**DE GRUYTER** 

# Mario Liverani

# IMAGINING BABYLON

THE MODERN STORY OF AN ANCIENT CITY

STUDIES IN ANCIENT NEAR EASTERN RECORDS



#### Mario Liverani Imagining Babylon

# Studies in Ancient Near Eastern Records

General Editor: Gonzalo Rubio

#### **Editors:**

Nicole Brisch, Petra Goedegebuure, Markus Hilgert, Amélie Kuhrt, Peter Machinist, Piotr Michalowski, Cécile Michel, Beate Pongratz-Leisten, D. T. Potts, Kim Ryholt

## Volume 11

# Mario Liverani Imagining Babylon

The Modern Story of an Ancient City

Translated from the Italian by Ailsa Campbell

**DE GRUYTER** 

### The translation of this work has been funded by SEPS SEGRETARIATO EUROPEO PER LE PUBBLICAZIONI SCIENTIFICHE



Via Val d'Aposa 7 – 40123 Bologna – Italy seps@seps.it – www.seps.it

ISBN 978-1-61451-602-6 e-ISBN (PDF) 978-1-61451-458-9 e-ISBN (EPUB) 978-1-61451-958-4 ISSN 2161-4415

#### Library of Congress Cataloging-in-Publication Data

A CIP catalog record for this book has been applied for at the Library of Congress.

#### Bibliographic information published by the Deutsche Nationalbibliothek

The Deutsche Nationalbibliothek lists this publication in the Deutsche Nationalbibliografie; detailed bibliographic data are available on the Internet at http://dnb.dnb.de.

© 2016 Walter de Gruyter Inc., Boston/Berlin Typesetting: Meta Systems Publishing & Printservices GmbH, Wustermark Printing and binding: CPI books GmbH, Leck ⊚ Printed on acid-free paper Printed in Germany

www.degruyter.com

For Robert McCormick Adams

#### Preface to the Italian Edition

If a city rises to the sky like a mountain, that city will be reduced to a heap of ruins. Babylonian prophecy (Šumma ālu, I 16)

The civilization of the past will become a heap of ruins and in the end a heap of ashes, but ghosts will hover over the ashes. Ludwig Wittgenstein (1977, p. 22)

The reconstruction of the cultural story of our Western world in the last two hundred years could ideally be portrayed as so many tesserae – one for each possible subject – which build, or should build, a mosaic which shows a picture rich in meaning. One tessera missing until now is the one showing how the city of the Ancient Near-Eastern civilizations (Mesopotamia and surroundings) has been imagined and visualized, studied and reconstructed over two centuries of archaeological excavations and scholarly research. I imagine that the normal reader's immediate reaction is one of irritation: this tessera is so small and abstruse as to be irrelevant, and anyway, the complete picture would be clearly visible and full of meaning even if our tessera were to remain for ever an empty hole. I believe, on the contrary, and not only because of my official position, that no tessera is useless, because all are interconnected and throw light on each other. If anything, I think that our tessera is endowed with a certain appeal and also a diagnostic value as regards relationships between West and East, between modernity and tradition, between colonialism and neo-colonialism, between the humanistic, social, natural-physical and information sciences. Besides, it is one of the very few tesserae that I can attempt to fill from my own personal knowledge.

To tell the truth, whoever wanted to write a book on the subject with due competence and consciousness should know much not only of historical and proto-historical archaeology and many of the philologies of the Ancient Near East (Assyriology, Sumerology and Hittitology, Egyptology, Semitic studies, Persian studies, and several others), but also of the history of town planning and architecture, of the history of art and drawing, of urban sociology, of social anthropology, of macro-economic theories from the nineteenth century onwards, of evolutionism and neo-evolutionism, of neo-Marxism and neo-liberalism, of village communities and agrarian landscapes, of despotism and theocracy, of political events between Europe and the Ottoman Empire, of colonialism and decolonization, of globalization and localization, of neo-geographic approaches and the theory of systems, of computerized graphics and remote sensing, and who knows what else besides. I do not believe that a single person answering this identikit exists in the world, but in any case it is certain that I am not it.

However, having passed so many years of my life dwelling on the question, having written different articles and entire books on particular points, and having finally decided to embark on this undertaking, I set myself to read (in many cases reread) a quantity of books and articles, inside but largely outside my own field of professional competence, over three years of frenetic and uninterrupted frequenting of very varied libraries. From this I have drawn not only ideas and information, confirmations and confutations, corrections and rejections, but also strong intellectual enjoyment. So if then the outcome of my labours should be unsatisfactory, I can always console myself with the famous words of Borges: 'Others boast of the pages they have written; I am proud of those that I have read'. I must, however, confess that the temptation to widen my horizons has arrived too late to allow me to think (and live) in a way a little more complete, because I also feel like Poe's castaway, who towards the end of *Manuscript found in a bottle* says: 'I have been all my life a dealer in antiquities, and have imbibed the shadows of fallen columns at Balbec, and Tadmor, and Persepolis until my very soul has become a ruin.'

At a certain point I had to put an end to the frenzied activity of reading (in every article read others are discovered to read, and so the further one advances, the further away one is from the ideal destination), giving up the search for books and articles whose titles were enticing and at the same time relevant. Fortunately I found great support in the suggestions and comments of numerous colleagues and friends, whom I must here thank. I wish at least to mention my debt to Silvia Alaura, Marcello Barbanera, Isabella Chiari, Francesco Paolo Fiore, Maria Gabriella Micale, Davide Nadali, Vanda Perretta, Maria Grazia Picozzi, Alessandro Vanzetti, Mercedes Viale, Claudio Zambianchi. I then found in Mario Torelli a friend willing to read everything before its final development, receiving from him (apart from the ritual compliments) valuable criticism of both a general and a specific nature.

The title of the book and the Babylonian prophecy cited in the epigraph allude to the biblical myth of the Tower of Babel, of which the prophecy itself is largely an inspiration and model. Whether divine nemesis or historical process, whether moral teaching or systemic outcome, it is certain that the ancient cities were all reduced to heaps of rubble: the Babylonians said tillu, from which comes the Arabic tell, which indicates the low stratified hills of the remains of the ancient settlements. If the boast of the Assyrian king, Esarhaddon, in describing the deadly advance of his army, was 'Before me cities, behind me heaps of ruins (tillu)', the boast of modern Near-Eastern archaeologists could be the reverse: 'Before us tell, behind (or after) us cities'. The archaeological and epigraphic rediscovery of the ancient cities of the Near East constitutes a chapter not at all marginal in our recent cultural history, a contribution rich in consequences, and well able to fit into the fabric of cultural trends and even of historical events of the last two centuries. The maturity of a discipline is also recognizable by being more than the urgency of publication of the unpublished, and of the spatio-temporal framing of data, in order to face a sort of self-analysis or self-historicization of work completed and in progress, and of further perspectives. It is, besides, striking how and to what extent the old myths, the echoing of biblical and classical readings, remain profoundly rooted in our culture, and how, on the contrary, more recent discoveries, as exciting as they are, have great difficulty in penetrating it. And the recent trends towards turning everything into a show and 'mass' sharing of cultural communication draw easier and more attractive nourishment from the old myths than from the boring details and contextualization of the professional historians.

A couple of technical clarifications. On the spatial level, this book has a strong 'nucleus' in the so-called Greater Mesopotamia of the period between 3500 and 500 BC; but it also has a gradually shaded outer extent in time (from the proto-historic premises to classical, late antique and Islamic development) and in space (from Egypt and the Aegean to Iran, to Southern Arabia, to the valley of the Indus, and to Central Asia). Finally, everyone will understand that this book does not pretend to provide a systematic treatment, in a textbook fashion, of the subject, but rather to outline its developments in their important traits. The book has already assumed a size much greater than that initially imagined – and I am grateful to the publisher for having accepted it, although so expanded, and with all the illustrative and bibliographical apparatus. I thank in particular Maria Gabriella Micale and Lucia Mori for having helped me in the iconographical research.

The dedication of this book to Robert McCormick Adams is inevitable and due: it is a question of the only person in the world who to a large measure approaches close to the identikit of the ideal author outlined above, and it is to him that we owe many of the decisive suggestions in carrying our way of handling the subject from the positions of the late nineteenth century to the present level. It is then for me a true pleasure to be able to express to the great Maestro my recognition for everything that I have learnt from him, even without ever having been a pupil, unless a virtual one.

Mario Liverani

#### **Contents**

	Preface to the Italian Edition — vii		
	List of figures — xv		
	Abbreviations — xvii		
	Journals <b>—— xvii</b>		
	Series — xviii		
1	Rediscovery and perplexity —— 1		
1.1	The ruins and the biblical curse — 1		
1.2	Imagining unknown cities —— 10		
1.3	The rediscovery of the Assyrian capitals — 23		
1.4	The techniques of excavation and the problems		
	of visibility —— 31		
1.5	Ancient cities and eastern cities; the material,		
	and the values — 37		
1.6	Ideology and town planning: a city and not a city —— 43		
1.7	From the Assyrians to the Sumerians — 49		
1.8	Stripping the tell —— 54		
2	Acceptance and modification —— 61		
2.1	The 'discovery of bricks' and the architectural revolution — 61		
2.2	From Liberty to Bauhaus: the city takes form — 68		
2.3	The ancient descriptions — 76		
2.4	Imagining Jerusalem —— <b>80</b>		
2.5	Above the flood plain: Anatolia and Iran — 85		
2.6	The Near-Eastern village and its eclipse —— <b>89</b>		
2.7	Evolutionism and economic history —— 93		
2.8	Max Weber: the separate ways —— 100		
2.9	Anna Schneider and the Sumerian temple-city —— 104		
2.10	New procedures: the inventory of the country —— 107		
2.11	New procedures: excavation by squares —— 113		
2.12	The 'colonial' excavations: palaces and urban neighbourhoods — 120		
2.13	Henri Frankfort, from Egypt to the Diyala —— 125		

3	The season of theoretical models —— 131
3.1	Gordon Childe: the urban revolution and evolutionary
	heritage <b>—— 131</b>
3.2	Thorkild Jacobsen and 'primitive democracy' —— 138
3.3	Igor Diakonoff, the 'Asiatic mode' and the residual
	village —— <b>142</b>
3.4	Karl Wittfogel and the 'hydraulic' city —— 148
3.5	Karl Polanyi and the redistributive city — 154
3.6	The Chicago school: 'City Invincible' and the young
	Adams — 159
3.7	The wider scenes: Mumford, Sjoberg, Jacobs —— 165
3.8	Neo-evolutionism: city and archaic state —— 171
3.9	After Babylon: Greek urbanization and the Islamic city —— 176
4	The new models in practice —— 183
4.1	Robert Braidwood, the Jarmo project and the arrival
	of the palaeo-sciences — 183
4.2	Robert Adams and the Diyala Basin Project: territorial and
	demographic analyses — 187
4.3	Leo Oppenheim and the Sippar project: 'great organizations'
	and communities of citizens — 192
4.4	Primary and secondary urbanization —— 200
4.5	The cycles of urbanization — 204
4.6	The contest for the first city —— 210
4.7	New frontiers: from the Nile to the Indus to Central Asia — 216
4.8	The shape of the city and the new foundations —— 230
5	Modernity: new approaches and new settings —— 243
5.1	The 'zero stratum' of the tell and the ethno-archaeological
	model —— <b>243</b>
5.2	The neo-geographic models and the settlement
	hierarchies — 248
5.3	Site catchment analysis and the urban-rural continuum — 259
5.4	The village and the communal bodies — 264
5.5	The revival of architecture: the French school —— 270
5.6	The revival of architecture: the German school —— 277
5.7	The crisis of the palace — 282
5.8	The crisis of the temple —— 286
5.9	City-state and state-city — 291
5.10	The neo-liberalist model: market and entrepreneurs — 295

5.11	The 'world-system' and the expansion of Uruk —— 303
5.12	North and South, centre and periphery — 311
5.13	The theory of systems and the question of collapse — 322
5.14	The climatic factor and the early environment — 330
5.15	The demographic factor —— 335
6	Post-modernity: computerization and deconstruction —— 345
6.1	Tourist enjoyment and totalizing restoration —— 345
6.2	Political instability and growing costs: the virtual
	excavation —— 352
6.3	Simulations and computer graphics — 359
6.4	Globalization: Eastern and Western — 365
6.5	Generalized complexity and continuism — 369
6.6	Anti-state localism: the oikos revisited —— 373
6.7	Non-places and non-cities: the structure denied — 378
6.8	Epilogue —— 384
	Bibliography —— 389

Index — 468

#### List of figures

- Fig. 1: Pieter Brueghel, *The Tower of Babel* (1565). Rotterdam, Museum Boijmans Van Beuningen 16
- Fig. 2: Athanasius Kircher, The Tower of Babel (1679) 28
- Fig. 3: Johann Fischer von Erlach, *The city of Babylon* (1721). London, the British Library 29
- Fig. 4: Maarten van Heemskerck, *The Tower of Babel* (1569). Paris, Bibliothèque nationale de France 30
- Fig. 5: The ziqqurat of Ur 31
- Fig. 6: John Martin: The fall of Nineveh. London, British Museum 32
- Fig. 7: Thomas Mann Baynes, Nineveh (1853), (actually Nimrud) 33
- Fig. 8: Romolo Liverani, stage-set for Nabucco 35
- Fig. 9: Victor Place, ground plan of Khorsabad 37
- Fig. 10: Section of Tell el-Hesi (Petrie, 1891) 51
- Fig. 11: Walter Andrae, general view of Assur 73
- Fig. 12: Robert Koldewey, Babylon: ground plan and reconstruction of the temple of Nebuchadnezzar II 84
- Fig. 13: Walter Andrae, Assur, detail of daily life 85
- Fig. 14: Eckard Unger, reconstruction of Neo Babylonian Babylon 88
- Fig. 15: Ancient ground plan of Nippur 90
- Fig. 16: Ground plan of Babylon 93
- Fig. 17: Ground plan of Jerusalem 94
- Fig. 18: The terrace of Persepolis 97
- Fig. 19: Ur, Old Babylonian residential quarter 101
- Fig. 20: Khafaja, reconstruction of the Oval Temple 137
- Fig. 21: Khafaja, aerial view of the excavation 143
- Fig. 22: Jawa, reconstruction (Helms) 144
- Fig. 23: Arslantepe, axonometry of the temple complex 226
- Fig. 24: Kahun, ground plan of workers' village 227
- Fig. 25: El-'Amarna, general ground plan of the city 235
- Fig. 26: El-'Amarna, house of the sculptor Thutmose 236
- Fig. 27A: Mohenjo Daro, general ground plan 237
- Fig. 27B: Mohenjo Daro, detail of the acropolis 239
- Fig. 28: Central Asian cities (Sapalli Tepe and Dashly), general ground plans compared with contemporary seals 240
- Fig. 29: Habuba Kebira, Uruk colony on the mid-Euphrates 242
- Fig. 30: Ground plan of Mari, ideal reconstruction 246
- Fig. 31: Shaduppum, Old Babylonian town with square plan 247
- Fig. 32: Kar-Tukulti-Ninurta, ground plan 248
- Fig. 33: Tell Halaf, ground plan of the city in the Neo-Assyrian age 249
- Fig. 34A: Zincirlı, ground plan of citadel 250
- Fig. 34B: Zincirli, detail of acropolis 251
- Fig. 35: Tell en-Nasbe, ground plan of city 251
- Fig. 36: Tell Beer-Sheva, ground plan of city 255
- Fig. 37: Distribution of settlements in the valley of the Diyala: reality (above), and theoretical grid (below) (Johnson) 255

- Fig. 38: Simulation of extent of cultivated area in Lower Mesopotamia. 1: early Uruk period.
  2: late Uruk period (Adams) 268

  Fig. 30: Conclusion of extensions in Lower Mesopotamia in the Uruk Period (Affile and
- Fig. 39: Canals and settlements in Lower Mesopotamia in the Ur III-Larsa period (*left*), and Old Babylonian period (*right*) (Adams) 271
- Fig. 40: 3-D reconstructive model of the palace of Mari (Margueron) 272
- Fig. 41: Boğazköi, ground plan of the site 289
- Fig. 42: The Eanna temple complex of Uruk 296
- Fig. 43: Ebla, axonometry of Royal Palace G 305
- Fig. 44: Hasanlu IV, ground plan 328
- Fig. 45: Tepe Nush-i-Jan, ground plan 334
- Fig. 46: Flowcharts on the origin of the city. A: Boserup; B: Childe; C: Adams; D: Redman 335-341
- Fig. 47: Emakh of Babylon, modern reconstruction 355
- Fig. 48: 'Aqar Quf, the modern restoration 362
- Fig. 49: Tell Taya, reconstruction of ground plan from the remains visible on the surface 364
- Fig. 50: Abu Salabikh, diagram of the city 371
- Fig. 51: CORONA satellite image of the area of Tell Hamukar 372
- Fig. 52: Al-Rawda, image of the geo-magnetic prospecting 375

#### **Abbreviations**

#### **Journals**

AfO Archiv für Orientforschung
AJA American Journal of Archaeology

AmAnt American Antiquity
AmAnthr American Anthropologist

An Antiquity

AnnESC Annales. Économies, Sociétés, Civilisations

AoF Altorientalische Forschungen
ARA Annual Review of Anthropology

ArOr Archív Orientální

BaM Baghdader Mitteilungen

BASOR Bulletin of the American Schools of Oriental Research
BCSMS Bulletin of the Canadian Society for Mesopotamian Studies

BO Bibliotheca Orientalis
CA Current Anthropology
CHM Cahiers d'Histoire Mondiale
DaM Damaszener Mitteilungen
IEJ Israel Exploration Journal

JA Journal Asiatique

JANES Journal of the Ancient Near-Eastern Society of Columbia University

JAOS Journal of the American Oriental Society

JARCE Journal of the American Research Center in Egypt

JCS Journal of Cuneiform Studies
JEA Journal of Egyptian Archaeology

JESHO Journal of the Economic and Social History of the Orient

JNES Journal of Near-Eastern Studies

MDOG Mitteilungen der Deutschen Orient-Gesellschaft

OA Oriens Antiquus

OLZ Orientalistische Literaturzeitung

Or Orientalia

PdP La Parola del Passato
P&P Past & Present

PO Paléorient

RA Revue d'Assyriologie

RANL Rendiconti dell'Accademia Nazionale dei Lincei

SA Scienze dell'Antichità

SAAB State Archives of Assyria, Bulletin SMEA Studi Micenei ed Egeo-Anatolici

SS Studi Storici
UF Ugarit-Forschungen
VO Vicino Oriente
WA World Archaeology

ZA Zeitschrift für Assyriologie

#### xviii — Abbreviations

ZAS Zeitschrift für die Aegyptische Sprache

ZAW Zeitschrift für die Alttestamentliche Wissenschaft ZDPV Zeitschrift des Deutschen Palästina-Vereins

#### **Series**

AASOR Annual of the American Schools of Oriental Research, New Haven

ADOG Abhandlungen der Deutschen Orient-Gesellschaft, Berlin

AOAT Alter Orient und Altes Testament, Kevelaer (1969 sgg.), Münster (1997 sgg.)

BaF Baghdader Forschungen, Berlin

BAH Bibliothèque Archéologique et Historique, *Paris* 

BAR Int British Archaeological Reports, International Series, Oxford

BBVO Berliner Beiträge zum Vorderen Orient, Berlin

CDOG Colloquien der Deutschen Orient-Gesellschaft, Berlin
CMAO Contributi e Materiali di Archeologia Orientale, Rome
MARI Mari. Annales de Recherches Interdisciplinaires, Paris
OBO Orbis Biblicus et Orientalis, Freiburg-Göttingen

OIC Oriental Institute Communications, *Chicago*OIP Oriental Institute Publications, *Chicago*OLA Orientalia Lovaniensia Analecta, *Leuven* 

OWA One World Archaeology, London

PIHANS Publications de l'Institut historique-archéologique néerlandais de Stamboul,

Leiden

RAI Rencontres Assyriologiques Internationales. Comptes-rendus. I-X

RIA Reallexikon der Assyriologie, Berlin

SAOC Studies in Ancient Oriental Civilizations, *Chicago*SDOG Sendschriften der Deutschen Orient-Gesellschaft, *Berlin*TAVO Bh. Tübinger Atlas des Vorderen Orients, Beihefte, *Wiesbaden* 

WVDOG Wissenschaftliche Veröffentlichungen der Deutschen Orient-Gesellschaft,

Berlin

#### 1 Rediscovery and perplexity

#### 1.1 The ruins and the biblical curse

There is a Jewish legend which describes the fate of the 'Tower of Babel', the building symbolic of human presumption and divine punishment, destroyed by God, before it was completed, to stop man from reaching the sky, not under divine benediction but in an act of arrogant insubordination. The story goes: 'One part was plunged into the earth, another was consumed by fire, and only a third remained standing. The place where it rose retains to this day one peculiarity: whoever passes it forgets everything he knows'. So no one, even if he had been there, could ever 'remember' and say where it was. There is a somewhat similar Arab-Islamic story, transmitted to us by the great Ibn Khaldun (whose intention was to destroy its historicity), but certainly much older, of the mythical city of 'Iram – a story inspired by the visible ruins of the ancient south Arabian cities: 'When Shaddad [a mythical king] heard a description of Paradise, he said, "I shall build something like it". And he built the city of 'Iram in the desert of Aden over a period of three hundred years. He himself lived nine hundred years. It is said to have been a great city, with castles of gold and silver and columns of emerald and hyacinth, containing all kinds of trees and freely flowing rivers'. But then when the king and his followers went there to live, God destroyed them all, and of the city we know only that it is still there, but no one has ever seen it again.

In both the Jewish tradition, of Old Testament origin, and the Islamic (which also owes much to the biblical tradition), the ancient world's cities in ruins are the outcome and mark of a divine curse against civilizations and kingdoms that had rendered themselves culpable: in Islamic tradition because they predate the true faith, going back to the period of ignorance (*jahilīya*), and in the biblical tradition because they were opponents of Israel. In the Qur'an (XI 117) the principle of 'presumption of guilt', even in the absence of definite information, is stated unequivocally, inasmuch as, 'Your Lord would not destroy any town without cause if its people were acting righteously',<sup>3</sup> a promise placed after a long series of images (with clear biblical echoes) of the great flood and pre-Islamic cities and civilizations in ruins, the legendary 'Ad, Thamud and Madyan.

<sup>1</sup> Ginzberg 1995, p. 171 (from Sanhedrin 109a), and pp. 382–385 on other legends relevant to the Tower. Schmid 1995, pp. 5–7, citing the Judaic sources on the Tower, gives only the first half of this passage!

<sup>2</sup> Rosenthal 1958, I, p. 26.

<sup>3</sup> Abdel Hameed's translation, 2010, p. 235.

In the biblical tradition, while the lesson told by the myth of the Tower of Babel concerned all humanity, the fate of genuinely historical peoples and cities – as described by the prophecies of Isaiah and Jeremiah on the destruction of Babylon (Is. 13, 21, 47; Jer. 25:8–13; 50; 51:34–58) or in Nahum's rejoicing at the destruction of Nineveh<sup>4</sup> – concerned the tragic history of the 'chosen people'. Assyria was guilty of the destruction of the Kingdom of Israel (with the consequent scattering of the 'ten lost tribes') and of the attempted siege of Jerusalem at the time of Sennacherib. Babylonia was guilty of the destruction of Jerusalem and her 'first temple' at the hands of Nebuchadnezzar II, and of the consequent exile of the Jews in Babylonia itself. Just as an incomplete ruin had to remain of the Tower of Babel, because the divine prohibition brought to bear during the 'confusion of tongues' had stopped it thus, just so must these capital cities of the 'empires of evil', which had been Nineveh and Babylon, find themselves in a state of complete ruin, which would confirm and realize the outcome of the divine curse. Had they been able to excuse themselves, Assyria and Babylon could surely have said that they were simply carrying out a divine order, from that same Yahweh who was God of Israel and who had used them to punish his people. But it is so much more comfortable to be the order-givers than the executors: the giver of orders can change his mind and forgive (giving proof of his magnanimity), while the executor of the order remains 'enmeshed', more cursed than the victim himself. And besides, Assyria and Babylonia had been so over-zealous and had so much relished their punitive missions that their curse was more than justified.6

Biblical memories of the ancient kingdoms of Assyria and Babylonia were therefore deeply marked by moral and theological implications, which made them rather more than snippets of information or occasional curiosities, and which identified allusive, and even fundamental, symbols and principles of shared values. And yet commitment to the faith – be it Judaic, Islamic or Christian - implied that these ruins should remain as such, or, even better, be so obliterated as to be no longer known, not even the places where they had stood. The desire to know and find the ruins of antiquity, therefore, and to reconstruct the images and values of these remote worlds (leaving out the theological worth of their story) belongs rather to the slow and gradual formation of a historicist, and largely secular, vision in the European world.

The western world's interest in antiquity, including that of the Ancient Near East, had developed slowly over the centuries, and then underwent sig-

<sup>4</sup> On Babylonia in the Old Testament: Kratz 1999.

<sup>5</sup> Uehlinger 1990

<sup>6</sup> Silberman 1991.

nificant acceleration with the Enlightenment of the second half of the eighteenth century, within the context of the great cultural and historiographical changes that heralded the start of 'modernity'; these changes had their roots in the great geographical explorations of the sixteenth century, which had widened our knowledge of our planet, and in the beginnings of modern astronomy, which had widened the dimensions of the universe, and which was then followed by the beginnings of geology, to widen the dimensions of time. As is well known, this enormous spatio-temporal expansion met with censure and resistance from the Church, since it contradicted the biblical text, but it nevertheless sparked off growing awareness of the fact that there exist – in time and in space - worlds different from our own, and that their recognition (be it rediscovery or reconstruction) serves also to enrich our vision of the world, and possibly strengthen our control over it.

As an initial formulation, the antiquity that men wanted to know and revisit in the eighteenth and nineteenth centuries was obviously the classical world of Greece and Rome. Of this world there remained not only abundant historical and literary sources but also remarkable monuments and entire cities that, in the form of ruins, occupied the European/Mediterranean world, not to mention movable objects of art, which served to enrich the growing collections of private and princely individuals (or cardinals). The 'antiquarian' reconstruction of the world will break out in the movement of Neo-Classicism, with its ideals that were not purely aesthetic but also ethical (the ancient heroes as models of virtue), and finally political (on opposite sides: the Greek city-state and the Roman Empire).<sup>7</sup> The start of the Bourbon excavations at Herculaneum and Pompeii may signal, more symbolically than definitely, this vision,<sup>8</sup> which young members of the European nobility and growing middle classes acquired in their 'Grand Tour' of the antiquities of Rome, Sicily and Greece. Besides, as well as the 'public' excavations of the two Neapolitan sites, there were numerous 'private' initiatives undertaken by the grand families of the Roman nobility, each on their own land in the city and outside, in order to supply their collections of antiquities.9

The rediscovery of the Ancient Near East, on the other hand, although parallel in time was a very different event, both in the availability of written mate-

<sup>7</sup> The best introductions (although not recent) to Neo-Classicism: Honour 1968; Assunto 1973. On the eighteenth-century study of antiquity: Pucci 1993.

<sup>8</sup> The excavations of Herculaneum and Pompeii appear in every history of archaeology: cf. Schnapp 1993, pp. 215-240; Barbanera 1998, pp. 9-10, 19-34.

<sup>9</sup> On the Grand Tour, excavations and building of collections, see the studies of Pinelli 2010. On the Colonna collection, Picozzi (ed.) 2010 is definitive.

rial and in the values that people sought to attribute to this world. On the documentary front, while direct knowledge of the classical world (literary and material) had always been maintained, nothing remained of the Ancient Near East, though considered the 'cradle' of our civilization, beyond, to use Johann Gottfried Herder's words at the end of the eighteenth century, 'stories about stories, fragments of history, a dream of the world before us (ein Traum der Vorwelt)'. And on the ethical front, while the classical world was perceived as 'our' western world, as a privileged place in which to set inspirational value models, ours by sharing (however discontinuously), eastern civilizations were perceived, even before being rediscovered, as models of the anti-values that were personified above all by the Ottoman Empire: and so, culturally interesting, but also ethically-politically by antithesis. And, as we know, antithesis is a primary instrument of self-identification.

To come to the actual question of the city, we can begin with a fact that is obvious, but pregnant with consequences. While great monumental complexes and indeed entire cities of the classical world (particularly of the time of the Roman Empire) were clearly visible in the Mediterranean and Near-Eastern landscape (enough here to think of Ba'albek and Palmyra, of Leptis Magna and Sabratha), the monuments and cities of the pre-classical Near East remained hidden under stratified mounds, actual artificial hills, known by the name of tell in Arabic (and as hüyük in Turkish, tepe in Kurdish and Persian).11 And I open here a brief parenthesis to note that the Arabic word tell comes from the Assyro-Babylonian tillu, which means precisely 'a heap of ruins', and also to recall the passage (already cited in the Preface) in which the Assyrian king Esarhaddon takes up the story, with Tacitean brevity, of the advance of his conquering and destroying army, boasting (he speaks of himself in the third person), 'before him (is) a city, after him a heap of ruins', precisely, a tell.<sup>12</sup> Modern archaeologists of the Near East could boast of the contrary, of transforming a *tell* into a city returned to life. Now, stone ruins are legible remains that allow us to add to and mentally reconstruct the building or the city as it must have been; but collapsed unfired brick presents an unformed mass, a non-ruin apparently unimportant and illegible.<sup>13</sup> By applying the distinction

**<sup>10</sup>** Herder 1784–91, p. 329; notes by Larsen 1987, pp. 96–98, repeated by Moorey 1991, p. 1.

**<sup>11</sup>** On the morphology of *tell*: Naumann 1957, pp. 197–205; Lloyd 1963, pp. 13–28; Wright 1974; Lapp 1975; Butzer 1982, pp. 87–93; Rosen 1986; London 1992; Schirmer 1999; Steadman 2000 and 2005.

<sup>12</sup> Frahm 2006, p. 93; the passage is now in Leichty 2011, p. 184 (rev. 13).

<sup>13</sup> Building in unfired brick: Sauvage 1998; Glassner 2003, pp. 158–175; Anastasio 2011, pp. 35–44.

dear to Marc Augé, 14 we can say that true and real 'ruins' remain of the classical world, while of the Eastern only 'rubble'. Already in Strabo (16.1.5) the definition 'the great city is (by now) a great desert'15 fitted Babylon even better than Arcadian Megalopolis, and Lucan's lament (Bellum Civile 9.969) comes to mind, etiam periere ruinae, 'even the ruins have now perished', which, however, refers to Troy and Pergamum.<sup>16</sup>

Alongside, therefore, theological considerations, technical factors took substance (the different resistance of unfired brick compared to stone) to explain how it came about that the Near East, although strewn with Graeco-Roman monuments, had preserved no visible remains of the 'accursed' Assyrian and Babylonian empires. Over and above Mesopotamia, the landscape of Palestine, a land of Old Testament and Gospel par excellence, was also scattered with remains and tell, which had given rise since antiquity to moral explanations (or 'aetiologies'): from Sodom and Gomorrah destroyed for their sins (Genesis 19) to Jericho and 'Ay destroyed, accursed, reduced to heaps of ruins 'even unto this day' for having been opposed to the Israelite conquest of the Promised Land (Joshua 6 and 8).<sup>17</sup> If the Mediterranean classical world had valuable and wonderful 'ruins' that gave rise to positive aetiologies, 18 the world of Mesopotamia and the Levant had only 'rubble', which could only provide aetiologies of guilt and eternal punishment.

The more acute European travellers in the Near East remained struck and perplexed at seeing the plains strewn with tell, and at first had difficulty in understanding their origin - even although their nature as a mine of ancient objects was well known to the local population, who had long been accustomed to bore into them in search of something to sell. The majority of travellers were driven by religious motives and remained content with the theological explanation (human guilt and divine punishment) but those inspired by a secular spirit sought human, political or socio-economic explanations. A writer of the Enlightenment such as Volney, who crossed Syria in 1785, was struck by the numerous tell in the area south of Aleppo, and drew from them a historical and political lesson. These remains of ancient settlements, so frequent in a region now desolate but once clearly fertile and populated, demonstrated to Volney

<sup>14</sup> Augé 2003.

<sup>15</sup> Cf. also Pausanias 8.33: 'Of Babylon the sanctuary of Bel remains, but of Babylon itself, than which the sun saw no greater city, nothing now survives except the walls'.

<sup>16</sup> Papini 2009.

<sup>17</sup> Topographical aetiologies of the Old Testament: Long 1968; but Alt 1936 remains the fundamental text. The name, 'Ay, means 'ruin'.

<sup>18</sup> Ruins and memories in the classical world: Boardman 2002; Alcock 2002; Papini 2011.

the weight of human factors and, above all, the role of political structures: the desolation was the fruit of the fiscal banditry of Ottoman greed and misgovernment, hand in hand with the plunder and brigandry of the Bedu and the uncaring indolence of the peasantry.<sup>19</sup> But Volney likewise, when he wished to ponder more deeply the rise and fall ('the revolution') of civilizations and empires, saw himself standing in front of the majestic ruins of Palmyra,<sup>20</sup> and certainly not in front of some insignificant tell. Edward Gibbon, a good twenty years earlier, had thought no differently: he also was intent upon pondering in front of majestic ruins (in his case the Forum at Rome), and on meditating upon the fall of empires: 'The provinces of the East present the contrast of Roman magnificence with Turkish barbarism. The ruins of antiquity, scattered over uncultivated fields, and ascribed by ignorance to the power of magic, scarcely afford a shelter to the oppressed peasant or wandering Arab'.<sup>21</sup> And again, in the midnineteenth century, Layard, who certainly knew the nature and potential of the tell, having excavated a couple of large ones and visited hundreds more,<sup>22</sup> contrasted the monumental ruins of Anatolia and the Levant with the shapeless tell to be encountered east of the Euphrates.<sup>23</sup> Even half a century after the discovery of the Assyrian capital Lord Byron contrasted the formless ruins of Nineveh and Babylon with the significant ruins of the Parthenon.<sup>24</sup>

The fact is that a heap of broken bricks does not keep (at least not before being correctly excavated) either the form or style of the monumental remains stratified inside it, as stone ruins do, since the latter remain more or less 'intact' and allow the visitor to reconstruct mentally their form and function. In a wider Eastern pre-classical context, not only the Syrian-Mesopotamian one, there were two striking exceptions: Pharaonic Egypt and the site of Persepolis (to which I will return in the next chapter). But apart from these concrete exceptions, there was also, and above all, one special case, imaginary and symbolic, to be postulated, and indeed was postulated, on the basis of the biblical text (Genesis 11:1–9): the Tower of Babel, so high as to touch the sky, massive and majestic, part of which should have remained visible in Babylon, even if reduced to the state of an incomplete ruin, to which it had been condemned,

**<sup>19</sup>** Volney 1787, II, pp. 59-60.

<sup>20</sup> Volney 1791. Volney had never visited Palmyra, but saw Wood's 1753 account (Volney 1787, vol. 2, pp. 259-263; and Barbanera 2009, pp. 45-46). Carena 1981 has interesting points of discussion on the theme of ruins.

<sup>21</sup> Gibbon Vol. 1, p. 55, Oxford World's Classics 1903.

<sup>22</sup> Layard 1849, I, p. 315 on the hundred tell at the foot of Jebel Sinjar.

<sup>23</sup> Cf. Layard 1849, II, pp. 249–279; 1853, pp. 527–531 on the illegibility of brick architecture.

<sup>24</sup> Byron 1821 (in 1901 edn., pp. 547-548).

not by normal deterioration in the course of time, but by the divine curse meant to break and punish man's insane ambition. So these few travellers who, not content with a Levant more easily accessible, confined by the triangle of Istanbul, Cairo and Jerusalem, pushed the 'voyage to the East' as far as Mesopotamia, did so in order to look for the Tower of Babel – the search for the Earthly Paradise (the biblical Eden) appearing less easily practicable.<sup>25</sup>

However, even the Tower remained difficult to identify. At the beginning of the nineteenth century only the still towering remains of the stepped temples (the ziggurat as the ancient Babylonians called them) of 'Agar Quf (the ancient Dur-Kurigalzu) and of Birs Nimrud (the ancient Borsippa) presented themselves as reasonable candidates for identification as the Tower of Babel<sup>26</sup> until, at the beginning of the twentieth century, the excavation of Babylon by Robert Koldewey brought to the light the actual remains of the *ziqqurat* of Babylon itself.<sup>27</sup> But well before being rediscovered on the ground, the Tower of Babel, besides providing a subject for written and pictorial reconstructions based on pure imagination (we shall see them in § 1.2), was above all a symbol indicative of the relation between the Ancient Near East and the modern western world. We know how and how widely the custom of reading the Bible became diffused (especially in the Protestant world), and how deeply rooted biblical knowledge became in western Christian culture. The events in the Bible were part of the fundamental culture not only of the ecclesiastical and intellectual elite, who had direct knowledge of them from the biblical text (whether or not in translation), but also of the whole population, who were given a sense of these events by pictorial representation, by Sunday sermons, and by use of the liturgy. The Tower of Babel had then an altogether unique

<sup>25</sup> Ancient localizations of Eden: Alexandre 1988; Bockmuehl 2010; mediaeval: Cardini 2004: Assyriological: Delitzsch 1881; Albright 1922; Deimel 1925; and now comprehensively, Scafi 2007. Lemaire's 1981 suggestion (Eden = Bit-Adini, an Aramaic kingdom) is not convincing. On the 'journey to the East' cf. Berchet 1985; Brilli 2009; and the critical approach of Said 1978 (pp. 166-197 of the 1979 paperback edn.); for a more technical approach Larsen 1992; Liverani 1994; Invernizzi 2002; 2005; 2008; Di Paolo 2006; 2008. Sixteenth-century presuppositions, in a commercial context: Ooghe 2007 (with rich bibliography).

<sup>26</sup> The candidature of Birs Nimrud (once 'Aqar Quf, too distant, was rejected) was eliminated in 1854 by Rawlinson, who showed that the ruins were of Borsippa (but Peters 1897, p. 124, still has, 'Birs Nimrud, the Tower of Babel'). On the ziqqurat of Borsippa cf. now Allinger and Csollich 2004. The history of the voyages and archaeological discoveries has been told many times: already in Budge 1925, pp. 58-73; Pallis 1956, pp. 19-93 (travellers) and 266-384 (archaeological discoveries); and then in Uehlinger 1990, pp. 181-200 (travellers) and 201-230 (archaeological discoveries); Mazower 2002; Fagan 2007 (popular account); Reade 2008a; Prato 2010; Fenollòs (ed.) 2010; 2011; Brusasco 2012.

<sup>27 § 2.1;</sup> Lenzen 1941 on the ziqqurat of Uruk and Nippur.

power of imagery, linked both to the question of 'confusion of tongues', which had great influence on the beginnings of linguistic classification in a protomodern age,<sup>28</sup> and to the ethical and theological value of the story.

Of these Ancient Near-Eastern cities, however unknowable materially, there was yet thought to be information of a character both economic/political and related to town planning. A negative stereotype and an urbanization model resulted in the meeting of the biblical and classical threads, which began with Herodotus and Ctesias to spread by means of writers such as Diodorus Siculus up to the *Bibliotheca* of Photius. The biblical texts provided the theological framework and 'logical' explanation of the curse, while the classical texts on the other hand gave measurements and descriptions of the Near-Eastern megalopoleis and, above all, literary embellishments and narrative stories of the political (despotism) and moral (luxury, cruelty and such like) aspects. The classical stories of Ninus, Semiramis and Sardanapalus became well known among the educated public in the Renaissance and post-Renaissance age, without indeed ever reaching the diffusion of the Bible, but lending themselves more easily than the Bible to all the charm of visual and literary elaboration.

In our eyes, however, it is the aspects of actual urbanization known in these currents, both biblical and classical, that are of primary interest. The biblical book of Jonah gives a picture of Nineveh as a huge metropolis, which takes three days to cross (Kafka's 'Messenger of the Emperor' would have found himself at his ease there). Singularly analogous is Aristotle's 'fact' (Politics 3.1276a,28–30) that when Babylon was conquered by the Persians, part of the city had still not heard even a rumour of this after three days. In even greater detail the first book of Herodotus (1.178-187) describes Babylon as a square city, enormous, on a Hippodamean grid, with houses of three or four storeys, imposing perimeter walls, and at the centre the citadel, half palace and half temple. The surrounding agricultural land had also been ordered systematically with a complex network of canals, the work of the queens Semiramis and Nitocris. The other detailed description of Babylon is derived by Diodorus from Ctesias, eager to differentiate himself from Herodotus. For Ctesias (Diodorus 2.1.4–28) Babylon is an enormous rectangular city.<sup>29</sup> The sources present numerous variants (as we shall see in detail in § 1.6), but they agree (and indeed vie with each other) in giving an image of enormous cities, evidently populated by innumerable human hordes, but at the same time well

**<sup>28</sup>** There is Borst's huge work (1957–63) on the diversification of languages and peoples from antiquity to the present age. The writings of Olender 1989 and Eco 1993 are more manageable.

<sup>29</sup> Classical descriptions of Babylonia: Prontera 1994, 2000.

organized because of far-sighted royal sagacity.<sup>30</sup> Besides, the enormous dimensions did not impede a lightning speed of building: in Josephus (Ant. Iud. 10.224-5) Babylon's three-fold wall was built in fifteen days, and in Strabo (1.5.9) Sardanapalus boasts of having built the Cilician cities of Tarsus and Anchiale in a single day.

This picture of urban building clearly served to provide a material setting for eastern despotism. Not by chance it was once again Herodotus, with all the weight of his authority, who was most responsible for establishing the influential stereotype of antithesis between East and West. The theory, arising from Herodotus' description in his *Histories* of the Persian Wars (and already at work in Aeschylus' *Persians*), is well known: given the quantitative disproportion of human and material resources between the widespread Persian Empire and the Greek poleis, there must have been a qualitative factor that enabled the small to prevail against the large, and that factor was liberty. Free citizens had the virtue and motivation that the slaves of the emperor lacked. The Persian Wars as described by Herodotus unleashed an entire sequence of struggles between 'fighters for freedom' and 'the empire of evil', which in the nineteenth century was obviously identified with the Ottoman Empire, with the preceding empires of Assyria, Babylonia and Persia seen at its shoulders. The Greek War of Independence (1825–30) against the Ottoman Empire came to be fought not only by the Greeks (who, to tell the truth, were more Levantine than European) but also by European intellectuals, from Lord Byron to the Italian Santorre di Santarosa, rushing to help brandishing a musket in one hand and the *Histories* of Herodotus in the other.

If the idea that Near-Eastern cities were vast megalopoleis harmonized well with the fact that they were the seats of 'oriental despots' and their anti-values (the caprice of the despot, the general subjugation), in the course of the classical writing on the Near East (whether Persian or Assyro-Babylonian) over and above Herodotus there came to prevail a thread going back to Ctesias which made the Near East the seat of thoroughly negative values and behaviour: luxury, licentiousness, sexual depravity, cruelty, which, added to an atmosphere of magic and intrigue produced a mixture only too well suited to supply inspired ideas and plots for works of entertainment. Hellenistic and late-antique short stories and poems, with Semiramis and Sardanapalus as protagonists (to name the best known characters), committed to immortal memory the stereotypes of a dissolute and despotic Near East, set in palaces (more than in cities) with plenty of harems, eunuchs and viziers, in all of which eighteenth and

<sup>30</sup> Historical Babylon was a 'megalopolis' by the standards of the time (Margueron 2000); but that is another argument.

nineteenth-century readers recognized a Near East more unchangeable than ancient, perfectly embodied in the Ottoman 'Seraglio' with its intrigues and scandalous affairs. Moral condemnation of the great Assyro-Babylonian capitals runs through the entire history of western culture, from early Christianity to Romanticism, but to repeat it here would be out of place.<sup>31</sup>

#### 1.2 Imagining unknown cities

If you had asked a Renaissance scholar how, specifically, an ancient city was built, you would have found him perhaps a little perplexed, but not unprepared. To begin with he might have cited the best of ancient and modern treatises (from Vitruvius to Leon Battista Alberti)<sup>32</sup> on the external shape of the city and its civic organization. But, continuing, he would have finished by admitting that he imagined it as similar to the cities of his own time. And if the inquisitive (but luckily imaginary) questioner had asked how a city of the Ancient Near East was built, before the time of Alexander the Great, let us say at the time of Semiramis and Sardanapalus, then the scholar would have become more deeply perplexed. Faced with a problem that had never been put, and with his thoughts oscillating between the Tower of Babel and Herodotus' description of Babylon, he would have been unable to envisage anything (a city, a whole world) that was unknown and foreign to him.

The truth is that interest in the archaeological discovery of ancient cities is but the apex, the point of final maturity, of a cultural process of extraordinarily wide compass and sustained effort, namely, to imagine and visualize the ancient world according to its own shapes and forms, stepping beyond the facile anachronism – which held sway for centuries – of dressing ancient heroes in mediaeval and then Renaissance garb, and of placing their adventures in cities and landscapes copied (so to speak) from those familiar to the artists of the age. The historicizing of the ancient (in architecture and city planning as in the visual arts) went hand in hand not only with the growth of an interest in antiquities and then with the early stages of archaeology, but also with the beginnings of a historiography that was not just bare chronicles, or moral warnings or biblical curses. It has often been observed that the beginnings of

**<sup>31</sup>** Summaries in McCall 1998, pp. 185–189. Babylonia in literary tradition: Haas 1999; Glassner 2003, pp. 64–94 and 199–228 (without notes and bibliography); also Brusasco 2012, pp. 209–273.

**<sup>32</sup>** Alberti's works (published posthumously, 1485) are studded with quotations from the classics, including on Babylonia.

interest in archaeology (which implies a 'layered' vision of the earth), and in a history and chronology based upon the timeless years of prehistory, owe much to the great formative period of geology and physical anthropology at a scientific level. The fundamental works of Charles Lyell and Charles Darwin partly preceded but also partly followed the beginning of the Assyrian excavations of the decade 1845–55: Lyell's Principles of Geology appeared in 1843, and his Geological Evidence of the Antiquity of Man in 1863, while Darwin's Origin of Species came out in 1859 and The Descent of Man in 1871. So although the 'dilettantes' Botta and Layard, who excavated the Assyrian capitals in the midnineteenth century (as we shall see in § 1.3), were not right in the vanguard, they were, all things considered, firmly part of the cultural and scientific climate of the time.

Coming then to the question of how to visualize the ancient city in a nonanachronistic way, before the eighteenth century the problem did not really arise; it was perfectly natural for Piero della Francesca to set the meeting of Solomon with the Queen of Sheba, or the recovery of the true cross, in a Jerusalem perched like a fifteenth-century village on top of a Tuscan hill, or for Benozzo Gozzoli in Pisa's Camposanto to picture in a similar way the Babylonians intent on building their Tower, or for a fifteenth-century French miniaturist to imagine the temple of Solomon as a 'decorated' Gothic cathedral. And when eighteenth-century Neo-classicism wanted to visualize, in a philologically appropriate way, the ancient cities of Greece and Rome, there was no problem to be faced. Classical ancient monuments had always occupied a noticeable place in the European and Mediterranean landscapes – mostly as ruins, but also as conspicuous monuments, while the eighteenth-century study of antiquity had added the final touches to a rich repertoire of ancient habits and iconography, and Vitruvius provided detailed technical information.<sup>33</sup> The case of the preclassical Near East was very different: with the ancient Mesopotamian cities buried under the enigmatic tell of which we spoke before, only Egypt, and the isolated case of Persepolis, provided visible and conspicuous remains.

Egyptian antiquities had always drifted around the Western world, in the form of obelisks, sarcophagi, sphinxes, canopic jars and other decorated objects, much appreciated by the Wunderkammer antiquarianism (not to mention the Masonic symbolism);<sup>34</sup> but ancient Egypt also became a field of topographical and architectural study following the Napoleonic expedition of 1793-99 and then the Prussian expedition of 1842-45, which, in their sumptuous publica-

<sup>33</sup> Antiquarianism and the beginnings of archaeology: Pucci 1993; Schnapp 1993, pp. 109-157.

<sup>34</sup> Egypt-mania: Baltrušaitis 1967; Humbert 1989; relation to Masonry: Pucci 1993, pp. 34-38.

tions, brought back images of temples and entire cities emerging from the sand. The architectural and decorative style of ancient Egypt was therefore readily available in the minds of those who wanted to picture buildings and cities foreign to classical culture and placed in the East. As for Persepolis, frequently visited and described from the time of the memorable but tragic Danish expedition of 1761–67,<sup>35</sup> the pictures in Niebuhr's account, like those of Ker Porter (1821–22), Buckingham (1827) and still others, gave the impression of a kind of 'plantation' of columns, more than a real city.

Even in Egypt, there were no complete cities, no inherently urban structures; there were, however, temple complexes so extensive and comprehensive (think of the Karnak-Luxor complex) as to allow the reconstruction of the image of a city, at least in its central and ceremonial aspects. To take just one example, David Roberts' 1829 painting entitled *Departure of the Israelites* (completed a year after the publication of the last volume of the *Description de l'Égypte*) depicts an Egyptian city which in its excessive monumentalism (with four levels of colonnades, and pyramids springing up all over) shows a basis of specific 'philological' knowledge which would have been unthinkable (at that period) for the other parts of the Ancient Near East.

But the problem of visualizing the Ancient Near-Eastern cities in a non-anachronistic way, quite apart from being difficult to solve from lack of relevant documentary material, was also of little, or at least only selective, interest. Prior to their discovery, that is, between the mid-eighteenth and mid-nineteenth centuries, did anyone need to envisage how Nineveh or Babylon had been built?<sup>36</sup> Really only painters and landscape artists, above all the painter of biblical and classical themes, who, however, had a preference for internal settings, and thus wanted to envisage costumes and furniture but not entire cities. The one subject that led more directly to architectural and urban visualization was the building of the Tower of Babel. Examples are plentiful, and tell different stories of the building: they appear from the thirteenth century and then become more and more frequent towards the seventeenth and eighteenth centuries.<sup>37</sup> The pre-Renaissance pictures are based only on the biblical text and concentrate on the Tower alone, without an urban setting. They are clearly not intended as 'historical' representations of the architec-

**<sup>35</sup>** History of the exploration of Persepolis: Pallis 1956, pp. 55–64.

<sup>36</sup> Babylonia in European culture: Allard 2008a.

**<sup>37</sup>** Iconographic collections in Parrot 1949, pp. 169–176 (also 1953b, pp. 39–42; 1970, pp. 98–101); Klengel and Brandt 1982; Minkowski 1983; Vicari 1985; 2000, pp. 98–114; Neumann 1997; Albrecht 1999; André-Salvini (ed.) 2008, pp. 436–497; Seymour 2008d; Marzahn and Schauerte (eds.), *passim*.

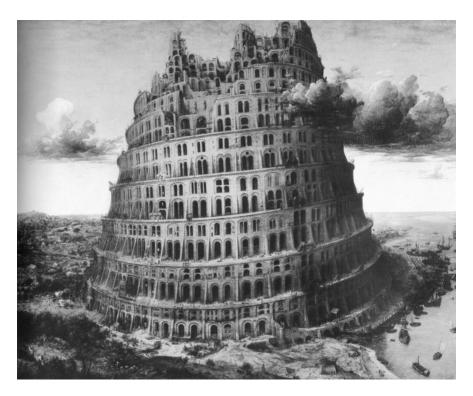


Fig. 1: Pieter Brueghel, *The Tower of Babel* (1565). Rotterdam, Museum Boijmans Van Beuningen.

ture and habits, but only to show skilful stone-masons at work on their scaffolding, of dimensions better suited to a human scale than to a tower meant to reach the sky.

From the sixteenth century, however, the Tower becomes depicted within the urban setting of Babylonia – I believe as a result of the spread of the texts of Herodotus (Lorenzo Valla's Latin translation came out in 1474) and of Diodorus. In this way the various details that could be extracted from the classical descriptions found themselves faithfully portrayed as the surroundings of the biblical Tower: the square plan of the city, the right-angled urban grid, the high city walls, the innumerable towers, the city gates, the bridge over the river that cuts the city in two. These elements are exemplified in famous paintings, such as those of Pieter Brueghel (1563, 1564/68) [fig. 1], which created a school of followers in the Low Countries, for example with the paintings of Maerten van Valckenborch (1595), Lucas van Valckenborch, Brueghel the Younger and others. In the seventeenth and eighteenth centuries there were

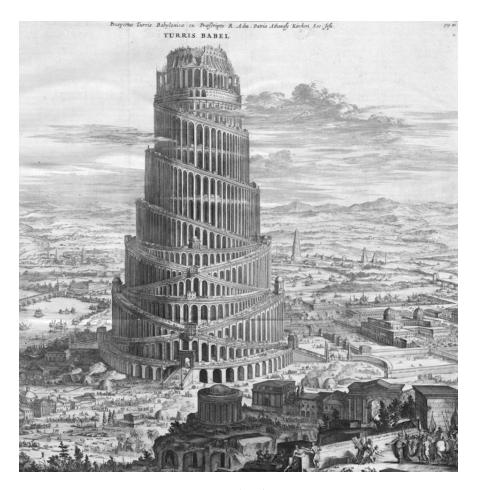


Fig. 2: Athanasius Kircher, The Tower of Babel (1679).

above all huge numbers of engravings, for the most part somewhat repetitive and of poor quality, but with some of considerable value – only think of the famous engravings by Athanasius Kircher (1679) [fig. 2], which portray both the single Tower and the whole city, or of the *Spectacula Babylonica* of Johann Fischer von Erlach (1721–23) [fig. 3].<sup>38</sup> The Tower is the centre of attention, but also provides an excuse to portray the whole city, with the help of descriptions and measurements from classical authors, such as the two cited above, in order to draw up genuine urban design 'projections'. Moreover, the bird's eye view



Fig. 3: Johann Fischer von Erlach, The city of Babylon (1721). London, the British Library.

of Babylon adds itself to the tradition of the 'portrait of a city' which portrays real cities and which runs through the history of European art from around 1470 to around 1770 (then to be cast aside in the division between topographical plans, of scientific accuracy, and pictorial 'panoramas').<sup>39</sup> Also the 'portraits of cities' on one side seek to be technically accurate, and therefore realistic, but on the other involve an ideological twisting of the evidence towards a model of the 'ideal city', and therefore 'imaginary' cities are not far distant from this thread.

There was, however, one significant, and familiar, exception to the imaginary representations of Babylonia:<sup>40</sup> in 1616 Pietro della Valle betook himself to the spot and not only correctly identified Babylon with Tel Babil near Hilla, and even had a quick sounding carried out, but, what is of interest here, he had drawings made of the *tell* as a realistic portrayal of what remained of the Tower of Babel. The drawings remained unpublished until Athanasius Kircher brought them out in 1679, to make a clear contrast with the reconstructions full of imagery which were then current.

<sup>39</sup> de Seta 2011.

<sup>40</sup> Invernizzi 2000.



Fig. 4: Maarten van Heemskerck, *The Tower of Babel* (1569). Paris, Bibliothéque nationale de France.

It was not just the city that remained open to different interpretations, but, to an even greater extent the Tower, which had been far less described by classical authors. Few artists portrayed it as square (as Herodotus clearly says at 1.181), and it is only by chance (I would say) that Maarten van Heemskerck's lithograph (1569) [fig. 4] so extraordinarily hits the mark in being not too removed from the appearance of a real *ziqqurat*, as the archaeologists will later establish [fig. 5]. The prevalent cylindrical form derives instead from the Islamic world, with the tower of the mosque of Samarra or the minaret of the Cairo mosque of Ibn Tulun as possible models. As for the context, the Renaissance images do not yet set themselves the problem of 'archaeological' accuracy and place the Tower in the landscape of their own times: either empty (but more rural than desert), or urban, with a Babylon which, among Flemish painters, tends to resemble a busy river port. When, with the eighteenth century, a sense of antiquity is sought, painters obviously turned to the classical world's decorative and constructive elements, but, wanting to add at least some 'eastern' touches, their only option was to turn to Egypt (putting obelisks here and there, and some pyramids) or to the Ottoman world (adding cupolas and minarets).

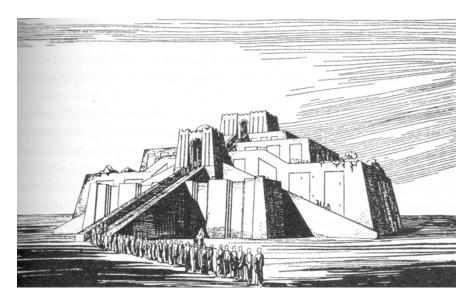


Fig. 5: The ziqqurat of Ur.

At this point perhaps we can be allowed to take a leap ahead. When the real 'Tower' is excavated at Babylon by Robert Koldewey's expedition in 1913 (as we shall see in § 2.1), and shows without any possibility of doubt that it was square, many artists (not Assyriologists) continue undaunted to portray it as circular. Moreover, Koldewey himself,<sup>41</sup> archaeologist and architect, reconstructs it as very perpendicular, as a parallelepiped, as a real 'tower', rather than in pyramid form as a *ziqqurat* (the upper part is entirely a reconstruction). It has to be said: behold the power of the name!<sup>42</sup> And, again, he reconstructs the whole city of Babylon, taking into account the information gained so far (thanks to his own excavations) but also allowing himself to be influenced by the classical descriptions (Herodotus and Diodorus), and so reconstructing a right-angled plan much more regular than emerges from the excavation. From Athanasius Kircher's Babylon to Robert Koldewey's, there was more continuity than rupture, and the tradition seems to have greater weight than the new specific discovery.

The Tower apart, other biblical or classical episodes (such as the death of Sardanapalus or the story of Judith and Holofernes) that were the subjects of

<sup>41</sup> Koldewey 1913 (fig. 121b in the 1981 edition); 1918b, with figs, 8 and 10.

**<sup>42</sup>** Cf. Schmid 1995, pp. 9–24; Micale 2008c; Unger 1931, figs 30 and 35 take account of the previous portrayal. A different reconstruction in Wiseman 1985, pp. 68–75.



Fig. 6: John Martin: The fall of Nineveh. London, British Museum.

pictorial elaboration were for the most part (as we pointed out earlier) set indoors, which required the artist to envisage furniture and habits, but not the urban complex. Real urban images are therefore rather rare, although certainly not absent. I want to exemplify this by reference to three paintings by John Martin in the first half of the nineteenth century.<sup>43</sup> The first in chronological order is the *Fall of Babylon* (1819), the second is the *Seventh Plague of Egypt* (1823), and the third the *Fall of Nineveh* (1829) [fig. 6].<sup>44</sup> The second anticipates in certain aspects (with colonnades on more than one level and pyramids springing up here and there) Robert's 1829 *Departure of the Israelites*, which we discussed earlier, but it also, and more markedly, anticipates the *Fall of Nineveh* not only by its leaden sky and violent storm clouds, but also by the slanting flight of the colonnades. It is obvious that Martin, by moving the subject of his painting from the Egyptian to the Assyrian city, needed to drop the most obvious 'Egyptianisms' (such as, above all, the pyramids) but kept nearly

<sup>43</sup> On Martin: DNB ed. 2.

**<sup>44</sup>** Assyriological notes in McCall 1998, pp. 189–191; Bahrani 2001b; Bohrer 2006, pp. 228–229 with fig. 20; Seymour 2008e with figs. 167–168; Allard in André-Salvini (ed.) 2008, pp. 494–495. The *Fall of Babylon* is reproduced and commented on by Woodward 2001, pp. 162–164 with fig. 15; also cf. Wullen and Schauerte (eds.) 2008, p. 122.

unchanged almost all the rest, in absence of an alternative. By so doing, he had to pass from a reconstruction within certain 'philological' limits (the Egyptian) to one totally arbitrary (the Assyro-Babylonian). Martin himself recognized this honestly, explaining, 'the style of architecture, particularly of the Egyptian on the one hand, and of ancient Indian on the other, has been invented as the most appropriate for a city situated between the two countries, and necessarily in frequent intercourse with them,' all the more since Nebuchadnezzar, conqueror (according to the classical tradition) of both Egypt and India, must have imported architects and other craftsmen (as was the custom at the time), who would have worked together with the Babylonian ones.<sup>45</sup> But it has to be said that the British Empire of the time also placed Mesopotamia (which it did not yet control) halfway between its two well-known bulwarks of Egypt and India.

The same localization used by Martin is found in the work of Thomas Cole. His cycle 'The Course of Empire'46 includes a painting of the destruction of Rome (1836)<sup>47</sup> which is clearly inspired by Martin's destructions of Nineveh and Babylon. Viewed obliquely, with a foreground which here is meant to be the side of the Palatine looking towards the Circus Maximus, there are again levels of colonnades, tempestuous skies, slaughter and desperation. Four years later (1840) when Cole conceived The Architect's Dream, with a mixture of styles which he would have liked to be 'universal', once the dark Gothic of the left corner is removed, what remains is the same oblique view of Egyptian and classical colonnades, giving onto a river studded with boats. Even after the archaeological discovery of Nineveh this design will remain in force: as an example we have the painting of 'Nineveh' (really Nimrud) commissioned by Layard from Thomas Mann Baynes (and published in 1849) with the view of the city on the river [fig. 7], which fits well into the preceding tradition. And again, in Gustave Doré's portrayals of eastern cities (1866) the scenes set at Susa reappear at Persepolis (inserting, however, Assyrian bulls in a city gate which clearly belongs to Khorsabad); but the scenes set at Babylon and Nineveh are a good deal fuller of fantasies (on Thomas Cole's model) with colonnades on several levels, improbable columns, and in no way consistent with what the excavations had meanwhile documented.48

**<sup>45</sup>** Cited by McCall 1998, p. 191.

<sup>46</sup> Woodward 2001, pp. 178-180.

<sup>47</sup> Illustrated on the cover of Ward Perkins 2010.

<sup>48</sup> Pedde 2000.



Fig. 7: Thomas Mann Baynes, Nineveh (1853), (actually Nimrud).

It is also noticeable that in the first half of the nineteenth century both Martin and Cole favour destruction (of Nineveh, of Babylon, of Rome) as if the most important fact about these centres of ancient civilizations is that they fell, were destroyed, no longer exist. And conversely, in Degas' picture (c.1860) portraying Semiramis building Babylon – a theme of classical, not biblical, literary origin – the main element is the character of Semiramis, not the city of Babylon, which we see only indistinctly in the distance.<sup>49</sup> Only after the discovery of the Assyrian capital, in contrast, will the same city design, with slanting colonnades along the river, be applied (exactly as in Baynes' work) to the living and thriving city and not to its ruinous destruction.

Secondly, alongside paintings, there were the stage sets for tragedies and lyrical works very often set in classical antiquity or the Middle Ages (to take only the many tragedies of Corneille, Racine and Shakespeare), and many more, with biblical subjects, rooted in the Ancient Near East. The question of 'archaeological' accuracy gained authority in stage sets more slowly than in painting: it began in the mid-eighteenth century<sup>50</sup> but dragged on for more than a century, if even at the end of the nineteenth century Oscar Wilde upheld

**<sup>49</sup>** Bohrer 1998, p. 347; 2003; 2006, pp. 255–256; Bahrani 2001a, pp. 176–177; Asher-Greve 2006, pp. 349–354. On Semiramis Asher-Greve 2006; Bernbeck 2008.

**<sup>50</sup>** Above all in the writings of Pietro Gonzaga, cf. Biggi 2006. My thanks to Mercedes Viale for drawing my attention to this.

its non-obligatory nature, 'archaeological accuracy is merely a condition of illusionist stage effect; it is not its quality'51 – but modern archaeologists do not take umbrage, it does not concern them.

Stage sets conceived as Egyptian also enjoyed a solid documentary foundation, which Mesopotamia on the other hand lacked. Thus Karl Friedrich Schinkel's Egyptian stage sets for Mozart's Magic Flute at the Berlin Opera House in 1816,<sup>52</sup> while the interpretation is obviously arbitrary (with the pyramid on the backcloth), are based upon direct knowledge. The situation for the authors of stage scenery in an Assyro-Babylonian context is very different; they needed first of all to imagine what the Assyrian cities could be like and then (after the middle of the nineteenth century) to take account of the information which arose from their discovery. This is a question that has only recently attracted scholars' attention and which would be worth the trouble of analysing systematically. The most propitious case is given by Rossini's Semiramis, which, written in 1823, stretches throughout the whole period, before, during and after the discovery – but I do not want here to enter into a discussion which emerges in the course of analysis on the part of other scholars, in particular of Julia Asher-Greve.<sup>53</sup> All the same, the delay in taking note of the reality revealed by Assyrian excavations, or, to put it differently, the persistence of previous stereotypes, means that even the sequence of nineteenth-century stage sets for Verdi's *Nabucco* (which came out in 1842, coinciding with the discovery, if not yet of Babylon, at least of Nineveh) lends itself to similar considerations.<sup>54</sup> I shall limit myself to just one example, the stage set which my (possible) ancestor Romolo Liverani prepared for the performance of Nabucco at Genoa in 1846 [fig. 8].<sup>55</sup> There is still nothing Assyro-Babylonian but plenty from Egypt (the capitals, the pyramids), something from India (the elephants), something Islamic (the tower of Samarra), and the usual slanting view of colonnades above, as in the pictorial works of Martin or Cole.

In practice, the solution adopted to visualize cities which were in fact unknown was a mixture of classical (Greek) and Egyptian elements, with long colonnades, even built on more than one level - which will then prove totally foreign to the unfired brick architecture of Mesopotamian cities - and with plenty of obelisks and the odd sphinx. To this mixture is added, often and

**<sup>51</sup>** Wilde 1930, p. 120.

<sup>52</sup> Reproduced in the catalogue The Age of Neo-Classicism, London 1972, pl. 100(a).

**<sup>53</sup>** Asher-Greve 2006.

<sup>54</sup> Babylonia in theatre scenery: Crespi Morbio 2004; Allard 2008b. On Nabucco now Nadali 2010-11.

<sup>55</sup> On Liverani cf. Vitali 1990.

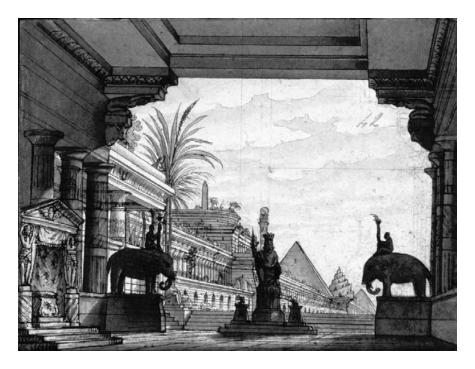


Fig. 8: Romolo Liverani, stage-set for Nabucco.

willingly, something of Ottoman architecture, showing cupolas and minarets, clearly useful in picturing an unchangeable Near East which therefore needed to retain elements of remote antiquity in a modern age. As for taking account of the concrete reality revealed by the excavations in Assyria and Babylonia, this was a weak and slow process, as if the biblical and classical facts, deeply rooted in western culture, were only with difficulty to be menaced by the new acquisitions. Even in 1867, when Assyrian architecture and habits were well known (the Assyrian section of the Louvre had by then been open to the public for twenty years) the poster for a *Sardanapale* at the *Théâtre Lyrique Impérial* in Paris was all Egyptian and not at all Assyrian. <sup>56</sup> And even in 1920–22, at the *Festspielhaus* in Salzburg, Hans Poelzig's scenery for an opera was inspired by the Tower of Babel, but by the Tower of the medieval iconographical tradition, not the Tower by then known from the excavation. <sup>57</sup>

**<sup>56</sup>** Bohrer 1989, p. 14 with figs. 2-3.

<sup>57</sup> Biraghi 2008, I, p. 234.

## 1.3 The rediscovery of the Assyrian capitals

In 1829 Barthold Niebuhr (Roman historian, son of Carsten, the discoverer of Persepolis) in his Römische Geschichte 'ventured a prophecy that Nineveh would arise as the Pompeii of Western Asia'.58 The prediction was realized twenty years later, with the startling discoveries made by Paul-Émile Botta and Layard, the story of which has been told so many times as not to need repeating here.<sup>59</sup> It is, however, useful to go over once again, at least with a few hints, the question of the localization of Nineveh, a question which is at the same time taken for granted, but problematic.

Towards 1170 the rabbi Benjamin of Tudela, who was travelling throughout the Near East passing from one Hebrew community to another, having arrived at Mosul (which he called 'Assur the Great') had a clear idea (thanks to information given to him by his local colleagues) that across the Tigris was the famous Nineveh, in ruins but covered with villages and farms, and he added: 'the extent of the city may be determined by the walls, which extend forty parasangs to the city of Irbil'.60 The rabbi mixed the visible information (the 'real' walls were easily seen) with the myth of the tradition (an enormous city with a circumference of 200 km). Ten years later another rabbi, Petachia of Ratisbon, also arriving at Mosul (which he called 'New Nineveh') and crossing the river, visited 'Old Nineveh', which he described as desolate and 'overthrown like Sodom' with the land black like pitch, without a blade of grass.<sup>61</sup> The power of tradition, or rather of the divine curse, which makes men see not what there is (what had happened to the cultivated land and farms seen by his colleague a few years earlier?), but what ought necessarily to be there.

Myths apart, the localization of Nineveh remained a matter of common knowledge and beyond argument; various western travellers (such as Jean Baptiste Tavernier in 1644, and then Bourguignon d'Anville in 1779) confirmed it, and some small soundings followed.<sup>62</sup> Anyway, the tomb of the prophet Jonah (Nebi Yunus), which obviously (on the basis of the biblical book) had to be found at Nineveh, dominated (and still dominates) the very centre of the ruins, facing onto the Tigris beside the older acropolis of Kuyunjik. As for the extent of the city, if the 'cadastral' plan prepared by the elder Niebuhr (in 1766)

**<sup>58</sup>** Breasted 1933, p. 9.

<sup>59</sup> Larsen 1996; on Layard cf. Waterfield 1963, and Brackman's 1980 ('journalistic') biography.

**<sup>60</sup>** Adler 1930, p. 42.

**<sup>61</sup>** *Ibid.* p. 67.

<sup>62</sup> Pallis 1956, pp. 42-43 (identification); 19-93 (other undertakings to the mid-nineteenth century).

is found too schematic to resemble the reality, by the middle of the nineteenth century there were very exact topographical plans, in particular that of Claudius Rich, who was the English 'Resident' in Baghdad in the years 1812–21.63

The parallel question however, of identifying the ancient Babylon,<sup>64</sup> remained for a long time much less decided, tied as it inevitably was to the question of the Tower (and therefore dragged from 'Agar Quf to Birs Nimrud); but the location of Babylon too, in the area of Hilla, was already correctly identified by the more careful travellers of the seventeenth<sup>65</sup> and eighteenth<sup>66</sup> centuries, and was then mapped and described by this same Rich, who in the ten years 1810–1820 brought about a true turning point.<sup>67</sup> Rich visited the site several times over and although initially dismayed by the range of the ruins and their state of preservation, which did not allow the visualization of monuments, he made both an accurate description and a very satisfactory topographical plan. Rich became sufficiently well known to be mentioned in 1820 by Byron in Don *Juan*, with reference indeed to the identification of Babylon: 'Should there be [...] some infidels who don't / Because they can't, find out the very spot / of that same Babel, or because they won't / (though Claudius Rich, Esquire, some bricks has got / and written lately two memoires upon't)'.68 But, literary irony apart, Rich's personality was truly notable, and his work completely accurate and meritorious; he not only drew the attention of the whole cultured world (at least the British) to the importance of these ancient sites and gave assistance to passing scholars (such as Buckingham in 1816, Ker Porter in 1818),<sup>69</sup> but then opened the way in practical terms to the first excavators of the site of Nineveh, through his topographical survey and also by help given to them in loco.

The merits of Rich and other nineteenth-century scholars should not be belittled, but the memory of what Babylon had been and where it was located is also found much earlier in the Arab-Islamic world, if then emerging with

<sup>63</sup> Rich 1836 (posthumous); on the character see Lloyd 1947, pp. 5–75. Jones' plan followed in 1855 (from excavation carried out from 1852); cf. Pallis 1956, pp. 47–53.

<sup>64</sup> André-Salvini (ed.) 2008 has chapters on Babylon in the biblical (Recio), talmudic (Geller), classical (Rollinger), late-antique (Teixidor), mediaeval (Gousset) and Arab (Vernay-Nouri) sources, and on the travellers and story of the excavations; similar contributions in Marzahn and Schauerte (eds.) 2008.

<sup>65</sup> Pietro della Valle, in 1616, cf. Invernizzi 2000.

**<sup>66</sup>** Already Niebuhr (1765), then D'Anville (1779); cf. Pallis 1956, pp. 44–55; Reade 1999; 2008a,

**<sup>67</sup>** Rich 1813; 1818; then 1839 (posthumously).

<sup>68</sup> Byron, Don Juan, Canto V, 62; cited by Lloyd 1945, and by Moorey 1991, p. 7.

<sup>69</sup> Cf. Hilprecht 1903, pp. 26-54 (on Rich, Buckingham, Ker Porter, Mignan); also Fagan 2007, pp. 45-68.

very different results. 70 The eleventh-century historians and geographers (such as Ibn Hawqal, al-Istakhri, Mas'udi) knew correctly that facing Hilla was the village of Babil, perched atop the ruins of the ancient magnificent city ('Bābil was the city of the "Nimruds" and fir'awns, the seat of their reign, and the center of their magnificence, while nowadays it is a small village [...] In Bābil are the remnants of a construction of which is reported that it was in the days of old a large capital';71 'When someone watches this village, impressive vestiges of debris, destruction and buildings which have become like hills come to his eyes'72), and also made use of the information of Greek authors on its dimensions;<sup>73</sup> however, they considered the ancient city as by then unknown and characterized it negatively as the city of wine and witchcraft, based on the ancient anti-models of oppressive royalty like Nimrud and Dahhak, 74 huge mythical metropoleis composed of seven cities, each one characterized to the world by a unique peculiarity. For example, 'In the seventh city there was a copper tree, huge, with many branches, that did not cast a shadow on its trunk. Yet if someone sat underneath it, it would shade him, up to a thousand persons ("souls"); but if the number of people exceeded thousand, even by one, they all ended up standing in the sun.'75

Turning to Assyria, I am a little amazed, thinking of the certainties established, that once they went on to the excavation of the Assyrian capitals, various uncertainties remained. Botta, the first excavator of Nineveh, was quickly disappointed by the site of Kuyunjik and moved almost immediately (March 1843) to the site of Khorsabad (ancient Dur-Sharrukin) where he easily brought to light (in the absence of heavy superimposed layers) the palace complex of the new capital that Sargon II had caused to be built and which was abandoned immediately after his inauspicious death. The monumental edition of Botta's discoveries was published by him as Monument de Ninive, 76 and yet is unmistakably about Khorsabad. In a somewhat similar fashion, Layard also initially worked above all at Nimrud (the Kalkhu of Assurnasirpal II) and then at Kuyunjik, but his successful publications – both those properly scientific<sup>77</sup>

<sup>70</sup> Documentation collected and analysed by Janssen 1995; also briefly by Haase 2008; Vernay-Nouri 2008; Brusasco 2012, pp. 275-289.

<sup>71</sup> Janssen 1995, p. 33 (Ibn Hawqal 244); also p. 30 (al-Istakhri 86).

<sup>72</sup> Ibid. p. 49 (Mas'udi 538-540).

**<sup>73</sup>** *Ibid.* pp. 62–63 (al-Himyari 13<sup>th</sup>–15<sup>th</sup> centuries).

<sup>74</sup> Ibid. pp. 91-111 (localization), 136-145 (ruins), 157-180 (Nimrud and Dahhak).

<sup>75</sup> Ibid. pp. 73 (Yaqut 14<sup>th</sup> century), 83–84 (al-Qazwini) and 87 (al-Dimashqi).

<sup>76</sup> Botta and Flandin 1849-50.

<sup>77</sup> Layard 1849-53; 1851.

and the popular works<sup>78</sup> - emphasized the name of Nineveh without giving a hint of that of Nimrud. There was undoubtedly an opportunistic motive in terms of publication (which, although it may have been valid for the popular works, should not have applied to the scientific ones), in that the biblical and classical fame of Nineveh took hold of a wide public, to whom the names of Khorsabad and Nimrud meant little or nothing. But there was also the idea of a 'great Nineveh' extending over a wide area (I shall discuss this in § 1.6), which in some way made this improper use of its name legitimate.

The first cities of the Ancient Near East to be revealed by archaeology were then the Assyrian capitals, with the excavations of Botta and Layard taking place in the decade 1843–53.<sup>79</sup> Why precisely then? On the level of factual history we note that this decade was an interlude of respite and relative stability for the Near East, between the end of the war between Muhammad Ali and the Sublime Porte (1838-41) and the beginning of the Crimean War (1853-56), which was followed immediately by the Indian Mutiny (1857-58) and the Second Opium War (1856–60), events which prevented the western powers from engaging in investments and activities that were not military.<sup>80</sup> The decade in question saw the influence of the western powers (above all Britain and France) take root in the Ottoman Empire, in political and diplomatic, financial and commercial fields, at a level without precedent, thanks to the credit they gained (and were to continue to gain) through their support for the 'sick man of Europe' against his enemies, first Egypt, and then Russia.81 The economic influence had been formalized since 1838 (Treaty of Balta Liman), then to become altogether invasive following the Ottoman and Egyptian bankruptcy of 1876.82

But in the longer timescale of cultural history, the rediscovery of Assyria fits into that more general interest in the archaeological discovery of ancient civilizations of which I have already spoken (at § 1.1). While the archaeology of the Greek world developed in a climate of a shared culture, and of the claims

<sup>78</sup> Layard 1849; 1852; 1853.

<sup>79</sup> Botta excavated in 1843–1846; Layard in 1845–1851 (then Rawlinson and Loftus 1852–55). On the whole story Larsen 1996; in brief Fagan 2007, pp. 97-155.

<sup>80</sup> On the Indian Mutiny, Panikkar 1953, pp. 102-103; Wolpert 1985, pp. 216-220; on the Opium Wars, Panikkar 1953, pp. 127-138; Sabattini and Santangelo 1989, pp. 596-599, 606-610. On the interruption to the excavations as a result of the Crimean War and their later resumption cf. now Crossen 2011 (who seems to me to overvalue Loftus).

<sup>81</sup> Ottoman decline, Ternon 2005. An attempt to set the Assyrian discoveries in the frame of the events of the period has been made by Glassner 2003, pp. 95-135 (with little interest paid, however, to the archaeological aspects).

<sup>82</sup> Cf. Gelvin 2008, pp. 119-122, 180-182, 187-188 (text of the Treaty of Balta Liman).

of continuity between ancient and modern Greeks (even although the latter were in good measure Levantines), the archaeology of the Mesopotamian world took shape with an attitude of 'otherness' and of a rupture between the ancient and modern inhabitants of the region. The West that had supported the independence of Greece, which had been the seat of European civilization, the origin of democracy, of arts and sciences, against the despotism of the Ottoman Empire, behaved very differently in the whole of the Islamic part of that same Empire – from Egypt to the Levant and as far as Mesopotamia – notwithstanding the Near-Eastern origin of the Christian faith. On the cultural level, Western interest in eastern antiquities characterized itself through an attitude which we can define as proto-colonial; an attitude, at any rate, of appropriation.

On this topic two cultural traditions, opposing but converging towards the same outcome, met. On one side the Islamic world expressed a total lack of interest (and even contempt) for the pre-Islamic cultural heritage, dating to the period of the *jahilīya*, that is to say of 'ignorance' not yet illuminated by Islam. I have already cited (in my book on the history of the Ancient Near East) a passage from the letter which the *qadi* of Kuyunjik wrote to Layard when the latter, beginning his work at Nineveh, sought to inform himself on the economy and technology of the region as a help for understanding the antiquities. It is worth repeating the quotation here: 'My illustrious Friend and Joy of my Liver! The thing you ask of me is both difficult and useless. Although I have passed all my days in this place, I have neither counted the houses, nor have I inquired into the number of the inhabitants; and as to what one person loads on his mules and the other stows away in the bottom of his ship, that is no business of mine. But, above all, as to the previous history of this city, God only knows the amount of dirt and confusion that the infidels may have eaten before the coming of the sword of Islam. It were unprofitable for us to inquire into it'.83 A few decades ago we were able to perceive a similar lack of interest and contempt (also shown by the consequent instances of destruction and dispersion), before mass tourism showed the Arab countryman what antiquity could do, even for him.

