stanzas, Shen Bingcheng added illustrations and commentary in his *Summary of Sericulture*. Three years later Wang Rizhen included these songs along with both Dong Xun and Dong Lizhou's compilations of sericulture folk songs and commentaries in his *Account of Huzhou Sericulture*. That same year, the he and the editors of the Huzhou and Nanxun gazetteers, included these songs to spread sericulture knowledge widely throughout the Jiangnan region.

Shen Bingcheng was among several late nineteenth century officials who became sericulture gods. The people of Zhenjiang and neighboring areas prayed to a chestnut wood placard for Shen Bingcheng for his virtue in teaching sericulture. To his left and right were placards to two other officials, Li Shuyan 李叔彦 and Zhang Jiushan 長久山, who later carried on the work in the office for teaching sericulture. The people in Danyang (丹陽), Jiangsu, likewise set up a wooden placard in the Jin Gong temple to worship the district magistrate, Ze Changwu (迮常五), for his work since 1867 promoting sericulture to assist the people.[8]

7.10 Conclusion

Sericulture technology and culture flowed along with the rhythm and voices of ritual performance. Cognition of music and ritual were significant means of transferring information within a broad network of religious communities whose members came from diverse backgrounds. Like drosophila labs in the early twentieth century, silkworm temples, festivals, and pilgrimages bound communities into trans-local networks through which the culture and technology of silkworms circulated. An oral tradition of popular religious songs and rituals performed at these celebrations

[8](清)淩焯等修, (清)佘錫麟等纂:《重修丹陽縣志》三十六卷,清光緒十一年(1885)刊, p.670。(清)人李恩绶撰,李丙荣续辑:《丹徒县志摭余》第九卷尚义, p. 3–7.

encoded not just the experience of raising silkworms but also much of the technical knowledge. Prior to the mid-eighteenth century, these activities were mostly rural, worshipping a variety of silkworm deities such as the Horse-Head Goddess. Taking advantage of an imperial mandate by the Qianlong emperor (1735–1796) in the eighteenth century, powerful local elites and low-level officials sought to gain control over the ritual spaces of sericulture production and female religiosity by moving them to urban areas and establishing officially sanctioned sericulture temples and rites. This urbanization process involved both appropriating the lands of Buddhist and Daoist temples and subjugating popular silkworm deities under the official pantheon. A close examination of these temple initiatives reveals that they were not funded by the imperial government nor followed a standard imperial rite. Imperial control over the deities was illusory, as local people often adapted rural rituals rather than follow official rites.

Popular religious rituals and songs were also important for spreading technological innovation and asserting regional identity. This was especially true for the Hangzhou, Huzhou, and Jiaxing regions of Zhejiang Province, the most important center for raising silkworms at the time. Songs from this area not only describe the entire lifecycle of the silkworm but the techniques for raising them, often as part of a ritual process. The performance of these songs, as both religious ceremonies and entertainment, was critical in conveying the embodied knowledge and experience that words alone could not express. Raising silkworms was literally as raising children, within the warmth and bosom of the home. As with so many of the technical arts ranging from healing to calligraphy, the emotive aspect in the mastery of skill or technique was reflected in the performance of the work as ritual. Sericulture promoters from Zhejiang used these songs and staged performances to teach methods for rearing silkworms to villagers in other areas such as Jiangsu Province. The literati who recorded and adapted these songs often complained that the ancient classics on sericulture only discussed northern methods, which were not suitable for southern climes. This followed a broader trend, such as in the categorization of diseases, which asserted a southern regional identity in the natural environment distinct from the northern cradle of Chinese civilization.

The politics of religious and cultural authority between the court and the countryside was thus entwined in the performance of the technological rituals and the natural history of the silkworm. The spread of the organism and its technology was facilitated through religious culture and reflected in religious monuments.

The eighteenth century urbanization of silkworm temples, and the recording of sericulture folksongs shows how, before China's attempts at modernization, officials, erudites, and sericulturalists interacted to take craft knowledge from the household and local religious communities, and disseminate it for ideological and developmental agendas. The combined use of texts, songs, and rituals was a hybrid social and cognitive technology for transforming tacit craft skill into transferable knowledge for a variety of people.

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Appendix A: Time Distribution and Patronage of Sericulture Fairs and Temples Prior to Qianlong Reign

Date/period	Location	Temple/festival
1576	Puyuan 濮院	Field Silkworm Festival 田蠶會(燒田蠶,田柴會)
		Held jointly with Xiushui every 3 years.
1573–1620	Xiushui 秀水	Burning the Field Silkworm Festival 燒田蠶
		Held jointly with Puyuan every 3 years.
1620–1627	Pinghu平湖	Lighting the Field Silkworm
		Festival 照田蠶
1638	Wucheng 烏程	Burning the Field Silkworm Festival 燒田蠶
1662–1722	Haiyan 海鹽	Lighting the Field Silkworm Festival 照田蠶 (Travel to Wuxing)
1662–1722	Haichang海昌	Lighting the Field/Divining the Purple Maiden Festival 照田卜紫姑
1734	Changxing 長興	Ancestor Silkworm Shrine 先蠶祠
1818?	Shimen 石門	Dragon Silkworm Temple 龍蠶廟
		[a]Ma Ming Wang Miao 馬鳴王廟 (Locally called 裴將廟)

[a]May not be relevant. Pei and Jiang were two Tang dynasty generals jointly worshipped as Ma Ming Wang. Cross reference Jaixing Fuzhi

Appendix B: Time Distribution and Patronage of Sericulture Fairs and Temples from Qianlong Reign Onwards

Date	Location	Name of shrine/temple	Patrons
1734	Changxing (at base of Mount Zi)	Ancestor Silkworm Shrine	
1811	Mount Tai Temple outside Changan Men		District Magistrate Yan Junshou, Silk Tradesmen Sun Xingquan and Associates move shrine to outside city walls
1867	City Wall God Temple Former San Guan Hall		Gentleman Zhong Lin and Associates move shrine by converting former worship hall
1764	Wucheng (Yellow Emperor's Temple Rear Hall)	Ancestor Silkworm Temple (proposed renovation)	Villager Tang Sheng and Associates
1783	Deqing	Ancestor Silkworm Shrine (renovation)	District Magistrate Shi Lemi
1794	Huzhou City (Northwest of City)	Ancestor Silkworm Temple	
1794	Jiashan (Originally in the Huan Bi Hall. Moved to Taiping Dao Temple)	Ancestor Silkworm Shrine	District Magistrate Dai Fengwen Moves shrine from hall to Daoist temple
1794	Pinghu (Xilin Monastery)	Ancestor Silkworm Alter	District Magistrate Huang Songling establishes alter in monastery
1794	Haiyan (Southeast of Poplar Bridge)	Ancestor Silkworm Temple	
1794	Xiushui (outside west gate at San Ta Monastery)	Ancestor Silkworm Spirit Temple	Prefect Xing Yu, Jiaxing District Magistrate Xu Shuanggui, Xiushui District Magistrate Zhan Xiaoceng
1795	Shimen Chongfu Monastery.	Ancestor Silkworm Temple	
1795	Tongxiang (Shine inside City Wall God Temple).	Silkworm Spirit Shrine (Re-established)	District Magistrate Li Tinghui establishes shrine
1870			District Magistrate and Rural Gentleman Yan Chen

(continued)

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Date	Location	Name of shrine/temple	Patrons
1797	Xinsheng (Neng Ren Monastery)	Silkworm King Hall	Monastery converted
1894		Silkworm Emperor Hall	Local person Lu Mingxin and associates
1896		Silkworm Shrine	Local person Lu Mingxin and associates
1799	Wuxing	Silkworm Spirit Temple	District Magistrate Bao Zhen (philanthropist)
1799	Wukang (Former mulberry orchard on western grounds of City Wall God Temple)	Ancestor Silkworm Temple (Xilingshi)	District Magistrate Gong
(1821−1850)	Nan Xun Shrine established at Southern end of Charity Hall	Silkworm Spirit Shrine	
(1821−1850)	Shrine established at eastern end of Daoist Temple		
1857	Shrine established at western end of Buddhist convent		
1882	Linghu Zhi Yuan Monastery	Ancestor Silkworm Temple	Temple built on former monastery

Appendix C: Outline of the Silkworm Lifecycle Based on Sericulture Songs. From Wang Rizhen's 汪日桢 Nineteenth Century Collation of Sericulture Folksongs Recorded by Shen Bingzhen, Dong Lizhou, and Dong Xun

1. 浴種溻種	15. 上山
Washing the eggs	(Silkworms) climbing the mountain
2. 護種	16. 擦火
Protecting the eggs	Applying fire (to warm the silkworms)
3. 貸錢	17. 回山
Borrowing money (to buy mulberry leaves)	Returning from the mountain (collecting the cocoons)
4. 糊筐	18. 擇繭
Pasting the baskets	Selecting the cocoons

(continued)

(continued)

5. 收蠶	19. 繅絲
Collecting the silkworms	Reeling the silk thread off cocoons
6. 采桑	20. 剝蛹
Picking mulberry leaves	Removing the chrysalides
7. 稍葉	21. 作棉
Selling the mulberry leaves	Making “cotton”
8. 飼蠶	22. 辟絮
Rearing/ feeding the silkworms	Washing raw silk floss
9. 眠頭	23. 生蛾
First period of dormancy	Birth of the moths
10. 餉食	24. 布子
Feeding the silkworms	Laying eggs on sheets
11. 分蒿	25. 相種
Separating the silkworms (from the waste)	The pattern of eggs (for fortune-telling)
12. 鋪地	26. 望蠶信
Spreading the silkworms on the ground	Professing faith to the worms
13. 縛山棚	27. 賣絲
Tying up mountain tents	Selling silk
14. 架草	28. 賽神
Bundling up grass	Worshipping the spirits

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Part III
Motion as Free Thinking and Social Circulation

Chapter 8
Travel as a Basis for Atheism: Free-Thinking as Deterritorialization in the Early Radical Enlightenment

Charles T. Wolfe

> *I have been driven out of the court, where I knew not what to do; if they push me to leave France, wherever in Europe I shall go, I have acquaintances there thanks to my name. I can easily accommodate myself to a variety of foods and garments; I am indifferent towards climates and men.*
>
> —Théophile de Viau, 1623 (De Viau 1668, 13/1965, 58; all translations are mine unless otherwise indicated.)
>
> *It is up to us to go to extreme places, to extreme times, where the highest and deepest truths live and rise up. The sites of thought are the tropical zones frequented by the tropical man, not the temperate zones of the moral, methodical or moderate man.*
>
> —Gilles Deleuze (1962, 126.)

Abstract The early modern radical *savant* did not travel so much as he read travel narratives. From Montaigne's cannibals to Locke's talking parrot, from Leibniz's plans to create a race of "warrior slaves" to Diderot's utopian *Voyage de Bougainville*, a kind of 'science fiction' or 'deterritorialization' of the narrative of the familiar, Eurocentric, Plato-to-Hegel narrative of Western philosophy can be discerned. A key feature of these artificial travel narratives is that they serve as a basis for proclaiming atheism (and China plays a well-known role here). The radical *savant* described here is neither the solitary meditator, nor the participant in communal knowledge-gathering projects for national glory (Bacon, Linnaeus). He (for it is always a he in this case) is less a producer of a stable, cumulative body of knowledge than a destabilizer of forms of existing knowledge.

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8.1 Introduction: Early Modern Knowledge-Gathering and Heterodoxy

We have grown accustomed to certain familiar pictures or scenes of the early modern savant – *images d'Épinal*, they would be called in French: reassuring coloured pictures in schoolbooks. These include, minimally, the savant as player in a communal enterprise (Bacon and Boyle, in the Royal Society; Fontenelle and Maupertuis, in the Paris and Berlin Academies of Sciences) and the savant as 'solitary' (Descartes's rejection of authority and what some have called his emphasis on the individual over the community[1]). In other words, some savants have a House of Salomon, and some do not. More recently, attention has turned to a third figure we might call the savant as wanderer or traveler: hence the multiplication of Atlantic, Pacific, Caribbean narratives of knowledge expansion.[2] By 'traveler' I do not mean someone in a rather territorially homogeneous process of movement, like Locke's flight to Holland during the years 1683–1688, but rather, an individual involved in either of two kinds of knowledge-gathering projects:

(a) enterprises of trans-national expansion of knowledge and science like Linnaeus' wanting new plants for Sweden and sending his students around the world, including Daniel Solander on James Cook's first trip around the world, in 1768–1771; Linnaeus was quite explicit about Nature having "arranged itself in such a way that each country produces something especially useful"[3];
(b) enterprises of internal *dépaysement* or *Entfremdung* – that is, 'de-familiarizing' enterprises, like Leibniz's projects to investigate talking dogs, stones containing plants or dried fish, or most surprising, fossilized remains of unicorns, the latter in his geological work intended as the first volume of a history of the House of Hanover, the *Protogaea*[4]; enterprises which perturb the sense of familiarity

[1]Cf. Garber 1998, 40. This is not just true of the best-known texts such as the *Discourse* and the *Meditations*, but also the *Regulae* (Rule 3 emphasizes the importance of individual knowledge over and against knowledge from authority). Of course, one can also view Descartes as deeply 'dialogical' given the effort he put into collecting responses e.g. to the *Meditations*, but I do not think this attitude is 'fundamental' to his natural-philosophical project.

[2]Delbourgo and Dew, eds., 2008; Schaffer, Roberts et al. eds. 2009 (and commentary in Golinski 2011), and the various publications by Jorge Cañizares-Esguerra, including Cañizares-Esguerra and Seeman, eds., 2007.

[3]Linnaeus, letter of 10 January 1746 to the Swedish Academy of Science, quoted in Koerner 1996a, 151; see also Koerner 1996b. This aspect of Linnaeus has been well-known since Lisbet Koerner's study (Koerner 1999); a good shorter analysis is Sörlin 2000, 60–65. Interestingly, Linnaeus' vision of an *oeconomia naturae* (which may have influenced Smith's idea of the invisible hand), a vision of balance and equilibrium, meant that he refused to accept racist ideas about inequality of different races: "Wild peoples, barbarians and Hottentots differ from us only because of sciences; just like a thorny sour-Apple differs from a tasty Reinette, only through cultivation" (1759 speech to the Swedish Royal Family, quoted in Rausing 2003, 193).

[4]Leibniz wrote that he "has now seen and heard the talking dog; it pronounced well the words *thé, caffé*, *chocolat,* and *assemblée*, among others" (Leibniz 1849–1855, IV, 199, *cit*. in Ariew 2005, 139). On the *Protogaea* overall see Claudine Cohen's recent critical edition (Leibniz 2008).

or self-identity of a Western 'self' or 'narrative'. I do not discuss Leibniz's fascination with China here (see for instance his 1697 opuscule *Novissima Sinica* and his 1716 *Discours sur la théologie naturelle des Chinois*; Leibniz 1994; Perkins 2004). But I do return to Leibniz below – not as a promoter of universal peace and rationality, nor as a natural philosopher addicted to exotica and natural curiosities, but as a more Eurocentric, sometimes even Teutonic thinker who often spoke *for* Christian political power when he declared that "The Turks have already learnt *our* military arts and naval science . . . " (Leibniz 1923, IV: 1, 398, emphasis mine). The latter Leibniz is less the philosopher "who considered heaven to be his country" and more the man who wrote a poem beginning "Exulta, Germania!" when Belgrade was finally taken back from the Turks (Almond 2006, 467).

In the fascination with the unfamiliar to which Leibniz, among others, bears witness, sometimes despite himself, there is an intimation of a more destabilizing project, which I shall call in what follows knowledge as *deterritorialization*: a process by which a territorially familiar, essential, 'native' state or ethos is weakened, subverted and generally uprooted so that it becomes unfamiliar, non-foundational and de-essentialized.[5] We can see the latter kind of intention – it is hard to call it a 'project', since such cognitive enterprises are rarely 'knowledge-gathering' enterprises in any standard, cumulative sense and are even less likely to have a systematic character – taken up within the twilight world of the *libertins* (free-thinkers) and particularly the clandestine manuscript tradition from the mid-seventeenth to the mid-eighteenth century, with texts such as the *Treatise of the Three Impostors*, a variable combination of libertine texts, depending on the manuscript version, such as Vanini and Charron, extracts of Hobbes and especially Spinoza (it contains the first French translation of the Appendix to Book I of Spinoza's *Ethics*), which circulated in ever-reworked forms during the first half of the eighteenth century, beginning in 1719.[6] What may emerge from this is the emergence of a *fourth* figure (in addition to the group player, the solitary thinker, and the traveler): the savant as a radical, moving as it were from the intellectual galaxy studied by Robert Merton and Steven Shapin to that studied by Margaret Jacob and Jonathan Israel.[7]

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[5]The term 'deterritorialization' was first used in Deleuze-Guattari's 1973 *Anti-Oedipus*, where it had a psychoanalytic connotation of the freeing of a libidinal entity from pre-established objects of investment; but it quickly, in their *Thousand Plateaus* of 1980 (translation, Deleuze-Guattari 1987), also comes to mean a socio-political process whereby, e.g., a population is either dispossessed of its territory (like peasants by lords) or in contrast, freed from a fixed territory such as land or a factory. Closer still to the sense in which I am using the term, Deleuze and Guattari say in their work on Kafka that "the first characteristic of a minor literature in any case is that in it language is affected with a high coefficient of deterritorialization" (Deleuze and Guattari 1986, 16).

[6]The classic study of the clandestine tradition is Wade 1938; for recent overviews of the topic see Benítez 1996a, b; Thomson 2005, 2008, especially chapter 5: "Journalism, Exile, and Clandestinity."

[7]Margaret Jacob's focus on Freemason networks (in addition to her better-known studies on Newtonianism, the English Revolution and the Scientific Revolution) in Jacob 1981, 2006 fits as it

Moving from the savant as participant in a communal enterprise such as the Royal Society to the solitary meditator dissecting calves' or sheep's brains on Amsterdam's Kalverstraat and thirdly, to the traveler-wanderer, we arrive, then, at a fourth figure: a gentleman or rogue, scholar, pamphleteer, diplomat or amateur, who *does not* travel (except to flee punishment and censorship), is *not* engaged in globalized commerce – except in very diffuse senses such as the vitalist reception of Chinese medicine of the pulse via Jesuit translations, which I mention below – nor in the production of typical 'exotica' except inasmuch as they are reinterpreted to suit radical purposes: call them 'radical exotica'. A typical producer of radical exotica would be the *esprit fort* (and army captain) Boyer d'Argens, with works such as the *Lettres juives* (Boyer d'Argens 1738–1742), in which a group of Jewish travellers exchange impressions and stories of their adventures in various countries of Europe and the Mediterranean, or his *Lettres chinoises* of the following year, in which Spinoza's God is presented as derivative of the Chinese *Li*. Indeed many Europeans, d'Argens says, "follow a System which strongly resembles that of these new Chinese Commentators. *Spinosa*, a Dutch savant, was its *inventor*, or rather he *restored* it; for it is claimed that his sentiments were already, more or less, those of several ancient Philosophers."[8] We see here a more or less direct statement of a sentiment often derived from Pierre Bayle (who would not have approved of it in this form): millions of atheists forming a stable, ethically grounded society cannot all be wrong! I shall call this conceptual figure promoting such views the *radical savant*.

Before seeking to further articulate this figure, particularly its relation to processes of deterritorialization, I should mention some methodological difficulties that arise in this sort of reflection. Notably, it is not clear how one might maintain such types in systematic isolation from each other. Consider the vitalist reception and appropriation of Chinese and Japanese medicine in eighteenth-century France, mentioned above. What should we make of this case? It is indeed a *heterodox* case within Western medicine: vitalists construct medical knowledge of the pulse through Jesuit narratives of Chinese and Japanese medicine,[9] articulating a heterodox

were somewhere in between a narrative of respectable natural philosophers functioning as pillars of society and a narrative of anti-social, 'mad dog' deists / atheists / materialists like John Toland or the anonymous authors of the *Theophrastus redivivus* (1659), the *Treatise of the Three Impostors* (sometimes dated to 1716; cf. Benítez 1996a, 203), or *The Material Soul* (*L'Âme Matérielle*, approx. 1725–1730; Niderst 2003).

[8]Boyer d'Argens 1739–1740, vol. I, letter XIV, 106 (this text apparently served as a basis for Oliver Goldsmith's *Chinese Letters*). It is not possible here to go into details about this entertaining and interesting work; the first Chinese traveller-narrator describes how, upon arriving in Le Havre, he is asked if in China they believe in the Pope, and when he answers No, how he has to convince the crowd that his compatriots are also neither Huguenots nor Jansenists . . .

[9]Proust 1998; Terada 2006. There are Chinese and Japanese sources for the vitalist view: the former were notably collected in R. P. Harvieu/Louis-Augustin Allemand's 1671 *Les Secrets de la Médecine des Chinois* and the 1702–1776 Jesuit compendium *Lettres édifiantes et curieuses écrites des missions étrangères par quelques Missionnaires de la Compagnie de Jésus*; the latter notably include Willem Ten Rhijne's 1683 *Dissertation de arthritide: mantisa schematica de acupunctura* . . . (London/The Hague/Leipzig 1683; translation in Carrubba and Bowers 1974).

Western 'holism' through the appropriation of 'Eastern' medical ideas. The more 'holistic' trend in Enlightenment medicine appropriates these traditions in a much more sympathetic way than mainstream medicine which tended to speak of them as nonsense, or of Asian medicine as backwards, e.g., as lacking any knowledge of the circulation of the blood. There is a striking contrast between mainstream Western medical discourse saying Chinese medicine is nonsense, and (for instance) the vitalist Ménuret de Chambaud saying in no less a publication than the *Encyclopédie* that the Chinese have "gone further than us" ("il n'est pas étonnant qu'ils [les Chinois] soient allés plus loin que nous & qu'ils n'aient des lumieres supérieures aux nôtres"; Ménuret, "Pouls," *Enc*. XIII, 227a). He adds that they have a superior understanding of the interrelations of organs ("les filiations & les correspondances des visceres entr'eux sont sans doute bien apperçues en général," 227b). Ménuret studied the *Maijing* by Wang Shuhe as translated in Du Halde's 1735 *Description de l'Empire de la Chine* (*Description géographique, historique, chronologique, politique et physique de l'Empire de Chine et de la Tartarie Chinoise*).[10]

It is debatable whether Ménuret's positive judgment is an instance of extension of a national body of knowledge, or a kind of recognition of alterity in knowledge (a cosmopolitanism in knowledge, as it were); but it is not quite the figure of the radical construction of knowledge I am interested in, for it lacks a certain *destabilizing* dimension. To be sure, even if the vitalist interest in Chinese and Japanese medicine is not part of an aggressive program to destabilize European religious, metaphysical or political values, it nevertheless testifies to a different type of ethos, a non-conquering one. We are clearly no longer dealing with the kind of rhetoric which is probably most famous in its Baconian variant, of extending the "power and empire of the human race itself over the universe of things," or "the knowledge of causes, and secret motions of things; and the enlarging of the bounds of human empire, to the effecting of all things possible," as Bacon describes the ultimate goal of the program of the *New Atlantis*.[11]

It is noteworthy that the Jesuits were forbidden from studying and practicing medicine, and did not give much reports of treatments such as acupuncture. They focused on sphygmology (medicine of the pulse). Conversely, Ten Rhijne focuses on practices such as acupuncture (a word he is often credited with inventing), and does not mention the medicine of the pulse. On the role of sphygmology in the conceptual articulation of vitalist medicine in the eighteenth century see Terada 2006, and Wolfe and Terada 2008.

[10]To be clear, I am not using the word 'holism' in any especially valuative sense – in the older but still common sense, found on both sides of the 'divide', that Eastern thought is holistic whereas Western thought is mechanistic, with the implication that Western thought has somehow come closer to a hidden (holistic) truth by learning from the East – but rather as a historico-theoretical construct which had a certain efficacy. Namely, if 'mechanism' is the respectable paradigm of Western medical science in the seventeenth to eighteenth centuries (and beyond), 'holism' is a kind of heterodoxy, and as far back as the early eighteenth century, anti-mechanists looked to the East for legitimizing sources of their knowledge – which could be assimilated to 'native' forms of exotica such as the Hippocratic paradigm.

[11]Francis Bacon, *Novum Organum* I, 129; *New Atlantis*, in Bacon 1996, 480.

8.2 Knowledge as Conquest

Sometimes the idea of conquest just takes the form of an *analogy* between a project in natural philosophy and the voyages of discovery:

> it is fit that I publish and set forth those conjectures of mine which make hope in this matter reasonable, just as Columbus did, before that wonderful voyage of his across the Atlantic, when he gave the reasons for his conviction that new lands and continents might be discovered besides those which were known before; which reasons, though rejected at first, were afterwards made good by experience, and were the causes and beginnings of great events. (Bacon, *Nov. Org*. I, xcii).

This is still very vivid as an idea two centuries later when Charles Fourier (the Utopian socialist) asserts that an inventor stands to new ideas as a traveler-naturalist stands to new plants that he brings back from an expedition:

> To ask that an inventor not move away from received ideas is like demanding that a naturalist, upon returning from a voyage of exploration, present not a single new plant. Those who brought us back from America quinoa, tobacco, potatoes, cocoa, vanilla, indigo and cochineal – haven't they done us a much greater service than if they had only brought back known species? (Fourier 1845, ix–x).

Early modern savants are not always content with such analogies; in their zeal at achieving a kind of 'global reach' (a popular term in international relations theory, some decades prior to the term 'globalization', used to describe roughly the same economic phenomenon: Barnet and Muller 1974) they can depart from analogy altogether and plan *real* mastery of the world. Leibniz has been described as "the only prominent modern philosopher to take a serious interest in Europe's contact with other cultures" (Perkins 2004, 42). But the actual forms this "serious interest" could take are quite surprising. For after all, even the very respectable Leibniz, who "considered heaven to be his country," proposed a plan for *training a new army of warrior slaves*, in an audacious 1671 text entitled "A Method for Instituting a New, Invincible Militia that can Subjugate the Entire Earth, Easily Seize Control over Egypt, or Establish American Colonies" (written as an addendum to his better known *Consilium Aegyptiacum* or *Egyptian Plan*):

> A certain island of Africa, such as Madagascar, shall be selected, and all the inhabitants shall be ordered to leave. Visitors from elsewhere shall be turned away, or in any event it will be decreed that they only be permitted to stay in the harbor for the purpose of obtaining water. To this island slaves captured from all over the barbarian world will be brought, and from all of the wild coastal regions of Africa, Arabia, New Guinea, etc. To this end Ethiopians, Nigritians, Angolans, Caribbeans, Canadians, and Hurons fit the bill, without discrimination. What a lovely bunch of semi-beasts! But so that this mass of men may be shaped in any way desired, it is useful only to take boys up to around the age of twelve.[12]

As Ian Almond nicely observed about the *Consilium Aegyptiacum*, "Leibniz's advice to Louis XIV, his attempt to persuade the monarch that an attack on Egypt

[12]Leibniz 1923, IV, 1: 408; quoted and discussed in Smith 2011, 243.

would be 'to the profit of Christendom', appear almost to have been written with Gramsci and Said's analysis of the intellectual's complicity with imperialistic hegemony in mind" (Almond 2006, 464). The origin of this unpleasant fantasy of global reach (but policy and fantasy are not separated by any Chinese walls!) seems to have been Thomas Sprat's "Relation of the Pico Teneriffe," presented to the Royal Society in 1667 (Dascal 1993, 391), and the concept is very much that of the Janissaries in the Ottoman Empire. Leibniz's well-known fascination with China goes in the opposite direction ... (Leibniz 1994; Perkins 2004; Mungello 1998) but the above text bears witness to a more obsessively 'Orientalist' mindset. In contrast, a later text entitled "An Utopian Island" expresses what we might call more 'multicultural' sentiments (Dascal 1993).

Less disturbingly, the kind of confident, linear expansion of 'our' knowledge (whether it be French, European, etc.) is still expressed in Cornelius de Pauw's *Encyclopédie* article "Amérique," which concludes with a list of America's useful resources, from gold and silver to beaver skins and, further South, cinnamon, sandalwood, and "dragon's blood" ... and his very influential *Recherches philosophiques sur les Amériquains*.[13] We find the same intent in Linnaeus' plans to import foreign species of plants to Sweden, and it is presumably in the background of the opening of the Abbé Guillaume-Thomas Raynal's *Histoire des deux-Indes* (1770: full title, *Histoire philosophique et politique des établissements et du commerce des Européens dans les deux Indes*, a multi-authored work, large parts of which are actually by Diderot), referring in particular to the impact of Iberian expansion: "No event has been so interesting to mankind in general, and to the inhabitants of Europe in particular, as the discovery of the new world, and the passage to India by the Cape of Good Hope" (quoted in Gascoigne 2010).