On the other side, this cultural heritage, in which the inhabitants of the Near East were not interested, was claimed by the 'moral heirs' who came from Europe.<sup>84</sup> This vindication was more obvious and went further back as far as the Bible was concerned: at the outset the expansion and migration of a good part of Christianity and Judaism towards the West, and then their further dislocation with the advent of Islam, made it clear that the heirs of the biblical

<sup>83</sup> Layard 1853 (edn. 1982, p. 401); cf. Braidwood 1973b, p. 38; Liverani 2014, p. xxi.

<sup>84</sup> Larsen 1994.

world were largely the Europeans. This claim then attached itself to the archaeological remains of the Near East, either because they were also enhanced by the biblical connections, or because they were the result of the lengthy Greek, Roman and Byzantine presence in the Levant. Today we are informed enough to understand that the myth of the 'empty land' and 'unused resources' is a typical expedient of modern colonialism (as it already was of ancient imperialism): if there are spaces, resources, heritage which the 'indigenous' inhabitants are not using, through lack of interest or ignorance or technical backwardness, then we are authorized to 'discover' and use these otherwise useless riches. This counts, first, for material, but also for cultural resources. And in this way the process of colonial appropriation of the Near East, which culminates in the collapse of the Ottoman Empire and government by mandate, had been prepared in parallel, by appropriation both mercantile and financial and, equally, both cultural and, in particular, archaeological.85

To sum up, while the Islamic world made the strong break with pre-Islamic antiquity prevail, the European world, while accepting moral judgement from the Judaic-Christian tradition, valued the unchanging continuity between the ancient eastern civilizations, the classical world and the later development of western and world civilization. And so in the nineteenth century models (classical in origin) were conceived which could be labelled as Ex Oriente lux and Translatio imperii, those keystones of a universal history which had arisen in the east, later to move and grow in the Mediterranean and then in Europe. There come to mind here the representations spread through the 'orientalist' painters of the early nineteenth century, in which the imposing and wondrous classical or Egyptian ruins, which emerge from the sands of time, are populated by tiny (in comparison) and picturesque, but somewhat miserable, 'native' characters, little shepherds and farmers, little old men and women, that by the very fact of being there appear to be the 'material heirs', but that clearly cannot be – I do not say, the direct creators of these colossal and sublime monuments, but not even their direct descendants. By way of contrast the western traveller/ painter, who works among the dull and lazy indifference of the natives, belongs to the 'spiritual heirs'.86

The appropriation of Assyrian antiquities took on in the field a very businesslike manner, linked to the emergence in Europe of the middle class and

<sup>85</sup> Liverani 2005a.

<sup>86</sup> Orientalism in art: MacKenzie 1995, pp. 43-70 (painting), 71-104 (architecture), 105-137 (drawing), 138-175 (music), 176-207 (theatre), 53 on the disparaging effect of the picturesque with regard to the imposing monuments; also Liverani 2008a; on the 'lazy native' Bahrani 2001b, pp. 24-26.

national state, and realized in the development of metropolitan museums and historical and archaeological publishing.<sup>87</sup> Just as a start, the excavation itself was explicitly intended for the recovery of valuable objects and their export towards the metropolitan museums. The phenomenon went back some time: for centuries the local people of the Levant and Egypt had been accustomed to dig up and sell (for very little) ancient objects to the antiquities traders of Levantine business, with their final destination in Europe. Besides, from ancient times popular imagination had told fables of treasure both hidden (e.g. in the tomb of Sardanapalus) and recoverable by digging underground tunnels. Eastern objects, above all Egyptian, had always been collected (alongside the prevalence of Etruscan, Greek and Roman objects), but for private or aristocratic collections, as oddities worthy of inclusion in a Wunderkammer alongside natural oddities. With the excavations of the mid-nineteenth century, however, we pass to direct exploitation by the European middle class in which the 'firmans' granted (or rather sold) by the Sublime Porte were permits for export rather than simply for excavation – excavation without export being inconceivable.88 In other words, given that the operation took place in Ottoman territory, the intervention of state diplomacy was necessary, in the context of the British and French government influence (in competition with each other) on the Ottoman Empire. In this sense, the fact that Botta and Layard were diplomatic agents and not archaeologists has its own logic: as well as 'dilettanti', they really were the 'specialists' in the case. The very mass of objects found (the great sculptured stone slabs of the Assyrian palaces) required the organization of laborious transport, on rafts for going down the Tigris, and then by ship, even passing by way of India (there was as yet no Suez canal), and the transportation did not always go well: dozens of sculptured stone slabs lie somewhere at the bottom of the Tigris basin, and all that remains of them are the quick drawings made early in the expedition.89

The metropolitan museums, set up by the state, had really arisen in order to receive these great complexes of Ottoman or Egyptian origin which could have been neither recovered nor imported by private individuals. The British Museum was founded in 1759, the Louvre in 1791, and alongside the masterpieces of classical art - the story of the 'Elgin Marbles' unfolds between 1801 (their removal) and 1816 (their acquisition by the museum)<sup>90</sup> – Assyrian sculptures

<sup>87</sup> Display and popular publishing of the Assyrian discoveries: Bohrer 1989. Eurocentric and imperialist attitude of the first discoverers: Larsen 1992; 1994.

<sup>88</sup> The excavation of Botta and Layard began without authorization from the Sublime Porte and were to all effects clandestine, conducted with the same procedures: cf. § 1.4.

<sup>89</sup> On the shipwreck of the reliefs: Pillet 1962.

<sup>90</sup> Pavan 1977, pp. 159-210; Rothenberg 1977; Greenfield 1989, pp. 47-105; recently King 2006.

coming from Khorsabad, Nineveh and Nimrud made an enormous impression. The Assyrian section of the Louvre was opened to the public in 1847, and that of the British Museum in 1853. To illustrate this phenomenon more widely, the first ethnographical collections, botanic gardens, and 'state' zoological gardens, also all arise during this proto-colonial phase, as a clear consequence of the imperialist ideology: that is, to gather at the centre of the world all the variety of strange and beautiful things from every part of the periphery, as a demonstration of the empire's capacity for universal domination, and for the sake of public admiration. As a parenthesis, the Assyrian kings had already done the same, 2500 years before, and indeed had already said they did it 'for the admiration of the public'.

The stream of visitors into the metropolitan museums (which were followed by the museums of Cairo in 1857 and Istanbul in 1882, in clear imitation of the European model) coincided with the spread of popular books, partly derived from the topic of the adventures of travel, but now enriched by first hand accounts of the startling archaeological discoveries. While the 'official' reports of the excavations of both Botta and Layard were enormous and expensive volumes (in the style of the Napoleonic Description de l'Egypte and of Lepsius' Denkmäler), impossible to open unless supported on a suitably large lectern,<sup>91</sup> the popular works by Layard (Botta did not write any) were small volumes, easily accessible and readable, yet without sacrificing an informative accuracy, to the extent that modern scholars consult and cite those volumes more often than the large official reports.

The different publication strategies of Botta and Layard have a number of contributory causes. The different organization of their respective missions carried the greatest weight: the French was clearly supported by the state, well financed by public money; the English was of a private collector nature, with resources that were always inadequate. The subsequent careers of the two excavators also weighed: Botta was transferred to other diplomatic duties, far from France, and ended as consul in Jerusalem and then in Syrian Tripoli. Layard on the other hand remained in London, became a Member of Parliament and gained considerable fame from his popular publications. His works were reprinted and reprinted on what was for the period a considerable scale: every British family of standing had a copy in their library at home, seeing that Nineveh and its Remains sold 20,000 copies in four years (12,000 in the first year).<sup>92</sup> Its success was not only due to the fascination of exotic adventures,

<sup>91</sup> Cf. Chevalier 2002, p. 483, for Mohl's criticisms of the inaccessibility of the sumptuous publications, more costly than the excavation!

<sup>92</sup> Bohrer 1992.

and not only to the archaeological information, but also to the biblical backcloth which the authors took care to highlight, and did this not out of opportunistic calculation but from deep cultural roots. In Protestant Britain there was a huge public already with marked biblical interests, whereas in France this aspect was less developed.<sup>93</sup>

I will close this section with two quotations on Layard's fame. Karl Marx, who found himself in London at the time (1853) and followed the parliamentary debates in which Layard took an active part describes him as 'the celebrated restorer of ancient Nineveh' and refers to one of his speeches as 'proving the illustrious scholar to be as intimately acquainted with Nicholas [the Tsar] as with Sardanapalus, and with the actual intrigues in the Near East as well as with the mysterious traditions of its past.'94 So far as it appears, Marx approved of Layard for his political positions, but had probably not read any of his books, and at any rate had not gained much from them, but continued to pick up traditional stereotypes. Jakob Burckhardt (in 1870) on the other hand had certainly read Layard, but regarded him with dislike, in that he cites him as a prototype of the scholar who becomes famous and respected not for the value of his ideas but for the luck of his discoveries: 'A disproportionate glory is attributed to the first to make important discoveries in distant lands (for example, a Layard at Nineveh), though everyone knows that the greatness is found in the object and not in the man.'95 Even today many 'philological' scholars think the same of their 'archaeological' colleagues.

## 1.4 The techniques of excavation and the problems of visibility

In the more general historical cultural view which I have sought to deal with in the preceding section, is included the problem which is at the centre of our book: the discovery of the ancient Assyrian capitals, then to be followed by the discovery of even more ancient cities, finally made it possible to visualize and interpret the cities of the Ancient Near East, not as just a trick of the imagination, nor as a new reading of the later texts (biblical or classical), but on the evidence itself of the actual archaeological material. Anyone who visits the archaeological excavation of an ancient city today has a more or less organic

<sup>93</sup> Bohrer 2001 notes the difference, but not the 'biblical' causes.

**<sup>94</sup>** Articles in the *New York Daily Tribune* No. 3826 22<sup>nd</sup> July 1853, and No. 3862 2<sup>nd</sup> September

<sup>95 1870</sup> Lectures at Basle, then published (1905) as Weltgeschichtliche Betrachtungen.

vision of it (of course, depending on the site, its history, its organization), which allows the visitor to understand its ground plan and appreciate its buildings, even leaving aside the possible help available on the spot, such as posters, guides, audiovisual aids. Unfortunately, a similar visualization was impossible for the Assyrian capitals in the mid-nineteenth century, above all because of the aims and methods of the excavation.

It is always necessary to bear in mind that those responsible for the excavation were not archaeologists, for the simple reason that such a profession did not yet exist: archaeology was only just in its birth throes. In the history of archaeology we read that the Dane, Jens Worsaae, 'became the first professional prehistoric archaeologist, and was the first person to be trained in the discipline, albeit informally', 96 and his book on Danish antiquities 97 came out at the same time as Botta's first discoveries. The other founder of prehistoric stratigraphy was Jacques Boucher de Perthes, whose volume on Celtic antiquities came out a few years later, but whose thesis on 'antediluvian man' did not appear until 1860.98 Obviously the two pioneers of Mesopotamian archaeology, Botta and Layard, had not been professionally trained, and their excavation was far removed from the standard 'stratigraphy' of the nascent study of European prehistory. Besides, the comparison with British or Scandinavian pre- or protohistoric archaeology would be unjust, given the very different dimensions of the great earthworks on the palaces of the historic age compared to the minute stratigraphy of prehistoric funerary tumuli. Professionally speaking, Botta was French consul at Mosul, and Layard was attaché at the British embassy in Istanbul. They were both men of considerable intellectual talent and great organizational ability, and undoubtedly did their best - I would say they performed 'miracles', considering the difficult conditions in which they had to operate and the methods of excavations then current. All in all their work was not so very different from what was being done in the same years in Italy or Greece, where the great 'professional' excavations, carried out by those belonging to the academic world of antiquity, began only with the next generation, in the 1870s: the excavations of Alexander Conze at Samothrace in 1873–76, those of Ernst Curtius at Olympia in 1875–86, those of Conze again and Carl Humann at Pergamum in 1878–86, and other important operations (at Aegina, at Delos, at Athens itself) all took place about that

<sup>96</sup> Daniel 1967, p. 85; Trigger 1989, p. 80; Schnapp and Kristiansen 1999.

**<sup>97</sup>** Worsae 1843.

<sup>98</sup> Boucher de Perthes 1847-49; 1860. On the origins of archaeology Daniel 1967; Guidi 1988, pp. 12-25; Trigger 1989, pp. 80-102.

time<sup>99</sup> - so thirty odd years after the excavations of the Assyrian capitals. The same goes for the pre-classical Aegean world, the startling discoveries of Schliemann at Troy began in 1870, those of Mycenae in 1875, to say nothing of those of Arthur Evans at Knossos, which only began in 1894.

In fact, Botta and Layard could not do otherwise than apply the methods of excavation already in use by those burrowing on the spot, by the 'clandestines', as we say. They followed the methods for two reasons: first because the aims were the same (recovery of objects of value, intended for the museums), so that we could say the excavations of the Assyrian capitals were clandestine (in their method) even if made official (with government permits, which applied besides to work already well in progress). The aims of profit were explicitly stated by Layard himself: 'to obtain the largest possible number of well preserved objects of art [sic] at the least possible outlay of time and money', and Loftus, excavating at Warka some years later, also used similar words. 100

The second reason is that the excavation was in practice carried out by the workmen, with general directions and intermittent supervision by the director, and the workmen would not have been able to know how to proceed other than apply, for the benefit of whoever had engaged them, the same work practices which they were accustomed to carry out by themselves. 101 Obviously in 'stratified' sites, like the Mesopotamian tell, and with architecture in unfired brick in which every reconstruction implied the emptying of the old foundations, the practice of digging (or simply rummaging) under one's own house, even during the life of the city, without expecting that it would become a ruin, is ancient: in the Babylonian tablets we already meet predictions dealing with this activity of 'household archaeology': 'if a man, in pulling down his own house, finds in the ancient foundations gold / silver / bronze / lead / stone' generally with negative results. 102 The tradition of seeking for ancient 'treasure' by thieves but also by local country people is found throughout European literature from Herodotus (2.150), who tells of tunnelling to find the treasure of Sardanapalus, at least as far as Goethe (in the second act of *Faust*).

But let us return to the first excavators of the Assyrian cities. Two of Botta's letters<sup>103</sup> are revealing on the inability to understand the ground plan of the

<sup>99</sup> Daniel 1950, pp. 166-167; Marchand 1996, pp. 77-103. On Curtius and Conze: Schiering 1969; Barbanera 1998, pp. 53-55.

<sup>100</sup> Daniel 1950, p. 152.

**<sup>101</sup>** Pallis 1956, pp. 293–303 (organization), 304–313 (excavation methods).

**<sup>102</sup>** Freedman 1998, pp. 84–85.

<sup>103</sup> Published by their recipient, Jules Mohl, secretary of the Société Asiatique, in the Journal Asiatique of 1843, 1844, 1845, and then in his book (Mohl 1845).

buildings in the course of excavation. In a letter of May 2<sup>nd</sup> 1843, just at the start of the work, he admits, 'I must confess that I understand nothing of the design or general ground plan of this monument' (he is talking of the palace of Khorsabad). But even six months later (31st of October) his understanding has not only not moved forward, but in a certain sense has become even worse: 'I still consider the ground plan of this monument as problematic. Up until now we have not been able to follow any level, and it is not even clear if we are dealing with a palace or a tomb. For me, the latter hypothesis is the most probable [sic], because the inside must necessarily have been completely dark.'

The excavation of Khorsabad, like those of Nimrud and Nineveh, quickly concentrated on the recovery of the alabaster stone slabs which decorated the lower part of the walls inside the Assyrian palaces. As well as the sculptured slabs, the great winged bulls enjoyed similar positions and interest. Now, to reach the slabs, they dug shafts to arrive at the floor level of the palace, and then followed its walls, bringing the slabs to light. When the floor level was noticeably lower than the surface (as was the case above all at Nineveh and Nimrud, through successive stratification) it was more 'economical' to follow the sequence of slabs by means of a tunnel, so saving the removal of the higher part of the earth mound and, above all, the central part of the rooms.<sup>104</sup> Excavation by means of a tunnel, which was normal in clandestine excavations (this 'native' method was used from the beginning on the initiative of the workmen, and then willingly adopted by Layard for reasons of its economy), 105 hampered the all-embracing visualization of the monument, and even more of the urban settlement.

The other and greater drawback was that the 'messy' excavation, carried out with pick and shovel, did not allow the excavator to see the bricks (of unfired clay), to be alert to the difference between bricks in place, that is, walls, and bricks which had fallen or crumbled. Identifying the individual walls, which was easy when they were clad with stone slabs, became a problem when these were lacking. It seems incredible, but the first excavators (or rather their workmen) were not able to distinguish the walls until after they had partly dismantled them (noticing the different degree of hardness). As a result the inhabited, but not ceremonial, rooms of the palaces, devoid of facing in stone, were identified little and badly; not to mention the tiny dwellings, in the area outside the palace, which were scarcely noticed, feeding, as we shall see, the misconception of the 'empty' city. Besides, in Layard's first excavations, apart from not locating the walls in the absence of the slabs, they did

<sup>104</sup> Explicit theorization by Rassam 1897, p. 222.

<sup>105</sup> Layard 1853, pp. 69 and 75; cf. Liverani 2000, pp. 3-4.

not even pick out the inscribed tablets, which they therefore threw away, saving only the inscriptions on stone:106 once again a result from a combination of the 'messy' and crude excavation and of the workmen's habits, whose 'eye' was ready to locate objects of value, even small ones, but was as yet ignorant of the value of the tablets (which became quickly revalued, especially after the story of the Great Flood was found on one of them).

The initial inability to locate the walls passed into quite incomplete ground plans. Layard's first plans (he did not have an architect with him) were formal schemes of the sequences of slabs discovered and recovered, which corresponded (I am tempted to say, by chance, or if you like, by serendipity) to the ground plan of the rooms, or at least to those furnished with slabs, evaporating into nothing on arrival at the residential apartments or storerooms, or other non-ceremonial structures. 107 Nor did the pictorial reconstructions of James Fergusson and Thomas Mann Baynes, which Layard verified and indeed used to embellish his publications, succeed in making use of the data from the excavation, and did no other than reproduce the pre-archaeological plan, but by now consolidated, of Martin's Fall of Babylon. 108

The plans of Khorsabad, where Botta could excavate without tunnels (given it was less buried), were from that point of view more complete and more exact. Credit for this is due to Eugène Flandin, the artist attached to Botta's mission; but the site of Khorsabad (a newly founded city, abandoned shortly after its construction, and devoid of subsequent building above) had a unique character. In particular the general ground plan of the site (first Botta's summary, and then Place's perfected plan [Fig. 8])109 was made practically without excavating, given that the surrounding wall and the general aspect already emerged by themselves. The gap between the plans and reconstructions of the British and French missions was accentuated in the second generation, which saw Hormuzd Rassam succeed Layard, and Victor Place succeed Botta. While Rassam was perhaps the worst of all the nineteenth-century excavators of Mesopotamia (he recorded nothing of his findings), Place and his artist Félix Thomas gave proof of great professionalism, and brought about a true 'realistic innovation' compared to the 'fantasy' of Layard and Fergusson. 110 Even their reconstructions of the elevations have a claim to philological accuracy. But

<sup>106</sup> Pallis 1956, p. 309.

**<sup>107</sup>** The workmen's ability to find walls without slabs improved with the third campaign.

<sup>108</sup> Bahrani 2001b, p. 18; Micale 2005, pp. 144-146.

**<sup>109</sup>** Place 1867–70, III, pl. 2 (= Loud 1936, fig. 1a p. 2).

<sup>110</sup> Micale 2005, pp. 140-143; 2007a; 2008a; 2008b. On Botta and Place: Chevalier 1995; on Place: Pillet 1962.

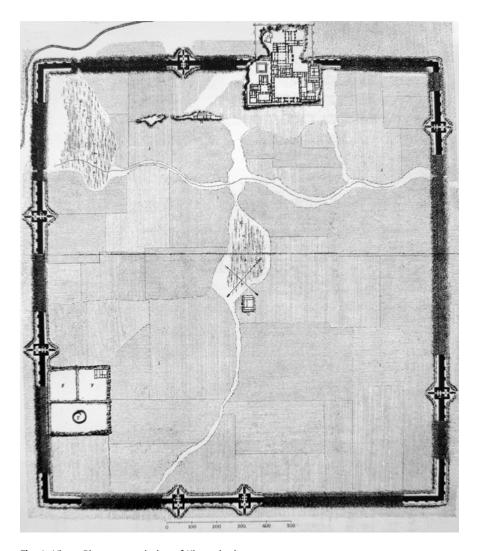


Fig. 9: Victor Place, ground plan of Khorsabad.

certainly Place and Thomas had their work made easier by the nature of the site, while at Nimrud and Nineveh stratifications and excavation by tunnelling made it impossible to visualize the city; we also need to note the twenty years of experience that had passed between Layard and Place.

While the French mission's survey and pictorial representations (from Botta and Flandin to Place and Thomas) were undoubtedly more professional and technically more accurate [fig. 9], and the visualization of the city became more

amply possible, yet we need to give credit to Layard (who had far smaller financial means at his disposal) for other merits, of striking innovation, particularly in the technical field: we need only think of the first metallographic analyses carried out on the bronze objects found at Nimrud, or of the attention paid to the reverse side of the clay seals, or cretulae (the small lumps of clay used to seal doors and containers), with the negative imprint of string and peg,<sup>111</sup> which only became an object of systematic study a century later.

The backwardness of excavation methods in Mesopotamia throughout the second half of the nineteenth century has been repeatedly and severely criticized.<sup>112</sup> But everyone knows and deplores the work done in their own field by preceding scholars. To Mortimer Wheeler, who lamented that Palestine was the region where 'more sins have probably been committed in the name of archaeology than on any commensurate portion of the earth's surface', Kent Flannery replied that Wheeler clearly did not have in his mind the sins committed by certain Mesoamerican archaeologists.<sup>113</sup> Clear differences in quality among excavations (and excavators) in the eyes of their contemporaries can be justly criticized once a working paradigm has been established – a specific professionalism and indispensable standards of quality. But the first generations of excavators of the Assyrian capitals worked in a 'pre-paradigmatic' situation, and had neither a standard of reference nor professional preparation. It was they who began the discovery of the ancient cities, and their merits are greater than their defects. It is upsetting today to think of the mass of information lost for ever, but without these beginnings it would never have been possible to arrive at the formulation of ever more appropriate and rigorous operative standards.

# 1.5 Ancient cities and eastern cities; the material, and the values

At about the same time as the ancient capitals were discovered, historians of classical antiquity began to define and use the concept of the 'ancient city', applying it only to the Graeco-Roman world, and above all to the Greek, without taking account of the Assyrian cities – doubtless also ancient, but perhaps

**<sup>111</sup>** Layard 1853, pp. 670–672 (metal) and 154 (cretulae, with the mischievous note that Botta had also found these, without, however, understanding them).

<sup>112</sup> Lloyd 1947 (1955, pp. 192-210).

**<sup>113</sup>** Wheeler 1954, p. 16; Flannery (ed.) 1976, p. 1. Wheeler meant the number of wrongs committed in a region of similar size, and the Mesoamerican region is very different.

not cities. The well-known and influential work of Numa Fustel de Coulanges<sup>114</sup> is a most significant example here, especially since it was written when the Assyrian finds had already been exhibited to the public (in Paris itself), Layard's popular books enjoyed a wide readership, and the ground plans of Khorsabad provided a concrete image of an 'ancient city'. In presenting his great fresco of the origin and ethical-political nature of the ancient city Fustel proved himself a leader in a long tradition of study which continues – just to give two important names – from Gustave Glotz<sup>115</sup> to Domenico Musti, <sup>116</sup> But even an anthropologist of the calibre of Marcel Mauss, who should indeed have been safe from a certain chauvinism among the classicists, saw the cities of the Ancient Near East as enormous and disordered, different from the ancient city, that is, the Greek polis. 117

The historical/cultural reasons which are at the base of this disparity are profound and have been analysed many times, 118 mostly to underscore their historiographical weight, but also sometimes the defects. The classicist Pasquali<sup>119</sup> observed that Fustel, in basing himself on the ancient sources, used them in an uncritical way, was unaware of the modern bibliography and had already been superseded when his work appeared, used the stuff of stories in an ingenuous way, confused different historical situations, ignored non-Indo-European and pre-Greek components (he ignored the Near East), and fell into the Indo-European (Greece-Rome-India) misunderstanding, wrongly transferred from the linguistic context to the religious and institutional. It is a severe criticism, but unobjectionable, which classes Fustel's work as a view of genius rather than an objective analysis.

But we need above all to put forward that for classicists the terms 'city' and, better, 'city-state' were (and even today still are) a mental translation of the Greek term polis, which indicates not the city in its town-planning and architectural material state (which in French would be ville) but rather the socio-political structure (precisely the *cité*), the community of its citizens.<sup>120</sup>

<sup>114</sup> Fustel de Coulanges 1864. Kuhn 1878 was somewhat less influential. On Fustel see Momigliano 1970.

<sup>115</sup> Glotz 1928.

<sup>116</sup> Musti 2008. Also de Polignac 1984. Greco and Torelli 1983, pp. 3-16 (excellent critical introduction), 17–35 (history of the studies) is dealing with the Greek city, but is also generally useful.

**<sup>117</sup>** Mauss 1998, p. 15.

<sup>118</sup> Finley 1977; Ampolo 1980; Levi 1989, pp. 11–21.

**<sup>119</sup>** Pasquali 1972.

<sup>120</sup> The geographer Kirsten 1956 already expressed the difficulty of 'translating' polis as Stadt (Greco and Torelli 1983, pp. 3-6).

The belief that the city is made of men and not of houses (or of walls) runs through the whole study of the Greek city, from Thucydides (7.77.7) and Aristotle until Rousseau and Fustel himself.<sup>121</sup> Aristotle (*Politics* 3.1) then specifies that it is not enough to live in a city to be its citizens (there are also metics and slaves): citizens are those who attain the magistracies (judges and the rest) and take part in the assembly; but this is a vicious circle, given that the magistracies and assembly are open to anyone who is, exactly, a citizen. It is better for us to say that free, property-owning, male, adult members of a community are citizens and reach the magistracies.

The opposing ideas of men and houses, clearly ideological and polemical in form, would make sense only if the common opinion was already that the city was made precisely of houses; the polemic means something in Greek, where polis means both one and the other, whereas it means nothing in French, where obviously the *ville* is made of houses and the *cité* of men. The ancient statement, in contrasting ethical-political structures with those of town planning, seems to ignore the existing and necessary relation (of which we are so conscious today) between the two aspects – up to the possibility, by now current in prehistoric archaeology (which lacks written sources), of deducing the socio-political structures from the settlement structures. But the greater difficulty, already there in Fustel but then magnified in his successors, is of a logical and classificatory nature: if the concept of a city is drawn from analyses of a limited context (the classical world), we cannot then suggest that it has a universal value, establishing inclusions or exclusions also for those contexts which have not contributed to define it. In other words, it was more than justified to maintain the Assyrian cities were not *poleis* in the Greek sense, but it was not justifiable to consider them as beyond the concept of city in its wider sense.

Turning to Fustel's vision, two of his views, connected but not necessarily consequential, had a different impact on subsequent studies. His idea that at the base of the foundation of a city there were ancestral and spiritual factors (especially religious) was then obviously eclipsed by positivist and 'materialist' historiography, which stood a good chance of highlighting the socio-economic, technological, and demographic processes – instead recently to turn fashionable, with the followers of the 'symbolic' approach (we shall see it in § 6.7). Among these the work of Joseph Ryckwert on the 'Idea of a city' 122 – in which the symbolic, ritual, mythical and magical factors are paramount and prevail over the practical, utilitarian and material ones – enjoys particular attention

<sup>121</sup> Ampolo 1980, pp. v and xiv-xvii.

<sup>122</sup> Ryckwert 1976 ('oneiric' approach, according to Greco and Torelli 1983, p. 33).

(especially among architects and town planners). Everyone expresses his own ideas, but drawing knowledge of the 'ancient' city from a mixture of the Roman case with comparisons almost entirely ethnographical certainly does not constitute an adequate basis for an up-to-date and competent discussion.

The other basic concept of Fustel's vision – the union of the city with the positive values of the Western world (liberty, democracy, and similar), and the consequent exclusion of the eastern metropoleis – had major influence and persistence, at least among classicists, but was not an original idea; it was on the contrary an idea that was current, which moreover linked the exclusion of eastern metropoleis from the class of the 'cities' to the exclusion of the 'despotic' monarchies from the class of states (in an ethical sense).<sup>123</sup> Among Fustel's authoritative predecessors we must mention at least Hegel, according to whom universal history is the story of progressive affirmation of liberty:124 in the eastern empires (kingdoms or empires but not real states) liberty is for one alone, the despot, and is therefore absolute power and privilege; in the Greek and Roman world liberty is for some; finally only in the Christian-Germanic world is liberty for all. Implicitly, eastern despotism materializes in the palace; liberty for some materializes in the city (polis); liberty spread to all materializes in the people. The state 'is that form of reality in which the individual has and enjoys his freedom'.<sup>125</sup> Hegel knows something of the ruins of the Assyro-Babylonian and Medo-Persian cities, but the very fact that they are in ruins shows him that he is dealing with something which has by now been eliminated from the course of world history. As for Egypt, whose ruins 'the final result of immense labour, surpass in the gigantic and monstrous, all that antiquity has left us', we are dealing with a land of the dead, the only visible remains today are tombs. The description '[Egypt] is only present beneath the ground, in its speechless Dead, ever and anon stolen away to all quarters of the globe, and in their majestic habitations; - for what remains above ground is nothing else but such splendid tombs'126 is presented as a clear and contradictory paradox. The Italian philosopher Cattaneo (writing in 1858) talks of the eastern cities, among them Babylon, as 'great walled encampments, where the conquering horde gather the spoils of war and tributes of the peace' and further on specifies that 'these sumptuous Babylonian cities are without municipal order, without law, without dignity; they are inanimate beings, inorganic, incapable of

<sup>123</sup> On despotism cf. Bahrani 2000; 2003, pp. 50-72 (in the footsteps of Said 1978); 2007.

<sup>124</sup> Hegel 1837 (published posthumously), p. 23 in Sibree's English translation.

<sup>125</sup> Ibid. p. 38.

<sup>126</sup> Ibid. pp. 198 and 115.

performing by themselves any act of reason or will, but resigned above all to the decrees of fatalism'.127

What is more troubling in the success (by now of more than a century) of the ethical-political position setting that dates back to Fustel but still continues is that the 'Greek model' – even leaving out its inappropriate elevation to the rank of universal model – is extremely limited in time and space. In time, because after the Homeric precursors the polis took shape in the sixth century (in the institutional development which ran from Solon to Cleisthenes) and was already in crisis in the fourth century when it was incorporated into the Macedonian state. In space, because in reality the model of the *polis* is, to a great measure, based on the case of Athens, an atypical case in the more general picture of the Greek world, which saw the presence of monarchies, of chiefdoms, and of ethnic leagues, side by side with city-states both oligarchic and democratic.<sup>128</sup> The fact that a case as individual as classical Athens could become a touchstone for defining what is and what is not an ancient city, and then could even serve as the more general model of a city on a universal scale, makes us understand how concentration on values has influenced the reconstruction of history.

And here I can insert a collateral but important question. The great Jakob Burckhardt, first in his lectures on world history given at Basle in the first years of the 1870s, and then in his work on Greek history, maintained that the Phoenician cities were substantially similar to the Greek poleis. In the first work he stated: 'Their very polity - moderately monarchistic or republican, aristocratic or plutocratic, with ancient hereditary oligarchies functioning beside the King – would of itself reveal a cultural intention'; and a little further on: '[the Phoenicians] gave the world its first example of a free, unchecked mobility and industry, and the state seems to have existed only for their sakes'. 129 In the second work he states this even more precisely:

Before the Greeks, the Phoenicians had already founded poleis, i.e. city communities, city states, with bodies of laws. The power of the kings was limited by a council whose membership apparently was made up of the chiefs of privileged families. These city states were able to settle colonies that copied the organization of their mother cities. These poleis differed from the ancient royal strongholds of the Orient, which in each nation represented the central point of the whole; they differed from the gigantic army encampment of

<sup>127</sup> Cattaneo 1858, p. 8 (ediz. Venezia 1972); cf. de Seta 1975 = 1996, pp. 241–261. Salzano 1998, pp. 28-30 holds to the idea that the city developed through a mercantile route (a private use of surplus), while the 'lord' was foreign to it.

**<sup>128</sup>** Hansen 1997, pp. 9–10; Morris 1997; I shall return to this in § 5.9.

**<sup>129</sup>** Burckhardt 1905, pp. 125–126 (pp. 104–105 of the English translation).

the Assyrian dynasties on the Tigris, differed from Babylon founded as a common stronghold for property and the gods, differed from the three alternating residences of the Achaemenids, differed from the great mercantile centers associated with oriental trade, and from the temple cities of Egypt: essentially, they were civil strongholds. Would the honor of the Greeks suffer if one assumed that the Phoenician poleis influenced them?<sup>130</sup>

I wanted to cite this passage in full for two reasons. The first is that it seems to me that the idea of the capacity for citizen self-defence could derive from an equally well-known passage in which Ernest Renan (on return from his 1860 expedition to Phoenicia) claimed for the Phoenicians the honour of having defended their liberty in the face of a despotic empire, making of their anti-Assyrian and anti-Babylonian resistance a sort of 'Persian War' ante litteram:

Tyre was the first city to defend its autonomy against the feared monarchies which, from the banks of the Tigris and Euphrates, threatened to extinguish the life of the Mediterranean. When all of Phoenicia had been subdued, this rock, all alone, held in check the mighty Assyrian machine, endured for years hunger and thirst, until it saw Salmanassar and Nebuchadnezzar dislodged from the nearby plain. One cannot cross without emotion this strait transformed into an isthmus which in its day was the path of freedom. A hundred and two hundred years before the victories of Greece, there were Persian wars almost equally as glorious as those of the fifth century, and of which Tyre bore the entire effort.131

And here we insert the second and more substantial reason: that there is the seed of a link between a deep Near East (despotic and totalitarian) and a Mediterranean Near East (endowed with characteristics which render it more similar to the contemporary Greek world - while the difference remains firm in Burckhardt between the Greek polis, fundamentally ethical-civic, and the Phoenician, fundamentally commercial (and so material, venial). More than a century later the Italian historian Santo Mazzarino took up once again the discussion that the Phoenician cities were more similar to the Greek poleis than to the palace cities of the Near East, indeed widening the sphere of the city-state to include also those Aramaic and neo-Hittite, which were obviously completely unknown at the time of Burckhardt. This nineteenth-century flaw of the monolithic nature of the Near East then produced its fruits more recently, as we shall see in due course (cf. § 5.12). But the exception relating to the Mediterranean watershed of the eastern world was added by Mazzarino in his theory, or formula, of the 'double creation' of the city: he recognizes on one side the credit

<sup>130</sup> Burckhardt 1898, p. 5 of the English translation.

<sup>131</sup> Renan 1864-74, p. 574; cf. Liverani 1998c, p. 12.

due to the east for having created the generic city (the 'material' city, of economic-religious type, according to him), but gives to Greece the credit for having created that particular city in which the West recognizes the roots of its values – and the credit is all Greek, inasmuch as the eastern pseudo-*poleis* were based on very different values, so that for the former he uses the expression 'city-state' and for the latter 'state-city' with a nuance rich in implications: the city-state is a community of citizens which gives life and also administers a territorial state, while the state-city is above all a territory which is centred upon a royal city.

### 1.6 Ideology and town planning: a city and not a city

The reception of the discovery of Assyria produced contrasting reactions. The public and the critics could see only the sculptures, not the cities, and the sculptures - through the very fact of being located in the British Museum, which held the Phidian frieze of the Parthenon (the 'Elgin marbles', from the name of their purloiner) - were faced with the masterpieces of Greek art, and came out of it badly: 132 huge, impressive, but stylistically crude. Some London statements are particularly interesting because they come from those who were involved in the discovery. Henry Rawlinson, Layard's patron and decipherer of cuneiform, showed an understandable tendency (today we might say, through conflict of interests) to belittle the importance of the sculptures compared to that of the inscriptions, managing to define them as '[a work of art] ... valueless', 'can neither instruct nor enrapture us', with a specific comparison to Greek art. And Sir Richard Westmacott, Royal Academy Professor of Sculpture and member of the British Museum Council, asked by a parliamentary committee if the sculptures could damage the public's taste and distract it from the study of truly great art (i.e. Greek), replied that, yes, in effect, this was very ugly art and 'the less people ... view objects of this kind, the better', but, that the Museum had done well to acquire and exhibit them, for their historical value, both their own and that of the linked inscriptions.<sup>133</sup> The Egyptologist J. Gardner Wilkinson, on the other hand, appeared above all concerned with safeguarding the chronological, besides the aesthetic, priority of Egyptian art: the Assyrian art recently discovered (he is writing in 1853) is relatively late, belonging to the first millennium BC, represents a phase of decadence and not growth, and is in debt to the established and much more ancient model of

<sup>132</sup> Bohrer 1989; McCall 1998, pp. 195-206; Larsen 1992; 2009.

<sup>133</sup> See Bohrer 1989, pp. 18-19.

Egyptian art.<sup>134</sup> About the same time at Paris there was also this distancing. The excavator Botta rated as inferior the architectural/town-planning level ('the architectural art is of an altogether primitive poverty') and yet considered unexpected the 'extreme richness' of the decorative art. 135

Some decades later Jakob Burckhardt, presenting in the Basle lectures already cited his ample argument aimed at contrasting Western values (democracy, liberty, enterprise) to the anti-values of eastern despotism (as we have already seen in § 1.5), added to this his aesthetic judgement, mentioning 'the utterly uncouth royal fortresses of Nineveh' and 'the meanness of their groundplan and the slavishness of their sculptures'. Obviously the cultivated admirer of Periclean Athens and fifteenth-century Florence could not appreciate Assyrian art; but the aesthetic unacceptability of the Assyrian reliefs was for him associated with the unacceptability of the Assyrian capitals in both their politics and town planning. 136 Besides, the classicist repudiation of the eastern cities dies hard: even a century later Mason Hammond, while indeed presenting a wide panorama of cities 'before the Greeks' still added reservations: the Sumerian were religious centres, Babylon and Nineveh were too big, the Egyptian cities arose from the will of the pharaohs, the cities of the Levant are but commercial centres, the Anatolian cities are 'abortive', and the Minoan enlarged palaces. One notices the conviction that the real city begins with Greece.137

But we come now to the aspects more properly of town planning. Above all the Assyrian capitals were thought to be too big, not in an absolute sense (the modern cities of the mid-nineteenth century were by then more than merely large), but with regard to the classical canon. We remember (§ 1.1) how the biblical and above all classical information on the size of Nineveh and Babylon portrayed enormous and over-populous metropoleis. Herodotus (1.178-187) described Babylon as square, enormous (120 × 120 stades), on a Hippodamean grid, with houses of three of four storeys, with a surrounding wall 50 cubits wide by 200 cubits high (!), with 100 gates, divided in two by the Euphrates (but linked by a bridge), with the citadel at the centre half royal palace and half temple (with the temple of Bel and the Tower). For Diodorus (2.1.4–28) Babylon is rectangular (150 × 90 stades), the enclosing wall is 'only' 100 feet high but wide enough to allow the passage of three chariots side by side, and has 1500 towers. Elsewhere the Babylon founded by Semiramis has a surround-

<sup>134</sup> Wilkinson 1836, vol. 2, pp. 262-263 of the reprint, London 1996.

**<sup>135</sup>** Botta and Flandin 1849–50, vol. 5, p. 76.

<sup>136</sup> Burckhardt 1905, p. 89 (p. 77 of the English translation). Reply by Andrae 1938b, pp. 1-2.

<sup>137</sup> Hammond 1972.

ing wall of 365 stades (like the days of the year), the wall is 50 cubits high, with 250 towers, and with a bridge over the Euphrates. 138 Strabo (16.1.5–6) too gives similar measurements and describes the Tower, the hanging gardens, <sup>139</sup> and the dwelling houses. And for Strabo (16.1.3), Nineveh was even bigger than Babylon, much bigger.

Conversely, the theoretical/Utopian models of the *polis* oscillate between Plato's 5040 citizens (of fighting age)<sup>140</sup> and Hippodamus' 10,000,<sup>141</sup> to reach no less than 20,000 men of fighting age in a mythical and 'exaggerated' Atlantis, known, however, for aspects of 'eastern despotism'.<sup>142</sup> The criticism of a Nineveh over-large and doomed to collapse already exists in the time of Phocylides, who in the first half of the sixth century (therefore not long after the actual destruction of the Assyrian capital) wrote: 'a little city but placed on a high promontory and well ordered is stronger than the idle Nineveh'. 143 But now the excessive size of those cities which the excavators were also beginning to uncover in their dimensions on the ground and which could be estimated as ten or twenty times larger than the Greek canon, led to doubts as to whether they were really dealing with a city and not with something else. Clearly 5000 people were a community of citizens, but 50,000 or 120,000 were more probably a rabble of slaves. Figures apart, it is Aristotle who makes clear that the number of inhabitants should correspond to the smallest number necessary to secure the self-sufficiency of the city and that the inhabited area should be such as to be taken in at a single glance. 144

The fact that, as if to offset their size, these huge surfaces encompassed by the enclosing walls appeared somewhat empty led to a degree of perplexity. Two technical factors came into play here. First of all, the excavators of the mid-nineteenth century (and also of the following decades) concentrated exclusively on the palaces, ignoring the ordinary urban mosaic. The whole space

<sup>138</sup> The sources derived from Ctesias are collected in Lenfant 2004 (pp. 25–26, 32–38 for Babylon). On the classical sources: Prontera 1994 and 2000; on Babylonia: Boiy 2004, pp. 47-51, 67-78; Seymour 2008a; on Assyria: Zawadzki 1984; Rollinger 2011. On Herodotus' descriptions: Rollinger 1993 (cf. Dalley 1996); Nasselrath 1999. On Semiramis: Asher-Greve 2006; Rollinger 2011.

<sup>139 &#</sup>x27;Hanging gardens': Nagel 1978; Dalley 1994; 1997; 2002; Novák 2002; Dietrich 2002; Seymour 2008c.

**<sup>140</sup>** Leggi 5.737–738.

<sup>141</sup> Aristotle Politics 2.8. The idea of the ideal city of 10,000 inhabitants was also found in Egypt: cf. Badawi 1967.

**<sup>142</sup>** Plato *Critias* 112.d.

<sup>143</sup> Phocylides, in Gerber 1999, p. 394 (fr. 4).

<sup>144</sup> Politics 7.4 and 7.5.

between temples and palace and the surrounding wall remained uninvestigated. Secondly, even when an attempt was made - not often - to ascertain if houses were there or not, the excavation procedure was so rough as not to succeed easily in identifying the domestic structures of normal dwellings. A few soundings carried out at Khorsabad had nonetheless showed that the lower city was also inhabited, but the misconception, or at least the doubt, remained for a long time: were we dealing with populous cities or with wide spaces for refuge or for manœuvres linked to the palace?

And here the third and decisive factor comes into play: the Assyrian cities, the Babylonian, and then the Sumerian which were explored in the second half of the nineteenth century, focused as they were on the royal palace, or alternatively on the city temple, appeared to be extended palaces and not citizen communities of the type of the Greek polis. Karl Marx, in a pair of letters from June 1853, shortly after the public exhibition of Assyrian sculpture at the British Museum, alludes to the Assyrian cities as 'extended royal encampments', 145 and then in the manuscript *Precapitalist economic forms* (1857–58) he defines them as 'noble and lordly camps, superimposed on the real economic structure'. 146 Forty years later Jakob Burckhardt thought of identifying the Phoenician cities, which were real citizen communities (Stadtgemeinde, Bürgschaften), as the only plausible antecedents of the Greek polis, and disqualified the truly Near-Eastern cities, defining them as enormous encampments, extended palaces, markets, temple cities – everything, but not a city. 147

A more concrete result of the difficult meeting between the information given by the classical authors and the definite reality which began to emerge from archaeological activity was the question of 'greater Nineveh' and 'greater Babylon'. We have already seen that the measurements supplied by Herodotus and Diodorus give Nineveh an extent of 27 × 16 km and Babylon one of 22 × 22 km. Before the archaeological rediscovery, a 'great Nineveh' and 'great Babylon' had already been proposed, on the basis of the classical writers alone, by J. S. Buckingham in 1816, 148 and were repeated by R. Ker Porter in 1818 and by Robert Mignan in 1827. 149 We also find in Hegel's Berlin lectures (of 1822-23) the idea that these enormous walled cities formed the boundaries of entire peoples (with the palace of the despot in the citadel further inside). 150 And yet

**<sup>145</sup>** Werke, vol. 28, Berlin 1963, pp. 250–261.

<sup>146</sup> Ibid. vol. 42, Berlin 1983, p. 391.

**<sup>147</sup>** Burckhardt 1898, p. 5 of the English translation. I quoted the passage in § 1.5.

<sup>148</sup> Buckingham 1827, pp. 298-307 ('great Nineveh'), 414-472 (topography of Babylon, from Rich's ground plan, but influenced by information in classical authors).

**<sup>149</sup>** Pallis, p. 46; Hilprecht 1903, pp. 42-53.

**<sup>150</sup>** Hegel 1837, pp. 183–4 in the English translation by Sibris.

Hegel himself was aware (from the account of Ker Porter's journey)<sup>151</sup> of the material existence of the ruins of Babylon, but remained stuck to the information given by classical authors.

When, therefore, Nineveh and Babylon were uncovered (at first topographically and then archaeologically) it opened a season of doubts and debates for and against making the measurements given by the classical authors agree with the remains visible on the ground. The operation of 'putting on a plan' the imaginary megalopoleis, which had meant nothing before the mid-nineteenth century in the absence of ancient points of reference to which the operation could be anchored, became possible after the archaeological discoveries. Trying to superimpose the measurements quoted by the classical authors on the Babylonian and Assyrian areas surveyed topographically, it became clear that these measurements greatly surpassed the circuits of the walls which could be identified on the ground, and took in entire regions. Instead of dismissing the information of the classical authors as exaggerated and legendary, a compromise solution was sought: the 'archaeological' cities were inserted inside the encircling walls of regional dimensions, with the advantage of also being able to include in 'great Nineveh' the sites of Khorsabad and Nimrud, from which most of the finds came (and therefore of being able to use the title of Nineveh for the popular volumes on far less famous sites), and as far as the more distant Arbela; and of being able to include in 'great Babylon' all the territory from Kish to Borsippa, including therefore the indispensable Tower, which presented itself much more clearly as a ruin at Birs Nimrud than at Babel. 152

The problem was clearly present in the minds of the first excavators: Layard speaks of 'great Nineveh' at the beginning of his works, 153 though basing himself upon the realistic topography established by Claudius Rich just a few years before; and Fergusson provides a schematic ground plan of a 'great Nineveh' of regional size.<sup>154</sup> As for the French, in 1852 the director of the Frenel-Oppert mission sent a report to Paris in which he explained that 'the ruins of ancient Nineveh [...] extend along the left bank of the Tigris from Khorsabad [...] to Nimrud'. 155 And again, ten years later, Jules Oppert spoke of 'great Babylon' when he carried out a survey and soundings. 156 To be honest, in their

<sup>151</sup> Ibid.; from Ker Porter 1821-22.

<sup>152</sup> For Buckingham 1827, the ruin of 'Aqar Quf was not the Tower of Babel (pp. 395-402); but that of Birs Nimrud (pp. 474-494) was! For Dalley 2008 the confusion between Babylon and Nineveh can even date back to certain cuneiform sources.

<sup>153</sup> Layard 1853, p. 492.

**<sup>154</sup>** Fergusson 1851.

**<sup>155</sup>** Cited by Pillet 1917, p. 111.

<sup>156</sup> Oppert 1863, pp. 214-216; Parrot 1949, p. 63 and fig. 37; see also Oppert s.d.

properly technical investigations, neither Botta, nor Layard, nor Fergusson adopted the myth of 'great Nineveh'. Yet the indications given both in the title of the volumes, and in the plan, show that what was rejected at the scientific level had nevertheless not ceased to flutter over the popularising pages, based upon a tradition which was no less persistent for being by now contradicted by the archaeological and topographical evidence. The same can be said for Babylon: 'great Babylon' stretching from Borsippa to Kish was abandoned by the archaeologists in favour of the survey (already carried out by Rich) of the real Babylon, of which the walls and main mounds of ruins were emerging. The archaeologists therefore quickly dismissed the idea and concentrated on the reality which was appearing from the excavation and reconnaissance on the ground of the material remains.

The legend still had, however, several decades of life, on the part of both historians of antiquity and popular writers. Even forty years after the discovery, Menant dismissed the idea of 'great Nineveh' but remained ambivalent (so as not to contradict his colleague and countryman Oppert) on 'great Babylon', endowed not only with her urban walls (the real ones, visible on the ground) but also by walls of regional dimensions as the classicists wished. 157 In the same way George Rawlinson, brother of the great patron of the Assyrian excavations, adopted (in his annotated translation of Herodotus) the idea that the walls enclosed an entire region, not just a city. 158 In the famous history of ancient art by Georges Perrot and Charles Chipiez, which came out in 1884, Babylon is described as a 'great entrenched camp' which included Babylon itself, Borsippa and Kutha.<sup>159</sup> Finally, in a popular book on the biblical importance of the discoveries, published in 1889 and probably just one instance among many, the plans are shown of 'great Nineveh' (which includes Khorsabad and Nimrud) and 'great Babylon' (which includes Borsippa and Kutha). 160 The power of imagination and tradition proved stronger than that of direct evidence, and at the beginning of the twentieth century the problem still merited serious discussion. And much more recently, among town planners, the trail had not yet dried: in 1925 Le Corbusier portrayed 'ancient Babylon' as square and of regional size, and in 1960 Wolf Schneider was ready to save the veracity of the classical authors: 'Perhaps at Nineveh there was an internal city distinct from the external one, in which case Diodorus could have been right.'161

**<sup>157</sup>** Menant 1888, pp. 63–66 on Nineveh, 255–261 (with fig. 88) on Babylon.

<sup>158</sup> Rawlinson 1858; Reade 2008c, p. 113 reproduces its map.

<sup>159</sup> Perrot and Chipiez 1884, pp. 470-472.

**<sup>160</sup>** Walther 1889, pp. 16–18 with fig. 1 (Nineveh), 147–157 with fig. 20 (Babylon).

<sup>161</sup> Le Corbusier 1925, p. 27; Schneider 1960.

Among Near-Eastern archaeologists, even in the mid-twentieth century, by which time the idea of great regional metropoleis was unthinkable, there reemerged now and again, however, with reference to the great tell of Syria and Upper Mesopotamia, which had a central citadel and an extensive lower town, the idea that the external circuit of walls bounded great 'entrenched camps' to hold flocks and livestock but empty of dwellings. 162 Obviously where an excavation was then carried out, the result was that the 'lower' towns were also found to have been settled, and moreover constituted normal cities, with the palace sector, however, concentrated in the citadel 'above'. 'Great Babylon', though, was again, to some extent, of topical interest with the publication of a text of Nebuchadnezzar II163 in which a wall to the north of Sippar, which goes from the bank of the Tigris to the bank of the Euphrates, is described as an external wall of the city or (alternative reading) of the country. Obviously this wall has nothing to do with the city wall of Babylon: we are dealing with a sort of regional 'dyke', known to the classical authors as the 'Wall of the Medes', which was found on the ground by the Belgian mission, 164 and which recalls what already existed at the time of Ur III in the form of the 'wall of the Martu', which exploited the proximity of the two great rivers to block entry to the land of Upper Mesopotamia by invaders coming from the north-west.

Technicalities apart, the question of the Near-Eastern city as a non-city – because it was too big, too empty, too centred on the palace, devoid of citizens and civic structure – developed into a 'discourse' (in the Foucaultian sense) or rather an ideological construct in the context of the more general European way of interpreting the Near East as a sort of anti-model and 'orientalism' as a kind of cultural tool of imperialism. Edward Said's discussion of this, <sup>165</sup> while studded with errors and omissions, and repeatedly attacked by scholars of the Near East, <sup>166</sup> substantially retains its validity, and could indeed even be developed in historical and archaeological directions, with which the literary critic Said had less competence to deal.

#### 1.7 From the Assyrians to the Sumerians

There is a phrase of Franz Kafka, from October 1922, a sort of flash which lasts an instant, which says 'Wir graben den Schacht von Babel', that is, 'We are

**<sup>162</sup>** Sites like Mishrife, cf. Ronzevalle 1914; Mesnil du Buisson 1927. Lyonnet 1998 and 2009 again thinks of spaces to welcome the nomads.

<sup>163</sup> Black 1987.

<sup>164</sup> Gasche et al. 1987; Gasche 2010.

<sup>165</sup> Said 1978; 1993.

<sup>166</sup> I refer to Irwin 2006 for a defence and a history (very anglo-centric) of orientalism.

sinking the shaft (digging the pit) of Babel'167 – which, it seems to me, obviously alludes (turned upside down) to the verse in Genesis (11:4): 'Go to, let us build a city and a tower, whose top may reach unto heaven', with which the construction of the Tower of Babel begins. Note that immediately before another fragment of Kafka, equally brief, had said, 'What are you building? - I want to dig a tunnel'. The inversion of digging (clearly downwards) instead of building (upwards) implies by strict logic that if the famous Tower of Babel was meant to reach heaven, the pit of Babel could serve to reach hell: but perhaps there is no need to follow this type of logic too closely. Kafka had already alluded to the Tower in two other fragments: one (from 1917) says only 'if it had been possible to build the Tower of Babel without ascending it – the work would have been permitted', while the other (from 1920) is longer and imagines that the building was foreseen as being so long and laborious that it would never be finished, and indeed would never even be started. 168 But returning to the shaft/tunnel, who knows whether Kafka knew that, after travellers had searched long and in vain for the Tower which rose on high, archaeologists had then decided to dig shafts and tunnels to search underground for the remains of ancient Babylon. I think he must have known it, even leaving aside the biblical connections, not least because in the years between 1912 and 1917, when (betrothed to Felice) Kafka went repeatedly to Berlin, the Berlin mission directed by Koldewey (cf. § 2.1) was intent on excavating Babylon, and there will have been lectures and press articles on the subject. 169

But we need to take things in order, without running ahead, let alone anticipating the importance of the German mission. In effect, after the end of the Crimean War, and then of the Indian Mutiny, towards 1870 excavations in Mesopotamia restarted, still monopolized by the British and French, to whom we can add the Americans from the 1880s.<sup>170</sup> With Layard's successors remaining steadily committed to the work at Nineveh and Nimrud, and Botta's successors to Khorsabad, interest spread to the south, precisely in the hope of recovering *in primis* Babylon, but also Ur (Abraham's homeland), Susa (the Persian capital where the story of Esther had unfolded), and other sites as well, both because they were named in the Bible and because all of southern Mesopotamia was dotted with *tell*, again of huge size, which must hide important cities. Babylon was a discouraging site for the skills of the time. Claudius Rich re-

**<sup>167</sup>** Published in Kafka 1961, p. 35. The comments by Glassner 2003, pp. 11, 136 and 225 seem to me inappropriate.

<sup>168</sup> Kafka 1961, pp. 34-35, 36-39.

<sup>169</sup> On Koldewey's use of tunnels and shafts in the excavation see Micale and Nadali 2008.

<sup>170</sup> Kuklick 1996; Clark and Matthews (eds.) 2003.

mained disheartened by the scale of the ruins and their state of preservation, which did not allow the monuments to be visualized, even although he then succeeded in making an adequate plan of them. Layard himself had made some soundings in 1850–51, but had concluded that without massive funding it would not be possible to excavate anything, and that anyway he would not work there, not even with huge financial backing. Other attempts were also to fail,<sup>171</sup> with the result that the site remained incredibly 'free' until granted to Robert Koldewey's German mission at the end of the century (cf. § 2.1).

But Babylon was not only difficult to excavate compared to the Assyrian capitals. Working in Lower Mesopotamia was hard, for various reasons: because of the climate, terribly hot, the distance of the tell from the large cities (whereas at Nineveh you only had to cross the river to be in Mosul), the lack of government control over the marauding nomads, the great size of the ruins, the complex stratification (with the more coveted levels buried under metres and metres of later remains), and finally the absence of sculptured slabs to follow (in a tunnel or in the open) so as to reach the ground plan of the palace: there were only walls of unfired brick, which were identified with difficulty in Assyria, but in Babylonia constituted the entirety of the ruins.

And so the site of Ur,<sup>172</sup> in spite of its Biblical appeal, and John Taylor's early sounding (1854), had to wait until 1922 for a proper and extensive excavation. The same applies to Uruk, 173 also bored into by William K. Loftus (1850) and 1854), but then properly excavated only from 1928 onwards. That was not the end, however, encountered by the American excavations of Nippur (John P. Peters and Hermann V. Hilprecht, 1889–1900), 174 the French of Sippar (Vincent Scheil, 1894),<sup>175</sup> of Tello/Lagash (Ernest de Sarzec, 1877–1900; Gaston Cros, 1903-09; Henri de Genouillac 1929-31; André Parrot 1931-33), and of Susa (Marcel-Auguste Dieulafoy, 1884–86; Jacques de Morgan, 1897–1908; Roland de Mecquenem, 1908–46). In these sites, great urban and temple centres, the cursory nature of the excavation methods was accompanied by the discovery of huge quantities of tablets, even of a literary content, in the temple and secretarial archives. The result was that as soon as the archaeological missions with-

<sup>171</sup> The Fresnel-Oppert expedition of 1852, cf. Pillet 1918; 1919.

<sup>172</sup> Leick 2001, pp. 110-137. For a list of campaigns in all the Mesopotamian sites, Pallis 1956, pp. 340-384.

<sup>173</sup> Leick 2001, pp. 39-66.

<sup>174</sup> Peters 1897 (in the style of a 'traveller's diary'); Hilprecht 1903, pp. 289–568; in brief Leick 2001, pp. 138-161; Fagan 2007, pp. 225-242; Kuklick 1996, pp. 19-91. The excavations were resumed in 1948 (DeJong Ellis, ed. 1992).

<sup>175</sup> Leick 2001, pp. 162–185. It was necessary to wait a century for systematic excavations, with the Belgian mission of the 1970s.

drew, clandestine diggers immediately replaced them to take away thousands and thousands of tablets to sell on the antiquities market. It is true that the 'regular' excavators also carried out perfunctory and hurried recordings, but the clandestines obviously recorded nothing, and the loss of information was colossal. I want to limit myself to citing a single case: let us imagine just for a moment what richness of information we would have if in 1894 Ernest de Sarzec had found the means, the time, the physical energy (he was gravely ill) to recover and record one by one the tablets in place – one behind the other, shelf above shelf – in the administrative archive of Ur III discovered intact at Tello!<sup>176</sup> The archive, then completely sacked by the clandestines, was estimated at 30,000 tablets.

The description which Léon Heuzey made of that archive uses 'mining' language ('a layer of tablets [...] a real deposit of archives [...] plates of terracotta, laid regularly on five or six levels')<sup>177</sup> quite deliberately. The French school of the end of the nineteenth century (at Tello as at Susa)178 was indeed directed by mining engineers who, wanting to adopt 'modern', 'western', 'industrial' systems (exploitation industrielle), opted for the mining method, not thinking of the 'native' pits with their narrow horizontal tunnels, but of the great industrial excavations of open cast mining, through enormous terraces with vertical cuts and horizontal planes, wide use of *décauvilles* (narrow-gauge railways) to carry away the earth, but also the remains of buildings and objects – without any connection to their context. The French 'mining answer' to the German 'architectural challenge' was a true disaster: it started from the simplistic presupposition that the earth contained 'deposits' of precious objects to recover (rather than cities to bring to light), and led down a blind alley until it had to be abandoned.179

In Assyria as well, the two excavators of genius of the first generation were not always followed by heirs of equal competence. At Khorsabad Victor Place improved the methods of excavation and above all the methods of visual representation,180 and was also among the first to use photographic reproductions;<sup>181</sup> but note how his plans of the site appear unrealistically regular (if compared to those then made by the Chicago mission). 182 On the other

<sup>176</sup> Photograph in Heuzey 1884-1912, II, pl. 59.2.

**<sup>177</sup>** Heuzey 1894, pp. 65–66.

<sup>178</sup> Liverani 2000, pp. 6-12.

<sup>179</sup> Parrot 1946, pp. 133-134, 149, 163 still uses, undaunted, the terminology of mining, and, ibid. 1956, pp. 37-39, develops a theory on the 'exploitation industrielle'.

<sup>180</sup> On Place: Chevalier 2008; Micale 2007b, p. 2.

<sup>181</sup> Bustarret 1991; Chevalier 1994.

<sup>182</sup> Sauvage 1994, with the two plans side by side at p. 47.

hand, at Nineveh Hormuzd Rassam, when compared to Layard, worsened both working standards, which became even more rough-and-ready, and the recording, which became almost non-existent. His book, which came out with considerable delay, belongs to the genre of 'stories of travellers' (with much space dedicated to the Christian communities of Iraq), 183 but contains valuable information on his soundings, not only in Assyria (with the memorable discoveries of the palace of Assurbanipal and the gates of Balawat), but also in Lower Mesopotamia: at Babylon, Borsippa, Sippar, and Tello. 184 Rassam is in general considered quite the very worst excavator<sup>185</sup> and certainly he did not at least have the excuse (valid for Layard) of being the beginner. Throughout the period from 1876 to 1903 he maintained far too modest levels of work, and even those who worked on either side of Rassam (first George Smith, and then William Budge and Leonard King) had no idea of doing better, behaving as philologists attracted only by the cuneiform tablets. The library of Assurbanipal was recovered, but knowledge of the city and its palaces did not progress perceptibly.

If therefore the resumption of the excavations in the last twenty-five years of the nineteenth century saw no progress either in archaeological technique or in urbanistic visualization, yet the work on the cuneiform tablets shifted attention from the cultural material to the textual data, and from the city to the 'people' (a truly fundamental structure of the political ideologies which bridged the nineteenth and twentieth centuries) in its recognizable linguistic character. All these twenty-five years were dominated by the rediscovery of the Sumerians and their language. The placing of Sumerian, neither Semitic nor Indo-European but if anything of Ural-Altaic association, caused a number of problems to be considered. There were those who thought it could not be a real language, but rather a cryptographic version of Assyro-Babylonian. And we should remember that a few years earlier Ernest Renan, faced with the deciphering of Assyro-Babylonian as a Semitic language, had reacted by maintaining that it was impossible, because all Semitic languages used the alphabet! But the question quickly entered the pattern of the time: peoples

**<sup>183</sup>** Rassam 1897. History of the excavations of Nineveh: Thompson and Hutchinson 1929; Pallis 1956, pp. 266–276, 288–292; Leick 2001, pp. 208–228; Fagan 2007, pp. 199–223.

**<sup>184</sup>** Rassam 1897, pp. 264–279 (Babel, Birs Nimrud, Tello), 344–363 (Babel), 398–411 (Sippar), 200–220 (Balawat).

<sup>185</sup> He is, however, defended by Reade 1986 (de Sarzec was not better: some consolation!).

<sup>186</sup> Halévy 1874; cf. Cooper 1991; 1993; also Jones 1969.

**<sup>187</sup>** Renan 1855, pp. 65–69 (p. 65: 'll y a donc un alphabet sémitique, inséparable des langues sémitiques').

neither Semitic nor Indo-European, and so labelled as Hamitic (the Egyptians) or Turanic (precisely the Sumerians), had the merit of great innovations in material culture (cities, writing), but then superior peoples will arrive (Semites and Arians) to introduce their spiritual and intellectual values (democracy, the alphabet). In this way the 'Sumerian cities', even before being to some extent visualized in their urbanistic and socio-economic structure, reach the pure and original type of the Ancient Near-Eastern city: large and populous, fortified, centred on palace and temple, seat of a despot and widespread slavery – while we need to wait for the Hebrews and Greeks to have a community of citizens.

### 1.8 Stripping the tell

There is a splendid passage in Ludwig Wittgenstein, a passage loved by linguists, which compares a language to a city grown over time, in which buildings of different periods coexist: 'Our language can be seen as an ancient city: a maze of little streets and squares, of old and new houses, and houses with additions from various periods; and this surrounded by a multitude of new suburbs with straight regular streets and uniform houses'. 188 This metaphor, however, is only good for our cities, built in stone, with enduring buildings which tend to co-existence: more ancient and more recent, with modest differences in height, but on the same plan of general urban trampling down, in a sort of horizontal stratigraphy. The city constructed of unfired brick, on the other hand, tends occasionally to collapse in a heap of debris, and is rebuilt each time ex novo, producing a vertical stratigraphy. The enlargement is due both to the solid urban refuse dumps, which accumulate more in alleys than in interiors, and more on earth surfaces than on paved ones, and to the technique of rebuilding ex novo as far as the foundations, necessary for unfired brick. It will have been Pompeii rather than Nineveh that inspired Italo Calvino's city of Argia 'which has earth instead of air' with the streets buried, the rooms packed with clay, and the roofs weighed down with layers of debris. 'From up here above, there is nothing to be seen; there are those who say "It's down there below" and we can only believe them'. 189

The other powerful image is that of being able to 'enter inside' the ancient cities, find them intact, walk through them, and meet the ancient inhabitants (and indeed speak to them in heaven knows what language). This is an image

<sup>188</sup> Wittgentstein 1953, no. 18.

<sup>189</sup> Calvino 1972, p. 127 of the 2010 edition.

cultivated initially from finding chamber tombs still an inviolate vacuum, with all their goods and items of daily life: that which made first the Etruscans and then the Egyptians fascinating, whose civilizations were characterized precisely by chamber tombs and robbery from times before archaeology. The mummies then added the preservation of those buried, who were imagined to be capable of coming back to life and interacting with us. One might follow this wish to 'enter inside' the ancient cities: starting indeed from the cartoon strip *Paperino e la sposa persiana* from when I was a little boy, with the mad archaeologist who entered into the clearly Babylonian city of Itsa Faka ('It's a Fake') and brought the inhabitants back to life, <sup>190</sup> and finally arriving at the technological *Stargate*, with inhabitants who speak excellent ancient Egyptian (with advice from a professional Egyptologist).

None of all this for the ancient Mesopotamian cities: you cannot walk through the middle (as Wittgenstein imagined), nor enter inside (as was done in the tombs), but need to 'strip' them layer by layer. Only in exceptional cases, and always following unexpected destruction, do we have buildings, palaces and entire cities remaining high enough to give the impression of 'ruins' rather than simple 'debris', and therefore the illusion of being able to walk inside. Through an accident of history, this was the case with the Assyrian palaces, the first to be excavated, which therefore generated exactly that illusion and assured for it a certain persistence in the collective imagination. But for the most part with current archaeological practice, particularly when excavation began in other areas, in Lower Mesopotamia as in the Levant, smaller stratifications were met, which did not give the visual impression of how collapsed buildings had been made and which had to be removed layer by layer in order to recover the diachrony.

Which was what that dilettante of genius and no scruples, of powerful imagination and inexhaustible activity, Heinrich Schliemann, began to do in the final decades of the nineteenth century. Everyone knows the story of his excavation of the hill of Hissarlik, with its seven 'cities' superimposed, to choose among them the one corresponding to the Troy of the Homeric poem. Obviously the fact that each accumulation (whether natural or human) is formed of superimposed layers, so that it is therefore possible to 'read' in cross section (in walls) the history of the accumulation itself, was already well known to European prehistorians, who had deduced it from the geologists of their time. <sup>191</sup> But these beautiful stratified walls illustrated in every book on

**<sup>190</sup>** The original *Donald Duck in Ancient Persia* came out in 1950; my thanks to Alessandra Lazzari for her help.

**<sup>191</sup>** Cf. Harris 1979, pp. 49–61; in the continuation the oriental part (and outside Europe in general) was neglected.

the beginnings of prehistoric archaeology were cut from the inside of funerary tumuli, and were therefore operations of modest size and above all of unambiguously vertical accumulations, without those horizontal or transverse complications of an inhabited whole. Schliemann's Troy was therefore the first urban settlement to be visualized as a superimposition of cities, and to be excavated (at least ideally) layer by layer. Schliemann excavated alone (with his wife Sophie) from 1870 to 1873, adapting 'mining' methods for great trenches, but nevertheless carrying out measuring and recording which could be considered accurate for his time. He then excavated from 1882 until 1890 with the valuable collaboration of the archaeologist and architect Wilhelm Dörpfeld, who had already worked with Curtius at Olympia. It was in this second phase that the idea of the superimposed cities took form more clearly, and it was then Dörpfield who standardized it.192

If there is a trait of dilettantism and ingenuousness in Schliemann (which, of course, does not impugn at all on his merits, no more than it excuses the brutal illegality of his behaviour), it is in having conceived the stratigraphic excavation as basically complete, ideally taking away one layer after another, which not only meets with enormous difficulty in performance, but also is only practicable in a small site (which Hissarlik is) and with expenditure of time and resources which generally call for a more selective use. When the 'professional' Flinders Petrie<sup>193</sup> occupied himself with this problem, he immediately clarified that the stratigraphic reconstruction of a site could be obtained by means of interpolation, starting from trenches or sample transects (or simply clearing away parts eroded by time or man) on the external slope of the tell, where the layers were coming to an end and were therefore immediately visible. The story of Petrie is curious in some ways: the innovative theorist, both of stratigraphic excavation and of surveys of surfaces in the Levant, had worked long and frenziedly in Egypt, 194 a land which was considered, rightly or wrongly, to be home to easy excavation: you clear away the sand and the stone temple, still standing, appears. In reality Petrie's case is not unique: it is enough to think of the methodological merit of the American George Andrew Reisner's excavations (who also moved to Palestine to excavate Samaria. cf. § 2.4),195 not to mention the Egyptian overviews of Henri Frankfort and Leonard Woolley. In point of

<sup>192</sup> On Schliemann: Daniel 1950, pp. 167-169; Schmied (ed.) 1960; Siebler 1990; also Seeden 1994, pp. 58-61.

<sup>193</sup> Daniel 1950, pp. 174-177; Drower 1985; and Petrie's autobiography 2003 (written c. 1930).

<sup>194</sup> Petrie 1900.

<sup>195</sup> On Reisner: Wright 1970, pp. 12–18; Silberman 1982, pp. 171–179. Relations between Petrie and Reisner: Kuklick 1996, pp. 146-152.

method, however, Petrie owed much more to his master, the prehistorian Pitt Rivers, than to his Egyptian experience.

Be that as it may, in 1890 Petrie worked in Palestine, at the excavation of Tell el-Hesi, where he carried out a single and short campaign, which he hastened to publish immediately (as was his wont, meritorious but cursory), saying that he did not think it worth continuing. In the report there was a reconstructed section of the tell, which became famous and would be reproduced in all histories of Palestinian archaeology (and elsewhere) [fig. 10].<sup>196</sup> The theoretical principles of the stratigraphy of the *tell* were set forth by Petrie both in the excavation report and in a conference held at the Palestine Exploration Fund.<sup>197</sup> Today the reasoning he adopted to transform the sequence into a chronology appears mechanical and simplistic; given that the summit of the tell (at a level of 340 feet) is dated to c.450 BC (on the basis of Greek imports), and given that Phoenician pottery begins (c.1350 BC) at a level of 295 and finishes (c.850 BC) at a level of 320, a growth can be deduced of around 5 feet per century and therefore the beginning of the settlement, corresponding to the base of the *tell* at a level of 278, dates to c.1670 BC.<sup>198</sup> Obviously now we recognize that the thickness of the accumulation is not only a function of time but also and above all of various happenings, so to translate the feet into years is an absurd and misleading operation. We need, however, to keep in mind that dating procedures less ingenuous and banal than these were not then available.199

The excavation was then continued by the American (who grew up in Lebanon) Frederick Jones Bliss,<sup>200</sup> who would a few years later present anew the visualization of the *tell* as a series of stratified cities and repeat the principles and methods of his master.<sup>201</sup> Finally in 1904 Petrie published a short theoretical handbook in which he reasserted both the principles of stratigraphic excavation and those of the 'pottery' survey (an aspect to which we return at § 2.9).<sup>202</sup> The study of pottery is the practical procedure for arriving quickly at chronological results both of the excavation (even in the absence of inscriptions or sculpture) and of the survey. Petrie was already writing in 1900 that

<sup>196</sup> Petrie 1891, folding plan before p. 33; Bliss 1894, pl. II.

<sup>197</sup> Petrie 1891; 1892.

<sup>198</sup> Petrie 1891, pp. 14-15.

**<sup>199</sup>** See the 'dilettante' Schliemann's negative considerations, dictated by good sense and experience, in Schmied (ed.) 1960.

<sup>200</sup> Silberman 1982, pp. 147-151; Moorey 1991, pp. 25-30,

**<sup>201</sup>** Bliss 1894, pp. 1–17 (ch. 1: *The Anatomy of a Tell*).

<sup>202</sup> Petrie 1904.

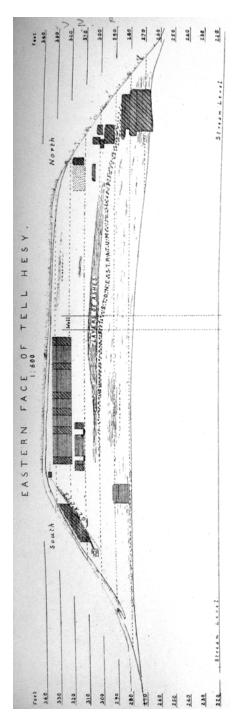


Fig. 10: Section of Tell el-Hesi (Petrie, 1891).

pottery was the key to the excavation, knowledge of it was the ABC of archaeological work, and a site could be dated in a moment on the basis of pottery on the surface, while a month would be needed to excavate it in order to find inscriptions and datable sculptures.<sup>203</sup> This also is stating the obvious but at the time pottery which was not endowed with something of an aesthetic value was habitually thrown away, without its form and the treatment of its surface being either recorded or studied.

Petrie's successors needed to adopt many of his methods (more in the Levant than in Mesopotamia, not to speak of Egypt), but held a double judgement on him: it was good to publish quickly, but would have been better to have published competently; the stratigraphic principle was good, but its approximate nature and ingenuous application was not good; the rapid campaigns in a multiplicity of sites was good, and his regional contextualization was good, but it remained necessary for someone to dedicate themselves to a lasting excavation (even for decades) in a reference site. And above all, as far as the theme of our story goes: the attention to pottery as an element for dating was good, but attention to the architecture and urbanistic configuration of the site as a whole was wanting. Therefore a necessary stage, but requiring integration with other advanced methodologies, in other directions. This is the work which will present itself to the next generation and to the administration of the mandates in Palestine, as in Iraq.

# 2 Acceptance and modification

## 2.1 The 'discovery of bricks' and the architectural revolution

On the 9th of May 1903 the American, Edgar James Banks, who was digging at the Iraqi tell of Bismaya (ancient Adab) in search of statues and tablets, went to visit the site of Fara (ancient Shuruppak), not far away, where the Germans, Robert Koldewey and Walter Andrae, had carried out excavations in the previous year. Banks, who used traditional methods, comprised of excavation by means of tunnels, had his interest aroused by the stories of his own workmen, who, having worked with the Germans, sung the praises of the new methods.1 Clearly the Arab workmen were never going to be theorists of modern archaeology but must have been struck by factors of organization rather than by those properly of methodology: the regularity of the trenches, the constant presence of the archaeologists, the quantity and accuracy of the measurements and of graphic recording, and finally the wish to impose 'western' organization of work instead of trusting to the customs and procedures of the workmen. It is probable that in singing the praises of the German method the workmen were only repeating what they had heard from the Germans themselves, who must have promoted their operational innovations among their workforce in order to overcome their natural resistance and initial scepticism.

Banks had taken himself to Fara with a baggage of archaeological method not far superior to that of his workmen, and with the attitude of the rough-and-ready excavator, compensated nevertheless by good luck, against the cultured archaeologist who, however, found nothing. He already knew that the Germans had excavated 'without great success'. And so he looked at the long and straight trenches, parallel and at regular intervals, which crossed the whole *tell* 'from desert to desert' as a work of excessive labour through a sort of mania for systematic ordering. The principal building was only partly excavated, since it 'had not yielded objects of value'. In a word, the Germans had excavated with 200 workmen for nine months before finding anything of importance (the tablets), and immediately afterwards had had to leave. Having in this way gratified his bad conscience, Banks returned to Bismaya convinced that nothing useful could come from the new methods. The lack of understanding was total, because the new methods were pursuing new aims, foreign to the men-

<sup>1</sup> Banks 1912, pp. 243–244, p. 292 for excavation by tunnel. The detailed publication of the excavation has now been announced, Wilson (ed.) 2012, in which the work of Banks seems to be re-evaluated.

tality of the old excavators. To stick to events: today Banks' book on Adab is consulted as an antiquarian curiosity, while the excavation of Fara has given its name to an entire phase of the Mesopotamian Early Dynastic period, with findings which can be located on Andrae's detailed ground plans.<sup>2</sup> To excuse Banks we need to recognize that excavation by means of a tunnel was still in practice in the 1930s (if only occasionally), well after the technical and methodological innovations which we are about to discuss.3

Quite apart from the relatively minor excavation of Fara (and also of other sites), the great achievements of Koldewey and Andrae were sensational. Robert Koldewey, who had been trained in classical excavations (in Greece and Italy) and had then acted as co-director of the excavation of Zincirlı (in south-east Anatolia),4 excavated Babylon from 1899 until 1917, when, in the middle of the World War, the British occupation of Iraq put an end to the work.<sup>5</sup> Walter Andrae excavated Assur from 1903 until 1914.6 The volumes of the final reports, which came out in the following decades,7 and the summaries directed to a wider public,8 indicate a turning point in Near-Eastern archaeology. Koldewey and Andrae were architects and in the German (as well as Austrian) environment of classical archaeology the principle had already become current in the seventies of the nineteenth century that an excavation was directed by an archaeologist but the visual recording (ground plans and surveys of the monu-

<sup>2</sup> Heinrich and Andrae 1931; Martin 1988.

<sup>3</sup> Frankfort, Jacobsen, and Preusser 1932, p. 19 with fig. 13; Frankfort and Lloyd 1940, figs. 3, 15, etc. and pp. 8-9, 16, 26, 57.

<sup>4</sup> He excavated with von Luschan 1888-92, cf. Andrae 1943. The excavation (directed by Humann in 1888 and by von Luschan with Koldewey in 1890, 1894, 1902) was begun as an eastern extension of classical archaeology. On Koldewey cf. Wartke (ed.) 2008 (studies by Marzahn and Matthes on his character, van Ess and Machule on his methods); Alaura 2010b.

<sup>5</sup> Biography written by Andrae 1952. On the excavation of Babylon: Renger (ed.) 1999; Oates 1979; Marzahn 2008b; Brusasco 2012, pp. 49-54 and passim.

<sup>6</sup> Andrae's own autobiography is illuminating on his life and personality (Andrae 1961); valuable information (on the part of his son Ernst) in the catalogue of his watercolours (Andrae and Boehmer 1992, pp. 108-154). Theoretical writings: Andrae 1929; 1949; 1957. On the decision to excavate Assur: Matthes 1997; on the excavation Marzahn and Salje (eds.) 2003; Renger (ed.) 2011; Leick 2001, pp. 186-207.

<sup>7</sup> The final reports of Babylon were published in the WVDOG series, initially as Koldewey's works (1911; 1918a, then the posthumous volumes of 1931 and 1932 edited by Wetzel), and of the collaborators Reuther 1926; Wetzel 1930; Wetzel and Weissbach 1938. The reports on Assur came out in the same series, firstly with Andrae's works (1909; 1913a; 1913b; 1921; 1922; 1935), then Preusser 1954; 1955; Haller and Andrae 1955 (Andrae died in 1956 and had been blind for some years); Miglus 1996. On the project of publication now in course cf. Renger 2003; 2011.