Whether the creation of an island of warrior slaves or, more pedestrian, the control over the growth and production of useful plants, what these forms of globalization have in common is a kind of 'total mobilization' in which the globe becomes unified: when Switzerland can be sought in the Indies, and the Indies in Switzerland (paraphrasing the Zürich naturalist Johann Jakob Scheuchzer writing in 1716; the original was more of a recommendation: "Switzerland must often be sought in the Indies, and the Indies in Switzerland").[14] Or more bluntly yet, when "Trade is raised to highest pitch, ... the empire of Europe is now extended to the utmost bounds of the Earth," as stated in the unsigned Introduction to Awnsham and John Churchill's (1704) collection of *Voyages and Travels*, which may be by John

[13] De Pauw 1768–1770, reprinted 1990. I cannot take up here the debates on universalism and relativism: suffice it to say that de Pauw combines both, if one compares his book to John Millar's later (1779) *The origin of the distinction of ranks* (a product of the Scottish Enlightenment), we can see in Millar but not in de Pauw a clear, systematic intent to synthesize ethnographic data from travelers, Jesuits etc. in order to formulate some relativistic principles for a nascent social science.

[14] Quoted in Pugliano 2009, 323. Scheuchzer was the author of the pre-Linnean *Natur-Historie des Schweizerlandes* (1706–1718).

Locke or by Edmond Halley.[15] The scholarly version of Scheuchzer and Churchill's bold statements is the observation that, even if natural philosophy had always made universal claims, "by the eighteenth century, the practical basis for these claims was increasingly global, fostering new confidence in the universal validity of such knowledge."[16]

8.3 Radical Savants and Deterritorialized Knowledge

In contrast to the above forms of more or less globalized knowledge, the type of knowledge produced by the radical savant is – not exactly globalized, in fact. Not only is it *not* concerned with the extension of national glory, or with such forms of 'global reach' in early modern natural philosophy, now shown to have had a global economic context, or as a network in which scientist-travelers act as 'go-betweens'[17] – and I am not addressing the sub-question of whether these journeys of expansion and appropriation might have or bear their own 'epistemology', distinct from that produced by politicians, intellectuals and other propagandists 'back home': a more 'transactional' epistemology, coupled to a rather circular 'ontology of networks'. it is more of an attempt to make the familiar, unfamiliar. The radical savant is something of an 'internal exile', although he often ends up away from his native land, denied even the right to burial in his national church, as happened to La Mettrie (Fontius 1967), Count Alberto Radicati di Passerano (Venturi 1954), or John Toland (Jacob 1981). The lives and ideas of La Mettrie and Toland are well known at this point, less so Radicati – a curious case of a radical exile expounding extreme materialistic views which resonated throughout the century even if what he actually wrote was not necessarily known directly. Like Toland and unlike La Mettrie, he suffered in large part because of his 'heterodoxy' (in his case, his attraction to Protestantism); he moved from Piedmont to England and after some years to

[15] "An Introductory Discourse containing the whole History of Navigation," in Churchill 1704, vol. 1, lxxiii, cit. in Schaffer 2009, 247. The passage began, much like Linnaeus's statements, by referring to the benefits of the importation of new plants, drugs and spices: "Natural and moral history is embellished with the most beneficial increase of so many thousands of plants it had never before received, so many drugs and spices, such unaccountable diversity."

[16] James Delbourgo and Nicholas Dew, "Introduction: The far side of the ocean," in Delbourgo and Dew 2008, 7.

[17] Hal Cook in his recent *Matters of Exchange* states that "it was no accident that the so-called Scientific Revolution occurred at the same time as the development of the first global economy" (Cook 2007, 411), but we never really learn why, or what this changes in other stories; clearly medical and natural-historical knowledge are highly involved with commodities and exchange, but this does not make them "the big science of the early modern period," as Cook rather strangely claims without explanation (410). For further analysis of early modern voyages of discovery as integrating the worlds of commerce, science and 'knowledge' see the work of Kapil Raj, e.g. Raj (2000); on go-betweens: Schaffer, Roberts et al., eds. (2009).

Holland, where he died in 1737. While in England he published his most shocking work, *A Philosophical Dissertation on Death. Composed for the Consolation of the Unhappy 'by a friend to Truth'*, a defense of suicide which had him thrown in prison along with his translator and his publisher (Venturi 1954, 209–215). Radicati's justification of suicide was based on a materialistic philosophy influenced by Toland.

This species of radicals – in the above case, materialists, although this is not a necessary condition (neither Montaigne, nor François de La Mothe Le Vayer, nor Henry de Boulainvillier are specifically committed to materialism) – are not travelers; they rarely make it further than St Petersburg or Berlin; however, as I indicate below, travel that remains virtual can also be a great source of deterritorialization. As Deleuze put it in an interview in 1988, "Il ne faut pas trop bouger pour ne pas effrayer les devenirs" ("One shouldn't move around too much, it scares off the [lines] of becoming," Deleuze 1995, 138) – a phrase which, curiously enough, applies quite well to Newton's 'immobility', which his contemporaries viewed in a favorable light as somehow complementary to the *mobility* of the travelers who, for instance, went to the ends of the globe to measure the length of a pendulum, such as the astronomer Jean Richer's celebrated 10 month's work in Cayenne in 1672, or the priest Louis Feuillée's similar experiments at Panama and later Martinique, in 1712, reported to Newton by Cotes, and used in his calculations (Schaffer 2009, 261–264).

Making the familiar – the territorial, the national – unfamiliar can be described, as I mentioned above, as a process of deterritorialization, which, once again, is not a process of becoming 'at home in the world', a *Weltbürger*, but rather one of *ceasing to belong anywhere*, even if some bravely claim that they are "indifferent towards climates and men," like Théophile de Viau, who was burned in effigy in front of Notre Dame in 1623. This kind of cognitive and intellectual process, which is bound up with the formation of radical knowledge, goes back to another famous story: that of Montaigne *personally making the trip* to see the cannibals. Montaigne was not able to go all the way to the Amazon, but in 1562 he made the effort to go to Rouen (522 km away, after all) to see a cannibal who had been brought to France by the explorer Nicolas Durand de Villegagnon (Montaigne 1588/1992, I.xxxi, "Des Cannibales," 213). Montaigne made the journey because he believed in the necessary role of experience in forming theories, rather than just relying on the accounts of others. There is a strong sense here of 'I saw', 'I experienced', 'I was there'; like the traveler. Here, the difference between someone who has physically crossed an ocean and been imprisoned by cannibals, like Hans von Staden (who was almost eaten by the Tupinamba, but partly owed his escape to their desire to wait for a certain species of berry to be ripe, which they liked to eat with human flesh: von Staden 1557/2008) and Montaigne, plays almost no role.

Montaigne derived from this experience what is probably the *fundamentum inconcussum* or Archimedean point of Western cultural relativism. Some cannibal habits only seem barbarian to those who

> call barbarism whatever is not [their] own practice … These nations, then, seem to me barbarous in this sense, that they have been fashioned very little by the human mind, and are still very close to their original naiveté. The laws of nature still rule them, very little

> corrupted by ours; and they are in such a state of purity that I am sometimes displeased that they were unknown earlier, in the days when there were men able to judge them better than us.[18]

Montaigne comments that "we may well call them barbarians, with respect to the rules of reason, but not with respect to ourselves, as we surpass them in every kind of barbarity" (210).

There is plenty of this usage of 'proximal exotica' in later radical thought: La Mettrie slightly modifies the trope of the wild child with this reference to the 'known fact' that in Poland, there are cases of kindly mother bears kidnapping newborn babies and then raising them with as much affection as their own young.[19] More broadly, and more durably, travel accounts of animal species, typically ones like the purported orang-outang, which disturb species boundaries (Tyson, Monboddo, La Mettrie) can be used, along with some standard quotations from Bayle, Montaigne and going back further, Lucretius, to support a theory of 'animal minds' which becomes a centerpiece of clandestine and/or semi-public materialist philosophy.[20] As I indicated above, materialism is not in itself either a necessary component of the figure of the radical savant, or a necessary consequence: thinkers such as Montaigne, Gassendi or Locke can build a case either for the *legitimacy* of the mores of other peoples and/or for the *ungrounded* character of our own moral systems and cognitive apparatus, without deriving from such narratives specific consequences about the unity of the natural world, or the rejection of any boundary separating humans from animals (as La Mettrie and Diderot certainly do).

To return to the figure of cannibals, this discussion had more than one use in radical thought. One can roughly reduce these to three: (i) Montaigne is engaged in a project of displacement of the familiar; (ii) Locke, when he takes up the cannibals example in the *Essay*, uses it to support anti-innatist views with respect to what he calls "practical principles" (that is, moral principles of conduct): he points out that the Tupinamba tribe in the Amazon considers that a high form of virtue is eating one's enemies.

> *Instances of enormities practised without remorse.* But I cannot see how any men should ever transgress those moral rules, with confidence and serenity, were they innate, and stamped upon their minds. ... Have there not been whole nations, and those of the most civilized people, amongst whom the exposing their children, and leaving them in the fields

[18] "Chacun appelle barbarie ce qui n'est pas de son usage. ... Ces nations me semblent donc ainsi barbares, pour avoir receu fort peu de façon de l'esprit humain, et estre encore fort voisines de leur naifveté originelle. Les loix naturelles leur commandent encores, fort peu abastardies par les nostres; mais c'est en telle pureté, qu'il me prend quelque fois desplaisir dequoy la cognoissance n'en soit venuë plustost, du temps qu'il y avoit des hommes qui en eussent sceu mieux juger que nous" (Montaigne 1588/1992, I.xxxi, 205–206).

[19] "On sait maintenant qu'il y a en Pologne des ourses charitables qui enlèvent des nouveaux-nés laissés sur le seuil d'une porte par une nourrice imprudente, et les élèvent avec autant d'affection et de bonté que leurs propres petits" (La Mettrie, *Système d'Epicure*, § xxxv).

[20] A good example of this is chapter 3 of the anonymous manuscript *L'Âme Matérielle* (approx. 1725–1730); see the edition by Alain Niderst (Niderst 2003).

> to perish by want or wild beasts has been the practice; as little condemned or scrupled as the begetting them? Do they not still, in some countries, put them into the same graves with their mothers, if they die in childbirth; or despatch them, if a pretended astrologer declares them to have unhappy stars? And are there not places where, at a certain age, they kill or expose their parents, without any remorse at all? In a part of Asia, the sick, when their case comes to be thought desperate, are carried out and laid on the earth before they are dead; and left there, exposed to wind and weather, to perish without assistance or pity. It is familiar among the Mingrelians, a people professing Christianity, to bury their children alive without scruple. There are places where they eat their own children. The Caribbees were wont to geld their children, on purpose to fat and eat them. And Garcilasso de la Vega tells us of a people in Peru which were wont to fat and eat the children they got on their female captives, whom they kept as concubines for that purpose, and when they were past breeding, the mothers themselves were killed too and eaten. The virtues whereby the Toupinambos believed they merited paradise, were revenge, and eating abundance of their enemies. They have not so much as a name for God, and have no religion, no worship. The saints who are canonized amongst the Turks, lead lives which one cannot with modesty relate . . . [21]

It should also be noted that, comparably to Montaigne's encounter with the cannibals, Locke met with Native Americans who had travelled to England from North Carolina (Farr 2008, 498), and he discusses their mathematical abilities in the *Essay* (II.xvi.6, at Locke 1975, 207); he goes into more detail about Native Americans overall in the *Second Treatise of Government*. Locke also owned one of the largest collections of travel writing in Britain.

Lastly (iii), examples like that of the cannibals, along with other descriptions of the plurality of customs and beliefs observed by travelers, are used in the constitution of the earliest explicitly *atheistic* arguments, since they are employed to rebut or weaken arguments for the existence of God. Of course, the testimony of travelers is also used to support the idea of a "universal consent" to the existence of God (going back to the *locus classicus* in Cicero, who suggested in the *Disputationes tusculanes*, I.xiii, that all peoples, even if they have false ideas, possess an idea of the gods – a kind of unanimity which should be considered a law of nature; Kors 1990, 138); and Pierre Bayle in turn will criticize this 'unanimity' argument for legitimizing, e.g. polytheism.[22] Conversely, well-known texts such as the Jesuit Bartoloméo de Las Casas' 1527 *Historia de las Indias* will argue that there is no people, however "barbarous," who can be denied membership in the "Christian family."[23] Similarly, Joseph-François Lafitau's 1724 *Mœurs des sauvages ameriquains, comparees aux moeurs des premiers temps* is an ethnographic document which insists on the innate

[21] Locke 1975, I.iii.9, at Locke 1975, 70–71; for further discussion of Locke's anti-innatism in the context of travel narratives, see Carey 2006, ch. 3 (who notes, among other things, the influence of Gassendi's *Exercitationes paradoxicae adversus aristoteleos*, written 1624–1626, published in his *Opera Omnia* in 1658). A similar focus on the Tupinambas is found in La Forge 1666, 354; on the Tupinamba as somehow paradigmatic cannibals, see Lestringant 1997.

[22] "On ne prescrit pas *contre la vérité* par la tradition générale et par le consentement unanime de tous les peuples" (*Pensées diverses sur la comète*, § xlv, in Bayle 1727–1731, III, 53).

[23] Pagden 1993, 69. That Las Casas, who was consistently an advocate of indigenous rights, was at one stage Bishop of Chiapas may seem to us an odd irony of history (thinking down to the present day's EZLN and Subcomandante Marcos).

religiosity of an indigenous population (here, Native Americans in Canada), in order to "deflat[e] the atheistic potential in cross-cultural comparison by arguing that all peoples had religions consistent with Christianity or had perverted them" (Garrett 2005, 186). But in the type of narrative I am retracing here, narratives of cannibals and other instances of early cultural relativism are directly used, alongside or similarly to reports on Chinese religion or philosophy, as argumentative 'planks' for Occidental atheism. However, before pursuing this atheistic development, I want to insist a bit more on the dimension of 'unfamiliarity' and 'displacement'.

8.4 Novelty, Unfamiliarity and Estrangement

Crucially, this new, unfamiliar knowledge also has a disturbing dimension: it produces a sense of estrangement or alienation ((what used to be called *Entfremdung*); or, to use another over-determined word from another generation, part of what is emerging here is The Other. Quite different from the endlessly recycled tale we probably owe to Husserl's *Crisis* (which is then reborn for each generation like a phoenix, e.g. as 'the Death of Nature'), that the flowering of natural science we associate with the Scientific Revolution 'cuts us off from the world', producing alienation, creating a permanent divide between the world of quantity and laws of nature, and the world of quality and values, my claim is that humanism, the New Science, the challenge to Aristotelianism, and so forth, usher in a new *disquiet*, a sense that essentialism (including species fixism, however much Aristotle may or may not have believed in it: Wilkins 2009, 15–21) is false. To put it differently, the narrative of decline that is sometimes reiterated about the Scientific Revolution, 'modernity' and the like tells us that the new knowledge produced in early modern natural philosophy divorces us from the world of meaning and value, in favor of a 'positivistic' world of facts, quantities and laws of nature. In contrast, the story told here stresses that this new knowledge, produced inseparably by experimentation, voyages, natural history, philology, Orientalism, etc., does not usher in a confident era of science so much as a new sense of the world as *unfamiliar*. Consider again Montaigne:

> Until this time, all these miracles and strange events were hidden to me – I have never seen monster nor miracle in the world more explicit than myself: One becomes familiar with anything strange over time. But the more I brood and know myself, the more my deformity astonishes me. The less I understand myself.[24]

As Tristan Dagron comments in an essay on Cardano, Montaigne and Vanini, here "Nature has ceased to be a 'world'. The rule which governs the arrangement and the relationship of things is no longer that which guarantees the harmony and

[24] *Essais*, III, xi, "Des boiteux,": "Jusques à cette heure tous ces miracles, et événements étranges, se cachent devant moi – Je n'ai vu monstre et miracle au monde plus exprès que moi-même: On s'apprivoise à toute étrangeté par l'usage et le temps, Mais plus je me hante et me connais, plus ma difformité m'étonne. Moins je m'entends en moi" (Montaigne 1588/1992, 1029).

unity of a totality, but rather the 'rule' of dispersion, variety and vicissitudinous becoming which transforms everything into everything" (Dagron 2005, 55). In a broader sense which I shall not discuss here, this is the sense that modernity is in its essence defined by crisis – political, metaphysical and so on.[25]

We might take as the most vivid illustration of this inner disturbance in the Western ethos, the monster (Curran et al. 1997; Wolfe 2005). Without wanting to play up an 'irrationalist' history of science, there is a sense in which the fascination with monsters from the late Renaissance well into the early Enlightenment is not a steady process of naturalization and demystification of 'folk biology' towards a measurable, quantifiable scientific account of anomalies in biological development, but rather a kind of crisis of anthropocentrism in which a burgeoning skepticism tries to find support in the new empirical 'sciences' but instead just contributes to a growing sense of strangeness (not to say *Unheimlichkeit*!). Exploration narratives during the earlier part of this period are filled with this hope to discover monstrous races: "Who has not seen monsters, has not traveled."[26] But in some cases it is good enough to have intimate familiarity with accounts of monsters, or, as we saw with Montaigne (who devotes another chapter of his *Essais* [II, xxx], to the case of a monstrous child), to have some partially direct contact with the exotic. As regards familiarity and strangeness, travel and internal exoticism (or deterritorialization and reterritorialization), an entire study could be written on the way some of the classic travel *cum* natural history narratives, such as Pierre Boaistuau's 1560 *Histoires prodigieuses*, can move imperceptibly from tales of giant serpents or the unknown properties of certain precious stones, to the "wondrous (*prodigieuses*) stories of the Jews" (Boaistuau 1560, ch. X); Boaistuau probably doesn't mean this as a compliment.

But the moral I derive from the emergence of this form of knowledge is not the wonderful irreducibility of the strange and the preternatural, à la Lorraine Daston (2000). Nor, granted, is it the *extension of the world of the known*. Rather, "the more I brood and know myself, the more my deformity astonishes me. The less I understand myself": there is a recognition of the *destabilizing force* of the world of the unknown. This may usefully be compared to Jean Céard's distinction between two different strategies employed by early modern naturalists faced with

[25] Koselleck 1959/1988; Negri and Hardt 2000. There would be more to say here about 'global reach' and stages or forms of globalization (not so much in debates over economic cycles, concerning work such as Wallerstein's and Arrighi's – Wallerstein 1980; Arrighi 1995, 2007 – but rather, concerning early forms of globalization, via Christianity and the like). While I am obviously borrowing some aspects of Israel's notion of 'radical Enlightenment', I am not using either his distinction between a moderate and a radical Enlightenment, or his focus on Spinoza and Spinozism as a driving force in the movement. Indeed, not all of the radical savants discussed here are political radicals in any straightforward sense. From the *libertins érudits* to La Mettrie, one can conceptually plan the destruction of an existing order – a metaphysical order, a religious order – without having any interest in the democratization of knowledge and thus in political revolutions; as I mention below, a 'closet radical' like La Mothe Le Vayer can explicitly oppose his own cosmopolitanism and free-thinking attitude towards customs and norms, to the entrenched prejudice of the common folk – without seeking to emend the latter.

[26] Kappler 1980, 115: "[Q]ui n'a pas vu de monstres, n'a pas voyagé."

unknown species and races, in which what I am discussing is closest to the Franciscan priest and explorer André Thevet's warning, in his 1558 *Singularitez de la France antartique, autrement nommée Amérique*, that we should *not* inscribe new discoveries under the heading of what we know:

> Here are admirable facts of nature, and as she likes to do things grandly, diversely, and for the most part, incomprehensible, and admirable to men. It would therefore be impertinent to seek their cause and reason, like many try to do on a daily basis: because this is a real secret of nature, whose knowledge is reserved for the creator alone.[27]

This does not sound like much of a program for building knowledge, however radical. And there is a sense in which the inheritors of this line of thought – people like La Mettrie, Buffon and Diderot (and possibly Joseph Priestley and Erasmus Darwin on the other side of the Channel, in the next generation) – *are* committed to building cognitive edifices, even if these do not always resemble strictly natural-philosophical endeavours ("Do you see this egg? With this you can overthrow all the schools of theology, all the churches of the world."[28]) But this is after all a problem inherent in the concept of deterritorialization itself: how are you meant to build something on it?

8.5 "Mummy, are Hunchbacks French?"[29]

I've said earlier that a narrative such as that of the cannibals – or that of monsters, or that of navigation to 'America' – has several possible radical, destabilizing uses, and precisely these need not be collapsed into some purely internalized Pascalian fright and contemplation. It is a destabilization *in* and *of* knowledge, which however can also be *productive of* knowledge (but then the question is, *which* knowledge or at least *what sort* of knowledge? And it is not clear that the work of the radical savant flows in any linear fashion into the emergence of a positive science; an exile – a thinker and agent of deterritorialization – is unlikely to be the Secretary of any learned society[30]). The classic example of this is what is often stressed about the

[27] Thevet, *Singularitez* . . . , f. 99a, quoted in Céard 1977/1996, 312. Thevet's work is known in good part also for its description of Brazilian cannibals. In his later *Cosmographie universelle* Thevet devotes a chapter to "Why I call this land 'Antarctic France' which others falsely call the Indies" (Thevet 1575, Bk. XXI, ch. 3; vol. II, 911a). "Car étant cette terre découverte de notre temps, si grande comme elle est ce serait simplesse que de la soumettre au nom particulier de l'Inde"; "Car l'Inde est orientale et l'Antarctique est toute méridionale: le Pérou, Mexique, la Floride entre l'Équateur et le Pôle Arctique. Par quoi vous pouvez voir la faute de plusieurs hommes de notre siècle." Quoted and discussed in Hoquet 2005.

[28] Diderot, *Rêve de D'Alembert* (approx. 1769), in Diderot 1994, 618. I discuss Diderot's 'biological Spinozism' and the emergence of 'biology' as a science in Wolfe 2011.

[29] Hugo, *Choses vues*, August 3d 1846, in Hugo 1987, 600; Wolfe 2008.

[30] As regards the relation of the radical savant to institutions, it was easy enough, in the set of distinctions with which I began, to oppose the 'company man' à la Boyle to the solitary Descartes

discovery and conquest of America: that by doing so, Europe is "not just discovering an unknown geographical space," but also, an unnerving sense of its own past, "that the accumulated wisdom of the Ancients might be, if not entirely false, at least seriously flawed" (Pagden 1993, 89): an oft-cited and early instance of this is the Jesuit José de Acosta's comment on his journey to the 'Indies' (Acosta had a leading role in the Jesuit mission, and was later the rector of the University of Salamanca and advisor to King Phillip II):

> I will describe what happened to me when I passed to the Indies. Having read what poets and philosophers write of the Torrid Zone, I persuaded myself that when I came to the Equator, I would not be able to endure the violent heat, but it turned out otherwise . . . For when I passed (the Equator) . . . I felt so cold . . . What could I do but laugh at Aristotle's *Meteorology* and his philosophy? For in that place and season, where everything by his rules should have been scorched by the heat, I and my companions were cold.[31]

More is at stake here than a wrong map, or even the anxiety experienced when one realizes that the parent or authority figure can be wrong, or conversely the gleefulness with which some of the free-thinkers could catalogue instances in which reports from travelers refute Biblical stories and geographies, or more recent tales of wonders and marvels (La Mothe Le Vayer's *Remarques géographiques* is filled with such reports, including also naturalistic *confirmations* of wondrous tales: faced with denials of a tale of oysters growing on trees on a certain island, he reports that in Madagascar, orange and lemon trees grow on the beaches, and that after a particularly high tide there can be oysters left hanging on the tree branches, Moreau 2010, 56). There is a sense, both of a profound disturbance in the 'fabric' of knowledge, and concomitantly of a disturbance in one's *self*-knowledge.

This sense that the authoritative texts need to be abandoned in turn engenders a *weakening* of the dominant European narrative which is not merely non-colonial or non-exploitative (Las Casas) or culturally relativistic (Montaigne, Locke, Diderot). For it is perfectly possible to 'meet the Other and understand him' as part of this

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and the radical Boyer d'Argens or La Mettrie. But this leaves out the role, primarily in the next century, of institutions such as dissenting academies, which precisely trace their roots to individuals who could not get into Oxford and Cambridge in the late seventeenth century (thanks to John Gascoigne for this point). One could also point to Protestant, sometimes Huguenot-based scientific clubs in the early Enlightenment in places such as The Hague (discussed in Jacob 2006) – but they were secret. A point closer to my own narrative is that the radical usage of, e.g., philology is definitely not a solitary enterprise; texts such as the *Treatise of the Three Impostors* emerged in milieus such as the Berlin salons of the early 1700s. By the next century, a heterodox institution such as the Lunar Society of Birmingham appears, at which James Watt, Joseph Priestley, Matthew Boulton and Erasmus Darwin meet, with a shared 'materialist' goal focusing on the practical, *public* consequences of the knowledge produced therein.

[31] José de Acosta, *De Natura novi orbis libri duo* (Salamanca 1589), later entitled *Historia natural y moral de las Indias*, translated into French by Robert Regnault or Regnauld as *Histoire naturelle et morale des Indes tant orientales qu'occidentales* (Paris: Orry, 1598), II, ch. IX, in Acosta 1617, 63b. John Gascoigne describes Acosta's *History* as "a pioneering work of anthropology and natural history" (Gascoigne 2010). For discussion see Duchet 1971/1995 and Abbattista and Minuti, eds., 2006.

dominant narrative; indeed, Tzvetan Todorov has suggested that the extraordinary success with which the European has colonized and assimilated the Other is "chiefly due to their capacity to understand the other" (Todorov 1984, 248). Montaigne's brooding – but also the fascination with monsters – is something else again: not the transparency of 'know the other, know thyself' but the opacity and 'exoticism' of "the more I brood" . . .

One could ask if and how the problem of grasping the existence of the monster translates into voyages of discovery which problematize national identity (whether via the savage purity of the Americas or the higher refinement of China); it is tempting to answer with an example from natural languages, here, Russian, in which the word for monster is *urod*, namely, that which stands apart from the *rodina*, the motherland (Lecouteux 1999, 11), the place of birth. Or from everyday life, as reported by Victor Hugo: "I saw a hunchback pass in the street. A little girl nearby stared at him in surprise and said to her mother: 'Mummy, look at that man!' 'Well, my child, do not look at him, he doesn't like that. He is a hunchback'. 'Mummy, are hunchbacks French?'"[32] Whether in faraway accounts or at home, the monster is not merely a natural category but one which expresses a-nationality or a-territoriality. It is no longer very bold or original, after all, to note that our conceptions of Nature – as order, as norm, as source of value – are never neutral, which is to say that they are always valuative.

8.6 Confucius as Spinoza: Travel and Atheism

Travel narratives, whether they showcase the unadorned *peaux-rouges* of the New World or the highly educated Chinese scholar, perturb both a sense of familiarity about oneself and one's 'world', and some of its foundational tenets; pushed to the extreme, they yield an argument for atheism, indeed, a variety of different arguments for atheism. Here is Locke again – someone who was certainly not an atheist himself – juxtaposing Caribbean tribes and "the literati of China" as evidence for stable, and *morally stable* practices of atheism:

> *Idea of God not innate*. If any idea can be imagined innate, the idea of God may, of all others, for many reasons, be thought so; since it is hard to conceive how there should be innate moral principles, without an innate idea of a Deity. Without a notion of a law-maker, it is impossible to have a notion of a law, and an obligation to observe it. Besides the atheists taken notice of amongst the ancients, and left branded upon the records of history, hath not navigation discovered, in these later ages, whole nations, at the bay of Soldania, in Brazil [*here Locke mentions de Léry, CW*], [in Boranday,] and in the Caribbee islands, &c., amongst whom there was to be found no notion of a God, no religion? . . . These are instances of nations where uncultivated nature has been left to itself, without the help of letters and discipline, and the improvements of arts and sciences. But there are others to be found who have enjoyed these in a very great measure, who yet, for want of a due application of their thoughts this way, want the idea and knowledge of God. It will, I doubt not, be a surprise to others, as it was to me, to find the Siamites of this number. But for this,

[32]Hugo, *Choses vues*, August 3d 1846, in Hugo 1987, 600; Wolfe 2008.

> let them consult the King of France's late envoy thither, who gives no better account of the Chinese themselves. And if we will not believe La Loubere, the missionaries of China, even the Jesuits themselves, the great encomiasts of the Chinese, do all to a man agree, and will convince us, that the sect of the literari, or learned, keeping to the old religion of China, and the ruling party there, are all of them atheists. Vid. Navarette, in the *Collection of Voyages*, vol. i., and *Historia Cultus Sinensium*. And perhaps, if we should with attention mind the lives and discourses of people not so far off, we should have too much reason to fear, that many, in more civilized countries, have no very strong and clear impressions of a Deity upon their minds, and that the complaints of atheism made from the pulpit are not without reason. . . . (*Essay*, I.iv.8, Locke 1975, 87–88).