<sup>8</sup> Koldewey 1913 for Babylon; Andrae 1938a for Assur. On Babylon also Wiseman 1985; Brusasco 2012; on the success Renger 1999; id. (ed.) 1999.

ments, as stratigraphy was not yet practised in historical sites) was entrusted to architects. So the Austrian Alexander Conze, who excavated at Samothrace from 1873, and the Prussian Ernst Curtius, who excavated at Olympia from 1875, were archaeologists and ancient art historians, but made use of architects for the monumental reliefs. I also recall that Wilhelm Dörpfeld, also a professional archaeologist, and trained at the excavation of Olympia, then went to direct the excavation of Troy for the dilettante Schliemann in the years 1882–90.

Unlike Conze and Curtius, the architects Koldewey and Andrae directed the excavations themselves.<sup>9</sup> The fact is that at the time professional archaeologists for the Mesopotamian world did not exist, and the excavation - apart from the discovery of objects and cuneiform tablets - consisted primarily of picking out, cleaning and entering on a plan the great monumental structures in unfired brick. If you recall what was said at § 1.4, the technique of 'messy' excavation with pick and shovel was ill-adapted to identifying unfired brick walls. The walls were often removed in whole or in part, at least if they were not accentuated and protected by stone cladding, and as a result the nineteenth-century ground plans were scanty and incomplete, with the larger buildings bobbing in the void. The German architects decided that to position both the wall structures and the finds it was necessary to establish a grid of horizontal reference (with great squares of 100 x 100 m, subdivided into squares of  $20 \times 20$  m), and measure the vertical levels, in such a way as to have an exact three-dimensional position.<sup>10</sup> And they decided that to draw the walls (the surrounding, but also the internal structures) they needed to mark their outlines clearly and to do this needed to excavate with straight cuts (through horizontal planes and vertical walls) and to clean (scrape) the surfaces. As though by a spell, on the straight and cleaned surfaces there appeared the outlines of single bricks and the external edges of walls, which in this way could be excavated from the top down to the level of the floor, and then put onto the ground plan, drawing them brick by brick.11 It is an obvious technique, but was innovative then, and the workmen trained by Andrae at Assur were the first in a profession which was passed from father to son; they are the shergati (from the Arabic name for Assur: Qal'at Shergat) recruited throughout the twentieth century by all the archaeological missions in Iraq.

<sup>9</sup> For placing Koldewey and Andrae in the context of the German tradition Cordoba 2003 is excellent; on the German architectural school Schmid 1999.

<sup>10</sup> Andrae 1929. The squares were used for topographical reference, but not to set limits to the excavation. On Andrae's care over recording cf. Bär 2003; the criticisms of Leick 2001 are altogether out of place.

<sup>11</sup> Liverani 2000; Micale and Nadali 2008; earlier Lloyd 1947, pp. 197-203; then Seymour 2008a.

But the German revolution was not a simple technical expedient, nor only the outcome of the architectural professionalism of two masters. In a sort of spiritual testament, published posthumously,12 Andrae established the three ethical principles of archaeology, placing them within the context of a geistesgeschichtlich approach (i.e. of the history of the spirit) to the excavation: 1) respect for the ground (Ehrfurcht vor dem Erdboden), 2) very precise observation (genaueste Beobachtung), 3) unselfishness (Selbstlosigkeit). It is a clear and at times explicit attack on the excavations of the past – but still of the present – which were on the contrary characterized by the brutal violation of the ground, lack of accurate recording, and search for profit. It is a true manifesto, which was consciously meant to indicate a new stage in the spiritual history of humanity.

Besides, in the great cultural ferment of Kaiser Wilhelm II's Germany the town planner had also found his place: the roots were there in the process of industrialization and urbanization of the European continent in general, but with German unification in 1870 the theory of town planning was defined and its administrative practice laid down, comprising the town-planning law of 1875, the debate on the plan for regulation (1876), the 'Greater Berlin' competition (1910), the beginning of international conferences on town planning, the town-planning exhibitions (Dresden 1903; Vienna 1904; Boston 1909), the town-planning journals ('Der Städtebau' from 1904; 'Town Planning Review' from 1910). The excitement over town planning in the years 1870-1910 was a phenomenon spread throughout Europe, 13 but Germany's role was undoubtedly one of pre-eminence in the vanguard of the movement.<sup>14</sup>

Returning to Koldewey and Andrae, the extensive excavations of large cities (at Babylon the finds were also very remarkable) systematically brought to light not only the city walls and gates, and thereby the shape of the external boundary of the settlement, and the principal public buildings – palaces and temples, which were obviously the main target of the excavation, but also sizable districts of private houses and thus the structure of the town plan as a whole. In particular, at Babylon in the district called Merkes, that is, the 'city

<sup>12</sup> Andrae 1957.

<sup>13</sup> On pre-nineteenth-century town planning cf. Finotto 1992, and the reflections of Quaroni 1967, pp. 49-52. On later town planning Choay 1965, pp. 7-83, and 1970 (note 1: the French term 'urbaniste' was coined in 1867 but spread in 1910); Sica 1970, pp. 159-273. Giedion 1941, pp. 234-267 on the role of the world exhibitions in London (Crystal Palace 1851) and Paris (Exposition Universelle, 1855) at the same date as the discovery of the Assyrian capitals; then the following ones in Paris 1867, 1878, 1889, Chicago 1893 etc.

<sup>14</sup> Piccinato 1974 includes the documents (pp. 187–256 regulatory plans, 507–515 town planning laws, 543-548 conferences, 548-552 exhibitions, 455-474 the Berlin competition).

centre' (markaz) we can distinguish between three phases of work: the marking out of the blocks of buildings over the whole area, the selective excavation of some of the blocks, and the theoretical reconstruction of the entire city, which was essentially (but not exactly) orthogonal, in some ways 'Hippodamean' (with a certain amount of forcing, owed to the traditional preconceptions). This wish to reconstruct the entire urban settlement, and to transfer with accuracy the data from the excavation to the theoretical reconstruction indicates a great innovation in the study of the Near-Eastern cities. And also the accurate study of the private houses, in their technical aspects (the construction, but also the basic furnishing), remained unrivalled until recent decades.

The results of the new methods were received in different ways, and it needs to be said at once that while the technical procedure was very easy to adopt, the project of a complete urbanistic reconstruction remained unparalleled for a very long time. But even at the operative level reception was far from general. In the British-American sphere there was going to be some sort of influence: at Nineveh R. Campbell Thompson began in 1904 to pay attention to the architectural surveys, at Nippur Hermann V. Hilprecht (who was by origin and training German) sought to do the same (from 1900), 15 and finally the new method was introduced by Pinhas Delougaz and Conrad Preusser (the latter also German) in the mission of the Oriental Institute of Chicago (at Khorsabad and on the Diyala) in the 1930s. 16 In contrast the French, already at work at Susa from 1884-86 (Marcel-Auguste Dieulafoy), continued undismayed with Jacques de Morgan (1897–1908) and Roland de Mecquenem (1908–46)<sup>17</sup> – to make use of crude methods and, still more, to develop theories (as we already hinted at in § 1.7) based on 'industrial exploitation' of a mining type (all three directors were mining engineers) with great cuts that carried away everything, without mercy, to obtain the long terraces and wide flat spaces at a uniform level. 18 Only when a tomb or wall was found was a negative level taken (from the reference level of the height of the tell), leaving the slender evidence of the bore samples, cylindrical in form and bound swiftly to disintegrate. Similar backwardness in the techniques of excavation and in architectural and topographical survey was still found in the first decades of the twentieth century at Tello, where the plans roughly sketched buildings hanging in the

<sup>15</sup> The 'stratigraphy' of Ekur is also in Hilprecht 1903, p. 549.

<sup>16</sup> Frankfort, Jacobsen, and Preusser 1932, p. 5; cf. Lloyd 1963, pp. 29-47.

<sup>17</sup> On the three characters: Chevalier 1992; Carter 1992; on institutional and diplomatic aspects: Chevalier 2002, pp. 113-203.

<sup>18</sup> De Mexquenem 1922, pl. III. The theory of exploitation by mining is laid out in de Morgan 1905 (and repeated by Parrot 1953a, pp. 37–39), the preceding method in de Morgan 1900.

void, and the photographs of the excavation documented the working reality (a mob of workmen, messy excavations, confusion of levels, floors always passed through, walls left hanging in the air, etc.).<sup>19</sup>

Andrae's attack regarding 'respect for the ground' certainly derived from this procedure of violence. In a certain sense the mining excavation was also the result of an evolution, from excavation in tunnels (the 'native' method) to great earth movings (the 'industrial' method) through horizontal planes and vertical walls, connected to the use of the décauville and industrial organization of the work. But in contrast to German architectural modernity, intended to visualize the structure, French mining modernity, intent on carrying away, on exploiting the archaeological ground, considered a 'mine' of finds, certainly did not help in understanding, and even less in visualizing, the town planning of the sites excavated.

The 'discovery of the bricks' is the archaeological aspect of one of the most vast revolutions which the German academic world pursued conscientiously to the end of the nineteenth century.<sup>20</sup> The German universities, upon which Wilhelm von Humboldt had conferred a structure and a definite 'mission' a century earlier,<sup>21</sup> were at the front of scholarship, above all of Near-Eastern philology. In contrast the great archaeological and epigraphic discoveries of the Near East had been made by people who not only were not professionals or academics, but above all were not German, being British or French. Obviously the commercial and diplomatic 'pre-colonial' presence of Britain and France in the ports of the Levant, and their support of the 'sick man of Europe' – the Ottoman Empire in decline – played a part, as did the late political unification of Germany (even although Prussia had already effected both her university reform and her presence in the Near East). German academic frustration went back to the middle of the nineteenth century: just think how the astonishing 'demonstration' of the successful decipherment of cuneiform sees as protagonists three Englishmen (Edward Hinks, Henry Rawlinson and Henry Fox Talbot) and one Frenchman (Jules Oppert) but no Germans!<sup>22</sup> Furthermore, G. R. Grotefend's work on the proto-decipherment (so to speak) of Persian cuneiform (from 1802) had remained in practice marginalized. The German reaction was at first to show great contempt for the imprecise competence of the French and English, and then above all to produce works that were truly 'scientific' in the field of

<sup>19</sup> Cros 1910, Plan B, C, 'Coupe' at pages 70–71, photograph in the 'Vues' 1–4; id. 1911, fig. a, p. 126; id. 1914, Plan F, H, K, fig. 11 at p. 299, photograph at 'Vues' 7-14.

<sup>20</sup> Development of German orientalism: Hauser 2001.

<sup>21</sup> His theoretical work is from 1792, the foundation of the University of Berlin is from 1810.

<sup>22</sup> Pallis 1956, pp. 159–161. On decipherment of cuneiform see most recently Cathcart 2011.

philology. The rationalization of Assyrian grammar and vocabulary was the work of the German Assyrian school, in particular of Eberhard Schrader,<sup>23</sup> Friedrich Delitzsch<sup>24</sup> and Carl Bezold,<sup>25</sup> and the first syntheses on the geography and history of ancient Assyria, based on the texts more than on the descriptions of the archaeological remains, were the work of Schrader, <sup>26</sup> Fritz Hommel<sup>27</sup> and Hugo Winckler.<sup>28</sup> The British reactions to the German claims to the scientific approach to philology were largely of incomprehension and censure.29

But academic rivalry gained a political dimension following the unification of Germany in 1871.<sup>30</sup> The unified German state exerted itself on all fronts to close the gap between it and its rivals – beginning with a programme of colonial presence (1884: Tanganyika, Togo, Cameroon, and South-West Africa) which clearly sought to keep pace with what France and Britain had already started. In relations with the Ottoman Empire, while the British and French commercial and financial presence was by now well rooted, Germany exploited two strategic sectors: the railway projects (linking Istanbul, across all of Anatolia and Syria, to Baghdad on one side and Mecca on the other)<sup>31</sup> and military advisers (already exercised by Prussia from 1835, with individuals of the calibre of the future Marshal von Moltke).<sup>32</sup> The strategic character of these two sectors would be fully revealed when they emerged into the alliance of the Ottoman Empire with Germany at the start of the First World War. Even the travels of scholars were at least partly dragged into these relationships: for example Edward Sachau at the end of his long journey (Aden-Basra-Babylonia-Assyria-Aleppo) flung himself into considerations of the feasibility of a railway to Baghdad.<sup>33</sup> And afterwards it became clear how the sites of German excavations were mainly situated along the railway line.

<sup>23</sup> Schrader 1878; 1883.

<sup>24</sup> Delitzsch 1887–90 (dictionary); 1889 (grammar); 1900 (chrestomathy).

<sup>25</sup> Bezold 1889–99 (catalogue of the tablets in the British Museum); 1887 (vocabulary, then published by Goetze in 1926).

<sup>26</sup> Schrader 1878; 1883.

<sup>27</sup> Hommel 1885; 1904.

<sup>28</sup> Winckler 1892.

<sup>29</sup> Budge 1925, pp. 223-241, ignores the methodological question and the 'scientific method'.

**<sup>30</sup>** Marchand 1984.

<sup>31</sup> Earle 1923; Pick 1975; Schöllgen 1984, pp. 118–131 and 205–226; further information in Alaura 2006, n. 23. We will remember that the Suez Canal was opened in 1869, and Egypt came under British control in 1882.

**<sup>32</sup>** Trumpener 1975; Schöllgen 1984, pp. 32–37.

<sup>33</sup> Sachau 1900.

At a purely cultural level, the visit of Kaiser Wilhelm II to Istanbul (October 1898) and then Jerusalem<sup>34</sup> had a double purpose. The first had a religious nature, linked to the question of 'holy places'. France had a role as protector of eastern Christianity and guardian of the holy places, which dated back a long way and was recognized by the Sublime Porte. Lutheran Germany intended to balance the Catholic presence of France with a Protestant presence. The second aim was to obtain a place, not just equal but absolutely pre-eminent, in the archaeological exploration of the Near-Eastern world (Mesopotamian as well as Palestinian).<sup>35</sup> The initiative had been well prepared; in 1894 a commission had been set up to study the means of entry into the archaeological competition and the Deutsche Orient-Gesellschaft had been founded<sup>36</sup> a few months before the Kaiser's trip, while the opening of the Vorderasiatische Abteilung of the Berlin Museum would take place in 1899.<sup>37</sup> The prestigious concessions for excavation at Babylon and Assur<sup>38</sup> were a result of the Kaiser's visit, and gave the further possibility of demonstrating the scientific character of German scholars compared to the British and French 'on the ground' in archaeology, as it had already been shown by 'on the desk' studies in philology. But the bearing of the two great German excavations on the possibility of visualizing the great cities of the Ancient Near East in an acceptable manner deserves a separate discussion.

#### 2.2 From Liberty to Bauhaus: the city takes form

Walter Andrae was an individual of great cultural and professional depth; let us spell it out – he was a genius.<sup>39</sup> When in 1898–99 he joined Koldewey's first Babylonian mission at the age of twenty-four, he knew nothing of Near-Eastern archaeology, and the older expert described him as 'a foolish boy who can't

**<sup>34</sup>** Shöllgen 1981; 1984, pp. 107–114; Silberman 1982, pp. 161–170; Matthes 1998.

<sup>35</sup> Matthes 1999; Freischlader 2000 (excellent and exhaustive); Crüsemann 2001.

**<sup>36</sup>** Von Schuler 1968; Renger 1979; Wilhelm (ed.) 1998, pp. 5–13; Matthes 1998 for the history of the foundation. The society was to publish in its Mitteilungen, from 1899 to 1914, the preliminary reports on the excavations at Babylon, Assur, Fara, Boğazköi, and Warka (as well as those in Egypt and in Palestine).

<sup>37</sup> Crüsemann 2001 reconstructs the progressive arrangement of Mesopotamian antiquities in the Berlin Museum. cf. also Alaura 2010a (with exhaustive bibliography).

<sup>38</sup> See Wilhelm's chapters on Babylon and Maul's on Assur in Wilhelm (ed.) 1998. For Koldewey and Andrae in the context of Wilhelmine Germany cf. Crüsemann 2003; Micale 2005, 147-151; 2008b; Marchand 1996, pp. 188-220 (openly hostile).

<sup>39</sup> Bär 2003.

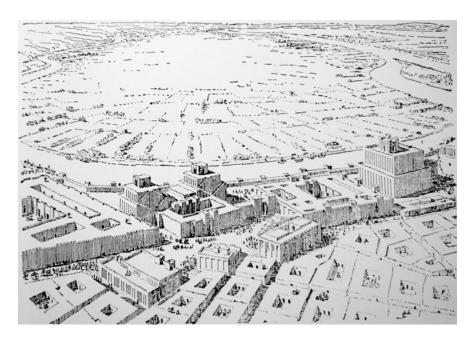


Fig. 11: Walter Andrae, general view of Assur.

tell the difference between a post-hole and a fox's earth';<sup>40</sup> but only two years later Koldewey considered him sufficiently mature to entrust him with the excavation of Fara and then the prestigious one of Assur. An archaeological genius, he was also an impassioned and able draughtsman and painter. Whereas his watercolours of the Near-Eastern landscape are simply pleasing, his reconstructions of the ancient cities of Assyria are completely innovative in the way they present the discoveries made to the public, and above all assume an attempt, then without precedent, of entering into the landscape and life of the city in that remote civilization [fig. 11; see also fig. 13]. His stage-set for the historical pantomime of *Sardanapalus* (performed in Berlin in 1908) constitutes the first and only case of an 'Assyrian' stage set entrusted to an archaeologist: and this is due to his personality and multifarious abilities, as archaeologist and artist.<sup>41</sup>

**<sup>40</sup>** The judgement (a letter to Puchstein of January 1899) is in Koldewey 1925, pp. 134–135; cf. Andrae and Boehmer 1989, p. 6; Córdoba 2003, p. 48; Alaura 2010c, p. 29 n.73. On relations between Koldewey and Andrae cf. Matthes 2011.

**<sup>41</sup>** Andrae and Boehmer 1992, Tab. 88 (cat. n.132) for the colour reproduction, pp. 125–127 for the story of the event.

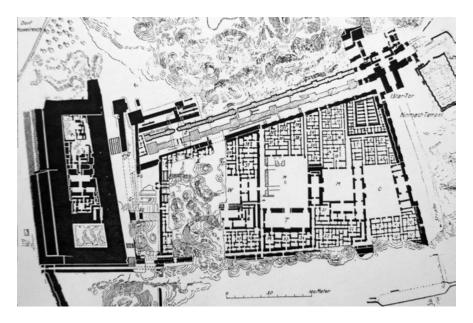


Fig. 12: Robert Koldewey, Babylon: ground plan and reconstruction of the temple of Nebuchadnezzar II.

Obviously the very look of the urban reconstructions drawn by Andrae and, of course, Koldewey before him [fig. 12], fits in with the trends of the time, which emerge from building projects (and their realization) that can be projected over the whole urban fabric and how it is visualized.<sup>42</sup> These trends can be placed in the context of a wider journey which sets off from the decorative arts of the *belle époque* (of the *Art Nouveau*, *Liberty* and *Jugendstil* kind) obtained from an almost obsessive ornamentation of surfaces and the use of decorative elements both classical and eastern (Egyptian, Chinese and Turkish motifs of a late eighteenth-century stamp), then to arrive at the aesthetics of mass, which prefers simple, homogenous, undecorated surfaces, favouring function as an end in itself over decoration. It is enough here to note that the process began in the two decades that bridged the end of the nineteenth century (especially with Otto Wagner and the *Nutzstil*, and with Adolf Loos)<sup>43</sup> then to emerge in the full light of the twentieth century in the German Bauhaus (and also in the work of Frank Lloyd Wright in the United States, of Le Corbusier in

**<sup>42</sup>** On the visual reconstructions of Koldewey and Andrae see the excellent Córdoba 2003 (with exhaustive bibliography).

<sup>43</sup> Saggio 2010, p. 32 and passim.

France, and of others).<sup>44</sup> It was therefore a journey of a certain length, which, however, was given a marked acceleration with the trauma of the Great War.

Coming then to the pictorial visualization of the cities of the Ancient Near East, this process is immediately clear in a simple comparison of the reconstructions of Fergusson or Place with those of the early twentieth century, particularly Andrae's. We pass from Egyptian-Turkish decorative art, which fills every square inch of the walls, and from obelisks, pinnacles and banners waving in the wind, to a severe and functional representation of the buildings, which are set, moreover, within a comprehensive urban fabric, which had previously been absent. Actually, from the moment the Assyrian capitals were discovered the decorative style could easily have been copied by painters and stage designers, using to a great measure the ornamentation of the sculptured slabs; instead, the architectural structures remained submerged under miscomprehension and anachronisms:45 a result of the non-visibility of cities excavated by Botta's and Layard's methods. The innovative contribution of Andrae, and of the German school as a whole, is therefore twofold: their architectural and urbanistic competence produces the first setting of buildings in the city fabric; and the employment of the 'severe' style fits well into favouring the larger picture (also part of an architectural matrix) rather than decoration of the surfaces.

It does not seem to me (from the little that I am able to assess) that Andrae belonged to any particular school of drawing, and anyway the reconstructive drawings of Assur are spread over an arc of various decades. But looking at the German context, we can say that his personal journey was focused in the same direction as the Bauhaus movement. Argan's definitions – 'the liberation of architecture from a flood of ornament, the accent placed on its structural functions, and the adoption of concise and economical solutions', 'new kinds of wallpaper, absolutely free of figurative elements, whose value consists of the quality of the surface, of the "weave" or "grain" of the material' - could well be applied to Andrae's reconstructions of Assyria. 46 In other words, if in artistic theory of the Liberty type the surface (the wall of the building) was the prop of the decoration, like a large page to fill (and to fill completely, horror vacui!), in this Bauhaus type the wall has a value in itself, it is the third dimension that transforms the plan into a three-dimensional model, and so stands out better if empty, undecorated. As regards the famous (and continuously re-

<sup>44</sup> Biraghi 2008, I, pp. 62-88 (late-nineteenth-century movements in Germany, France, the United States), 99-110 (Otto Wagner), 119-130 (Peter Behrens), 163-174 (Adolf Loos). On the formal principles of the Bauhaus cf. Argan 1957; Saggio 2010, p. 44.

**<sup>45</sup>** Exemplification in McCall 1998, pp. 202–206.

<sup>46</sup> Argan 1957, pp. 74 and 67.

produced) pictorial reconstruction of 'Nineveh' [fig. 7] (but actually of Nimrud) drawn by Thomas Mann Baynes (1849; often erroneously attributed to Fergusson),47 Koldewey and Andrae take the credit for removing certain anachronisms (cupolas, minarets, colonnades on several levels) and of conferring upon the image of the Assyrian city a greater touch of realism.

In this stylistic process other, properly archaeological, factors also exerted an influence. The first generations (Botta and Layard, and Place and Rassam) had excavated to find decorated surfaces (the sculptured slabs), and the methods of excavation 'in the dark' led them to neglect (if not to disdain) the greater mass. The German architectural school excavated buildings, and did not come across - whether at Babylon or Assur - completely ornamented walls; at most they found some isolated decorative elements which stood out against the solid blank walls or uniform brickwork (think of the dragons and winged bulls in Babylon's Processional Way). And here our discussion must pass from the style of drawing to the experience on the ground. Understanding of ancient building techniques in unfired brick was obviously helped by knowledge of modern building (of the time), on both the domestic and village level (Koldewey and Andrae built and lived in 'mission houses' of the local style, while preceding generations of excavators had lived in cities, from where they came and went), and on a more exacting level (in urban centres such as Aleppo, Mosul, Baghdad, and others). It seems significant that the architect-archaeologist Oskar Reuther, before publishing his work on the inhabited quarter of Babylon-Merkes, had made a careful study of the architecture of private houses in modern Baghdad.<sup>48</sup> In this way it became possible and indeed natural to delineate houses correctly with internal courtyards, undecorated outer and internal walls, no windows, flat roofs, blind alleys, and so on. The ancient cities also took on the characteristic form of Near-Eastern houses, turned 'inwards' towards the central courtyard, unlike Mediterranean houses, turned 'outwards', towards the street and piazza.

Besides the technical publications of the excavation results at Assur and Babylon, <sup>49</sup> the theoretical reconstructions of great architectural complexes (temples and palaces) or of entire urban landscapes which are found in the popular volumes published by both Koldewey and Andrae are still more significant.<sup>50</sup> The imaginary scenes of Assur and Babylon are not so very unlike the actual

**<sup>47</sup>** Published in Layard 1849–53, II, pl. 1; cf. Fagan 2007, pp. 152–155.

<sup>48</sup> Reuther 1910.

<sup>49</sup> Cf. above, note 7; the report on the ziggurat (Schmid 1995; cf. George 2005-06) is excellent but 80 years late.

<sup>50</sup> Koldewey 1913; Andrae 1938a.

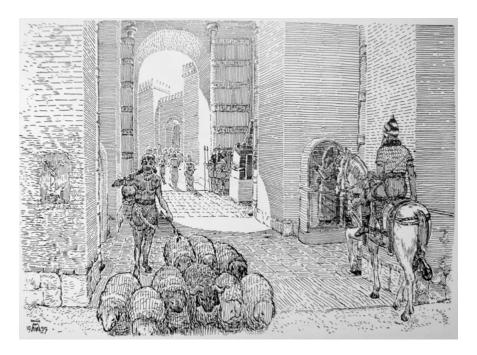


Fig. 13: Walter Andrae, Assur, detail of daily life.

scenes of the modern cities. Even the hints at the 'life' (of both palace and city) show similar tendencies towards the realities of daily life and purposeful activity. The first reconstructions of Assyrian palaces (nineteenth-century, of the Fergusson kind) populated them with characters in ceremonial dress, intent on doing absolutely nothing, apart from displaying themselves, borrowing this and that from the processions of officials in the reliefs of Sargon II at Khorsabad. Andrae's reconstructions, on the other hand, bring in ordinary people and flocks of sheep, guards and fishermen, in commonplace contexts which give a sense of real life and daily happenings among the lower classes as well [fig. 13].<sup>51</sup>

The German excavations at Babylon and Assur also suffered from the trauma of the Great War and the first years after the war (with reparations imposed on Germany and the terrible inflation of the first years of the 1920s): there were interruptions to the excavations in the Near East, and difficulties in working due to lack of means, but a tenacious will to obtain concrete re-

**<sup>51</sup>** The urban addition and human presence is also noted by Micale 2007b; 2008b, who emphasizes the Germans' debt to Place, but recognizes the detachment of the latter, who does not introduce human beings into his reconstructions.

sults – at least in exhibiting the materials and in preparing the publications, two tasks which Andrae carried forward with exceptional energy and clarity of purpose. He also founded (in 1926) a Koldewey-Gesellschaft, as a working community of architect-archaeologists, organizing annual conferences.<sup>52</sup>

In practice, while the watercolours and plans made on the spot date to the pre-war period, all the drawn reconstructions of urban settlements are postwar. For example, the reconstructed view of Sam'al<sup>53</sup> is from 1923, and so indeed are those of Babylon,<sup>54</sup> while those of Assur<sup>55</sup> appear at intervals between 1908 and 1937 (by then on the eve of the Second World War). There is therefore the whole course of forty years between Koldewey's and Andrae's first visual reconstructions and the latter's final drawings, even if the formative period is clearly that of the work in the field. This temporal spread also explains a number of differences between the work of the two leading figures. Koldewey's Babylon is all intact and regular (geometrical), while in the ancient reality and in the results of the excavation there were building lots (ruins), different heights, empty spaces, heaps of rubbish, vegetable gardens, little fields, and much irregularity.<sup>56</sup> Real life, we know, is less regular and also less noble than on paper, and the life visualized by Koldewey is a model, or more exactly a projection. For the most part, in Koldewey the weight of tradition is noticeable: his Babylon derives from the descriptions of Herodotus and Ctesias at least insofar as it does not come from the results of the excavation, and his aerial view of Babylon<sup>57</sup> resembles more than it should that of Athanasius Kircher. The other famous reconstruction (and in continuous reproduction), which is that of Unger,<sup>58</sup> is only slightly more realistic [fig. 14].

Andrae was much less affected by tradition and classical descriptions. Not only did he belong to a later generation, but also Assur had none of those ancient descriptions which had inevitably influenced the image of Babylon.<sup>59</sup> But Andrae was more creative, more original. We have noted among other

<sup>52</sup> See the site www.koldewey-Gesellschaft.de. On exhibiting Wartke 2003; Marzahn 2008a.

<sup>53</sup> Andrae and Boehmer 1992, Abb. 20; German excavations (von Luschan, 1890-94) in which Koldewey took part.

<sup>54</sup> Ibid. Abb. 210-211.

**<sup>55</sup>** *Ibid*. Abb. 128–131.

**<sup>56</sup>** Cf. Baker 2003, pp. 68–69; 2007, pp. 67–69; Margueron 2000, p. 474 on the irregularities in relation to the orthogonal grid.

<sup>57</sup> Koldewey 1913, Abb. 119.

<sup>58</sup> Unger 1931, Abb, 7 and frontispiece.

<sup>59</sup> Mentions in the Old Testament: Frahm 2011; in the classics Rollinger 2011; these always deal with Assyria, not with the city of Assur (at the height of imperial power the capital was Nineveh). On Assur's scant presence in European culture Frahm 2003.

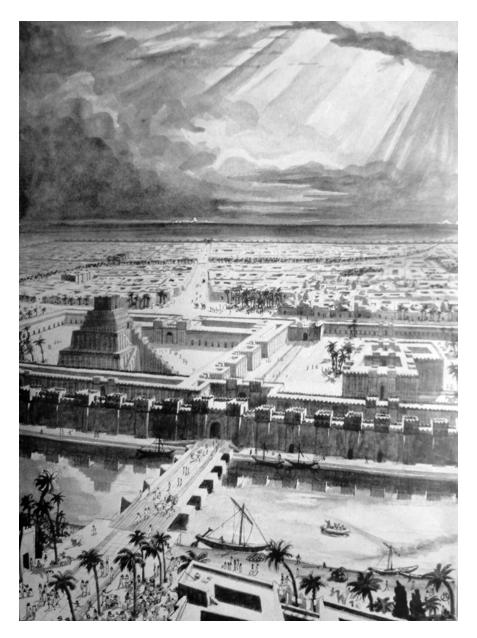


Fig. 14: Eckard Unger, reconstruction of Neo Babylonian Babylon.

points how Koldewey assumed a 'bird's-eye view' for his scene of Babylon, in the Baroque fashion, whereas Andrae preferred a view from the ground, both to adopt the human point of view, and to accentuate the monumentality of the elevations.<sup>60</sup> Some exaggerations remain even in Andrae, however: for example the obsessive presence of the triple-stepped battlements (attested more from iconography than from archaeology),<sup>61</sup> which began a custom that has continued until today; or the presence of towers flanking the city gates and doors of temples; or indeed the systematic emphasis on the vertical, with the heights calculated on the width of the walls, but with the evident aim (or rather effect) of giving an impression of power. In particular it has been noted that the Tabira gate of Assur is reconstructed with towers projecting beyond the façade, which does not correspond to the ground plan; and also the arrowslits, the arched gateway, the battlements, the ditch, do not correspond to the remains as on the ground plan. 62 But this is a recurrent emphasis in reconstructions of ancient architecture, which characterize the buildings as more imposing and complete than they probably were. In our case, the motives (though not made explicit) for the emphasis on height were of two different orders: the technical motive is the calculation of height based on the width of the walls without taking account of the margin of safety, presumably considerable in antiquity; the ideological motive is that height increases the effect of power, of majesty. The pity if anything is that the reconstructions of Koldewey and Andrae were then accepted uncritically as 'real',<sup>63</sup> and even used just as they were for those restorations ex novo which are so pleasing to 'Asian' taste (and to western tourists): but we shall return to this in due course (§ 6.1).

### 2.3 The ancient descriptions

Wartime operations, with Iraq being taken under British control in 1914–15, which interrupted the German missions' work on the ground, also meant a pause in deskwork, which was resumed after the immediate post-war period,<sup>64</sup> that is, in the years 1920–30, notwithstanding the economic difficulties (the huge inflation of Weimar Germany). Alongside the work of the display and study of the archaeological materials (to which Andrae dedicated himself), the

**<sup>60</sup>** Micale 2007a, p. 126.

**<sup>61</sup>** Micale 2011, pp. 51–53 and 69–70.

**<sup>62</sup>** Micale 2005, pp. 124–125 and 136–139 (with fig. 4); 2007b, pp. 2–3.

<sup>63</sup> Micale 2008b.

<sup>64</sup> Very pessimistic post-war budget Meyer 1923.

study of epigraphic materials also assumed great importance. The analysis of the cuneiform tablets, in search of useful data for reconstructing the historical topography of Babylon and Assur, had already been started during the excavations, both by Assyriologists (Delitzsch and Weissbach on the topography of Babylon)<sup>65</sup> and by the excavators themselves (Koldewey on the Tower of Babel,66 Andrae on the topography of Assur67) but they were then carried out above all by the Assyriologist Eckard Unger. We need to admit that the material available, while of great interest because recovered precisely from recent excavations, was not such as to enable real descriptions; from the royal inscriptions, in celebratory contexts, lists were extracted of the names of the city gates, of temples, and little more, but there were also lists of erudite or scholarly character, often with names and sometimes measures of various urbanistic elements, and the possibility of making this textual information agree with the results of the excavation was truly enticing.

Unger devoted himself at first to the topographical texts of Assur, translating a text from Assur itself (KAV 42-44, with more duplicates held by the British Museum) and then proceeding to reconstruct the topography and image of the city, comparing the texts with the archaeological evidence to draw from them finally a schematic ground-plan of the city.<sup>68</sup> He then gave himself over to the topography of Babylon, on which there was better documentation. His book of 1931 was preceded by a long article which already gave the essentials of the text and of the possible reconstruction.<sup>69</sup> The properly topographical texts were published in the book: the so-called Stadtbeschreibung von Babylon and various other texts which give the measurements of the buildings (the ziggurat Esagila of Babylon and Ezida of Borsippa, the surrounding walls and the ditches) and which list the gates, the quarters, the suburbs, the Euphrates and canals, the streets and bridges, the altars and chapels, the sanctuaries, the statues of the gods, the palace, and the museum. To follow, fragments of ground plans (schematically incised on tablets) were also published, as well as passages of royal inscriptions containing useful information, administrative, epistolary and legal texts, and then also ritual texts, calendars of the festivals, and whatever else might be directly or indirectly useful for the reconstruction. Some ten years later the Sumerologist Adam Falkenstein attempted a similar edition of the topographical documentation pertaining to Uruk, stopping how-

<sup>65</sup> Delitzsch 1903; Weissbach 1904.

**<sup>66</sup>** Koldewey 1918b.

<sup>67</sup> Andrae 1904; 1905a, b; 1906.

<sup>68</sup> Unger 1929.

<sup>69</sup> Unger 1930; 1931.

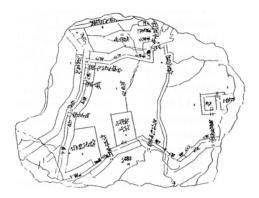


Fig. 15: Ancient ground plan of Nippur.

ever at the first volume,<sup>70</sup> relating to the late (Seleucid) period, for which he had a certain amount of textual material at his disposal, and avoiding treatment of the preceding periods; I do not know if it was planned, but in any case it was never carried out.

This 'topographical' material was to be revisited from time to time, even for other purposes (for the descriptions of rituals, for the royal celebratory ideology, and such like), and a more precise interest was also to emerge in the collection and study of the plans of individual buildings (public and private) incised on the tablets. While the plan of Nippur of the Cassite period [fig. 15] has become famous (and has been reproduced only too often) as the only plan of any size and truly urbanistic interest,<sup>71</sup> there is also a great mass of plans of buildings which stretch in time from the Akkadian and Neo-Sumerian age to the Neo-Babylonian and Persian.<sup>72</sup> These plans can moreover be integrated with virtual ground plans drawn from the texts (legal or administrative), giving the measurements and boundaries of urban (and agricultural) property and, with the further help of some mathematical problems,<sup>73</sup> can contribute to provide useful comparisons with archaeological data and so in the last analysis to reconstruct and visualize the ancient Mesopotamian cities and the agrarian landscape that surrounded them.<sup>74</sup>

<sup>70</sup> Falkenstein 1941.

**<sup>71</sup>** Millard 1987 and Stone 1991 (with preceding bibliography); other topographical outlines in Albright 1931 (Nuzi) and André-Salvini 1992 (Tello).

**<sup>72</sup>** Plans of buildings in Heinrich and Seidl 1967; of fields in Liverani 1988–89 (Akkad and Ur III) and Nemet-Nejat 1982 (Neo-Babylonian). Bagg 2011 is now excellent.

**<sup>73</sup>** Nemet-Nejat 1993, pp. 72–78.

**<sup>74</sup>** Liverani 1988–89 (Ur III); 1996a (general picture); Zaccagnini 1979 (Nuzi); Mori 2003 (Emar).

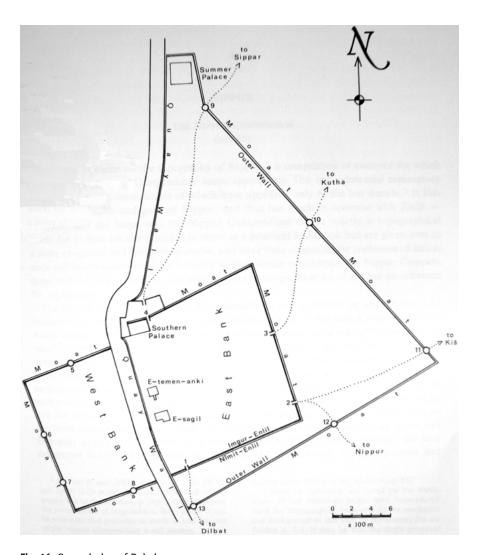


Fig. 16: Ground plan of Babylon.

The properly 'topographical' lists were then to be revised more recently by Andrew George,<sup>75</sup> with much material added compared to that known to Arthur Ungnad, in an edition which can by now be considered definitive [fig. 16]. The old interest in discerning the topography of the cities, completely understand-

**<sup>75</sup>** George 1992; then 1997 and 2008a, b; also id. 1993 (lists of temples); Marzahn 1994; Boiy 2004, pp. 55–98.

able at the time of the first archaeological explorations of Babylon and Assur, has by now been succeeded by a more critical interest: on one side to clarify that the types of text in question are not 'topographical' but are rather the cities' celebratory texts; on the other side to ascertain whether these texts could have been the source of the classical descriptions. Perhaps the informants of Herodotus and Ctesias, who will presumably have been priests and scribes, in any case members of the cultured intellectual class of Babylonia in the Persian period, had access to texts of this type, from which to draw measurements and names of temples, city walls, gates and streets. The classical image, though distorted by the ideal of greatness and a wish to make the plan regular, could well have had a foundation of information not only visual (which would have not have explained measurements and technical details well) but also written.

I am not in any way undervaluing the information drawn from the portrayals of the cities in the Assyrian reliefs, which were obviously used in this sense from the beginning of their discovery,<sup>76</sup> even if with little critical scrutiny as regards the clear presence of factors of standardization, idealization, lack of proportion and simplification which marks them. I want here only to note the convergence between the iconographic portrayals of the enemy cities (portrayed while besieged by the Assyrian army) and their brief textual descriptions: both concentrate only on the walls and towers, and even seem to reduce the descriptions of the cities to their defences: a clear outcome of the 'lens of the besieger' which is at the root of Assyrian experience.

Finally, the little three-dimensional terracotta models of houses, while clearly unable to compete with the little wooden models conserved in the Egyptian tombs, do, however, provide valuable images, for example of the presence of a second floor. But interest has only recently been concentrated on these clay models.77

## 2.4 Imagining Jerusalem

The western world was most widely aware of archaeological interest in the 'Holy Land', because of the obvious Biblical and Christian links – just as the excavations in Mesopotamia or Egypt were more interesting when they could be linked to the events of the Old and New Testaments. When archaeological activities in the Near East began to take off in the mid-nineteenth century, many countries established foundations dedicated to the promotion of the his-

<sup>76</sup> Excellent studies by Borchardt and Bleibtreu 2011 and Micale 2011; earlier Reade 1998.

<sup>77</sup> Bretschneider 1991; Muller 2000; 2002.

torical and archaeological knowledge of Palestine (this word was then used correctly as a geographical term, without the implications which later developed and which make it 'politically correct' today to speak of the 'Southern Levant'), and generally with a seat of operations in Jerusalem. The first institution was the British Palestine Exploration Fund, founded in 1865, followed by the German Deutsche Palästina-Verein (1878), the École Biblique of the French Dominicans (1890), and finally by the American Schools of Oriental Research (1900), all with establishments in Jerusalem. In Rome, the Pontifical Biblical Institute was founded (in 1909) with the aim of promoting archaeological exploration and it also had a seat in Jerusalem.

It will be useful here to contrast the two contrasting poles of Near-Eastern urban archaeology at their beginnings between the mid-nineteenth and early twentieth centuries: on one side Babylon (and Nineveh), on the other Jerusalem. Babylon and Nineveh were the accursed cities, the capitals of the empire of evil, while Jerusalem was the holy city, capital of the chosen people. But archaeologically the opposite was true: Babylon and Assyria showed themselves relatively 'easy' to excavate, and immediately gave excellent results, not only architectural and urbanistic, but also epigraphic. Jerusalem [fig. 17] on the other hand could not be excavated, not only because it was inhabited, but above all because it was full of sacred places (Christian, Judaic and Islamic), which certainly could not be altered, far less removed.

As for the literary sources, available long before the movement to archaeological investigations and able to give an idea of how those cities had been built, even with them there was a great difference. For 'picturing Babel' the descriptions of the ancient authors could be tranquilly subjected to criticism; but for 'picturing Jerusalem' the descriptions that the Biblical Book of Kings (I Kings, 6-7) gives of the First Temple and Palace of Solomon (very detailed descriptions with plenty of precise measurements) could not be placed in doubt, dealing as they were with texts of divine inspiration. It was possibly only to place the temple and palace mentally on the site of the 'Old City' (that inside the Herodian walls) taking up practically that whole area. For the period in question, faith in the literal reliability of the biblical text was dominant, both among the general public and among many biblical scholars, who, being generally Protestant clergymen, Catholic priests or Jewish rabbis, had an attitude strongly conditioned by their faith. It is true that at least from the middle of the nineteenth century textual analysis, above all German (with Julius Wellhausen and others), had attacked the character of the Bible as a 'revelationary' text and therefore not susceptible to criticism; the public of believers, however, remained impervious to this critical and lay approach.<sup>78</sup>

**<sup>78</sup>** The question is recapitulated in Kraus 1956.

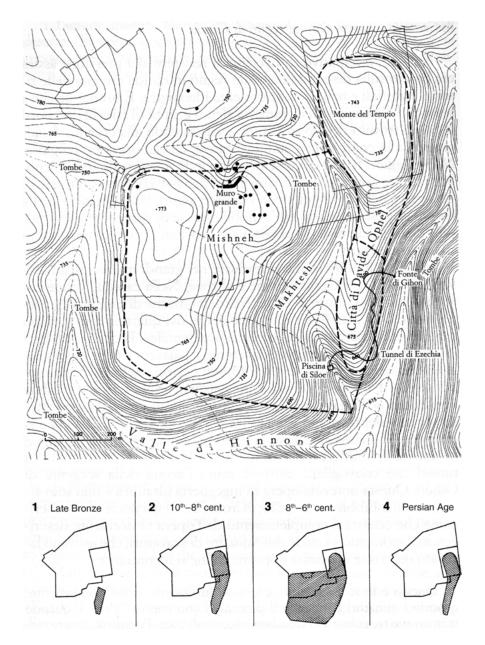


Fig. 17: Ground plan of Jerusalem.

Given Jerusalem's archaeological impracticability, excavations were begun in other sites in Palestine towards the end of the nineteenth century, with preference for those which could be linked to the biblical text. But excavation in Palestine turned out to be much more difficult than in Mesopotamia.<sup>79</sup> The visible remains of the ancient cities did not appear comparable to the monumentality of the Egyptian temples or Assyrian palaces and were covered by modest tell, whose remains appeared 'without style, without date' (to quote Ernest Renan's expression, to which we shall return at § 2.10). When the excavations began (in the ways established by Petrie at Tell el-Hesi: cf. § 1.8) they found innumerable superimposed layers of levels modest in size and quality, which did not make a wide visualization of the city easy - even if then, in retrospect, it stimulated the adoption of more accurate methods than in Egypt or Mesopotamia. For the most part these excavations, difficult as they were for the methods of the time, proved themselves very sparing of epigraphical finds, causing great disillusion to those who had hoped for or dreamt of archives of the importance of the Assyro-Babylonian ones. The dearth of texts of a Palestinian provenance meant that the comparison of the biblical text with archaeological discoveries moved spatially - so to speak - to a comparison with discoveries outside Palestine. The public and religiously orthodox scholars had welcomed with enthusiasm the results of the first excavations in Assyria and Babylon, thinking that the new discoveries, above all the cuneiform tablets, showed that 'the Bible was right' (as a successful popular book of the midnineteenth century was entitled) contrary to the nihilist hypercriticism of German philologists.<sup>80</sup> It was only to be with the work of William F Albright,<sup>81</sup> well into the twentieth century, that excavations in Palestine were also used in a biblical role, and this was done in two ways: defining the chronology of pottery as a means for showing that the period of life of a given city, as obtainable from the Bible, actually coincided with the archaeological results; and then giving preference to those sites and buildings which had definite links with the biblical text: from the walls of Jericho to the stables of Solomon, just to quote the two most sensational cases. Both these cases, let it be said in parenthesis, then turned out to be misleading; the excavations of Jericho in reality showed that at the time of the Israelite conquest of Palestine the city had been uninhabited for centuries (we shall return to this at § 4.6); and as for the 'sta-

<sup>79</sup> Moorey 1991, pp. 25-53 (excavations 1890-1925), 14-23 (earlier); Ben-Arieh 1979; Silberman

<sup>80</sup> The popularity of Sayce's works 1893; 1907 anticipated that of Keller 1955.

<sup>81</sup> On Albright and biblical archaeology 1925-48, Running and Freedman 1975; Moorey 1991, pp. 54-86; Long 1997; Fernman 2000.

bles of Solomon' found at Megiddo, it has by now been ascertained that they are indeed stables (in spite of the doubts expressed on the subject), but are attributed to the Omride dynasty and not to Solomon.82

This is not the place to describe individually all the Palestinian excavations from the end of the nineteenth century to the outbreak of the First World War, but I must at least mention the importance of the Austrian-German excavations at Tel Taannac (Sellin), the German at Megiddo (Schumacher) and Jericho (Sellin), the British (Palestine Exploration Fund) at Tell el-Hesi (Bliss) and Gezer (Macalister), and the American ones at Samaria (Reisner); we should also record the interest the Americans took in asserting the stratigraphic principle that for dating a building it is not enough to define the architectural phases (as the Germans did in Palestine, no more nor less than in Mesopotamia), but there is a need to distinguish and date the layers of fill.<sup>83</sup> But the refining and spread of the stratigraphic method was not to happen before the period of mandated rule, and even then Fisher was to excavate (Megiddo, 1925) at arbitrary cuts of 30 cm,84 and the elderly Petrie continued (Tell el'Ajjul, 1930-34) to outline 'stratigraphies' no better than the ones introduced by him more than forty years earlier in his fleeting incursion at Tell el-Hesi. Whether good or bad, the period between the two world wars was to be rich in excavations, which was to make Palestine perhaps the most intensely excavated area in the world, but certainly not the best excavated. The judgement of Mortimer Wheeler (protagonist of the introduction of the stratigraphic method but by now towards the end of the period of the mandates) is often quoted and was cited earlier, according to which Palestine was the region in which more 'sins' (archaeological) had been committed than in any other part of the world of similar size.85 At the same time we need, however, to recognize that we are also talking of the region in which developed – in a Near-Eastern context – methods more rigorous than in the large and 'easy' metropoleis of Egypt and Mesopotamia. But we shall speak of the methodological progress of the period of the colonial mandates further ahead (§ 2.11).

While dreams of Jerusalem86 and a preference for biblical 'references' continued, yet the city of ancient Israel began to take form.87 The excavations con-

<sup>82</sup> Holladay 1986; Finkelstein et al. (eds.) 2006; now Liverani 2012b.

<sup>83</sup> Reisner 1924 (excavations of 1908–10), notes by Moorey 1991, pp. 35–36.

<sup>84</sup> Fisher 1929; Guy 1931.

**<sup>85</sup>** Wheeler 1954, p. 16.

<sup>86</sup> Material knowledge was making no progress, but imagination overflowed, given the enormous historical and religious value of the temple of Jerusalem; cf. Matthiae 2009.

<sup>87</sup> Description and bibliography in Herzog 1997.

centrated on the Iron Age cities (precisely the lifetime of the Kingdom of Israel) disregarding for now the Bronze Age cities ('Canaanite'), and so obscuring the historical run as a whole. The type that emerged was a citadel (more than a city), of modest size, placed on a hill, perched on the summit of a *tell* already a thousand years old, well equipped with encircling walls and town gates with two or three defensive outworks, with an access tunnel to a well for the water supply, with public buildings that were more like palaces than temples, and with little or no inhabited quarters. This urbanistic type had few similarities to the large Mesopotamian urban centres, and if anything was closer to the Aegean and Mediterranean world. But the 'biblical' archaeologists, all intent on a wish to link their findings with passages from the Old Testament, did not care to go back to the old idea of the Levantine city-state as a model for the Greek one. The 'case of Israel' needed to be and remain unique, elect, not entering into history, and so it remained until the new models of the 1970s.

#### 2.5 Above the flood plain: Anatolia and Iran

The 'highlands' of Anatolia, Armenia and Iran attracted less interest from nineteenth-century scholars. Devoid as they were of substantial biblical memories, they could count on the information given by classical writers on the empire of the Achaemenids and the kingdoms of Lydia and Phrygia, but also on the reliefs and inscriptions on rocks in unknown characters, both hieroglyphic and cuneiform, and finally on the Christianity of the Armenians, isolated in the great Islamic sea. Nevertheless, the first travellers to venture up onto the high Anatolian and Iranian plains (in search, even, of Amazons among the kings and warriors of the Hittite reliefs, from their powerful chest muscles which were mistaken for breasts) found the clearly visible remains of great cities and powerful fortresses. And unlike the low Syrian-Mesopotamian plains, lands of unfired brick, the ancient cities of the high plains, lands of building in stone and wood, were not all reduced to shapeless hummocks of debris accumulated through time, but were sometimes left as visible and distinguishable ruins. Their investigation by means of excavation, however, was to be delayed by several decades, even by a century.

In Persia, the ruins of Pasargadae (which was later known to be the work of Cyrus the Great) and of Persepolis (later known to be the work of that Darius who tried to conquer Greece) were in themselves well worth seeing, and were visited and described, Persepolis as early as 1765 by Niebuhr (who copied inscriptions there, opening the way to their decipherment) and then both sites by various travellers between 1820 and 1850: Ker Porter, Texier, Flandin and

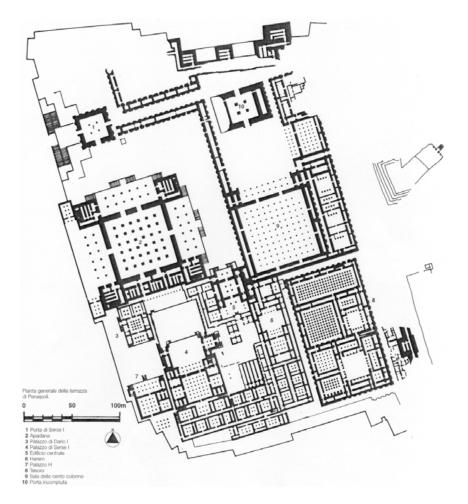


Fig. 18: The terrace of Persepolis.

Coste, and others besides.<sup>88</sup> But it was necessary to wait an entire century for the large-scale excavations of the Oriental Institute of Chicago in the 1930s at Persepolis [fig. 18],<sup>89</sup> and even longer for David Stronach's excavation at Pasargadae.<sup>90</sup> Only then would a complete and complex form be given to the image of these enormous palaces, centred on hypostyle halls (*apadana*), back-

<sup>88</sup> Ker Porter 1821–22; Texier 1852; Flandin and Coste 1844–52.

<sup>89</sup> Excavations by Herzfeld 1931-34, then by Schmidt 1935-39, published by Schmidt 1953-70.

**<sup>90</sup>** Excavations in the 1960s: Stronach 1978. In 1928 there was a brief excavation by Herzfeld cf. *id.* 1930; 1935.

cloth for the celebrations of the Iranian New Year, ceremonial cities like no others, and surrounded by the enormous royal parks which gave Paradise its name (cf. § 4.7).

On the high plain of Armenia are scattered (quite apart from the enchanting medieval Armenian churches) the ruins of citadels and fortresses which, as became clear, date back to the reign of Urartu (between the 9th and 7th centuries BC). In particular, the ruins of the stronghold of Van on the banks of the homonymous lake - the 'city of Semiramis' of the medieval Armenian history of Moses of Corene – with its rock inscriptions attracted the attention of Friedrich Eduard Schulz, who in the years 1827–29 gave a description of it,91 before meeting his tragic death there. The descriptions of the great travellers followed: Texier in 1838,92 then Layard, and even Rassam (who carried out an archaeological raid there), and yet others, up until the 'Armenische Expedition' of Carl Friedrich Lehmann-Haupt and Waldemar Belck, who in 1898-99 gave the first large historical contextualization of the inscriptions, which had by then been deciphered.<sup>93</sup> But for the cities of Urartu to become the scene of important excavations, they had to wait for the Soviet conquest of Transcaucasia, and then, above all, for the end of the Second World War. The first large excavation of an Urartian city was begun in 1939 by Boris P. Piotrovskij at Karmir-Blur near Erevan (in Soviet Armenia),<sup>94</sup> but the real intensity belongs to the years 1960–70, both on the Russo-Armenian side (K. Oganesjan and Arutjun A. Martirosjan at Karmir Blur, Arinberd and Armavir)95 and on the Turkish (Tahsin Özgüç at Altintepe; Afif Erzen at Toprakkale near Van and at Çavuştepe), 96 following the regional frame provided by Charles Burney's surveys.<sup>97</sup>

In Anatolia, apart from the ruins of Greek (and Roman) cities along the Aegean coast, there were above all the ruins of Boğazköi, with the nearby rock sanctuary of Yazilikaya, to attract the curiosity of nineteenth-century travellers. We are indebted to Texier in particular for the first description of the site, whose city walls with gates, acropolis and numerous buildings, including the imposing Temple I, were all clearly visible. 98 The ground plans of the site, such

<sup>91</sup> Schulz 1940; cf. Salvini 1955, pp. 5–14.

<sup>92</sup> Texier 1852.

<sup>93</sup> Lehmann-Haupt 1907; 1910-31; Belck 1901.

<sup>94</sup> Piotrovskij's reports in Russian 1950-55; there is an Italian translation (1966) of his 1959 summary.

<sup>95</sup> Oganesjan 1955; 1961; 1973; Martirosjan 1974.

**<sup>96</sup>** Özgüç 1966–69; Erzen 1962; 1978.

<sup>97</sup> Burney 1957.

<sup>98</sup> Texier 1839-42. Nineteenth-century travellers, mappings and first soundings (esp. Hamilton 1842; Chantre 1898): de Roos 1995; Alaura 2006, pp. 16-54.

as the one then made by Texier, but also the far more correct plan made in 1907 (by which time excavations had begun) by Puchstein, are based in large measure on the remains visible above ground. Identification of the site as the capital of the Hittite kingdom had already been suggested in the mid-1880s by both Perrot and Sayce, with the latter, however, above all interested in the hieroglyphic inscriptions and in the 'Hittites' of Syria (and the Old Testament).99

The excavations did not have to wait for too long, and the site (already an object of German operations for some time) was chosen as a consequence, albeit somewhat delayed, of Kaiser Wilhelm II's great push in the name of the unified Germany, of which we have already spoken with reference to Mesopotamia (§ 2.1).<sup>100</sup> But unlike what happened at Babylon and Assur, with the great personalities of the architects Koldewey and Andrae to give methodological and operational direction to the excavations, at Boğazköi the excavations were conceived and initially practised (1906) by the philologist Hugo Winckler (with the assistance of the Turk Makridi Bey) as a garnering of cuneiform tablets. Even although in the following year (1907) the German institutions insisted on a professional archaeologist and the extension of the project to a proper archaeological excavation, the altogether capable architect Otto Puchstein (who had already worked in 1888 in the first German excavation in Turkey, directed by Karl Humann and Felix von Luschan at Zincirlı)<sup>101</sup> was, so to speak, overshadowed by Winckler, and the interest of the site from a town-planning and architectural viewpoint – potentially very remarkable – was overwhelmed by interest in the archives of cuneiform tablets, discovered in great numbers: those written in Akkadian (especially letters and international treaties) and immediately read by Winckler were to provide the first steps for the reconstruction of the history of the Hittite Empire and its international relations; whereas those written in Hittite led to the decipherment of that language (Bedrich Hrozny, in 1915) as the most ancient Indo-European language known, exciting great enthusiasm in the philo-Aryan climate of Germany at that time.

The fact is that after the first report, published in 1907, in which archaeology and philology were both included (even if the latter took the lion's share),102 in the reports of the following years (all published in the MDOG se-

<sup>99</sup> Perrot 1886; various articles culminating in Sayce 1888.

<sup>100</sup> History of the excavations: Crüsemann 2001; Haas 1998; Alaura 2002; 2006; various contributions in Wilhelm (ed.) 2008.

<sup>101</sup> Crüsemann 2001, pp. 87-97; Alaura 2007.

<sup>102</sup> Puchstein 1907; Winckler 1907. Puchstein's study on the architectural remains was published posthumously (1912).

ries) there were new articles of fundamental importance on the texts (Winckler), on the history and geography (Forrer) and on the language (Hrozny) but the archaeology disappears (Puchstein died in 1911) and the excavations were then stopped by Winckler's death in 1913 and the outbreak of the Great War. In this case as well, therefore, we will need to wait another half-century for the racial and philological enthusiasms of the early twentieth century to go and for it to be possible to undertake a proper urban excavation at Boğazköi (under the direction of Kurt Bittel, from 1931), 103 and further to tackle dispassionately the question of what a Bronze-Age city on the high plains of the Near East was, and how and to what extent and why it differed from the models of the Lower Mesopotamian flood plain (we shall touch this briefly at § 5.4 and § 5.12).

#### 2.6 The Near-Eastern village and its eclipse

The question of 'what is a city?' - be it ancient or modern, eastern or western bears closely, nolens volens, on the identification of other forms and levels of settlement, from the village to the isolated farmstead, from the castle to the watchtower or a nomadic camp. Every definition of type only has meaning in the context of a larger whole, within which the entity being defined is placed through differentiating it from other entities of equal level. In our case, the study of the city of the Ancient Near East must necessarily be accompanied by the study of the village of the Ancient Near East. Nowadays we reason in a systematic manner, and therefore well understand how the settlements, whether big or small, simple or complex, come to make up a 'settlement system' capable of being studied as a whole in the reciprocal relations between the constitutive elements. But even reasoning in an impressionistic manner, it must have been clear to everyone (at least to those with even minimal experience of the country) that alongside the cities there also existed, and had existed in the past, villages. And yet throughout the second half of the nineteenth century, and also in good measure beyond, almost until the outbreak of the Second World War, the attention of Near-Eastern archaeology centred on the cities and ignored the villages. Since the primary aim of the activity of excavation (and of those who financed it) was the recovery of objects of value, it was

<sup>103</sup> Bittel (ed.) 1953. A mine of information on the organization of the excavations is contained in Bittel's memories 1998, pp. 200-222 (1931 campaign), 273-288 (1932 campaign), 383-422 (1933 campaign) and passim (development of the Turkish historical-archaeological institutions, and sketches of the individuals involved).

obvious that the concentration would be on the larger and predictably richer settlements. Even within the urban settlements interest was centred on palaces and temples, while excavation of the normal urban fabric (the inhabited quarters, but also the network of streets and system of fortification) and of the individual residential nuclei was only practised from the time of the 'architectural revolution' at the beginning of the twentieth century, and only became entrenched practice in the period of mandated rule and beyond.

The existence, however, of a 'Near-Eastern village' had been suggested and visualized through the intersection of two different threads of study, one on the prehistoric European village, and the other on the village of British India. The growing study of prehistoric Europe, in the absence of cities with palaces, obviously concentrated on the Neolithic and proto-historic village – from the terremare of the Po plain to the lake-dwellings on piles in the foothills of the Alps and central Eastern Europe (in Germany and Poland). A turning point (also in the mass media) was signalled by the particularly dry winter of 1853-54, which caused the lake-dwellings to be uncovered – just when Botta and Layard were excavating the Assyrian capitals. While the villages of Neolithic Europe could now be identified and investigated archaeologically, there were also two sources for their socio-political structure. One, detailed and classical, in Tacitus' description of the Germanic village, with common ownership ('arva per annos mutant, et superest ager'), collective decision-making bodies ('de minoribus rebus principes consultant, de maioribus omnes'), and the arrangement of houses spread over a wide area ('vicos locant non in nostrum morem connexis et cohaerentibus aedificiis; suam quisque domum spatio circumdat').<sup>104</sup> The other source was the historical-juridical study of the remaining village community, which was in the course of disappearing following the process of expropriation and private acquisition of common land (the enclosures), a process begun in England and spread through the rest of nineteenth-century Europe. As often happens, whatever is being destroyed is studied at the last possible moment before it is too late. But the social and juridical data could be found in late-medieval and early-modern sources.<sup>105</sup>

The second thread was that of the 'eastern' village, as described at the beginning of the nineteenth century by the administrators in British Imperial India, and also by the Dutch in Indonesia. 106 Unlike the European village, the Indian village had still kept its communal structure and its collective bodies,

<sup>104</sup> Political implications in the study of Germania: Canfora 1979 (who, however, does not analyse the question of the village).

<sup>105</sup> The work of von Maurer 1854 is fundamental. For recent work see Wunder 1987.

**<sup>106</sup>** Dumont 1996a; 1996b, pp. 202–212, 217–220. Also Liverani 1999.

but it also was under threat from the encroachment of the imperial administration, which (for fiscal and juridical purposes) turned the notables of the community into landowners. However that may be, the description of the Indian village, given in a more or less standardized form in the works of imperial administrators, was taken up by the political theorists, from Marx (in a letter to Engels and in an article in the 'New York Daily Tribune', both in June 1853, and then in the first book of Das Kapital)107 to the summaries of Maine108 and Tönnies.109

Like the European village, and more so, the Indian was held to be an unchangeable entity, as if frozen since remote antiquity, 110 which allowed it to be given a place (in the evolutionary scale) stretching back a very long way, if not to the beginnings, while still dealing with an institution recognized by modern reality. Given these characteristics of simplicity and antiquity, the problems of values, and so of antithesis between East and West, which had so affected the study of the Mesopotamian city, had no reason to exist for the village: European and Asiatic had been entirely the same in origin, except that the European villages had then evolved and disappeared while the Indian remained always there, still as they had been millennia before.

The other difference, which might then appear as essential to an evolutionary or simply diachronic vision, is that the village of Neolithic Europe must have been an autonomous community, even if combined in wholly equal alliance with other villages to constitute an ethnic-cultural entity; whereas the Indian village was clearly subordinate to a state, which had its seat in a city and in royal palaces and which stretched its grasping tentacles to all the villages scattered over the countryside. In principle, the civilizations of the Ancient Near East offered the possibility of studying the passage from one situation to the other, from the pre-urban to that of coming under the state; but for the moment nothing was done. And the same can be said for the other problematic question, that of the existence (and limits) of the collective ownership of the whole village, compared to that of the extended family and of the nuclear family, a problematic question that was foreseen in the imperial administrators' descriptions.

<sup>107</sup> Passages which have been often reproduced and commented on (especially at the end of the 1960s), cf. for example, Godelier 1970, pp. 122-130.

**<sup>108</sup>** Maine 1871, pp. 125–126 (I cite from the 1881<sup>4</sup> edition); earlier and briefly *id*. 1861, pp. 153– 154.

<sup>109</sup> Tönnies 1887.

<sup>110</sup> Marx 1867 (p. 378, note 13 of the 1968 edition); Maine 1861, p. 153, 'the village community is, as everyone knows, of great antiquity'.

It is, however, noticeable that while twentieth-century neo-evolutionism assigned a somewhat low level of complexity to the first phases, keeping a much more complex one for the city, the nineteenth-century descriptions of the Indian village give the image of a structure, albeit small but certainly complex, with deep diversity and specialization of competence and roles. As an example I cite the description given in Marx's *Das Kapital*:

In those of the simplest form, the land is tilled in common, and the produce divided among the members. At the same time, spinning and weaving are carried on in each family as subsidiary industries. Side by side with the masses thus occupied with one and the same work, we find the "chief inhabitant", who is judge, police and tax-gatherer in one; the book-keeper, who keeps the accounts of the tillage and registers everything relating thereto; another official, who prosecutes criminals, protects strangers travelling through and escorts them to the next village; the boundary man, who guards the boundaries against neighbouring communities; the water-overseer, who distributes the water from the common tanks for irrigation; the Brahmin, who conducts the religious services; the schoolmaster, who on the sand teaches the children reading and writing; the calendar-Brahmin, or astrologer, who makes known the lucky or unlucky days for seed-time and harvest and for every other kind of agricultural work; a smith and a carpenter, who make and repair all the agricultural implements; the potter, who makes all the pottery of the village; the barber, the washerman, who washes clothes, the silversmith, here and there the poet, who in some communities replaces the silversmith, in others the schoolmaster. This dozen of individuals is maintained at the expense of the whole community.<sup>111</sup>

This description is taken almost word for word from a report of the civil administration in British India to the British parliament, quoted in the same newspaper article referrred to earlier.

If for the socialist and utopian Tönnies the values of social cohesion of small communities (of the *Gemeinschaft* type) were 'natural', and those of complex societies (of the *Gesellschaft* type) were 'artificial', Emile Durkheim<sup>112</sup> was to overturn this valuation immediately afterwards. For the leader of the French school of sociology, for whom solidarity and cohesion were not emotive aspects but on the contrary working structures, a 'mechanical solidarity' was at work in small communities, based upon simple juxtapositions between cells which were all equal in function; whereas in complex communities, based on the social division of work, an 'organic solidarity' was present, in the sense that the composite and complex organism functioned by means of the coordination of the various constituent cells, in themselves different and not self-sufficient.

In this way the foundations were laid for distinguishing sociologically the 'complex' city from the 'simple' village – and in this sense Durkheim's influ-

**<sup>111</sup>** Marx 1867, pp. 357–358 from the English translation, 1967 ed.

**<sup>112</sup>** Durkheim 1892.

ence, direct or indirect, conscious or not, on the course of historical-archaeological studies of the city and village has been enormous, starting at least from Gordon Childe (as we shall see in § 3.1), who quotes him explicitly. The village can be as small as you like; the addition or subtraction of one or more cells does not alter the homogenous structure. But the city needs an adequate quantitative base so as to be able to contain within it the cells of all the different socio-economic specializations, beginning with the basic bifurcation between producers of food and the specialists of the transformation, of exchange, of the conduct of civic and administrative affairs. The arguments of the late nineteenth-century debate were therefore also of definite interest to the study of the city of the ancient Near East, but this was only to be realized half a century later. For the moment, at least until the First World War, the village of the ancient Near East remained unknown archaeologically, and of no interest theoretically. In late nineteenth and early twentieth-century Ancient Near East studies there was no trace either of the question of the village or of research already in progress on the European and Indian 'cases'. Even in 1935 when the authoritative Reallexikon der Assyriologie arrived at the word 'Dorf' nothing better was found to write than: 'Dorf s. Stadt' (village: see city). A hypothetical 'Mesopotamian village' could not be known at that time, but there was not even an attempt to imagine it – as was done, on the other hand, for the city. The human landscape of Mesopotamia remained strewn with cities alone, large cities with palaces and temples, 'cathedrals in the desert', with the surrounding countryside cultivated by the slaves of palace or temple, who did not even present the problem of knowing where they might have lived.

### 2.7 Evolutionism and economic history

In the famous series of lectures held at Basle in 1870, Jakob Burckhardt stated with ill concealed irritation:

All our efforts to reconstruct the beginnings and origins of the State are in vain. Hence, unlike the philosophers of history, we are under no necessity to rack our brains over such questions. Yet in order to have light enough to see the abyss at our feet, we must ask the question - how does a people become a people, and how does it become a State? What are its birth-throes? At what point of its growth can we begin to call it a State? 113

Burckhardt was writing squarely in the middle of the great age of evolutionism, when the foundations were being laid for a periodization of world history into

<sup>113</sup> Burckhardt 1905, p. 28; p. 34 of the English edition 1943.

separate stages of great transformations, of which the birth of the state and of the city were among the most important, if not indeed absolutely the most meaningful in determining the modern structuring of society.

The idea of human society's technical, cultural and institutional progress was always there, accompanied by the idea that the advent of the city represented a culminating stage in such a process. Enough here to quote Vico: 'The order of human matters made progress: that first there were the wild forests, after that the hovels, then the villages, next the cities, and finally the academies'. 114 Two beliefs intersect, which we already find set out clearly in earlier times. Thucydides' comment (1.6.6.) is well known: 'the Greeks once lived as the barbarians live today' and hence that observation of human groups at a less advanced level (today we would say: less complex) tells us about our own past. Less known (except to specialists of the Mesopotamian world) is the recurrent Sumerian definition of the 'barbarians' of the time as 'those who know neither house nor city', thereby presupposing the forms of settlement to be the defining characteristic of the society.<sup>115</sup> But the identification of the periods and modes of evolution, in forms which made them useful for the classification of societies which were being discovered in time and space, took shape with social evolutionism, which, not by chance, developed exactly in the decades following the discovery of the Assyrian cities.

Evolutionism, especially in its unilinear form and accompanied by diffusionism, does not today enjoy a good reputation; but we need, as always, to place things in their historical context, to set every theory within the knowledge of the period and in comparison with preceding theories. In this sense, social evolutionism (like, in fact, biological evolutionism) represents enormous progress when compared to the preceding unshakable positions, which even while seeing the differences, did not, however, succeed in explaining the process of change, and perhaps did not indeed face the question. Think of the 'Lectures on the philosophy of history' which Hegel gave at the University of Berlin in the 1820s. 116 As already touched on at § 1.5, world history, seen as the progressive affirmation of the state, an institution which assures the spread of liberty of man, is thus marked in four phases – the Eastern (with liberty of the despot alone), Greece and then Rome (with liberty of a few), the Christian-Germanic world (with general liberty) – the real East, however, that is, China and India, 'Empires belonging to mere space – as it were – unhistorical Histo-

<sup>114</sup> This is Axiom XLV of the Scienza Nuova, of 1730.

<sup>115</sup> Cooper 1983, pp. 30-33.

<sup>116</sup> Published posthumously in 1837.

ry', 117 is something frozen, unmoving, the same today as it was in the remote past. Only Persia (the heir of Assyria and Babylonia, as was then only known by the classical authors) evolves and with Persia history and the state begin. Hegel says of the Mesopotamian world that 'While these two realms [China and India] have remained to the present day, of the empires of the Tigris and Euphrates on the contrary nothing remains, except, at most, a heap of bricks' and that of the Egyptian world only the splendid tombs remain. 118 A less 'eastern' role is reserved for the Phoenicians (beginning a line of thought which will have a lengthy sequel) because of their mercantile activity, which developed qualities of initiative, in contrast to the environmental and religious limitations which weighed so heavily on the peoples of further Asia. Nevertheless, the first city is acknowledged to have been founded by the Assyrians and Babylonians, materializing from the double cause of agricultural settlement and defence, and described as enormous on the basis of the writings of the classical authors (as we already saw at § 1.6). But all Hegel's reasoning is of an ethical-political character, and little attention is given to material elements.

A less known, except among scholars of the Near East, but equally significant case is Ernest Renan who, outlining in a diachronic sequence the appearance of the human race to historical visibility, put forward a threefold typology. There were at the beginning 'the inferior races, who leave no records, who lived on the earth from an era which is impossible to indicate historically and whose determination belongs to geology', races still present in Oceania, southern Africa and northern Asia. The 'first civilized races' then make their appearance from 4000 BC: the Chinese, Cushites and Hamites (which include the Egyptians and Assyrians-Babylonians), marked by a materialistic character and still present in China. Finally, towards 2000 BC the 'great noble races' appear: Aryans and Semites. 119 These three blocks are impervious to each other: 'no branch of the Indo-European or Semitic races had descended into savagery. [...] Moreover we know of no examples of a savage people who have raised themselves to civilization. We must assume that the civilized races did not pass through a state of savagery, but have carried within themselves from the beginning the seeds of their future progress'. 120 From where then did these races appear on the stage of history, as though from behind the curtains of a theatre? They come from different directions: the Semites came out of the desert, from which they derive their distinctive cultural traits (including mono-

<sup>117</sup> Hegel 1837, p. 105 of the English edn. 1956.

<sup>118</sup> Ibid. p. 115, more amply pp. 182–187 (Assyria and Babylonia) and 198–224 (Egypt).

**<sup>119</sup>** Renan 1855, pp. 501–503 in the 1863<sup>3</sup> edn.

<sup>120</sup> Ibid. p. 468.

theism); the Aryans come out of the temperate European forest, with similar outcome but marked by a different direction.

It is true that the term 'race' did not then have the exclusively biological meaning that we attribute to it today, but also included cultural traits (from language to religion): but really this mixture is indicative of the fact that characters and unchangeable destinies were assigned to people, engraved in the race and environment (race and milieu, to use the two key terms of the positivist sociology of Auguste Comte then prevalent) and not susceptible to evolution.<sup>121</sup> It would have been difficult to set the processes which led to the birth of the city and the flowering of the great Assyrian and Babylonian metropoleis within this type of dogmatism. But really at about the same time, when Botta and Layard were bringing to light the Assyrian cities and the next generation was widening the view to southern Mesopotamia and to earlier centuries (and millennia), these changes were being confirmed over a broad spectrum between geology and biology, ethnography and archaeology and history - of which we have already spoken, and which culminated in the decade of the 1870s with the great classics of anthropological evolutionism.

The name which first comes to mind is that of Lewis Henry Morgan, with his Ancient Society.122 Trained as a jurist, his cultural baggage consisted of direct knowledge of the social structure of the Iroquois (defended by him in a legal case), then the usual classical and biblical education. His intention was to classify the systems of relationship, from the family to the clan to the phratry to the tribe, and the connected civil and religious institutions. Based as it was on ethnographic documentation, of North American kind, compared with Greece and Rome (and just a little of the Bible), the rest of the world was barely visible: Mesopotamia was named only a couple of times (as one of the source areas of the Flood), 123 but even the great 'historical' civilizations of China and India were neglected, and so indeed was Egypt and the Islamic world. Morgan seemed to be ignorant of all the recent archaeological discoveries in the world of the Near East, and minimized those of prehistoric Europe; he was probably working in a remote setting, with few books at his disposal. Moreover he did not intend to occupy himself with the city, nor with settlement forms in general, and when he cites Fustel he does it on account of the phratries. For Morgan civilization was not indicated by the advent of the city, but by the alphabet and for him pre-alphabet writing, cuneiform and Egyptian, had been deciphered in vain.

**<sup>121</sup>** Liverani 2012a.

<sup>122</sup> Morgan 1877.

<sup>123</sup> Ibid. pp. 19 and 389.

While the importance of his work remains steady in the ethnographic field, particularly for the systems of native American relationships which constitute the bulk of the work, 124 its weight in studies of antiquity has been very clearly increased by the influence which he exercised upon Marx and above all on Engels. It might seem that his work should not be of much interest to us here, but, on the contrary, his basic idea, which is the periodization of human history into the three stages of Savagery, Barbarism and Civilization (the first two further divided, each into three subdivisions), had consequences of the first order on the history of the Ancient Near East as well – even although he passes directly from ethnographic savagery to the Graeco-Roman world, skipping over the pre-classical eastern civilizations. The idea of three stages is not really Morgan's: it had already been suggested in the eighteenth century in the works of Adam Ferguson and Jean-Antoine Condorcet, 125 and was then more precisely defined in the seventies of the nineteenth century by Edward Tylor and John Lubbock, 126 who combined the ethnographic information with the system of threefold evolution established by Danish prehistorians from the years 1830-40:127 Stone Age, Bronze Age, Iron Age. Morgan, who indeed cites Tyler and Lubbock, does not seem to take any account of the prehistorians' discoveries and classification, 128 and is therefore unable to combine the ethnographical data with the archaeological and to suggest that - in practice - the stage of savagery corresponds to the Stone Age, the state of barbarism to the Bronze Age, and civilization to the Iron Age. It will be necessary to wait for Gordon Childe to set the three evolutionary stages in the reality of archaeology, with the Neolithic revolution of production of food to mark the passage from savagery to barbarity, and the urban revolution to mark the passage from barbarity to civilization (as we shall see at § 3.1). Technically, as well as failing to note the forms of settlement (the village, the city) among the distinguishing characters of the stages, Morgan inherited the confusion, then widespread, between animal herding and agriculture, and between the metallurgy of iron and of bronze. As a result, it would have been difficult to convert the typological classification into a diachronic sequence, while it was much simpler to build the evolution on the basis of the various stages of actual, modern progress of human groups.

<sup>124</sup> On Morgan: Harris 1968.

**<sup>125</sup>** Rossi 2012, pp. 99–109, 111–117, 168–176.

<sup>126</sup> Tylor 1865, cf. Harris 1968; Lubbock 1865 and 1870, cf. Harris 1968.

<sup>127</sup> Daniel 1967, pp. 79–98; Trigger 1989, pp. 73–86. The foundational works of Thomsen and Worsae date to 1836 and 1843 (English translations 1848 and 1849).

<sup>128</sup> There is just a hint (of reserve) at p. 5.

Morgan's work was immediately noted and commented on by Marx and Engels.<sup>129</sup> A few years later Engels published his own study on the origin of the family, which is to a large extent faithfully based on Morgan's work, adding, however (in the final chapter), noticeable attention to the economic aspects of the evolution (changing the relations of production, and the conditions of ownership) which caused the beginning of civilization to coincide with the creation of the state, and (with less emphasis) of the city as well, correctly linked to the social division of labour between agriculturalists and artisans. 130 But, like Morgan, Engels also does not seem to know of the Mesopotamian discoveries (by now not only Assyrian, but also Sumerian), or does not understand the potentiality of the chronological breakthrough that had occurred in the documentation of a remote past for the reconstruction of the evolutionary stages, and even less for the light shed directly on the origin of city and state.

The same can be said for the works of Karl Bücher on the origin of the economy:131 he also bases himself on the relationship between the ethnographic data on 'primitive' peoples and the literary data on Greece and Rome, he also skips the civilizations and economies of the Ancient Near East, and he also sets himself off on an abstract plan without asking himself about the role of settlements (from villages to cities) in the stages proposed. After writing at length on the 'natural' economy (*Naturwirtschaft*) of the ethnographic savages, he too proposes a threefold division. There is at first a 'closed domestic economy' (Geschlossene Hauswirtschaft), similar to the Oikenwirtschaft already suggested by Rodbertus, and which embraces all of antiquity (substantially Graeco-Roman). Then there comes a 'city economy' (Stadtwirtschaft), which covers the Middle Ages. Finally we arrive at the 'national economy' (Volkwirtschaft), which is that of the modern age. The criteria of this last, insists Bücher, cannot be applied to the preceding stages, and with this the start was given to the 'primitivist' position, in contrast to the classical/modernist position begun by Adam Smith and to which we shall return with reference to Max Weber. As we see, there is no trace of the Ancient Near East, and the city, as least as an economically active institution, seems to begin in Mediaeval Europe; on this point also Bücher will have numerous successors.