China actually plays the largest role here: "the sect of the literari, or learned, keeping to the old religion of China, and the ruling party there, are all of them atheists." And throughout the next two generations, radical (and frequently clandestine, anonymous) texts multiply references to China, most often in support of a program of (European) radicalism. The anonymous author of the manuscript *Les Doutes des Pirroniens* (*Doubts of the Pyrrhonians*, dated circa 1696–1711) illustrates the possibility of a republic of atheists precisely by referring to Chinese society:

> The dominant Religion of the great empire of China, particularly that of its magistrates, is pure Atheism; as they believe in the eternity of the world, know no other God but the Spirit or the Active Virtue of the Sky, and do not believe in the immortality of the soul, or in rewards and punishments after death.[33]

Now, further on in the text the author revises his claim somewhat and calls this "dominant Religion" "a kind of Atheism or Deism" (fol. 89), and then concedes that it may be improper to call them Atheists per se, since ("like the Egyptians") they hold that the eternal matter of the universe is animated by a kind of divine soul (fol. 90). This sort of clandestine usage of China, while it is not an extreme (or 'strong') case of deterritorialization, is nevertheless saying more than just 'in China they do things better than us'. It is building on Pierre Bayle's idea that China amounted to "a society of atheists – millions of them – who seemed to be living civilized and honorable lives. This seemed to cast doubt on the need for any religious basis for morality if so large a society as China could operate without religion" (Popkin 2003, 271). In another anonymous manuscript, this one from approximately 1770, entitled *Dialogues sur l'âme* (*Dialogues on the Soul*), the narrator describes how difficult it is to find the home in Paris of a philosopher he has heard discuss the materiality of the soul. Then he comments: "In China people would have known. It is not that their cities are any smaller or less populated; but there, it is by merit that people are placed in the first rank."[34] Similarly, one of the many versions of the

[33] "La Religion dominante du vaste Empire de la Chine, qui est particulierement celle des Magistrats, est le pur Atheïsme ; puisqu'ils croyent l'éternité du monde, qu'ils ne connoissent point d'autre Dieu, que l'Esprit, ou la Vertu Active du Ciel, et enfin qu'ils ne croyent pas à l'immortalité de l'ame, non plus qu'aux peines et recompenses après la mort" (Anon., *Doutes des Pirroniens*, Bibliothèque Royale de Belgique, ms. 15191, f. 40, cit. in Benítez 2007).

[34] Anon., *Dialogues sur l'âme*, ms. Bibliothèque Mazarine 1191, I, fol. 109–110, cit. in Benítez 1996b, 403.

Treatise of the Three Impostors, by the 'atheist priest' Etienne Guillaume, opposes Moses and Jesus to Socrates, Plato and Confucius in order to argue that the latter three are more ethically and intellectually admirable than the former two (Israel 2006, 714).

Henry de Boulainvillier's materialist-Spinozist usage of China is more explicitly that of a radical savant. Boulainvillier (as he preferred to spell his name) was the author of several chemical treatises of the Helmontian variety, a primer of Port-Royal logic, and rather more influential works of historical scholarship on the origins of monarchy (and a less-known history of Mohammed). But in addition, he translated Spinoza's *Ethics* and wrote some of the most penetrating commentaries on the latter's work. Curiously for our purposes, Boulainvillier explains that after reading several refutations of Spinoza, what finally convinced him to return to the texts of the Dutch thinker was the publication of the "doctrine of the Chinese" in the volumes of the Jesuit missions.[35] In his 1731 *Essai de métaphysique*, Boulainvillier plays a complex rhetorical game: he simultaneously (a) praises Confucius over and above any Western thinker, (b) uses the cultural prestige that the name and figure of Confucius had at the time to legitimize (Eurocentric) radical thought, by describing Confucius as an atheist and a materialist, and (c) tries to defend or rehabilitate the dreaded name of Spinoza, by saying that according to the Jesuits, Confucius is given the highest honours in his country; and his ideas are really not so different from Spinoza; thus it should not be such a scandal to admire Spinoza. Boulainvillier is building here on the Baylean image of a country populated by millions of 'virtuous atheists'.

It is important not to confuse this clandestine articulation of Spinoza and Confucius with the negative portrayal of Spinoza, the metaphysician of One Substance, as somehow 'Oriental' (and thus not really legitimately part of Western philosophy; the trope of 'Spinoza the Oriental' was already used by Bayle, and goes straight through to Hegel[36]). In the clandestine context, assimilating Spinoza and Confucius could mean a praise of Chinese anteriority, a diminishment of the purported originality of a radical European thinker, or a *Lettres persanes*-style fictitious critique of Eurocentrism. (The cultural prestige of Confucius was such that, as noted by Nicholas Dew, the influential 1687 collection of Confucius' writings, the Jesuit-prepared *Confucius, Philosopher of the Chinese* (*Confucius Sinarum Philosophus, sive Scientia Sinensis Latinè exposita*), received a review in the influential *Journal des Sçavans*, that was literally 7 times longer than that of Newton's *Principia* in the same year, i.e., 7 pages to 1 page.[37]) However, one

[35]Henri de Boulainvilliers (correct spelling Boulainvillier, which apparently he was very attached to, as Renée Simon indicates in her introduction to volume 1 of his works), *Essai de métaphysique* (1731), in Boulainvilliers 1973, I, 84. See also Bove 2008. On Boulainvillier's relation to libertine salon culture see Wade 1938, 97–123.

[36]On Spinoza, 'the Oriental' see Hulin 1983. On the more positive Spinoza-Confucius parallels see Israel 2001, 588, 2006, ch. 25.

[37]For the review of the *Principia*: *Journal des Sçavans* (Amsterdam), August 2, 1688, 128; for the review of *Confucius Sinarum Philosophus*, Jan. 5, 1688, 5–12. See discussion in Dew 2009,

should not think that all clandestine discussions of China are univocally positive; some also challenge its form of government, as in Nicolas-Antoine Boulanger's *Recherches sur l'origine du despotisme oriental*, published in 1761 by d'Holbach. For Boulanger, the Chinese form of government is an obstacle to progress, to the extent that 1 day, "the Chinese will be the unhappiest people of the earth" (§ 23).[38] This becomes a classic trope in Helvétius, Mably and others.

8.7 Radical Erudition

But to return to the radical savant, his discussion of types of knowledge, beliefs and doctrines from China and elsewhere is definitely a kind of *erudition* at work (in the sense of the *libertins érudits* onwards, that is, the group of 'gentlemen virtuosi' under protection of powerful patrons who pursued sceptical and Epicurean forms of erudition in the seventeenth century, such as François de La Mothe Le Vayer (1588–1672), tutor to the Duc d'Anjou (the brother of Louis XIV) and overall skeptical man of letters, who Popkin dismisses rather cruelly as "an insipid Montaigne" (Popkin 2003, 83) and Gabriel Naudé (1600–1653), author of the famous *Considérations politiques sur les coups d'État*, member of the Académie française, and secretary to Cardinals Richelieu and Mazarin and to Queen Christina of Sweden; Pintard 1943/1983). In direct contradistinction to the way much globalized knowledge is reincorporated in national usage (the Bacon-Linnaeus model), the production of knowledge as deterritorialization is, to a great extent, the usage of forms of exotic knowledge (whether about the past, through philology, or distant territories, through travel narratives) in the service of a challenging or a weakening of national narratives. As previously noted, it does not matter whether the travel is actual or virtual in this case; one also thinks of the role of utopias, notably Cyrano's 1648 *Etats et empires du soleil*, to which one may possibly add Kepler's 1634 *Somnium* (see Ofer Gal's essay "Two Bohemian Journeys" here) and Fontenelle's 1686 *Entretiens sur la pluralité des mondes*, which explicitly says that when we are faced with the possibility of walking on the moon, we are in the position of the inhabitants of America before it was discovered by Columbus.

206–207, and more generally Mungello 1998, 90 f. The text was produced by at least seventeen Jesuit missionaries, with the help of many Chinese interlocutors, across almost a century. It gave Latin translations of three of the 'Four Books' (*Sishu*) that the Jesuits had identified as the core of the Confucian canon: the *Great Learning* (the *Daxue*), the *Doctrine of the Mean* (*Zhongyong*), and the *Analects* (*Lunyu*); the *Mengzi* or *Mencius*, was left out (Dew 2009, 210).

[38] In a note to this section Boulanger uses the term 'despotism': "L'empire de la Chine demontre la sublime speculation des premiers hommes qui ont cru se rendre heureux en etablisssant un gouvernement semblable a celui du ciel, il ne faut cependant pas croire que le gouvernement chinois puisse justifier les theocraties terrestres par ce que les beaux traits de l'histoire de la chine ne peuvent pas contrebalancer les maux que le despotisme y a causé et qu'il cause chez les autres nations."

Just as the travel narratives could be used as evidence for the existence of 'millions of virtuous atheists', or as support for Spinozism, or more modestly to stress the skeptical point that we might not have absolute knowledge of, e.g. morality, given the variety of customs in different parts of the world (hence we should suspend judgment, the skeptical *epoche*), similarly, our interpretive categories should not boil down to a monolithic definition of the radical savant. The *weaker* form of the destabilizing, deterritorializing force of a certain type of knowledge or discovery, is captured by studies of the rise of early modern skepticism such as Richard Popkin's. Namely, tales of worlds beyond the familiar oceans, the size of their animals, whether one is hot or cold at the crossing of the Equator, or whether the theologies of the Indians or Chinese or Native Americans confirm, challenge or are neutral with respect to the narrative of Scripture certainly call into question the reliability of knowledge as such. But the *stronger* form of this radicalism goes beyond the skeptical motif (Charron, Montaigne, La Mothe Le Vayer, possibly Locke), according to which exotic knowledge "functioned for thinkers of the period as an emblem of the problem of knowledge-making in general" (Dew 2009, 235). It carries the disturbance further. Of course, the natural response here is to inquire into the exact status of this deterritorialized – or better, *deterritorializing* – knowledge. Clearly, this is not 'colonial', 'imperial', or 'mercantile' knowledge which would let itself be subsumed into a project of national or royal glory, but it also does not seem to fit the obvious opposite model – itself quite legitimately 'radical': that of a 'knowledge from below' (whether this is taken in a more Marxist sense: Rancière 1981; Moulier Boutang 1998, or a more post-Marxist sense, including that of Foucault: Fehér 1982/1987). In that case, what type of knowledge is being produced here?

In some cases, there is a 'weakly deterritorialized' form of knowledge which we can view as somehow cosmopolitan or at least anti-provincial, as when the vitalist physicians in Montpellier warn against underestimating the importance and sophistication of Chinese sphygmology (medicine of the pulse), in comparison to Western medicine, or earlier – and more metaphorically – La Mothe Le Vayer's insistence that the best years of his life were spent outside his country, travel having freed his mind from the constraint of local customs: a freedom opposed to the inertia of "the common people" (*la multitude*, cit. in Dew 2009, 147; see also Moreau 2010). In other cases, there is a kind of exoticism which sometimes becomes, or is reappropriated as, what I have termed 'radical exotica' (Montaigne, Boyer d'Argens) or an entirely non-exotic, but strongly relativist case for weakening our confidence in the mores and norms of our societies (as in Locke). Here, current post-colonial or 'global knowledge' theory would insist on the way in which even parochial knowledge is actually always already hybridized.[39] But, following Tristan Dagron, I am more concerned with instances in which the new knowledge is genuinely destabilizing (whether or not it is genuinely new – after all, a form

[39]For redefinitions of the scientific knowledge collected at the "periphery" and processed at the "center" see Gruzinski 1999 and White 1991, and for the case of Newton see Schaffer 2009.

of atheist argument can be found as early as Tertullian, who is rediscovered in early modern radical theological texts by Henry Layton and others, including, more critically, by Malebranche; Thomson 2008), so that travelers like José Acosta and André Thevet can insist that we not inscribe new discoveries under the heading of what we know. In addition, the radical savant is not engaged in an enterprise of stable knowledge-gathering with relatively well defined goals, as would be the case of the natural philosopher (allowing for exceptions).

8.8 Conclusion

I have tried to describe, rather summarily, the difference but also relations between several kinds of modernizing discourses, all of which share

(i) a certain overdetermined relation to travel (whether travel narratives, translations of scientific or theological texts from e.g. China, or personal encounters with 'otherness' like Montaigne going to meet the cannibal chieftains), and as we have seen, the travel can be actual or virtual;
(ii) a 'radical' tendency to want to either start afresh, from the foundations upwards (Bacon), or at least focus on the production of new knowledge, including with reference to the worlds beyond the seas (Bacon again, Linnaeus).
(iii) Subtly different from the latter category would be a case like the vitalist appropriation of (and praise for) Chinese medical knowledge. It is not so nationalistic (I called it 'cosmopolitan') but shares with the Baconian kind of program a cumulative attitude towards knowledge.

Moving towards the more specific definition of the radical savant as a thinker *in* and *of* deterritorialization, we come to cultural relativism, which does not have to directly entail either atheism or materialism, and which fuels two distinct projects: cognitive analyses such as Locke's anti-innatism, and more political analyses such as Diderot's *Supplément au voyage de Bougainville* (1772), including the critique of sexual repression in Western society, and his contribution to Raynal's *Histoire des Deux-Indes* (1781); and sometimes these two projects – sensationist or empiricist arguments about how the mind is 'furnished' with its ideas through the senses and relativistic travel narratives – come together in one individual, such as the great traveler and empiricist philosopher François Bernier (*c*.1625–1688).[40] Similarly, accounts presenting Confucianism as a kind of unproblematic,

[40]Bernier lived for years in Mughal India and wrote a massively successful multi-volume history *cum* political and anthropological study of the peoples and customs of South Asia, the 1670 *Histoire de la dernière Révolution des Etats du Grand Mogol* (Bernier 1670, translated at the time as *The History of the Late Revolution of the Empire of the Great Mogol,* Bernier 1671; see the excellent analysis in Dew 2009, ch. 3), but was *also* a pupil of Gassendi who wrote the most influential summary of the latter's philosophy, the equally massive *Abrégé de la philosophie de Gassendi* (Bernier 1678), which influenced Locke amongst others in the articulation of a hedonistic

and morally worthy Spinozism of the East, which I shall discuss below, certainly *can* be part of an atheistic narrative, without having to be so. However, Montaigne's brooding –and also the fascination with monsters – is something else again. The more naturalistic *and more destabilizing* analysis of phenomena such as monsters, is the recognition of the presence of a kind of knowledge which is not just the confident intention to 'revise our maps and fill in the blanks'. It is a deterritorialization in the sense of a *disturbance in the foundational certainties of a territory*.