But the course of studies (also of the Ancient Near East) is indebted to Bücher for two other contributions, which lead more directly to the question of the city. The first is his input to the debate then current in Germany of the

<sup>129</sup> See the introduction by Tristram Hunt to the English translation of Engels 1884.

<sup>130</sup> Engels 1884, pages 203-207 of the English translation.

<sup>131</sup> Bücher 1893.

theme of the metropolis, the *Großstadt*, <sup>132</sup> a theme which will come back into topical interest (but in an altogether different form) with reference to the postmodern megalopoleis (as we shall see in § 6.7). The second is the emphasis he placed upon the oikos, the productive family unit, as a basis of the ancient economy. It is noticeable that in the nineteenth-century evolutionist constructs, from Morgan to Engels to Bücher, while the size of the political organism tends to become larger, passing from the savages' band to the barbaric chiefdom, and from that to the state and finally to the empire, the size of the economically active unit becomes smaller, passing from the tribe to the extended family, from that to the nuclear family, and finally to the individual. Today we know that in effect the textual information on collective or undivided ownership is clearer in the third millennium than afterwards, but if instead the average size of the houses (comparable to the number of inhabitants) can be put in sequence, we get rather greater fluctuations. Besides, we know that alongside diachrony there can exist side by side some sectors of society (particular in the pastoral area) in which an extended family unit is functional in the activity of economic sustainability, and other sectors (especially in the palace environment) in which the individual can follow his own activity and put together personal wealth. Today the idea that the extended family is an evolutionary stage would find few supporters, while if anything it can still be considered as an intermediate necessity between the nuclear family and the community, a necessity which is valid more for certain legal tasks than for properly productive activities.

This is not the place to enlarge upon the debates of the early years of economic history, which would carry us far from our theme. The cases cited are in any case quite sufficient to support our impression, that half a century after the discovery of the Assyrian capitals and the decipherment of cuneiform, this new and crucial segment of world history was completely ignored; history passed from the 'primitive' world known from ethnographic description to an 'ancient' world based upon classical authors. Equally significant is the impression that the abstract nature of the debate did not succeed in finding a connection with the reality of settlements, so that the question of the 'city' remained excluded from the debate. It is true that nineteenth-century archaeology itself, with its difficulty in visualising the urbanistic structure, was partly responsible for this backwardness, But we also need to note that the economic historians of the time show very clearly how their cultural baggage relative to the ancient world remains anchored to a strictly classical and literary background.

<sup>132</sup> Bucher et al. 1903; cf. also Beloch 1898; Simmel 1903.

#### 2.8 Max Weber: the separate ways

The theories, analyses and debates on the socio-economic configuration of the ancient city culminate, in the period bridging the nineteenth and twentieth centuries, with the work of Max Weber. We are indebted to him for above all two fundamental contributions to the subject, one in the first phase of his production and one in the final. Both include a role for the city of the Ancient Near East in the analyses of the ancient city, and so merit detailed treatment.

In 1897 Weber published a chapter on agrarian relations in antiquity (Agrarverhältnisse im Altertum), in the first edition of the Handwörterbuch der Staatswissenschaften, still giving quite modest attention to the Ancient Near East.<sup>133</sup> But then in 1909, in a new edition of the same work (*Agrargeschichte*) he widened and greatly deepened the study of the Near-Eastern economies, attributing an important role to them. 134 In the interval the first volume of Eduard Meyer's history of antiquity had been published,135 from which Weber acknowledges he has drawn inspiration and information, even if he does not share all its conclusions. Also in the mean time documents of the greatest importance had become accessible from both the Mesopotamian world (the Code of Hammurabi was published in 1902) and the Egyptian. The great sociologist had no hesitation in acknowledging his own lack of philological competence and so also the objective scarcity of sources accessible to him, but justly laid claim to the opportunity if not the right also to insert – as best he could given these stated limitations - the pre-classical Near-Eastern civilizations into the picture he intended to build. 136 It might be thought that his contribution was necessarily affected by its inclusion in a work centred on the question of agrarian relations; but in fact the city found there the role of a major player, because 'the course of agrarian history in Antiquity was so closely connected with the fortunes of the cities that the two subjects cannot be treated separately'. 137 We also need to underline, among his remarks, the positive appraisal of the oikos of Rodbertus and Bücher, and the stand taken on positions of the 'primitivist' kind ('nothing could be more misleading than to describe the economic institu-

**<sup>133</sup>** Weber 1897.

<sup>134</sup> Weber 1909. Citations are from the English translation by Frank.

<sup>135</sup> Meyer 1907.

<sup>136</sup> On Agrargeschichte cf. Finley 1977; Momigliano 1977; Bruns 1987–89; Hansen 1997, pp. 32– 54. For analysis, together with earlier bibliography, cf. Capogrossi Colognesi 2000, pp. 171-194 (pp. 195–218 on the Ancient Near East).

<sup>137</sup> Weber 1909, p. 68 in the English translation.

tions of Antiquity in modern terms' 138) which was in contrast to the authoritative position of the 'modernist' Meyer.

Notwithstanding the commendable effort made to collect evidence on conditions in the Ancient Near East (which distinguishes Weber from his evolutionist predecessors, on which see at § 2.7) the attention paid to the Ancient Near-Eastern city does not however at all imply its conformity to the ancient/ classical model; on the contrary, it was a sign of their antithesis. From the beginning Weber declares that 'The pattern of settlement in the European Occident contrasts with that common to the civilizations of Asia', explaining how this is due to the (presumed) lack in the East of forms of common ownership of land and individual ownership of the herds. 139 And then he outlines a typological system ('ideal type' in his terminology), but in reality connected to a chain of diachronic development, a system which is presented as clearly twofold.<sup>140</sup> After the common stages of the rural community (*Bauerngemeinwesen*) and of the princely castle (Burgenkönigtum), the course of development has on one side the sequence of aristocratic city-state (Adelspolis), Hoplite city-state (Hoplitenpolis), and democratic city-state (demokratische Bürgenpolis), which is a sequence modelled on Greece of the archaic and classical age; on the other side the sequence is of bureaucratic city kingdom (bureaukratisches Stadtkönigtum), 'liturgical' monarchy (Leiturgiemonarchie), and 'liturgical' city-state (*Leiturgiestaat*). Just as the first sequence is based on the *polis*, so the second is on the monarchy, and applied to the West concerns the Hellenistic and Roman Imperial worlds, but applied to the East it is a form dating far back, inasmuch as Egypt and Mesopotamia are assigned to the 'liturgical' stage from their origin, or at least from the first available documentation. Basically, while for the city of the West reasonably accurate, and indeed temporally very narrow, lines of historical development can be drawn, the city of the Near East is home to a mixture of typologically and diachronically diverse elements (elements of 'natural' economy, of feudalism, of capitalism), in which there is no precise long-term evolution to be noted.<sup>141</sup>

There are also passing references to the environmental factor: the Graeco-Roman city is above all a coastal city, while the Egyptian and Mesopotamian city is a river city. The 'hydraulic' question arises in several places, that is, the effect which the digging and management of the networks of irrigation canals exercised in conferring upon Egypt and Mesopotamia a heavily directed (Weber

<sup>138</sup> Ibid. p. 45; cf. Capogrossi Colognesi 2000, pp. 185-186.

<sup>139</sup> Weber 1909. p. 37.

**<sup>140</sup>** *Ibid.* pp. 64–79.

**<sup>141</sup>** Bedford 2005, pp. 63–64 gives a more homogenous judgement of the two threads.

does not use the term 'despotic') socio-economic structure. 142 Since the ancient city was otherwise structured in a plurality of productive units (oikoi), 143 it is clear that in the Near East the oikos of the king (and particularly of the pharaoh) assumed such pre-eminence as to take over and exploit, through taxation, corvée and 'liturgy', all the other oikoi. It is a vision which will afterwards meet with noticeable developments.

Twenty-odd years later, Weber finished a long essay with the title Die Stadt, 144 which was published immediately after his death, and then included as a chapter in the large posthumous work Wirtschaft und Gesellschaft.145 In this work, the three fundamental types of legitimate domination – the rational, traditional and charismatic - are illustrated from time to time with historical examples, among which however the East is represented mostly by India, China, Islam and Judaism, with very little recourse to the Ancient Near East (Egypt is adopted as the first example of the bureaucratic-patrimonial type of administration),146 even on points such as the oikos or so-called patrimonialism, which were afterwards shown to be abundant in the Ancient Near East as well. Coming, however, to the city, Weber's attitude is clear right from the title given to the chapter: Die nichtlegitime Herrschaft Typologie der Städte (the nonlegitimate domination type of cities). The fact is that according to Weber the seat of political authority is outside the city; it is the castle or the court of the landed nobleman, and the exemplification of the origins and functioning of the city is substantially restricted to mediaeval and modern Europe. The image of the city as an autonomous unit, separate from and often antagonistic towards the king or feudal lord installed in his castle and extra-urban palace, hovers over Weber's entire treatment of the subject. This image does not fit the ancient world in general, comprising the classical – unless Athens is considered a 'free' city in relation to the palace of the Persian king - and even less does it fit the Ancient Near-Eastern city. The nineteenth-century prejudice essentially reemerges, that the Assyrian or Babylonian or Egyptian city, being an extension of the palace, cannot be a city, and therefore the cities rediscovered materially by archaeology cannot be classified as such. The 'real' cities are the western ones (in, however, a very selective progression that goes from the Greek polis to the mediaeval commune to the Hanseatic cities) and are characterized by their origin as market places, and by their working as self-governing confraternities.

**<sup>142</sup>** Weber 1909 pp. 38, 84, 107.

<sup>143</sup> Ibid. pp. 85, 105 and passim.

<sup>144</sup> Weber 1921.

<sup>145</sup> Weber 1922; I quote from the English translation of the Weber 1956 edition.

<sup>146</sup> Weber 1956, vol II, pp. 146-147; the three types of power are described in vol. I, at p. 221, and developed at pp. 217-241 (of the English translation).

All the characterizations of the eastern cities are of the negative type (signalled stylistically by 'but' or 'on the contrary'); unlike the western cities, they are not citizen communities and lack the very concept of a 'citizen community'; the inhabitants do not have rights as citizens, they do not have their own courts, they do not have their own administration, in short, there is no law of citizenship - while on the positive side we can say they are fortresses or the seats of rulers. 147 Weber makes a couple of exceptions: he says that some community characteristics had perhaps existed in the initial stages, which, however, takes us back to village communities rather than to developed and complex cities; and then he says of the Phoenician city-states (as Burckhardt had already said) that they were in some ways the precursor of the Greek polis. Once the ancient 'eastern' city has thus been dismissed, by being excluded, Weber then continues to describe and classify the 'western' city (explicitly so defined), outlining a typology and development partly analogous (for antiquity) to those we have already seen in the Agrarverhältnisse, but in a less schematic form. The distinction between a city of consumers and a city of producers (which goes back to Werner Sombart), <sup>148</sup> even if applied to the West, also risks excluding the eastern cities yet further from the entrepreneurial and productive aspects.

One has a clear impression that, after the effort made to gain the information (even if only indirectly) twenty years earlier, Weber had not then made any progress in his knowledge of the Near-Eastern sources and the secondary literature on the subject. His statements are necessarily generic and incontestable, and give an extreme picture without diachronic development of the Mesopotamian (and Egyptian) city. It is the outcome of an entire tradition of study, which from the initial rejection of an ethical and aesthetic character was by now consolidated in a historical-sociological structure which intended to be objective and dispassionate (the Weberian Wertfreiheit!), classificatory and based on documentary evidence, without noting its influential agreement with the profoundly fundamental values – liberty and autonomy, trade and enterprise, individuality and the individual's rights - of the post-Enlightenment western world, and so of its functionality in the construction of a western identity.

But there were also other points in Weberian sociology which had an alternate influence on the configuration of the city and state of ancient Mesopotamia. As already said, Weber distinguished between three types of authority: rational, traditional, charismatic. The rational, or legal, authority (which is that of the modern state) is based on bureaucracy, while traditional authority

**<sup>147</sup>** *Ibid.* especially pp. 1226–7.

<sup>148</sup> Sombart 1902; he was then (1907) at work on the role of the city.

(which is that prevalent in antiquity) is based (in sequence) on gerontocracy, patriarchalism, patrimonialism.<sup>149</sup> This final term is not really connected to patrimony, but indicates the mutually dependent relation between master and servant. Now, the vision of the city and state of the ancient Near East for (at least) all of the first half of the twentieth century was explicitly or implicitly considered to be of a bureaucratic type, with a wide use of this term, not actually in a strictly Weberian sense, but rather as a term of common use. It will only be with the crisis of the vision of the 'strong' state, above all in the period at the turn of the twentieth and twenty-first centuries, that a vision and terminology of a more 'patrimonial' type gained ground more clearly and rigorously. We shall see these in due course (§ 6.6), but it was timely here to anticipate this point as particularly indicative of the fluctuating fortune of Max Weber in the Assyrian camp.

The same can be said for the concept of oikos, a basic structure of economic production, which Weber drew from Rodbertus and Bücher, and which among ancient historians gave life to the hoary old argument between 'primitivists' (supporters of precisely patrimonialism and oikos) and 'modernists' like Eduard Meyer and Julius Beloch, who saw the ancient economy as structured according to the same principles of trade as the modern economy.<sup>150</sup> And the same can be said for the Weberian concept of the ancient city as a 'consumer' compared to the mediaeval/modern city as a 'producer', with the resulting difficulty in classifying the city of the Ancient Near East as one or other type, until arriving at the type of the 'administrative' or 'redistributive' city in the Polanyi sense (§ 3.5). All these concepts expressed by Max Weber remained very marginalized (and for the most part ignored) in the studies of the Ancient Near East until the years 1960–70, then to re-emerge later, above all in an anti-Marxist function, until being adopted in a neo-liberal key.

# 2.9 Anna Schneider and the Sumerian temple-city

Just as the excavations were centred for preference upon palaces and temples, neglecting (with few exceptions) the inhabited areas, so too in the study of the texts selective preferences were shown. The first decades of Assyriology saw major attention being given to the literary texts (especially if they had biblical links), to the royal inscriptions (of obvious historical interest), and also to the lexical lists, which were of valuable, indeed indispensable, help for the study

<sup>149</sup> Weber 1956, vol. I, p. 231 of the English translation.

<sup>150</sup> Texts collected by Finley 1979.

of vocabulary and for the decipherment of Sumerian. But the archives of the temples and palaces had also afforded large quantities of administrative, and even legal texts (contracts of purchase and sale, wills, leases, loans etc.), which were of definite interest and great potential for reconstructing the functioning and socio-economic structure of the city. When the contents of these administrative archives also began to be studied, at the turn of the century, the results were not long in coming.

Towards 1920 the great German Sumerologist (but a Jesuit at the Pontifical Biblical Institute in Rome) Anton Deimel began to publish his studies on the city of Lagash in the pre-sargonic era (c. 2500-2350 BC),151 and then in 1931 published his synthesis.<sup>152</sup> In the mean time (in 1920) the economic historian Anna Schneider, a pupil of Karl Bücher, had used Deimel's first works and also those of Schwenzner on the Old Babylonian economy to publish a small but important monograph on the Sumerian temple-city (Die sumerische Tempelstadt).<sup>153</sup> The importance of Schneider's endeavour is obvious: for the first time an economist had taken the trouble to read the ancient texts (in translation, obviously), and to propose a model of an Ancient Near-Eastern city based for the first time on concrete administrative documentation (even Weber in 1909 hardly cited anything other than the Code of Hammurabi), a detailed model described positively, and so not an anti-model characterized by its absences and differences compared with the canon of the polis. The success of the proposed model is demonstrated by the fact that thirty-five years later, when Henri Frankfort organized an issue on the city of the Ancient Near East for the new Unesco journal 'Cahiers d'Histoire Mondiale' and asked the Sumerologist Adam Falkenstein to write an article on the Sumerian city, the latter not only re-used Schneider's title, 154 but also confirmed in substance Schneider's conclusions, yet distancing himself from those of Deimel, admitting the existence of 'free citizens' and privately owned property, and articulating his picture between temple, king (that is, the palace) and free citizens.

The positions of Deimel and Schneider (quite apart from their areas of expertise) really were quite different, and need to be examined separately, even if they often became confused. Deimel had based his analysis on the study of the archive of one of the major temples of Lagash, the temple of the goddess Bau. The archive provided detailed information on the temple's management

**<sup>151</sup>** List in Foster 1981, p. 226 n. 2.

<sup>152</sup> Deimel 1931. See most recently the critique of Gibson 2010.

<sup>153</sup> Schneider 1920.

<sup>154</sup> Falkenstein 1954; published with Kraus 1954 for the next periods. Then see von Soden 1979 on the temple cities and metropoleis.

of the lands and their workforce, also yielding computations of an agronomic (the productive yield of the cultivated land) and demographic nature. The conclusion of Deimel's analyses and calculations (and also of his interpolations) was quite extreme: all the cultivable land belonged to the temple and all the workforce depended on it. Furthermore the royal (human) direction of the city duplicated the ideological (divine) direction: the king administered the temple of the supreme god (Ningirsu), the queen that of his consort (Bau herself), and their offspring the temples of the gods' offspring. The image of the city-temple was therefore all-inclusive, symbolising a sort of Sumerian Vatican City, with the whole population not only faithful to the god and subject to the king, but properly slaves – ideologically of one, legally of the other. Obviously this allinclusive image, which Deimel saw as dependent on the 'hydraulic' administration of the land (irrigation canals), was affected by technical details (the value of the units of measurement), by understanding of the administrative mechanisms, and finally by the calculations carried out. It then became clear (as we shall see at § 3.3) that certain values and certain details were to be interpreted differently and that as a consequence the comprehensive picture is considerably different: only one part of the lands belonged to the temple (the others being in family ownership) and the temple slaves were only one component of the population, the temples themselves benefitting rather from *corvée* from the 'free' component.

Schneider's interests were different. Though starting from the Assyriologists' analyses, the substance and intention of her work (as defined better by its subtitle) was to fit the Sumerian city into the evolutionist system put forward by Karl Bücher, whose student she was. The image of the Sumerian city emerged as far less one-sided than Deimel's - also because she had examined the data not only from pre-sargonic Lagash but also from the Old Babylonian period, which was later by half a millennium and based on different socioeconomic relations. For Schneider, the economy of the Sumerian city was mixed: alongside the temple and the king there existed self-sufficient and autonomous local communities (selbständige Gemeinden), heirs of the past (alte agrarische Gemeinschaften - the old agrarian communities). Hegemony belonged to the temple, but each community retained autonomy over production and consumption. The central result of Schneider's work however - theoretically more important - was that the Sumerian city could not fit into any of Bücher's evolutionary stages. There were elements of centralization and redistribution, similar to those of ancient Egypt; there was an urban synoecism, similar to that of ancient Greece; there was feudal servitude (Fronwesen), similar to the mediaeval; and finally there was a system of exchange based on credit, which in some ways was a precursor of capitalist mechanisms. This mixture of elements, which in an evolutionist system such as Bücher's marks different stages, might suggest that either the system is in itself mistaken, or anyway does not have universal validity. The first, but for the time methodologically astute, concrete analysis of an Ancient Near-Eastern city thus opened up perspectives of reflection and research that unfortunately remained unexplored for at least fifty years – apart from then being taken up from a quite different perspective.

Schneider had neither the interests nor training of the town-planning kind; if, however, we try to transfer the socio-economic models to urban and territorial reality, it has to be said that Deimel's model is quite compatible with the image (by then already old-fashioned) of the city as a sort of 'cathedral in the desert', all pivoting upon and almost personified by the temple, without posing the question of where on earth normal families, the ordinary people, lived – an image that reflected well the ground plans that the archaeologists had produced for Lagash, with the temples bobbing in a vacuum. Schneider's model, on the other hand, also made room, beside the central agencies (temple and palace), for the family and rural communities, which presumably populated the countryside in a plurality of villages (even if Schneider never used the term *Dorf*), outlining a much more realistic reality, less totalitarian and theoretical.

### 2.10 New procedures: the inventory of the country

After the tragedy of the Great War, work in the field could begin again, but in changed conditions compared to the period of Ottoman rule. The whole period between the two wars can be described as the period of the 'mandates', a sweetened form of a colonial relationship with which the League of Nations assigned Iraq, Cisjordan and Transjordan to British administration and Syria and Lebanon to French. The duration of the mandated regimes varied from case to case, but was relatively short: from 1922 until 1932 for Iraq, to 1943 for Lebanon, to 1946 for Syria and Transjordan, and to 1948 for Palestine and Israel. But the western presence weighed heavily at the administrative level (and we should remember that Britain had administered Egypt since 1882), and in perspective led to the separation of national states (and the respective nationalist movements) in a completely innovative situation compared to their subjection under the Ottoman Empire. 155

The establishment of the European mandates involved the launch of legislation of protection – just as the British imperial administration in India had

<sup>155</sup> Gelvin 2008, pp. 217-230; Fromkin 1989, pp. 493-567.

already outlined a system of archaeological research and protection for the archaeological sites (from the middle of the nineteenth century and then in Egypt).<sup>156</sup> The Ottoman Empire had previously, in 1874 and then in 1884, brought in a law, somewhat more concerned with regulating the concessions of excavation to foreign countries, and the destination of the finds, than in organising the work in the country itself.<sup>157</sup> It is worth here recording the alarm expressed by Flinders Petrie in 1918, on the disaster already consummated in Egypt and Cyprus and by now weighing on Iraq and Palestine: 'There are no ifs and buts in the question; unless we take long-sighted and effective measures at once – this year – we promote the destruction of the history of past ages of civilization'.158

A first law of protection for Iraq under the mandate had been issued in 1924, thanks to Gertrude Bell, who was an art historian, had travelled extensively in the Near East, was able to speak Arabic fluently and had friendly relations with the Arabs, to such an extent that she was accused of philo-Arabism (in good company with her friend, the legendary Lawrence of Arabia).<sup>159</sup> Petrie, worried by the fate of the antiquities in the British mandates of Iraq and Palestine, had also drawn up a sort of programme, which advised that the excavation should be given by concessions to missions whose director had already carried out excavations and the related publications under an expert guide, that the director would record the findings and publish them within two years, and finally that the finds would go to public museums (apart from great numbers of duplicates). 160 The law of 1924 welcomed these principles in full: it prohibited any excavation without authorization – and that was only granted to missions meeting the technical-scientific requirements, imposed publication within two years from the end of the work and a division of the finds between Iraq (where Bell had set up the Museum of Baghdad, opened in 1927) and the countries of the excavators. 161

A similar process was also afoot in Syria, on the part of the French authorities. Their political ideology is best expressed in an article/manifesto which came out (1920) in the first number of the new journal 'Syria', official organ of

<sup>156</sup> Territorial inventory and laws of protection had already been introduced in Europe at the turn of the nineteenth century.

**<sup>157</sup>** Ottoman laws: Chevalier 2002, pp. 29–41 (documents at pp. 493–505).

<sup>158</sup> Petrie 1918, p. 1.

<sup>159</sup> On Bell cf. Wallach 1996; Fales 2004, pp. 110-117; Howell 2007, and the website www.gerty.ncl.ac.uk.

**<sup>160</sup>** Petrie 1918, pp. 93–96.

**<sup>161</sup>** Pallis 1956, pp. 277–281.

the mandatory administration's cultural heritage, under the signature of Joseph Chamonard (a functionary more than a scholar): the Ottoman centralization and lack of interest had led to grave neglect of the Syrian antiquities: 'Among the provinces of the Ottoman Empire, Syria was without doubt the most damaged. There were none more rich, and above all of such varied richness. And none less protected, nor more deprived of the advantages of her wealth'. 162 But now that the country was 'independent' things would be changed: progress was already being made towards the inventory of the country, the creation of the museums of Beirut and Damascus, the promulgation of a law on antiquities, and the resumption of excavations by both French missions and those of allied countries.

The bodies (of the 'Antiquities Department' type) put in charge of pursuing the tasks of protection in the various countries under both French and British mandates necessarily had to take care of two aspects: the inventory of the country and the definition of a standard procedure in the work of the actual excavation in the field. Both these needs had clear spill-over onto the acquisition and study of data on the ancient cities, as I shall seek to clarify below.

The question of the territorial inventory, alongside the generic aspect, valid for all countries, also had an aspect linked to the specific nature of the tell. In a general way, the mandate's administration had to possess (and therefore make, since none existed before) an inventory of the antiquities as distributed in the territory, and in practice had to put the archaeological sites on the maps which were then being drawn for purposes far beyond the cultural inventory. Quite apart from their exact geographical location, the description of the site, in greater or lesser detail depending on the pieces of information, human resources and available material, also reached the Antiquities Department, in the form of filing cards accompanied by sketch maps, photographs and much else. On the technical level, in addition to the surveying and photographic equipment available at the time (such as the theodolite, already used by Conder and Kitchener in the survey of Palestine in the 1880s), there was aerial photography, which had made its debut in archaeology at the start of the century, 163 but which was only introduced to the Near East, entering the usage of colonial administration, after the First World War, thanks to the admirable work of the British Royal Air Force. Around 1930 we have different examples of aerial pho-

<sup>162</sup> Chamonard 1920, p. 83. On him Chevalier 2002, pp. 225-231, 290-294, and on the conduct of archaeology under the French mandate pp. 283-321.

<sup>163</sup> History of this in Daniel 1950, pp. 294–302. First used at Stonehenge (1906), then at Ostia (1913). For the first territorial applications cf. Crawford 1923 (Celtic villages in Britain) and his manual, Crawford 1929.

tography, both for urban complexes – for example, of Babylon<sup>164</sup> – and, more often, for single buildings or sections of an excavation, for example, at Ur, Uruk and on the Diyala. 165 At about the same date it began to be used for large structures in desert areas (the Roman limes in Syria being the prime example), 166 and shortly afterwards was used to give a picture of the Jordan valley, even although it was devoid of visible structures.<sup>167</sup> Then with the Second World War much wider coverage took place (mosaics of images covering an entire territory) with stereoscopic imaging. We need only to recall here the work of van Liere and Lauffray<sup>168</sup> on the Syrian Jezira, where from the aerial photographs they worked out the type, size and distribution of the tell, traces of the system of roads (which will then be Wilkinson's 'hollow ways', cf. § 5.3) and of the network of canals - but by now we are well beyond the chronological limits of the present paragraph. 169

But if to locate, describe, document and date the classical and Islamic remains of monuments did not present any particular problems, describing and dating the pre-classical tell long remained vague and problematic. Without dating of the sites, and therefore their potential distribution on maps by date, a settlement and urbanistic analysis of the territory proved impossible. In the period that we have defined as 'proto-archaeological', which is the second half of the nineteenth century, there were available no criteria for dating unexcavated *tell*. In Mesopotamia the excavations concentrated exclusively on the major sites (which were dated on monumental and epigraphic grounds), actually ignoring the entire rural territory; but this problem was particularly critical for Palestine, which on one side attracted major attention as the scene of biblical and proto-Christian events, but on the other was poor in monumental sites for the whole pre-classical period. The large surveys first conducted by the American pastors Edward Robinson and Ely Smith between 1838 and 1852,170 and

<sup>164</sup> The aerial photograph of Babylon in Wetzel 1930, (Taf. 1) had been taken by the RAF. Aerial photograph of Tello in de Genouillac 1934, pl. 1\*.

<sup>165</sup> Ur: Hall and Woolley 1927, pl. I.1-2 (excavation of Ubaid from 1923-24; 'courtesy RAF'); also Woolley 1934, pl. 2 (from 1930). Diyala: Frankfort 1932, p. 64 (excavation 1930-31). In the same years photography from hot-air balloons began, especially at Megiddo (1929).

<sup>166</sup> Poidebard 1934 (work from 1925-31). Cf. Bradford 1957; and now Musson and Whimster 1992.

<sup>167</sup> Glueck 1937-39.

<sup>168</sup> Van Liere and Lauffray 1954-55; van Liere 1966.

<sup>169</sup> History of the surveys in the Ancient Near East: Liverani 1994; Lehmann 1999 (with extensive bibliography). On travellers/surveyors of the early nineteenth century also Ben-Arieh 1979, pp. 31-56; Mazower 2002.

<sup>170</sup> Robinson and Smith 1841–56; cf. Wright 1979. pp. 3–8; Ben-Arieh 1979, pp. 75–93.

then by British military surveyors under C. R. Conder and H. H. Kitchener in the 1880s, 171 were based, insofar as identification of the sites goes, on the comparison between biblical and Arab toponyms, and for the dating upon an analysis of the biblical contexts – making, if nothing else, a clean sweep of so many popular stories. But archaeology was not then of any help. We can exemplify this with the brief and rather disdainful description given by the great orientalist (Semitist, epigraphist, biblical scholar) Ernest Renan, returned from his mission to Phoenicia: 'Palestine, as much as any part of the Orient, is covered in sherds, but in sherds without style and hence without date'.<sup>172</sup> Renan had begun his mission in Lebanon, where he was well enough satisfied with the emergence of monumental ruins (albeit always of a Graeco-Roman age) and had then gone on towards Jerusalem, crossing Galilee, where he lost – so to speak – every point of historical reference. These fragments 'without style' were the sherds of ordinary pottery that littered every tell, and which certainly could not be classified by a non-expert eye such as Renan's (nor by anyone else's at that time). Without style and hence without date: there seemed to be no solution. And again in 1907 Gertrude Bell crossed central Syria (passing close by Tell Mardikh, the site of ancient Ebla), bored and in a hurry, lamenting that there was not even a stone standing.<sup>173</sup>

But the turning point had already been reached, if only just before, in the work of Flinders Petrie, 174 who, when excavating Tell el-Hesi, had applied for the first time an admittedly summary stratigraphic approach (as we saw at § 1.8) to the excavation of a *tell*, and a separate sampling, layer by layer, of the material, including that debris 'without style' which before used to be thrown away as useless, and which, on the contrary, revealed significant chronological development. Once the chronological sequence of the diagnostic sherds had been obtained through stratigraphy of the excavated sites, their identification in the course of surveying surfaces allowed the dating of unexcavated sites. In his manual on archaeological technique Petrie could declare, not without a hint of boasting, 'With the brief view of Palestinian pottery gained in a few weeks, on one site at Tell Hesy (Lachish), I found it possible to ride over mounds of ruins and see the age of them without even dismounting." The picture of Petrie surveying and dating, from the top of his camel, 'without even

<sup>171</sup> Conder and Kitchener 1881–88; 1889. Kitchener was to become famous for the reconquest of Khartoum.

<sup>172</sup> Renan 1864, p. 787.

<sup>173</sup> Bell 1908, p. 259.

<sup>174</sup> Moorey 1991, pp. 26-29 and passim.

<sup>175</sup> Petrie 1904, p. 17; earlier id. 1891, p. 40.

dismounting', the tiny fragments of sherds scattered on the soil is indicative of the individual and the period.

The possibility of dating the sites on the basis of the surface sherds depended, however, on the availability, area by area, of one or more stratigraphically excavated guide-sites, to which to anchor the dating of the unexcavated sites in the surrounding region. Both the one and the other problem – the stratigraphic excavation and the territorial inventory – obviously made much progress from Petrie's triumphant announcements to the end of the period of mandated administration; but progress was slow and not general. In the 1930s land surveys of an administrative character (British in Iraq and Jordan, French in Syria and Lebanon) still had nothing to do with scientific knowledge. There were a few exceptions, like Max Mallowan's 'trespass' into the Syrian Jezira to make an inventory of the sites of the valleys of Khabur and Balikh.<sup>176</sup> But they were exactly that - exceptions.

Among the non-mandatory powers, Germany concentrated above all on the high lands of Anatolia and Armenia, but the truly commendable travels of Lehmann-Haupt in Armenia<sup>177</sup> were still carried out in the old tradition of the 'voyage to the East' with an interest exclusively monumental and epigraphic, and with little effect on knowledge of the settlement system; the same goes for the Anatolian travels of von der Osten on behalf of the Oriental Institute of Chicago.<sup>178</sup> The United States were above all interested in biblical Palestine, and Nelson Glueck's repeated visits to Jordan merit particular notice and appreciation.<sup>179</sup> He was interested in, or perhaps rather, fascinated by, the Arabian desert, difficult to reach for logistic and environmental reasons and also because of political-religious problems (linked to he inaccessibility of Mecca). Here also matters remained at an adventurous rather than a scientific level, at least until the Austrian geographer Alois Musil made repeated journeys in the 1920s to Arabia, Jordan and the mid-Euphrates, seeking to reconstruct the story of the area on the basis of both the visible ancient sites and the eastern sources (including cuneiform).180 But we will need to wait until 1936 finally to have a project which really aimed, with appropriate methods, at the reconstruction of the settlement history of a precise regional context: which was the project conducted by Robert Braidwood (of the Oriental Institute of Chicago) on the plain of Antioch, the 'Amuq, geographically Syrian and ethnically Arab, but

<sup>176</sup> Mallowan 1936; 1946.

<sup>177</sup> Lehmann-Haupt 1907; 1910-31; cf. § 2.5.

<sup>178</sup> Von der Osten 1927; 1929; 1930; 1933.

<sup>179</sup> Glueck 1933–34; 1934–35; 1937–39; 1945–49; 1970.

<sup>180</sup> Musil 1907-08; 1927a; travels in Arabia id. 1926; 1927b; 1928.

annexed (after the First World War) to Turkish territory. The sampling of the sherds (comparing them to the sequence secured from the excavation) site by site (without even subdividing each site into sectors or areas) produced distribution maps for periods of great historical and settlement study potential.<sup>181</sup>

We can therefore say that up to the eve of the Second World War the setting of the cities in their regional (or at least area) context, that is, the study of the relation between city and countryside, remained a question to be discussed, in line with principles that were by now practicable, and even occasionally practised, but which were still not realized and made general. The zeal in recording and making inventories was not as yet replaced by the wish to understand the phenomena and historical movements.

#### 2.11 New procedures: excavation by squares

There are stories, entertaining but unfortunately true (or at least of fine invention), repeated in various histories of archaeology, of the archaeologist who, visiting another's site, failed to hide his amazement, declaring 'By Jove! You have walls!' or, vice versa, of the archaeologist who, showing his own site to a visiting colleague (we are at Tello in 1930), confesses 'It's incomprehensible, my dear chap, but we never find walls'.182 Thirty years after the 'discovery of the bricks' by the German school, there were still those who carried out 'messy' excavations, failed to identify walls of unfired brick, and clearly left the excavation to the workmen's own expertise and honesty, without continuous supervision. And thirty years from Flinders Petrie's 'discovery of stratigraphy' there were still those who quarried the tell by carrying away everything, as though the deposits from a mine.

The German method had only been adopted by some missions, and besides even it was deficient when it came to recovery of the stratigraphy, which was of an architectural character (superimposition of the different phases of a building) but did not take account of the fill. Some images of Koldewey's excavation of Babylon are enlightening on this subject: the sections with houses, walls and pits, arranged on three levels, 183 or the great ditch (which is from 1910, but was reproduced many times) with the side sketched impressionistically.<sup>184</sup> Andrae also, at an advanced age, was to declare his appreciation of

**<sup>181</sup>** Braidwood 1937 for the survey; 1960a for the excavation.

**<sup>182</sup>** For example, Lloyd 1947, p. 180 n. 1.

<sup>183</sup> Koldewey 1913, Abb. 154 at p. 232.

**<sup>184</sup>** Already in Koldewey 1901, Abb. 3 at pp. 20–21; then *id.* 1911 Taf. X; 1913, Abb. 124; Reuther 1926, II, Taf. 4; etc.

the contribution made by stratigraphic and pottery dating, particularly for the older phases, 185 but there can be no doubt that he always remained faithful, in working methods, to the sequence of buildings or phases of buildings, then having recourse to epigraphic data in order to date them.

The great merit in the British administration of the archaeological heritage of the Near and Middle East was that of having developed, through the work of Mortimer Wheeler, 186 the system of excavation by squares of 4 metres by 4 metres (or the equivalent in feet) separated by divisions (baulks) a metre wide; this gives a right-angled grid expandable at will, which greatly facilitated the recording of topographical points, both horizontal (for the production of ground plans) and vertical (for the production of sections), with the instruments then available (theodolite, measuring tape and plumb line) and used by archaeologists themselves even in the absence of surveyors or architects. The systematic three-dimensional placing of the finds and the excavations is the Wheeler method's great innovation. The British archaeologist mentioned that precise stratigraphic recording had already been put to use from the mid-nineteenth century onwards for English funerary tumuli, but he justly felt the need to complain that current standards in the Near East were mostly still fixed to the Flinders Petrie level, with walls that floated into nothing, with no properly stratigraphic connections: that is, architectural, but not 'geological' sequences. The fact is that the transfer of method from a tumulus to an entire *tell*, from a tomb to a layered city, is not easy (not only because of the size element), but what is more, the excavations – both before and during the mandates – were carried out by crowds of hundreds of workmen with insufficient presence of archaeologists, and with inadequate control and recording of the layers and the finds.

Excavation by squares on the contrary allowed the work to be organized by way of stable teams of workmen with constant supervision by the archaeologists; topographic recording to be carried out easily in the course of the excavation; and the sections to be double-checked and sketched after the excavation had been carried out, 'reading' the strata on the faces of the baulks. It was an undoubted step beyond the open architectural excavation of the German school, if only because the more controlled grid circumscribed the margin of error in assigning the materials to their contexts. Wheeler then outlined a strategy for large urban excavation, in which he wisely advised great trenches across the encircling wall, extensive excavations of a significant level, excava-

**<sup>185</sup>** Andrae 1949, p. 21.

<sup>186</sup> Wheeler 1954; but the method had already been developed in the 1930s. On Wheeler, cf. Hawkes 1982.

tion of a city gate and its network into the interior urban fabric – ignoring, however (perhaps for patriotic reasons), the similar strategy of the German school and the results already obtained by Koldewey at Babylon and Andrae at Assur, as he also ignored the advances in the understanding of the stratigraphy of the tell already made by the German-American George Reisner at Samaria.187 The system of excavation was initially developed in the great protohistoric sites of the Indus valley, excavated with ample breadth and depth (Wheeler himself excavated Harappa and Mohenjo Daro, and then became general Director of Antiquities), but was then 'exported' into the British Near-Eastern mandates (Iraq, Jordan, Palestine and Cyprus) and finally also applied by the missions of other countries. Wheeler never worked personally in the Near East, but his method was used in Palestine by Kathleen Kenyon, 188 and also perfected by her (the Palestinian stratigraphies being much more minute than the huge fills of the cities of the Indus).

But the more systematic developments of both Wheeler and Kenyon arrived much later; in the middle of the 1930s the standard of excavation under the mandates remained somewhat unequal and unsatisfactory, and excavation by squares was practised in Palestine rather than in Mesopotamia. 189 I can review here only a few cases of urban excavation, but they seem to me among the most important. Leonard Woolley excavated at Ur in the years 1922–34. To judge from the final reports, 190 the photographs (which are very good) show a careful excavation, with the walls and floors carefully finished, and with the bricks made clear. The plans on the other hand are too approximate, with walls shaded in black, straight and of a constant width, and with only the burntbrick floors made clear. The sections are almost non-existent, and when they do exist, <sup>191</sup> they are of an architectural type or anyway very schematic. The fact is that the, extensive, excavation did not proceed by means of squares but followed the buildings, without reference to the baulk faces for sketching, unless in the deep soundings (like that of the famous 'Flood'). The ample reference grid (squares of 25 by 25 metres) was only used for the survey, not for the excavation. There was no architect on the excavation, and the poverty of the

**<sup>187</sup>** Reisner 1924; cf. Moorey 1991, pp. 35–36, 94–99; Silberman 1982, pp. 171–179. On stratigraphic methods in Palestine, by Reisner and Wheeler and Kenyon, Hachmann 1994, pp. 24-

<sup>188</sup> Kenyon 1939; 1952. On Kenyon cf. Moorey 1991, pp. 94-99 and 122-126; Lönnqvist 2008; Davis 2008.

<sup>189</sup> To take an example, Megiddo: architectural stratigraphy, squares 25 by 25 metres, but an arbitrary cut of 30 cm. (Fisher 1929, pp. 26-39).

<sup>190</sup> Hall and Woolley 1927; Woolley 1934; 1939; 1955; 1965; Woolley and Mallowan 1962; 1976.

<sup>191</sup> For example Woolley 1955, pl. 71-72 and pl. 83.

surveys of the architectural structures appears all the more evident if compared to the accuracy of the drawings of the tombs, done by the archaeologist himself. 'Methodological' criticisms in hindsight are always unjust, and in the case of Ur risk forgetting that Woolley realized there a large urban excavation, of dimensions that had not been reached since those of Babylon and Assur, and with results much more convincing than those of other British missions at the same time in the Assyrian capitals. 192

The Chicago missions in the Diyala in the 1930s (which I shall deal with better at § 2.13) seem attached to the German heritage: both the sections and plans of the buildings in superimposed phases (distinguishable by the different backgrounds) show a limited attention to the three-dimensional arrangement of the single buildings, 193 without presenting adequate evidence of the stratified fill. In the publications of the years 1960 and 1970 the ground plans still fail to bring out the bricks, the walls have straight edges and uniform width, if anything it is the floors that are distinguished, 194 and the stratigraphies are of the architectural type (always with horizontal layers, without foundation trenches or anything else).<sup>195</sup> In the Diyala a reference grid was used with squares of 20 by 20 metres, inside which were numbered a sequence of loci, which were both a stratigraphic and an arbitrary unit. 196 In general, the Chicago mission did not make much use of squares: in the Diyala and at Nippur because of the sandy soil, at Khorsabad because they were dealing with a large palace, excavated room by room.

At Nippur, we notice already in the 1960s a repeated difficulty in overcoming the schematic ground plans and architectural sections, 197 and not until the next generation, under the direction of McGuire Gibson, were real stratigraphies in an urban context seen. 198 In the report of 1975 we note that

<sup>192</sup> The deep sounding at Nineveh (1932) resulted in a schematic section, cf. Thompson and Mallowen 1933, pp. 127-134 and pl. LXXIII; now Gut 2002, with fig. 4. On Nimrud there is the excellent summary of Oates and Oates 2001.

<sup>193</sup> Cf. Delougaz and Lloyd 1942, pl. 14 (architectural section) and passim (ground plans of the buildings at superimposed stages); Frankfort 1936, fig. 2 at p. 3; Frankfort and Lloyd 1940 (but excavations 1930-34), passim; Delougaz 1940, pl. XII (architectural section); and again Delougaz, Hill, and Lloyd 1967, passim.

<sup>194</sup> Delougaz, Hill, and Lloyd 1967, pls 2-13, 24-29, etc.; Hill, Jacobsen, and Delougaz 1990.

<sup>195</sup> Ibid. pl. 15.

**<sup>196</sup>** Delougaz 1940 (excavations 1931–34): p. 5 note 5: squares 20 by 20.

<sup>197</sup> McCown et al. 1967: schematic plans (pl. 5) and architectural stratigraphies (pl. 66). the same in McCown et al. 1978 (pl. 1): cf. still Zettler 1993 (excavation 1975-76), and McMahon 2006 (excavation 1989-90).

<sup>198</sup> Gibson 1975 (e.g. fig. 9 at p. 22, fig. 54 a. p. 78) and 1978 (excavations 1972-73), passim.

squares are being used not for excavation but only for the recording, but in the report of 1978 they are abandoned even for recording, which is done by loci.199

For different reasons (involving prehistoric excavation, with accurate and very detailed recording) Robert Braidwood's first mission to 'Amuq set up the usual grid of squares of 20 by 20 metres, for the purpose of surveying, but then the excavation often moved into deep soundings to reach the prehistoric phases.<sup>200</sup> Afterwards squares were also abandoned for historic periods and urban contexts;<sup>201</sup> there were differences between the respective field sites and excavators but by and large there were schematic ground plans (not distinctive), with superimposed phases, and architectural stratigraphy. Obviously the execution and recording of the prehistoric excavation were normally more accurate, while in the large urban excavations other problems and other needs arose. Next were to come Braidwood's 'grandchildren' and Adams' 'children',202 to overcome every delay, presenting properly stratigraphic sections, detailed and properly distinctive ground plans, right across the spectrum of biological analyses, but they will do this in contexts both simpler (of a village) and older (proto-historic).

The French lack of interest (if not contempt) for the methodological and procedural innovations is well expressed in a number of general studies published by André Parrot, the famous excavator of Mari, who in writing a history of Mesopotamian archaeology does not even think it necessary to mention the innovations of the German school at the beginning of the century;<sup>203</sup> and in establishing excavation methods and techniques remains at a very empirical, practical level, of great conceptual poverty, and shows no sign of being aware of the stratigraphic revolution of Wheeler and Kenyon, whom he does not even cite.204

In concrete terms Parrot directed the mission of excavation at Mari, 205 where he excavated both the pre-sargonic temple and, above all, the palace of the Old Babylonian era. In both cases the final reports are marked by schematic

<sup>199</sup> On the old excavations of Nippur deJong Ellis (ed.) 1992, with contributions from Westenholz (pp. 291-295) and Zettler (pp. 325-336) and Bregstein and Schneider's bibliography (pp. 337-365).

**<sup>200</sup>** Braidwood 1960.

<sup>201</sup> Haines (ed.) 1971.

<sup>202</sup> E.g. Algaze (ed.) 1990.

**<sup>203</sup>** Parrot 1946, pp. 169–263.

<sup>204</sup> Parrot 1953a, pp. 15-100.

<sup>205</sup> Excavations 1933-38; then 1951-54, 1960-74 and 1979-2011; cf Parrot's popular works 1945; 1974; now Margueron 2004, pp. 10-13, 554-556.

ground plans and very simplified architectural sections (not stratigraphic). In particular the palace, which was immediately considered (and 'advertised') as the most important building of the early second millennium and was found in an enviable state of preservation (destroyed by the fire kindled by Hammurabi's troops), has no stratigraphy; the ground plans are somewhat simplified; there are numerous and not very careful drawings of the various rooms and architectural details; and finally, there is no analysis of the internal traffic and structure of the palace in its various purposes. The photographic evidence, on the other hand, is good, and also the three-dimensional (axonometric) reconstruction (which was then repeatedly published).<sup>206</sup>

The excavation of Ugarit was, on the other hand, entrusted to the Alsatian Claude Schaeffer, who was by training a prehistorian. The site had been discovered by chance, and attention, at first centred on the chambered tombs and harbour area, then moved to the *tell* to identify finally the royal palace (in 1939, just on the eve of the war's interruption).<sup>207</sup> The mission's architects, W. Forrer and P. Pironin, established a practice (which continued in the post-war era), with very precise ground plans, but no stratigraphy, and with the position of the objects measured according to their distance from the surface (which was, however, variable) of the ground. The procedure can be criticized, and the policy for recovery, even for the inscribed tablets, seems very offhand,208 but all the same the precision of the records has allowed reconstruction of the threedimensional position of the finds, with good results (including the demonstration of the position of the archives on a higher floor).<sup>209</sup>

As for the German excavations in the period of the mandates, with Babylon and Assur frozen, they excavated above all Uruk, under the direction of J. Jordan, A. Nöldeke, and E. Heinrich.<sup>210</sup> The basic ground plan, made with the theodolite in 1913,211 was to be used for half a century, added to with the placing of the principal monuments excavated. For the excavation the working method inaugurated at Babylon and Assur before the war was fully adopted,

<sup>206</sup> Parrot 1958, pl. III (axonometric), IV (aerial photograph); also pls. II and XXIII (architectural non-stratigraphic sections).

<sup>207</sup> Excavations 1929–39; then 1948–66 and from 1968 to the present with some interruptions (from 1974 with direction of M. Yon).

<sup>208</sup> The procedure described by Schaeffer (ed.) 1962, pp. 47–51, is disconcerting: the tablets which at first glance appeared illegible were thrown away!

**<sup>209</sup>** Van Soldt 1986; 1991, pp. 47–231; Liverani 1988.

<sup>210</sup> List of preliminary reports (Uruk vorläufiger Berichte, 1-11) in Finkbeiner 1993. Van Ess, Weber, and Nöldeke's article (2008) is based on the correspondence of the individuals concerned.

<sup>211</sup> Jordan 1930, Taf. 1.

with little appreciation of the real innovations of the British mandated period: excavations were carried out over large open surfaces, following the buildings. For recording a large grid was used, with squares of 100 by 100 metres, subdivided into smaller squares (20 by 20 metres), with the sole purpose of surveying. Even the style of drawing derived from the kind established by Koldewey, but of lower quality. The ground plans were of two kinds: detailed ground plans, with the bricks of the walls and brick floors highlighted one by one (following the tradition of Koldewey and Andrae, but again of lower quality), and more summarizing plans, with walls very schematic and marked in black. As for the stratigraphy, the excavation of Uruk was very extensive but not at all deep (not only the late levels, but also the archaic were excavated on the surface), with modest superimpositions; the sections were therefore low and of an architectural type. There is a record of a deep sounding with an impressionist section (carried out in 1932)<sup>212</sup> which was no further advanced than that at Babylon twenty years earlier. The three-dimensional reconstructions were few and poor,<sup>213</sup> and the site was so vast that it was never possible to visualize the city, neither as a whole nor by area – but the abandonment of an extended three-dimensional vision was a general phenomenon for the whole forty years from 1920 to 1960.

In the period after the Second World War, with the resumption (1954) of excavations at Uruk, the German mission, directed by Heinrich Lenzen<sup>214</sup> and then by Jurgen Schmidt, 215 still shows great continuity, in methods of excavation and survey, and even in the style of drawing, with the tradition inaugurated by Koldewey, and always with few three-dimensional reconstructions.<sup>216</sup> One single innovation: the sections also recorded the fill<sup>217</sup> and in the photographs (very good), apart from the single bricks being clearly brought out, the layers in the walls are also deeply marked. But they always lack the reconstruction of the whole city, or at least have only that of Eanna, of which there is the first plan of the whole thing, 218 which is then updated as and when the excavation proceeds. Excavation and recording methods were to be partly renewed and updated with the new direction of Rainer Boehmer, from 1980 onwards: the major changes (publishers' series, drawing style) seem more

<sup>212</sup> Eichmann 1989, pp. 39-44 and Beilage 8.

<sup>213</sup> E.g. Jordan 1930, Taf. 17 (G. Martiny's).

<sup>214</sup> Lenzen 1955 and successive reports from 1956 to 1974.

<sup>215</sup> Schmidt's reports from 1972 to 1983.

<sup>216</sup> Lenzen 1959, Taf. 41.

<sup>217</sup> Ibid. Taf. 40.

<sup>218</sup> Lenzen 1965, Taf. 31.

cosmetic than of substance, and the opening to biological sciences is really very modest.<sup>219</sup> However, for the care taken and for their results, the revision of the stratigraphy of the 'old' campaigns<sup>220</sup> and of the architecture (without, all the same, three-dimensional reconstructions),<sup>221</sup> and the survey of the surfaces (of which we shall speak at § 5.3) are important.

# 2.12 The 'colonial' excavations: palaces and urban neighbourhoods

It was during the 'colonial' period (or more correctly the period of the 'mandates'), between the two world wars, that the Mesopotamian city assumed a concrete and realistic form, thanks to the great and wide-reaching excavations made possible by the combined effect of various factors: the direct political and economic control of the country, the wish to recover the ancient centres of the 'cradle of civilization', 222 the extremely low wages of the workmen, and the introduction of the excavation method by squares and baulks (sensible but also rather fast). To the almost exclusive concentration on palaces, typical of the nineteenth-century excavations, were now added extensive excavations of temple complexes, systems of fortification, and residential neighbourhoods. In fact this more complete vision had already been practised by the Germans in the first fifteen years of the twentieth century, at Assur and Babylon: but then in the 'colonial' period the German presence underwent a strong crisis,<sup>223</sup> and the direction of operations was taken up anew by the British (in Iraq and Jordan-Palestine) and the French (in Syria-Lebanon). Together with the names of biblical ascendancy, from Ur to Nineveh, the great public of archaeological enthusiasts learnt to familiarize themselves with 'new' names, such as Mari and Ugarit, which did not have a destiny already marked (so to speak) by ancient stereotypes, and from which therefore a more 'normal' approach could be expected.

The stereotypes were difficult to overcome, however, with the result that what today seems paradoxical is, on the contrary, completely understandable

<sup>219</sup> H.-J. Gregor in Boehmer 1987, pp. 71-86.

<sup>220</sup> Eichmann 1989.

<sup>221</sup> Van Ess 2001 (second volume, from the Akkadian age to the Middle Babylonian, with an introduction on the methodology; the first volume with the Eanna of late Uruk is in prepara-

<sup>222</sup> On colonial ideology in the Near East, apart from the 'cult books' of Said 1978 and 1993, cf. Mitchell 1988.

<sup>223</sup> Hauser 2011.

in the cultural temper of the time: that is, from an excavation such as Ur, whose chief merit was bringing to light both the administrative districts and the neighbourhoods of dwellings [fig. 19], the results considered more 'valuable' by the public, thanks to the excavator himself, Leonard Woolley,<sup>224</sup> were altogether of another sort: the royal cemetery whose startling 'treasures' were impressive in themselves, and then the 'biblical' discovery with the remains of the 'Universal Flood' and with the ziggurat (obviously a 'Tower of Babel'), while the urban fabric became unfailingly presented as 'of the time of Abraham' (who, as we know, came from Ur) as the sole possibility of making it interesting.<sup>225</sup> To Woolley's credit it must be observed that when he was responsible for writing the chapter on the Near East from 3000 to 1200 BC (that is, for the whole of the Bronze Age), for a Unesco projected history of humanity, a context therefore where it was unnecessary to capture a public, he decided to entitle it The Urbanization of Society, 226 even if the text is actually very general, and painted pictures but hardly raised issues (and is besides completely without notes or bibliography or figures).

Turning to the popular approach, a few words are needed on the alluvial stratum which Woolley was to link to the legend of the universal flood, recognizing that this was obviously local flooding, not universal, and yet claiming that this had really been that flood which had given rise to the Babylonian and then the biblical myth. Other alluvial strata were then discovered, at Ur itself and at other sites, belonging to other chronological positions, and corrections were made,<sup>227</sup> which, however, did not target the question of method: that is, the story of the flood, being a myth, aims at providing an origin for a recurrent problem by means of a colossal event – the frequent inundations of Lower Mesopotamia due to the Euphrates overflowing in the rainy season – believed to have been true in remote antiquity. And then we know – and archaeologists should know it well - that their caveats and reserve and explanations will inevitably be swept away by the 'master idea' issued to capture the attention of the public.

As for the ziggurat, the one at Ur was the first to be excavated (or, put better, freed from the mound of sand) and so provided an opportunity for a

<sup>224</sup> On Woolley, cf. Mallowan 1960.

<sup>225</sup> Woolley 1929, pp. 15–26 (flood), 87–113 (ziggurat), 124–132 (houses 'of the time of Abraham'). Comments in Micale 2008a.

<sup>226</sup> Woolley 1957.

<sup>227</sup> Mallowan 1964; Raikes 1966. Schneider 1960, p. 13 still believes in the stratum of the 'universal' flood and even the Assyriologist Saporetti 2006, pp. 79, 109-114 believes in the flood as a historical event.

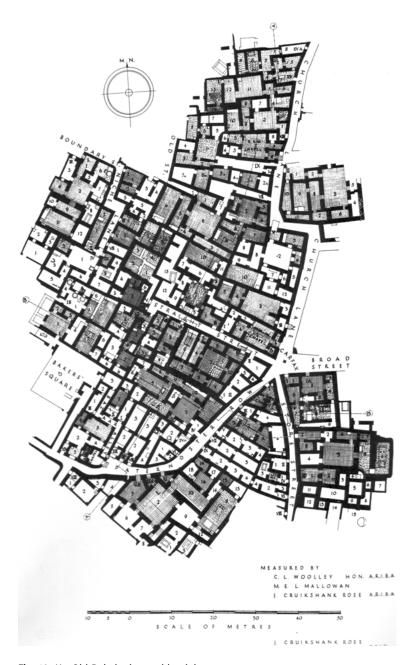


Fig. 19: Ur, Old Babylonian residential quarter.

reconstruction which was not only realistic, and not heavily influenced by the biblical-medieval-baroque tradition, but also differentiated by periods of construction and successive restorations. The images, the work of M. V. Duffell (1937), were to be published several times over, both in the official reports and in the popular works.<sup>228</sup>

But we come now to the inhabited neighbourhoods: here Woolley, with typical British humour, but also with an implicit wish for normality, gave to the excavated streets and alleys the names of streets in English cities, and house numbers to the individual houses, and so a certain house is '2 Paternoster Row', another '2 Quiet Street' or '5 Gay Street' and so on.<sup>229</sup> The 'type' of the Babylonian house was identified, corresponding perfectly to the type of Near-Eastern house (by now well known to the colonial administrators), turned towards the internal courtyard rather than towards the street; and attempts were also made to identify workshops or small shops, turned, in contrast, towards the street. Other urban neighbourhoods were excavated (and examples of houses reconstructed three-dimensionally), particularly at Tell Asmar,<sup>230</sup> and in the Levant at Megiddo.<sup>231</sup> In this way the bases of evidence were laid for facing the problems of habitation type, questions which will later be studied, above all in the 1970s and 80s, by German and French scholars: there was the issue of distinguishing whether we were dealing with a courtyard or really a central room,<sup>232</sup> a development from the 'three-part' house typical of the Ubaid period to that with the central courtyard of the historical age;<sup>233</sup> the question of the existence and extension of the upper floor; the problem of the passage from the scattered distribution of villages to the compact organization, marked by blocks of buildings and streets, typical of the city,<sup>234</sup> and so on.

When tackling the question of the various areas' specialized functions, Woolley tried to bring his neighbourhood to life, with chapels, schools, shops,

<sup>228</sup> Woolley 1939, pls. 86 (Neo-Sumerian phase) and 88 (Neo-Babylonian phase); Woolley 1965, pl. 51; Mallowan 1966, pl. 126.

**<sup>229</sup>** Woolley 1965, pp. 75–83; Woolley and Mallowan 1962, pp. 43–48; 1976, pp. 12–19, 96–168. On the inhabited neighbourhoods of Ur cf. van de Mieroop 1992a; Jahn 2005, pp. 37-83.

<sup>230</sup> Frankfort 1934; ground plan at fig. 1, modern parallel in fig. 2, reconstruction (of H. D. Hill 1933) between pp. 18 and 19. Cf. also Delougaz, Hill, and Lloyd 1967 (excavations 1931-38), with treatment of the whole (pp. 145-151 and 274-278: the private house 'type').

<sup>231</sup> Guy 1931, fig. 55 at p. 35 (reconstruction, of L. C. Woolman, 1930).

<sup>232</sup> Above all Schmid 1999; also Margueron 1980 (a house with a central courtyard, and its modular use in the palaces).

<sup>233</sup> Roaf 1995, p. 426. The three-part type continued in the Levant until the end of the Iron Age, with the so-called 'four-room house' (Braemer 1982; Shiloh 1987).

<sup>234</sup> Schmidt 1964; continued by Huot 1970.

workshops and places of business. But it is noticeable how it was easy at that time to identify (at Ur as at Nippur)<sup>235</sup> the 'administrative areas', actual or supposed to be such, thanks to the presence of the cuneiform tablets, whose placing was recorded in the course of the excavation, while it remained difficult to place other manufacturing specializations (as was to be done later, even recording the waste from the processes, and carrying out analyses of the soil), and practically impossible (then as now) to identify quarters based on family relationships, ethnicity, or other immaterial factors.<sup>236</sup>

If attention on the inhabited neighbourhoods is the most innovate feature of the colonial period (without however forgetting how much had already been done at Babylon-Merkes and Assur),<sup>237</sup> the excavation of the royal palaces remained the heaviest commitment. The most sensational cases, of which we have already seen the practical aspect and the methods used, were those of the palace of Mari (in the mid-Euphrates valley, and so on the borders of Lower Mesopotamia) of the eighteenth century BC, and of the palace at Ugarit (on the Syrian coast, and so in the Levant region) of the fourteenth to thirteenth century. We are dealing here with the first palaces found in an excellent state of preservation (both had been destroyed and burnt, one by Hammurabi of Babylon, and the other by invaders, the 'Sea peoples'), completely excavated (unlike the Assyrian palaces at the time of Layard), with careful recording of the finds and the clear intention of being able to reconstruct the entire building, its use of the single apartments, and the 'life' that revolved inside them. The project of a final and complete publication on the two palaces is an unhappy story. We need to wait until Margueron succeeds the excavator Parrot to have a complete presentation and adequate analysis of the palace at Mari: and we need to wait for Durand to take over leadership of the team of philologists for the publication of the archives, in order to have substantial information on the textual side. And for Ugarit, the excavator Schaeffer intended to begin the series 'Palais Royal d'Ugarit' with a volume containing 'the history of the building, its organization, and also the objects and furniture recovered from its ruins',<sup>238</sup> and then to end it with a volume by W. Forrer (the mission's architect) on the architecture of the palace. These two volumes were never published, and the series remains limited to the volumes of the texts (numbered from second to sixth).

<sup>235</sup> McCown et al. 1967; now also Meijer 2004 (Hammam et-Turkman).

**<sup>236</sup>** Postgate 1992, pp. 76–79.

<sup>237</sup> In the 1900s, Koldewey (Merkes) and Andrae (Assur and Fara) excavated a number of private houses, but that was not their real interest.

<sup>238</sup> Schaeffer 1955, p. ix.

## 2.13 Henri Frankfort, from Egypt to the Divala

During the period of mandates, as well as the colonial powers' excavations, there were also those of German and American missions. The first worked under clear difficulties, as a result of Germany having lost the war (and so was internationally marginalized and in grave economic crisis): they were able to resume the excavation of Uruk, but not those of Babylon and Assur, true symbols of their past splendour, and they remained as though anchored (even in their method) to the great pre-war model, which had been innovative then but had rapidly become dated. The American intervention, by way of contrast, was characterized by an aggressive entry into the field, this also the result (but in the opposite sense) of the interruption of the First World War and their new politics of presence in the international field.

The year immediately after the Great War, 1919, saw the foundation of the Oriental Institute of the University of Chicago, for which the multi-millionaire John D. Rockefeller put funds (his own, private) at the disposal of the University of Chicago, first in 1902 and then again in 1919, of an unprecedented sum which then remained unsurpassed in the field of human sciences. While the funds came from Rockefeller, the project was that of the Egyptologist James Henry Breasted, who was the first director and who laid down the policy lines: 'in the ancient Near East [...] lies the evidence out of which we may recover the story of the origins and the early advance of civilization, out of which European culture and eventually our own civilization came forth. The task of salvaging and studying this evidence and of recovering the story which it reveals - that is the greatest task of the humanist today'.239 These intentions were perfectly visualized in Breasted's own bookplate, as reproduced in low relief over the entrance to the Institute, which shows the meeting of the modern archaeologists, backed by Roman legionaries and mediaeval crusaders, with the kings and scribes of the Ancient Near East, from whom they receive, as though in a relay, their cultural heritage. Today this vision of the ex Oriente lux type strikes us as very dated, but that was not the case then, and anyway the Institute needed to appeal to sentiments both deep-rooted and widespread, in order to obtain their funding.<sup>240</sup>

Even though the economic and financial crisis of 1929 greatly reshaped the Institute's possibilities and ambitions after just ten years of life, activity in the

<sup>239</sup> Breasted 1933, p. 2 (original italics); cf. id. 1928. On the foundation of the Institute, Wilson 1970; on Frankfort and the history of the Institute, Lloyd 1963, pp. 29-47; 1986; Kuklick 1996, pp. 99-122.

**<sup>240</sup>** Comments by Larsen 1989; Liverani 2005a, pp. 223–225.

field (to which were added large epigraphic and philological projects) knew remarkable development, above all in Egypt and Mesopotamia, but also with an important presence in Persia (Persepolis),<sup>241</sup> in Palestine (Megiddo)<sup>242</sup> and in Anatolia.<sup>243</sup> In Mesopotamia there was an important operation at Khorsabad (which by now was no longer of interest to France) and in other Assyrian sites;<sup>244</sup> but we need here to linger over the large regional project of excavations in the Divala valley, a little to the north of Baghdad, and on the figure of Henri Frankfort, who planned and directed these activities. Breasted clearly had great regard for Frankfort because of his earlier work in Egypt, in particular at el-'Amarna;<sup>245</sup> but Frankfort was a scholar in all fields, who ranged from the history of art to the history of religion and of culture in general, and who, in work in the field, gave the very best of himself in Diyala.<sup>246</sup> We have already touched on (§ 2.11) the aspects of the excavation's methods and procedures, and on the not very rigorous adoption of the new stratigraphic approaches. We need here, on the other hand, to underline the great formal (I would even say aesthetic) care taken over the three-dimensional reconstructions carried out by Frankfort's architects and illustrators - not forgetting that Frankfort himself was by training an art historian and was, once he had left the practical and archaeological Chicago, to find his ideal place as director of the more theoretical and meditative Warburg Institute in London. A number of the images of temples, palaces and urban neighbourhoods of the centres of Diyala are heirs to the substance of the volumetric vision of the German school, but recast in an up-to-date and, I would say, less artisanal form of drawing.

Unlike the normal heads of mission, Frankfort, although interested in the theoretical aspects of town planning and of architecture, left the practical running of the excavation to his architectural and archaeological colleagues (above all to Pinhas Delougaz and Seton Lloyd respectively). Personally, he was more interested in fitting the results of the excavations into the general panorama of Mesopotamian civilization, and in defining its 'shape' (in the

<sup>241</sup> Excavations by Herzfeld (1931-34) and Schmidt (1935-39), published by Schmidt 1953-

<sup>242</sup> Fisher 1929; Guy 1931; May and Engberg 1935.

<sup>243</sup> Schmidt 1931 (Alishar); travels of von der Osten 1927; 1929; 1930; 1931.

<sup>244</sup> Frankfort 1932; 1934; Jacobsen and Lloyd 1935; Loud 1936. The development in Assyriology in Chicago profited from the exodus of German Jewish scholars because of Nazi racial discrimination: Benno Landsberger and Hans G. Güterbock passed by way of Turkey to end up finally at Chicago.

<sup>245</sup> Frankfort 1923.

<sup>246</sup> Frankfort, Jacobsen, and Preusser 1932; Frankfort 1932; 1934; 1935; 1936; Frankfort and Lloyd 1940; Delougaz 1940; Delougaz and Lloyd 1942.

sense of the character peculiar to it) and the specific nature of the city's role, which he considered central. He did this above all through two contributions: an article on the urbanistic structure and a chapter in a small book (the result of a series of conferences), which appeared in 1950, but which it is opportune to anticipate here because it is the final outcome of his work in the field in the 1930s.

The article appeared in 'Town Planning Review' when Frankfort, by now transferred to London to direct the Warburg Institute, decided to commission a series of articles for the journal, which would cover the whole of the Ancient Near East.<sup>247</sup> Notably, in the same year Frankfort, as co-editor of the new Unesco journal 'Cahiers d'Histoire Mondiale', wished in this position to introduce the same discussion, but from a philological viewpoint, commissioning in this case too a number of articles from leading specialists;<sup>248</sup> the result was that his role in defining and founding knowledge of the Ancient Near-Eastern city was at this period absolutely decisive. But then, somewhat paradoxically, among his own ideas those which had the greatest impact on the progress of study were rather those on the demographic value of the urban centres, which were certainly among the least indicative of his vision of the 'form' of the city.

The conferences, held in 1948–49 at Bloomington, Indiana, and published two years later in a small volume, selected a number of important aspects to clarify the development of Mesopotamian and Egyptian civilization, and one of the discussions was precisely that of the city: 'Now one might say that the birth of Mesopotamian civilization, like its subsequent growth, occurred under the sign of the city'.249 In developing his argument, Frankfort was in debt to Deimel and above all Schneider for his use of the administrative texts, and to Jacobsen (who was his epigraphist in the excavation of the Diyala) on civic aspects. His debt to Gordon Childe is perhaps deeper than he would wish to appear (we note his ideological reserve over the term 'revolution', and too on the notion of 'surplus'):<sup>250</sup> the fact remains that the indicators of visible urbanization on the archaeological record coincide in part with those indicated by Gordon Childe: size of settlements, monumental architecture, writing, figurative art.<sup>251</sup> The selection of factors of a civilized order is immediately noticeable, and the rejection of socio-economic ones. Frankfort's model is in effect

<sup>247</sup> Frankfort 1950. The other articles were those of Childe on the urban revolution (Childe 1950, cf. § 3.1), of Fairman 1949 on Egypt, and many more on the Egyptian world.

<sup>248</sup> For the articles by Falkenstein 1954 and Kraus 1954 on the temple-city cf. § 2.9.

<sup>249</sup> Frankfort 1951, p. 51.

**<sup>250</sup>** *Ibid.* p. 57, note 2 (revolution), and pp. 63–74 (surplus).

<sup>251</sup> Ibid. p. 49.

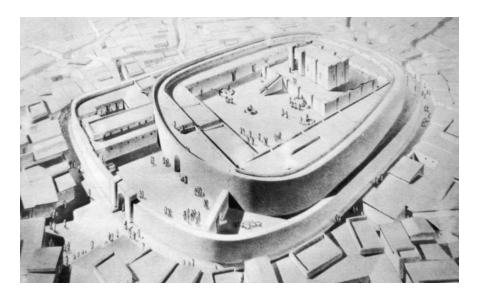


Fig. 20: Khafaja, reconstruction of the Oval Temple.

completely personal: in defining the 'shape' of Mesopotamian civilization, he looks for it in a theological direction, and as tragically affected by the deep insecurity dictated by the conditions of an unstable environment subject to recurrent catastrophes – an environment opposite to that of secure and stable Egypt.

The role of the temple had already been given weight in archaeological studies and the three-dimensional reconstruction of the 'oval temple' of Khafaja (H. D. Darby, 1934) was to remain the best known image-symbol of what a Sumerian temple would have been in its urban setting [Figs. 20, 21].<sup>252</sup> This role was illustrated in detail (in the footsteps of Schneider) in the administration of the lands and work; but the conclusion is somewhat surprising: 'the temple community was a religious institution regulating the social life of the community [...] The temple community seems not, however, to have been a political institution'.<sup>253</sup> In a civic sense Jacobsen's theory took over: the city is governed by an assembly of citizens, and then has recourse to a 'dictator' in times of emergency – except that, for the repetition of continuous emergencies, he would be partly deprived of his authority. Whatever the correctness of the

**<sup>252</sup>** The drawn reconstruction was published in Delougaz 1940 (frontispiece) and has been reproduced innumerable times (by Frankfort himself 1954, pl. 12).

<sup>253</sup> Frankfort 1951, p. 68.



Fig. 21: Khafaja, aerial view of the excavation.

model, it was nevertheless clear that the insistence on the role of the assembly of citizens conferred upon the Sumerian city an arrangement not dissimilar to that which was once thought distinctive of the 'western' city (classical and mediaeval). It was a suggestion which, at Chicago, would meet with important developments.

# 3 The season of theoretical models

# 3.1 Gordon Childe: the urban revolution and evolutionary heritage

When the great palaeoethnologist Vere Gordon Childe (British but Australian by birth) began work, towards 1920, the great season of evolutionism was by then over, but its influence was still strong. It could be said that Childe's purpose (which took shape in stages) was to rewrite on an archaeological basis, that is, with concrete evidence, the proposals that nineteenth-century evolutionism had formulated on a substantially philosophical basis, but with more consciousness of the different rates of development of modern communities than of historical and prehistorical ones. In the debate of that period between 'diffusionist' and 'evolutionist' visions Childe actually took a middle way: he was a diffusionist in emphasizing how very much Europe owed to the Near East,¹ but an evolutionist in articulating the story of humanity as a progression through states of successive development.²

After years dedicated to questions of prehistoric Europe (including the question of Indo-European origins), Childe, in summarizing relations between Europe and the Near East, developed his vision in its first form:<sup>3</sup> the passage from a society of hunters and gatherers to one of farmers and shepherds (producers of food) is marked by the 'Neolithic revolution', and the passage from those Neolithic societies to truly historical ones, shaped as states and cities, is marked by the 'urban revolution' – which is what we are concerned with here. Childe, however, retained nineteenth-century terminology, describing the first (Palaeolithic) phase as 'savagery', the second (Neolithic) as 'barbarism', and the third (with the use of metals) as 'civilization'. As for the term 'revolution', which appeared to be politically loaded, the socialist Childe repeatedly asserted that it was used to describe a total (nowadays we would say structural) change happening within a relatively short period; but certainly among conservative scholars there hovered, and continues to hover, a sort of rejection. Lastly, as for the reasons for the change, the technological factor was of prime

 $<sup>{</sup>f 1}$  Europe's debt to the Near East is very pronounced in Childe 1925, but still visible in Childe 1958.

**<sup>2</sup>** On Childe, cf. McNairn 1980 and Green 1981, and the critical approaches of Trigger 1980 and Harris (ed.) 1994, as well as the valuations of Ridgway 1985; Guidi 1988, pp. 98–115; Sherratt 1989 (the framing within the cultural trends of the time is excellent); McGuire 2006; Vidale 2007; Smith 2009. New interest was indicated by Manzanilla (ed.) 1987 and Collins 2000.

<sup>3</sup> Childe 1928, 1934.

importance in this first formulation, even if it seems clear that the use of the terms savagery-barbarism-civilization (from an anthropological context, beginning with Morgan) instead of Palaeolithic-Neolithic-Age of Metals (already used in a prehistoric context) was meant to give the process a wider basis than a purely technological one.4

But it was only from 1938, the year of his visit to the USSR and of his contacts (however critical) with the Soviet study of prehistory, that Childe incorporated in his scheme of things elements of clear (and acknowledged) Marxist origin, 5 basically adapting his Neolithic and urban revolutions to Karl Marx's model of the industrial revolution, which was also a process of passage from one stage to the next. While keeping his interest in the technological factor, Childe made it one component of a more complex socio-economic whole: thus the emergence of full-time specialists is no longer 'technical progress' but a new structuring of socio-economic relations within a community. The change therefore concerns the whole field of the relations of production, that is, the relationship between the ownership of the means of production and labour, and the terminology used is that of the Marxist tradition. In particular the urban revolution marks the emergence of a complex society (although they did not use the term 'complex' then), shaped as a state, with an elite of non-producers supported by the producers by means of setting aside a surplus. The Marxist influence is also clear in the question of the surplus: a revolutionary leap takes place when a society succeeds as a result of technology in producing a surplus of food, and rather than turning this to greater consumption and improved conditions of life decides to accumulate it for shared purposes. Finally, the ideological element is also of clear Marxist inspiration: that is, the religious motivation, thanks to which the directing elite succeeds in ensuring that the producers assign produce and labour for the support of this same elite. Naturally, many of these points were already generally present in Childe's ideas before 1938 (a militant socialist from his youth and for his entire life), but at that date the system assumed its definitive shape, and was delivered in a series of small volumes of synthesis that enjoyed notable success and had a strong impact upon the course of studies.<sup>6</sup>

For the purposes of our argument, however, a separate discussion is called for by the theoretical presentation of the urban revolution that Gordon Childe

<sup>4</sup> Childe 1944; cf. Trigger 1986 and Greene 1999.

**<sup>5</sup>** McNairn 1980, pp. 150–167; Trigger 1984b.

<sup>6</sup> Childe 1936; 1942; 1951; 1957.

wrote for the *Town Planning Review* in 1950.<sup>7</sup> The article, conceived for a public of architects and town-planners, therefore an informed but not archaeological or pre-historian public, set out in a clear form the problematic nature of the urban revolution. The conceptual apparatus is that of evolutionism of a nineteenth-century order (in the mid-twentieth century it caused rather a ripple to hear someone speak of 'savagery' and 'barbarism'). But what counts, more than this conceptual apparatus, are the famous ten criteria that Childe puts forward as characterizing the city – or at least the proto-city emerging from the 'revolution'. One of their possible applications to the 'historical' and modern city was not considered, and seems rather to be excluded, although implicitly it may be imagined that the basic characteristics of the city must also leave traces in later urbanization.

The ten criteria are: (1) a certain size of settlement and density of population; (2) full-time specialization of work; (3) centralization of the surplus of production to support the specialists; (4) monumental buildings for both ceremonial (temples) and practical (storehouses and granaries) use; (5) a ruling class and social stratification; (6) writing; (7) sciences (arithmetic, geometry, astronomy and creation of a calendar); (8) figurative art; (9) procuring materials from a distance; (10) 'organic solidarity' in a complex and strongly unequal system, which needed compensation of an ideological (religious) nature.

The choice of the ten criteria has been criticized often,8 as being inconsistent in placing on one level basic structural traits and exterior manifestations. All the same, we need to look at two aspects, for the most part neglected by Childe's critics. The first is that the description tackles the origin, therefore the first urbanization, and nothing says that all the criteria must be valid, even for historical urbanization, which cancels the objections, particularly those on the part of the classicists. The second is that we are not dealing with a simple list (such as the one I have just given, or other formulations of it by other authors, for the purpose of summary) – a 'shopping list', as maliciously defined – but with a continued discussion, articulated in points for greater clarity. It is certainly possible to suggest a different articulation of the discussion, endowed with greater consistency: for example, criterion (2) logically presupposes criterion (3), which should therefore come first. In particular, the inclusion of writing has been criticized, above all by students of the Americas (but the 'first

<sup>7</sup> Childe 1950. The mechanism was already there in Childe 1942, pp. 97-121, and will be repeated in a more discursive style in Childe 1951. Cf. comments on the article in Bianchi and Liverani 2004.

**<sup>8</sup>** E.g. Adams 1966, pp. 10–11; Flannery 1994, pp. 106–109.

<sup>9</sup> Like Hansen 2008, or Osborne 2005, p. 6.

urbanization' of the Maya had writing, 10 and Inca urbanization knew its first stages, then broken off by the Spanish conquest); whereas others<sup>11</sup> hold it to be essential, because it allows the creation of bureaucracy, which leads to the formation of the 'bureaucratic state' in a process in which urbanization and control by the state go side by side. In recent years, besides, it has been possible to reconstruct the parallelism between civic/settlement growth and growth of the instruments of security and recording (cretulae – the clay seals – and tokens) with final and contemporary emergence of city, state and writing, <sup>12</sup> But where Childe is concerned, we need to note that the 'deep' mental system is nineteenth-century, which links city with civilization, civilization with history, and history with writing (prehistory is 'without writing'), a shortened link uniting city with writing.

To sum up, looking at the criteria in isolation, different incongruities leap to the eyes, 13 but reading the text without stopping, the arguments hold good. There are two fundamental concepts to the entire process of thought: the first is that the city is distinguished from the village by a complexity (we note the adoption of Durkheim's concept of 'organic solidarity') that is based upon specialization of work and produces a socio-economic imbalance; the second is that this system is supported on the (ideologically intended) withdrawal of a surplus, which is administered centrally and redistributed to the non-producers. In these terms the argument not only certainly has its own logic, but can also still be substantially shared sixty years after its first formulation.

In the 1950 article concepts re-emerge that can be traced back to Childe's earlier works of synthesis. The question of primary and secondary urbanizations is explicitly formulated: the 'primary' cases are four (Mesopotamia, Egypt, the Indus valley, and Maya civilization); all the other urbanizations came out of processes of diffusion and transmission, albeit not without variations. Later on it will be observed that the first three could lead back to just one, with Mesopotamia as the initial nucleus – so that the primary cases remain only two, one for the Old World and one for the New. Conversely, the processes of diffusion (another nineteenth-century legacy) will be greatly rescaled, to the gain of the internal dynamics of development. I will turn later to

<sup>10</sup> On the decipherment of Maya writing (in the 1980s) cf. Coe 1992.

<sup>11</sup> Buccellati 1977; Sweet 1997; Hudson 2004; Adams 2004, pp. 58-59; Ross 2010. Good summary of the question in Larsen 1988. On the 'mental' results I refer to Goody 1977 and 1986.

<sup>12</sup> Ferioli et al. (eds.) 1994; Frangipane (ed.) 2007; Rothman 2007.

<sup>13</sup> Castells 1972, while accepting it in substance (Castells as a Marxist accepts the surplus as a fundamental factor), is then ironical, pp. 23-24: 'notwithstanding a classification process very close to the famous Chinese Encyclopaedia of Borges ...'

these questions (§ 4.4). But the restriction to four primary cases is useful for Childe because it is from them (and not from the secondary cases) that he draws the evidence relevant to the definition of the urban revolution, and so of the proto-historic city – therefore the evidence on later urbanization (beginning from the Greek *polis*) will as a matter of principle not be included here.

The question of the centralization of the surplus is also clarified and placed at the heart of the process. Here Marx's influence is strong; the mechanism that he describes to explain the 'industrial revolution' is adopted by Childe to explain the 'urban revolution'.14 This deals with the so-called 'primitive (or primary, or original) accumulation of capital', or really with that assigning for social objectives of the 'surplus' produced inside a specified community. Childe uses the term 'social surplus', without however explaining (taking it for granted) that it is not simply a question of a surplus produced inside a given society, but of a surplus that becomes destined for a social use (that is, for the community), subtracting it from the producers' private consumption.

Coming finally to the 'prime mover' of the process of primary accumulation, Childe's preference is still identified in the technological factor, and in particular in the emergence of full-time specialization.<sup>15</sup> This point will then be the object of much criticism, in response to the multi-factored and more elusive vision that will prevail from the 1980s. I myself, who most certainly do not hide my debt to Childe's vision, would apply the question of the technological factor to the innovations introduced, right on the eve of the 'revolution', in the sector of primary production, agriculture (and so pertinent to the moment of production of the surplus), more than to the sector of specialized labour (artisanal), which benefitted from a surplus already produced.<sup>16</sup>

But the greatest merits, in a vision over a long period in the history of these studies, seem to me to consist not so much in the solution given or in its single points, as in two factors of Childe's theory, two new and interconnected facts. The first factor is the ability to verify archaeologically the individual 'criteria'. The size of the settlement can be measured and even its density estimated. The monumental buildings can be excavated, measured and visualized in all their glory. The presence of specialists and of imported materials appears from the excavation, and their centralization around the seat of power can be inserted in the scheme; and the same goes for the presence of written documents and

<sup>14</sup> Analysis suggested by me in Liverani 1998a, pp. 3-6.

<sup>15</sup> Specialization of labour: Wailes (ed.) 1996, with the articles by Zettler and Stein (pp. 17-23 and 25-38) on the Ancient Near East; Wailes' introduction (pp. 3-14) is, on the other hand, on diffusion. Cf. also Rosen 1997; Vidale 2007.

<sup>16</sup> Liverani 1998a, pp. 19-26.

works of figurative art. In a nutshell, the decision whether a given settlement is or is not to be classified as a city depends on a 'material' analysis of its remains, not on ideological presuppositions or an estimate of the 'values' on which it is thought to be founded. This ability to verify the urban nature of a settlement archaeologically cannot be conclusive for the more advanced historical periods, for which written evidence becomes illuminating; but it certainly is for the phase of the 'urban revolution', which is properly placed bridging the gap between prehistory and history, and again for the whole protohistorical and historical phase of the pre-classical Near East, Rather than imagining the proto-historic city on the basis of literary information provided by a following era, the suggestion is to identify archaeological data that can be projected from the proto-historic city also to successive cities.

From this it follows - and here we have the second fundamental factor of Childe's theory – that the definition of a city provided by Childe, based as it is upon objective evidence, can be applied in its substance to any region or period. It is a definition of universal validity: as such the old distinction between western city and eastern non-city collapses, revealing its entire nature as an ideological construct and aprioristic selection and contrast. If anything the opposite came about, which is that the city of 'first urbanization' is based on exactly these elements of centralization (temple and palace) that had cast a sinister light onto the Near-Eastern cities as seats of despotism. At this point there open two ways towards a fuller understanding: one line of research upon the characteristics of secondary urbanizations (§ 4.4 and § 5.12), and one on the component of community attributes that the city (even the 'eastern' one!) inherits from the village (§ 3.3 and § 5.4). But these lines will only be developed a few decades later.

If Childe's article has been continuously criticized – or ignored – by neoarchaeologists weighed down by their Oedipus complexes,<sup>17</sup> it met, however, a widespread and substantial acceptance on the part of both ancient historians and town planners (to whom it was directed). It will be enough here to give as an example the well-known work of Lewis Mumford, or even better Gideon Sjoberg's book on the pre-industrial cities, 18 which re-used all Childe's theoretical structure, albeit with different terminology: from the environmental and technological premises, to the size, to the emergence of a governing elite of a bureaucratic character, and finally to the ideological justification of a religious nature. Sjoberg's study gained great authority, and served in its turn to give

<sup>17</sup> Trigger 1972, in his scrutiny of urbanization, achieves the tour de force of never citing Childe, who, however, hovers all over.

<sup>18</sup> Mumford 1938; 1960a, b; 1961; Sjoberg 1960. I return to them both at § 3.7.

currency to a 'bible' of the first urbanization that owes much to Childe's ideas. Closely after the publication of the article in 1950 the anthropologist Robert Redfield was also much influenced by Childe: he entitles the first chapter of his book Urban Revolution and the fifth Man Makes Himself (which is the title of a famous small book by Childe); he also criticizes him repeatedly, but he uses him as an authoritative and essential reference point.<sup>19</sup> Ten years later the American historian William McNeill, in outlining the progress of civilization in the course of world history (with an evolutionist and diffusionist route, formed from technical innovations and interruptions by barbarian intrusions), actually absorbs the substance of Childe's suggestion (beginnings in Mesopotamia, question of the agricultural surplus, system of redistribution, etc.) without however citing him other than for different and secondary questions (Aryans, Mediterranean building of megaliths, iron).<sup>20</sup>

The idea of establishing a list of qualifying 'points' was repeatedly both adopted21 and modified.22 For example, Maurizio Tosi chooses as essential points the dimensional growth, the accumulation of a surplus, social stratification, and artisanal specialization.<sup>23</sup> The classicists Morgan and Coulton,<sup>24</sup> considering the Greek polis, begin with Childe's ten criteria, selecting points (1) concentration/density of habitation, (2) specialization of labour, (4) monumental public architecture, (5) marked social stratification, (6) writing, and (9) trade over a distance. Kolb,25 without indeed citing Childe, nevertheless provides a 'list' partly coinciding: (1) topographic and administrative compactness of the settlement, (2) a population of several thousand people, (3) specialization of labour and social differentiation, (4) a variety of buildings, (5) an urban style of life, (6) a function as the centre of a region. Kostof<sup>26</sup> lists nine criteria that partly coincide with Childe's and partly do not: (1) a certain size, variable depending on the period, (2) inclusion in a hierarchical group, (3) spatial limits (encircling wall or juridical status), (4) specialization of labour and social hierarchy, (5) influx of wealth (surplus, trade), (6) written records, (7) relationship with land that provides food in exchange for protection and services, (8) monu-

<sup>19</sup> Redfield 1953; also Redfield and Singer 1954 and 1961.

<sup>20</sup> McNeill 1963.

<sup>21</sup> Frick 1977, pp. 9-18, uses Childe's ten points, with some changes due to his Old Testament view. Stoddart 1999 criticizes the ten points, but then in practice considers them all.

<sup>22</sup> Hansen (ed.) 2000, pp. 27-28 goes back to the ten points and cites various other similar

<sup>23</sup> Tosi 1977, p. 51; Vidale 2007, p. 412.

<sup>24</sup> Morgan and Coulton 1997.

<sup>25</sup> Kolb 1984, p. 15.

<sup>26</sup> Kostof 1991.

mental architecture, (9) a place made of buildings and people. Obviously Kostof, town-planner as he was, concerned himself with the city in general, and gave space to elements of the urban structure that Childe had left out and which are only partly applicable to the city of the Ancient Near East – such as the 'skyline', high at the centre and decreasing as it moves out; the basically regular grid; the presence of a 'city-centre' (administrative and religious). But even the eight points of an archaeologist such as Colin Renfrew<sup>27</sup> are almost exclusively of the town-planning type, while reflecting the socio-political and socio-economic structure. By contrast it emerges clearly how Childe was interested in neither urbanistic form nor territorial context, but in the socioeconomic and socio-political process.

## 3.2 Thorkild Jacobsen and 'primitive democracy'

At the start of World War Two the Danish Sumerologist Thorkild Jacobsen, who had emigrated to the United States in 1929, wrote two short articles of clear ethical-political mould, fitting easily into the mood of the period. In the first article, 28 which is only of marginal interest here and which was published in 1939, he argued against the widespread idea of ethnic conflict in Lower Mesopotamia in the third millennium, between Sumerian and Semitic (Akkadian) elements, citing strong evidence that the conflict known of took place between citizen states and not between peoples, and that different ethnic components normally lived together inside the same city. Perhaps it is worth noting that a couple of years later (in 1942) the journal of the Oriental Institute of Chicago, where Jacobsen worked, changed its name from American Journal of Semitic Languages and Literatures to Journal of Near-Eastern Studies, certainly to give equal status to historical studies and archaeology, but perhaps also to avoid a situation where the pre-eminence awarded to language could flow into a displeasing 'racial' misunderstanding. Turning to Jacobsen's theory, it was basically correct, even if somewhat extreme: it was very soon observed (by Ignace J. Gelb) that while there certainly was not a properly racial conflict (in the physical-genetic sense), there were, however, aspects of antithesis and even of ethnic and national conflict, and so we are not only dealing with struggles between regional entities.<sup>29</sup> Later approaches have still maintained that the two ethnic elements were and felt themselves to be different from each other

<sup>27</sup> Renfrew 2008, pp. 47-48.

<sup>28</sup> Jacobsen 1939.

<sup>29</sup> Gelb 1960, pp. 74-79, 313.

in mentality and values, with some consequences of political opposition, as often happens in similar cases.<sup>30</sup> But beyond these terminological adjustments (the term 'race' is still used incorrectly to refer to ethnic facts, therefore political/cultural and not just of physical anthropology), the article remains important because of the moment it was written, when Europe was entering war after over almost two decades of conflict infested with policies of racial intolerance (and particularly anti-Semitism), of a violence without precedent, and based upon a 'myth of the state' to be imposed with violence. Jacobsen's vision, if anything too idyllic, had the force of a Utopia, of a 'manifesto', and in the context of the question that interests us here it served to portray Mesopotamian cities as being of an inter-ethnic web, the like of which had not been imagined before (having always been spoken of as 'Sumerian city', 'Assyrian city' and similar).

But it is the second article, on 'primitive democracy', 31 that has had major influence on the image of the Mesopotamian city. At a historic moment when Nazism was about to be overthrown by the combined action of the Anglo-American West and the Soviet Union, conflict (or at least competition) began inevitably between democracy and communism for world hegemony. Jacobsen's expression 'primitive democracy' rang out like a voluntary, an explicit opposition to the widespread use of the concept and Marxist expression 'primitive communism', in the context of the common idea of a 'primitive' stage of a humanity not yet controlled by the state. We need therefore to notice that both expressions, apart from being in mutual opposition, are opposed in primis to the conception of the despotic state as theorized and in fact used by European scholars (above all, but not exclusively, German) in the period between the two wars. Contrasted to the 'despotic' city (Jacobsen uses 'autocratic') - centred urbanistically on the palace, and politically based on the decision making of a 'non-responsible' king (in the sense that he is accountable to no one), if anything technically supported by a corps of functionaries at his service - is a community of widespread skills and responsibilities, where the decisions are taken by communal bodies - bodies which are properly documented for the whole course of Near-Eastern history, as councils of 'elders' and as 'plenary' citizen assemblies, in both a village and city context (as we shall see at § 5.4).

Reading Jacobsen's article, however, we find a not unimportant difference. In the Marxist theory 'primitive communism' is defined as such in what

<sup>30</sup> From Kramer in Kraeling and Adams (eds.) 1960, pp. 87-89, up to Westenholz 1993. Today it is recognized (Smith 1986) that it is better to reserve the term 'nation' for the modern world, but the term 'ethnie' is also appropriate for the ancient world.

<sup>31</sup> Jacobsen 1943. Among his supporters I recall Wolf 1947; Evans 1958.

is an initial stage, primordial, of the socio-political and economic evolution of human society. Jacobsen on the other hand states that by 'primitive democracy' he means a loose democracy, not yet well structured: 'the various functions or government are as yet little specialized, the power structure is loose, and the machinery for social co-ordination by means of power is as yet imperfectly developed'32 – even if (as we shall soon see) thrown back to an ancient, pre-documentary phase of Mesopotamian civic development, and so in fact also primitive in a diachronic sense. In other words, while Soviet Marxism saw in the Ancient Near East the remains of a primitive communism, by now overtaken by a 'feudal' phase (following the simplified and official Marxist scheme: we are in the age of Stalin), Jacobsen's democracy is above all a projection towards the future, towards the realization of a grown-up and complete democracy.

In a third article (of 1957) Jacobsen will then give a more complex reconstruction of the political development of Mesopotamia in the third millennium, a reconstruction enriched by the archaeological-territorial interests he had cultivated in the mean time, and which outlines a somewhat radical progression from 'primitive democracy' to 'primitive monarchy' and finally to 'primitive empire' (that of Akkad).33 A few years later (at the symposium on the City Invincible, cf. § 3.6), in a manner both more solid and more subtle, Jacobsen will suggest an alternation between a trend to centralization and a trend to localism.34

But the main problem has to do with the evidence used. To a large extent the information that we have on the cities' communal bodies is of two types. We have an abundance of legal and administrative documents on the fact that in each city (and also in each village) local judicial questions were decided by the 'elders', while possible problems of greater weight, and of particular emergency, were put to the 'plenary' assembly. We then have a number of passages of mythological texts where a divine assembly plays a role, and also legendary pieces of writing in which the king-despot (of the Gilgamesh type) must take account of the opinion of the communal bodies. The Marxist approach, and markedly the neo-Marxist, as it develops in the sixties and seventies (as we shall see at § 3.3), has no problems in reconstructing a situation predating the genesis of the city and state, with village communities selfgoverned by collective bodies; and then a situation of urbanization and state control in which the strictly political decisions are within the competence of

<sup>32</sup> Jacobsen 1943, p. 159.

<sup>33</sup> Jacobsen 1957.

<sup>34</sup> Jacobsen 1960a.

the monocratic power, while local questions (judicial) rest within the competence of the local communal bodies, which therefore no longer have political competence.

Jacobsen on the other hand prefers to base himself more on the literary texts than on the administrative and legal documents, and maintains that the divine assembly is the 'reflection' (over millennia!) of a time when – in a prehistoric and pre-documentary age - men also governed communally; a memory stretching to the age in which the democratic bodies no longer existed and no longer enjoyed the fullness of their functions. To use Jacobsen's words, 'Our material seems to preserve indications that prehistoric Mesopotamia was organized politically along democratic lines, not, as was historic Mesopotamia, along autocratic'.<sup>35</sup> This explanation is difficult to accept, and the study of 'foundation myths' enjoys bases other than the banality of memories stretching over millennia. Besides, the explanation is not even necessary: in attributing to the gods an assembly, the authors and public of these stories could not (nor needed to) 'remember' institutions from thousands of years before, but simply worked within their own present reality, with their councils of elders and their plenary assemblies, attributing to the gods the customs of men.

By and large, the argument on 'primitive democracy', as was said earlier  $\dot{a}$ propos racial conflict, kept intact its value as an ethical-political 'manifesto' in support of the democratic regime, beyond the absences that become clear in the light of deeper studies, of added evidence, and above all of an altogether more coherent theoretical vision. As an immediate consequence it was suggested that the same label be applied to Ancient Israel.<sup>36</sup> But later studies have for the most part reserved for Jacobsen's articles citations of a somewhat 'ritual' character, with more or less marked reserve on the actual political power of the assemblies. Sufficient here to compare Samuel Kramer's naïve enthusiasm for Sumerian democracy and 'the first bicameral Congress'<sup>37</sup> to Adam Falkenstein's cautious rethinking.<sup>38</sup> In particular the short poem *Gilgamesh and Agga*, which talks of a double assembly at Uruk, one of 'elders' and one of 'young men' (actually adults, warriors), underwent a deeper analysis. A short article by Dina Katz correctly underscored properly literary elements, of narrative structure, in the composition and in the role played in it by the contrast be-

**<sup>35</sup>** Jacobsen 1943, p. 172.

**<sup>36</sup>** Wolf 1947.

**<sup>37</sup>** Kramer 1956, pp. 26–31; 1981, pp. 30–35.

<sup>38</sup> Falkenstein 1954.

tween 'elders' and 'young men';39 and a few year later Giovanni Pettinato, reexamining the whole question, also concluded that the purpose was literary.<sup>40</sup>

It is singular how this whole line of study, which is founded (if often critically) upon Jacobsen's articles and based upon philological analysis of Sumerian literary sources, remains apart from what was in the mean time clarified about the role of the communal bodies of the Mesopotamian cities, both in a neo-Marxist context (§ 3.3: structure of the village and question of the so-called 'residual city' as compared to the palace), and in the US context (§ 4.3: coexistence of the 'great organizations' and normal citizenship with its communal organs). It is within these other threads that the study of the political structure is more concretely applied to the shape of the Mesopotamian city.

### 3.3 Igor Diakonoff, the 'Asiatic mode' and the residual village

In 1953 the complete and official edition of a dense work that Karl Marx had written a century earlier was published in Berlin (the Grundrisse der Kritik der Politischen Ökonomie); the work included chapters on pre-capitalist economic forms in which the theory was expounded of the 'Asiatic mode of production'.<sup>41</sup> Hints of the theory also exist in other Marxian writings, 42 but it remained almost completely eclipsed, for just a century, so as not to impede the official, classical, sequence, which entailed passage from the slavery mode (of antiquity) to the feudal mode (of the Middle Ages) to the capitalist mode (of the modern age): this sequence fitted in between the mythical primitive communism of the origins and the communism of the future, which already appeared (or so it was hoped) to be in sight. It is clear how the classical scheme fitted in to nineteenth-century evolutionism, unilinear and of universal validity, while the alternative owed much to the difference, and even antithesis, between East and West - also nineteenth-century (but still alive in Max Weber). In effect, the classical stages, applied to the West, presented a continuous evolution, with passage from one mode to the other, and with expectation of a positive final outcome determined by the internal mechanisms and 'contradictions' both of the capitalist mode and the preceding modes. On the other hand, the

**<sup>39</sup>** Katz 1987; earlier Malamat 1963.

<sup>40</sup> Pettinato 1994; most recently Bartash 2010.

<sup>41</sup> Marx 1857–58; the first English translation of the 1953 edition was by Nikolaus in 1973.

<sup>42</sup> See Godelier's anthology 1970a.

'Asiatic mode', 43 whose description was largely based upon the conditions of imperial and pre-imperial India, presented a stagnation, an incapacity for endogenous progress - such that Marx (whom it would be singular to accuse of philo-colonialism) saw British dominion as the only way of bringing India out from her thousands of years of inertness. As far as antiquity went, while the slavery mode implied strong centralization (especially for the 'public' slavery of temples and palaces), the Asiatic mode left ample space for the role of local communities, and in particular of the villages. The Asiatic mode is in substance a model at two superimposed levels: there is the despotic government (with cities, public works, centralization, taxation, specialization) and there are the local tributary communities (with villages, production of food, selfgovernment, and socio-economic homogeneity). It is clear how, in stressing the role of the upper level, the East (ageless rather than ancient) assumes the characteristics of despotism, while stressing the role of the villages leads to recognizing their capacity for local self-government, which instead goes back to the primitive stage of the Garden of Eden type. While the villages already existed in the 'primitive' mode, the city was formed only in successive modes, among them the Asiatic, both as a centre of exchange and as the seat of the despot. But the Marxian pointers to the socio-political image of the city remain in truth not very clear and somewhat contradictory.

Much has been written on the political reasons for the hundred-year-old eclipse of Marx's Asiatic mode,44 particularly once the Berlin edition had opened the way to an intense activity of study, and this fervour of studies explains why I speak of the models of the mid-twentieth century rather than those of the mid-nineteenth. But the analysis of these studies needs to distinguish between those carried out inside the Soviet Bloc (where the Grundrisse was already available in the Moscow edition of 1939-41) and those effected by Western neo-Marxists. To understand the position of the studies in the Soviet world, with reference to the Ancient Near East, it is useful and, I would say, indeed illuminating to run through the anthology of contributions by Russian Assyriologists translated into English and edited by Igor M. Diakonoff that was published in 1969. The spread of the works is already significant: only one from

<sup>43</sup> See among others Chesneaux' and Godelier's contributions in Garaudy (ed.) 1969; also Godelier 1970b, pp. 29-79.

<sup>44</sup> Sofri 1969; Godelier 1970a, pp. 15-96; Krader 1975; Sawer 1977; Tokei 1979; Bailey and Llobera (eds.) 1981; Dunn 1982; O'Leary 1989. But cf. earlier Wittfogel 1957, pp. 585-651 ('Birth and death of the theory of the Asiatic mode of production'). The theoretical-political reasons are obvious: applying the 'Asiatic mode' to China and Russia (also partly 'Asiatic') would exclude those countries from the normal evolutionary course, blocking their socialist outcome.

1933, three from the years 1947–49, five from the period 1953–57 (with the peak therefore soon after the Berlin edition), and finally two from 1965. The Egyptologist and later Sumerologist Vasili Struve was, from 1933, the champion of the official solution (and his authority was decisive in also imposing it on less convinced colleagues), embracing in full both the role of slavery and the 'hydraulic' model (with frequent throwbacks to Deimel and to Schneider). The role of the village is minimized and distorted as an organization based on the work of slaves, both for the construction of the canals and for the cultivation of the fields.<sup>45</sup> Replies and counter-replies followed, but Struve's vision became officially consecrated as valid.

The question was re-opened, however, after 1953 – when the question of the village community also gained a new vigour in other areas of antiquity.<sup>46</sup> Alexander I. Tyumenev underscored two decisive points: (1) that even at the peak of centralization under the Third Dynasty of Ur the work was done not by slaves but by corvée, to which the population was liable (in, therefore, a kind of 'feudal' way), (2) that increasingly strong elements of a free economy were then emerging.<sup>47</sup> At the same period, Igor M. Diakonoff took the decisive step, showing that Deimel's calculations were erroneous, and that alongside the temple lands there were other lands belonging to villages, and alongside (or rather under, given the use of taxation) the temple there were communities of villages and extended families, documented above all by the acts of land grants and transfers called kudurru, both of the Cassite and Middle-Babylonian ages and archaic ones of a proto-dynastic and Akkadian age. 48 The existence of cities and great temple agencies was certainly not denied, as the role of irrigation was not denied, but a more complex model was built, with what we can define as a 'residual village' (as compared to the creation of the city) still very present in both the countryside and the city itself (the residential areas), and, among other things, corresponding to the results of excavations in the era of the mandates (cf. § 2.12), which, however, were not then included in the publications. The picture of Mesopotamian society of the Sumerian and Old Babylonian age was therefore two-fold: between the state lands (of temples or palaces) and private lands, and between people of 'free' status (Babylonian awīlum) and 'public service' status (Babylonian muškēnum); Diakonoff estimat-

**<sup>45</sup>** Struve 1933 (in Diakonoff [ed.1969], p. 33).

<sup>46</sup> Sufficient to think of Tchalenko 1953 and Sereni 1955.

<sup>47</sup> Tyumenev 1956.

<sup>48</sup> Diakonoff 1956. On Diakonoff's criticism of Deimel, and on the fortune of the Diakonoff model in the West, cf. Foster 2005. On the debate in the Soviet world there is the brief note by Andersen 1961.

ed (for pre-sargonic Lagash) a ratio of the temple sector as one-third and the private as two-thirds.<sup>49</sup> At a conference of Soviet scholars of the Ancient Near East held in Leningrad in 1962 it was recognized that the ancient Near-Eastern societies could not be included in the slavery mode, but rather belonged to the Asiatic mode.<sup>50</sup> However, political impediments did not allow this observation to be developed in the Soviet world, and Tyumenev and Diakonoff were careful not to claim the authority of the Marxian economic pre-capitalist forms or to quote the 'Asiatic mode of production', preferring if anything to list as 'feudal' a situation which in contrast was clearly 'Asiatic'. But the theoretical confusion was considerable: how could you assign a feudal mode to the Ancient Near East, long before the slavery mode of the Graeco-Roman world? Marx himself had not placed the Asiatic mode before the slavery mode; he had placed it alongside the whole sequence and had denied it the possibility of evolution that, by contrast, the Ancient Near-Eastern evidence seemed to allow it. The debate continued above all outside the Soviet Union, in both eastern (East Germany, Czechoslovakia, Hungary)<sup>51</sup> and western countries of Europe.

Impediments of a doctrinal nature did not exist among the Western neo-Marxists, who in France, Great Britain, and Italy, greeted the 'Asiatic mode' with enthusiasm, certainly in connection with the emergence of a 'Euro-communism', critical and open, detached from the Stalinist legacy, in a process that was politically bound up with the events taking place, from those in Hungary (in 1956) up to the 'Prague spring' (of 1968). But among scholars of ancient Mesopotamia a number of years were yet to pass before a definite position was held: I will allow myself here to recall that my ample chapter on the 'mode of production', in 1976, actually broke new ground in the field of Ancient Near-Eastern studies.<sup>52</sup> On the theme of direct interest here, that of the village, there were two very productive meetings. The first, in 1974, was a session during the sixth Congress of Economic History at Copenhagen, a session organized by Diakonoff and from which a number of contributions were published in the following year.<sup>53</sup> The second, in 1976, was the twentieth congress of the praiseworthy 'Société Jean Bodin' in Warsaw, which had as its theme the rural communities, with the section on the Ancient Near East organized by W. F. Leemans

<sup>49</sup> Cf. Diakonoff 1971 for a useful summary.

**<sup>50</sup>** Cf. Matouš 1969, p. 3.

<sup>51</sup> Cf. Matouš 1969; Melekechvili 1969; Klima 1978; Komoróczy 1978; Brentjes 1968, 1982; Hruška 1983; Makkay 1983.

<sup>52</sup> Liverani 1976, with explicit use of the 'Asiatic mode'; then Zaccagnini 1981; Zamora 1997.

<sup>53</sup> Diakonoff 1975 (general); Liverani 1975 (Late Bronze-Age Syria); Briant 1975 (Achaemenid-Greek period).

and with its proceedings then published in 1983.<sup>54</sup> The position of Leemans (a retired judge, but thoroughly professional Assyriologist, specialist in Old-Babylonian commerce) was decisive in displaying an obvious weakness. On the one hand, he first included the articles of the Copenhagen congress in 'his' journal (the Journal of the Economic and Social History of the Orient) and then organized the congress in Warsaw; but on the other hand he assumed a position of complete closure, denying the existence of rural communities in the Ancient Near East (and throwing the other participants into confusion). The fact is that he took as a model a community (more theoretical than historically actual) in which the village possessed all the lands in common – and in those terms the rural community did not exist, not only in the Ancient Near East, but probably nowhere else either. The discrepancy had definite and long-standing cultural roots: on one side Diakonoff and the other champions of the village community came from the old nineteenth-century tradition, by means of the Marxist and neo-Marxist route; on the other side Leemans personified the anticommunity position, which was widely held among Western philologists and which had produced a long silence on the question.

Diakonoff gave the most complete presentation of his vision in 1982, confirming to a great extent the positions already formulated in the fifties and sixties, without, somewhat pointedly, changing too much.<sup>55</sup> Once again he avoided referring to the 'Asiatic mode', which is cited only at the end (note 321), and with evident embarrassment. Contrary to a slavery-based Ancient Near East (as the orthodox view would have it), Diakonoff, since slavery was very limited there, held out instead for a feudal mode in a broad sense. Leaving the labels aside, there is a system of two sectors (or at two levels): (a) the 'state sector', personified by the palace and temple; (b) the 'community'. The members of the latter are free (in a Marxist sense: they own the means of production on which they live) and are subject to the payment of taxes, while the members of the state sector are servants of the king (at various levels, from the functionaries at the highest grade down as far as the field slaves) and have lands by royal grant. In the free sector ownership is managed in common (above all in the third millennium, but also later), and cannot be passed outside the extended family. In the course of the centuries the whole system becomes subjected to various pressures and distortions compared to the ideal

<sup>54</sup> Gilissen (ed.) 1983, with chapters by Théodoridès (Egypt), Leemans (Mesopotamia in general), Klima (Old-Babylonian period), Dandamayev (Neo-Babylonian period; cf. also id. 1995; 1997), Liverani (Bronze-Age Syria), de Geus (Palestine in the First Iron Age), Briant and Kreissig (Achaemenid and Greek age), and many others on the Greek, Roman and Byzantine world.

<sup>55</sup> Diakonoff 1982; cf. his earlier summary, id. 1974.

type.<sup>56</sup> In particular the extended family is no longer an intermediate stage between the tribe and nuclear family (as it was in early-evolutionism), but a structure with a very consistent foundation, even although it tends to disintegrate.

The question of the extended family, among other things, reveals ideologically unlike positions. Diakonoff, who had brought it to the attention of the Assyriological world from the middle of the fifties on, now turned to it again more explicitly in the eighties,<sup>57</sup> with accounts kept from the legal texts of sale of landed property, from which it emerged that in both the early-dynastic and Old-Babylonian periods around 30% of sellers were multiple/common owners (while those acquiring the land were normally single individuals). But since the individual owners were predominantly beneficiaries of non-transferable royal gifts, it is probable that the percentage of common owners in private ownership was much higher. Also in the mid-eighties, a number of the Hungarian journal of antiquity, Oikumene, was dedicated to the extended family: Powell's introduction (he then became champion of the private oikos) remains somewhat vague (both because it takes no account of the history and weight of the problem, and because the place of publication lay in the communist bloc) and some of the contributions also are purely descriptive (Klengel, Zablocka, Dandamayev). Only two are ideologically informed: Jankovska upholds (for Nuzi) the socio-economic role of the extended family, of the village community, and of common ownership, following the classical neo-Marxist direction. In contrast, the liberal Leemans denied tout court that common or collective ownership existed, ownership being only individual.<sup>58</sup>

Diakonoff's insistence, however, on the extended or undivided family lent his vision a strong characterization of community attributes, while in parallel (and by way of contrast) Ignace J. Gelb's insistence on the oikos served to lend the accumulation of lands a character of privatization and a trend towards capitalism. In Munich's's Rencontre Assyriologique (published in 1972) the positions of Diakonoff and Gelb are visibly different: the former contrasts the 'communal and private sector', found in the village communities, to the 'state sector' (of temple and palace), following the structural terminology already described; the latter on the contrary holds that the members of the controlling

<sup>56</sup> On the evolution of the system cf. Liverani 1984.

<sup>57</sup> Diakonoff 1954; 1985; 1996.

<sup>58</sup> Powell 1986; Klengel 1986; Zabocka 1986; Dandamayev 1986; Jankovska 1986; Leemans 1986. In Holland Leeman's denial position has left traces in van Driel 2000a; 2001. On an archaeological basis, Faust 2000 sees the nuclear family predominate in an urban context, and the wider family in a rural context.

elite appropriate ancient commonly-held properties, lending thereby an origin to the state sector, and that the private sector is represented by the family oikoi – with the rural communities possibly still alive in the third millennium but doomed to disappear.<sup>59</sup> We should besides consider, apart from all else, that both scholars, in demolishing Deimel's monolithic 'temple-city' and giving a fundamental role to the private/family sector, base themselves (at least initially) on the same textual typology, the early-dynastic land sales, with their obvious differentiation between individual purchaser (from a city background) and multiple sellers, with all the ceremonial that serves to introduce the new proprietor into the local community, and with their characteristic abundance of 'gifts' that the buyer distributes not only to the common owners but also to a whole series of members of the community.<sup>60</sup>

I will turn later (§ 5.4) to the other developments in the study of local communities and the organs of self-government found not only in the villages but also in the cities. Here, however, it is important to stress how and to what extent the course of studies on the 'Asiatic' mode has contributed to articulate the vision of the settled landscape, no longer centred in megalopoleis similar to 'cathedrals in the desert', but instead populated by a network of interconnected cities and villages: and also the vision of the socio-economic relations, no longer monopolized by temple and palace but flowing in capillary fashion through families and local communities. The study of the Marxist texts directs us on a way that is actually parallel to what was being proposed by non-Marxist scholars at the same time, both archaeologists (§ 4.2) and Assyriologists (§ 4.3), in the examination of their respective evidence.

#### 3.4 Karl Wittfogel and the 'hydraulic' city

The history of the link between ancient urbanization and the alluvial floods, which required the development of irrigation systems, is a long one. The connection is clear in the Ancient Near East (the Nile and Tigris-Euphrates valleys) but also in the Indian sub-continent (the Indus valley), in China (the Yellow River), and also in less striking instances in Central Asia and Mesoamerica. The link has attracted attention and given rise to explanations, which have quickly focused on two (interlinked) points: the possibility, provided by

<sup>59</sup> Diakonoff 1972; Gelb 1972 (pp. 88-92 on the village communities).

<sup>60</sup> The texts were then published by Gelb, Steinkeller, and Whiting 1991. Recently Studevent and Hickmann 2008, in chronicling the critique of the model of the temple-city, cites only Gelb, completely ignoring Diakonoff.

a wide hydrologically-arranged valley, of feeding large concentrations of population; and the necessity for strong control to administer the building and maintenance of great complexes of canalization. Irrigation, urbanization and despotism are thus already joined together in the eyes of ancient and renaissance authors, of nineteenth-century philosophers (there is, for example, an acknowledgment in Hegel, probably under the influence of the geographer Karl Ritter),<sup>61</sup> and of the theorists of the first socio-economic evolution (in particular John Stuart Mill and Karl Marx),62 all theories that will finally also lead to the contributions of scholars of ancient civilizations (as already said of Deimel, at § 2.9).

But the connection between Near-Eastern despotism and 'hydraulic' civilizations gained marked attention in 1957, when the German Sinologist Karl Wittfogel (an emigrant to the United States) published the work entitled Oriental Despotism,63 but with ample use of the definition of a 'hydraulic society' as almost synonymous with an 'Asiatic society' or even 'Near-Eastern society'; 'hydraulic society' was used in preference because the phenomenon embraced cases that were predominantly but not exclusively Asiatic. In his historical exemplification, India and China take the lion's share, Pharaonic Egypt and Sumerian and Babylonian Mesopotamia are both given major roles, but then we come to Imperial Rome and Byzantium, Islam of the Caliphate, the civilizations of pre-Columbian America (Maya and Inca) and finally the island of Hawaii. The hydraulic society, Wittfogel maintains, is characteristic of arid zones, of a dry climate, but crossed by rivers, where agriculture based on rainfall is not possible, but water is abundant and close by. For Mesopotamia, therefore, Wittfogel accepts the model of the temple-city, without, among other things, distinguishing Deimel's totalizing position from Anna Schneider's more articulated one.64

The book reached a wide readership and provoked fierce debate, interlinking in some ways with the debate (of which we have already spoken, § 3.3) on the 'Asiatic mode of production'.65 Wittfogel was a Marxist scholar, but strongly anti-Stalinist, and intended to reassess concepts already expressed by Marx but then censured by the communism of Stalin's USSR for motives of a political nature. And so it came about that Wittfogel's positions were regarded with distaste by non-Marxist scholars as being Marxist (and in those years there was

<sup>61</sup> Hegel 1837, pps. 100-101 of the English translation; cf. Rossi 2012, pp. 233-234.

**<sup>62</sup>** For example Marx 1857–58.

<sup>63</sup> Wittfogel 1957; the work was preceded by Wittfogel's important article 1955.

**<sup>64</sup>** *Ibid.* pp. 267–269.

<sup>65</sup> Among the numerous contributions, I would single out Mitchell 1973; Lees 1974.

no middle course - you were either for or against), and vehemently rejected by the Marxists of the regime, who branded Wittfogel as a 'traitor'. Actually the book, while intended as a socio-economic analysis, comes across rather as a work of polemic politics in its preliminary pages and above all in the two concluding chapters.<sup>66</sup> From a discussion based on a survey wide-ranging in space and time it clearly emerges that the author's interest and intention is also (and I would say above all) directed to the classification of Russia (both Tsarist and Soviet) as an 'Asiatic' or 'semi-Asiatic' entity and to the question of whether the development of China ought to follow the 'stages' of official Marxism. And it must be said that the book's readability is hampered by an overcomplicated structure and a wordy and repetitive style.

Coming to the argument that interests us here, we need to recognize that Wittfogel, whose competence was as a Sinologist, showed himself sufficiently well informed on previous works by Assyriologists and Egyptologists. In contrast, indications of archaeological evidence are very rare if not completely absent. Wittfogel cites the evolutionist summaries of Gordon Childe but does so for their theoretical-political implications, and does not cite (and I would say does not really know) the article and fundamental thesis on the 'urban revolution'. In effect Wittfogel is not interested in checking and following the development of the 'hydraulic' system on the basis of the archaeological evidence (limiting himself to the textual), nor in realizing it on the basis of the actual settlements. However, his model can be easily translated into a precise urban type. The hydraulic states – says Wittfogel – are great builders and great organizers. As great builders they not only dig and maintain canals, but build temples and colossal palaces, capital cities, encircling walls and fortresses, roads and postal stations – all non-hydraulic structures but making it possible to mobilize manpower in quantity, which arises from the requirements of canalization and is therefore part of the hydraulic organization.<sup>67</sup> And as great organizers the hydraulic states give life to systems of calculation and recordable accounts, to writing and to bureaucracy, to taxation, to the corvée, to control of the population (through censuses, land registers, measurements of productive capacity, etc.), to information systems, networks of roads, postal services, and finally to propagandist indoctrination.<sup>68</sup> The brief outline<sup>69</sup> could

<sup>66</sup> Wittfogel 1957/1967, pp. 369-412 (The Rise and Fall of the Theory of the Asiatic Mode of Production) and 413-448 (Oriental Society in Transition).

**<sup>67</sup>** *Ibid.*, pp. 34–45.

**<sup>68</sup>** *Ibid.*, pp. 50–52, 55–59.

<sup>69</sup> Ibid., p. 50 for the definition; the description takes all of chapter 2 (pp. 22-48) for the constructions and chapter 3 (pp. 49-100) for the organization.

have profited from Childe's 'ten criteria', and the hydraulic city, which is presented in Wittfogel as a completed reality, could have and should have been fitted into a process of growth.

We need besides to recognize that Wittfogel's presentation is not a 'totalising' one, as is often supposed (especially by those who have secondary knowledge of the work): perhaps the totalising nature of the object of study has been unduly transferred to the method of tackling it. Wittfogel not only distinguishes between small canal systems of village dimensions and the great hydraulic works of regional range (those unattainable without despotic control over huge masses of manpower),<sup>70</sup> but also suggests a graduated classification between compact hydraulic areas (like Pharaonic Egypt and Sumer) and non-compact (like Assyria), between central and marginal areas, and between continuous and discontinuous areas.<sup>71</sup> Between public and private ownership a different measure is recognized, 72 with margins of freedom in a family setting, in a local community, in working and religious organizations, even if this amounts according to Wittfogel - to very little, of freedoms which do not confer selfgovernment, which symbolize a kind of 'beggars' democracy'73

These graded elements were undervalued at the time, as was inevitable given the theme of the book (with its subtitle on 'total power'), but should have merited greater attention on the part of those who later developed the image of the Ancient Near-Eastern city as a complex organism, centred on the despot's palace, but composed of a plurality of actors linked by interactive relationships that were not simply of dependence on a central monocratic and totalitarian entity. Wittfogel, it is true, did not tackle the problem of the city's origins directly (we have already noted his disregard of the archaeological evidence, and also of the formative processes), and in general paid little attention to the city. But the relevance of pluvial agriculture, and of hydraulic agriculture on a small scale, to societies articulated by village communities seems obvious if implicit, and, by contrast, the link between hydraulic organization on a vast scale with the presence of a city, capital of a region and seat of the controlling organism. Relevant to this we see how Julian Steward, who includes Wittfogel's important article in his volume published in 1955, himself propounded a major role for irrigation in the process leading to urbanization and formation of states.74 And the different reception in the American world reserved for a more or less analogous position – a positive reception for Steward's proposals, a

**<sup>70</sup>** *Ibid.* pp. 3 and 12.

**<sup>71</sup>** *Ibid.*, pp. 165–188.

**<sup>72</sup>** *Ibid.* pp. 270–295.

<sup>73</sup> Ibid. pp. 108-124.

<sup>74</sup> Steward 1955; ibid. (ed.) 1955.

critical one for Wittfogel's – is partly explained by the greater flexibility and subtlety of the former, but also partly by the latter's Marxism.

Inevitably, the ideological censure of Wittfogel's work has long obscured the non-ideological question of the role of irrigation in the emergence of urbanization. We shall see later (§ 4.2) the position expressed above all by Robert Adams, that irrigation on a regional scale, coming after centuries of despotism, could not be the cause. Similarly, both McGuire Gibson and Carl Lamberg-Karlovsky<sup>75</sup> maintain that Wittfogel was wrong, because irrigation can be managed locally. In the United States everything goes back to Robert Fernea's book<sup>76</sup> on local management of irrigation in Southern Iraq. Obviously Fernea's model is correct, but I believe we need to distinguish between the management of systems already in operation, and which have been so for a long time and are by now a part of daily life, and the very different question of the *construc*tion of irrigation systems. By now the middle position has made progress, which assigns an important role to the central state in the construction of the great networks of canals, and leaves their administration to the functionaries of the local communities. I would, however, distinguish between a largely positive position in Egyptology studies and a more cautious one in Assyriology.

On Egyptian irrigation the studies of Wolfgang Schenkel<sup>77</sup> are particularly profound; right from the introduction he connects the study of Egyptian irrigation to Wittfogel's theory, and then passes to a typological-developmental classification that distinguishes between a natural/seasonal irrigation through basins (up to and including the Old Kingdom), artificial/seasonal irrigation through basins (introduced with the First Intermediate Period), permanent irrigation by basins, and finally permanent irrigation by means of canals (introduced in the Middle Kingdom). We can see that before canalization state intervention was not necessary, although there was a strong need to redraw the field boundaries after the flood season. More recently Karl Butzer<sup>78</sup> also recognizes Wittfogel's merit in having raised to the first level of importance the question of irrigation, even if now his theories need to be revised. Personally I believe that it would be useful for clarification to note how the first phase of irrigation in the Nile Valley is of the 'African' type (cultivation after the flood has gone down), and the second phase is of the 'Asiatic' type: state intervention is not needed for the first phase, but is for the second.

<sup>75</sup> Gibson 1976; Lamberg-Karlovsky 1976. Favouring the role of irrigation Hunt and Hunt 1978; Postgate 2003.

**<sup>76</sup>** Fernea 1970.

<sup>77</sup> Schenkel 1974; 1978.

<sup>78</sup> Butzer 1996.

As for the Assyriologists, the available sources for Lower Mesopotamia are of two types: administrative texts, but also classroom problems (from the training of scribe-administrators) relating to the digging of canals.<sup>79</sup> These latter show without any margin of doubt how the digging of the canals was an operation carried out by the state administration. For the management of canals already prepared, the administrative texts have been viewed differently. Stanley D Walters,80 studying the case of Old-Babylonian Larsa, showed how the royal administration had an 'Irrigation Office' with full-time functionaries, inspectors, and recruitment of corvée (of the order of around two thousand) for the work of construction but also of ordinary maintenance - and he finished his study by citing Larsa as a case of a hydraulic society, with explicit support for Wittfogel's thesis. Recently, in contrast, Stephanie Rost,81 studying the province of Lagash under the third dynasty of Ur (and so the period of greatest state centralization) holds out for a local and decentralized administration.

On the whole, the idea that Wittfogel's model, somewhat modernized and improved, merits being reconsidered and even revalued has made some progress.<sup>82</sup> Pierre Briant, introducing a number of the Annales dedicated to irrigation in the Ancient Near East, starts from Marx and Wittfogel, while the specialist contributors (Charpin on the Old Babylonian period, Durand on Mari, Joannès on the neo-Babylonian period, Manning on Egypt, Frankfort and Lecomte on Central Asia) show that Wittfogel's model, while not acceptable as it stands, has however contributed greatly to the development of studies. In particular Charpin and Manning accept the vision of canals constructed by the kings but managed locally.83 J. R. Pournelle,84 while leaving Wittfogel out of consideration (and basing herself on modern technology and modern methods), also re-evaluates the role of irrigation in the rise of urbanism (the colonization of the marshes). Finally, in the fascicle of World Archaeology dedicated to Archaeology of Water M. Davies repeats Wittfogel's theory, while not accepting its despotic character, but admitting that there are various scales of size in irrigation, to which various scales of political-managerial intervention correspond, while M. J. Harrower, studying the case of Yemen, re-proposes the connection between irrigation and the rise of urbanism.85

<sup>79</sup> Neugebauer and Sachs 1945; now also Nemet-Nejat 1993.

<sup>80</sup> Walters 1970. The study was used by Wright 1977, pp. 383-385.

<sup>81</sup> Rost 2011: excellent summary, well documented and with a rich bibliography.

<sup>82</sup> As already in Mitchell 1973.

<sup>83</sup> Briant 2002, followed by sectional articles by Charpin, Durand, Joannès (Babylonia), Manning (Egypt), Frankfort and Lecomte (Central Asia).

<sup>84</sup> Pournelle 2003; 2007.

<sup>85</sup> Modella, Osborne, and Shaw (eds.) 2009, with the articles by Davies and Harrower (pp. 16-35 and 58-72).

#### 3.5 Karl Polanyi and the redistributive city

In 1944 a book was published that in itself had nothing to do with the city of the Ancient Near East, but which nevertheless proved itself to have weighty consequences.86 The book was the work of a Hungarian economist, Karl Polanyi, by then almost seventy, and discussed the distinctive and (in his view) negative character of the modern market economy, which had arisen only recently to cut off the economy from its connection to and embeddedness (his key term) in the social structure, which had been part of the economy from its beginnings until the 'great transformation' of the nineteenth century and its excesses at the start of the twentieth. The historical conclusion, applicable to the past, was that the ancient economies were framed and connected in the social system of their age and context, and cannot be analysed simply on the basis of market laws, which are not at all universal, as the classical economists would have us believe: a hard blow for the 'modernist' theories of the early twentieth century.87 At the time, the book had no direct influence on the scholars of the Ancient Near East. However, a couple of years later Polanyi took himself to the United States (to Columbia University), and there set up interdisciplinary contacts and research programmes for a historical examination of his theories.88

The major outcome, and one pertinent to our theme, was a book edited by him and published in 1957 on Trade and Markets in the Early Empires; it ranged from the theory and history of the very concept of a market to a historical panorama (actually starting from ancient Mesopotamia) and wide-reaching ethnography.<sup>89</sup> The section on Assyriology was entrusted to Leo Oppenheim, of whom we shall see more later (at § 4.3). At present it is more important to examine a number of the general directions taken that are due to Polanyi.

The first is the typological classification of economies, following three 'patterns of integration': reciprocity, redistribution and market exchange.90 The typology runs the risk (even beyond its intentions) of being transformed into a diachronism, because the model of reciprocity (best expressed by 'gift exchange' as theorized in his time by Marcel Mauss)<sup>91</sup> is the only one appli-

<sup>86</sup> Polanyi 1944.

<sup>87</sup> On the development of the debate cf. Frankenberg 1967. The historicization of economic 'laws' is already in Marx.

<sup>88</sup> On Polanyi cf. Humphreys 1966; Salsano 1974; Grendi 1978; Hann 1992.

<sup>89</sup> Polanyi (ed.) 1957.

<sup>90</sup> Ibid.; again repeated in id. 1977, pp. 61-71.

<sup>91</sup> Mauss 1922-23; for later developments see Godbout 1992.

cable to societies defined as 'primitive', that is, pre-urban (or better, not urbanized and not existing as nation states) societies of the present and of the remote past;92 while redistribution happens with 'archaic' socio-political communities, which the book's title defines as 'Early Empires' but which are spread far wider; and finally market exchange is yet later, and in antiquity the problem is rather to identify traces and aspects of it, anticipating it but not concretely realized. It was quickly observed that redistribution could become a 'mobilization' when the centre gave back little or nothing (or only ideology):<sup>93</sup> a trend clearly operative in the Ancient Near East, particularly over time, culminating in enormous palace-cities that sucked back resources (material and human) from an entire territory without returning anything apart from ideological pronouncements - without ensuring protection, nor justice, nor the spread of specialist technology. The model of five types (or stages) put forward by Carol Smith is also applicable to the Ancient Near-Eastern city, with type three coinciding with a 'dry' redistributive vision (as in Polanyi), and type four with a 'mixed' vision (with additions to Polanyi, in a sense that we shall see shortly).94

As happens with all models, Polanyi's also do not exist in reality, but are instruments to describe or visualize reality in a simplified form, in its most important aspects. For the Ancient Near East, I managed to show how the two models of reciprocity and redistribution co-existed, applied differently not so much according to era, but rather to size (relations among a family, a small group, a village as compared to the inter and intra-state political-administrative relations), and according to the purpose of the texts that had preserved relevant information. In essence, just one act of exchange, for example an exchange of gifts between two kings, could be presented as suggesting redistribution in a text of celebratory purpose that was addressed to an internal public, and by contrast as suggesting reciprocity in a letter sent to the reciprocal partner.95

Whatever the nature - typological, diachronic, communicative - redistribution is Polanyi's great contribution, even if the concept obviously had many precedents from the mid-nineteenth century and had then been used above all by Karl Bücher, letting loose the debate between 'modernists' and 'primitivists' of which we spoke earlier (§ 2.7). The plan is well adapted to describing, in its essential lines, the economy of the Ancient Near East, and in particular to clari-

<sup>92</sup> The concept of reciprocity will be sharpened by Sahlins 1965.

<sup>93</sup> The term 'mobilization' was introduced by Smelser 1959 and taken up by Earle 1977.

<sup>94</sup> Smith 1976; cf. Hodges 1987, pp. 122-127.

<sup>95</sup> Liverani 1990, pp. 19–29. The approach is welcomed by Nakassis et al. 2011.

fying the way in which the Ancient Near-Eastern city functioned. This was a redistributive agency in that it received (through taxation and corvée) the entire territory's surplus of production, centralized it (physically and/or administratively) in palace or temple storerooms, and then used it to pay specialists and administrators, and to fund public works. In these terms the concept is both usable and still used. But we need straightaway to advance a couple of reservations. The first is that Polanyi is too rigid in applying his models to historical cases, which are always more complex than a model whose merit is precisely that of simplifying. The Ancient Near-Eastern city is not entirely redistributive, since redistribution is rather an element of the city's state (temple or palace) component; alongside that component exist segments or levels of society (the family, village, individual businessmen) that are not redistributive, and that merit equal attention. The second reservation has to do with the predominant application (on the part of Polanyi himself) to trade and above all to long-distance trade. Nowadays 'integration' is a concept even wider than 'exchange', and the redistributive aspect also has administrative and, above all, internal, applications of a relationship between palace and subjects, much broader than the simple exchange of merchandise, especially with distant countries. Redistributive mechanisms are evident and essential in internal taxation (where Polanyi's position remains firm), while they are debatable and partial in long-distance trade, which in any case for the whole pre-modern world concerns a minimal component of the GDP (Gross Domestic Product).

The choice of long-distance commercial exchange as a focal point of his theory then leads Polanyi to take as an example an erroneous case. Old-Assyrian trade, which developed between the city of Assur and Anatolia, in the nineteenth to eighteenth centuries BC, and which is the best documented case in the whole of antiquity (up until the Mediterranean trade documented in the rolls of the Cairo Geniza), was, according to all the evidence, a 'market' commerce, in the sense that those involved were individual family commercial houses, sharp attention was taken of fluctuations in prices and costs, and it dealt on the whole with a trade in exports (and so in no way redistributive), with Assyrian merchants who went to sell tin and cloth in Anatolia, brought back from there weighed silver (which was the 'money' of the period), and immediately reinvested the proceeds to continue the cycle. On this point the criticisms of Assyriologists were immediate and widespread, and led many scholars to dismiss Polanyi's entire proposal as erroneous. 96 But is it perhaps

<sup>96</sup> Critical review by Gledhill and Larsen 1982; Yoffee's 1981 comments. Renger 1984 is clearly pro-Polanyi. Less known to orientalists is the revision of Polanyi's systems made by Hodder 1978b.

by chance that the specialists of Old-Assyrian texts (such as Klaas Veenhof and Mogens Trolle Larsen) are anti-Polanyi, while those of Old-Babylonian (such as above all Johannes Renger, but also at this time Leo Oppenheim) are much more open to the possibility or favourable?

Another crucial point: did the Ancient Near-Eastern city constitute or contain a market, in the sense of a 'marketplace' or not? Obviously the existence of a marketplace is essential for the exchange of merchandise (at least in the past, now it is all done on the web), while in a redistributive system it is superfluous; what is needed is a temple or palace that centralizes and then disseminates the resources. Polanyi supports a 'marketless trade', and the Assyriologists immediately raised the objection that the word *mahīrum* means precisely the place of exchange.<sup>97</sup> But on this point I believe that we should admit that Polanyi is right, and consider these 'local street markets' (places of local exchange, not of long-distance trade) as marginal compared to the great 'administered' trade that depended on the Palace. Actually the very concept of a 'marginal market', as non-indicative of a market system in the financial sense, then met with developments, even authoritatively, in the field of economic anthropology.98

And yet, turning to the market mechanism: how did prices function in the Ancient Near East? For Polanyi, it was a matter of fixed prices, constant because stabilized by royal administration, and in this sense it had to do with an 'administered trade'. For his critics, on the other hand, it was a matter of prices fluctuating according to the relations between supply and demand. In reality, as I have tried to argue elsewhere, 99 to understand how Ancient Near-Eastern trade managed by the palace (or temple) functioned, we need to subdivide it into two segments. The first segment concerns the relations between the palace (or temple, as it might be) and the operator (the travelling merchant), and this is an 'administrative' relationship: the palace gives the merchant a 'grant of goods', a quantity of resources (woven cloth and others) that must be converted into goods (metal and others) not available *in loco*. The tally of goods going out and coming in is based on pre-stabilized and fixed values, and it could not be otherwise because the palace is not placed to follow the movements (physical and financial) of the merchant. The second segment concerns the activities of the merchant, from when he leaves the administrative seat until he must

<sup>97</sup> Polanyi 1977, pp. 165-178 (reprinted from 1957); on 'ports of trade' cf. Polanyi 1963. Assyriologist criticisms by Veenhof 1972, pp. 348-357; Röllig 1975-76; and cf. § 5.10.

<sup>98</sup> I am thinking of Dalton and Bohannan 1962. Renger 1984 uses the expression 'substitute markets'.

<sup>99</sup> Liverani 1998a, pp. 58-64.

return there (six months later, a year later), and this segment is in no way administered but is 'free', and intended for profit, in the sense that the merchant will select the most favourable conditions of exchange (and will also need to be active in non-urbanized areas, which know neither 'prices' nor instruments of credit), and will also seek to exploit his grant of goods, increasing the number of dealings and also dedicating himself to financial activities (particularly loans at interest).

The final concept which we owe to Polanyi, and which will have a notable impact on the studies of Ancient Near-Eastern economies, is that of 'staple finance' which is the 'finance of staple commodities' or 'basic products', as he put forward at the Chicago symposium on the City Invincible, of which we shall speak shortly.<sup>100</sup> In an economy that does not know real money (but only monetary functions, ascribed above all to weighed silver),<sup>101</sup> financial operations need to resort to physical displacement, or to administrative tallies, of the basic resources. The same 'primitive accumulation of capital' already theorized by Marx as presupposed for each passage from stage to stage, and taken up by Childe to explain the urban revolution, if applied to the Ancient Near East is understood as an accumulation of basic resources (in the first place cereals). The application of the mechanism of 'primitive accumulation' to financial capital, the proceeds of interest loans, while suggested by Heichelheim, <sup>102</sup> is altogether anachronistic (an example of a modernism that has the intention of applying laws quite apart from the historical context) and in the Ancient Near East follows later and marginally, without having a special impact on the evolution of the economic system.

At the beginning of the nineties, Daniel Snell noticed that Polanyi had no success among Assyriologists; apart from the explicit criticisms, even Leo Oppenheim, who had indeed collaborated with him for the book on *Trade and* Markets, then tended to sidestep, 103 and similarly Johannes Renger, the only Assyriologist on his own admission a follower, preferred the moderate Polanyi of the Livelihood of Man. Renger, however, in a very long article in the middle of the eighties, minimized Oppenheim's swerve (considering him an orthodox follower of Polanyi), and provided a general weighing up, very positive towards Polanyi's impact in an Assyriological context; Renger also minimized

<sup>100</sup> Polanyi 1960a. The term will be re-used by D'Altroy and Earle 1985 (without giving Polanyi much credit).

<sup>101</sup> On the various uses of money, and on moneys of partial worth, cf. Polanyi 1960b; 1977, pp. 135-164 (reprinted from 1957).

<sup>102</sup> Heichelheim 1938.

<sup>103</sup> Snell 1991.

the role of the local marketplaces, explaining the price fluctuations as determined otherwise, and assuming a very 'redistributive' vision of the Ancient Near-Eastern city. 104 In any case, right in the middle of the eighties a new interest in Polanyi's theories arose, as we shall see later (§ 5.10).<sup>105</sup> And in these same years, Polanyi's theories were also discussed by professional economists: Douglass North (who would win the Nobel prize in 1993) on one side recognized their essential validity, while in contrast Morris Silver criticized them point by point, giving a truly mercantilist vision of the Ancient Near East basing himself, however, only on trade and quite apart from the weight of the redistributive administration. 106

#### 3.6 The Chicago school: 'City Invincible' and the young Adams

In the 1920s, the Sociology Department of the University of Chicago gave birth to a new approach to the study of the city, 107 obviously the modern one: an approach of sociological character that had already been spelt out in 1915 in a 'seminal' article by Robert Park, <sup>108</sup> and which culminated ten years later in the book by several authors entitled *The City*. 109 The project was meant to be inspired by cultural anthropology, particularly the work of Franz Boas, basically applying to the complex world of the metropoleis (not just the American ones) the methods of analysis current in the study of simple (or 'primitive' as they said then) society. The premise was somewhat ingenuous and alien, but the decision to apply sociological methods to the study of the city was not at all, and resulted in numerous studies on the socio-economic diversity of urban quarters, central-peripheral dynamics, ghettos, industrial zones, situations of marginalization, racial conflicts, urban criminality, and whatever else - until it legitimately became an important branch of sociology. The importance of the

<sup>104</sup> Renger 1984; Zaccagnini 1989-90. Janssen 1975a also adopted redistribution as the basic structure of the Egyptian economy.

<sup>105</sup> Enough here to give as examples the redistributive visions of Manzanilla 1997 and Fortin 1997. A well balanced account on Polanyi's fortunes and misfortunes in the Ancient Near East is given by van de Mieroop 2004. Immediately afterwards appeared Rouillard (ed.) 2005, which showed a revival of interest. Most recently Halstead 2011 is clearly pro-Polanyi.

<sup>106</sup> North 1977; 1981; Silver 1983; 1985.

<sup>107</sup> The school of sociology succeeded the school of architecture at the time of Chicago's great urban development in the 1880s and 1890s; cf. Giedion 1941, part V.

**<sup>108</sup>** Park 1915.

<sup>109</sup> Park, Burgess, and McKenzie 1925; also Wirth 1938.

'Chicago school' is well known and has been much studied, and it is certainly not up to me to deepen the analysis.110

I intend instead to say that, not by chance, it was there at Chicago (at the Oriental Institute, which was then the world centre for studies of Ancient Mesopotamia) that a complex of research initiatives began that we too can call the 'Chicago school', applied however to the sociological study of the city of the Ancient Near East. 111 Between the two 'Chicago schools' forty years elapsed, but it is difficult to imagine the second without the premises of the first, and the roots they took in the academic world of the University of Chicago. Obviously, a number of the sociological inspirations remain peculiar to the modern city (for example, the dynamic between the poor centre and rich suburbs) and cannot be applied to remote antiquity. But more important than individual theories is the adoption of a sociological approach to a problem that until then had remained predominantly architectural in a formal sense.

The 'founding' occasion of the urban school in a Mesopotamian context was provided by the symposium on City Invincible, which was held in 1958 and whose proceedings were published in 1960. The idea of the symposium was certainly due to the young, at that time, Robert McCormick Adams, scion of great families from the financial and entrepreneurial aristocracy of Chicago, who in these years was developing his interest in Mesopotamian urbanization, 112 a topic to which he would then provide decisive contributions. The other organizer of the symposium (and co-editor of the proceedings), Carl Kraeling, was, by contrast, involved because he was then director of the Institute, and contributed with a chapter on the Near-Eastern city in the Greek and Roman period. The Institute was anyway already occupied with the study of urbanization: we need only mention the place given by Henri Frankfort to his 'Diyala Project' of which we spoke earlier.

The symposium was based upon the equation, city = civilization: on the one hand a common etymological origin (civis/civilitas) and nineteenth-century legacy, on the other perhaps not foreign to Gordon Childe's appraisal of the urban revolution as the beginning of the stage of 'civilization' (§ 3.1). Childe was not invited, but then all the participants were from the United States. Nevertheless the symposium covered a wide range beyond Near-Eastern archaeology and Assyriology, both in a spatial (Mesoamerican comparisons were en-

<sup>110</sup> I will limit myself to referring to Sobrero 1992, pp. 53 and 71–89; but see Bulmer 1984. In the ancient oriental world Heinz 1997a, pp. 21-25.

<sup>111</sup> Liverani 1997a. Marcus and Sabloff 2008a, pp. 6-11, provide outlines on the structure of the city, derived from the Chicago school.

<sup>112</sup> Adams 1956; 1960a.

trusted to Gordon Willey) or temporal sense (prehistoric theories were entrusted to Robert Braidwood; later developments to Kraeling), and in a disciplinary sense, with attention to and the concrete presence of cultural anthropology, history of town planning, and history of economics. The presence of two scholars, Karl Polanyi and Lewis Mumford, seems particularly significant; they brought to the symposium the theories that they were formulating in their widest extent in those same years - and it is therefore proper to talk of them elsewhere (§ 3.5 for Polanyi, § 3.7 for Mumford). Instead we need here to concentrate on Adams' contributions, 113 and on the book that he himself was to dedicate to the theme of urbanization a few years later. 114

At the 1958 symposium (and in a short but important article published two years before) Adams refers (through explicit quotation or simple allusion) to the theories then current on factors of urbanization, but in general he distances himself in order to promulgate a more flexible process, hinged on the two concepts of complexity and progression. In this way he discusses the connection between urbanization and irrigation, obviously citing Wittfogel's radical theory, in order to maintain, on the basis of archaeological evidence, that the most ancient systems of irrigation were of a local range, initiated and maintained locally, while the great canals and regional systems belong to a phase in which the cities had already existed for some time - stating that 'the introduction of great irrigation networks was more a "consequence" than a "cause" of the appearance of dynastic state organizations'.115 I think one could say, less extremely, that the connection between an agricultural surplus and development of settlements exists, but not in a uni-directional sense (hydraulic cause, urban effect) but rather as a progressive growth with reciprocal influence, because dynastic states would not occur without growth based on intensified agricultural production having already taken place.

The same goes for Adams' relation to Childe, whose 'ten criteria' he welcomes in 1960, but will criticize in 1966. 116 But he had already, in his first contribution, 117 expressed what we shall describe as his 'three points', leaving the others (such as art or writing) to a secondary role, as factors not always present, and anyway derived from the three fundamental points. The real and true factors would therefore be: (1) the emergence of a stratified society; (2) the greatly increased importance of specialized craftsmanship; (3) the changing character

<sup>113</sup> Adams 1960b and 1960c.

<sup>114</sup> Adams 1966.

<sup>115</sup> Adams 1960c, pp. 280-281.

<sup>116</sup> Ibid. pp. 270-271; Adams 1966, pp. 9-12.

<sup>117</sup> Adams 1960b, pp. 30-32.

and function of the population centres. But the substance of Childe's theories were not so much in the debatable list of 'ten criteria' as in separating the basic mechanism of the whole process: production of a surplus that was intended for social use. And this mechanism is substantially accepted by Adams.

And finally the same can be said of Polanyi's theories, which are in part welcomed (the redistributive scheme as the foundation of the ancient urban economy), but without explicit agreement. As in the other cases, here also Adams is not inclined to accept theories and visions that are too mechanical, too uni-directional, and too ideologized. There is the influence of the environment, but there is also the influence of man on his environment. There is the prominence of irrigated agriculture in the great agricultural flood plains, but there is above all a strategy of diversification (pluvial agriculture, stock rearing, both settled and with transhumance, fishing in the rivers and pools, harvesting in wooded country and on the steppes, and residual hunting), which better enables recovery from recurrent crises. The idea has already been introduced that the great rigid and bureaucratic systems are subject to vertical collapse, while the flexible systems of local range are more elastic and therefore capable of surviving ('resilience' will become one of his favourite terms). 118

In setting up the symposium of 1958, Adams poses three questions: (1) the ecological context, which in Mesopotamia meant irrigation but not that alone; (2) the internal complexity, the sociological study of the city (and here the influence of the Chicago school stands out), the internal differentiation, and the emphasis on the function of connection between different ecosystems; (3) the 'managerial' city (unlike Childe's technological one), and the management of the agricultural surplus and of irrigation. Today this can all seem obvious and facile, but at the time an approach so complex, meant to outline a system in all its differences and interactions, was not at all facile, in a still pre- (or at most proto-) information technology age.

The selection of cases of 'primary' urbanization also took form, which might be thought to keep intact the determinant factors of urbanization, both those of an environmental nature and those relative to the socio-economic and socio-political process. In 1960 Adams selected four cases: Mesopotamia, Egypt, Mesoamerica and Peru; they are treated as clearly falling into two pairs, one for the Old World and one for the New, pairs inside which the older case could have had an influence on the newer, an influence, however, that was not definite. Here we may ask how on earth China and the Indus Valley are missing, more distant and less able to be influenced by Mesopotamia than Egypt could have been. Perhaps the decision was due to the occasion of the symposium, to less competence in the cases excluded, or to other incidental factors. The fact remains, however, that returning to the argument in 1966, Adams prefers to cut the list back even further, reducing it to only two cases (Mesopotamia and Mesoamerica), explaining the exclusion of Egypt and the Indus valley as being secondary processes, and the exclusion of China as due to documentary inadequacy.

The small book of 1966 (derived from his Morgan Lectures from the three years 1963-65) is set out in a manner to which the thoughtful choice of title already leads - The Evolution of Urban Society. 'Evolution' (and not 'revolution', a term which, however, he too uses), and so consideration for a gradual approach more than a particular turning point: the revolution is a process and not an event. And 'urban society' (again the Chicago school!) indicates a much larger theme than the 'city' or even 'the (archaic) state', as in the jargon of neoevolutionism to which Adams does refer (if for no other reason than the location of the lectures) from the first page: with unilinear early-evolutionism discredited, and with, however, the 'Boasian' phase of specific analysis of individual cases also superseded, a new comparative and generalizing season opened, finally based on archaeological, textual and contextual data. And we should remember that the book represented the culmination of that first phase of Adams' activity, but was written when he had already started on experience in the field with the Divala project, of which we shall speak later (§ 4.2).

The flexible vision, so typical of Adams' style and method, does not prevent the separation of 'steps' of spatial-temporal concentration of discontinuity and creative innovation; among these 'steps' the beginning of urbanization merits a central role in the history of humanity. In the conclusion of the work he distinguishes between a course oscillating between high and low for Mesoamerica and one of a more continuous 'ramp' for Mesopotamia, with the cautious suggestion of blending the two processes in a ramp marked by steps, as a general model. He adopts from Julian Steward the expression 'levels of sociocultural complexity' for articulating the process of development, and the concept of a 'core', or nucleus, in contrast to the 'secondary features' to characterize a civilization, whose nature is, however, for Steward of a material and environmental nature, while for Adams it is cultural. The environment is always present, but above all for establishing that Mesopotamia is not at all homogenous, but is on the contrary based upon a plurality of resources and human groups with diverse specializations: extensive cereal farming, intensive horticulture, sheep-rearing (both settled and with transhumance), exploitation of the marshes, and fishing. This environmental and socio-economic complexity produces local exchanges that are 'mediated by the dominant urban institutions, including the palace and the temple' (p. 51), a model that is close to the model of Polanyi's 'redistributive city' - while obviously distant from Wittfogel's more totalizing model of the 'hydraulic city' (pp. 66-68). If the author adopts numerous points already proposed by others (Diakonoff on commonlyheld ownership, Gelb on serfdom, Oppenheim on the great institutions, as well as the systematic use of Childe's formula of the 'urban revolution'), the great innovative merit, however, remains in the formulation of a complex socioeconomic picture, such as had never before been attempted. The chapter on Kin and Class (pp. 79-119) brings into the discussion the element of internal social structure: having taken it as completely acceptable that urban society is characterized through a passage from a structure based on groups of kin to one based on groups ('classes') of function, the chapter emphasizes above all, however, the persistence of lineage as the basis also of functional relations (heredity of the roles), and adopts the ethnographic model of 'conical clans' (with ranks and fortunes decreasing from the central lineage to the collateral lines) in order to explain the emergence of socio-economic stratification – so actually renouncing the traditional explanation, that the stratification of roles and access to resources is the result of a complex and supra-familial organization (with positions more or less close to the management of the social *surplus*). In some ways analogous is his shift over the importance of the religious factor. Adams recognizes as correct the idea of a religious factor in the urban revolution ('a primarily religious focus to social life at the outset of the Urban Revolution' p. 121),<sup>119</sup> but then develops the idea in the sense of specifying the multifunctional role of the temple (with the temple developing not only as a sanctuary but also as a redistributive centre with management activity), rather than inquiring into the role of religion. I mean here to say that there are no observable traces of the role of religion in making the growing socio-economic inequality acceptable (in Marxist terms: the questions of the 'superstructure' and of the 'false consciousness'), just as there is no explicit attention to the fact that the first urbanization must have been founded on the temple and on the 'high priest' (Sumerian en), while only with the second could the role of the 'lay' palace and dynastic king (Sumerian lugal) emerge. In general lines Robert Adams' wish to adopt an approach of anthropological character is clear, renouncing at the same time (both with explicit contrary material and more often with omissions of fact) the more extreme and ideologically laden visions which had preceded it.

<sup>119</sup> Adams had already, in 1956, sketched a line of development from the pre-eminence of the temple to the eve of urbanization, to the predominance of the palace (and of military expansion) in the early dynastic era, to the secondary emergence of commercial entrepreneurship.

#### 3.7 The wider scenes: Mumford, Sjoberg, Jacobs

The year 1960 can be taken as a 'symbolic' date: not only did scholars of the ancient Mesopotamian city then receive input (no longer of nineteenth-century mould) from those who were engaged with the city from the urbanistic and modern sociological viewpoint, but we also find the converse - that sociologists and town planners worked on, or tried to work on, recent results in archaeology and ancient history, including Near-Eastern, in order to develop their theories of general reference. Not since the time of Max Weber, half a century earlier, had this happened, and the years between had seen an increase and enrichment of the Ancient Near-Eastern evidence, which had moved its focal point from the texts to archaeology, and above all had begun to work on its own models, with which generalists ought also to have been confronted, if for nothing else, for tackling the problems of the 'origins'. It has to be said that accurate understanding of the archaeological and Near-Eastern material was not easy for the generalists, who often contented themselves with gaining information at second hand, and came to use it not as a starting point but as a support for already conceived models. Without spending too much time on giving accounts of so much work devoid of particular originality and influence, we should, however, at least give due weight to the work of two very influential scholars: the well-known historian of urbanism, Lewis Mumford, and the sociologist, Gideon Sjoberg.

Before his participation in the Chicago symposium on the City Invincible, Mumford had already published important books on the culture of the city and other aspects (development, collapse, renewal) of urbanization, 120 but it was only now that he was bringing out his greatest work, of a more properly historical stamp, which would be published the following year.<sup>121</sup> Among the many works written by both architects and town planners, this merits attention, if for no other reason than because of its authority and persistent influence. He uses fine sources (Frankfort and Woolley for the archaeology, Childe for the 'urban revolution', Wittfogel on the hydraulic factor and totalizing character), yet with various exaggerations, contradictions, and also misunderstandings. The style, laden with images and fantasies, and the fervent argument of unproven (and unprovable) hypotheses, yet set forth dogmatically, make it a work, taking it as it is, for good and for bad, of little scientific value. Idealism and the principle of continuity are both prominent. The rejection of Childe's

<sup>120</sup> Mumford 1938; 1945.

<sup>121</sup> Mumford 1961.

'revolution', with its economic and technological dominance, can be attributed to idealism – even though it is true that he then accepts the picture almost to the letter (pp. 38–39). Totally unjustifiable statements (compared with what he himself has said in great detail) are made from a wish to follow the principle of continuity, such as 'as purely physical artefacts the remains of the large village and the small town are indistinguishable' (p. 19), or 'the gradations between Neolithic villages and Neolithic towns are so smooth, and the points of resemblance so many that one is tempted to take them as simply the youthful and adult forms of the same species' (p. 20) to culminate in the incredible statement: 'The city ... was the chief fruit of the union between Neolithic and a more archaic Palaeolithic culture' (p. 27; and note the insistence on the presumed 'hunter-king' p. 23). In his more analytic discussion we recognize more judicious views, on demographic estimates (pp. 62–63, from Frankfort), on the role of the citadel (pp. 67-80, with temples and a palace), on the general system (from Childe), on the confluence of village elements in the new dimension. But the central and very personal theme of the book is striking in being extreme and at the same time based on fantasy: the Ancient Near-Eastern city born from a blend of religion and war - is 'a focal center for organized aggression' (p. 42), 'an outstanding display of ever-threatening aggression' (p. 44).<sup>122</sup> Two incompatible components are flowing together here, it seems to me: a sort of admiration for a powerful machine, and a sense of something alien that derives, to what extent I do not know, from the old antithesis between the Near-Eastern city and 'our' community, or perhaps also from a kind of genuine unease in making the adjustment to the modern megalopolis.

The contribution to the *City Invincible* is equally noticeable for its fanciful style, the many exaggerations, the unjustified generalizations, and the fundamental thesis, that urbanization had been a 'great explosion of power'. It is worth quoting a passage: 'This union of secular and sacred power greatly simplified the art of centralized government, for the palace, the temple, and the granary not merely monopolized the main agents of political and economic power but, by their architectural magnificence, expressed in symbolic language that even the illiterate could easily understand, imposed respect and obedience upon the mass of the population. By these means a whole region, finally a whole river valley, might be transformed into a single co-operative unit'.123 Further on it turns to urbanization as a parallel effect of 'the military machine and the bureaucratic machine', and the role of trade is denied (no origin from the market place; and the canals as means of irrigation more than

**<sup>122</sup>** To some extent echoed by Uphill 1972 (the Egyptian palace as a 'ruling machine').

<sup>123</sup> Mumford 1960a, p. 8.

as channels of transport). In the concluding remarks the mixture between Palaeolithic and Neolithic elements also re-emerges, a beginning placed certainly (with Childe) in 3000 BC, but entirely other than revolutionary. But more significant than the 'date' seem to me the principles expressed in the form of questions (somewhat rhetorical) put to the specialists: 'Was the change from the village or the proto-city possible without the institution of kingship, however feasible it was to dispense with that authority at a much later stage, as in Athens? Do you ever find cities of any size without discovering the castle or palace, along with the temple, in a sacred, usually fortified, precinct? Do you find any early cities in which there is not a dominant minority in control of the instruments of power and culture and a much larger group contained by the city but participating only vicariously in its higher activities?'124 It is clear how much Mumford owes on the one hand to Childe and on the other to Wittfogel, while formally distancing himself from both, perhaps for political-ideological reasons.

Gideon Sjoberg's theory, which also appeared in 1960, is meant to provide a unified model of 'pre-industrial' (or 'feudal', using a pretty ambiguous term) urbanization, that is which stretches from the origin of the city up until the great changes produced by the industrialization of the last two centuries: and so a model that covers a good 95% of the world history of urbanization. Sjoberg (with his wife Andrée, co-author of the chapters on the ancient phases) commits himself, without too much divergence, to pre-selected points of reference: Gordon Childe for the process and date of the first urbanization, Henri Frankfort and Leonard Woolley for the archaeological evidence and demographic data. The essential factors are three, derived from Childe and altogether not dissimilar to those proposed by Adams: (1) the environmental factor, above all irrigation but also the facility for interaction with neighbouring environments; (2) an advanced technology, in agriculture but not only there, able to produce a surplus; (3) a complex organization and a power structure capable of extracting (through taxation) the surplus for the maintenance of specialists. Among the three factors, the technological one appears as the 'prime mover' and somewhat anachronistically Sjoberg unites (without too much distinction) Neolithic innovations (cultivation of plants and animal herding) with those coming chronologically after the first urbanization: the wheel, the plough, irrigation, metal-working in bronze. On the size of towns, the author tends to reshape certain archaeological estimates, in order to shape the ancient cities (and also the mediaeval) as much more modest than the post-industrial.

<sup>124</sup> Mumford 1960b, p. 237.

As for the history of urbanization, once the case of Jericho (on which see § 4.6) has been justifiably rejected, the oldest city is the Mesopotamian, towards 3500, together with the beginning of writing: other breeding grounds not really 'primary' are Egypt towards 3100 BC, the Indus valley towards 2500 BC, China towards 1500 BC – all to a large extent self-governing and original, even if with a certain debt towards Mesopotamia, a debt varying according to the distance – plus the case of the Maya civilization, obviously without relations with the Old World. From these breeding grounds urbanization will then spread from Mesopotamia into the Levant, Anatolia and Egypt, from Egypt into Nubia, from China into Korea and Japan, from Mesoamerica into the Andes. The accent placed (still in Childe's footsteps) on the new and great renewal of urban expansion at the beginning of the Iron Age, around 1200 BC, and also in geographical and ecological contexts never before urbanized, is interesting: in this case the technological factors are the iron itself, the alphabet, new techniques of irrigation (in extra-alluvial areas), and new techniques of navigation and land transport.

On the whole Sjoberg's book worked well as a means of taking the results from research into Near-Eastern archaeology and presenting them to the world of sociology, where the book was widely and positively accepted. And it was also useful to Near-Eastern archaeologists in providing them with a frame of socio-economic and urbanistic reference of considerable perspective and reliability.<sup>125</sup> Only the first part of the book has been considered here, because all the rest, which is meant to provide a general model based on a long diachronism (from the urban revolution to the beginnings of modernity) and on a world stage, necessarily assumes a process more properly sociological than relevant to the ends of the present study.

It may be illuminating to cite how the two different visions of Mumford and Sjoberg are reflected in the definitions of what a city is, given by the two authors. For the former the city is 'the point of maximum concentration for the power and culture of a community'; for the latter it is 'a community of substantial size and population density that shelters a variety of nonagricultural specialists, including a literate elite'. The definition given earlier by Louis Wirth was not bad, as 'a relatively large, dense, and permanent settlement of socially heterogeneous individuals'.126 In all these definitions, different as they are, there is a positive intention to take into consideration the city of the Ancient

<sup>125</sup> For example Frick 1977, pp. 1-23; Nefzger 2001, pp. 164-166.

<sup>126</sup> Mumford 1938, p. 3; Sjoberg 1965, pp. 55-56; Wirth 1938, p. 8. Mumford's and Wirth's definitions are cited by Kostof 1991 and by Pezzoli and Olgiati 2002; Sjoberg's is cited by Morris 1972 (1994<sup>3</sup>).