Recalling Deleuze-Guattari's example of Kafka as the practitioner of a "minor literature" which deterritorializes the 'native' lands and languages in which he found himself, we might say the paramount case, not of the early modern radical savant in particular, but of deterritorialization, is Creole languages.[41] Or, to use another vocabulary, the radical savant as discussed here is not a thinker of Empire but of 'multitude' (Negri and Hardt 2000), where Empire is the name for a system that seeks to facilitate globalization as a 'closed system' of increased efficiency, and 'multitude' is the name for that part, or mirror image, or monstrous double of Empire in which globalization becomes an 'open system':

> The multitude must be able to decide if, when and where it moves. It must have the right also to stay still and enjoy one place rather than being forced to be constantly on the move. *The general right to control its own movement is the multitude's ultimate demand for global citizenship*. This demand is radical insofar as it challenges the fundamental apparatus of imperial control over the production and life of the multitude. (Negri and Hardt 2000, 400, authors' emphasis).

Just as the radical savant is neither the fluid 'go-between', traveler, diplomat, mercenary, nor the *Weltbürger* who feels equally at home in any environment, the condition described here is not tantamount to cosmopolitanism or "extraterritoriality" (Siegfried Kracauer's word, itself borrowed from Georg Simmel, for the condition of thought which necessarily requires an 'outside' or exteriority; Jay 1986; Jeanpierre 2005). It is also a radicalism which rejects 'Empire' (as is manifest in the Diderot-Raynal *Histoire des deux-Indes*, for instance, with its lucid critical remarks on colonialism and commerce). These travelers, actual and virtual, erudite and self-taught, are not so interested in the self-contemplation of their own otherness (although La Mettrie plays a lot with his exiled situation at Frederick's court and this doubtless fuels the dark humor with which he contributes to the myth of "Monsieur Machine" or "Herrn Maschine") as in the contemplation of otherness *tout court* (first step, as with monstrosity, exotica, etc.) and then in the proclamation of a deterritorialized knowledge (second step, as in the integration of figures such as Confucius and Spinoza, in the *Doutes des Pirroniens* or Boulainvillier). Of course

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motivational psychology, and an 'empiricist' account of cognition and the formation of ideas (Milton 2000).

[41] A recent discussion of 'Creoleness' by major Francophone Caribbean authors has it this way: "Neither Europeans, nor Africans, nor Asians, we proclaim ourselves Creoles. This will be for us an interior attitude – better, a vigilance, or even better, a sort of mental envelope in the middle of which our world will be built in full consciousness of the outer world" (Bernabé, Chamoiseau, Confiant 1989/1993, 75).

these general distinctions themselves contain further subdivisions: thus otherness can go both ways – from Orientalizing Spinoza to using the Chinese discussion to legitimate Western atheism. And even the latter kind of deterritorializing project can remain relatively narrow (like the confrontation with otherness in Diderot's *Supplément au voyage de Bougainville*) or open-ended (as in Montaigne).

In discussing these different discourses, I have tried to emphasize the pertinence for 'global knowledge' analyses of a type of thinker who does not travel, except imaginatively, but, in this 'internal exile', plays an important role in perturbing the familiarity of the 'domestic' narrative, whether by stating his "indifference towards men and climates," like Théophile de Viau, conjuring up strange gems, monstrosities, cannibals, or hairy men, like Boaistuau, Cardano, Montaigne and Locke, or conversely by removing the 'strangeness' from Spinozism or atheism, by appeals to Confucianism or Islam. These deterritorialized conceptual performances, sometimes accompanied by a whiff of exoticism, sometimes predominantly bearing the mask of erudition, challenge key national and metaphysical commitments – from our sense of normality/abnormality to the existence of God. This is a far cry from either just exoticism or wonderful strangeness.

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Chapter 9
Late Traditional Chinese Civilization in Motion, 1400–1900

Benjamin A. Elman

Abstract Scholars often contend that civil examinations were an important part of what made imperial China a political meritocracy. They point to the examination system to show that the selection process served more as a common training program for literati than as a gate-keeper to keep non-elites out. Despite the symbiotic relations between the court and its literati, the emperor played the final card in the selection process. The asymmetrical relations between the throne and its elites nevertheless empowered elites to seek upward mobility as scholar-officials through the system. But true social mobility, peasants becoming officials, was never the goal of state policy in late imperial China; a modest level of social circulation was an unexpected consequence of the meritocratic civil service. Moreover, the merit-based bureaucracy never broke free of its dependence on an authoritarian imperial system. A modern political system might be more compatible with meritocracy, however.

9.1 Introduction

Late imperial Chinese literati were on the move from 1400 to 1900. They regularly traveled along the myriad waterways and roads of their extensive empire, moving up from villages to counties, townships, prefectures, provinces, and the capital. Why? To take civil service examinations! The Ming dynasty (1368–1644) was internally the most mobile empire in the early modern world. Already a massive society of at least 150 million by 1500, 10 % of them (some 1.5 million local Chinese) gathered biennially in 1 of 1,350 Ming counties for the privilege to be locked up inside testing grounds to take civil examinations. Those who passed,

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some 75,000, registered in 1 of 17 provincial capitals to take the heavily-policed triennial provincial examinations. The 6,000 who survived that cut then travelled every 3 years to the capital in Beijing for the dynasty-wide metropolitan and palace examinations for the right to become *jinshi* (palace graduates entering officialdom).

Under the sprawling Qing empire (1644–1911), the number of Chinese moving through these regional and hierarchical gates by 1850, tripled to 4.5 million at the local level. From these millions, 150 thousand survived to take the provincial examinations. Civil examinations in late imperial China thus marked one of the most traveled – and policed – intersections between politics, society, economy, and Chinese intellectual life. This article is about pre-modern Chinese society and civilization in motion – upward and downward – from 1400 to 1850. The power of classical learning and statecraft to motivate millions of Chinese to want to become public officials serving far from home and family is one part of the story. Only 5 % would see their hopes realized, however. Success was at a premium. A more important part of the story of civil examinations is the one about the 95 % who failed to become officials. The authority of the classical language empowered the civil examinations to gain traction as a cultural gyroscope even in the minds of millions who failed. More than the thousands of classical literate officials, the classical knowledge system produced millions of literates who after repeated failures became doctors, Buddhist priests, pettifoggers, teachers, notaries, merchants, and lineage managers, not to mention astronomers, mathematicians, printers and publishers.

Civil examinations reflected the larger literati culture because state institutions were already penetrated by that culture through a political and social partnership between imperial interests and local elites. Together they had formed and promulgated a classical curriculum of unprecedented scope and magnitude for the selection of officials and the production of classically literate failures. Both local elites and the imperial court continually influenced the dynastic government to reexamine and adjust the classical curriculum and to entertain new ways to improve the institutional system for selecting civil officials. As a result, civil examinations, as a test of educational merit, tied the dynasty and its elites together bureaucratically via culture.

In the realm of culture a broader secret lay hidden. The state, the ruler, and his ministers, were dimly aware that Chinese elites encompassed not only those who passed the final palace examination and became high officials, some 50,000 total for both the Ming and Qing dynasties. The fate of the millions of failures, the "lesser lights" in the classically educated strata of the society, worried the emperors and their courts. Would they become rebels and outlaws and challenge the legitimacy of their rulers? Or would they find suitable social niches for their lives, which a classical education both enabled and encouraged? Emperors also worried when the numbers of old men over 80 *sui* (Chinese added a year at a new born's first new year celebration) taking local examinations went up precipitously. Was it really an honor for a grandfather and father, who had failed for decades, to accompany their younger grandson/son into the local examination halls to take the same licensing examination?

9.2 Classical Education and Civil Examinations

Compared to other civilizations, China placed a high value on education since the ancient classical era (600–250 BCE). Influential Chinese thinkers from the moralists Confucius (551–479) and Mencius (372–289), to the pragmatists Mozi (ca. 470–ca. 391) and Xunzi (ca. 298–238), advanced the unprecedented notion that merit and ability measured by training should take precedence over race or birth in state appointments. Since the early empire (200 BCE–ACE 200), clans and families had mobilized their resources to provide young boys (and in some cases girls) with the tools of classical literacy. For the most part, however, a society based on merit remained an unattained ideal, and for much of the early empire an education remained the privilege of landed aristocrats and, to a lesser degree, prosperous merchants.[1]

Beginning in the middle empire (600–900), the Chinese state dramatically increased its expenditures on education and created the first large-scale examination system for selecting civil officials in the world. Such developments, which challenged the medieval educational monopoly for advancement in official life held by northwestern aristocratic clans, climaxed during the Northern and Southern Song dynasties (960–1280), when the government erected a dynasty-wide school system at the county level to mainstream bright young men from commoner families into public service. In addition, Buddhist monasteries in medieval China created new local institutions for education, namely the Buddhist schools educating many commoners – male and female. Thereafter, state and society, except for the occasional Daoist eccentric, agreed that education, particularly a classical education, was one of the foundations of public order and civilized life. Large-scale examination compounds, an odd sort of "cultural prison," dotted the landscape since the Song dynasties. "Actual prisons" for lawbreakers were scarce. Small-scale jails in the county yamens sufficed for criminals. The language of social order and moral rehabilitation was largely cultural.[2]

These pioneering educational achievements gathered momentum during the Song dynasties, when various strands of classical statecraft and moral thought were reinvigorated, particularly the metaphysical strands that Cheng Yi (1033–1107) and Zhu Xi (1130–1200) derived in part from classical responses to Buddhist challenges. These literati views later were synthesized under the name of "Way learning" (*Daoxue*, what others mistranslate as "Neo-Confucianism"). The latter became orthodox – in name more than in practice – when the Mongol Yuan dynasty (1280–1368) belatedly renewed the civil service curriculum at a controlled level in 1313. Only 11 hundred high degrees were conferred under the Mongols, compared to over 25,000 palace graduates under the following Ming. But the Mongol cooption of "Way learning" served as important models for the both the Ming and Manchu

[1] Elman 2000.

[2] See des Rotours 1932 and Herbert 1988 and compare Dikotter 2000.

Qing dynasty, which again made the Cheng-Zhu persuasion the cornerstone of classical orthodoxy.[3]

After the restricted Mongol era, Ming China tried to reinvent a meritocracy in which social prestige and political appointment depended for the most part on written classical examinations to establish legitimate public credentials. Elite political status and social prerogatives were corroborated through more extensive trials by examination, which in turn produced new literati social groups that endured from 1400 to the twentieth century. Classical learning became the empire-wide examination curriculum, which reached into 1,350 counties and tens of thousands of villages for the first time.

The Song-Yuan "Way learning" orthodoxy was mastered by millions of civil service examination candidates from 1400 until 1900. In the first Ming provincial and metropolitan examinations of 1370 and 1371, the medieval emphasis on poetry was ended. The new curriculum still required classical essays on the Four Books and Five Classics. The complete removal of poetry by the examination bureaucracy lasted from 1370 to 1756, when the examination curriculum pendulum swung decisively back to balance the essay with a poetry question again. But examination policy never hindered the popularity of poetry and literary flair among literati groups, which decisively demonstrates the cultural limits of the classical curriculum in influencing intellectual life.[4]

In Ming times, the Song dynasty "Way learning" tradition became an empire-wide orthodoxy both geographically and demographically among upper and middle level literati. Later followers created an imperial curriculum of learning at all levels of society that could be linked to the elitist civil examination system. Although the classically educated were marked by a characteristic set of moralistic predispositions favored in the civil examinations, alternative and dissenting views proliferated.[5] Natural studies, particularly medical learning became a legitimate focus of private study when literati sought alternatives to official careers under a Mongol rule that disdained sweeping civil examinations. Such occupational alternatives continued to be available when the odds of success for the many on the Ming examinations became prohibitive after 1500. The wider scope of policy questions on the civil examinations dating from the early fifteenth century often reflected the dynasty's and public interest in astrology, calendrical precision, mathematical harmonics, and natural anomalies. The "first" Western learning that entered Ming China via the Jesuits after 1600 enhanced focus on these technical fields of natural studies.[6]

Most Chinese agreed that learning was guided by examples of past worthies and sages and encouraged by good companions and teachers. In traditional schools, learning led to far more regimentation than many literati might have wished, but this

[3] See de Bary and Chaffee 1989 and Elman 1991.

[4] See Zi 1894. See also Yu 1997 and Elman and Woodside 1994 and Woodside 2006.

[5] Tillman 1992.

[6] Elman 2005.

was always tempered by the numerous local traditions of learning outside the control of the bureaucratically limited state. Many members of literary schools held that because literature and governing were not separate, writers should avoid Buddhist and Daoist vocabulary, or rustic and colloquial phrases, or the stylistic anarchy of popular novels. Knowledge of numbers in tax-related economic transactions, debates about "hot" and "cold" medical therapies to deal with epidemics, and needed reforms of the official calendar by the mid-sixteenth century were also common.

Europeans first marveled at the educational achievements of the Chinese in the sixteenth century when Catholic missionaries, especially the Jesuits wrote approvingly of the civil examinations then regularly held under Ming-Qing government auspices. Such admiration carried over into the accounts of China prepared by eighteenth century *philosophes*, who praised the "Mightie Kingdome" for its enlightened education.[7] In the absence of alternative careers of comparable social status and political prestige, the goal of becoming an official took priority. The civil service recruitment system achieved for education in imperial China a degree of standardization and local importance unprecedented in the early modern world.

This ethos carried over into the domains of medicine, law, fiscal policy, and military affairs. Imperial rulers and Chinese elites believed that ancient wisdom, properly inculcated, tempered men as leaders and prepared them for wielding political power. Both the Ming and Qing dynasties encouraged the widespread publication and circulation of acceptable materials dealing with the Four Books, Five Classics, and Dynastic Histories because the latter were the basis of the civil service curriculum and literati learning empire-wide. Throughout the Ming and Qing dynasties, more classically-literate Chinese read or had access to the literati canon than literate Europeans had access to the Bible's Old and New Testaments.[8]

Imperial support of elite cultural symbols, which were defined in terms of classical learning, painting, literature, and calligraphy, enabled the civil service hierarchy to reproduce acceptable social hierarchies by redirecting wealth and power derived from commerce or military success into education to prepare for the civil and military service. The selection of a "writing elite," not the enlargement of a "reading public," was the government's goal in using civil examinations to select officials. By producing too many candidates, however, the civil service market also yielded a broader pool of failed literates who turned to producing legal plaints, novellas, medical tracts, and bawdy plays for a de facto reading public.