Near East, and to find a common denominator between them and the modern cities to which town planners and sociologists primarily dedicated their attention. In this thread Paul Bairoch's thesis also enters, 127 with the demographic factors not influential, the accumulation of capital not decisive, and the supremacy of economic factors over technological ones (which, nevertheless remain important). And if I can open a parenthesis here, Botero's definition of a city half a millennium ago is not bad either: 'A city is defined as a gathering of people drawn together in order to live happily, and the greatness of a city does not consist in the extent of its site or the circumference of its walls, but in the number of its inhabitants and their strength. Now, men are gathered together through authority, or force, or pleasure, or the utility that results from it'. 128

Unfortunately the way opened by Mumford and Sjoberg was to have less informed followers who were to put forth visions less credible and adhering less to the actual evidence of the Ancient Near East. It is extraordinary to see the credit that was given, and is still given, even among specialists of protohistoric Mesopotamia, to the book by the economist and urbanist Jane Jacobs. 129 Obsessed (as in one of her preceding works) by the 'explosive urban growth' of the modern megalopoleis and the prospect of collapse, she has in mind the modern model, of advanced capitalism, in which urban growth is based on export, and applies this to the stages of urban origins too. So she speaks of urbanization as earlier than agriculture (as if, in Childean terms, the 'urban revolution' had preceded the 'Neolithic revolution'), entitling her first chapter Cities First – Rural Development Later, and bases herself on the case of Çatal Hüyük, towards 9000 BC, considered the first city, in order to portray a Utopian 'New Obsidian', which functioned in remote antiquity according to the canons of the exporting city of advanced capitalism. The subverting of the technological and socio-economic processes of prehistory is total.<sup>130</sup> The imaginary 'New Obsidian', even more ancient than Çatal Hüyük, around 9000 BC, prospers on the working and trade of obsidian, and its inhabitants live on game, both local and imported. Stock rearing and farming are acquired from

<sup>127</sup> Bairoch 1963.

<sup>128</sup> Botero 1958, p. 309. 'Città s'addimanda una ragunanza d'homini, ridotti insieme, per vivere felicemente; e grandezza di città si chiama non lo spatio del sito, ò il giro delle mura ma la moltitudine de li abitanti, e la possanza loro. Hor gl'homini si riducono insieme, mossi ò dall'autorità, ò dalla forza, ò dal piacere, ò dall'utilità che ne procede'. The translation above is from Symcox 2012, p. 9.

<sup>129</sup> Jacobs 1969.

<sup>130</sup> I do not know if Jacobs' Palaeolithic city owes something to the Palaeolithic-Neolithic factors of Mumford's first urbanization, which, however, remained within more moderate limits.

the steward, who must manage the provisioning of a city technically Palaeolithic! Then the farming migrates from the city to the country because the shepherds must feed on cereals, and so around the Neolithic city there are Palaeolithic villages of hunters and new villages of shepherds, who export wool and meat into the city, but not cereals (which they cultivate for their own consumption). What folly!

The precedence of agriculture to urbanization<sup>131</sup> is considered a 'dogma' by Jacobs, something based not on concrete and incontrovertible data, but on a sort of faith spread among scholars – an attitude typical of dilettantes ignorant of the evidence. Her ignorance and indeed contempt for the work of archaeologists and historians of the Ancient Near East is total. The book has no footnotes referring to documentation and does not have a bibliography at the end, but a glance at the analytic index is enough to confirm that it never names cities such as Babylon or Uruk, it never cites authors such as Childe or Adams, there is just one reference to Mesopotamia and one to Egypt, and so on. We should not even be speaking of a work like this, were it not for its prestige in the economic and urbanistic ambit. It may even be that her ideas on growth and collapse of modern megalopoleis are worthy of attention (I do not have the competences to say), but certainly the whole of the part on the prehistoric origins of cities make the book unacceptable for ancient historians.

Putting aside Jacobs' completely anachronistic approach, and turning to the importance of the commercial factor on the genesis of urbanization, this at least appeared in the book by the Belgian scholar Pirenne, in the middle of the twenties, and so before the first attempts to place the Ancient Near-Eastern city in a socio-economic context.<sup>132</sup> According to Pirenne, a specialist of the mediaeval European city, there is a valid rule for cities ancient and modern, Eastern and Western, that urban life is connected to the development of trade and industry. The reason is that to support the population it is necessary to import agricultural and pastoral goods, in exchange for which the export of goods of secondary production is needed. The difference between the ancient city, predominantly of consumers, and the mediaeval of producers, does not change the substance of the rule. As we can see, we are logically on the outside of an attempt to understand the formative processes of the city, whose development seems to generate the presuppositions upon which it is founded, and so will have to be explained differently (or perhaps we are dealing with a development that is 'natural' and therefore not explained?).

<sup>131</sup> Even for Bairoch 1963 agriculture is the determining factor for the industrial revolution, and agricultural development precedes industrial development.

<sup>132</sup> Pirenne 1925.

#### 3.8 Neo-evolutionism: city and archaic state

Almost a century after the great season of evolutionism in the 1870s and 1880s, a neo-evolutionary movement, above all American, emerged; after the long season of 'particularism' and 'descriptivism' (linked above all to the name of Franz Boas), courage was summoned up to incorporate our understandings into a wider setting of spatial and diachronic dimensions.<sup>133</sup> While nineteenthcentury evolutionism had drawn pictures of a simple evolution, uniform and rather mechanical, based upon the necessary relation between cause and effect, the revival was marked by a consciousness that evolutionary processes are complex, not inevitable, and above all varied in their position in space and time, and also through the characteristics peculiar to each instance. 134 But here I shall limit myself to pointing out a number of positions that have influenced Ancient Near-Eastern studies.

Of the two exponents of the first generation, Julian Steward<sup>135</sup> and Leslie White, 136 it was the former who expressed positions influential to our argument. In his book of synthesis, after having set forth the principles of multilinear evolutionism and complexity, and the inventory of instances of complex societies (Mesopotamia, Egypt, China, Mesoamerica and the Peruvian Andes) Steward spends some time (through the declared influence of Childe and Wittfogel) on the role of irrigation in the passage from the 'formative' stage to that of 'regional states' and then of 'initial empires'. The similarity of the processes (although staggered across different eras)<sup>137</sup> is explained through the ecological factor, and Steward sees himself as the godfather of 'cultural ecology'. Therefore, in analogous ecological conditions we have analogous processes, and the passage to urbanization and to the formation of states takes place in arid or semi-arid environments thanks to irrigation.

The second generation was rather more interested in the evolution of sociopolitical forms of organization, passing through stages variously described,

<sup>133</sup> Yoffee 1979, pp. 5–11; 2005, pp. 3–41; Harris 1968, pp. 855–880; White 1959b; Sahlins and Service (eds.) 1973 (with White's comments, pp. v-xii, on the 'Boasian' phases); Meggars (ed.) 1959; Claessen 1981; 1984; Claessen and Skalník 1978; Johnson and Earle 1987; Rothman 1994. On neo-evolutionism in the information age Guidi 2003.

<sup>134</sup> Carneiro 1973; Dunnell 1980; Claessen 1981.

<sup>135</sup> Steward 1955.

<sup>136</sup> White 1959a, b and 1960.

<sup>137</sup> Steward 1955, table 4 (p. 189) shows a clear diachronic spacing, from Mesopotamia to Egypt, from China to Mesoamerica, which makes one suspect a role of some sort for the mechanism of diffusion.

than in the development of types of settlement.<sup>138</sup> In 1962 Elman Service proposed the sequence 'bands'  $\rightarrow$  'tribes'  $\rightarrow$  'chiefdoms' (then introducing a fourth stage 'states' and a fifth 'industrial society', not discussed because his book limited itself to primitive social organization). <sup>139</sup> In 1967 Morton Fried proposed the sequence: 'simple egalitarian societies'  $\rightarrow$  'ranked societies'  $\rightarrow$  'stratified societies' → 'states'. 140 Both authors minimize or completely leave out the 'material' aspects (forms of settlement, technological innovations, economic relations, work specialization). Fried states explicitly<sup>141</sup> that the settlement element of 'ranked society' is the village, but then he does not say that the state is characterized by the appearance of the city; he does not cite Childe, and does not seem to know of him. Symptomatic of the new political-cultural temper is the willingness to find neutral labels, which offend no one (the 'savages' and 'barbarians' of nineteenth-century evolutionism might have been offended, but fortunately did not know how to read ...). And so Robert Redfield, to avoid terms with connotations indicating value judgements, uses the expression 'folk societies' to designate pre-urban societies; but then he compares them to 'civilized societies' (the urban ones) which is indubitably a term with connotations! Besides, with urbanization and civilization arrive a company with little to recommend it: heterogeneity, uprooting, exploitation, specialization (of knowledge and functions),<sup>142</sup> so that perhaps not being civilized would not cause too much grief.

Service then turned in 1975 to his evolutionary scheme, this time extending it up to the forming of states. In a general way he proposes to simplify, unifying band with tribe and chiefdom with state, 143 establishing a 'great divide' so general as to be of little historical use. 144 Among the factors indicated by earlier authors, but considered for reshaping, we find all the 'material' ones: war and conquest; irrigation and intensified farming (against Wittfogel); demographic pressure (against Carneiro);<sup>145</sup> urbanization (against Childe); economic stratifi-

<sup>138</sup> The interest in matters political rather than in settlements is clear skimming through the summary of Cohen and Service (eds.), pp. 1-20.

<sup>139</sup> Service 1962 (I quote from the partially revised 1971 edition). The scheme was adopted by Flannery 1972b. I am not entering into the much-debated problem of what a 'tribe' is, postponed to Crone 1986.

<sup>140</sup> Fried 1967.

**<sup>141</sup>** *Ibid*, p. 118.

<sup>142</sup> Redfield 1953.

<sup>143</sup> Service 1975, p. 304.

<sup>144</sup> As Spencer 1990 noted.

<sup>145</sup> Carniero's (1970) proposal was linked to the concept of 'circumscription': the state emerges from a condition of conflict in a delimited agricultural zone (by mountains or deserts), which cannot therefore be expanded.

cation and class warfare (against the Marxist school).<sup>146</sup> On urbanization Service cites Childe and his ten criteria, but only to reject them as non-essential. Urbanization is not an important factor, there was never an 'urban revolution', the city is an occasional (not universal) regression, defined by ceremonial intentions, or even defensive (against competitive neighbours, or against aggressive nomads). The state then is not oppressive, as Lenin said; it did not arise to defend those who have against those who have not, class warfare does not exist. You cannot help but notice how Service, the ex-Marxist penitent, 'must' put himself at the greatest possible distance from historical materialism. On the contrary, says Service, evolution is determined by the institutionalization of leadership and power, following a strictly political approach, which has little to do with the facts of settlement. But the divergence between neoevolutionists, on the importance of material and socio-economic factors, was already there in White and Steward's generation (for and against the role of ecology) and perpetuated itself with that of Fried and Service (social conflict vs. consensus and profit for the governed too).

Coming then to discuss the Ancient Near-Eastern cases (after so much space given to 'chiefdoms' scattered throughout the world), Service accepts (under pressure, obtorto collo) for Mesopotamia<sup>147</sup> the role of the rivers and canals, urbanization ('The First Urban Civilization' is the title of his concluding paragraph), full-time specialization, and the central position of the temple. For Egypt, however, he takes Wilson's position, on the absence of urbanization for the whole of the third millennium and beyond (according to him 'the origin of civilization in Egypt was not a good example of Childe's urban revolution'): political unification came before urbanization, and later there was no longer a need. The instances of India and China, says Service, also put the socioeconomic role of urbanization in crisis: in India there is no palace, in China there are ceremonial centres. On the whole, the case of Mesopotamia is exceptional, cannot be extended, and urbanization is not an essential factor.

Another dozen years later, Johnson and Earle<sup>148</sup> provided an evolutionary scheme – from the family to the local group, to the chiefdom, to the archaic state, to the national state – of a technological and demographic type: growth

<sup>146</sup> A good review, with particular attention to the Ancient Near East, by Wright 1977; also the contributions of Service (pp. 21–34) and of Wright (pp. 46–68) in Cohen and Service (eds.) 1978, pp. 21-34; Huot 1982. In general American neo-evolutionism prefers integrationist factors to controversialist ones, since those can involve the Marxist 'class warfare'. In a contrary trend Fried 1978, who cites and appreciates Diakonoff.

<sup>147</sup> Service 1975, pp. 203-224.

<sup>148</sup> Johnson and Earle (eds.) 1987.

in size of the group, of demographic and settlement density, of resources and technology, of social organization, of leadership and ceremonial, and of territoriality and war. 149 Little or nothing is said of the cities, and the Ancient Near East is almost completely absent: 'Ubaid alone is named as a simple chiefdom, while the archaic state is exemplified by the Inca, mediaeval France and Japan, not to speak of the national state.

At this point we might ask ourselves if speaking of these examples is really necessary. It is, for various reasons, above all because certain concepts and certain terms have become part of the Ancient Near-Eastern baggage too: an obvious instance is 'chiefdom', 150 which is by now accepted by many authors as a necessary stage in arriving at the state; 151 and we can also think of 'Rank Society'. 152 And then schemes of neo-evolutionist inspiration have also been proposed in relation to the growth of settlements in the Ancient Near East: there is Jean-Daniel Forest, who has recently proposed the scheme of simple village  $\rightarrow$  complex village  $\rightarrow$  simple chiefdom  $\rightarrow$  complex chiefdom  $\rightarrow$  city-state → empire.<sup>153</sup> Besides, the origin of the Near-Eastern state from the tribe has also found favour with reference to the modern world.<sup>154</sup> Naturally the process that travels from the tribe to the state has very deep roots (enough to think of Ibn Khaldun) and a solid tradition in Arab-Islamic studies.

But the principal problem of neo-evolutionism arose from being based for the vast majority of cases on modern material, provided by ethnography and political science, and from marginalizing the archaeologically important cases (which the neo-evolutionists only know by hearsay), in which, however, one can have hands-on knowledge of the evolution of socio-political forms. In Service's book, for example, the 'weight' given to the instance of the deeply secondary, modern and ephemeral Zulu state is vastly superior to that given to Uruk, which is scarcely mentioned. But omission of the more important cases

**<sup>149</sup>** *Ibid.*, the resumptive tables, 10 at p. 314 and 11 at p. 324, are useful.

<sup>150</sup> On the use of the concept of chiefdom in the ancient Near East cf. Stein and Rothman (eds.) 1994, with contributions on 'Ubaid, Susa A (Wright), Tepe Gawra VIII-XI (Rothman) etc. See also Yoffee 2005, pp. 22–23. The 'Ubaid phase (on which cf. Henrickson and Thuesen [eds.] 1989; and now also Carter and Philip [eds.] 2010) is the most plausible candidate.

<sup>151</sup> Carniero 1981; Gledhill 1988, pp. 11-15. For the opposite view Sanders and Webster 1978; Yoffee 1993; 2005, pp. 4-21, who think of alternative courses.

<sup>152</sup> The concept of 'Rank Society' was renewed by Flannery 1994 with his 'Rank Revolution', which is also inserted mid-way between egalitarian society and the society of the State.

<sup>153</sup> Forest 2005. The opportunity to distinguish between simple and complex chiefdom, and to introduce other sub-types, was earlier in the introduction of Earle (ed.) 1991.

<sup>154</sup> Smith 1986; Khoury and Kostiner 1990.

is widespread. The volume edited by Earle<sup>155</sup> on chiefdoms does not include a single case from the Ancient Near East. Even in the London conference on *Man*, Settlement and Urbanism, although organized by ancient historians, we notice absences and under-valuations of its importance.<sup>156</sup> An extreme case is the authoritative collection edited by Claessen and Skalník on the Early State:157 of the Ancient Near East, and of antiquity in general, there is only Egypt, 158 missing out both Mesopotamia (!) and Greece, and Israel, the fount of the epoch that predates archaeology. By contrast there are plentiful late-antique, mediaeval and above all modern cases, and also, the geographical distribution is meant to be 'equal' (Africa 8 [!], Asia 6, Europe 3, America 2, the Pacific 2) but is clearly anti-historical. The whole analytical part is framed between an introduction – in which there is a definition of the 'archaic state' and how it is subdivided into sub-types (inchoate/typical/transitional, with this last so-called because it foreshadows the mature state) - and an evaluative and summingup part<sup>159</sup> that looks again at the classification in order to obtain, from the analytical examples, the typical characteristics, with an evidently circular process: first the 'appropriate' cases are chosen, and then they are studied to draw from them the conclusion that they are indeed appropriate!

In this way, between modernism and 'equal dignity' spread worldwide, evolutionary panoramas are produced, which in reality are based upon tribes that never become chiefdoms, and on chiefdoms that never become states. This was noticed in particular by Norman Yoffee, who made it the basis for a fundamental criticism of evolutionism, of the basic concept that the evolution of human society was obtained by placing in diachrony (from the simpler to the more complex) those factors that on the contrary were solutions that were among themselves alternative and co-existing. 160 I permit myself here to add a properly historical note: a few kilometres from the Assyrian capitals, the controlling centre not only of a state in full order but also of a 'universal empire', there lived on Mount Zagros populations organized through chiefdoms, and these remained almost until our own days. Nineteenth-century 'palaeo-evolutionists' could not do other than imagine on an ethnographic basis and

<sup>155</sup> Earle (ed.) 1991. Earle 1987 gives only five lines to the Ancient Near East, which is left out of the question.

<sup>156</sup> Ucko, Tringham, and Dimbleby (eds.) 1972.

<sup>157</sup> Claessen and Skalník (eds.) 1978.

<sup>158</sup> Janssen 1978.

**<sup>159</sup>** Claessen 1978.

**<sup>160</sup>** Yoffee 1993; 2005, pp. 4–21; on the same lines Adams 2004, pp. 41–43, and earlier Crone 1986. The critique of Paynter 1989 is of a different tenor.

through philosophical speculation a process that remained unknown in a historical-archaeological sense; and we had to wait for Gordon Childe to have a translation into proto-historical terms. But the neo-evolutionists reasoned and wrote when historical-archaeological knowledge already existed; and it is a sign of grave anthropological backwardness that they were not aware that the conditions for analysing the problems had by now to be founded on very different bases. In the face of hundreds of instances of societies remaining for millennia at the state of tribe or chiefdom, there is a need to recognize that the few, very few instances in which the jump towards the state and the city took place are worthy of particular attention and had the effect of dragging forwards wide areas of the world at large.

### 3.9 After Babylon: Greek urbanization and the Islamic city

Given the weakness, at least in its nineteenth-century formulation, of the antithesis between an ancient western city and an eastern non-city motionless in time, deeper knowledge of the ancient Mesopotamian city (finally!) triggered diachronic study of the various successive urban models in the Near East over the course of centuries: and thereby the study of continuity and discontinuity that marked the advent first of Hellenism and then of Islam. This development took place while classicists continued (and were to continue for yet another fifty years) to define 'ancient' as the Graeco-Roman city of the classical world: 161 probably from simple convenience and absence of mind, but symptomatic of a persistent closure towards the Near-Eastern world. Works by ancient historians in the 1970s and 1980s, in contrast, give due space to the Near East, absorbing from the existing literature a series of characteristics but also of stereotypes: the beginning of urbanization towards 3500 BC (but with doubts on the question of Jericho/Çatal Hüyük), the Sumerian cities centered on the temple, and then the Assyro-Babylonian centred on the royal palace, the Levantine cities based on trade (but without understanding the distinction between primary and secondary instances), the cities of the Indus without a sequel, and the Egyptian cities created through Pharaonic decrees. 162

But we arrive at the question of the advent of the Hellenistic city in the East, following the conquests of Alexander and the empires of his successors. The most striking phenomenon was obviously provided by the new Hellenistic

<sup>161</sup> As in Rich, Wallace-Hadrill (eds.) 1991, or the Paris conference on La cité antique published in Opus, 6-8 (1987-89), or the book by Reddé (ed.) 2003.

<sup>162</sup> Hammond 1972; Kolb 1984.

foundations - the many Alexandrias founded by Macedonia, and the many Antiochs, Seleucias and Laodiceas founded by the Seleucids - which were thereafter the centre of attention for ancient and modern historians of the Hellenistic world. In the 'colonial' years the most authoritative account was given by Michael Rostovtzeff. In an earlier (rather general) book on Caravan Cities he discusses Jerash, Petra, Palmyra, and Dura Europos, with a preliminary chapter on trade in the Ancient Near East, but without posing the question of if and how such trade had taken shape in a suitably equipped location, in some way precursor of the caravan city, which appears as if out of nowhere in the Roman era. 163 Rostovtzeff then discusses the Greek cities more widely in his great social and economic history of the period, confirming that Graeco-Macedonian colonization was established not exactly in an empty space, but almost. If in the fourth century, on the eve of Alexander's conquests, there were some flourishing cities, these, however, were the financial and mercantile centre of Babylon, the ports of the Levant, and the caravan cities. And so (apart from the temple-cities of Asia Minor) everything revolved around trade, especially trade with the West, which had a 'vivifying influence' (p. 85). One has the impression that this urban-commercial network is a foreign body compared to the mass of the rural and nomadic population. Even the picture of colonization (pp. 132–135) has little connection with the pre-existing cities. 164

A colonial attitude leaks out in Rostovtzeff. Every colonialism, both ancient and modern, needs to state that it took possession of an 'empty' country, because it was both sparsely populated, and incapable of exploiting its own resources: the arrival of colonists served to populate it and put it to use. As earlier in the study of antiquity the buildings and cities of new foundations had to be established in the desert ('Amarna, Khorsabad), for a combination of ideological reasons (the boast of heroic priority, the uncontaminated renewal from preceding ugliness), so also the conquest of whole countries must happen in a void, an emptiness both pre-existing and caused by the conquest itself (with 'ethnic cleansing' and deportation), to start again from nothing. For ancient times the 'myth of the empty country' has been studied above all with reference to post-exilic Israel. 165

But still in the post-colonial age the absence of cities in Mesopotamia on the eve of Hellenism continues to be a widespread conviction. At the 1960 Chicago symposium Jacobsen cited (from a classical historian not well identified) the Macedonians' amazement on their arrival in Mesopotamia, in seeing that

<sup>163</sup> Rostovtzeff 1932.

<sup>164</sup> Rostovtzeff 1941; further bibliography in Greco and Torelli 1983, pp. 313–374; Millar 2006.

<sup>165</sup> Barstad 1996; comments and revisions in Barstad 2003; Fried 2003; Oded 2003.

a country so fertile had only two cities, Babylon and Nineveh, and otherwise nothing but villages.<sup>166</sup> A little more scientifically, Kraeling recognized that there were capital cities, but after the Sumerian period there were no longer hundreds of cities before the arrival of Hellenism. Besides, only then were the cities fully planned, whereas before only temples and palaces were planned, and the rest grew spontaneously.<sup>167</sup> And again, more recently, the classicist Tate maintains that on the eve of Hellenism Syria was a region 'essentially rural', even although he then mentions Damascus, Tyre, Sidon, Beirut, Byblos, Antarados, and numerous minor cities in the north: 168 and conversely, the classicist Leriche studies Greek urbanization in the East without mentioning what came before and was there at the same time, as if there were nothing! 169 Very different (and well based upon the texts) is the vision of the ancient historian, van der Spek, 1987: the old Near-Eastern cities (like Babylon and Uruk, on which there is abundant evidence) coexist with the new Hellenistic foundations, and their ancient city institutions (the communal bodies) are reinterpreted and assimilated to the Greek.<sup>170</sup> And besides, right through the Persian era the list of urban centres with both public and private archives, of which we have numerous legal and administrative tablets, includes Babylon, Borsippa, Sippar, Kish, Kutha, Nippur, Ur, and Uruk.

The question of the urban institutions and of their actual presence in urban planning, seems to me to be the crucial point for estimating the rate of discontinuity between pre-classical, classical, and post-classical cities; but until now this point has attracted sparse attention on the part of theorists of the 'ancient' and 'eastern' city. In one of my recent publications, it appears clear how in the Ancient Near East there is considerable evidence for 'places of power' (the palace, the temple, the encircling walls) but not for 'places of citizenship', and for the services available to the population.<sup>171</sup> These mark, on the other hand, the advent of the Hellenistic city, with its markets and colonnaded streets, buildings for the assemblies and city magistrates, public baths, theatres and other

<sup>166</sup> Jacobsen in Kraeling and Adams (eds.) 1960, pp. 179-180. But how could Nineveh have existed in 330, if it had been completely destroyed three centuries before?

<sup>167</sup> Kraeling 1960, pp. 190-191. In the course of the book not much is said of the innovative particulars: agorà, market, theatre, public baths, etc.

**<sup>168</sup>** Tate 1997, p. 351.

<sup>169</sup> Leriche 2003.

**<sup>170</sup>** Van der Spek 1987.

<sup>171</sup> Liverani 2013. For modern city planning see Romano 1993, on the 'rights of citizenship' (pp. 46-57: streets, hospitals and schools, water and light) and on the 'collective themes of public relevance' (pp. 74-98; churches, walls, streets and squares, hotels and restaurants, theatres and sports grounds, libraries and museums, etc.).

places for spectacles and sporting competitions. The comprehensive urbanistic structure emerges completely renewed; not to say that before Hellenism there were no cities, but they were simply cities structurally different.

The type of Greek city, with its spaces dedicated to the public, was carried into the Roman age and then into the Byzantine, with a number of important innovations, above all due to the advent of Christianity: but this does not interest us here, being placed far beyond the chronological limits of our journey. But the second great episode of discontinuity, due to the advent of Islam, does interest us, certainly not for chronological reasons, but because in the common view, but also in the opinion of illustrious scholars, the Islamic city, being 'eastern', must be linked to the pre-Hellenistic city, closing, so to speak, an interlude (albeit a millennium and a half long!) of classical intrusion into the Near East. The study of the Islamic city also took off during the colonial era, above all in the work of French scholars in Syria and in the Maghreb, and these studies provide points for discussion and parallels that are also valuable for the understanding of certain aspects of the ancient Mesopotamian city, <sup>172</sup> But quite another matter is the re-emergence of the concept of the 'eastern city', as championed above all by the geographer Eugen Wirth in a copious series of authoritative articles, then culminating in a book.<sup>173</sup> In his important 1991 article Wirth had already analysed the Islamic city with reference to the prevalent characteristic of private space, as opposed to the prevalence of public space in the classical city (with, however, all the ambiguity of the public/private distinction, which is understood differently in different historical contexts). In the Islamic city, not only are daily activities carried on in areas that are limited and protected (from the house to the quarter), but the whole city is barred to strangers, the civic institutions are private foundations, and the space outside is used as rubbish dumps. 174 Others will perhaps correct this characterization for the Islamic city (it is not up to me to enter into the problem here), but certainly it cannot extend to the ancient Mesopotamian city, where many of the functions and institutions to which it alludes did not yet exist. The antithesis, clear in Wirth, between East and West, should be reformulated from spatial to diachronic.

But in the evaluation that follows I will refer above all to his contribution (given at the beginning of the programme) to the Colloquium of 1997 on the

<sup>172</sup> See the studies of Sauvaget 1934; 1941; 1949; among more recent studies cf. Marcus 1989 on Aleppo, and the chapters on the Islamic city in Wilhelm (ed.) 1997, pp. 375-399. A history of studies on the Islamic city is found in Wirth 1991, pp. 50-59 (with bibliography at pp. 83-92).

<sup>173</sup> Wirth 1975, 1982; 1991; 1997; 2000.

<sup>174</sup> Wirth 1991, pp. 63-69

Orientalische Stadt, because the occasion was largely one attended by historians of the ancient Near East. Whereas among the historians of town-planning the term 'eastern city' is used to indicate the Indian, Chinese, and Japanese city, and to distinguish it from both the ancient and Islamic city, 175 Wirth uses exactly the same term to indicate the continuity between the city of the Ancient Near East and the Islamic city, hurdling over, so to speak, the intervening classical city, and putting aside the city of eastern Asia. Undoubtedly Wirth's analysis both of the general concept of the city (contrary to one-dimensional criteria, and also contrary to neo-geographical schemes; favouring complexity and socio-economic stratification) and of the characteristics of the Islamic city are of great value; but here we need to evaluate the question of the presumed continuity between the city of the Ancient Near East and the Islamic city. Wirth's position seems to me to be based, not on the definition of a historical course, but on an altogether general model which assigns to the Near-Eastern city three functions: the administration of religious and spiritual life, the solidification of power (Herrschaft und Macht, with the predominance of palace and citadel much more marked than in the classical world<sup>176</sup>), the exercise of the economy and market. Nor does Wirth accept that the Near-Eastern city is chaotic, based on an organic/spontaneous and not a planned development, in contrast to the classical and western city based on a geometric plan; and he confirms his idea that the Near-Eastern city is based on the pre-eminence of the private sphere (family and hereditary) in social relations, against the preeminence of the public sphere in the western city. As one can see, these are already rather debatable generalizations, in their application to the Islamic city, not to speak then of the Ancient Near-Eastern.<sup>177</sup>

But returning to a properly historical course, two levels of difficulty do very clearly appear. The first difficulty is that the presumed similarities between the ancient Mesopotamian city and the Islamic city are hardly very convincing. At the 1997 colloquium it was pointed out that the *suq*/bazaar that characterizes the Islamic city is missing from the Mesopotamian city, that the mosque has socio-economic functions very different from those of the Sumerian temple, that the quarters remain elusive, and that the socio-economic structure is very different (redistribution vs. market);<sup>178</sup> for my part I put forward a history of the

<sup>175</sup> In Italy this tradition goes at least from Benevolo 1988 to Romano 2010.

<sup>176</sup> On the Islamic palace Necipoğlu (ed.) 1993.

<sup>177</sup> Wirth 1997 ignores the history of the question (he cites neither Childe, nor Adams, nor Oppenheim) and the textual information, and works essentially on schematic plans.

<sup>178</sup> Pfälzner 1997a, pp. 73-74. On the ethnic quarters, typical of the Islamic world (Wirth 1997, pp. 32-34), Dandamayev 2004 suggested that a first nucleus already existed following the Assyrian and Neo-Babylonian deportations. A differentiation in the size and quality of

question which meant the abandonment of the 'eastern' label as obsolete and equivocal.<sup>179</sup> But then the very marked difference between the Mesopotamian city, which accents only places of power, compared to the Islamic which also stresses places of citizenship, must, in my view, be considered conclusive. 180

The question of places of power and places of citizenship introduces the second difficulty that Wirth's thesis encounters: which is that the theme of Mesopotamian-Islamic continuity runs counter to the legacy that the basic configuration of the Islamic city owes to the classical-Byzantine city, a legacy that had already been noticed and discussed well before Wirth's contributions, 181 and which was later taken up again by H. Kennedy in an excellent discussion. 182 Certainly there was discontinuity between the classical and Islamic cities, due not only to the religious factor (the abandonment of theatres, the different role of the mosque compared to the church, with an assumption of functions previously belonging to the agorà) but also to the economic factor (difference between agorà and suq/bazaar; public baths used for cleanliness but not to discuss business) and factors of town-planning (from the Hippodamean grid, spacious and well-lit, to the labyrinth of narrow covered alleys). But these factors of discontinuity do not affect the basic evaluation, that the Islamic city is much more similar (as the historical course would have it) to the classical city than it is to the pre-classical Mesopotamian city. <sup>183</sup> If anything it is the type of residential house, facing towards the internal courtyard and closed towards the street (compared to the 'Mediterranean' house, facing outwards, towards the street and piazza, cf. § 2.12), that assures a continuity, dictated by climatic and environmental factors and by deeply-rooted social conventions, which overcome the passage of the millennia.<sup>184</sup>

houses, area by area, was demonstrated for Ugarit by Devolder 2005, but the 'ethnic' quarters are altogether another matter.

<sup>179</sup> Liverani 1997a. In contrast Novák 1997 and 1999 uses the concept of the 'eastern' city and follows up his analysis of the royal residences of Akkad up to the Abbasid capitals of Baghdad and Samarra.

<sup>180</sup> Liverani 2013. Also Schloen 2001, pp. 108-116. In the recent book by Dolce and Pellitteri (eds.) aspects of continuity are also given importance.

<sup>181</sup> See von Grunebaum 1955 and Cahen 1958.

<sup>182</sup> Kennedy 1985.

<sup>183</sup> Fusaro 1984 makes no mention of the Classical-Byzantine legacy and speaks only of nomads and of 'a first urban implosion under the sign of religion' (confusing Arab origins and the Islamic world). The same can be said of the book (very rich in illustrations and information) by Cuneo 1986, pp. 58-63, who assigns a major role to the south-Arabian and north-Arabian pre-Islamic cities, and not to those of the Byzantine and Sassanid world.

<sup>184</sup> In this sense I would weigh the positions of Butzer 2008, pp. 82–86 (continuity of domestic nuclei and discontinuity of urbanistic grids), and of Schloen 2001, pp. 108-116.

## 4 The new models in practice

# 4.1 Robert Braidwood, the Jarmo project and the arrival of the palaeo-sciences

In 1942 Gordon Childe had described the Neolithic village as self-sufficient, without full-time specialization of work, and without the production of a surplus; and then the Chalcolithic village as no longer self-sufficient, because the introduction of metallurgy had made the presence of specialists necessary and so the production of a surplus intended for their maintenance. His position was already at that period completely consistent with the evolutionary scheme that was then to gain yet more precision and detail. But what could Childe have based himself on at that time? On the one hand on the legacy of nineteenth-century evolutionist theory, which made the passage from homogeneity to complexity obvious, from community organization to social organization (in Tönnies' terms), from mechanical solidarity to organic solidarity (in Durkheim's terms). On the other hand on data from prehistoric Europe and from his own (most beautiful) excavation at Skara Brae in the Orkney Islands to the north of Scotland. But on the villages of the Neolithic Near East he was able to make use of nothing apart from modest and chance pieces of evidence, by themselves inadequate for constructing a complex theory.

Among the many merits which we must acknowledge in the great Near-Eastern palaeoethnologist Robert J. Braidwood<sup>2</sup> (of whom we have already spoken at § 2.10 on his youthful regional survey of the 'Amuq of 1937), the greatest is perhaps that of having planned the reconstruction of the Ancient Near-Eastern village on bases no longer theoretical-philosophical and imaginary, and even supplemented from ethnographic models, as was only possible for phases of study bridging the nineteenth and twentieth centuries (§ 2.6); instead we have the reconstructions on concrete archaeological bases. To some extent Braidwood's research strategies can be compared to those of Childe (who was of an older generation), in the sense of giving a concrete body to evolutionist theories, and in the sense of dedicating himself above all to the reconstruction of the settlement system. Childe's soundest contribution was to the shape of the Near-Eastern proto-city, Braidwood's was to the shape of the Near-Eastern proto-village. In other words: Childe, between his two 'revolutions', the Neo-

<sup>1</sup> Childe 1942, pp. 65-66 (Neolithic village) and 87-88 (Chalcolithic village).

**<sup>2</sup>** On his work see the *Festschrift* Young, Smith, and Mortensen (eds.) 1983, with conclusions by Adams 1983.

lithic and the urban, was then more specifically dedicated to defining the urban; whereas Braidwood dedicated himself to defining in great depth the process of the Neolithic revolution. Of strictly prehistoric competence, Braidwood seems almost not to have dared to venture beyond the foundation process of the city, 'passing' when he arrived at fully developed cities: this is seen in one of his works of the early 1950s,3 and on the brink of the '60s.4

But already in the middle of the 1940s, Braidwood had formulated his 'Jarmo Project', which was then carried out on the ground in the years 1947-48, 1950–51, and 1954–55, to be presented in a preliminary form in 1960,<sup>5</sup> and then in the form of a final report in 1983.6 The elaboration of the theory needed to be based on concrete evidence, which field work alone, at first hand, could provide; as long as the work was planned in a clear and finalized way, and then carried out using rigorous methods. Jarmo is a hilly site, in the Iraqi Zagros Range, and was chosen in addition to other sites in the same area to investigate the origin of the village in one of the 'centres' that the palaeobotanic and archaeo-zoological investigation had indicated as a scene of the first production of food (that is, of the Neolithic revolution). Later, when the Iraqi Zagros became an impractical area, Braidwood moved to south-eastern Turkey with the 'Çayönü Project' – but by now we are in the 1960s.7 It is not possible to discuss here so many other projects, American and European, contemporary or later, but Braidwood's work is the most representative, at least for the Old World, and was to have a knock-on effect on the others.8

Braidwood must have had a liking for Childe and his theories, and even expressly defends the term 'revolution', pointing out that between two phases lasting many thousand years a change that takes place in a few centuries can be considered rapid enough to merit that definition.<sup>9</sup> In any case it was then to be demonstrated that the industrial revolution (upon which Childe's revolution was modelled) was also a long and gradual process. 10 But going beyond the goodwill, and the scientific and methodological consideration, the adjust-

<sup>3</sup> Braidwood 1952; cf. also id. 1973a.

<sup>4</sup> Braidwood 1960; Braidwood and Braidwood (eds.) 1960; Braidwood and Willey 1962. Paradoxically enough, Byrd 1994 (on Beidha and the Neolithic pre-ceramic Levant) makes no mention of Braidwood!

<sup>5</sup> Braidwood and Howe 1960; Braidwood and Braidwood 1953. On the history of the project Lloyd 1963, pp. 74-78; Braidwood 1974.

<sup>6</sup> Braidwood et al. 1983.

<sup>7</sup> Braidwood *at al.* 1981: on the continuation of the work Özdoğan and Özdoğan 1989.

<sup>8</sup> In general, Flanney 1972a; id. (ed.) 1976.

<sup>9</sup> Braidwood 1985, p. 145.

<sup>10</sup> Wrigley 1988.

ments are clear, with the dilution of the 'revolution' into a 'process', following the introduction of the concepts of 'intensified hunting-collecting' and 'incipient cultivation and domestication', which split the Neolithic revolution up into times and sub-phases more detailed and more compatible with what is found on the ground. Along the same lines, the definitions of Pre-Pottery Neolithic A and B are then confirmed, which serve to highlight how the conventional picture of Neolithic Europe as a compact block, made of villages, pottery, agriculture and stock-raising, was partly influenced by the treatment of a 'secondary' Neolithic phase, added ready-made from a Near East where it was, by contrast, possible to recognize and articulate all the formative phases. On one point Braidwood's position (at least at the beginning) seems singularly backward, in denying (against Childe and his theory of the oases) the influence of climate change in determining the great structural changes in human society.<sup>12</sup> His position, clearly a legacy from the idealist historiography of the early twentieth century, was based upon the conviction that the planet's climate, after the end of the last ice age, had remained more or less stable, without such changes as could be historically influential. He would see immediately afterwards, from his own scientific colleagues, the proof that this was wrong and the demonstration that even medium and short-term fluctuations, which punctuate the history of the climate in a fully historic age too, could produce most substantial consequences.

Whereas the conceptualization and archaeological identification of the proto-city needed to be set on an exciting and already well-formed case (that of Uruk), the proto-village in Braidwood's project needed to be analysed in various cases corresponding (if possible) to the various sub-phases of the process: so Jarmo in particular exemplified the stage of incipient cultivation of food, while Çayönü exemplified the pre-pottery stage, and so on. But the different strategies, while due to methodological-conceptual causes, were in practice made possible by the very different size and complexity of a city and its stratigraphy, compared to the size of the village. It can be said that the application, even for the process of urbanization, of analogous sub-phases (we can coin the expressions of 'intensified village' and 'incipient urbanization', and something of the sort has actually been proposed) and their identification on the ground has been added to the agenda only in the first decade of the new millennium. Certainly a synthesis is lacking up until now for the Near East that is at the same time both organic and enjoyable (an aspect which does no harm), like

<sup>11</sup> Apart from the Jarmo project reports already cited, see the summary by Braidwood 1985.

<sup>12</sup> On this problem, and on the Jarmo project in general, cf. G. A. Wright 1971 and H. E. Wright 1993.

the one that Kent Flannery has provided on the ancient Mesoamerican village.<sup>13</sup> But on this point also, alongside possible theoretical considerations, the practical facts are important: the Near-Eastern village covers so many and such different millennia and types and regional varieties, that any attempt at synthesis must necessarily be divided into sub-phases – with a process that has the weight of the facts behind the vision.

Braidwood's other great merit was in having planned his project as a full multi-disciplinary collaboration; this is normal practice today but constituted an innovation at the time, at least at the level of specialization and institutionalization. Certainly some kind of technological and anthropological interest existed in Mesopotamian archaeology from its beginnings: in the old style excavations petrographic and metallurgical analyses were carried out, not to mention the measurement of skulls (but more from racial interest than from palaeo-pathology, demography, or genetics).<sup>14</sup> The contribution of natural sciences to the founding project of the Oriental Institute of Chicago had already been pointed out by Breasted in the early 1930s, 15 as an element of great modernity and managerial ability; but the full entry of palaeo-botany and archaeozoology into archaeological projects is in practice actually more recent, certainly influenced by the growing interest in environmentalism.

The first manual of 'science for archaeology' was published in 1963<sup>16</sup> and included the themes of dating (radiocarbon dating was then little more than ten years old), environment (climate, soil science, botany, zoology), physical anthropology, use of microscopy and radiography, technology, statistics, and prospecting. Today we would have a slightly different thematic spectrum, for example with more information science, and every chapter would be updated, but that was the scenario at the time. And the competences put together by Braidwood did actually reflect it in full: palaeo-botany and palaeo-zoology, climate, analysis of materials (thin sections etc.), analysis of the soil and clays, ethnographic parallels, statistical treatment of the data.<sup>17</sup> This solid use of 'auxiliary sciences' was indispensable for obtaining a picture as articulated as possible (if not complete) of a little village, an operation in which the accuracy and detail of the excavation and the richness of the analysis must compensate for the poverty of the remains (environmental and their content), not to men-

<sup>13</sup> Flannery (ed.) 1976.

<sup>14</sup> For example, A. Keith in Hall and Woolley 1927, pp. 214-240.

**<sup>15</sup>** Breasted 1933, pp. 15–25.

<sup>16</sup> Brothwell and Higgs (eds.) 1963 (expanded new edition 1969). See the comments in Hole 1995.

<sup>17</sup> Braidwood and Howe 1960; Braidwood et al. 1983.

tion the absence of textual information. It is easy to understand, therefore, that the application of strategies analogous to the excavation of great urban settlements has been late in becoming established, for considerations both of the financial cost and of the organizational size of the excavation. Still today it comes about for the most part in a selective manner. I recall that when we presented Robert Braidwood (come to the University of Rome, the present La Sapienza, to receive his honorary degree) to the Rector, who was then the great Antonio Ruberti, our palaeoethnologist Salvatore Puglisi explained to the Rector, 'È per colpa sua se gli scavi archeologici sono diventati così costosi ...' (It is his fault if archaeological excavations have become so expensive). But certainly it remains a little paradoxical that information of an environmental and anthropological nature, which are part (and the lion's share) of the presentation of the results of the excavation of a prehistoric village, remain, however, as if over-ridden by architecture, monumentality, and epigraphic documents, when we pass to expounding the picture of an urban excavation.

### 4.2 Robert Adams and the Diyala Basin Project: territorial and demographic analyses

In a recent autobiographical and methodological profile, <sup>18</sup> Robert McCormick Adams summed up the series of surveys he had conducted in Iraq from 1956 to 1969, and then again from 1975 to 1980 (until the first Iran-Iraq war put an end to the territory's feasibility), giving a first-hand roundup on the progress of the methods and models in the course of half a century.<sup>19</sup> He conducted a first survey in the 'country of Akkad', that is the area between Sippar and Nippur, in 1956-57 at an almost personal level, with modest means, and based upon brief mapping and poor knowledge of the sequence of pottery; this was published hastily.<sup>20</sup> The area was then surveyed and studied much more systematically by the Belgian mission at the end of the last century,<sup>21</sup> but we shall speak of that in due course (§ 5.2).

Strengthened by this experience, in the following year Adams launched the Diyala Basin Archaeological Project,<sup>22</sup> with sufficient means provided by the Oriental Institute, and with the direction of the much older (and so much

<sup>18</sup> Adams 2012. On Adams see Yoffee 1997; Stone (ed.) 2007.

<sup>19</sup> Cf. Adams 1999; and in general Hole 1980.

<sup>20</sup> Adams 1958; 1972a.

<sup>21</sup> Cole and Gasche 1999; Gasche et al. 2002.

<sup>22</sup> See its first report in Jacobsen 1958

more respected) Thorkild Jacobsen, who had already had the opportunity of working in the field in 1930–35 (by then long past), when together with Seton Lloyd he had studied the Assyrian aqueduct of Jerwan and had shown interest in the city/territory relation, reconstructing the water supply of Nineveh;<sup>23</sup> and then again in 1953-54 had worked in the area of Lagash to reconstruct the ancient course of rivers and canals.<sup>24</sup> The choice of the area – which was criticized by the leading Sumerologist at Chicago, Benno Landsberger, as being marginal, 'dialectal' as he said – was obviously due to the lengthy activity of the Oriental Institute, from the time of Frankfort, on the sites of the Divala, whereas more generally the interest in territorial archaeology – in which the problem of the city is present but is framed within the use of the farming land and within the network of canals - is a sort of collateral fallout of regional development projects (farming, town planning, roads) - of interest to the 1950s' post-colonial and neo-capitalist view in the Near East – through which archaeology gained technical surveying instruments. This connection between archaeological reconnaissance and modern planning, in which to all appearances the former was in debt to the latter for methods and instruments, was, however, reciprocal since the long archaeological record could provide useful information for a correct blueprint for a development project.<sup>25</sup> Only later was the procedure of the archaeological 'salvage' operation recognized, where the development project (typically the dams) involved the obliteration of the surfaces of entire regions.

On the level of method, the precedents indicated by Adams himself in the introduction to the final report are significant: on the one hand the ample Soviet surveys in Central Asia, and on the other Gordon Willey's settlement analysis in the Peruvian Virù Valley.26 I think that the two indications have different reasons: the first for the similarity in context, in that it was carried out on a wide region starred with tell and crossed by ancient canals, and thus analogous to the area of the Diyala even if much larger; the second as a reconstructive model (already of neo-geographical inspiration, cf. § 5.2) of the relations between settlement hierarchies inside a very limited canton. The total silence on the Palestinian (and also Mediterranean) surveys, by contrast, is striking by

<sup>23</sup> Jacobsen and Lloyd 1935, with the chapter on The Water Supplies of Nineveh (pp. 31-43). On Jacobsen's role and archaeological competence, see Gibson 2008.

<sup>24</sup> Jacobsen 1960b; 1969. The reconstruction, based on textual information alone, was then contradicted by Heimpel 1990 and Steinkeller 2001.

<sup>25</sup> The articles of Jacobsen and Adams 1958 and Adams 1962 really begin from the connections between development projects and archaeological reconnaissance.

<sup>26</sup> Willey 1953.

their omission, in that their main innovations (recalling Petrie and the dating of pottery) were by now completely 'digested', while the mountain and predesert environment presented different problems. The survey of Diyala was notwithstanding carried out quickly enough (two years), making use of aerial photography cover, of 1:50,000 topographic maps, and in practice locating from the motor car the principal sites (the tell), which were visible inasmuch as they rose above the flat country, and discarding those more modest, and then reconstructing the network of canals on the assumption that the settlements were located on their banks, and finally dating the sites (but not parts of sites) on the basis of the pottery remains, which, however, the Iraqi legislation required to be left in place.

But more important here are the approach and the results of settlement history.<sup>27</sup> For the first time it was possible to reconstruct the history of settlement in a Near-Eastern region from the dawn of urbanization to the present day. Rather than wasting words, it is worth looking at the final reconstructive drawing, 28 which pictures the high and low settlements and demographies (estimate of the population present), distinguishing the percentages by types (in practice by size) of settlement: capital cities, cities, small towns, villages. The drawing implicitly opened perspectives that were to become central in succeeding decades: the question of cycles and of collapse, the question of spatial distribution crossed with the hierarchy of the sites – alongside the old question of the relation between irrigation and urbanization. Clearly the estimates of inhabitants per hectare involves the question of convention (Adams adopted the estimate of 150 inhabitants per settled hectare),<sup>29</sup> and classification by hierachies is based only on the settled area. But the parameters count for all the periods and therefore the overall pattern can be considered largely correct. The only serious distortion comes from the procedures for identifying the tell, which undoubtedly translates into a more or less systematic rejection of the more modest sites, in both size and diachronic depth. Not only are the hierarchically inferior types (the villages, not to speak of isolated farms) underestimated, but sites of the more ancient periods are less easily identified, either because they are by now submerged by the silt of the alluvium, or because they are covered by the successive strata. The interest in settlement and demography is emphasized by the very titles of the chapters (from 'the Formation of Walled Towns' to 'Resettlement and Urbanization' and such like), and con-

<sup>27</sup> See also Adams 1969, on the study of settlement in relation to the urban origins.

<sup>28</sup> Adams 1965, p. 115; the book is supplied with maps of the distribution of sites, period by period, with symbols proportional to the dimensional class.

<sup>29</sup> Discussion in Adams 1965, pp. 24-25, 123-125.

stitutes the substance of the book, while the introductory chapters on climate, agricultural production, and recent trends, with their statistical tables, are more indicative of the 'regional planning' approach than of being definitely productive in the analysis of the important sites.

The idea takes shape, on the basis of the concrete evidence, that the dimensions of the irrigation systems have grown with the growth of the political dimension, and that therefore it is not a cause but rather a secondary effect. This notion had already been expressed by Julian Steward,<sup>30</sup> and becomes a fixed and central point in Adams' interpretation of the process of urban and state development,31 receiving widespread acceptance.32 We should bear in mind that it was in the 1970s, in an excellent article by the husband and wife Oates team,<sup>33</sup> that the first known case was published of irrigation canals, which date back to c.5000 BC, at Choga Mami (near Mandali, 120 km northeast of Baghdad). There is no doubt that the beginnings were modest and of local (even very slight) range, but we need to notice that when the system spreads into Mesopotamia it had to do with the timing of full floods that unlike Egypt – did not arrive at the 'right' moment (as regards the management of the cultivated plants and their harvest), and required catchment basins and, yes, a local, but not too modest administration.

An explanation of the recurrent collapse of the urban structures also takes shape, based on the impoverishment and salinization of the soil, following its over-exploitation. To the famous article by Adams and Jacobsen on salinization<sup>34</sup> was then added an equally interesting one by Gibson<sup>35</sup> on over-exploitation (inflicted by the state bureaucracy) as a cause of the impoverishment of the soil, and of the fall in rates of agricultural productivity. It is clear how these explanations derive from the attention to problems of agricultural planning and regional development. The impact of salinization was then scaled down by Marvin Powell:<sup>36</sup> the problem is recurrent, then as today, but already in

**<sup>30</sup>** Steward 1955, pp. 200–209.

<sup>31</sup> Adams 1974, p. 3: 'Large-scale irrigation systems did not exist at the time states made their first appearance, and nineteenth-century and recent practices in the area make clear that there is absolutely no requirement for a bureaucracy of any sort to construct and maintain irrigation networks even larger and more complex than those that are known from the late fourth and early third millennia'.

<sup>32</sup> For example, Postgate 1992, pp. 173-190; more cautiously id. 2003. Contrary opinion in Renger 1995, pp. 272-273.

<sup>33</sup> Oates and Oates 1976.

<sup>34</sup> Jacobsen and Adams 1958. The internal report on salinization is from 1958, but is then published as Jacobsen 1982.

<sup>35</sup> Gibson 1974.

<sup>36</sup> Powell 1985.

ancient times they knew of it and developed the means to deal with it (fallows, washing of the fields). Besides, salt was valuable and was harvested.<sup>37</sup>

The surveys carried out a little later by Adams himself in Khuzistan, 38 by McGuire Gibson in the Kish area,<sup>39</sup> by Henry T. Wright in the Ur and Eridu area, 40 and finally by Adams together with Hans Nissen in the Uruk area, proceed with the same lines of method used in the Diyala. In the book on the survey of Uruk citation and methodologies of a neo-geographic type begin to appear, with reference to Haggett's manual that had been published the previous year; but this is dealing with ideas not yet fully developed: the emphasis remains fixed on the reconstruction of the surroundings, on the relation between a system of canals and the placement of the cities, on hierarchies by size (and function) of the settlements, and on demographic estimates. It is only with the surveys of the area between Nippur and Adab, carried out in the years 1973 and 1975, that the neo-geographic models become important, but of this we will speak in due course (§ 5.2).

It is time here, however, to point out that it was in the 1960s, in the context of that regional planning on the part of international neo-capitalism that I have already mentioned, that development of construction of dams on the major rivers began; this work was normally preceded by archaeological surveys and then by a 'salvage' excavation of the principal sites. With this there was at the time a substantial increase in knowledge relating to the zones examined, obviously according to the working standards and interpretative models of the period, and, though over a longer period, a definitive loss of the possibility of gaining further information. Not to expect the worst – as I did some years ago in a provocative article,<sup>41</sup> that in a future not so very far off, when the whole surrounding territory will be totally devastated - by war, by chemical pollution, by exploitation of oil resources, by the growth of great cities, and such like - the archaeologists could recover 'intact' archaeological surfaces only excavating through the built-up sediments that will by then have filled the basins of the dams to the brim and prevent the use, by then obsolete, for which they had been built.

Turning to the concrete events of past history, the first great river dam of the Near East was built in Egypt, the Aswan Dam (\$\int add el-'Ali), which involved the inundation of Nubia. This was preceded by a great international mobiliza-

<sup>37</sup> Potts 1984.

<sup>38</sup> Carried out in 1960-61, published in Adams 1962.

<sup>39</sup> Carried out in 1966-67, published in Gibson 1972.

<sup>40</sup> Carried out in 1966, published in Wright 1981.

<sup>41</sup> Liverani 1996b.

tion, proclaimed by Unesco and advertised by the media in its most spectacular aspects (the movement of the temple of Abu Simbel or that of Philae), but more productive of results on the monumental level than on that properly urbanistic or of settlements in general.<sup>42</sup> Following this the procedure was moved above all to the Euphrates, whose valley bottom is by now a series of dam basins; both in the Iraqi stretch (the Hadhita dam), in the Syrian (the dam of Tabqa/ Lake Assad and then of Birecik), and in the Turkish (the three-dam sequence of Keban, Karababa, and Karakaya/Atatürk), and then to be followed with yet other minor dams on the Euphrates and the Khabur, as well as on the Upper Tigris (Eski Mossul, and now on the Turkish stretch in the valley of Diyarbakir) and on its tributaries on the left bank.<sup>43</sup> The valley of the Euphrates, in particular, which was without doubt the mainstay of Mesopotamian urbanization for the whole of antiquity, is now reduced to a series of artificial lakes and lost for ever. Only when flowing into the Lower Mesopotamian plain is the Euphrates not able to be dammed, but the territory is equally compromised by oil and by war. Future study of the subject must be largely based on the evidence recovered in the past, and will need to come to terms with this grave limitation.

### 4.3 Leo Oppenheim and the Sippar project: 'great organizations' and communities of citizens

The palace, in western culture, has always had the character of an alienating labyrinth. As Borges says, 'The Palace is not infinite' but it is so vast, complicated, hierarchical, that 'it is granted to no one to pass through more than an infinitesimal part of it. Some know only its cellars.'44 In Italy we have a long tradition, which stretches from Guicciardini to Pasolini and to the language of modern journalism, of calling the centre and seat of political power the 'Palace'. The early sixteenth-century Guicciardini contrasted it to the 'piazza', as the centre of common citizenship,<sup>45</sup> and in the Mediterranean city the piazza had an obviousness and a socio-political role beyond urbanism, at various levels of nobility, from the structured Greek agorà (and Roman forum), until the modest but lively little square of the mediaeval towns. This role does not have a precise equivalent in the Ancient Near East, where in the urban fabric, while the bulk of the palace dominates from the summit of the acropolis, the

<sup>42</sup> The work began in 1955; cf. Leclant 1956.

**<sup>43</sup>** On the dams Steele 2005, pp. 52–55 with exhaustive bibliography.

<sup>44</sup> Borges, p. 539 of vol. II of the Milan 1985 edition. The passage translated here is from 1972.

<sup>45</sup> Bruni 2012; also Romano 1993.

piazza has neither visibility nor function. The places of power are urbanistically clear and also oppressive, while the places of citizenship are not structured; the citizens have no place dedicated to meeting.46 There are obviously wide stretches, empty spaces, and also broader streets, but if people need to meet, it probably happens near the city gate, where there is the local market and billposting of regal edicts. However, even if not visible in terms of town planning, the 'pole' of citizenship, as contrasted to the 'pole' of the Palace, did also exist in the Mesopotamian city. The tradition of studies, profoundly influenced here by the classical image of Near-Eastern despotism, obscured for a long time the presence of the contrasting citizen element in the eastern city, perpetuating the extreme antithesis between eastern Palace and western citizenship.

The credit is due to Leo Oppenheim, a Viennese Assyriologist emigrated to the Oriental Institute of Chicago, for having maintained with force and perseverance that the Mesopotamian city (not then to mention the Levantine, which the Burckhardt tradition compares to the polis) was not so dissimilar to the Greek, and was based on two contrasting parts: one that he calls 'the great organizations', that is, the temple and palace, but the other the self-governing citizen bodies, that is, the assembly and the elders – even if his cultural sensibility led him to deny (in clear distancing from Jacobsen) that the Mesopotamian citizen assembly was properly 'democratic' in a western sense, attributing to it a character between the tribal and the oligarchic.<sup>47</sup> Oppenheim, who had already expressed his general vision in his contribution to Polanyi's 1957 book on trade and market, 48 and then at the symposium on the City Invincible in 1960,<sup>49</sup> next formulated it in a keynote article<sup>50</sup> and made it a central part of his book on Ancient Mesopotamia, one of those books so dense in their original but solid positions that they never date.

The central core of his position is summed up well in a passage that is worth quoting: 'Let us distinguish two essential components: first the community of persons of equal status bound together by a consciousness of belonging, realized by directing their communal affairs by means of an assembly, in which, under a presiding officer, some measure of consensus was reached, as was the case in the rich and quasi-independent old cities of Babylonia; second,

<sup>46</sup> Liverani 2013.

<sup>47</sup> Oppenheim 1977, p. 112. Ampolo (ed.) 1980, pp. 3-33 selects a long passage from this work to illustrate the Mesopotamian city.

<sup>48</sup> Oppenheim 1957, already set on the interaction between the polarities of the palace and the citizen community.

<sup>49</sup> Oppenheim, in Kraeling and Adams (eds.) 1960, pp. 79-81.

**<sup>50</sup>** Oppenheim 1967; also *id.* 1969; the book is from 1964, brought up to date in 1977.

an organization of persons entirely different in structure and temperament from the community just mentioned, whose center and raison d'être was either the temple or the palace, either the household of the deity or that of the king'.51

Further on Oppenheim accepts that he has relied on parallels with the Greek city and the city of the Italian Renaissance<sup>52</sup> – but this sort of 'inspiration' does not diminish the fact that both the 'great organizations' and the communal bodies of citizens are then meticulously recovered from the textual data. Less well demonstrated – at least in my opinion – is the king's presumed foreigness to the city (in the sense of a city community). In saying 'the king is basically, though nowhere admittedly, a war lord whose political and military base of power is in small towns and other settlements rather than in the city in which he has his palace',<sup>53</sup> Oppenheim seems to me influenced by the Weberian image of the Western city having no part in and being antagonistic to a palace placed outside it - an implicit influence in the frequent reference to Greek and mediaeval parallels. The recurrent emphasis on the role of trade in shaping the city (on the town planning level, the 'port' is one of the three parts, alongside the city and its suburbs)<sup>54</sup> seems to me clearly influenced by studies of the mediaeval European city, in particular those of Pirenne. Even if Oppenheim does not deal directly with the question of the origins of town planning, the role of commerce in this sense does, however, appear implicit. I recall that Oppenheim took part in Polanyi's conference on Trade and Market, and there expressed a not strictly Polanyian position, and then preferred not to return to it. And yet his systematic use of the concept of 'redistribution' to describe the economic activities of temples and palaces, and also some recognition of the importance of the commercial sector to the 'great organizations' and of the secondary nature of private trade for profit, nevertheless show how he had indeed absorbed something (and not just a little) of Polanyi's position.

At this point I think it necessary to indicate a certain imbalance in Oppenheim's position, between the elements of historical-humanist culture of his training in Vienna (familiarity with the classics and with European historiography at the end of the nineteenth and start of the twentieth centuries) and the elements of socio-anthropological culture in the American environment (and noticeably at Chicago) where he found himself working. In one of his key articles, significantly published in the first issue of Current Anthropology, and built on the vision of Mesopotamia as a first chapter in the history of so many tech-

**<sup>51</sup>** Oppenheim 1977, p. 95.

<sup>52</sup> Ibid. p. 114.

**<sup>53</sup>** Oppenheim 1967, pp. 13–14.

**<sup>54</sup>** Oppenheim 1977, pp. 115-116.

nological and cultural innovations, he concludes by saying 'If the new directions here surveyed mean that Assyriology will eventually move away from the humanities and nearer to cultural anthropology, I shall shed no tear'.55 And so, when he decided to launch his Sippar Project on the study of the Mesopotamian city, he wished to bring in Robert Adams, and plan it on the comparison between the texts and archaeology, a little on the model of Adams and Jacobsen's Divala Project, but whereas Jacobsen had shown himself interested in the activities on the ground, Oppenheim was irremediably a desk philologist (for a long time he directed the *Chicago Assyrian Dictionary*), and the archaeological component was very quickly lost along the way. And so the framing of the city in the territory, notwithstanding the activities already taking place at Chicago, appears based on the texts alone. Outside the cities of every shape and size, Oppenheim does not see (or at least does not cite) villages, but only 'more or less permanent agglomerations of huts and encampments';56 he does not see a productive countryside, irrigated and cultivated, but insists on an open country populated by nomads and fugitives of various origins (economic, political, delinquent). He recognizes that it would be excellent to correlate the institutions (as they are found in the texts) with the archaeological evidence, with the shape of the city; but maintains that it is not possible to do this because of the inadequacy of the archaeological documentation, since the Mesopotamian cities are too big to excavate the residential quarters extensively and to outline the overall structure (with clear undervaluation of the German excavations at the start of the last century, and those of the mandated period, Ur at the head, and of the excavations of Chicago itself). When he attempted to do this himself, he made more use of external comparisons (which he found already formed) with the classical and Islamic worlds, than of internal comparisons to the Ancient Near East.<sup>57</sup> In certain passages it seems that Oppenheim almost means to deny the difference between 'eastern' and 'western' cities, conferring on the former the characteristics of the latter, or rather emphasizing the weight of the common elements to the point of making them predominant.

As for the question of the first urbanization, his mentions are pessimistic and as though out of his depth: 'The urbanization process as such in Mesopotamia is totally beyond our reach' and again 'For unknown reasons, the center of urbanization lay in southern Mesopotamia. It may even be said ... that there alone within the entire ancient Near East spontaneous urbanization took

<sup>55</sup> Oppenheim 1960a (the article was partly republished as an introduction in Oppenheim 1964 and 1977).

<sup>56</sup> Oppenheim 1977, p. 82.

**<sup>57</sup>** *Ibid.* pp. 125–127 and 127–142.

place'.58 One can scarcely imagine the dismay that his colleagues in the Oriental Institute will have felt, in seeing all their work so diminished, if not ignored.

In the project launched by Oppenheim, the choice of Sippar as the city to study as an example of a Mesopotamian city was significant. Sippar, which is thirty kilometres south of Baghdad, was very fitting as far as availability of texts went: tens of thousands of tablets came from there, of administrative and legal nature, stretching from the Old-Babylonian to the Neo-Babylonian period. But it had been excavated little and badly, and therefore a comparison with urban topography was lacking; and besides almost all the texts came from clandestine excavations and from antiquarian trade and so had no provenance. But above all, even leaving out the state of the finds, the city was already atypical in ancient times: a city sacred to the solar god Shamash, Sippar was home to the 'convent' (gagûm) of the oblate priestesses of the god, which constituted an area, also economic, lacking (or less present) in the other cities. But it had never been the political capital of a kingdom, and so lacked the contrasting element of the palace. Moreover, the city, placed almost at Babylonia's northern frontier, had a 'harbour' quarter (*kārum*), much more developed than in cities with a central position. And finally, the city was somewhat broken into separate nuclei (today buried under tell placed far apart), unlike the compactness of the greater part of the cities. It was, therefore, for a variety of reasons an atypical case, not appropriate for generalizations.

The work on the texts, however, which were largely unpublished, was important and praiseworthy, and was entrusted to Oppenheim's pupil Rivkah Harris, who produced important articles and an extremely valuable final monograph.<sup>59</sup> In illustrating the project Harris did not consider it necessary to enter into questions of method, not, I believe, because she did not understand the novelty of Oppenheim's model, but rather because such a model must have been so familiar to her (from daily didactic and scientific exposure) that she no longer registered its peculiarity. Pointing out how the choice of Sippar could be criticized, for reasons already mentioned, she presented a more systematic and universal study of a Mesopotamian city than had been attempted up till then. She described the scattered settlement shape through the various settlements, the role of the nomads, and then the properly urban topography: walls, gates, streets, pleasure gardens and kitchen gardens, workshops and taverns, houses, and ruins of houses - the whole meticulously documented with references to the relevant textual evidence.

<sup>58</sup> Ibid. pp. 110-111.

<sup>59</sup> Harris 1963; 1975.

Among the city's institutions, the palace (which was far distant, at Babylon) administered its affairs by means of the citizen bodies: taxes, corvée, military conscription, and sale of the palace goods (barley and wool). There were palace granaries, and there was a king's garrison. The temple was represented above all by the Ebabbar and the gagūm, 60 which had a superintendent, a gatekeeper, a judge, women scribes, servants and oblates, women weavers, cooks, and everything that would serve the life of the separate community. The harbour was probably more important than elsewhere, as mentioned above, and contributed to lending an 'entrepreneurial' image to the whole city. The city, taken as the community of citizens, had its own bodies: the assembly (called simply âlum 'city', or puḥrum 'meeting') with its president, the elders (šībūtum), the mayor (rabiānum), and the superintendent of the port. The city was divided into quarters (*bābtum*) each with its own mini-mayor (*hazānum*).

The Oppenheim model, purged however of a preferred application to later phases, which brought the Babylonian city closer to the Greek polis, has become so widely adopted as to become the current and almost unnoticed choice. It is in this light that we can view Elizabeth Stone's synoptic presentation, 61 or Nicholas Postgate's general book on Mesopotamian civilization, 62 or Marc van de Mieroop's book on the city, which is the most recent overall treatment of the Mesopotamian city. 63 Along the same lines we should also include the contributions of Marten Stol, who, in discussing the economy of Old Babylonia, distinguishes the activities of the city from those of the palace and from those of the temple;64 of Robert Adams, who substantially accepts Oppenheim's bipartite division between the 'great organizations' and the private sector, sharply distinguishing, however, the private/entrepreneurial sector, of merchants in search of profit, from the private/community sector of the villages;65 and finally also of McGuire Gibson, who accepts the triple partition of temple – palace – private sector, and sees the city developing from a nucleus of 'temple manor', and the private sector from the ownership of agricultural lands.<sup>66</sup>

Stone's work on the quarters of Nippur, which was carried out (as a doctoral thesis) at the Oriental Institute of Chicago, but after Oppenheim's death

<sup>60</sup> Cf. Harris 1963.

<sup>61</sup> Stone 2005.

**<sup>62</sup>** Postgate 1992, pp. 88–108 (houses), 109–136 (temple), 137–154 (palace).

**<sup>63</sup>** Van de Mieroop 1997; briefly before *id.* 1992b; 1995.

<sup>64</sup> Stol 2004, pp. 664-678 (Die Stadt), 919-943 (Die Palastgeschäfte) and 945-948 (Die Tempelgeschäfte).

<sup>65</sup> Adams 1984, pp. 89-97.

<sup>66</sup> Gibson 1976.

(1974),<sup>67</sup> deserves particular mention; the author is one of the very few people capable of working at first hand both on the texts and on the archaeology, and sought to study on this double base the internal articulation of Old Babylonian Nippur. Further on, we shall look at the developments in this interest of hers in the urban structure, limiting ourselves here to analysing the first stage of the work, between the mid 1970s and the mid 1980s. Unfortunately the two areas considered (TA and TB, both in the 'Tablet Hill') had been very badly excavated, the texts were still partly unpublished, the objects had not been recorded, and so on. Stone threw all her efforts into the description (through a somewhat aprioristic wish) of two quarters of different characters, but exploited the evidence probably to the verge of exaggeration.<sup>68</sup> Reactions in this case were more or less unanimous: exaggeration in recognizing 'schools';69 the idea is good, but the realization less so, and there are doubts on the distinction of 'quarters' between two small and adjacent areas;70 the coordinated use of texts and archaeology is admirable, but the approximation, the superficiality, and the lack of an historical sense are deplorable (and the criticism of Stone extends in general to American archaeology of an anthropological mould).<sup>71</sup>

But the case in which the articulation of the Mesopotamian city between the palace sector and the community sector was most clearly highlighted is that of Old Assyrian Assur. This case is also atypical, perhaps even more so than Sippar: in the nineteenth to eighteenth centuries Assur was a city with a strong mercantile component, engaged in its trade with central Anatolia, so much so that the city institutions are known to us from the thousands of tablets recovered not at Assur, but at Kültepe (ancient Kanish) near Kayseri, first from clandestine nineteenth-century excavations and then by the proper Czechoslovakian and above all Turkish excavations, which have lasted until the present. It needs to be said at the outset that the commercial activity documented by the archives of the Assyrian merchants at Kanish is a private activity (with companies of a family nature) and bent upon profit (exporting cloth and tin in exchange for weighed silver, which is so to speak cash, to be immediately reinvested in the same merchandise), and so has nothing to do with the palace business of import and redistribution.<sup>72</sup> The emphasis on trade, which in the

<sup>67</sup> Stone 1987.

<sup>68</sup> Sievertsen 2002 then turned to the question of the quarters: local structures, but of noble origin.

**<sup>69</sup>** Charpin 1989–90.

**<sup>70</sup>** Van Driel 1990.

**<sup>71</sup>** Postgate 1990b.

<sup>72</sup> On the types of trade Larsen 1967 and Veenhof 1972 remain fundamental.

tablets in our possession is obviously total, given their context, must have had some relationship to reality, since prosopographical studies have led to the estimate that, with the people employed in trade (merchants and agents) and those (female) employed in weaving, a significant part of the city must have been involved in commerce.<sup>73</sup>

This atypical mercantile centrality could have accentuated, certainly in the documentation but perhaps also in reality, the role of the non-palace institutions.<sup>74</sup> Even with this reservation, the institutional picture is clearly tripartite. The position at the top belongs undoubtedly to the king, who, however, bears titles that strongly underscore his dependence on the city's god (Assur is the name of both city and god), of whom the Assyrian king is a sort of 'managing director'. The formula of the ritual of enthronement is clear, 'Assur is king, Soand-So is the governor (on behalf) of Assur'. The second element in the system is the 'city' (ālum), which, when it acts and deliberates as a unitary body, is represented by an assembly (puhrum) in which all free citizens (heads of families) participate. The city has a sphere of competence somewhat more judicial than political; it is the voice of the citizen community, and as with all the assemblies of the city has an importance proportional to that of the extrapalace activities: in this case it is very notable given the great weight of the free commercial sector. The third element of the system is an eponymous functionary called līmum, whose role (a kind of mayor or head of assembly, consignee of taxes on trade, linked rather more to the city than to the king) limited that of the palace. Whereas kingship was hereditary and rendered legitimate through its privileged relation to the god Assur, the eponymous position was held for only one year (to which it gave the holder's name), and was drawn by lot from a circumscribed number of candidates, representatives of different families. On the whole the structure saw a balancing between the power of the royal palace, that of the citizens, and that of the great mercantile families who produced the eponym.

We shall see later (§ 5.4) how the communal bodies are attested widely in Mesopotamia, in the Levant, and in Anatolia, through the entire course of ancient history, and by now constitute a fixed point in the evaluation of the city's political structure. But as for a real concept of 'citizenship', Oppenheim was probably right to maintain that it was more evident in the case of the Babylonian city of the first millennium. The more unequivocal texts essentially date back to the eighth and seventh centuries. There is a letter of the Assyrian king

<sup>73</sup> Cf. Larsen in Hansen (ed.) 2000, p. 79.

<sup>74</sup> On the Old Assyrian institutions see Larsen 1976 and Dercksen 2004. On further developments cf. Liverani 2011a.

Esarhaddon<sup>75</sup> that makes a distinction between the 'Babylonians' (his faithful subjects) and the 'non-Babylonians' who were applying to become so. And it has been shown<sup>76</sup> how only citizens were admitted into the assembly, and that specific procedures existed for admitting into the ranks of citizens ex-foreigners and even ex-slaves. But there is above all a letter of the Babylonians to the Assyrian king (I shall cite it in full at § 6. 4) which reaffirms the city's statute of privilege (certainly threatened by some Assyrian initiatives): the self-governing town is a prerogative, connected to a sort of divine protection, called *kidinnu*, which grants royal exemptions to individuals and communities.<sup>77</sup> This type of status is attached particularly to 'sacred' cities, seats of prestigious divinities: in Assyria Assur (no longer capital, but remaining always seat of the national god),<sup>78</sup> and in Babylonia under Assyrian rule Babylon itself, but also Nippur and Sippar, all centres of a temple tradition proudly intent upon defending their privileges from possible regal prevarication.<sup>79</sup> This set of circumstances, which in some ways sees a common strategy between temple and city, in opposition to the palace, must have pleased Oppenheim, reminding him of the mediaeval European situation. But it is a set of circumstances very much specific to the late period, with the 'temple-city' that had by now lost its political role, and with the whole region occupied and dominated by a foreign king.

## 4.4 Primary and secondary urbanization

The distinction between primary and secondary urbanization (already mentioned at § 3.1 and § 4.2) has a long history, which matches the changed historiographic attitude to the general question of the relation between 'invention' and diffusion. For individual and defined technological elements it is clear enough that the explanation of the single invention and subsequent diffusion is the simplest, given that their dispersal abroad in the course of time can be followed. But for a complex phenomenon like urbanization the question is posed at another level. No one can have 'invented' the city at a given moment and in a precise place. And yet a socio-economic and socio-political system

**<sup>75</sup>** Reynolds 2003, n. 1.

<sup>76</sup> Dandamayev 1997.

<sup>77</sup> Leemans 1946; Reviv 1988.

<sup>78</sup> Saggs 1975 ('Assur Charter'). On the role of the city of Assur cf. Oppenheim 1960b.

<sup>79</sup> Lambert 1960, pp. 110–115 (Babylonian 'Advice to a Prince'). At Nippur (Richardson 1984) there is a 'governor' at the head of a great redistributive manor, which does not depend upon the king, balances the economic role of the temple, and might be an expression of the 'city'.

already taking place, and based on urbanization, has the potential for such results - compared to systems built on simple village communities - as to make its adoption through imitation completely fitting. But, unlike the individual technological element (either adopted and adapted, or not), the range of different measurements between imitation and innovation, between the reception of a winning but alien model and the development of its real potential (even copying a model of which there is some idea), is significant. Broadly speaking, it can be said that a phase of more simple diffusionism, which lasted until the sixties of the last century, was then succeeded by an inclination to consider local contributions as more important than the external model; in other words, to favour the role of whoever adopts (and transforms) the cultural element, over the role of whoever provided him with it.

I must, however, point out that in this second paradigm a degree of Eurocentrism has had a certain influence, given that the diffusion of massive cultural elements from the Near East to Europe (from the 'Neolithic revolution' to the 'urban') has made the active role of the receivers as modifiers clear. And there is perhaps also an (unconscious) influence from the 'island' syndrome of the British in preferring developments along internal lines over diffusion from region to region. These 'provincial' paradigms paradoxically develop right at the time (the last decades of the twentieth century) when the spread of cultural elements on a global scale reached unprecedented heights, which we can all see.

Returning to our argument, it is clear that the diffusionist paradigm bears a very limited number of instances of primary urbanization, only two, one for the Old World and one for the Americas, given the impossibility of contact (at least of any importance) in ancient times. The second paradigm, by contrast, sees a dilution of the question into a thousand urbanizations, all primary because all worthy of being so (a sort of politically correct approach: who are you to call me 'secondary'? what lets you? who do you think you are?). I want here to cite, as an example of restriction of the number of primary instances, the Oriental Institute of Chicago's act of foundation, in which the role of primary urbanization was conferred on only two civilizations: that of the Ancient Near East and then (but 5500 years later) that of the Maya. 80 The Indus Valley and China must have grown from the breeding ground of the Near East, in which the Egyptologist Breasted wished to reserve equal roles for Egypt and Mesopotamia. Almost twenty years later, Frankfort (also at Chicago) proposed three primary centres (the Near East, with Egypt fertilized by Mesopotamia),

**<sup>80</sup>** Breasted 1933, pp. 3-11.

China (with some doubts as to the possibility of contributions from the Near East), and Mesoamerica (headed by the Maya).81 In the same year Gordon Childe (the articles of both authors, on urban planning, appeared in the same number of the same journal) also assigned the primary role to the sole instances of Mesopotamia and the Maya, with all the other cases of the Old World developed directly or indirectly from Mesopotamia.82

When then, fifteen years later, Adams wrote his book on the subject (and we are still at Chicago), he once again limited the primary cases to Mesopotamia and Mesoamerica.<sup>83</sup> He did so certainly not from any love of diffusionism, but to carry out an analysis of the 'urbanization' phenomenon that was based on original instances, not polluted (so to speak) by secondary transfers: he too, therefore, excluded China, even though there was only a suspicion of some sort of indirect influence from the Mesopotamian breeding ground. Now, if the historically verified cases of urbanization add up to dozens (and perhaps to hundreds), a typology based on only two cases remains too little representative: by giving preference to primary purity there is a risk of ignoring other phenomena, the acceptance of change, the peripheral urbanizations, the partial urbanizations, actions and reactions – in a word, the accidents of history.

With the new paradigm the opposite risk is run: the study of urbanization, and the closely connected study of the formation of the 'Early State', is carried out on a wide field of cases, the great majority modern, equally distributed over five continents, including cases where urbanization and formation of states is lacking – with the paradox that the inclusion of the Mesopotamian case, which first realized this decisive transformation on a world scale, is even forgotten.84 In essence the primary/secondary distinction is abandoned, not so much because the secondary is also worthy of attention, but because the state of being primary is no longer held to be important.

For my part, I suggested, in contrast, 85 that the distinction is still relevant but should be reformulated from diachronic to structural. The secondary cases were not such because they imitated the primary, but because they were based on different socio-economic structures. Given that every new urbanization,

<sup>81</sup> Frankfort 1951.

**<sup>82</sup>** Childe 1950.

<sup>83</sup> Adams 1966. On analogous positions McNeill 1963 (who owed much to Adams' earlier discussions).

<sup>84</sup> I am referring here to Claessen and Skalník (eds.) 1978, cf. § 3.8. The distinction of primary/ secondary is usual among neo-evolutionists, cf. Price 1978; and also the 'Tributary or Client State Formation' of Cohen 1987.

<sup>85</sup> Liverani 1998a, especially pp. 70-73 of the English translation.

like every structural revolution, must be based on the primary accumulation of capital (§ 3.1), we can ultimately distinguish the primary urbanizations based on local accumulation of resources, primarily agricultural (Polanyi's staple finance), and those secondary ones based on accumulation of raw materials and exchange. So the secondary urbanizations assume the primary, because without them they could not have developed; but Egypt - let us assume – is a primary instance not because the Mesopotamian influences are altogether marginal and fortuitous, but because her urbanization is based upon the accumulation of primary resources occurring in loco. And the same can be said for the Indus Valley, obviously for China, but also for Central Asia, and so on. On the other hand, the urbanizations (anyway partial) of the Zagros and Taurus could not have developed without contact with the Lower-Mesopotamian breeding ground, and so should be considered secondary. This way of seeing the question, which I have defined as structural, recovers its historicity – the complexity of interactive relations between communities that are close or distant, similar or dissimilar on environmental and economic bases (thinking of the 'hydraulic' factor, § 3.4),86 but nevertheless different in specific cultural characteristics.

In this sense Gunder Frank is right, that the primary/secondary dilemma goes back to the internal workings of Wallerstein's 'world-system': the system includes ecological diversity and different exchanges of surplus within such diversity, and really stands up on this complementary nature of resources. Frank's 'formula' is that a system exists if A would be different were it not in a relation with B, and vice versa.<sup>87</sup> But how different? That is the whole question, because a rare, marginal, non-structural relation means very little - the secondary nature means something only if the modification is significant: and the case of the emergence of an urban and early state structure most certainly is.