Teaching in late imperial times generally meant the reproduction of classically literate elites, and the socialization by means of exhortations and rituals of the far less literate, or even illiterate, common people. The civilizing goal of "teaching and transforming" (*jiaohua*) never hardened into a tidy formula, given the dissatisfactions with the educational status quo that characterized Chinese history. Wang Yangming (1472–1528) and his late Ming followers, for example, opened schools

[7] See Lach 1965 and Elman 2005.

[8] See Ozment 1980, 202 and Elman 2001, 140–169.

and academies for commoners on a wider scale than ever before. On the other hand, the line between elites and commoners could also be blurred by political turmoil. When emperors feared that heterodox popular religions were spreading because of the excessive numbers of unlearned people in the empire, they often conflated learning with indoctrination from above. Consequently, many literati accused Wang Yangming and his more radical followers of heterodoxy and deceiving the people.[9]

Separate from official studies, "schools" of learning among literati included poetry societies, private academies, or lineages of teachings associated with classical, medical, or statecraft traditions peculiar to a particular region. Medical and statecraft traditions, in particular, were usually tied to a specific master, who bequeathed his teachings to his disciples. Without "public" schools, a classical education took place in private lineage schools, charity and temple schools, or at home, not in the solitary official county, provincial or capital school that licentiates tested into. Large numbers of teachers, often examination failures, transmitted the classical or technical training needed by young men to pass local civil or military examinations or practice their trades in counties, townships, or prefectures.

9.3 Meritocracy and Examinations

After the mid-seventeenth century fall of the Ming to Manchu armies, civil service examinations were immediately instituted by the succeeding Qing dynasty and its savvier Manchu rulers without skipping a beat. Unlike the Mongol Yuan government, the Manchu state regularly held Ming-style classical examinations in 140 prefectures and about 1,350 counties. Medieval examinations were held only in the capital, while from 1,000 to 1,360 regular examinations, when held, took place only in the provincial and imperial capitals. Fearing repetition of the Mongol failure to remain in power for very long, Manchu emperors favored civil service examinations to cope with ruling an empire of extraordinary economic strength undergoing resurgent demographic change. Qing emperors put in place an empire-wide examination system that occupied a central educational position in Chinese government and society until 1905, when the examinations were abolished.

What was unique about this effort to develop institutions for classical consensus and political efficacy was its remarkable success in accomplishing the goals for which it was designed. Education effectively restructured the complex relations between social status, political power, and cultural prestige. A classical education based on non-technical moral and statecraft theory was as suitable for selection of elites in China to serve the imperial state at its highest echelons of power as humanism and a classical education served elites in the nation-states of early-modern Europe. The examination life, like death and taxes, became one of the fixtures of elite education and popular culture. Examinations represented the focal

[9]See Kuhn 1990 and Rowe 2001.

point through which imperial interests, family strategies, and individual hopes and aspirations were directed. Moreover, the education ethos carried over into the domains of medicine, law, fiscal policy, and military affairs. The examinations engendered an empire-wide school system down to the county level. Several centuries before Europe, the Chinese imperial state committed itself financially to support a county level school network.

Despite their initial success, dynastic schools, one per county or township, were eventually absorbed into the examination system and remained schools in name only. Because the classical curriculum was routinized, little actual teaching took place in such schools. Dynastic schools became way-stations, that is, "testing centers," for students preparing for the more prestigious civil service examinations. Imagine if American students seeking to enter medical school only needed to pass the Medical Boards prepared by the Princeton Educational Testing Service (ETS) and were not required to attend college before entering medical school! Song and later Ming-Qing schools of classical learning were trumped by the civil examinations. The schools became "waiting stations" for those who had not passed.

Training in vernacular and classical literacy was left to the private domain. Dynastic schools in China never entertained goals of mass education. Designed to recruit talent into the "ladder of success," a classical education became the sine qua non for social and political prestige in empire-wide and local affairs. Imperial rulers recognized testing their elites on their mastery of a classical education was an essential task of government, and Chinese elites perceived a classical education as the correct measure of their moral and social worth.[10]

When the autonomy of education from political and social control at times became a bone of contention, this revealed the limits of imperial power in the Ming or Qing empires. But both rulers and elites generally equated social and political order with moral and political indoctrination through a civilizing education. High-minded officials often appealed for the relative autonomy of education in private academies as an antidote to the warping of classical educational goals by the cut-throat examination process. Such private academies frequently became centers for dissenting political views, but they often paid a political price for such activism, viz, the late Ming Donglin Academy. Such academies also served as important educational venues for literati who preferred teaching and lecturing to passing on classical learning to their students. When compared to some 500 Song and 400 Yuan dynasty private academies, the Ming overall had in place from 1,000 to 2,000 such academies by its end. The Qing had upwards of 4,000 empire-wide, a small number considering that population reached 300 million by 1800, but in aggregate an influential force.[11]

[10] See Ho 1964.

[11] Bai 1995.

9.4 Social Reproduction

Education was premised on social distinctions between literati, peasants, artisans, and merchants in descending order of rank and prestige. Under the Ming, sons of merchants for the first time were legally permitted to take the civil examinations. Occupational prohibitions, which extended from so-called "mean peoples" (those engaged in "unclean" occupations) to all Daoist and Buddhist clergy, however, kept many others out of the civil service competition, not to mention an unstated gender bias against all women.

Civil examination success required substantial investments of time, effort, and training. Because the dynastic school system was limited to candidates already literate in classical Chinese, initial stages in training and preparing a son for the civil service became the private responsibility of "commoner" families seeking to attain or those simply hoping to maintain elite status as "official" or "military" families. Careerism usually won out over idealism among talented young men who occasionally were forced to choose between their social obligations to their parents and relatives and their personal aspirations. Failures, however, because of their classical literacy could choose teaching, pettifoggery, or medicine as alternate careers.

Once legally enfranchised to compete, merchant families also saw in the civil service the route to greater wealth and orthodox success and power. Unlike contemporary Europe and Japan where absolute social barriers between nobility and commoners prevented the translation of commercial wealth into elite status, landed affluence and commercial wealth during the Ming dynasty were intertwined with high educational status. Because of the literary requirements, artisans, peasants, and clerks were poorly equipped to take advantage of the hypothetical openness of the civil service.

Frequently the rites of passage from child to young adult in wealthy families were measured by the number of ancient texts that were mastered at a particular age. Capping of a young boy between the ages of 16 and 21, for example, implied that he had mastered all of the Four Books and one of the Five Classics, the minimum requirement for any aspirant to compete in the civil service examinations up to 1756. Clear boundaries were also erected to demarcate male education from female upbringing, which remained intact until the seventeenth century when education of women in elite families became more common. Nevertheless, when compared with the fatalistic ideologies common among Buddhist or Hindu peasants in South and Southeast Asia, for example, the Chinese ideology of teaching and learning did affect beliefs in the usefulness of education and created a climate of rising expectations for those who dreamed of glory but sometimes rebelled when their hopes were repeatedly dashed.[12]

Looking beyond the official meritocracy of the graduates, we see the larger place of the civil examinations in Chinese society and not just for elite families. One of

[12] See Ko 1994 and Gardner 1989.

the unintended consequences of the civil examinations was the creation of legions of classically literate men (and women) who used their linguistic talents for a variety of non-official purposes. If there was much social "mobility," i.e., the opportunity for members of the lower classes to rise in the social hierarchy, it was likely here. The archives indicate that peasants, traders, and artisans, who made up 90 % of the population, were not among the highest graduates. Nor were they a significant part of about 1.4 (late Ming) to 2.6 million (mid-Qing) local candidates who failed at lower levels every 2 years.

Occupational fluidity among merchants, military families and gentry, however, translated into a substantial "circulation" of lower and upper elites in the examination market. Overall, licentiates were not peasants, traders, artisans, clergy, or women. They were gentry and merchants, who were "commoners," or military men. To reach this level, peasants, traders, and artisans had to begin an economic climb that eventually allowed them to earn enough to provide classical educations for their sons.

9.5 Political Reproduction

Education in Ming China was recognized as one of several tools in the repertoire of the dynasty to maintain public order and political efficacy. Imperial support of education and examinations was contingent on the examination process in supplying talented and loyal men, some 20,000 officials empire-wide, for the bureaucracy to employ. The dynasty's minimum requirement that the educational system reinforce and inculcate political, social, and moral values, which would maintain the dynasty in its present form, was inseparable from classical rhetoric exalting learning and prioritizing civilian values. Political legitimacy was an assumed and worthy byproduct of preparation for the civil and military service. The legions of local clerks who worked in 1,350 county and 140 prefectural yamens were banned from the civil service, although they passed on their home sinecures to their sons or close relations.[13]

In a tightly woven ideological canvas of loyalties, even emperors became educated in the orthodox rationale for their imperial legitimacy – by special tutors selected from the civil service examinations. A by-product was that the number of classically literate elites able to produce essays, poetry, stories, novels, medical treatises, and scholarly works also increased dramatically. They fed the woodblock printing industry and the rapid growth of a dynamic print culture in South China with classical and vernacular texts read widely in the late Ming.[14] Imperial support of literati-inspired cultural symbols, which were defined in terms of classical learning, painting, literature, and calligraphy, enabled the dynasty in concert with

[13] See Zi 1894 and Miyazaki 1981 and compare Foucault 1977, 170–228.

[14] See Brokaw and Chow 2005.

its elites to reproduce the institutional conditions necessary for their survival. The examination hierarchy reproduced acceptable social hierarchies by redirecting wealth derived from commerce or military success into a classical education.

9.6 Overlaps Between Economic and Cultural Reproduction

Well-organized local lineages translated social and economic advantages into educational success, which correlated with their control of local cultural resources. Such lineages were usually built around corporate estates, which required classically literate and highly placed leaders who moved easily in elite circles and could mediate on behalf of the kin group. Economic surpluses produced by wealthy lineages, particularly in prosperous areas, enabled members of rich segments to have better access to a classical education and success on state examinations, which in turn lead to new sources of political and economic power outside the lineage. Here, economic reproduction lent its traction to social and political forms for the accumulation of power and stature. If one "followed the money," economic resources translated into cultural resources for classical learning.[15]

Because education of elites entailed long-term internalization of orthodox thought, perception, appreciation, and action, the simultaneous processes of social and political reproduction in Ming China yielded both "literati culture" and the literatus as a "man of culture." Classical literacy, i.e., the ability to write elegant essays and poetry, was the crowning achievement for educated men and increasingly for elite women in the seventeenth century. This learning process began with rote memorization during childhood, continued with youthful reading, and concluded with mature writing. Literati believed that the memory was strongest at an early age, while mature understanding was a gradual achievement that derived from mastering the literary language and its moral and historical content.

Educated men, and some women, became a "writing elite" whose essays would mark them as classically trained. The educated man was able to write his way to fame, fortune, and power, and even if unsuccessful in his quest for an official career, he could still publish essays, poetry, novels, medical handbooks, and other works. The limitation, control, and selection of the "writing elite," not the enlargement of the "reading public," was the dynasty's goal in using civil examinations to select officials. By enticing too many candidates, however, the civil examination market also yielded a broader pool of literate writers who upon failing turned their talents to producing other texts, novellas, pornography included, and medical tracts.[16] They compiled genealogies, prepared deeds, provided medical expertise, and wrote settlements for adoption contracts and mortgages. These acts required expertise and contacts that only the elite within a descent group could provide. Merchants

[15] Elman 1990.

[16] See Shang 2003.

in late imperial China also became known as cultured patrons of scholarship and publishing. The result was a merging of literati and merchant social strategies and interests. Classical scholarship flourished due to merchant patronage, and books were printed and collected in larger numbers than ever before.[17]

Dominant lineages and nouveau riche families maintained their high local status through the lineage schools, medical traditions, and merchant academies they funded. Elite education stressed classical erudition, historical knowledge, medical expertise, literary style, and poetry. Classical literacy and proficiency in the literary arts were requirements to socialize with the political elite. The strict enforcement of requirements for civil examination essays further cemented literary culture. The well-publicized rituals for properly writing classical Chinese included cultural paraphernalia long associated with literati culture: the writing brush, ink-stick, ink-slab, stone monuments, fine silk for writing and wearing, and special paper.

Literati prestige, however, more than met its match inside the actual testing sites, which operated as de facto "cultural prisons." Despite the role of police surveillance in the selection process, such "prisons" elicited the voluntary participation of millions of men – women were excluded – and attracted the attention of elites and commoners at all levels of society. Think of such cultural prisons as educational havens that elites sought to break into, so that they could eventually break out of them.

Political and social reproduction through public and private institutions of teaching required the transference of economic resources into education and entailed a degree of cultural and linguistic uniformity among elites that only a classical education could provide. Such uniformity was significantly muted in practice. The classical curriculum represented a cultural repertoire of linguistic signs and conceptual categories that reinforced elite political power and social status. Education in dynastic schools and private academies was a fundamental factor in determining cultural consensus and conditioned the forms of reasoning and rhetoric prevailing in elite literary life of the period.[18]

The reform of education after 1865 and the elimination of examinations in China after 1905 defined new national goals of Western-style change that superseded the conservative imperial goals of reproducing dynastic power, granting gentry prestige, and affirming the classical orthodoxy. National unity replaced dynastic solidarity, as the Manchu empire became a struggling Chinese Republic that was later refashioned as a multi-ethnic communist nation in 1949. Since the Song-Yuan-Ming transition, 1250–1450, the struggle between insiders and outsiders in "China" to unite the empire had resulted in what was over 400 years of so-called "barbarian rule" over the Han Chinese by first Mongols and then Manchus. With the Republican Revolution of 1911, that historical narrative ended.

[17] See Elman 2001.

[18] Elman 2000, chapter 7.

9.7 Power, Politics, and Examinations

The mark of the late imperial civil system was its elaboration of earlier civil examination models through the impact of commercialization and demographic growth when the reach of the process expanded from metropolitan and provincial capitals to all 1,350 counties. In addition, the upsurge in numbers of candidates was marked by the dominance of palace graduate degree-holders in high office starting in the late sixteenth century. Officialdom was the prerogative of a very slim minority. As the door to official appointment closed, civil examinations till conferred social and cultural status on families seeking to become or maintain their status as local elites.