Finally, we can note that the same distinction between a primary and secondary launch could and should be applied usefully also to the phases of decline and collapse (to which we shall return at § 5.13). If the secondary urbanizations have need of a point of reference (economic but also political) on which to rest themselves, then they can also collapse when the centre, which is not simply a model to imitate but is a support in economic interchange, gives way. I have studied two of these instances: that of the strongholds of the Medes, which flourished at the margins of the Assyrian Empire, with whom they enjoyed worthwhile relations of trade (in horses) and hire of mercenaries, and

<sup>86</sup> Delougaz in Kraeling and Adams (eds.) 1960, p. 58, had already seen primary urbanization in the alluvium, secondary on the high ground.

<sup>87</sup> Frank 1993.

which then collapsed when the Medes themselves descended from their mountains to put an end to the Empire;88 and that of the strongholds of the Garamantes, right in the middle of the Sahara and flourishing on the trade between the Mediterranean world and sub-Saharan Africa, which collapsed when the Roman Empire and Mediterranean trade entered crisis in the late-antique period.89 Many other cases might be studied in this sense, and they partly are (even if not in an explicit form), above all for the Levant and its relations on the one hand with Egypt and on the other with the Syrian-Mesopotamian world, 90 But the idea that growth is a process and crisis is an event, an idea which ought by now to be superseded by the systematic approach (§ 5.3), seems hard to die.

### 4.5 The cycles of urbanization

Completely different from the question of primary and secondary urbanization is the question of the 'first' urbanization as opposed to the 'second' (and also to the third, fourth, and so on), meaning the question of the cycles of urbanization that followed each other in the Near East, as indeed also elsewhere. I deal with this in two contiguous, but separate, sections (even if the question of the cycles will then be overturned in the successive phases of the study), really to guard against the misunderstanding (more frequent than one might expect)91 of describing as 'secondary' an urbanization that is in fact 'second', or vice versa.

Obviously an individual city can rise and can collapse for particular, circumscribed reasons: for example, it might have been founded in a certain place at a certain date for strategic or political reasons that have now passed; it can collapse because of an earthquake or destruction during war, and so on. But when we see that in a whole region the urban settlements in their entirety follow a curve of growth and decline, then we need to search for explanations that are not historical-event based, but historical-structural, I will return to the specific causes of growth and collapse at § 5.13, when the section on 'Theory of systems' will revisit the whole problem in its multiple parts, natural and

<sup>88</sup> Liverani 2003.

<sup>89</sup> Liverani 2001; 2006; 2007.

<sup>90</sup> Esse 1989 (Early Bronze Age); Joffe 2002 (Iron Age).

<sup>91</sup> For example, Ramazzotti 2003. Ramazotti 1999 and 2003, with reference to Lower Mesopotamia, tends to deny the cycles, in favour of a substantial continuity (but a task of the historian is to identify the pauses and differences).

man-made. But I can anticipate here that the visualization of the process of urbanization as comprising a series of ascending and descending curves refers to a lack of stability in urbanization, which seems always at risk of decline. My judgement is that urbanization of a given area, in view of the limited technical resources available in antiquity, constitutes a not inconsiderable burden for the whole region, and as a result may carry the risk of excessive exploitation of the resources, and be structurally subject to recessive crises.<sup>92</sup> In other words, the recessive periods, in which the region goes back to an agro-pastoral subsistence economy, with its basic socio-political structures (the village, the tribe), serves to let the region draw breath after the strain (or the oppression) suffered from supporting a partly alien body, which was the urban nucleus focused on palace and temple.<sup>93</sup>

The technological innovations that prove successful (that is, that give better results with the same expenditure of time and energy) tend to be consolidated and even to spread until supplanted only by other innovations even more efficient; by contrast the increase of complexity in the socio-political and economic organization of a region, with its inevitable social costs, tends every so often to be reabsorbed – and this is true also, and above all, for urbanization. It is actually noticeable how the ups and downs of urbanization are normally much more conspicuous in areas with limited agricultural resources, or with fragile ecosystems, in particular the semi-arid zones subject to experiencing even modest climatic variations (which take them above or below well-defined critical thresholds, above all of rainfall), and so to undergoing recurrent crises of drought and famine.94 The climatic oscillations are, on the other hand, felt less in wider and more stable ecosystems, and so at a point where urbanization is much more solid.

We need only analyse the summarizing table provided by Adams on the changeable fortunes of urban and rural settlement in central southern Mesopotamia,95 to see the clear trend of growth and decline: the area occupied passes from 535 hectares (Early Uruk period) to 2725 (Ur III and Isin-Larsa), and then drops to 616 (Middle Babylonian). The relation between urban centres (more than 40 hectares) and villages (less than 10 hectares) draws a parabola: from c.50 % (Uruk period) the non-urban sector decreases (Early Dynastic 10 %,

<sup>92</sup> On the sequence of growth – overexploitation – decline/collapse cf. Gibson 1976.

<sup>93</sup> The recent approach of Schwartz and Nichols (eds.) 2006 on the process of collapse and 'regeneration', wishing to show itself as innovative, ignores the studies made over the course of time on cycles of urbanization.

<sup>94</sup> For example, Stein 2004.

<sup>95</sup> Adams 1981, Tab 1.2.13; 1984, table at p. 98.

Akkad 18%), and then rises (Ur III 25%, Old Babylonian 30%, Cassite 57%, Middle Babylonian 64%). The urban sector on the other hand first grows from 30% in the Uruk phase, to reach its height in the Proto-Dynastic III period (78%), then to redescend until it touches its lowest level in the Middle Babylonian period (16%). It is noticeable how the evidence merged in the table does not tell us of fluctuations or minor cycles, for two reasons: the methods of dating in the surveys generate a division into periods that are too wide (for example, the phases of Ur III and Isin-Larsa are joined together, whereas they were perhaps separated by a vertical collapse, however brief), and the urban excavations are more extensive than stratigraphical; in addition, there is influence from the alluvium's greater resistance to the fluctuations, which on the other hand are shown much better in the periphery, even when short.

In an earlier work<sup>96</sup> I proposed a series of cycles applicable to the Near East in its entirety, which I believe retains its validity. The 'first urbanization' is that of the time of Uruk (c.3500-3000 BC; cf. § 5.11), centred in Lower Mesopotamia, where a number of settlements reached a considerable size for the first time (Uruk occupied a hundred hectares), but with appendages ('colonies', 'outposts', and connected centres) in Upper Mesopotamia, in Susiana, and in the mountainous periphery of the Eastern Taurus and the high Iranian plain. It did not, however, reach the Levant (in spite of a number of opinions to the contrary).<sup>97</sup> This first urbanization was based on the driving role of the temple; it introduced formalized administrative procedures (including recourse to writing); it then quite unexpectedly entered crisis, perhaps because of the failure of the 'regional system' following movements of nomadic peoples in the mountain periphery. The disappearance of the 'colonies' gave way to processes of regional fragmentation and of a regression to simple settlement hierarchies (of one or two levels) in the peripheries;98 while in the Lower-Mesopotamian nucleus the city resisted, even if in evident difficulty.99 It is notable that more recent research also attributes a 'first urbanization' to proto-dynastic Egypt, largely contemporary with that of Uruk.

The second urbanization (c.2700–2100 BC) corresponds to the Early Dynastic II and Akkad periods in Mesopotamia, and to the Early Bronze Age II-III in

<sup>96</sup> Liverani 1986, pp. 35-46, with the scheme at p. 40; cf. also Liverani 1987a.

<sup>97</sup> Cf. Schwartz 2001; Philip 2002. For the classical positions (Levant still pre-urban) cf. de Miroschedji 1971 for Palestine; Matthiae 1993 for Syria.

<sup>98</sup> Palmieri 1985; Finkbeiner and Röllig (eds.) 1986; Nissen 2001; Frangipane and Palmieri 1987; Frangipane (ed) 2004, pp. 103–107.

<sup>99</sup> Nissen 2007 maintains that the results of the surveys alter the dimensions of the post-Uruk decline.

archaeological periods. The second urbanization marks the maximum occupation in the semi-arid zone. In addition to Lower Mesopotamia (and obviously Egypt: it is the period of the Old Kingdom), it also includes Upper Mesopotamia, Syria (it is the age of Ebla) and the southern Levant (where it is the object of numerous studies), 100 Anatolia, and the Aegean (it is the age of the Minoan palaces). A part was played by the parallel flowering of urban cultures in the Persian Gulf, the Indus valley, and Central Asia, with urban centres of size and structure comparable to the Mesopotamian. 101 Compared to the first urbanization, centred on the irrigated valleys and the role of the temple, the second extends to the tablelands of pluvial agriculture (in Upper Mesopotamia and in Syria),<sup>102</sup> and is based on the driving role of the palace,<sup>103</sup> with the temple maintaining its visibility where first urbanization had taken place, whereas it appears as a simple cult building in the absence of earlier urbanization.<sup>104</sup> The whole system fell into crisis, probably through the effect of an unfavourable climatic situation, 105 through the gaining strength of the pastoral element, and, in short, through the succession of a lower level of social integration. 106 Again, whereas the peripheral areas changed back to a simple level of settlement, made up of villages and semi-nomadic tribes, the central nucleus (Lower-Mesopotamian) at first resisted (third Ur dynasty), finally to be swept away by famines and nomadic incursions (the Martu or Amorites).<sup>107</sup> In Egypt too, the political system of the Middle Kingdom (Twelfth Dynasty) was succeeded by what Egyptologists call the 'first intermediate period', which involved, again, nomadic infiltration, now into the Nile delta.

The third urbanization is that of the Middle and Late Bronze Age (c.2000– 1200 BC), two phases which are embraced in one single urban cycle but differ-

<sup>100</sup> Amiran 1970; de Miroschedji 1971; id. (ed.) 1989; Kempinski 1978; Joffe 1993; Nigro 1995, pp. 1–27; Greenberg 2002 (with a summary of the studies al pp. 2–4).

<sup>101</sup> On the second urbanization in Central Asia cf. Tosi 1973–76; 1977; Vidale 2010. I return to the Indus at § 4.7.

**<sup>102</sup>** Weiss 1983; *id.* (ed.) 1986; Stein 2004 (p. 61 'second wave of urbanization').

<sup>103</sup> This distinction is toned down by Margueron 1987; but the fact remains that the first clearly palatial complexes belong to the age of Jemdet Nasr: cf. Moorey 1964; 1976.

<sup>104</sup> On the more modest role of the temple in the north of Mesopotamia, compared to the south, see Stein 2004, pp. 74-76. The passage from the temple hegemony of the first urbanization to the palace hegemony of the second is for Flannery 1972b a case of 'promotion' of one sector (in this case the military) from being a particular/subordinate instance to being general.

<sup>105</sup> Weiss 2000.

**<sup>106</sup>** An accurate summing up by Palumbo 1990.

<sup>107</sup> Kenyon 1966. A different position by Shay 1988 (against the migratory hypothesis, and with doubts on the climatic, proposes internal social dynamics); recently Nichols and Weber 2006 (somewhat ignorant of the bibliography on the Amorites).

entiated by a progressive withdrawal of the settlements towards the irrigated zones, with abandonment of the semi-arid areas. 108 On the much wider scene too the persistent crisis of the Indus and Central Asia tends to limit the urbanized area to the 'fertile crescent'.<sup>109</sup> In this phase the relations of Mesopotamia, through Anatolia and the Levant, with the Aegean (it is the age of the Mycenaean strongholds) and Egypt (New Kingdom) become stronger and steadier; but if we add the urban system of the Late Bronze Age, it becomes clear how its extent is more than halved, compared to that of the second urbanization. The whole system will then enter into crisis through the worsening relation between productive forces and controlling elites, and will receive the decisive blow from the invasion of the so-called 'Sea Peoples' (corresponding to the 'Doric migration' in Greece), at the root of which is most probably repeated climatic worsening in the Balkan and Anatolian area. 110

A phase of modest settlements under tribal leadership follows, with reduced urban centres (Iron Age I, c.1200-900 BC), until the cycle of fourth urbanization then begins (Iron Age II-III, c.900-500 BC). The process of deurbanization and nomadization, which is endogenous in the Levant, was also shared by Anatolia (with people of Balkan provenance) and Mesopotamia (with the spread of the Aramaic tribes). The gap between crisis and recovery is more evident in the Levant, Anatolia and the Aegean, and also in Upper Mesopotamia (Assyria), while in Babylonia a gradual decline of the irrigation system and the urban centres continues. The final part of the cycle is marked by the disturbance (of a political-military nature) caused by Assyrian imperial expansion, which, if it led to the deep decline of urbanization of the Levant and other areas, does, however, also see the flowering of the great Assyrian capitals.

With the Neo-Babylonian and then the Achaemenid period (c.600–330 BC) we have a new cycle, which we can call the fifth urbanization, with the clear agricultural and urbanistic recovery of Babylonia, and also of the Phoenician coast and a number of Anatolian 'cantons', in contrast to the continuing crisis that in the areas between had been prompted by the ruinous wars of conquest, first Assyrian and then Babylonian. We can assign a sixth cycle to Hellenism and then to the age of the Roman and Parthian empires (to the west and east of the Euphrates respectively), but this goes beyond the chronological limits of our analysis. On the town planning level, the passage from the fifth to the sixth urbanization is marked not so much by a hiatus, as by the introduction of a new urban model (as we saw at § 3.9).

<sup>108</sup> A number of authors, such as Nigro 1995, pp. 29-118 vs. 119-191, distinguish the two phases, but on historical-political bases (Egyptian occupation) more than urbanistic.

<sup>109</sup> Biscione 1977; 1983.

<sup>110</sup> Liverani 1987b; Ward and Joukowsky 1992.

Sequences of cycles largely analogous to those shown here have also been proposed by other authors. For example, the cycles of state-formation outlined by Joyce Markus coincide closely enough with those of urbanization.<sup>111</sup> The case of the Levant has been much studied: in Herzog's outline of urbanization in Israel, his 'First Urban Period' corresponds to my second urbanization, his 'Second Urban Period' to my third, and the 'Iron Age' to my fourth. 112 Similarly in Ingolf Thuesen's outline, his first cycle is that of Uruk, the second the Early Bronze Age, the third the Middle (-Late) Bronze Age, and the fourth the Iron Age. 113 There have been many discussions of the Bronze Age cycles (second and third urbanization) in the Levant, which it is impossible to analyse individually; I shall limit myself to citing the papers collected by Pierre de Miroschedji on the highs and lows of urbanization from the fourth to the second millennium.<sup>114</sup> On the characteristics of the second urbanization we also have noteworthy discussions by Lisa Cooper for the Middle Euphrates, 115 Jean-Paul Thalman for the Levant, 116 and Alexander H. Joffe for Palestine. 117 For urbanization in Iron Age II, Joffe has revealed the 'ethnic' character of urbanization and the connected formation of states, and speaks of a secondary formation derived from interaction with neighbouring formations, then developed, but keeping a very distinct and characteristic community identity;<sup>118</sup> while William G. Dever<sup>119</sup> has pointed out how the birth of the state and of the urbanization of Israel was simply a cycle, in a series of cycles.

But more than these discussions directed to specific cases, we should mention Gunder Frank's general approach to the question of cycles, extended by him on a world scale. Inevitably, the more the system is stretched, <sup>120</sup> while wanting to maintain the unity of the phenomenon, there is all the more need to bend the chronologies (even more so in that Frank's proposed time scale does not actually reach the Near East), and the more necessity to turn to the climatic factor (as we shall see at § 5.14).

<sup>111</sup> Marcus 1998, pp. 76–86 (Mesopotamia), 86–88 (Egypt), 89–91 (the Aegean).

**<sup>112</sup>** Herzog 1997, pp. 259–280; Greenberg 2002, pp. 112–122.

<sup>113</sup> Thuesen 2000.

<sup>114</sup> De Miroschedji (ed.) 1989; Falconer 1994.

**<sup>115</sup>** Cooper 2006a, b.

<sup>116</sup> Thalman 1990a, where he lays greater emphasis on the external factors; and 1990b, where he deals with the internal.

<sup>117</sup> Joffe 1993.

<sup>118</sup> Joffe 2002.

<sup>119</sup> Dever 1997.

<sup>120</sup> Frank 1993; the chronological outline is at p. 389.

### 4.6 The contest for the first city

Following the sequence given by Gordon Childe and others to the 'urban revolution', ideas became current in the middle of the last century that the first Near-Eastern urbanization belonged to the second half of the 4th millennium (Uruk culture). 121 At least there could be discussion – and actually is discussion, as we have already seen - on the 'revolutionary' or, in contrast, 'gradually advancing' character of the phenomenon, or on the existence of early attempts on the margin of the Mesopotamian alluvium as well. For example, Svend Helms, pondering on his discovery of the site of Jawa, in the basalt (and very dry) mass of Jebel Druz north-east of Amman, a proto-urban centre of 12 hectares, datable to the end of the fourth millennium [fig. 22], suggested a distinction between an incipient town-formation (indigenous to a micro-region) of the Late Chalcolithic Age, and the 'proto-imperial' (that is, expansive) of the Uruk period.<sup>122</sup> The proto-urban venture of Jawa was in truth very modest, from its small size and short duration, and somewhat precarious through the effort of managing the meagre water resources available. But proto-urbanization in the Levant has been proposed more generally by Pierre de Miroschedji, 123 and has become evident in Anatolia following the recent campaigns at Arslantepe, where Marcella Frangipane has, correctly, insisted on highlighting elements of proto-urbanization of the Late Chalcolithic Age, with great temple complexes and economic centralization, well before the expansion of the Uruk model [fig. 23] (to which we shall return at § 5.11).<sup>124</sup> All of this shows how Gordon Childe's 'revolutionary' vision was too extreme, and that gradual development of intermediate situations, similar to that postulated earlier by Robert Braidwood for identifying the Neolithic stages, can and should also be identified in the process of first urbanization.

But following Childe's distinctions, the notion of what a city is and how it differs from the village and other pre-urban forms of settlement should by now be established. And yet, a good dose of conceptual confusion long remained (and still remains) prevalent not only among the public but also in the world of the specialists themselves. The fact is that the claim of having discovered 'the most ancient city of the world' is the best that can be imagined (the Bible

<sup>121</sup> Gullini 1970-71 and Huot 1994 provide good summaries of the process of urbanization, from the village to the city. Cf. also Cuyler Young 1986, and various of my works: Liverani 1986, 1987a, 1998a.

<sup>122</sup> Helms 1984; the excavation of Jawa is published in Helms 1981.

<sup>123</sup> De Miroschedji 1989.

<sup>124</sup> Frangipane 1997b; 2002; ead. (ed.) 2010, passim.

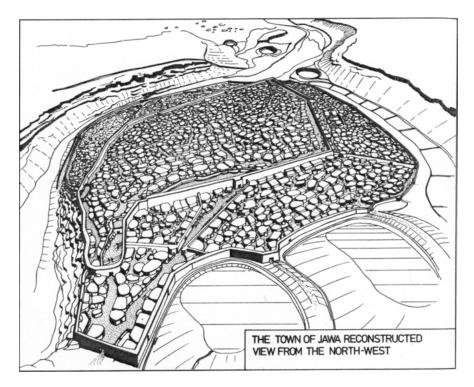


Fig. 22: Jawa, reconstruction (Helms).

apart) for gaining the approval of readers and the media, as well as the indispensable goodwill of the financing bodies. And so a sort of competition backwards in time is sparked off, in which large Neolithic settlements are labelled as 'cities' without having any of a city's structural features. The principal runners in this contest (somewhat tarted-up) have been two: Jericho and Catal Hüyük, and their supporters are (who knows why) English in both cases.

Jericho is a tell of scarcely 5 hectares (Tell es-Sultan), which rises in the centre of an oasis not far from the middle of the Jordan valley, and already enjoyed the biblical requirements for attracting the attention of the public (over and above the excavators, beginning with the Austrian-German mission on the eve of the First World War): it was the first Canaanite city that the tribes of Israel led by Joshua, having crossed the Jordan, came across and destroyed, throwing down its walls to the sound of the famous trumpets - an event as famous (up to the Afro-American spiritual that we all know) as legendary, even although the excavations have shown that at the time of Joshua the city had been abandoned for a long time. So we are dealing with an aetiological legend, provoked by these visible ruins that caused stories to be told of a legendary

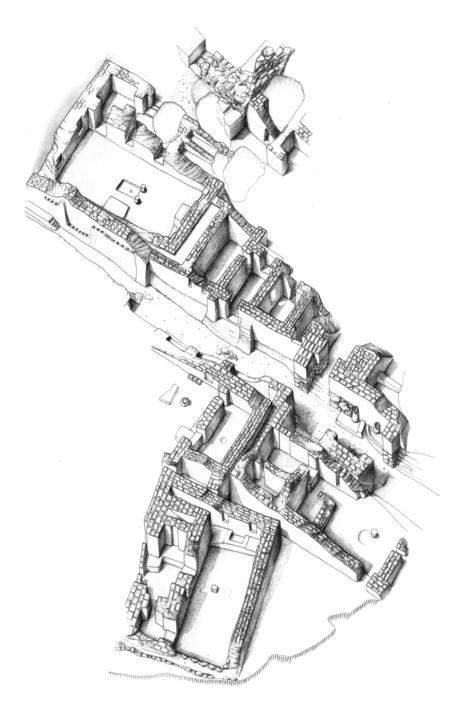


Fig. 23: Arslantepe, axonometry of the temple complex.

event by placing it in the formative period of the people of Israel (as well as Jericho, 'Ay also has the same characteristics of an abandoned city). The demonstration of the legendary character of the account of Joshua, back at the time of John Garstang's excavations in the 1930s, excited violent reactions among those who maintained that 'the Bible is right', but at a scientific level the question is by now shelved. 125

But when the direction of the excavation was assumed by Kenyon (in 1952), who concentrated on the older strata of the tell, she used the existence of a Neolithic village with heavy fortifications (in particular a surviving tower of impressive height) to proclaim that this was exactly 'the most ancient city of the world', as trumpeted the subtitle of her popular work on the discoveries. 126 The reasoning appears rather forced: because Jericho has a sophisticated 'civilization', with well-built houses and encircling walls, it must be a 'city'. The question also appeared in a couple of numbers of the prestigious British journal Antiquity with Kenyon's proposal<sup>127</sup> '[the] pre-pottery Neolithic people lived not in a village but in a town' followed by objections from individuals of the calibre of Leonard Woolley, Robert Braidwood and Gordon Childe, 128 all opposed to granting the label of city to a settlement that had none of its structural features, and opposed to the improper use of the terms 'civilization' and 'urbanization'; and followed by the counter-replies of Mortimer Wheeler ('our oldest town was a fortified oasis') and of Kenyon herself, 129 who, however, in replying on the technicalities, shows that she has not grasped the basic criticism regarding the distinction between city and village. The whole discussion, given the high academic rank of the contenders, and their mutual respect, was maintained at a courteous and only terminological level, leaving hidden the fundamental divergence, which, however, clearly filters through from the contributions of Braidwood and of Childe. But then Kenyon herself seems to have taken note of the criticisms, inasmuch as in the fifth edition (1979) of her collected works on Palestinian archaeology she abandons the tone of triumph, vet still defines Neolithic Jericho as a 'town', but then the Late Chalcolithic is called the 'Proto-Urban Period' and only with the Early Bronze Age are there

<sup>125</sup> On the story of the excavation cf. Nigro 2005 (who has resumed the excavation with an Italian-Palestinian mission). Nigro 2010 correctly places the urbanization of Jericho in the Early Bronze Age (my 'second urbanization').

<sup>126</sup> Kenyon 1957a.

**<sup>127</sup>** Kenyon 1956 (the sentence quoted is at p. 184).

<sup>128</sup> Woolley 1956; Braidwood 1957 (also in Kraeling and Adams [eds.] 1960, pp. 59-60); Childe

<sup>129</sup> Wheeler 1956 (the sentence quoted is at p. 135); Kenyon 1957b.

'City-States'. 130 In any case, the suggestion that there was a city at the very dawn of the Neolithic Age (the pre-pottery phase) was in fact allowed to drop at a scientific level, and the very existence of the famous encircling wall dating back to the pre-pottery Neolithic period has been thrown into doubt, and the function of the tower, left isolated or inside the wall, remains uncertain: perhaps cultic and not defensive, 131 - with which the whole theory of the proto-Neolithic 'city' collapses.

More persistent was the case that followed, of Çatal Hüyük, sparked off by the publication of James Mellaart's final report. 132 This is a large central Anatolian site in the full bloom of the Neolithic period, whose excellent state of preservation allows the excavator to recover both the plan of a substantial part of the village and the decoration and internal furnishings of many houses. The houses are all supported one against the other, without alleys for access: therefore circulation and access took place at a terrace level, and the external front of the houses constituted sufficient defence to render an encircling wall unnecessary. In suggesting that Catal Hüyük was a 'city' ('a town, or even a city') Mellaart started from two somewhat debatable presuppositions. First of all he believed that every example of manufacturing (of a very high technical and aesthetic level) was the work of a specialist, and that therefore the site was home to tens and tens of full-time specialized artisans, so realizing one of the necessary requirements. Further Mellaart makes a great case from the presence of so many 'sanctuaries', deducing from them that we are dealing with a quarter of priests, which would implicitly mean specialization and so urbanization. Now, it is true that many houses contain cult objects, but obviously we are dealing with domestic sanctuaries, 133 in a framework made of houses all of the same size and level, and the correct deduction is actually the contrary: not even the cult was centralized, and besides, how could the sanctuaries be in the homes of the priests? The candidature of Çatal Hüyük for the role of the first city in history very quickly collapsed under pressure from the specialists, even (and above all) British: from David French's ready criticism up to the most recent detailed information from Ian Hodder (who took up the excavation

<sup>130</sup> Kenyon 1960.

<sup>131</sup> Bar-Yosef 1986; Hackmann 1994, pp. 38-78; McClellan 2006; on the tower recently, Aurenche 2006.

<sup>132</sup> Mellaart 1967, pp. 15 ('Before 6000BC Çatal Hüyük was a town, or even a city, of a remarkable and developed kind'), 67 ('Its builders were well aware of the necessity of planning an orderly settlement'), 225–227 (full-time specialization, distant trade, urban planning).

<sup>133</sup> Cf. Huot 1970; 1990a.

in the 2000s) and others connected with him: 134 Çatal Hüyük is not a city, it does not have the city's socio-political, economic, and urbanistic structures, it is a large and prosperous village. 135

But unfortunately Mellaart's interpretation found an ample following among town-planners and economists, never nourished by knowledge of Ancient Near-Eastern prehistory, and more easily disposed to accept theories rich in fantasy on the city of remotest antiquity than solid early-economic reconstructions. Mellaart's theory immediately gave impetus to Jacobs' book (1969), which in maintaining the priority of the city to agriculture (as already seen at § 3.7) and knowing nothing of Childe and even less of all the archaeological work on eastern prehistory, except indeed Catal Hüyük, modelled her Palaeolithic city of 'New Obsidian' on that, or rather on Mellaart's interpretation of it. Edward Soja also followed Jacobs and placed the first city before the Neolithic revolution, proposing a first urban revolution 10,000 years ago, which is that of Jericho and Çatal Hüyük, then a second, which is that of 3000 BC, and finally a third, which is the modern, industrial one. <sup>136</sup> No different are the positions of other eminent historians of town planning.<sup>137</sup> And yet again, Ryckwert, though with some terminological caution, accepts that Jericho and Çatal Hüyük were urban centres 10,000 years ago. 138 In an Anglophone setting an easy compromise makes use of the distinction between 'town' and 'city', 139 and in a similar way the French difference between 'ville' and 'cité' is used. 140 But even using these distinctions, there lingers, like a legacy of the old misunderstanding, the 'need' to cite these two cases in relation to urbanization, instead of treating them dispassionately as two very splendid Neolithic villages.

The position of the paradigm now current (first urbanization in the middle of the fourth millennium) is welcomed above all by urban planners (of a more or less Marxist tradition) mindful of the concrete evolution of productive and

<sup>134</sup> French 1972; Huot 1970; 1982, pp. 98-99; id. et al. 1990 (which looks again at the whole question); and later Hodder 2006; Renfrew 2008, pp. 30-31. Shane and Küçük 1998 use the expression 'world's first city' without entering into the problem.

<sup>135</sup> This is the position of Brentjes 1987, p. 7; and of Klengel and Brandt 1987, pp. 16-17.

<sup>136</sup> Soja 1999; 2009.

<sup>137</sup> Sica 1970, p. 9; Schneider 1960, p. 30. Morris 1994 (1st edn. 1972) is an exception, pp. 5-6, 18-20; he places the first urbanization in 3500-3000 BC, and is sceptical/negative on Jericho and Çatal Hüyük, and critical of Jacobs' theory (pp. 18-20).

<sup>138</sup> Ryckwert 1976; 2000, p. 14.

<sup>139</sup> Gates 2003, pp. 18-51; Whitehouse 1977; Kostof 1991, pp. 29-30. On the factors of the first urbanization Kostof is critical of Childe's surplus, of Jacobs' market, and of Wheatley's religious factor.

**<sup>140</sup>** This is the case in Bairoch 1985<sup>2</sup>, pp. 34-37.

socio-economic structures. So Castells shows that he has assimilated well Childe's position when he states that 'the first settled urban areas with a high density of population (Mesopotamia about 3500 BC; Egypt 3000 BC; China and India 3000–2500 BC) appeared at the end of the Neolithic Age, where the state of technology and the social and natural conditions of labour enabled cultivators to produce more than necessary for survival'. 141 Paul Bairoch also expresses himself in favour of Childe's urban revolution and against Jacobs' trade theory, underlining how trade had a modest weight (which he quantifies as between 0.5 and 1%) compared to production. 142 Finally Mario Coppa, in his impressive history of town planning, 143 does not accept the urban character of Jericho, remaining more flexible on Çatal Hüyük (to which he attributes a 'form tending towards urban'), without however entering into the debate on city/ non-city. The work actually presents the process of urbanization as a progressive growth of settlements and of their form, and adopts from Childe accumulation and utilization of the surplus as a factor of urbanization (without, however, using the formula of the 'urban revolution') and the role of the temple and palace as factors of politicization and socio-economic stratification at the end of the fourth millennium.

In conclusion, it is noticeable that in the much praised Enciclopedia Einaudi, in both the articles on the history of urbanization, the only mention of the Ancient Near East consists of the question of whether Jericho and Çatal Hüyük were cities or not144 – for the rest, a total silence reigns: all the knowledge gained of the complex route that led to the creation of the first true and proper cities has not succeeded in catching the attention even of eminent scholars.

#### 4.7 New frontiers: from the Nile to the Indus to Central Asia

When in 1958 the symposium on the City Invincible was held at the Oriental Institute of Chicago, the discussion on Egypt was obviously entrusted to John Wilson, the Institute's Egyptologist, who found himself in grave embarrass-

<sup>141</sup> Castells 1972, p. 11 of the English translation.

**<sup>142</sup>** Bairoch 1985<sup>2</sup>, pp. 39–47.

<sup>143</sup> Coppa 1969, vol. I, pp. 48-51 on Jericho, 56-63 on Çatal Hüyük. The work, detailed and well illustrated, is strangely ignored by Near-Eastern archaeologists, perhaps because altering the current periodization leads to some diachronic (con)fusion, for example between Late Chalcolithic and Early Bronze, and between Late Bronze and Iron I-II.

<sup>144</sup> Roncayolo 1978, p. 3; Bairoch 1978, p. 86. Even the ancient historian Hansen (2000a, pp. 11 and 15) feels the need to cite Jericho and Çatal Hüyük.

ment. He had already in earlier works expressed his very pessimistic judgement on the possibility of identifying the Egyptian city. In the book edited by Henri Frankfort in 1946, on the relations between state and vision of the world in the Ancient Near East, the contrast is clear between the chapters that Wilson devotes to Egypt, in which there is complete silence on the role of the city, and the chapters which Jacobsen devotes to Mesopotamia, in which ample space is given to the concept of the 'city-state'. 145 Then, in his book summarizing Egyptian civilization, Wilson had written: 'One may doubt whether any community in earliest Egypt [that is, before the eighteenth dynasty] deserved the term "city". They were all agricultural villages of greater or lesser degree', and even more extreme: 'In its entire historical course ancient Egypt never reached the full urban stage'. 146 And so his reaction to tackling the Egyptian city at the Chicago symposium was rather negative, if we consider the title that he gave to his chapter (Civilization without Cities) and his opening words on the impossibility of discussing the theme. It is noticeable that Wilson did not make of this a question of less clear evidence, but really an institutional and cultural issue: 'The ancient Egyptian was urbane even though he had no *urbs*. He had a politesse even though there was no polis. He was civilized without being in the Latin sense a civis', and further on '[Egypt] was a major civilization without a single major city'. 147 Dealing, according to Wilson, with a structural feature, his greatest preoccupation was that of demonstrating that there was in Egypt (and how!) a 'civilization', even if there was no 'city'. It is clear how such a preoccupation relates to the idea, of nineteenth-century mould, based on etymology (civitas/civilitas), but also archaeologically a legacy in these years from Childe, with his conviction that the state of civilization follows (coming out of barbarism) only through the advent of urbanization. The scholars of the Mesopotamian world reacted differently to the Egyptian situation. Some of them, for example Woolley, accepted that the subject for discussion was the structural character of this civilization: 'not even in the capital, for all its magnificence, was there any real civic life', and 'there was nothing that called for the urban organization proper to a city'. 148 Others, for example Oppenheim, thought that it was a fact of archaeological visibility: with the exception of el-'Amarna 'all others have completely vanished',149 that is, there had been cities, but then they had 'vanished'. Sjoberg too, in 1960, accepted that there had been real cities in

<sup>145</sup> Frankfort (ed.) 1946, chaps. 2-4 on Egypt, 5-7 on Mesopotamia.

**<sup>146</sup>** Wilson 1951, pp. 34-35.

<sup>147</sup> Wilson 1960, pp. 134-135.

<sup>148</sup> Woolley 1957, p. 430.

<sup>149</sup> Oppenheim 1964, pp. 126-127 of the 1977 edition.

Egypt from 3100 BC, which however became less visible until 2000, through the alluvial burying of the valley.

It was during the 1960s that the question of Egyptian urbanization became standardized, through the concurrence of more factors: new excavations for the earlier periods too, 150 re-examination of the documentation of the ceremonial centres, utilization of particular urbanistic types (the funerary cities, the working men's villages, the fortified cities). As Barry Kemp observes, now that the texts have been fully revised, Wilson's position was based on the written sources, but archaeology shows that Egypt was a normally urbanized country.<sup>151</sup> It was therefore the normalization of excavation procedures in Egypt (previously inadequate, often in the hands of philologists) that also normalized the town planning. The case of el-'Amarna, the ephemeral capital of the 'heretical' pharaoh Ekhnaton in Middle Egypt, can be easily explained as a singular case of preservation (the city was abandoned and never re-inhabited), whereas it could not be explained if it had really been the only Egyptian capital (for just twenty years in a history of four millennia). The renewal of the excavations of el-'Amarna under the direction of Barry Kemp, with up-to-date methodologies, was a decisive element in the conceptual revision. But the case of el-'Amarna remains altogether singular, no longer because it was the only Egyptian city, but rather because it comes out of peculiar circumstances.

There are now plenty of comprehensive discussions of Egyptian urbanization - from ample treatment in Alexander Badawy's books on Egyptian architecture<sup>152</sup> to the relevant chapter in Barry Kemp on Egyptian civilization, <sup>153</sup> from Manfred Bietak's excellent summary<sup>154</sup> to the most recent by Kathryn Bard, 155 and to various articles from journals and conferences. 156 The discussions of each author cannot be followed here, but the state of what is actually known can be gained to some extent by two rapid run-throughs, one of a diachronic character and one of a typological character. On the diachronic level, we have evidence of clear urbanization from the first dynasties, both in the

<sup>150</sup> Kemp 1977a.

<sup>151</sup> Kemp 1977a, which then describes the three cases of Abydos, Edfu and Memphis; id. 1977b ('Amarna). The misunderstanding of an Egypt without cities still remains among Egyptologists and generalists, for example, Redford 1997; Stoddart 1999, p. 912.

<sup>152</sup> Badawy 1955 (Old Kingdom); 1966 (Middle Kingdom); 1968 (New Kingdom); also id. 1967.

**<sup>153</sup>** Kemp 1983, pp. 96–103.

<sup>154</sup> Bietak 1979.

**<sup>155</sup>** Bard 2008; cf. earlier *ead*. 1997; less thorough O'Connor 1993.

<sup>156</sup> For example, discussions by Parlebas 1977 and 1983; Vercoutter 1983 (at the Geneva conference edited by Bruschweiler); Valbelle 1990 for the book edited by Huot; H. S. Smith 1972 (at the London conference); Wenke 1997 for the book edited by Nichols and Charlton; Goelet 1999 (at the conference on privatization); Grimal 2000 (at the conference on megalopoleis; and

capital Memphis and in the administrative centres of the various nomoi: Hierakonpolis, el-Khab (Nekheb), Abydos, Elefantine, Edfu, and the first 'funerary cities' close to the pyramids. 157 With the Middle Kingdom, Kahun and Qasr es-Sagha (in Fayyum) are seen as regular rectangular cities; and also Buhen and others fortresses on the Nubian frontier.<sup>158</sup> In the New Kingdom there are new capitals:159 first (Amenophis III) at Thebes (with the great temple complex of Luxor and Karnak on the east bank and the funeral complex on the west bank, with the funeral centres of Medinet Habu, palace centres of Malgata, and artisan centres of Deir el-Medina), then (Amenophis IV) to el-'Amarna, and finally (Ramses II) to Avaris (Tell ad-Dab'a in the Delta).

The great visibility of the funerary cult is characteristic of Egypt (unlike Mesopotamia); the cult also gives rise to, alongside the real funerary complexes (the pyramids, then the royal necropoleis and those of functionaries through royal grants), the workers' villages for the construction and maintenance of pyramids and tombs, and the funerary cities (especially Giza), administrative and ceremonial centres for the management of the funerary cult and of the property assigned to that cult.<sup>160</sup> Among the most characteristic (and most studied) instances are the walled and rectangular city of Kahun [fig. 24], with one section (the west) of small terraced houses for the workers, and one (central-east) of large residences for the functionaries;<sup>161</sup> and the workers' village of Deir el-Medina, built and managed by the state (with provision of food rations and various grants, and division of the workers into standard teams), but at the same time with a strong community sense. 162 It is possible, even probable, that in Egypt there also existed 'normal' rural villages, and that even in economic production Egypt (urbanized or less so) always remained a society of villages;163 but certainly in the received vision these planned workers' villages steal the show for the normal settlement fabric.

the little book by Davoli 1994 (good introduction and diachronic chapters) and by Uphill 1988 (debatable classification and without chronology).

<sup>157</sup> On the early-dynastic, rectangular and planned, Egyptian cities as royal foundations, cf. Bietak 1986.

**<sup>158</sup>** Kemp 1972b.

<sup>159</sup> Donadoni 1994.

<sup>160</sup> Stadelman 1981.

<sup>161</sup> Kemp 1989, p. 155 gives an estimate of 3000 people. On the functionaries' houses cf. Doyen 2010.

**<sup>162</sup>** Černý 1973; Janssen 1975b.

<sup>163</sup> The notion is widespread, expressed explicitly by Eyre 1999. Also in Hassan 1993 (anthropological approach to the origin of the Egyptian city) the rural settlement is predominant, with the towns as centres of redistribution and exchange, or protective fortresses, or centres of an agrarian cult.

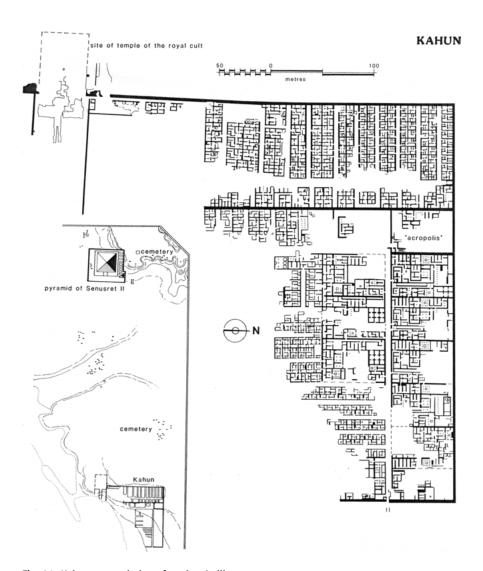


Fig. 24: Kahun, ground plan of workers' village.

As for the 'palace' cities or royal residences, <sup>164</sup> the case that can be most completely visualized remains el-'Amarna [fig. 25], which appears as a great ceremonial theatre, stretching along an axis parallel to the Nile, with palaces, administrative offices, residences for functionaries (also very large, with encir-

<sup>164</sup> In general O'Connor 1989; on the temple-city Kemp 1972a.

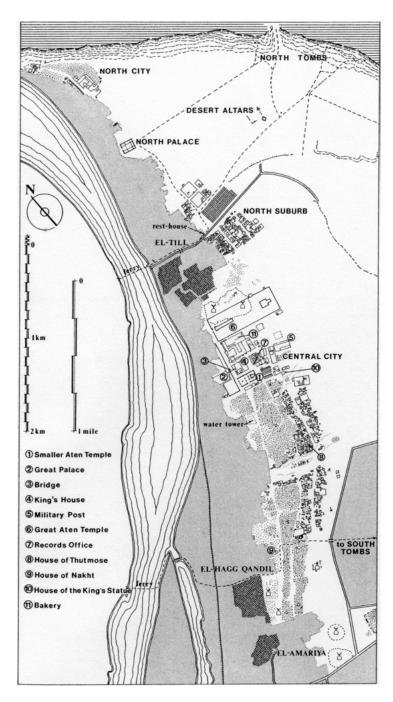


Fig. 25: El-'Amarna, general ground plan of the city.

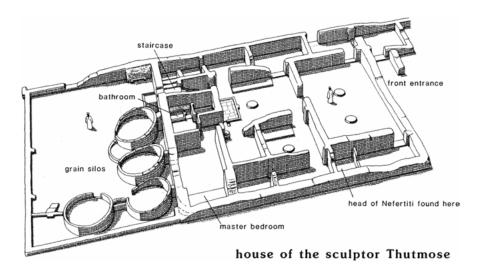


Fig. 26: El-'Amarna, house of the sculptor Thutmose.

cling walls and facilities for food preservation [fig. 26]), residential quarters, workmen's villages. But this case, apart from being striking because of the fine state of preservation of the structures, <sup>165</sup> is also atypical, both because the residence of the 'heretic pharaoh' was intentionally built on a site devoid of an earlier urban fabric, and because it was the seat of the atypical solar religion of Aton; therefore no temples, and no walls, but boundary stelae that mark the limits of the area, without protecting it. The actual extent is generous (around 440 hectares) but lightly built upon, with a population that has been estimated as between 20/30,000 and 50,000. <sup>166</sup> Equally promising is the research of Manfred Bietak at Avaris/Tell ed-Dab'a, which may give a less singular image of an Egyptian capital. <sup>167</sup>

Parallel to the take-off of research into Egyptian town planning (and also Nubian, with the case of Kerma as the 'first African city'), 168 the 1970s also

**<sup>165</sup>** Well before Kemp's work el-'Amarna was a favoured laboratory for the study of the Egyptian city; on the houses in particular cf. Ricke 1932 (deep typological study); Borchardt and Ricke 1981 (last edition) with the reviews of Kemp 1981 and Janssen 1983.

**<sup>166</sup>** Kemp 1989, p. 269. On el-'Amarna's town planning elements see Kemp 1972a; 2000; and also Joffe 1998, pp. 552–556; on the workmen's villages Kemp 1987; on the residential quarters Kemp 1981.

**<sup>167</sup>** On Avaris/Tell ed-Dab'a cf. Bietak 1997: and now the excellent up-dated presentation of Bietak 2010.

**<sup>168</sup>** Bonnet 1986. I cannot here enter into the post-condominium developments of Nubian and Sudanese archaeology.

saw the impetus of other great masses of evidence, and other centres of urbanization (even primary, in the sense defined at § 4.4) that placed the case of Mesopotamia in a much more shared context – a sort of 'world-system' as it was called and as we shall see at § 5.11. The best-known and most exciting case is that of the Indus Valley, whose great metropoleis of Harappa, Mohenjo Daro and Chanu Daro had already been extensively excavated in the colonial era (in the 1920s and 1930s), 169 when the first general descriptions were produced. But the new work in the post-colonial era (starting from the 1970s), both on the part of Western missions and on the part of Indian and Pakistani archaeologists, has brought about much more complex and complete images of a sample of sites (Kalibangan, Lothal, Surkotada, Kot Diji and others) that continue to grow still richer. In this instance also, I cannot enter into detail here, and must limit myself to the general lines which seem verified today.<sup>170</sup> We are talking of sites of considerable size: Mohenjo Daro extends to 250 hectares, Harappa to 150, Dholavira to 100, obviously metropoleis surrounded by a plethora of minor settlements. A formative phase can be reconstructed, not properly urban, but open to definition as 'proto-urban' (c. 3500–2600 BC), contemporary with the Uruk phase in Mesopotamia; then a fully urban phase (c. 2600-1900 BC), contemporary with the Mesopotamian 'second urbanization'; and then a decline whose length varies from site to site (c. 1900-1700 BC at Mohenjo Daro and Dholavira, but until 1300 at Harappa), parallel to the 'third urbanization'. The transition from the complex of the cities of the Indus to the urban renewal of 'classical' India, and also the link of the decline to population migrations (the arrival of the 'Aryans') are still open questions. However, there is an impression, quite legitimate, that what scholars of the Indus valley consider a single cycle of growth and decline, could on the contrary show itself (when the evidence for this becomes greater) as a sequence of minor cycles, and thereby more commensurate with those of Greater Mesopotamia.

But at the level of town planning the cities of the Indus civilization present singular characteristics. There is no lack of 'normal' cities, such as Rakhigarha, which has an acropolis/citadel (with public buildings of administrative and ritual function), and a 'high' city and a 'lower' city for residential areas. The most

<sup>169</sup> Mohenjo Daro: Marshall 1931; Mackay 1938. Harappa: Vats 1941. For the other sites I refer to the bibliography in Allchin and Allchin 1982, pp. 366-367. A classic 'colonial' summary in Wheeler 1953.

<sup>170</sup> For a recent summary I suggest Kenoyer 2008 (and id. 1998); but Allchin and Allchin 1982, pp. 165-192 also provides a clear picture of the essentials. Earlier Allchin (ed.) 1982; Jarrige 1988; Malville and Gujral (eds.) 2000; Possehl 2002.

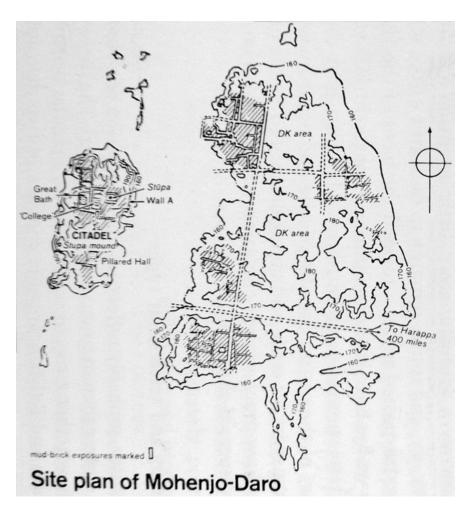


Fig. 27A: Mohenjo Daro, general ground plan.

famous cases, however, Mohenjo Daro [figs. 27A and B] and Harappa and also Dholavira, present a sort of bi-partition between a good-sized citadel (to the west), heavy encircling walls, and a lower city (to the east), noticeably larger and with a substantially rectangular grid. The citadel, raised high on a great brick podium, probably for protection against floods, contains large buildings of specialized function, of clear public (or community) character: the 'Great Bath' (at Mohenjo Daro) perhaps for cult use, the granary (at Harappa, and also at Mohenjo Daro), the assembly hall, etc. Even if the interpretations are no more than reasonable hypotheses, it appears clear that the citadel was home to buildings for cult and community use, while there is no royal palace, which postu-

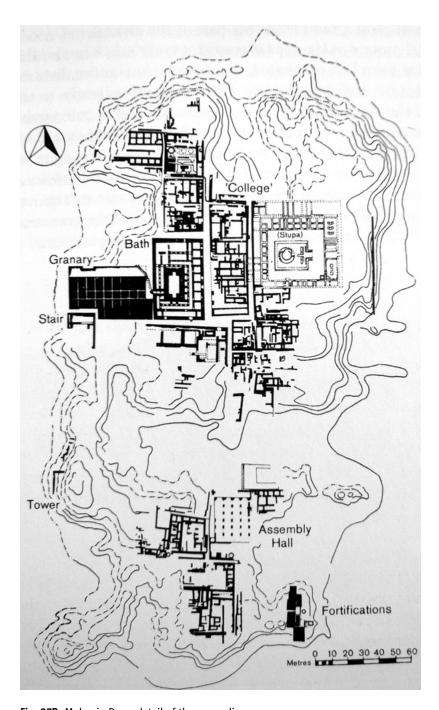


Fig. 27B: Mohenjo Daro, detail of the acropolis.

lates a non-hierarchical socio-political structure, less centred on central political bodies, with the possible presence of elites in reciprocal competition – but this is pure hypothesis. We can hardly fail to see how the non-appearance of the temple has a sequel in the historical period with Indian religion (Hindu and then Buddhist) having little connection to the management of the economy; and how the non-appearance of the palace could also indicate the distinctive characteristics of the Indian political system, quite apart from the royal and palatine force of the invaders coming from the north-west.

Just as productive (and perhaps more innovative) has been the revival of interest in Central Asia, first at the time of Soviet domination (when, however, a large part of the Russian work remained little known in the West, for reasons both linguistic and political-ideological) and then with the advent of local republics. The Italian excavations at Shahr-i Sokhte and the French at Shortugai also placed emphasis on interconnections between Iran and Turan (Central Asia) and between Iran and the Indus Valley.<sup>171</sup> By and large we can correlate the great cycle of first urbanization in Central Asia with that which is the 'second urbanization' (Early Bronze Age) in the Near East, 172 and also correlate the long decline with those more spatially limited phenomena that in the Mesopotamian peripheries marked the passage from Middle to Late Bronze Age. Finally, it could be thought, if we did not have the texts, that the long Cassite and Middle-Babylonian period could also be seen as a noticeable depression of urban civilization of Lower Mesopotamia, altogether analogous to that in the areas to its east. As for the urbanistic shapes, they are characteristic of the Bronze Age Central Asian civilization of the citadels (such as those of Dashli and Sapalli Tepe), whose plan is closely modelled on geometric designs, more or less 'labyrinthine' and of clear symbolic inspiration [fig. 28], which have nothing their equal in Mesopotamia. And here we must at least point out, moving forward in time, the markedly 'ceremonial' character of the Achaemenid palaces in Persia, the Pasargadae of Cyrus and Persepolis of Darius, with their parks ('paradises') and pillared halls (apadana), in which the element of ostentatious theatricality was certainly not the only component (elements of habitations, storerooms and administration remain), but was far superior to that of the Mesopotamian palaces. 173

<sup>171</sup> See the recent work of Kohl 2009 (and earlier id. 1984) and of Vidale 2010, with reference to specific bibliography.

<sup>172</sup> Tosi 1973-76.

<sup>173</sup> For Persepolis (excavations in the 1930s) see the three volumes of Schmidt 1953-70; for Pasargade (excavations in the 1960s) Stronach 1978; also Nylander 1970; Boucharlat 2002.

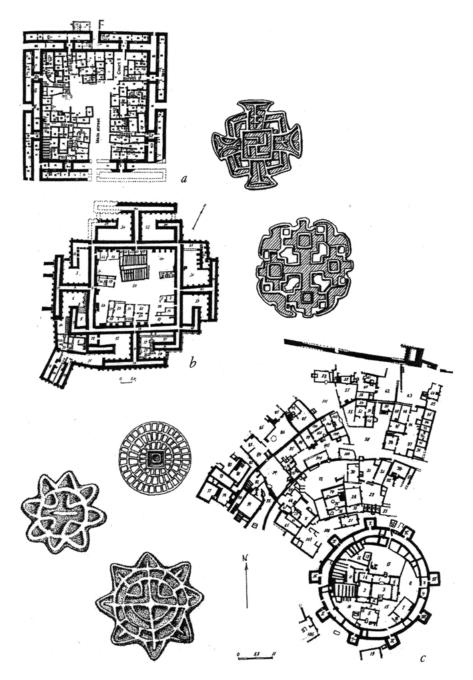


Fig. 28: Central Asian cities (Sapalli Tepe and Dashly), general ground plans compared with contemporary seals.

Another few lines to point out the situation in the Arabian peninsula. Here the political closure (of religious origin) of Saudi Arabia has in fact barred the surveys, and also greatly limited and hindered the excavation, of individual sites. Now that there is information of the large size (within the encircling walls) of the site of Teima, where the Neo-Babylonian king, Nabonidus, dwelt for years, all the more attention should be given to this great lacuna in knowledge. By way of contrast the United Arab Emirates, Oman, and Bahrein have all accorded a warm welcome and stimulus to western archaeological missions, to such an extent that the study of the levels and forms of settlements in these countries has made great strides forward. Obviously we are dealing with arid zones that cannot support great urban centres, but the origin of the oases in a desert environment (looking at Oman) and the maritime ports of the Persian Gulf constitute questions of even general note.<sup>174</sup> Of highest note, on the other hand, is the urbanization of Yemen (the Arabia Felix of ancient historians), which is linked to the construction of great dams (that of Marib is famous, and even the Quran talks of its collapse), which dealt with the water of the wadi descending from the high plain towards the desert, to redistribute it in sophisticated systems of capillary canals.<sup>175</sup> The 'cycle' of the Southern Arabian cities takes place in the Iron Age (first millennium BC), and so is parallel to the 'fourth' urbanization of the Levant, and then lasts through various political events almost until the time of Islam.

Anticipating here some of the developments that took place in the next decades, the comparison between the urbanization of Mesopotamia and that of Egypt and the Indus Valley oscillates between the two extremes of underscoring the common features or the differences. Between Egypt and Mesopotamia, once the extreme counter-positions of a country without cities and a country full of cities had been overcome, as well as the too facile encompassing of irrigated valleys within the 'hydraulic' label, a more circumstantial comparison was tried out by John Baines and Norman Yoffee, who singled out a number of critical fields: the Egypt of a strong and centralized state compared to the Mesopotamia of endemic conflict; the Egypt of urban-rural homogeneity compared to the Mesopotamia of sharp distinction between urban and agriculturalpastoral communities; the Egypt of sacred royalty compared to the Mesopotamia of substantially secular power; Egypt unified as a norm compared to Mesopotamia fragmented.<sup>176</sup> For the valley of the Indus doubts have arisen<sup>177</sup>

<sup>174</sup> I refer to the work of Potts 1990; cf. also id. 1998.

<sup>175</sup> I refer to De Maigret 1996; on the system of irrigation Brunner 2003.

<sup>176</sup> Baines and Yoffee 1998, p. 208 and passim. The classic summary on the influence of environment and the irrigation system in determining the settlement scheme in Egypt is Butzer 1976.

<sup>177</sup> The question is looked at again by Possehl 1998.

whether the great, startling urbanization of Mohenjo Daro and Harappa is connected with the forming of states - thinking of both a unitary state and of a mosaic of a number of states of 'cantonal' range. The doubt is clearly justified by the apparent absence of palatial buildings, an absence that implies that if there were a state, it was not a strong and monocratic one like the Mesopotamian (and even more the Egyptian). But also contributing to this doubt is the unsatisfactory level of knowledge that the enormous expanse of the Indus valley still produces on systems of settlement as a whole (urban and extra-urban), with the result that the neo-geographic conclusions too, drawn from hierachic levels and spatial distribution, have not yet provided sufficiently clear results.

I ask myself if we should not allow to seep into the picture those technical and environmental facts that on the one hand are only too well known, but on the other are not sufficiently linked to the whole settlement and political situation. Above all it is well known that the boundary between cultivated land and desert is as sharp in the Nile Valley as it is ill-defined in Greater Mesopotamia, and that this results in intensification of cultivation in the first case, and widening (particularly in the form of agro-pastoral transhumance) in the second which explains, among other things, why the Egyptians wear linen and the Mesopotamians wool.<sup>178</sup> But even the type of irrigation is different: the Nile Valley is cultivated (as described by Herodotus) on the residual humidity after the flood, which submerges everything, has retreated ('Flood Recession Agriculture'), while the Mesopotamian countryside is irrigated by dendritic canalization starting from catchment basins (to compensate for the discrepancy between the flood season and the cultivation season). A not very recent study<sup>179</sup> suggested that the 'Flood Recession Agriculture' – which is typical not only of Egypt but of the whole of North Africa: the Niger valley and the Saharan wadi - acts as a stimulus for the development of proto-state bureaucracy, because cultivated properties are obliterated every year by the flood that drowns everything, and must therefore be redrawn every year. This suggestion seems to me difficult to accept (the rest of northern Africa is not well known for precocious formation of states), but perhaps it is rather the relation between urbanization and politicaladministrative power being influenced by a different agricultural system: homogeneity and cohesion of the entire country, placing of the settlements at the margins of the flooded land, a smaller space for private economic fortunes. As for the Indus, it has been correctly noted that the monsoon system (with the favourable seasonal coinciding of the rains and cultivation) allows a flourishing agriculture without canalization, and therefore the role of the political elite is

**<sup>178</sup>** Cf. my comment to McCorriston 1997, pp. 536-537.

<sup>179</sup> Park 1992.

not important (and even negative, inasmuch as only exacting, in the form of taxes), given the non-appearance of palaces and the very easy reconversion to a pre-urban level when the elite begins to decline and the villages gladly free themselves.180

# 4.8 The shape of the city and the new foundations

An obvious and oft-repeated distinction is that between cities, or parts of cities, grown 'historically' and chaotically, and those by contrast modelled on a deliberate design. 181 And this leads to a clear consequence – the idea that the shape of the city, the 'ideal city' as imagined by every society, shows itself best in cities based upon a design. There is a general and abstract divide between idealism and reality, where the formal model finds its greatest expression in a Utopia or in the imagination, because the reality is always a compromise. But there is also the working divide, between the presence and absence of an initiative for urban planning. To tell the truth, the city imagined and then built by a king (or by an architect on the king's behalf) can also be, at least partly, too original and special to serve as a model for the normal city, whereas the cities grown 'historically' can in fact also reproduce the characteristics of that society, and its trends in the long run. 182

The desire for planning in the modern age has also affected cities already in existence, by gutting and re-ordering them; Haussmann's Paris is the largest and most symbolic of these, but far from the only case. In the Ancient Near East the rearrangement of what had existed was not easily practicable; there was a need to create from the beginning: this applied to single buildings, for which 'restoration' was a complete rebuilding, and also applied to the cities. The planned and regular city was always a construction ex novo, or better still ex nihilo.<sup>183</sup> Gudea, king of Lagash towards 2100 BC, pictured seated with a tablet on his knees on which is drawn the plan of the temple which he is preparing to build, is the prototype of the king-builder, who first imagines and then brings into effect.<sup>184</sup> Founding a new capital in its entirety, the king accomplished on the largest scale that which he could more often bring about as a sample, building palaces and single temples. By so doing he added his name to the list of authors of works of world creation and organization, a series begun by the gods

<sup>180</sup> Jarrige 1973.

**<sup>181</sup>** For example Pierotti 1972, pp. 25–35; Kostof 1991, pp. 43–51; Morris 1994<sup>3</sup>, pp. 8–10. Symbolic aspects of the foundations of cities: Sica 1970, pp. 11-40.

<sup>182</sup> In this sense Kemp 2000.

<sup>183</sup> Margueron 1988, pp. 50-51 (ex novo/ex nihilo) and id. 1994, p. 4 (fondation/refondation).

<sup>184</sup> Suter 2000; 2001.

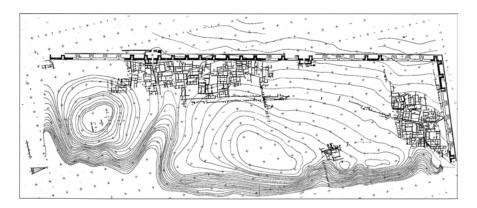


Fig. 29: Habuba Kebira, Uruk colony on the mid-Euphrates.

who created the physical structure of the cosmos, then followed by the ancient heroes who initiated the fundamental institutions of human society (kingship, the city, writing), and yet, and always, sustainable by the king in power, with achievements and innovations that would complete the divine labour. In the course of studies these considerations were always there, but it is above all in the 1980s that the ideological aspects were tackled in more detail (as I shall describe shortly), and then, with the 1990s, the archaeological and town-planning aspects of new foundations. French interest, particularly that of Jean-Louis Huot for the 'villes-neuves' 185 was probably stimulated by earlier relevant initiatives on the part of town planners and modern historians. Then more recently, and in an American context, preference was given to speaking of 'disembedded capitals', stressing the artificiality and political opportunism over and above an ability in town planning. 187

In ancient Mesopotamia, instances of new foundations are frequent, sometimes deduced from the regular, planned, layout of the settlement, and sometimes recognized from kings' celebratory statements. In the first case they already date back to the first urbanization, from the Uruk period, with the rectangular Habuba Kebira [fig. 29];<sup>188</sup> in the second at least to Sargon of Akkad, who founded his capital at the centre of his dreamt-of 'universal empire'. While the

**<sup>185</sup>** Huot (ed.) 1988, with introduction and conclusion by Huot, and Margueron's chapter on Mari and Emar. Cf. also Lafont 1994.

<sup>186</sup> For example Gottmann 1966; AA.VV. 1970.

<sup>187</sup> Cf. § 6.7 with references to Blanton 1976 and Joffe 1998.

**<sup>188</sup>** Preliminary reports by Heinrich *et al.* in MDOG 1970, 1971, 1974, 1976; summary by Strommenger 1980.

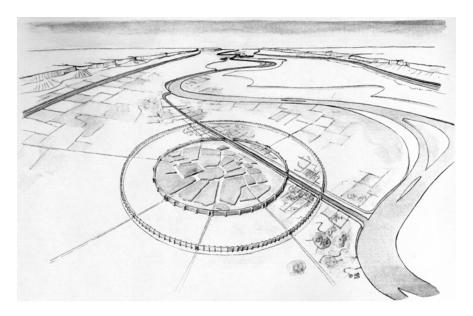


Fig. 30: Ground plan of Mari, ideal reconstruction.

site of Akkad is not yet securely identified, Habuba has been repeatedly studied as an example of early consciousness of urban design, of a real and true 'birth of urbanism', with a regular grid of the urban fabric, only later impaired by private appropriations and finally by the general decline that led to wide empty spaces.<sup>189</sup>

The instances then multiply, and more or less complete inventories of them can be obtained from Mirko Novák's book on the town planning and politics of the Ancient Near East<sup>190</sup> and from the symposium papers edited by Stefania Mazzoni on the new Iron Age foundations.<sup>191</sup> In chronological order the clearest cases are: in the proto-dynastic period, Mari [fig. 30];<sup>192</sup> in the Old Babyloni-

**<sup>189</sup>** Vallet 1996; on the organization of space at Habuba also *id.* 1997 (also 1998, and also Forest 1997 on the contemporary site of Jebel Aruda); Heinz 1997a, b and the excellent Kohlmeyer 1996.

**<sup>190</sup>** Novák 1999 (and earlier *id.* 1997); after the analytical part, site by site, he presents the various components: walls and gates, streets and squares, quarters and houses, citadels, palaces and temples, royal parks (also in Novák 2002). On Mesopotamian urban planning, also Dittman 1999.

**<sup>191</sup>** Mazzoni (ed.) 1994; cf. now also Rossi 2011. In the notes which follow I have not listed Novák's chapters or the contributions to the Mazzoni book. Also Joffe 1998, pp. 556–563.

<sup>192</sup> On the original, round, Mari: Margueron 1987; 1994; 2004, pp. 60-67 and 118-122.



Fig. 31: Shaduppum, Old Babylonian town with square plan.

an period, Kharadum;<sup>193</sup> in the Middle-Assyrian period, Kar-Tukulto-Ninurta [fig. 32]<sup>194</sup> and the provincial centre of Dur-Katlimmu; in Cassite Babylonia Dur-Kurigalzu; in the Middle Elamite kingdom Dur-Untash (Choga Zanbil); in the Neo-Hittite and Aramaic world, Khadattu (Arslan Tash), Til Barsip (Tell Ahmar), Guzana (Tell Halaf) [fig. 33], and Sam'al (Zincirlı) [figs. 34A and B]; and in the Neo-Assyrian age above all the great capitals: the Kalkhu (Nimrud) of Assurnasirpal II, the Dur-Sharrukin (Khorsabad) of Sargon II,<sup>195</sup> and the Nineveh of Sennacherib.<sup>196</sup> The case of Babylon seems very clear from George's study: first (in the Old Babylonian period) the city had an oval, but unplanned,

<sup>193</sup> Kepinski-Lecomte (ed.) 1992; *ead.* 1996. Kharadum (100 m  $\times$  100 m) is not an autonomous or palace city, but a city-fortress of a kingdom which has its centre elsewhere (Eshnunna); and the same can be said for Shaduppum [fig. 31].

<sup>194</sup> Eickhoff 1985; Dittmann 1997-98; also Baffi 1997; Dolce 1997; Gilibert 2008.

**<sup>195</sup>** For Khorsabad, Battini 2000 tries to show that even the variations/alterations of the rectangles are based on intentional surveying 'modules'.

**<sup>196</sup>** Lumsden 2000; on Nineveh cf. Matthiae 1998; in general on the Assyrian capitals also Levine 1986; Novák 2004.

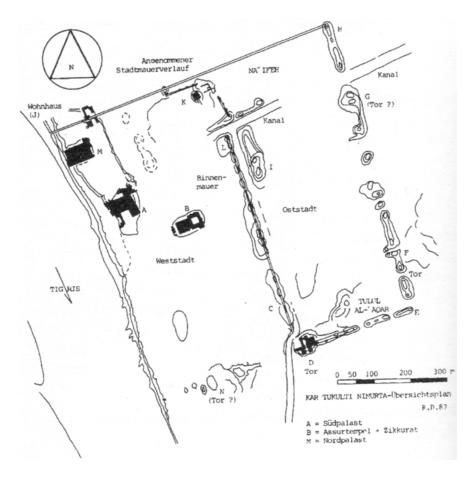


Fig. 32: Kar-Tukulti-Ninurta, ground plan.

form; then with the seventh century it became rectangular and very regular; and finally, with its growth in the sixth century, lost some of its regularity.<sup>197</sup> I am opening here a brief parenthesis on the names of the cities of new foundation, which often make reference to the founding king or his god: but while there are recurrent schemes, Dur-X 'Fortress of X' and Kar-X 'Port of X' (this only for peripheral centres), the most obvious naming Al-X 'City of X' is missing: the new foundation is seen as a great fortified palace or commercial (or

<sup>197</sup> George 1992, pp. 13–31. Cf. Klengel 1982 on a 'new Near-Eastern city' in the Old Babylonian age.

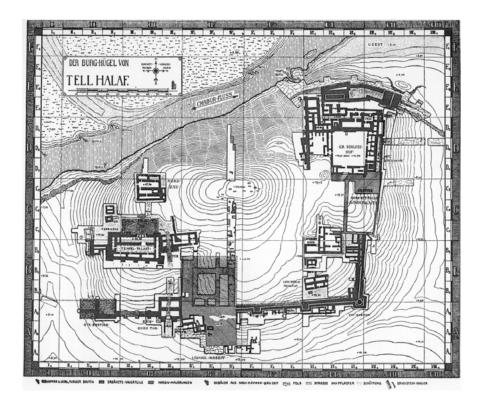


Fig. 33: Tell Halaf, ground plan of the city in the Neo-Assyrian age.

administrative) centre, while the component of the citizen community is not ideologically significant.

In its creative activity, whether restoration or original building, the new regal realization had to be better than the preceding (the preceding phases of restoration, the preceding cities in the new foundations), and the celebratory inscriptions of the re-builders<sup>198</sup> stand firm in extolling the new product as higher, larger, more solid, with deeper foundations, brighter, more embellished and decorated, and so on.<sup>199</sup> But in the case of the refounding of Nineveh

**<sup>198</sup>** The Assyrian ones have been studied above all: Lackenbacher 1982 (systematic collection and study, unfortunately stopping at Tiglat-pileser III); 1990; 2001; Joannès 1994 and Parpola 1995 on Khorsabad (celebratory texts, letters, and administrative texts). In general and in earlier periods: Hurowitz 1992 on the temples; Matthiae 1994a, pp. 7–37 on the temple and 127–162 on the king as architect; Ambos 2004, pp. 21–28 and 47–61 on the theological character of the foundation.

<sup>199</sup> Liverani 1995a.

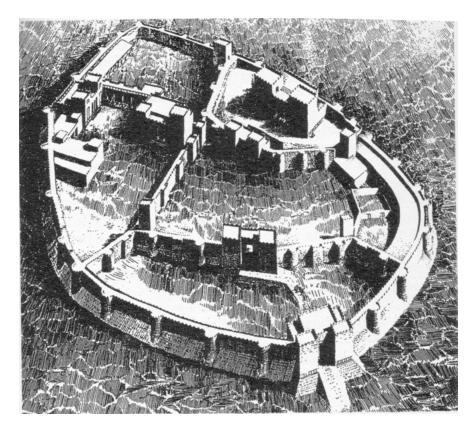


Fig. 34A: Zincirlı, ground plan of citadel.

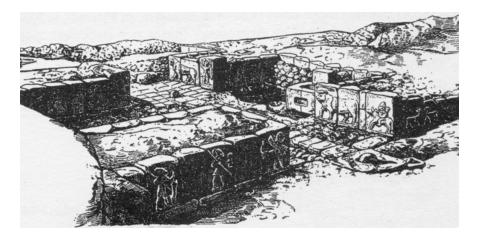


Fig. 34B: Zincirlı, detail of acropolis.

by Sennacherib (which I remind readers takes place in the period 702–695 BC), boasts more properly of urban design are added: having made the streets wider (with exemplary penalties for those house-owners who had invaded the 'royal way'), and above all straight. This insistence on a straight and right-angled urban grid, implicitly in contrast to the irregular mazes of alleys typical of the old cities, cannot do otherwise than make us think of a pre-Hippodamean conception of urban planning, and a conception also perfectly conscious.

The historians of Greek town planning and of Hippodamus (who, I remind readers, was active in the second half of the fifth century) usually admit a generic Near-Eastern origin for the right-angled grid, at least in its loose form, which is attested in Greece from the seventh century (and therefore a little after Sennacherib), which Hippodamus may then have theorized and made systematical in a rigorous manner.<sup>200</sup> We should remember that the information on Hippodamus comes above all from Aristotle's Politics, which then returns to the difference between the Hippodamean city, modern, attractive and adapted to good living, and the ancient city, chaotic but adapted to defence, in order to link forms of town planning to political systems: 'The acropolis is adapted to oligarchic and monarchic regimes, the level land to democratic regimes, while the aristocratic regime is not pleased by one or the other, but rather a good number of fortified positions'. 201 The link between an orthogonal plan and democracy, which is explicitly stated by Hippodamus, and which is applied in particular to new foundations of colonies, with equal plots drawn by lot, was accepted by classical scholars but is contradicted both by the eastern examples (not only Egyptian and Mesopotamian, but Asiatic in general) and by the ideology itself of the foundations (and re-foundations) on the part of a strong political, and also absolutist or despotic, power.<sup>202</sup> If anything it is the fixed size of the plots in the colonies, drawn by lot, that shows a democratic process, and not the orthogonal element or the general design.<sup>203</sup> When the scholars of classical town planning wished to cite the Near-Eastern precedents, they had recourse above all to Egypt (the workmen's villages of Kahun and of

<sup>200</sup> Castagnoli 1956, pp. 7-11 (= 1971, pp. 2-7) history of the question, 53-56 (= 1971, pp. 56-61) Near-Eastern precedents; Giuliano 1966, pp. 42–63 (pre-Hippodamean right-angled plans), 78-93 (Hippodamean plans), 94-97 (Hippodamus); Greco and Torelli 1983, pp. 148-232 (pre-Hippodamean right-angled plans), 233-250 (Hippodamean plans).

<sup>201</sup> Aristotle Politics 2 p. 1267b 22 f. on Hippodamus; 7 p. 1330b 19 f. on the suitability and political implications.

<sup>202</sup> Kostof 1991, pp. 99-103; also Greco and Torelli 1983, pp. 244-245. A presumed western character (rational and secular) for the right-angled grid is still maintained by Butzer 2008, pp. 82-83.

<sup>203</sup> Asheri 1975.

el-'Amarna), ignoring the Mesopotamian examples that had been ascertained in the mean time,<sup>204</sup> and instead adding the 'Urartian' case of Zernaki Tepe, which, on the contrary, has been shown to be a great deal later (Seleucid, if not Sassanid).<sup>205</sup> The connection between Egypt and Greece was favourably accepted by the Egyptologist (and historian of Egyptian architecture) Alexander Badawy, who, in stating that the truly orthogonal city only appears in Greece with the fifth century, but the 'axial' one already exists in Egypt, wishes to establish a special Egyptian-Greek link, to the exclusion of Mesopotamia.<sup>206</sup>

Kostof too – who, though writing in 1991, seems to know, of the Ancient Near East, only Herodotus' description of Babylon, plus the case (heaven knows why) of Neo-Assyrian Megiddo - admits that there are right-angled grids in Egypt and in Babylon (but only of the first millennium), but does not, however, consider them truly planned:<sup>207</sup> the prejudice persists that a formal and conscious regularity could not have been conceived before the theorists of classical Greece. It seems to me that Kostof took some of his inspiration and information from a short book by Quaroni published a few years before,<sup>208</sup> where a truly planned design is denied for the entire pre-modern age (that is, before the advent of professional town planners, as against simple architects), admitting nevertheless the presence of architects who 'drew' the cities. Of the Ancient Near East Quaroni seems to know above all Babylon and 'Zenghirli' or 'Zengihrli' (which should be Zincirli), defined as 'the most ancient example of a royal palace in the centre of an enclosed space, in which the population of the villages gathered during sieges' (still this misconception of the empty cit-

<sup>204</sup> In his update of 1970, Castagnoli 1971, pp. 128-138 has much new classical bibliography, but very little eastern (and nothing Mesopotamian). Giuliano 1966, pp. 98-104, correctly rejects Kahun and el-'Amarna, as irrelevant (not influenced), admits Mesopotamian influences (Khorsabad, Babylon) coming by means of Anatolia. Recently Shipley 2005, in re-examining Hippodamus and his place in the Greek tradition, makes no mention at all of the Near-Eastern precedents: the classical tradition has prevailed!

<sup>205</sup> Burney 1957; Burney and Lawson 1960; Nylander 1965-66. Later dating: Gullini 1972; Sevin 1997; now Dan 2010. The Urartian dating is Zernaki Tepe is also accepted, over and above Castagnoli 1971, by Oppenheim 1977, pp. 138-139; Kolb 1984, p. 45; Ryckwert 1976, p. 96; Coppa 1969, I, pp. 515-516 (who at least judges it 'surprising'); and by many others (cited by Dan 2010.

<sup>206</sup> Badawy 1960, p. 5.

<sup>207</sup> Kostof 1991, p. 104: 'public and residential buildings have not been worked out together, and blocks have no coherent logic except insofar as this is determined from inside out, from an inner court and the rooms around it, until the public space of streets and alleys is reached. So planning here actually consists only of laying out the main streets, and allowing for the formal arrangement of public complexes like temples and palaces'.

<sup>208</sup> Quaroni 1967, pp. 115-116, 129.

ies, only enlarged palaces, without quarters of civil habitation); but he also names Dur-Sharrukin and Ur as cities 'in which the architect planned the architectural framework of the encircling walls and the palace-city, leaving vast areas to the subjects' mud huts or shanties'.<sup>209</sup> Is it all the fault of the town planners, incapable of bringing themselves up to date on the progress of archaeology, or of the archaeologists incapable of releasing authoritative and competent summaries of their discoveries?

Leaving Hippodamus aside, the two basic town-planning forms have always been the round and the quadrangular;<sup>210</sup> the first derives from the 'natural' growth of a settlement from its central nucleus, and in the Syrian-Mesopotamian world found its material form in the round or oval shape of the tell. The quadrangular form on the other hand derives from the site of individual dwellings (houses and compounds) which, grouping themselves together without the great empty spaces that characterize the village, spread to take in blocks of houses and networks of roads. Instances come to mind that could hardly have been the result of intentional design: round cities such as al-Rawda<sup>211</sup> or Tell Chuera,<sup>212</sup> square cities such as the large Neolithic villages of Hacilar II and of Tell es-Sawwan,<sup>213</sup> or even like Tell Mumbaga.<sup>214</sup> In the Levant the roundish city prevailed for a long time, more oval than properly round, which adapted to the shape of the tell, and with houses built against the surrounding wall, as in the cases of Tell en-Nasbe [fig. 35] and Beer-Sheva [fig. 36] and so many others.<sup>215</sup> And the same goes for Anatolia.<sup>216</sup> In the villages both shapes occur, following the formula: quadrangular is to round as settled is to nomad and as dwelling house is to storehouse;<sup>217</sup> and it has been established as a fact that the first occupation of a village is round (nomadic legacy), then to become square in the following levels.<sup>218</sup>

<sup>209</sup> Ibid., p. 150, where there is also the Assyrian relief (given like a seal) with the round military camp.

<sup>210</sup> In general see Kostof 1991, pp. 69-89 ('The Straight and the Curved: Design Alternatives'), 95-157 (on the right-angled grid), 159-207 (on the round city: of the Ancient Near East he cites only the portrayal of the Assyrian military camp).

**<sup>211</sup>** Castel *et al.* (and the earlier reports); also Pinnock 2007.

<sup>212</sup> Meyer 2006.

<sup>213</sup> Breniquet 1991.

**<sup>214</sup>** Machule 1990.

<sup>215</sup> Shiloh 1978; 1987; Frick 1977, pp. 81-91; Fritz 1990; 1994; McLellan 1984 (on Tell en-Nasbe); 1997.

<sup>216</sup> Naumann 1957 already has a chapter (pp. 205–226) on shapes of the city, and lingers over the roundish ones, basing himself on neo-Hittite examples.

<sup>217</sup> Verhoeven 1999, pp. 213-220.

<sup>218</sup> Flannery 1972a.

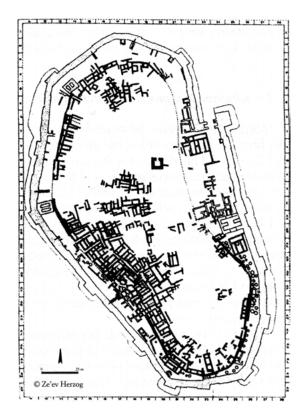


Fig. 35: Tell en-Nasbe, ground plan of city.

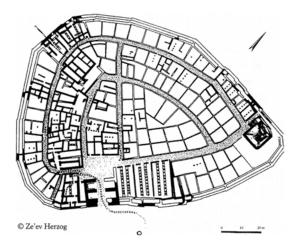


Fig. 36: Tell Beer-Sheva, ground plan of city.