Competitive tensions in the examination market explain the police-like rigor of the civil service examinations as a systematic and stylized educational form of cultural practice that Han Chinese insiders and Manchu warrior outsiders could both support. There were political forces and cultural fears pushing Han Chinese and their non-Han rulers to agree publicly how imperial and bureaucratic authority was conveyed through the accredited cultural institutions of the Ministry of Rites, the Hanlin Academy, and civil examinations. Political legitimation transmitted through education succeeded because enhanced social status and legal privileges guaranteed by code were an important byproduct of the examination competition for the civil service.[19]

Establishing quotas based on the ratio between successful and failed candidates further demonstrated that the state saw control of access via quotas to the civil service as an educational means to regulate the power of elites. Government control of civil and military quotas was most keenly felt at the initial stages of the competition: licensing at the county levels for the privilege to enter the examination selection process. By 1400, for example, it is estimated that there were 30,000 classical literate licentiates out of an approximate population of 65 million, a ratio of almost 1 licentiate per 2,200 persons. In 1600, there were perhaps 500 thousand licentiates in a total population of some 200 million, or a ratio of 1 licentiate per 400 persons. Once they were common place, local degrees became victims of cultural inflation. Only a higher degree conferred an official position.

Because of economic advantages in South China (especially the Yangzi delta but including coastal Fujian and Guangdong provinces), candidates from the south performed better on the civil examinations than candidates from less prosperous regions in the north (North China plain), northwest (Wei River valley), and southwest (Yunnan and Guizhou). To keep the south's domination of the examinations within acceptable bounds, Ming education officials eventually settled in 1425 on an official ratio of 60:40 for allocations of appointments for the highest palace graduates from the south versus the north, which was slightly modified to 55:10:35 a year later by adding a central region.[20]

[19] See Chaffee 1995.

[20] Elman 2000, chapter 2.

Despite – or perhaps because of – the state-society partnership that undergirded civil examinations, the examination hall was a contested site, where the political interests of the dynasty, the social interests of its elites, and the cultural ideals of classical learning were meshed. Moreover, literati officials who supervised examination halls empire-wide also were in charge of the military and police apparatus when so many men were brought together to be tested at a single place. Forms of resistance to imperial prerogative emerged among examiners, and widespread dissatisfaction and corruption among the candidates at times triumphed over the high-minded goals of some of the examiners in charge of the classical examinations.[21]

9.8 Literacy and Social Dimensions

Imperial examinations created a written linguistic barrier that stood between those who were allowed into the empire's examination "prisons" and those classical illiterates who were kept out. In a society where there were no genuine "public" schools, the partnership between the court and the bureaucracy was monopolized by gentry-merchant literati who organized into lineages and clans to maximize the value of their economic investments via superior classical educations. Language and classical literacy were central in culturally defining high and low social status in late imperial Chinese society. The selection process permitted some circulation of elites in and out of the total pool, but the educational curriculum and its formidable linguistic requirements effectively eliminated the lower classes from the selection process. In addition, an unstated gender ideology forbade all women from entry into the examination compounds.[22]

Literati regularly turned to religion and the mantic arts in their efforts to understand and rationalize their emotional responses to the competitive local, provincial, and metropolitan examinations. Examination dreams and popular lore spawned a remarkable literature about the temples candidates visited, the dreams that they or members of their family had, and the magical events in their early lives that were premonitions of their later success. Both elites and popular culture tempered their own understanding of the forces of "fate" that operated in the examination marketplace by encoding them in cultural glosses with unconscious ties to a common culture and religion. The anxiety produced by examinations was experienced most personally and deeply by boys and men. Fathers and mothers, sisters and extended relatives shared in the experience and offered comfort, solace, and encouragement, but the direct, personal experience of examination success or failure belonged to the millions of male examination candidates who competed with each other against increasingly difficult odds.[23]

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[21] Elman 2000, chapter 8.

[22] C.f. Elman 1990 and compare Bourdieu and Passeron 1977.

[23] Elman 2000, 299–326.

The civil service competition created a dynastic curriculum which consolidated gentry, military, and merchant families into a culturally defined status group of degree-holders that shared: (1) a common classical language; (2) memorization of a shared canon of Classics; and (3) a literary style of writing known as the 8-legged essay. Internalization of elite literary culture was in part defined by the civil examination curriculum, but that curriculum also showed the impact of literati opinion on imperial interests. The moral cultivation of the literatus was a perennial concern of the imperial court as it sought to ensure that the officials it chose in the examination market would loyally serve the ruling family.

The internalization of a literary culture that was in part defined by the civil examination curriculum also influenced the public and private definition of moral character and social conscience. A view of government, society, and the individual's role as an elite servant of the dynasty, was continually reinforced in the memorization process leading up to the examinations. For the literatus, it was important that the dynasty conformed to classical ideals and upheld the classical orthodoxy that literati themselves formulated. Otherwise the ruling family was illegitimate. The bureaucracy made an enormous financial commitment to staffing and operating the empire-wide examination regime. Ironically, the chief consequence was that examiners eventually could not take the time to read each individual essay carefully. The final rankings, even for the 8-legged essay, were very haphazard. While acknowledging the educational impact of the curriculum in force, we must guard against over-interpreting the classical standards of weary examiners inside examination halls as a consistent or coherent attempt to impose mindless orthodoxy from above.

An interpretive community, canonical standards, and institutional control of formal knowledge became key features of the civil examination system and its halls empire-wide. Scrutiny of the continuities and changes in linguistic structures and syllogistic chains of moral argument in the examination system revealed an explicit logic for the formulation of questions and answers and an implicit logic for building semantic and thematic categories of learning. These enabled examiners and students to mark and divide their cognitive world according to the moral attitudes, social dispositions, and political compulsions of their day.[24]

9.9 Fields of Classical Learning

Literati fields of learning, such as natural studies and history, were also represented in late imperial civil examinations. Such inclusion resulted from the court's influence, which for political reasons widened or limited the scope of policy questions on examinations, and the assigned examiners, whose classical knowledge echoed the intellectual trends of their time. In the mid-eighteenth century, new guidelines were

[24]C.f. Johnson 1985 and compare Kermode 1979.

also applied to the civil examination curriculum. As a result, the Song rejection of medieval *belles lettres* in civil examinations was turned back. In the late eighteenth century, the examination curriculum started to conform to the philological and evidential research currents popular among southern literati.

The scope and content of the policy questions on session three increasingly reflected the academic inroads of newer classical scholarship among examiners. Beginning in the 1740s, high officials debated new initiatives that challenged the classical curriculum in place. They restored earlier aspects of the civil examinations that had been eliminated in the Yuan and Ming dynasties, such as classical poetry. In the mid-eighteenth century, the Qing dynasty initiated "ancient learning" curricular reforms to make the examinations more difficult for the increasing numbers of candidates by requiring all Five Classics in 1787. In addition, the formalistic requirements of the poetry question gave examiners an additional tool, along with the 8-legged essay "grid," to grade papers more efficiently. The Qianlong emperor in particular recognized that an important characteristic of the civil examinations was the periodic questioning of the system from within to suit the times.[25]

9.10 De-legitimation and De-canonization

The radical reforms after 1860 to meet the challenges of the Taiping Rebellion (1850–1864) and Western imperialism are beyond the scope of this essay.[26] Even the Taipings instituted their own Christian-based civil examinations. In the last years of the Qing dynasty, however, literati-officials ridiculed the civil examinations as an "unnatural" educational regime that should be discarded. During the transition to the Republic of China, new political, institutional, and cultural forms emerged that challenged the creedal system of the late empire and refracted its political institutions.

The emperor, his bureaucracy, and literati cultural forms quickly became symbols of backwardness, especially after the 1894–1895 Sino-Japanese War, in which the Qing army and navy were humiliated in battle.[27] Traditional forms of knowledge were uncritically labeled as "superstition," while "modern science" in its European and American forms was championed by new intellectuals as the path to knowledge, enlightenment, and national power. Perhaps the most representative change occurred in the dismantling of the political, social, and cultural functions of the civil examination regime that had lasted from 1370 to 1905. By dismantling imperial institutions such as the civil examination system so rapidly, the Chinese reformers and early Republican revolutionaries underestimated the public reach of historical institutions that had taken two dynasties and 500 years to build. When they delegitimized them

[25] Elman 2000, chapters 9–10.

[26] Elman 2000, chapter 11.

[27] Elman 2003.

all within the space of two decades starting in 1895, Han Chinese literati helped bring down both the Manchu dynasty and the imperial system of classically-based governance. Their joint fall concluded a millennium of elite belief in literati values and 500 years of an empire-wide imperial orthodoxy.[28]

9.11 Reform and Revolution

The demise of traditional education and the rise of modern schools in China was more complicated than just the demise of imperial examinations and the rise of modern education, which would subordinate examinations to new forms of schooling. A social, political, and cultural nexus of classical literati values, dynastic imperial power, and elite gentry status unraveled. The dynamism of late imperial civilization in motion was lost. Rather, stagnation ensued. Manchu rulers meekly gave up one of their major weapons of cultural control that had for centuries successfully induced literati acceptance of the imperial system and herded them into examination compounds. The radical reforms in favor of new schools initially failed because they could not readily replace public institutions for mobilizing millions of literati in examination compounds based on a classical education.

Traditionalists who tried to reform classical learning as "Confucianism" after 1898 paid a form of "symbolic compensation" to classical literati thought by unilaterally declaring its moral superiority as a reward for its historical failure. The modern reinvention of "Confucianism" was completed in the twentieth century despite the decline of classical learning in public schools after 1905. In China and the West, "Confucianism" became instead a new venue for traditional scholarship, when the "modern Chinese intellectual" irrevocably replaced the late Qing literatus in the early Republic.[29]

The rise of "Chinese learning" as a counterpart to "Western learning" indicated that classical Learning was translated into a form of native studies that amalgamated ancient and modern China under the banner of reform. Traditional learning was equivalent to "Chinese learning." The English translation that resulted from this linguistic change was "sinology," which became the standard term referring to a "China specialist" in the twentieth century. Increasingly, traditional education was dissolving within a Westernizing reformist project.

Shu Xincheng (1892–1960), an early Republican educator and historian, recalled the pressure of the times to change: "The changeover to a new system of education at the end of the Qing appeared on the surface to be a voluntary move by educational circles, but in reality what happened was that foreign relations and domestic pressures were everywhere running up against dead ends. Unless reforms were

[28] Elman 2000, chapter 11.

[29] Elman 2002.

undertaken, China would have no basis for survival. Education simply happened to be caught up in a situation in which there was no choice" (Shu 1932, 6–7).

The floodgates broke open wide in 1905 in the aftermath of the Russo-Japanese War of 1904–05, which was largely fought on Chinese soil in Manchuria. Given the frantic, political climate of the time, the dynamism of the classical educational system was by 1905 a convenient scapegoat for stagnation. Court and provincial officials submitted a common memorial calling for the immediate abolition of the civil examinations at all levels. The civil examinations in particular were perceived as an insuperable obstacle to new schools because a classical degree still outweighed new Western school degrees and prevented the ideal of universal education.

New schools became the focus of educational and political reformers after 1905, but examinations remained an important feature of a student's life. Others, however, saw the shift from civil examinations to the new schools as simply a displacement from the late imperial form of examination control to school-based examinations. A separate Education Board was established in December 1905 to administer the new schools and oversee the many semi-official educational associations that emerged at the local, provincial, and regional levels. The Board reflected the increasing influence of Han Chinese officials in lieu of Manchus.

A deep educational chasm was emerging between literati traditionalists and new educators about the role of classical learning in twentieth century China. Increasingly, the Education Board served the interests of the modernists in first forgetting the carefully formulated cultural dynamism of a late imperial classical education and then undoing the schooling mechanisms under which classical literacy and essay writing had been achieved. A vital component was still missing, however: the need to address the dominating role of the written classical language and the invention of an alternative vernacular spoken language for school instruction and in written examinations. Full-scale educational reform would require champions of a "literary revolution" who became vocal during the early Republic. Once the Republican Ministry of Education bought into the need to address the written language of education, the new government could increasingly invoke popular education as a move from ideal to practical reality in instruction.

To confirm a school's performance and to measure a student's abilities according to a national standard, the Education Board from the beginning used examinations to test all levels of schools. Private and public school entrance examinations were already ubiquitous, as were graduation examinations. Many unofficial organizations and groups entered the fray of education and school reform at all levels, which further eroded the Manchu court's control over education policy. Increasingly, unofficial elites took over the dynasty's monopoly control of educational institutions, thereby gaining the upper hand in determining the future of education after 1905.

Through the portal of local education, local official and unofficial elites took over the educational bureaus of the central bureaucracy. As the Qing court and its upper levels of bureaucratic power grew weaker, regional and local tiers of power began to create the educational institutions that would accelerate the demise of the dynasty and form the educational motor of the Republic in motion after 1911. The Education Board established in 1905 continued into the Republican period,

although renamed as a "Ministry," and remained on the side of new schools and a new curriculum.[30] The educational institutions of the Republic of China after 1911 were the direct legacy of the late Qing reforms. Sun Yat-sen's (1866–1925) creation of the Examination Bureau as part of the Republic's 1920s "five-power constitution" was also a twentieth century echo of traditional institutions. The twentieth century "examination life," which became associated with university and public school entrance examinations in China and later in Taiwan is the cultural heir of a life in motion under the imperial examination regime.[31]

Despite these continuities, a complete break between longstanding, internalized expectations of Chinese families for prestige based on traditional educational preparation for sons and the dynasty's objective political institutions occurred. The new institutions were increasingly reformed based on Western and Japanese models. The devaluation of classical degrees when compared to those from new schools in China or from foreign schools precipitated a generalized down classing of most traditional education and the classical curriculum. Growing disparity between old expectations and new objective opportunities increasingly meant the failure of many conservative families to convert their inherited educational and literary cultural resources into new academic degrees for their children. A revolutionary transformation in student dispositions towards education accompanied the radical change in the conditions of recruitment of public officials after 1905. The ancient regime, virtually lifeless after 1900, stopped dead in its tracks by 1911, its corpse reconstituted as a republican state whose hardware ran new programs for a modern civilization.[32]

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[30] Elman 2000, chapter 11.

[31] Strauss 1994.

[32] Depierre 1987.

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