This contrast between round and square has often been very significant, both generally and in the analyses of concrete data; on the one hand for its original premises and concrete town-planning manifestations,<sup>219</sup> on the other for the symbolic aspects, which shape a whole tradition that begins with the classics (Plato's Atlantis, the Nephelococcygia of Aristophanes' Birds), and passing by way of Ryckwert finally arrives at Domenico Musti's 'shield of Achilles';<sup>220</sup> but the tradition had a supporter in Mesopotamia in Walter Andrae, who, thinking three-dimensionally, distinguished the 'spherical' system (which comes first) from the 'cubic', both laden with symbolic and spiritual connotations, and in general too; feminine spherical vs. masculine cubic.<sup>221</sup> The symbolic approach often tends to see the city as a microcosm that is meant to replicate the true macrocosm, and further to identify cosmic aspects even in the slighter but more pregnant forms of the palace and temple.<sup>222</sup> The symbolic aspects have been studied, not without reason, above all through the civilizations of Asia and the Far East, where they are more striking: starting from the classic work of Paul Wheatley on the Chinese city,223 exemplary studies have spread to the worlds of India and South-East Asia.<sup>224</sup> The Mesopotamian city lends itself less well to a similar exegetic level, and besides, the plans of the Ancient Near-Eastern cities could not compete with the geometric-magical schemes of the cities of Central Asia.225

The semiological approach of Mirko Novák seems to me more concrete: the city, and particularly the capital of a new foundation, is meant as an object message, a reflection of the ideology of power: a message from the king to the gods (ideological receivers) and to the people (actual receivers), a message of protection (the walls, the citadel), of order (the urban grid), of universal mastery (the parks with exotic trees).<sup>226</sup> The norm of displacing temples and palaces to the margins of the city, as maintained by Stone,<sup>227</sup> can be accepted, if at all, for the palaces (which needed a direct 'escape route') but certainly not

<sup>219</sup> Novák 1999, pp. 376-378 (square city) and 378-380 (round city).

<sup>220</sup> Ryckwert 1976; Musti 2008, who leaves out every bit of Ancient Near-Eastern data.

<sup>221</sup> Andrae 1949.

<sup>222</sup> For Babylonia see Maul 1997.

<sup>223</sup> Wheatley 1961 (better known in the American edition 1971); cf. also id. 1969; 1972; also Wright 1977.

<sup>224</sup> India: Malville and Gujral (eds.) 2000 and Singh 1994.

<sup>225</sup> On the geometrically-structured cities/citadels of the 'Oxus civilization' (Bactria and Margiana, bridging the 3<sup>rd</sup> and 2<sup>nd</sup> millennia BC) see now Vidale 2010, with the figs. at pp. 83 and 95.

**<sup>226</sup>** Novák 1999, pp. 19–24 and *passim*.

<sup>227</sup> Stone 1995; 1999.

for the temples (placed in the central nucleus of the settlement), and in this case too Novàk's judgement seems correct<sup>228</sup> - and the case of the Babylon of Nebuchadnezzar II is a paradigmatic example. Finally, an essential element of the building ideology is found in the double function of the city gates, as defensive closures and communicative openings. The names of the Neo-Assyrian city gates are extremely indicative in this respect.<sup>229</sup> But I cannot continue at length here on either the foundation myths, which lend the king's works a cosmic aspect,<sup>230</sup> or the rituals of foundation,<sup>231</sup> which make more concrete the ceremonial necessary for the correct construction of a simple dwelling house, or of the capital city at the centre of the world.

<sup>228</sup> Novák 1999, pp. 302–313 (peripheral palace citadel) and 322–331 (central temple area).

<sup>229</sup> Battini 1997a; 1998b; 1999b.

<sup>230</sup> Azara, Mar, and Subías (eds.) 2001, discussions by Margueron (pp. 27-35), Hallo (pp. 37-50), and Goodnick and Westenholz (pp. 59-68).

<sup>231</sup> Ellis 1968; 2001.

## 5 Modernity: new approaches and new settings

# 5.1 The 'zero stratum' of the *tell* and the ethnoarchaeological model

The archaeological missions of the pre-mandate and mandate periods, dedicated to the discovery of Ancient Near-Eastern civilizations, were not interested in possible late and modern phases of the sites of their investigations. By 'late phases' (a term that in the view of archaeologists of the remote pre-classical civilizations sounds inevitably disdainful) were meant the classical (Greek and Roman Imperial), Byzantine, and Islamic phases: phases of extremely valuable historical-cultural importance, also with reference to western presence in the region, but phases for investigating the great fields of urban ruins (ancient world) or cities still alive (Islamic world), and certainly not the modest remains that could have flourished on top of a tell in the Bronze Age. Just as pre-classical missions sought above all temples and palaces, and only marginally residential quarters, so also classical and Islamic missions concentrated on the great urban sites, the greatest representative expressions of those civilizations. Under the mandates, therefore, excavations were carried out at important classical sites (enough to think of Palmyra or Dura Europos), and also Islamic and 'Crusader' sites (thinking of Krak des Chevaliers), but the modest remains superimposed on the stratification of more ancient tell were treated with great scorn and irritation, as a troublesome obstacle to be demolished as quickly as possible, with economy of time and effort. And so they were excavated roughly, or more often simply carried off without any care at all taken over recording. These operations normally remain sparsely and badly documented in the publications, and are identified rather from brief mentions in the preliminary reports.

An even sadder fate awaited the modern villages – in the sense of those still inhabited – which were normally found perched on the summit or on the side of the ancient *tell*, or even stuck in among the ruins of buildings of the classical age. These villages were mostly removed without any records made, not as a first phase of the archaeological work but as an 'administrative' operation, preliminary to the beginning of the excavation: an operation above all concerned with the clearance of the inhabitants, transferred to new villages built on purpose outside the archaeological area, to which the inhabitants could then be swept away, freeing the site for excavation. There was an exception, comprising the mosques and tombs of the legendary saints of Islam, which could be neither destroyed nor moved elsewhere. Hence, to take two representative sites, the shrine of the prophet Jonah, which gives its name

(Nebi Yunus) to one of the two acropoleis of Nineveh, has remained unexcavated until now, to the great chagrin of Assyriologists, who know that there, underneath, is found the palace of Esarhaddon.¹ Another case, more curious than sensational, is the tiny mosque remaining as if trapped on top of the entry court of the great temple of Luxor, as a 'witness' to where the level of modern trampling was before the enormous masses of sand that partly submerged the pharaonic sanctuary were taken away.

But the normal, or, if we prefer, wretched villages had no escape: they were removed without so much as a thank you. Today we consider them the 'zero stratum', at the top of stratigraphic sequences, but of interest equal to the lower strata, with the difference (certainly not small) of being inhabited – with all that this implies, both negative (the costs of transferring the families) and positive (activities in progress, tools in use). For the entire period before and during the mandates these considerations counted for nothing. Quite apart from the pain and cost of the removal of the 'zero stratum', the weighty consideration of a historical-cultural nature of which I have already spoken (§ 1.3) was present, even if only implicitly: these modern inhabitants (farmers and shepherds) were seen as 'intruders', in that they were not linked to the preceding cultural tradition, and so not 'heirs' of those ancient civilizations, but instead their unworthy occupiers, squatters. Anyway, the rapid elimination of the 'zero stratum' was good for everyone: it saved time and money, it disturbed neither the material nor moral legacies, it benefitted (!) the families transferred from their traditional, insanitary, unfired-brick dwellings to neat small houses built of cement blocks.

Besides, the practice always exists of destroying the remains of later and less important periods to 'free' the complex or the phase considered worthy of being saved and valued as a monument, for tourist use or cultural remembrance, even where there are no underlying problems of a historical nature: we only have to think of the Acropolis of Athens, or the Palatine-Forum complex at Rome, to take the best known examples from so many possibilities.<sup>2</sup> The practice has practical and theoretical justifications, provided, however, that the removal of the 'late' levels is done and recorded as it ought to be. But in Mesopotamia, in the kingdom of unfired brick, a further drawback was confirmed: even the monumental strata (let us say: the Assyrian palaces), worthy of being 'freed' and valued, remained long abandoned to the ravages of time, without any possibility of carrying out protective or preservative restoration,

<sup>1</sup> Turner 1970a, b. First attempts to excavate Nebi Yunus in Rassam 1897, pp. 292–306.

<sup>2</sup> On the Acropolis of Athens see Barbanera 2009, pp. 58-76.

far less of being rebuilt (as, in contrast, already happened at the Minoan palace of Knossos at the beginning of the twentieth century).

The situation changed with the advent (from the 1960s) of the ethnoarchaeological approach, which was aimed at drawing important information on the function and use of the ancient 'installations' from a comparison with analogous ones still in use.3 The term 'installation', which I have used as suitably vague, is understood as relative to a whole dimensional range, from the single object of common use to the whole structure of an inhabited establishment and the community that lives there. The advent of the ethno-archaeological approach is part of a general cultural trend, but as far as the Near East goes it is linked to a precise factor: the work of American archaeologists who had been trained in, and so were developed by, a working method and mental approach while excavating the sites of the south-west United States or Mexican and Guatemalan Mesoamerica.4

When they arrived in the Near East, they found there structures in unfired brick and of technological levels dating back to various millennia earlier, but substantially analogous to those (much more recent) of the pueblos of the American south-west or even of the Aztecs or Maya. The difference was not only of a chronological order (centuries in contrast to millennia) but also and above all of continuity. The inhabitants of Mesoamerican villages, perched above, or even reusing, the preceding settlements, are the direct descendants of their predecessors, speak the same language, use the same traditional technologies - obviously before the impact of western technology. There was no trace of that ideological difference or that historical hiatus that in the Near East separates the present Arab or Kurdish communities from the ancient Assyrians, not to mention the Sumerians. So for the American neo-archaeologists trained in the south-west, it was altogether self-evident that the 'zero stratum' be taken as an object of study equal to the lower strata, and even as a valuable opportunity to understand ancient technologies and ancient social structures, seeing them still in use and indeed capable of being directly explained by the inhabitants. Ethno-archaeological interest was therefore born in America and transferred (with all its theoretical apparatus) to the Near East with the United States' missions operating in pre-Khomeini Iran and in the southern Levant –

<sup>3</sup> History of ethno-archaeology in Kramer 1979a; Watson 1980; Ochsenschlager 1999; Verhoeven 2005; popular Hole 1995. General introductions: Watson 1979; Charlton 1981; Hodder 1982 (without exemplification from the Near East).

<sup>4</sup> The ferment in the interlinked study of the ancients and the 'savages', which appears in various authors of the 17<sup>th</sup> century (Pucci 1993, pp. 159–182) was not followed concretely in archaeological practice.

to be adopted quickly by the European missions too (French in primis) and become a normal and generalized procedure of work.

We need, however, to mention two details. The first regards the level at which ethno-archaeological analysis is applied: it is above all useful when applied to technology and individual dwelling structures (houses, compounds), or at maximum to the villages<sup>5</sup> and nomadic camps<sup>6</sup>, while its application to the city is far less productive. Now, if understanding of the tools and dwelling houses forms the whole, or nearly, of archaeological investigations of the preurban periods, it remains, however, only part (if not indeed a marginal part) of the study of urban centres in the historical age. Here, if anywhere, comparisons (of demographic estimates, of town-planning aspects, etc.) with the Islamic cities – as had been carried out by sociologists and town planners, above all French, in Syria and in the Maghreb – remained useful. And here is the second detail, which is that in the period of the mandates (and even before) the cultural material of the modern East caught the attention: we need only remember Andrae's observations on the cane constructions of Lower Mesopotamia to explain the origin of certain architectural forms, or Heinrich's study of the ethnoarchaeological model of architecture in unfired brick.<sup>7</sup> And although Dalman's monumental work (which dates back to the 1920s and 30s) on the techniques and traditional customs in Palestine was stimulated by 'biblical' interest and use (more than by archaeology in the field), it did function as a reference work for a long period of our studies.8 But it was then a question of using knowledge of traditional techniques of building in order to understand better the ancient techniques, without, however, lending the 'zero stratum' any value as an object of independent research and equal worth.

A conscious ethno-archaeological approach took shape only in the 1970s, to become normal procedure in the 1980s, including among those who practised a traditional type of archaeology.9 As mentioned, the most frequent applications are to ordinary dwelling houses, passing from a purely descriptive level,10 to an approach more conscious of ethno-archaeological methods and

<sup>5</sup> Flannery 1972a; Kramer 1979b; Verhoeven 1999. Following the examples made available for some time (Sweet 1960 on Tell Tuqan, Syria; van Beek 1982 on Marib, Yemen) were above all studies of the Iranian villages: Kramer 1982 (Shahabad/Aliabad near Hamadan), an exemplary study with spatial analyses, typology of the habitations, socio-economic organization of the household, and much else useful for archaeological comparison; cf. also id. 1983.

<sup>6</sup> Cribb 1991; Finkelstein 1995; also Hole 1978; 1979.

<sup>7</sup> Andrae 1930; Heinrich 1950.

<sup>8</sup> Dalman 1928-42.

<sup>9</sup> On ethno-archaeological methods and their limitations cf. Barrelet (ed.) 1980.

<sup>10</sup> As can be exemplified in Algaze 1983-84.

of the regional archaeology, which can be exemplified above all in the work of Elizabeth Henrickson, 11 who studies the dimensions and internal relationships of houses as a clue to family structure, and analyses in great detail domestic tools, containers, burials. Applications to great palaces, <sup>12</sup> and to the structures of nomadic life13 are more rare.

A sort of reaction, or perhaps just a counterbalance, came from the use of information contained in the ancient texts. What I mean is that for Mesopotamia, unlike Mesoamerica where either there are no texts (south-west United States) or they are not dealing with material culture (Maya), written documentation, especially that of an administrative and legal nature, provides abundant information on the house, on working techniques, on working tools, on the flora and fauna, and so on. Here we need only cite the 'dialogue' between the archaeologist Castel and the Assyriologist Charpin, or the study of the Sumerologist Waetzoldt on the houses and families of Ur III, or Boysan-Dietrich's study of Hittite terminology of unfired brick architecture, or the comparison of texts and archaeology applied by Paolo Brusasco to the study of domestic architecture.14 And the series of books edited by Nicholas Postgate and Marvin Powell on Sumerian agriculture<sup>15</sup> show how it is worthwhile 'questioning' the ancient inhabitants (through the texts that they have left) and comparing the results with the reality of the present, in what we can define as 'ethno-Assyriology'.

I spoke of a sort of reaction, in that the use of the ancient texts, contemporary with the remains excavated, provide information that is not anachronistic like that of ethno-archaeology, and can therefore be inserted (as a mental formulation) in that hiatus between ancient civilization and the modern Islamic world of which I have repeatedly spoken. In some respects the implicit continuity of the ethno-archaeological approach was also applied to the texts themselves, in that identification of the naming (Sumerian and Akkadian) of Realien as well as of plants and animals would have remained dubious and difficult without recourse to knowledge of the cultural material in the modern environment. And so a strategy took shape of coordination between input of a triple nature: archaeological data, ethnographic comparisons, and ancient textual information. This strategy was stated explicitly by, above all, American archaeologists working in Mesopotamia, such as McGuire Gibson and Elizabeth Stone

<sup>11</sup> Henrickson 1981; 1982; also Brusasco 1999-2000.

**<sup>12</sup>** Aurenche 1985a: palace of Mari compared to the residences of sheikhs.

<sup>13</sup> Aurenche 1981c; (ed.) 1984; 1998: dimorphism in the Middle Euphrates.

<sup>14</sup> Castel and Charpin 1997; Waetzoldt 1996 (families of c. 10 people in houses of 100–180 m<sup>2</sup>); Boysan-Dietrich 1987; Brusasco 2007.

<sup>15</sup> Postgate and Powell (eds.) 1984-95.

at the excavation of Nippur.<sup>16</sup> In the German world, whereas Maria Krafeld-Daugherty's study, on the spatial distribution of domestic functions and tools (hearths and ovens, benches and platforms, sanitation, storerooms, stalls, funerary arrangements) in Old-Babylonian Mesopotamia, has a stated ethnoarchaeological approach to the use of certain textual data, <sup>17</sup> Jahn's study, also on dwelling houses of an Old-Babylonian period, is directly based on the relationship between texts and archaeology.18 The German preference for history compared to anthropology (and so for contemporary texts rather than ethnographic comparison) materializes also in the attention paid to those texts that provide valuable information of an architectural and town-planning character, and the ritual texts on building activities are valuable in this sense.<sup>19</sup>

A certain ambiguity in the use of ethno-archaeological comparisons remains unrecognized. Their use as interpretative models, identified and tested in more developed sectors of a study, or as a range of problems or list of 'questions' for putting to the results of the excavation, is undoubtedly positive, even if it holds good for both anthropological models and models from other historical periods, which by contrast appear more neglected. But their use for implying a substantial correspondence and continuity between ancient cultures and ethnographic cultures can be misleading, especially if it tends to pass from comparisons relative to elements of technical-material culture to interpretation of entire socio-economic structures, which on the contrary must remain well protected from the risk of anachronism.

#### 5.2 The neo-geographic models and the settlement hierarchies

In the year 1970 the 'New Archeology' spread from the Anglo-American world: it was written thus, without the diphthong, to demonstrate contempt for etymology and hence for history. To this was joined an analogous contempt for everything that had been written in languages other than English and in the years before 1960, in the age of pre-scientific ignorance.<sup>20</sup> And again, in a book published in 1999, the chapter on the history of archaeology is called Discover-

<sup>16</sup> Gibson 1980; Stone 1981; 1991.

<sup>17</sup> Krafeld-Daugherty 1994.

<sup>18</sup> Jahn 2005.

<sup>19</sup> Ambos 2004.

<sup>20</sup> Trigger 2008.

ing the Past, and that on the neo-archaeological phase Explaining the Past.<sup>21</sup> Speaking seriously, the project was to carry archaeology (as part of the discipline of anthropology, not of the humanities)<sup>22</sup> to the level of a true science 'with a capital S'23 and so to reconstruct not simple sequences but true and real processes (to give the definition of processual archaeology) endowed with more or less normative, necessary, causal connections. And since archaeology alone could certainly not construct a complete and independent scientificphilosophical system, it quickly resigned itself to a 'middle range theory', which lent a state of being scientific to individual theoretical-operational segments,<sup>24</sup> leaving the upper level (the epistemological foundations) to the philosophy of science, above all to Carl Hempel.<sup>25</sup> There was no lack of criticism (also internal) of certain naïve enthusiasms<sup>26</sup> and certain laws of disconcerting banality,<sup>27</sup> which should not, however, allow the undoubted merits of the neoarchaeological approach to be forgotten.

Clearly the marginalization of history, seen as a sequence of non-structural events, was and is predominant in the context of American anthropology;<sup>28</sup> but I believe that also influential was the fact that the great prophet of the new archaeology, Lewis Binford, as a specialist of the Palaeolithic era, was altogether remote from knowledge and reading of advanced historiography, which was not the old-style emphasis on single events. Anyway, after the first frenzy of the neophytes, history was also allowed in, at least in the form of the *Annales* School, with Braudel's distinction of three time scales and the obvious preference for the long term of background and structural history.<sup>29</sup> Moreover, both the theoretical and operational (in the field) impact, and the very selection of cases and construction of data-banks, was important and indeed decisive, above all for prehistoric archaeology and for the excavation of inhabited struc-

<sup>21</sup> Barker (ed.) 1999, with chapters by Schnapp and Kristiansen, and Redman.

<sup>22</sup> Binford 1962.

<sup>23</sup> Flannery 1973; Watson, LeBlanc, and Redman 1971; 1984, pp. 42-66 'Archaeology as Sci-

<sup>24</sup> Comments by Yoffee 2005, pp. 180-195; also Dittmann 1999. For a critique of processual and post-processual archaeology, see Hodder 1986, and also the derisive but constructive article of De Guio 1992, pp. 309-321.

<sup>25</sup> Hempel 1966.

<sup>26</sup> Braidwood 1973b, p. 34, likened the 'New Archeology' to a religious movement; and Flannery himself (ed.) 1976, p. 4 referred ironically to Binford as a restored Christ who multiplied the bread and fishes to feed his student public of followers.

<sup>27</sup> The 'Mickey Mouse Laws' of Flannery 1973, p. 51.

<sup>28</sup> Starting with the programmatic article of Binford 1962; cf., however, the British caution of Renfrew 1980.

<sup>29</sup> Bintliff (ed.) 1991; Knapp (ed.) 1992.

tures and villages, while its influence on the urban archaeology of great civilizations was much less visible. Urban excavation continued to be practised with the old methods: or still with squares  $\grave{a}$  la Wheeler (where the stratigraphy was drawn when the excavation was already done), or more often and better on great open expanses which could now be checked by the instruments of computer science, with stratigraphy (able to be formalized with Edward Harris' matrix) recorded necessarily in the course of the excavation.<sup>30</sup>

Trapped in the middle (so to speak) between prehistoric archaeology without cities, and late-antique and mediaeval archaeology with cities to restore rather than excavate, urban archaeology of the Near East remains sufficiently alien to new archaeology,<sup>31</sup> and traditional if not out-of-date, with the single exception of the archaeology of the Levant<sup>32</sup> – notwithstanding the bet lost by Kent Flannery,<sup>33</sup> and thanks to the work of Israeli archaeologists<sup>34</sup> more than of 'biblical' Euro-Americans.

There is, however, one sector in which the neo-scientific influence was felt, even in the Near East, as exercising a positive and remarkable impact: this is the sector of spatial dislocation of settlements, and at a working level the sector of surveying surfaces, which in the 1970s abandoned the old way (inventory of the sites, collection of sherds) to launch itself into palaeo-environmental and geomorphological analyses, demographic estimates, and above all the making of models of the schemes of settlement.<sup>35</sup> In this area neo-archaeologists were strongly influenced by 'New Geography', which (from the 1960s) had advocated the identification of 'laws' or 'rules' to explain the movements of cities and villages, their relations, and their flow (of people, merchandise, services) to build up integrated networks.<sup>36</sup> New Geography developed with the aims of regional planning, so sinking its roots back to the 1930s when town planning had assumed a more decisive regional dimension; but it then took on enormous diffusion with neo-capitalist activities in those regions – such as indeed

<sup>30</sup> Harris 1979.

<sup>31</sup> Short but excellent history of the archaeological theories and practices in the Near East in Matthews 2003, pp. 1-26.

<sup>32</sup> Cf. Dever 1981.

<sup>33</sup> Flannery 1998a, p. xvii: 'I once bet \$ 100 that the Old Testament would never meet the New Archaeology'.

**<sup>34</sup>** See the papers collected in Lévy (ed.) 1998 (the first edition is 1995).

**<sup>35</sup>** Cf. the views of Schiffer *et al.* 1978 (with rich bibliography); Hole 1980; Ammerman 1981; Bintliff 1992; and the balance of Lehmann 1999; also Matthews 2003, pp. 47–55.

<sup>36</sup> Goudie 1987 retraces the relations between geography and archaeology of the nineteenth century to the New Archaeology; Wagstaff 1987 and Hodges 1987 outline the relations (oscillating, problematic) between New Geography and New Archaeology.

the Near East – which formed fields of optimal application, in that all was yet to be built, in a modern sense.<sup>37</sup> The archaeological fallout from the neogeographical approach has this particular (and obvious) feature: the identification of 'laws' is of no use in deciding where to establish (in the immediate future) a given centre or a given service, maximizing the relation of costs and receipts, but on the contrary comes from knowledge of a well-known distribution already existing (in the remote past), which provides a meaning and explanation for the identification. The implicit assumption is that those systems that minimize the costs survive better over the course of time, through an unconscious 'Darwinian' mechanism. This clear assumption is never, however, stated by the theorists of the application of neo-geographical models to remote antiquity, who think they are dealing purely and simply with 'laws'.

The main neo-geographical models proposed as part of the standard baggage of Near-Eastern archaeology can be summed up, with great simplification, as follows:

(1) The calculation of the average distance of the 'nearest neighbour' is used to compare the average geometrically expected with that actually attested, with a discrepancy that discloses disturbances in the spatial distribution of the sites. (2) This system is partly linked with the visualization, through geometric polygons (Thiessen's polygons), of the supposed political-economic cells whose true limits are not known to us.<sup>38</sup> The system, in this simple form, is of easy application but also of astonishing banality. More refined, but equally more schematized is the XTENT model, in which the extent of the supposed state formation is proportionate to the dimensions of its central place, and visualized with cones of different heights.<sup>39</sup> (3) The 'gravity model' measures the expected interaction between two centres, in proportion to the relation between their size and the square of the distance between.<sup>40</sup> (4) The 'central places theory', with its hexagonal schematization of hierarchic relations between sites of different size and function, dates back to the early model formulated by Christaller, 41 and is much used to reconstruct the entire structure of a proto-state cell.<sup>42</sup> (5) Finally, and above all, the 'rank-size rule', the rule of the

<sup>37</sup> The most influential neo-geographic manuals were Chisholm 1962 and Haggett 1965; also Chorley and Haggett (eds.) 1967. For the archaeological application cf. above all Hodder and Orton 1976, and Hodder 1978a.

**<sup>38</sup>** Renfrew 1975; Cherry 1987, pp. 152–159.

<sup>39</sup> Renfrew and Level 1979, refined by Rihll and Wilson 1991. The 'percolation' model used by De Guio and Secco 1988 is analogous.

**<sup>40</sup>** Johnson 1977, p. 481.

<sup>41</sup> Christaller 1933; the work became influential following the English translation of 1966.

<sup>42</sup> Above all Johnson 1972; also Flannery 1972b, pp. 418-419. Deep-rooted criticism by Crumley 1976; a rather different use by Blanton 1976.

relation between size and position in decreasing order, which is a geographical application of Zipf's law,<sup>43</sup> determines that the size of the second settlement (in decreasing order) is half the size of the first, the third is a third, and so on – producing in the form of a graph a 'normal' curve, or, rather, an oblique line using logarithmic values. By constructing a graph of the size of sites of a given settlement complex, a progression is obtained that will more or less drift away from the lognormal line, giving a concave progression if the site-leader is greater than the norm, and/or if there are many minimal sites, and on the other hand a convex progression if there are large sites of similar size, and/or few minimal sites. The deviations would therefore be indicative of a particularity in the socio-political organization (more concentrated around a capital city, or rather with different centres in competition).44

Obviously, the application of similar 'norms' should be carried out with caution, especially if applied to remote antiquity.<sup>45</sup> Above all, and this also applies to modernity, the models are constructed in a Euclidean space, homogenous and not limited; but the real world is more bumpy, full of mountains and rivers, limited by natural boundaries. The possibility of introducing further norms, always of a geometric character, to skew the theoretical grid according to the movement of incidental natural elements, does exist, but would need to be worked out at a theoretical level and not starting from an individual case with the aim of its normalization. The 'game', for example, carried out by Gregory Johnson on the sites of the Diyala [fig. 37], in order to link the theoretical grid by means of intermediate passages to the actual organization, 46 brought to mind those chess exercises of the type 'white moves and wins in four moves': that is, by means of a certain number of intermediate passages it will always become possible to fit into the rules any settlement system whatever. The 'game', far from serving to demonstrate the validity of the procedure rather serves to distort it.

Moreover, if applied to remote antiquity the neo-geographic models suffer from the limited and uncertain documentary foundation (which is very offputting for those accustomed to the documentation of the statistical age): the very identification of the sites, of their size, of their age, of their function, are all problematic components, for which we can but put forward hypothetical and approximate solutions. And above all the demarcation of the area for consideration as a unit of analysis, which is well known in the historical periods,

<sup>43</sup> Zipf 1949.

<sup>44</sup> The clearest exposition is in Johnson 1981. Critique in Banning 1997, pp. 17–21.

<sup>45</sup> See the warnings in Adams 1972b; 1983; 1999.

<sup>46</sup> Johnson 1972.

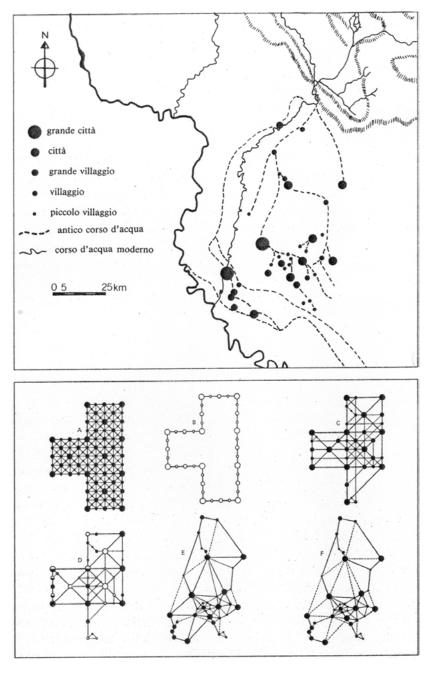


Fig. 37: Distribution of settlements in the valley of the Diyala: reality (above), and theoretical grid (below) (Johnson).

is not at all the same when there are no written sources. But here the existence of normative models, of a geometric and statistical type, come to our aid (once again: upsetting the logical-causal chain) in providing, through more or less massive doses of interpolations, a normalization and interpretation for a set of data in themselves doubtful and amorphous. Finally, the normative character of the models appears in difficulty when it is confronted with the factor of temporal duration, or really with diachronic discontinuity, which in history is a fundamental and indeed inevitable factor: how on earth does the system change in structure over the course of time, if the spatial relations (both 'Euclidean' and 'environmental') remain immutable? Think, for example, of Peter Pfälzner's study on the transformations of the cities of the Ancient Near East, which excludes all external factors (from climate to migration) to favour the interaction and reciprocal influence of four internal factors: population, differentiation, integration, energy.<sup>47</sup> But if only internal factors operate, how ever does the alteration produce different typologies in time and space? Some external factors are always needed: at least the climatic-environmental changes, but also technology, the political system, or other.

On the practical application of neo-geographic instruments to major surveys of surfaces carried out in the Ancient Near East in the years 1970-90, it is useful to examine two cases, emblematic in their differences - the work of Gregory Johnson and that of the mature Robert Adams (whose earlier experiences we saw at § 4.2). In carrying out and publishing his survey of Susiana (present-day Iranian Fars), Johnson still made a moderate use of neo-geographical models (which were developed afterwards), but added to the publication of the data an excellent analysis of the settlement systems (for the early/ middle/late Uruk periods), introducing two determining factors into the study of urbanization and archaic forming of states. The first element is the origin of the city from the local market, the 'local exchange', rather than from long distance trade (dear to Guillermo Algaze, on the other hand, as we shall see at § 5.11). The second element is the 'law' of three hierarchical levels as the minimum necessary for defining the archaic state.48

The neo-geographic impact is made more explicit in an article co-authored with Henry Wright and published two years later, 49 a true 'manifesto' of new trends, and then in other contributions and chapters by Johnson alone.<sup>50</sup> The

<sup>47</sup> Pfälzner 1997a, b adopts the model of Plog 1974 (cf. then id. et al. 1978), but imagined for prehistory.

**<sup>48</sup>** Johnson 1973.

<sup>49</sup> Wright and Johnson 1975 links neo-evolutionism and New Geography.

**<sup>50</sup>** Johnson 1975; 1977; 1980a, b; 1981; 1987.

methods most often used are those of 'rank-size', which, when applied to a sequence of successive phases highlights the intervening alterations, and of 'central place', better described as a 'gravity model' (the value expected from interaction between two centres is proportional to their size times the square of the distance between them), a model that is, however, shown to be more productive in the study of the spread of artefacts than in the definition of the boundaries between the various political entities. The emergence of a 'central place' in a territory (and so of a city compared to the villages) cannot be explained as a unique 'prime mover' (nor irrigation, nor demographic pressure, nor commercial exchange): it gives a multi-factor model, in which the re-organization of local exchange has great emphasis, in such a way as to make it more efficient – a vision here that has something in common with Polanyi's model of redistribution, which, however, is not cited. Finally the question of settlement hierarchies is defined: if for a chiefdom two hierarchic levels are enough, and for the archaic state three are needed, then the archaic state was not yet visible in the 'Early Uruk' period, whereas it was for the 'Middle Uruk'. Both Flannery and Renfrew will return to the argument on the norm of three levels: Flannery, for whom two or three levels indicate a chiefdom, and four are needed to indicate an archaic state;<sup>51</sup> and Renfrew, who, on the contrary, maintains that stateforming nuclei can appear with only two levels.<sup>52</sup> We can, however, assume that Gregory Johnson is a typical exponent of a 'modellization' of territorial assets – of remote antiquity too – of a formal and normative, but also somewhat abstract, character, with the risk of divorcing itself from concrete reality and from historically understood socio-political and socio-economic processes.

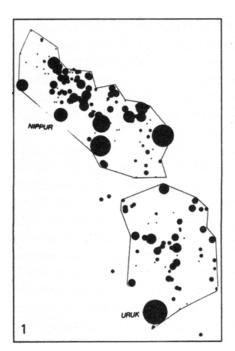
The less normative and more practically concrete approach of Robert Adams avoids these risks much better. At Chicago Adams is not alone in receiving neo-geographic models with moderation: McGuire Gibson too, in his survey of the site of Nippur, uses traditional methodologies (collection of sherds for micro-sectors) with excellent results, notwithstanding the difficult conditions through the presence of sand dunes and the rubbish heaps from old excavations which cover and alter the distribution of the evidence.<sup>53</sup> But on a very different scale is the survey carried out by Adams in the Nippur area, eventually published in his masterwork on the 'heart' of urbanization.<sup>54</sup> Obviously Adams by now uses not only maps and aerial photographs, but also satellite images (LANDSAT), and applies neo-geographic models, such as 'rank-size', or

**<sup>51</sup>** Flannery 1998b, pp. 16–21.

<sup>52</sup> Renfrew 2008, pp. 34–36 (and earlier studies).

<sup>53</sup> Gibson 1992 (field work 1973-75).

<sup>54</sup> Adams 1981 (field work 1968-75). Critical evaluation by Redman 1982.



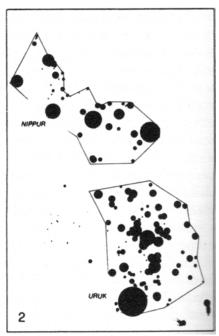


Fig. 38: Simulation of extent of cultivated area in Lower Mesopotamia. 1: early Uruk period. 2: late Uruk period (Adams).

four hierarchic levels (diagnostics of urbanization), or simulation of the extent of the cultivated zones, period by period, with the total exploitation of the agricultural space that appears only in the Sassanian era. The data of the new surveys were continually compared to the preceding, carried out in the areas of Uruk and Diyala (cf. § 4.2), in such a way as to highlight not only variations in the course of time, but also spatial variations, in neighbouring, but differently configured zones. From this came a true and correct history of settlement in ancient Mesopotamia, with different demographic trends peculiar to the various zones, the network of the canals which grew with the growth of the cities and the state, and variable relations between urban and rural populations, based upon the typology differentiated by dimensional class. The maps of general reconstruction (sites and canals), period by period, have become classic examples of visualization of settlement phenomena over the long term [figs. 38, 39]; as the two concluding chapters, on ancient Mesopotamia as an 'irrigation society' and as an 'urban society', are the textual counterpart.<sup>55</sup>

**<sup>55</sup>** Ibid. pp. 242–248 (Ancient Mesopotamia as an Irrigation Society) and 248–252 (Ancient Mesopotamia as an Urban Society).

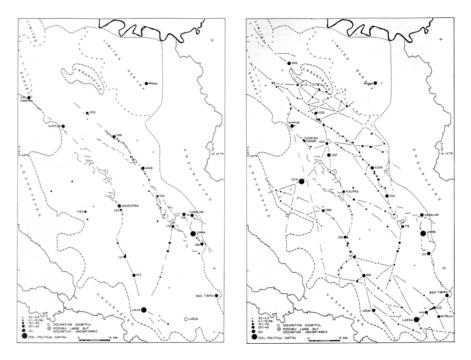


Fig. 39: Canals and settlements in Lower Mesopotamia in the Ur III-Larsa period (*left*), and Old Babylonian period (*right*) (Adams).

I should emphasize two points. The first is the confirmation that archaeological indicators of specialization, administration, and also of ceremonial rituals, are not exclusive to major sites, and therefore the correspondence between size and complexity appears simplistic. There can be purely rural villages of very large size, and on the other hand tiny centres with an administrative and ceremonial function. We can note that if the exploitation of rural land on the part of the urban-state centre happens above all through the use of manual labour (in *corvée*) to work on the palace or temple lands at low cost, then it is altogether functional to have very large villages (as a labour reserve) and small 'state' establishments – which is basically the 'feudal' model as proposed by Witold Kula, and which I myself have sought to apply to several Ancient Near-Eastern examples.<sup>56</sup> On the whole, the formation of states really entails a gradation of situations, but these are not just dimensional (as the simplified use of three or four hierarchic levels would have it). Think also of what Cesare de

**<sup>56</sup>** Kula 1970; Liverani 1979a; 1982 (Syria in the Late Bronze Age); 1988–89 (neo-Sumerian Mesopotamia).

Seta says of capital cities and dominant cities: capital is a political concept, dominant is a territorial/economic concept, and applying purely quantitative parameters, it is not then correct to draw deductions on the political hierarchies.57

The second point, historiographically significant, is that of the connection between irrigation and the formation of states; we have already seen how both Adams and other authors, while accepting the important role of irrigation, do not, however, accept Wittfogel's extreme model (§ 3.4). It is significant that in the climate of the Cold War Wittfogel aimed to describe the hydraulic state, totalitarian, as a prototype of the 'eastern' enemy then personified by Russia and China. In a changed climate, Adams in contrast aims to describe a society not entirely centred on the state, also attributing to the Ancient Near East certain characteristics of 'devolution' rather typical of the modern West: an implicit, even if involuntary, position of a neo-capitalist stamp, with its strategy of relating itself to different societies no longer by way of opposition but by means of assimilation.

Adams' syntheses also provided a starting point for further reflections: on the part of Assyriologists it was observed how a more precise and efficient use of the data provided by the ancient texts could confirm or challenge, but either way improve the picture provided by the surveys.<sup>58</sup>

On the part of archaeologists critical-methodological considerations were developed,59 but the enormous mass of material gathered by Adams was used above all as a sort of 'data-bank' for further analyses which make use of different and also innovative methodologies.<sup>60</sup>

Among the other large surveys of the 1980s and 1990s, we must at least recall those of the Belgian mission in the area of Akkad, 61 and those of the French mission on the Middle Euphrates.<sup>62</sup> Both are characterized by a very little neo-geographic and much more neo-morphological approach, with employment of the additional range of available techniques (high-definition satellite imaging, core sampling, etc.). However, the early-environmental and geomorphological emphases move away from the 'city' objective, which by contrast is central to Adams. Among the surveys relative to individual sites should

**<sup>57</sup>** de Seta 1996, pp. 161–196.

<sup>58</sup> Brinkman 1984; then Steinkeller 2007.

<sup>59</sup> Kohlmeyer 1981; Richardson 2007.

<sup>60</sup> For example Hassan 1981, pp. 231-257; De Guio and Secco 1988; Ramazzotti 2003.

<sup>61</sup> Gasche (ed.) 1987-96. More generally Gasche and Tanret (eds.) 1998; Cole and Gasche 1998; 1999; Gasche et al. 2002; Gasche and Cole 2003.

<sup>62</sup> Geyer and Monchambert 1987; on the (adjacent) valleys of the Khabur Ergenziger and Kühne 1988; 1991; on the Balikh Lyon 2000.

be noted above all that of Uwe Finkbeiner on the large site of Uruk, <sup>63</sup> which is very accurate and detailed in both field work and analysis and publication (with a general topographical study and myriad plans by period, classes of finds, etc.), but carried out with traditional techniques, without using either analyses of a neo-geographic type or electronic instruments or satellite imaging. Being, however, concerned with a single site (though a large one), these technical limitations do not have negative consequences.

Studies on the events of urbanization, mostly based on data acquired through surveys, are also numerous in the Levant: on 'Amuq,<sup>64</sup> on the Ugarit area,65 on the Ebla area,66 on Late Bronze Age Cyprus,67 and then above all in Israel.<sup>68</sup> To some extent the American survey on the upper Tigris runs counter to the trend: the excellent final study<sup>69</sup> does not use neo-geographic models but shows strong purpose of connecting the results of the surveys with textual information and the history of the period, with the structure of the Assyrian empire and its expansion and consolidation in the area under investigation. It does not attempt to establish rules, but succeeds in providing a true historical contribution.

### 5.3 Site catchment analysis and the urban-rural continuum

If the research examined thus far brings to the fore the question of settlement hierarchies (cities and villages) and canalization (linked to the role of the city), it must, however, be said that these same decades, the 1970s and 1980s, see the development of an interest given specifically to the extra-urban landscape, with the practice of 'off-site' archaeology and archaeology of the landscape.<sup>70</sup>

<sup>63</sup> Finkbeiner 1984; 1991.

<sup>64</sup> Casana 2009.

**<sup>65</sup>** Yon 1992.

<sup>66</sup> Meyer 1996: accurate reconstruction, neo-geographic background and comparative analysis between Ebla and the Mid-Euphrates, and between Early and Middle Bronze Age. Earlier de Maigret 1978; 1981.

<sup>67</sup> Negbi 2005.

<sup>68</sup> Finkelstein and Gophna 1993 (Chalcolithic and Early Bronze I); Broshi and Gophna 1984 (Early Bronze II-III) and 1986 (Middle Bronze); Gonen 1984 and Savage and Falconer 2003 (Late Bronze).

<sup>69</sup> Parker 2001.

<sup>70</sup> Theoretical and operative (in an Italian context) introduction in Cambi and Terrenato 1994; cf. also Wagstaff 1985; id. (ed.) 1987; Bernardi 1992; Ucko and Layton (eds.) 1999; Ashmore and Knapp (eds.) 1999. On the Ancient Near-Eastern landscape Liverani 1996a; recently Richardson 2007; Reculeau 2011.

The analysis of the relationship between a given settlement (urban or village) and its territory (which provides the agrarian/pastoral resources) can also be reduced to a simpler form geometrically: a procedure that dates directly back to von Thünen's nineteenth-century rings, 71 and which was taken up and reformulated in neo-geographical manuals.<sup>72</sup> But this connection finds a more specific and active application, particularly in prehistory, with the definition of Site Catchment Analysis as formulated by the Cambridge School of Palaeo-Economy with its project on the Early History of Agriculture backed by the British Academy.<sup>73</sup>

In practical terms, and taking a prehistoric site as an object of study, concentric circles are drawn whose radius may be covered in two hours (10 km) by hunter-gatherers, in one and a half hours (7.5 km) by shepherds, and in one hour (5 km) by farmers. The 'geometric' circles are then modified on the basis of how practical they are (natural obstacles, mountainous territory etc.) to lend them greater actual validity, also taking into account the level of transport technology of the period in question.<sup>74</sup> Inside this site catchment analysis zones are differentiated according to the quality of the ground and total productivity is calculated, the 'carrying capacity' which determines the maximum population sustainable in that specific canton.<sup>75</sup> The method has been criticized and more sophisticated versions proposed, 76 but surveys based on this model continue to be carried out with success, with the outcome of obtaining a broad vision of the human settlement and its territory. No longer isolated cities in a more or less deserted, or at least unknown, landscape, but a territorial fabric made up of villages and encampments, of fields and meadows and woods, of linking paths and canals of irrigation, even on a tiny scale.

In a Near-Eastern context the leader of this new vision of the land is undoubtedly Tony Wilkinson, who carried out and directed, from the 1970s (up to his recent death), an impressive number of operations in the field, in Central Mesopotamia (Abu Salabikh),<sup>77</sup> the Upper Euphrates (Kurban Hüyük),<sup>78</sup>

**<sup>71</sup>** Von Thünen 1875.

<sup>72</sup> Chisholm 1962.

<sup>73</sup> Vita-Finzi and Higgs 1970; Higgs and Vita-Finzi 1972; Jarman, Vita-Finzi, and Higgs 1972; Higgs and Jarman 1975.

<sup>74</sup> For example Wilkinson 1990a, b. The formula by Falconer 1994: s = kp (the sustaining area is equal to the population multiplied by the productivity) has parameters of density and productivity too vague to allow useful results.

<sup>75</sup> Hassan 1981, pp. 161-175, in illustrating the concept, never cites the Cambridge school. Cf. also Butzer 1982, pp. 211–229 (on the neo-geographic models) and 230–257 (on site catchment).

<sup>76</sup> Bintliff 1999, who is inspired by Flannery (ed.) 1976.

<sup>77</sup> Wilkinson 1990c.

<sup>78</sup> Wilkinson 1990a.

'Amuq.<sup>79</sup> the Syrian (Tell Beidar, the Balikh valley)<sup>80</sup> and Iraqi Jezira (including the micro-analysis of Tell el-Hawa),81 and therefore predominantly in areas of rainfed agriculture and of dry farming, whose set of problems differs from that of the Lower Mesopotamian areas, with irrigation by means of canals, object of Adams' surveys.<sup>82</sup> Right from the first surveys, in the years 1970–80, Wilkinson pays great attention to geomorphology (analyses of soils, processes of sedimentation and erosion, water resources) and to agrarian use (land use, modern flora and fauna, cultivation, farming techniques, manuring), with an interest also in change to environmental conditions (both climatic and, chiefly, induced by man) and demographic estimates. After this (especially in the 2000s), there is increased use of neo-geographic models (rank-size) and above all of new technologies: GIS, satellite imaging (CORONA), and computerized illustrations, simulations and statistics (cf. § 6.3). And there is still the fundamental point, that adding to the ground plan the so-called 'hollow ways' (routes that radiate from an inhabited site and which prolonged use and consequent sinking make visible in satellite imaging)83 and 'manuring zones' creates material clues to the extent of the land dependent on a centre. Some more recent suggestions, on the 'broken landscape' and the 'symbolic landscape',84 are aimed at becoming part of post-modern trends, but are of little practical value: the 'broken' landscape is simply the visualization of the dendritic scheme of irrigation.

Wilkinson's work of general synthesis85 combines an introduction to methodology and the history of the problem with the presentation of working and analytical methods, and then above all with the description of the landscape of the Ancient Near East in its constituent elements (morphology of the sites, irrigation systems, shape of the fields, etc.) and in its spatial-temporal diversification, distinguishing between a 'landscape of tells' (Bronze Age) and the various landscapes of the Iron Age; that of the alluvium, of the desert, of the moun-

<sup>79</sup> Wilkinson and Casana 2005.

<sup>80</sup> Wilkinson 1994 (general); 2001; id. et al. 2007 (Tell Beidar); Wilkinson 1998 (Balikh).

<sup>81</sup> Ball, Tucker, and Wilkinson 1989 (Tell el-Hawa); Wilkinson 1990b; Wilkinson and Tucker 1995.

<sup>82</sup> Cf. also Goldhausen and Ricci 2005, a regional reconstruction based on rank-size and catchment analysis.

<sup>83</sup> The hollow ways had already been identified (from aerial photographs) by van Liere and Lauffray 1954-55. Cf. now Altaweel 2003; Ur 2002b; 2003; Wilkinson et al. 2005. A different, but improbable, interpretation (canals) in McClellan et al. 2000.

<sup>84</sup> Kouchoukos and Wilkinson 2007.

<sup>85</sup> Wilkinson 2003; see also the views indicated in id. 1994; 2000; Kouchoukos and Wilkinson 2007.

tain. There had never been a synthesis of such detail and such quality, and with it the urban phenomenon can now be firmly set in its territorial, environmental, and food-provisioning context.

The site catchment type of approach is certainly fit above all for the configuration of the land used by a Palaeolithic settlement (for which in any case it was formulated) or by a Neolithic village, whereas its application to the territory of a city or group of cities is much more complicated, where precise historical facts also enter, a socio-economic complexity that also bears upon the question of food supplies from a distance, and great royal interventions which change the productivity rates decisively. The most spectacular case is the transformation of the Assyrian lands sought by Sennacherib towards the middle of the seventh century, through the construction of grandiose hydraulic infrastructures, with excavation of tunnels and building of aqueducts to divert watercourses from their natural beds towards the fields of Nineveh. This royal operation, linked to the building of a Nineveh more than double the size of the existing one, had already been studied using a traditional method,86 but the most recent treatments of the same historical field by Tony Wilkinson (relative to the neo-Assyrian landscape in general),<sup>87</sup> Mark Altaweel (excellent fusion of archaeology, information technology and texts),88 and Ariel Bagg (who studies the neo-Assyrian works of canalization in detail)89 are a good indication of the passage of time and of the adoption of a more complete and conscious approach.

Whereas new and successful operative methodologies were developed in archaeology, there was also a growing interest in Assyriology in placing the city within its territorial and regional context, but making use of entirely traditional approaches, at a descriptive level. Typical in this sense is a book of collected papers (following a symposium) published in 1990<sup>90</sup> on the city as an economic regional centre, with contributions on the various historical periods;<sup>91</sup> interest in the territorial arrangement of the city shows itself in several

<sup>86</sup> Oates 1968; Reade 1978. Hunt 1987 provides an excellent introduction to the bureaucraticlogistical problems connected to production, extraction of the surplus, and distribution.

<sup>87</sup> Wilkinson 1994; 1995; id. et al. 2005.

<sup>88</sup> Altaweel 2008.

<sup>89</sup> Bagg 2000a, a complete and detailed work; cf. also id. 2000b.

<sup>90</sup> Aerts and Klengel (eds.) 1990, with a general chapter by Renger 1990.

<sup>91</sup> Early dynastic period (Archi on Ebla, Powell on Girsu/Tello), neo-Sumerian (Limet), Old Babylonian (Kupper on Mari, Ellis on Ishchali), Hittite (Klengel), neo-Babylonian (Dandamayev on Uruk).

other works, 92 while archaeologists too did not lack interest in information of a textual origin.93

This 'territorial' interest, as we well know, is a cultural trend (with clear socio-political premises and implications) which became apparent with great force in the last decades of the last century. I want here to cite an instance which, albeit marginal, seems to me, however, emblematic: Kostof, in stating his 'nine points' for defining a town/city, points which partly coincide with Childe's famous criteria and partly do not, includes (in second place) the integration of the city within a group arranged hierarchically, and states, 'the town only exists as a town in relation to a form of life lower than its own ... It has to dominate an empire, however tiny, in order to exist'.94 Childe had not thought that this aspect – the integration of a city within a system and hierarchy - was necessary and characteristic, but today no one would deny it. However, if the town planner Kostof and the modern historian Braudel seem to stress the (traditional) aspect of the dominion of the city over its territory, archaeologists and historians of antiquity emphasize the aspect of continuity (the so-called urban-rural continuum). This is true not only for the Near East but also for the classical world, where historians also admit that it is due to archaeologists and territorial surveys carried out with modern methods that the old insistence (which goes from Weber to Finley) on the urban-rural dichotomy, and on the 'consumer city' that ruins and exploits the surrounding territory, is replaced with the idea of a one-to-one and workable relationship, and of a countryside 'repopulated' with myriad villages.95 We shall see further on (§ 6.5) how emphasis on the urban-rural continuum owes much to the conditions of the present world,96 and may entail certain anachronistic forcing if applied in exactly the same way to the ancient world. In my opinion the fundamental observations remain valid, that villages are self-sufficient whereas cities are not,<sup>97</sup> and that in the East the urban-rural dichotomy is very strong in structural arrangements, but also in the way of life – both in antiquity and in the Islamic world.98

<sup>92</sup> For example Postgate 1992, pp. 73-87; van de Mieroop 1992a, pp. 17-44; Czichon 1997 and 1998; Beckman 1999; Richardson 2007.

<sup>93</sup> Kühne 2010 defines the rural hinterland of Dur-Katlimmu on an archaeological and palaeoenvironmental basis, but pays great attention to the stelai of Adad-nirari III from Tell Rimah.

<sup>94</sup> Kostof 1991, p. 38, quoting Braudel 1979.

<sup>95</sup> Rich and Wallace-Hadrill (eds.) 1991, with introduction (p. xiv for the expression 'repopulating the countryside') and chapters by Snodgrass and Morris.

<sup>96</sup> Cf. Abrams in Abrams and Wrigley 1978, pp. 7-14 for a city/country relationship ranging from opposing to interactive.

<sup>97</sup> Falconer 1994.

<sup>98</sup> Adams 1982.

#### 5.4 The village and the communal bodies

The 'repopulation' of the Ancient Near-Eastern countryside, following the surveys, territorial analyses and the adoption of neo-geographic models, led in the years 1980–90 to a renewal of interest in sites of small dimensions, that is, on the whole, in villages, on the part of both archaeologists and philologists (Assyriologists). Obviously the dimension of the village was the only feasible one for the long Neolithic period, and continued to be so with renewed attention and accuracy of excavation and sophistication of analysis, of which the site of Tell Sabi Abiad (in the valley of the Balikh) is probably the best example.<sup>99</sup> But the excavation of villages of an historical age too, with urbanization by now taken off and the problem of their relations with the city on which they depended politically (and financially), had a more deliberate renewal. It has anyway been said that parallel to the process of urbanization a process of 'ruralization' also took place, the construction of the countryside by means of the city: 'the urban demographic implosion was accompanied by an equally important creation of the countryside ... existing towns and villages became networked to urban places'. 100 The two parallel processes should have received analogous attention, but there has long been a marked historical imbalance in the studies. During the phase of oblivion there had been some rare cases of conscious choice of village dimension, but these are exceptions to the longstanding predominant interest in urban excavation and the palace and temple contexts. Two excavations directed by Henry Wright should be noted above all: that of the early-dynastic village of Sakheri Sughir near Ur, and that of the Uruk period village of Tepe Sharafabad in Susiana.<sup>101</sup> The study of these sites is truly masterly, for its methodological structure, for the environmental and historical contextualization, and for the socio-economic analysis, which perhaps make them the only instances that can now be comparable to Kent Flannery's Mesoamerican Village. 102

Disparate factors contributed to the revival of interest in the years 1980– 90. The most 'serious' on a point of method is that already mentioned of a wish to rebalance the territorial analysis, giving due space to the minor settlements,

<sup>99</sup> Excavation directed by Peter Akkermans; over and above his final report (1993) there is the excellent study of Verhoeven 1999; for the regional setting Akkermans 1989; on the Middle Assyrian phase Wiggerman 2000. On the pre-pottery architecture of the Levant cf. Banning and Byrd 1989. The report by Margueron 1989 also limits itself to the Neolithic villages.

<sup>100</sup> Yoffee 2005, p. 60.

<sup>101</sup> Wright 1969; Wright, Miller, and Redding 1980.

**<sup>102</sup>** The Flannery model was recently applied to the Mediterranean world by Robb 2007.

so as to reconstruct the whole complex of hierarchies and of the flows of resources and services that together made the proto-state 'module'. But the practical conditions were equally decisive. Above all in the areas where dams were being built, international mobilization to 'save what can be saved' and the help offered by the host country resulted in so many missions working in a limited area that the choice of even minor sites became obligatory. And the question of costs and funding also came in, with the particularly American preference for no more than a three-year period of funding, which dictated the submission of such projects as would guarantee quick results.

This renewal of interest in the extra-urban compass takes on, however, the form of a sort of 'rediscovery' of the village, which occurs in an American anthropological context as if it were something new and innovative, and supported for interpretative ends by parallel ethnographical studies of a quite distant environment, both in time (the Islamic Near East) and in space (Mesoamerica). In practice the long history of the rural community, and in particular the 'eastern' village (§ 2.6), is forgotten (or somehow intentionally omitted), though already well outlined at the end of the nineteenth century, as indeed is the territorial system implicit in the 'Asiatic mode of production' (§ 3.3), and even the more recent developments in the prehistoric field (§ 4.1).<sup>103</sup> In this vein belong the conference (1989) and then a book (1994) edited by Glen Schwarz and Steven Falconer. 104 The premises are undoubtedly correct: persistent urban focus and sparse attention to the minor sites, a necessity on the other hand of a more balanced sampling so that the territorial system in its entirety can be assessed, a system that is based precisely on the interaction between city and village. The editors decided, however, above all to opt for a general suppression of the earlier history of the study - an oblivion which opens the way to deconstructionist trends – throwing into doubt the validity of the common opinion, considered far too simplistic, of the counter positions of villages, largely given over to primary production, and of urban centres, the preferred seats of specialization, of administration and of power. In fact the editors decided to centre their analysis on the fact that even minor sites are home to elements of 'complexity' (specialization of labour, social and economic inequality), which renders no longer acceptable the old distinction between a 'complex' city community and a simple 'rural' community insofar as everything is dedicated to the production of food. This point obviously goes back to the tendency of 'modernity' to deny strong characterizations, considered 'incorrect': simplicity is a sign of inferiority, and therefore we say that we are

<sup>103</sup> History of this question in Liverani 1999.

**<sup>104</sup>** I mainly examine here the introductory chapter of Schwartz and Falconer 1994.

all 'complex', and in this case out goes the old late-nineteenth-century paradigm, expressed in various ways by Tönnies and by Durkheim (§ 2.6), which saw the city as a complex organism, based upon the interaction of different components, in contrast to the homogeneous village. The various contributions to the book of the conference, almost exclusively American, 105 and the concluding chapters, 106 with their insistence on 'complexity' as also characterizing the villages, run the risk of not giving an account of the very different level of complexity that characterizes the urban environment. The use of distant parallels risks flattening the whole historical happening, which the texts of the period, in contrast, would help to illustrate in a more fitting way. One solitary contribution based on the texts, on the villages of the kingdom of Alalakh VII, partly mitigates this deficiency, and goes back (also through knowledge of the bibliography) to the historical-philological thread of which I shall shortly speak.107

Now, while it seems to me that a good dose of caution is called for, as regards such extreme and simplified models, at the same time I think that reservations, at various levels, should be advanced about the whole generalization of complexity. 108 Above all, the modern parallels (advanced much more widely than the ancient texts) show elements of a complexity largely induced by an uninterrupted relationship with the city: moreover, some small but 'complex' centres are not villages but decentralized functions of the temple and palace agencies: typical in this sense is the case of centres for the collection and sorting of the harvests, 109 which do not exist in working order by themselves but as part of a wider state entity. But the difference in complexity is above all a question of level: however diversified a village can be, its complexity remains very little compared to that of an urban centre, beginning with the actual physical presence of non-residential buildings usually absent from normal rural villages. And however decentralized certain artisan activities can be, there is still inevitably on the one hand the centralization of administrative and ceremonial activities in the city, and on the other the overwhelming predominance of food production in the country. There is also a question of long

<sup>105</sup> Contributions from Stein, Schwartz, Wattenmaker, Falconer; on their part on the Mesoamerican and Andean village.

<sup>106</sup> Hayden 1994; Kramer 1994.

<sup>107</sup> Magness and Gardiner 1994; on villages and palace in Alalakh VII cf. now Zeeb 2001; for Alalakh IV von Dassow 2008.

<sup>108</sup> I have explained the history of the question, and my own position, in Liverani 1999.

<sup>109</sup> This is the case at Tell el-Raqa'i (upper Balikh), excavated and studied by Schwartz 1994. Stone 2007b also, having to describe 'village-sized sites', chooses Kharadum and Tell Harmal, clear instances of royal peripheral foundations, and certainly not village communities.

chronological phases, with a level of general complexity (that is, relating to the entire territory) that marks a steep rise in all respects at the moment when the phenomenon of urbanization appears, and which is reflected in the villages themselves. So the old, radical model of opposition retains one of its functions, which is exactly that of a model, whose simplicity serves to bring out the fundamental characteristics, then leaving the details and refinements to the analytic description of the single instances.

The entire thread of philological studies remains rather separated from the nature of the archaeological problems. Among Assyriologists, after the polemics of the years 1960–70 between the (neo-Marxist) supporters of the village community and their opponents (of liberal training), of which we spoke earlier (§ 3.3), the debate was brought back to normal with less ideologically marked tones. Leemans himself had recognized (already in the Société Jean Bodin volume) that in the Old Babylonian period the descriptions of property shows that houses border on houses, and fields border on fields. So peasants lived in villages (or in cities), and fortified farmsteads (dimtu) were rare, while they were then to become more frequent at Nuzi and in Cassite Babylonia. In a word, villages existed, even if the Dutch scholar did not enter into the question of their community structure. 110 If a shared conclusion of this last problem (essential anyway on the socio-political level, over and above the economic) remained and remains difficult, the course of studies centred on the question of the communal bodies, which the texts documented clearly and extensively: in each community, be it urban or rural, local affairs were administered by a limited body of 'elders' and by a general assembly.

Thinking back to the now obsolete debates on the difference between the 'oriental' and 'occidental' city, and to Mazzarino's idea (explained at § 1.5) of the city's 'double creation', one eastern for material aspects and one Greek for civic aspects, the doubt could arise whether the western city appeared not as a development of the eastern city, but rather of the eastern village. Obviously this is dealing with a paradox, which the use of the old terminology of antithesis throws into relief. But it is a fact that when the Near-Eastern city (in Mesopotamia and surroundings) took off, around the temple first and then the palace, it must have inherited from the earlier Neolithic villages the structures of local self-government, even if it pushed them to a subordinate level and to judicial and administrative functions, depriving them of the political functions by now assumed by the palace.

The village had its communal bodies, elders and assembly, and the city too kept them (as we already saw at § 4.3 in the cases of Sippar and Assur),

<sup>110</sup> Leemans 1982.

either as a whole, or quarter by quarter in the case of larger cities. 'Within the twists of despotism', to reuse here the title of one of my articles, 111 prospered therefore elements of communality, if not truly of democracy, and to detract from it as a 'primitive' democracy in Jacobsen's sense (§ 3.2) or as a democracy 'of beggars' in Wittfogel's sense (§ 3.4) is unjust because based upon comparison with a democracy, ours or Greek or ideal, found elsewhere in both time and space. It must be underlined how the communal bodies of the village and the communal component of the city appear to us, in the evidence originating from the palace, as working above all for the palace itself: they organize the quotas of contributions to provide the palace with men (for the *corvée* but also for war) and material goods (food products), they are responsible for the welcome given to fugitive slaves, or for the killing of merchants of passage, and are flanked by (if not placed under) a 'mayor' of royal nomination.

In the decades of the 1970s and 80s, therefore, a substantial analysis developed, period by period, of the communal bodies in Mesopotamia and its surroundings, an analysis that will be renewed again at the start of the new millennium. To begin with there were different and quite distinct threads. The first was that of a neo-Marxist stamp, which flourished in both western and eastern Europe, and of which I have already spoken (§ 3.3) as having a socio-economic edge, and connecting village structures and extended families.<sup>112</sup> A second thread is linked to the initiatives of the Belgian, André Finet, who organized two symposiums, on La voix de l'opposition in 1973 and on Pouvoirs locaux in 1980,<sup>113</sup> this latter of a political cut, joined to the question of democracy. At the end of the two symposia Finet, asking himself if a democracy had existed in Mesopotamia, opts for 'yes' but with much caution, and without even citing Jacobsen (perhaps taking him as read). 114 In the same proceedings Jean Bottéro observes that dissidence and local powers appear more easily in the divination texts than in official inscriptions, where there has clearly been censorship:115 an observation which deserves to be more systematically developed. Finally, a third thread relates to communal bodies in ancient Israel, running from the article, before its time, by Wolf (which drew inspiration from Jacobsen), through works by McKenzie (on the elders), Malamat (Mesopotamian parallel),

<sup>111</sup> Liverani 1993. See also Szlechter 1970 and van de Mieroop 1999b.

<sup>112</sup> Over and above those already cited at § 3.3, I would single out Jankovska 1969a, b; Zablocka 1978; and Brentjes (ed.) 1982.

<sup>113</sup> Finet (ed.) 1975; 1982 (with chapters by Kupper, Talon, Cassin, Bunnens). The thread on 'local powers' was resumed by Joannès 1990 for the Persian period.

<sup>114</sup> Finet 1982a; also id. 1982b.

<sup>115</sup> Bottéro 1975; 1982.

and Reviv (Syro-Palestinian setting), and up to Benjamin's book on urban life in Deuteronomy, which, if it is philologically sound, reveals, however, a certain unease in the use of historical-political and historical-social concepts. 116 This weakness is true for a large part of the contributions in this thread, by scholars more immersed in the biblical texts than in the general nature of the problems; but the terminological study remains in every case essential, as clearly demonstrated by Frank Frick's book on Hebrew terminology: 'îr 'city' is really a fortified citadel, and the same goes for qiryâ 'wall', and for migdāl 'tower', while the villages 'hăsērîm' are etymologically enclosures for livestock, and the cities/villages antithesis often appears in the pair 'ārîm wěhăsērîm. The picture conforms well to the Levant's settlement system in the Iron Age. 117

More recently, with the famous 'end of ideologies' (and so with the end of bifurcation between despotism and democracy), the approach has become calmer, without distinctions between schools any longer, but with analyses historically circumscribed, period by period, with inevitable central focus on Old Babylonian and neo-Babylonian cases, but also with very particular attention to the unique enough case of the lists of the villages of Alalakh, and also to the case of Israel.<sup>118</sup> If anything, it is in general evaluations that the link between democracy and liberty emerges, 119 which when applied to the Ancient Near East (where liberty is sought in flight) reveals a certain dose of anachronism.

Less attention has been paid to what seems to me to be the central core in reconstruction of the working (and the very image) of the rural territory, which is the functional interconnection between villages and the farming estates of the palace or temple. Witold Kula has shown (for Poland in the 'feudal' age) that the noble estates would have had their accounts 'in the red' if they had needed to calculate all the expenditure items at market prices, and on the contrary showed great profits because they utilized manual labour at low cost through the *corvée* system. <sup>120</sup> I believe that I then showed that the same system applied to Late Bronze Age Syria: at Ugarit there were both village communities and palace farming estates, and the latter made use of the corvée chargeable

<sup>116</sup> Wolf 1947; McKenzie 1959; Malamat 1963; Reviv 1969; 1989; Benjamin 1983.

<sup>117</sup> Frick 1977; history of the question in Willis 2001, pp. 1-7.

<sup>118</sup> Durand 1988 (Mari) and 1989 (Ebla); Fleming 2004 and Seri 2005 (Old-Babylonian); Dandamayev 1982; 1988; 1995 and Barjamovic 2004 (neo-Babylonian); Archi 1973 and Beckman 1982 (Hittite kingdom); Heltzer 1976 (Ugarit); Fales 1989 (neo-Assyrian); Faust 2000 and Willis 2001 (Israel); also Bartash 2010 (literary texts).

<sup>119</sup> Martin and Snell 2005.

<sup>120</sup> Kula 1970.

to the villages. The palace obtained from its farms produce far superior to that which it collected as 'a tithe' from the villages, but had to maintain a balance between the two sectors because if it had ruined the villages, the whole system would have entered into crisis.<sup>121</sup> In this way a landscape is formed which sees coexisting beside the palace city rural settlements of a low level of complexity (the rural villages exactly), even relatively large, and small specialized settlements (the farms, but also the ports) administered directly from the palace. 122 This triangular system (palace city/rural villages/palace farms) must have taken shape right from the first urbanization, 123 with its characteristic flows: the manual work flows from the villages to the palace farm; the agricultural surplus flows from the farm to the palace; while the 'services' that the palace must provide to the villages (in particular protection) remain relatively unpredictable. The unequal, exactory, character of the system in its material application explains how the recurring crises (sometimes a real collapse) of the palace city are matched, by contrast, with the fundamental stability of the settlements belonging to the agro-pastoral population.

#### 5.5 The revival of architecture: the French school

The first French archaeologists had expressed somewhat negative judgements on the level of Mesopotamian architecture, starting right from Botta ('the architectural art is of an altogether primitive poverty') and then continuing to Contenau ('an architecture in its infancy'). 124 But it was a French archaeologist, Jean-Claude Margueron, who in the 1980s revived both an appreciation for the level of ancient architecture and modern technical interest in it. The two facts are clearly linked: the advocates of the old hasty denigration were struck by the contrast with great stone architecture, Greek and Egyptian, compared to which unfired brick architecture, with the then methods of excavation, was reduced to giving an image far less exalted. The more advanced excavation techniques of the period after the Second World War provided material better adapted to the technical study of building in unfired brick, and made possible its reevaluation.

**<sup>121</sup>** Liverani 1979a; 1982.

<sup>122</sup> The fortified settlements (of dimtu and dunnu type), studied by Kolinski 2001, are not private farming estates, but owned by palace or temple.

<sup>123</sup> Liverani 1998a; 2005c.

<sup>124</sup> Botta and Flandin 1849-50, vol. V, p. 76 (already cited at § 1.6); Contenau 1927, p. 361.

The 'turn' accomplished by Margueron found a suitable framework within the theoretical studies of town planners and architects who, especially in France in the 1970s, would raise to the first level the concept of 'space' in its various manifestations: the constructed space, the perceived space, the livedin space.<sup>125</sup> Possibly the most characteristic exponent of this is Henri Lefebvre, 126 theorist and Marxist historian (I would say early-Marxist) of town planning, who on the one hand insists upon space as a social product, connected with the mode of production, and on the other on the varieties of the concept of space. Whereas the 'Euclidean' space is traditionally a void in which phenomena are placed, the 'mental' space (subjective, ideological, utopian) and the 'produced' space are a result of, and not a scene of, social activity, and are historical, variable constructions: 'every society (and therefore every mode of production ...) creates a space, its own'.<sup>127</sup> Then, in his historical treatment, Lefebvre includes Greece and the classical world, but does not cite either the Ancient Near East, nor the East in general.<sup>128</sup> And besides, already in one of his earlier works, 129 Lefebvre, in making Childe's title of the 'urban revolution' his own, does not, however, give any sign of knowing of his work - and his urban revolution is not that of the fourth millennium, but that of modern times. I do not think that Margueron had drawn direct inspiration from Lefebvre, nor from other scholars such as Manuel Castells<sup>130</sup> and Paul Virilio,<sup>131</sup> but the whole French environment in the years 1970-80 was particularly sensitive to the new nature of questions of social/produced space and lived/perceived space. Among the archaeologists of the Ancient Near East the most explicitly 'Lefebvrian' are Davide Nadali, with two 'invented' spaces (as regards Assyrian artistic representation),<sup>132</sup> and the Dane, Steve Lumsden, who with reference to the Nineveh of Sennacherib uses the concept of 'production of space', 133

**<sup>125</sup>** The ability to imagine 'spaces' different from the Euclidean (strictly three-dimensional) has for long been the effect of twentieth-century progress in physics (relativity, curved space, four and more dimensions, etc.).

<sup>126</sup> Lefebvre 1972; 1974; cf. also Bacon 1974. Obviously the concept of space has always been present in town planning, at least from Giedion 1941, pp. 705-753. For an introduction to the question cf. Flanagan 2000; 2001.

<sup>127</sup> Lefebvre 1974, p. 40; cf. also pp. 57-65 and 473, and pp. 46-57 on triple space (perceived, conceived, lived).

**<sup>128</sup>** *Ibid.* pp. 265–335. At a bibliographical level too, Lefebvre is very French-centric.

<sup>129</sup> Lefebvre 1970.

<sup>130</sup> Castells 1970a, b.

<sup>131</sup> Virilio 1984.

<sup>132</sup> Nadali 2006; 2013.

<sup>133</sup> Lumsden 2004.

suggesting that the inclusion of the high fluvial terrace (to the east of the city) between the walls offered a view from the height over the entire city (a view which is again found in the sculptured reliefs of Sennacherib), and therefore a better 'reading' of its organization.

Returning to Margueron, in a seminar held at the University of Rome in 1981<sup>134</sup> he set forth his methodological principles: accuracy of survey, recovery of volume (beyond the two-dimensional plans on which archaeologists used to work), recovery of the 'life' of the building (which, unlike objects, passes through phases of remaking and change of use, before arriving at the last systematization, which is that which the excavation recovers), study of the 'physics' of the building (pressure on the walls and foundations), of internal traffic, of light, and of position in the external environment (and so of town planning). If the insistence on perception of space, or light, and of volume is analogous to contemporary trends in history of art, 135 the technical study of pressure and loads is really part of more advanced architectural study, and is particularly important for judging the presence and dimensions of the elevations, for the most part lost in the archaeological record (the presence of internal stairs can simply lead to terraces).

Margueron applied his principles in a rich series of studies, which cannot be examined individually here. 136 We need at least, however, to look at two of his great works, which also frame his work chronologically: that on the Bronze Age Mesopotamian palaces, published in 1982, and the complete summary of the city of Mari (whose excavation he directed from 1979 until recent years), published in 2004. His first book<sup>137</sup> already has an important methodological introduction, before the detailed analysis of single palaces and then of their constituent elements, which contained the principles of volume, light, and 'life' (and death) of the building, and their working applications: critical reading of the plans, reconstruction of the elevations and traffic (horizontal and vertical), study of the functions (which in the palaces are much diversified), and of the phases of re-use, and the whole then discussed again very fully in the concluding synthesis.

<sup>134</sup> Then published as Margueron 1986a.

<sup>135</sup> Cf. Nadali 2006. On the influence of light Shepperson 2009; in the urban quarters the danger of the sun was minimized (narrow streets, no squares, attention to orientation), while in public buildings there was use of light for ideological purposes.

<sup>136</sup> His series of Notes d'archéologie et d'architecture orientales has reached no. 12 (Margueron 2005).

<sup>137</sup> Margueron 1982; cf. also id. 1987.

The book on Mari<sup>138</sup> is of great analytic and illustrative richness. It follows the long history of the city, from the first structure (round, planned, cf. § 4.8) around 3000/2900,139 and then with the two best documented phases: that of the 'second urbanization' of the Early Bronze Age II-III (c. 2700-2350) and that of the 'third urbanization' of the Middle Bronze Age, the so-called 'Age of Mari', known from the archives of the last fifty years of the city's life, up to its destruction by the famous Hammurabi of Babylon. For the Early Bronze Age city, largely excavated under Margueron's own direction, the three-part picture (between residential areas, palaces and temples) is complete and balanced, so constituting one of the most solid and detailed examples of the 'classical' Mesopotamian type. 140 By contrast the examination of the Middle Bronze Age city is almost monopolized by the royal palace, on which the excavations of the years 1930 and then 1950, directed at the time by André Parrot, were concentrated. 141 Following his own principles, Margueron provides solid and detailed analyses of individual buildings and their functions, of volumes and light, and of the traffic and 'daily life' that was carried on within them. The study of loads and pressure, and of illumination and ventilation, leads him to provide reconstructions of the elevations (presented with illustrations of great elegance) which are certainly plausible, but perhaps (at least in my opinion, for what it is worth) too ambitious and elaborate, too 'modern' [fig. 40]. In the balance between technology and art,142 typical of architecture, it seems to me that the whole analysis is biased toward the former, but yet the graphic reconstructions favour the latter.

Over and above his important work on the architecture and town planning of Mari, and works of a general nature, 143 Margueron has also provided contributions of similar value on Larsa, 144 Emar (sites he himself excavated), 145 Khorsabad, 146 and on the palace of Ugarit, 147 on the invitation of the director of that excavation, Marguerite Yon. This fact is significant, because the archi-

<sup>138</sup> Margueron 2004.

**<sup>139</sup>** *Ibid.* pp. 60–67 and 118–122.

**<sup>140</sup>** *Ibid.* pp. 164–194 (dwelling houses), 195–233 (palaces), 234–271 (temples).

**<sup>141</sup>** *Ibid.* pp. 459-500.

**<sup>142</sup>** *Ibid.* pp. 272–277.

<sup>143</sup> Margueron 1984 (sacred space); 1997 (private houses); 1998 (space and territory); 1989 (villages).

<sup>144</sup> Margueron 1985; on Larsa Calvet 1984 (Ebabbar); 1994 (quarters with large residences and spacious streets); 1996.

**<sup>145</sup>** Margueron 1977.

**<sup>146</sup>** Margueron 1995a.

<sup>147</sup> Margueron 1986b; 1995b.

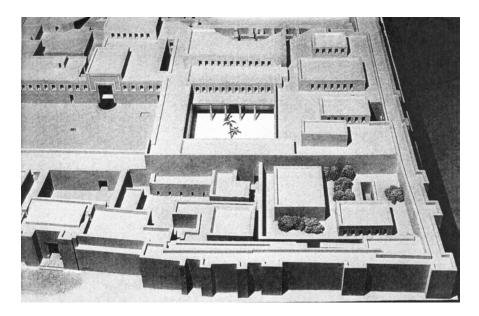


Fig. 40: 3-D reconstructive model of the palace of Mari (Margueron).

tects of the mission at Ugarit had already contributed work of considerable value, within the same tradition of interest: here also a sign of new times and modernized methodology, due to the passage of the direction of Mari from Parrot to Margueron, and that of Ugarit from Schaeffer to Yon.

The case of Ugarit reopens a particular discussion. We have already seen (§ 2.12) how the excavation was planned in the era of the mandates, under the direction of Claude Schaeffer. An article of Jacques-Claude Courtois, <sup>148</sup> of a purely descriptive character, with schematic plans, which nevertheless provide a good collection of data on the private dwelling houses, really belongs to this earlier stage. But at exactly the same time as this article (in 1978, after three years of direction by Margueron) the direction of the excavation was taken over by Marguerite Yon, who very explicitly intended 'to study the city of Ugarit as it appeared in its natural setting, with its architectural organization and with the characteristics of its urban civilization', <sup>149</sup> a project which is progressively carried out, not only with a type of excavation report that joins publication of the data to architectural and town-planning analyses <sup>150</sup> but also with general

<sup>148</sup> Courtois 1979.

<sup>149</sup> Yon (ed.) 1987, p. 7; cf. ead. 1992.

<sup>150</sup> Yon, Lombard, and Renisio 1987.

works of synthesis, 151 and with individual studies - on the streets and squares, 152 on wells and water resources in both the inhabited area and the surrounding land,153 on the oil-presses,154 on the houses and the socioeconomic differentiation of the residential quarters.<sup>155</sup> In an architectural and town-planning sense the contributions of the architect Olivier Callot are above all others exemplary; in a first monograph<sup>156</sup> he studies a single house of the 'Ville Sud' in detail as a model of reference, and then extends his analysis to other houses and to the entire quarter, 157 and finally to the temples. 158 Callot's work is remarkable not only for its technical and spatial analysis, but also for the drawings, of great elegance and usefulness, especially in the threedimensional reconstructions. This results in a true model of urban analysis, passing from analytic description (block by block, house by house, room by room), to the study of the synthesis: organization of urban space (roads and squares, traffic), building materials and techniques (also the roofs and upper floors), 159 organization of domestic space (water, kitchen, family tombs, etc.) – the human activities of the house.

The French school certainly does not exhaust itself with Margueron and the architects of Ugarit. Olivier Aurenche already appears as a parallel leader on the prehistory front, who alongside the course of his ethno-archaeological studies (already examined at § 5.1) pursued a purely architectural course, with contributions also summarizing the Neolithic architecture of Mesopotamia and Anatolia.<sup>160</sup> In his book on the house in the Neolithic Near East<sup>161</sup> the analysis is almost entirely technical (materials, phases of building, floors and roofs, entrances and stairs), with a simple typology and strong use of ethno-archaeological parallels, but less attention to spatial and functional analysis. 162

<sup>151</sup> Callot and Yon 1995; Yon and Callot 1997.

<sup>152</sup> Callot and Calvet 2000.

<sup>153</sup> Calvet 1981; Calvet and Geyer 1987; 1995.

**<sup>154</sup>** Callot 1987.

**<sup>155</sup>** Devolder 2005.

<sup>156</sup> Callot 1983.

<sup>157</sup> Callot 1985: 1994: also Castel 2000 and Devolder 2005.

<sup>158</sup> Callot 2011; cf. earlier Yon 1984.

<sup>159</sup> Ample panorama of contributions from the 'Margueron school' in Butterlin et al. (eds.) 2006; also Lebeau 1996.

<sup>160</sup> Aurenche 1981b and 1985c (Mesopotamia), 1985b (Anatolia). Contributions of various authors in Fortin and Aurenche (eds.) 1998. Aurenche's ethno-archaeological papers are now collected in id. 2012.

<sup>161</sup> Aurenche 1981a.

<sup>162</sup> This is at the forefront in Braemar 1982 and 1997, and in Foucault and Forest 1997 (both on the Levant).

Another prominent figure is Corinne Castel, who in her book on town planning and Neo-Assyrian and neo-Babylonian domestic architecture<sup>163</sup> is anxious to separate herself not only from the 'formal' German school, but also from Margueron's 'technical' approach, proclaiming herself the innovative adherent of a spatial approach, of clear derivation from the French town planning context (as already seen), and which in any case is found exactly the same in Margueron himself, ten years earlier. 164 However – allegiances apart – Castel analyses the 'constructed' space (dimension, orientation, access and traffic) and the 'lived' space (function of the surroundings, domestic furnishings) with great incisiveness and accuracy.

Finally, the Roman location of Margueron's seminar shows the attention that the school of Paolo Matthiae had and has for his position; Matthiae was led by the enormous interest of the remains of Ebla to join to his original historical-artistic competence and vocation an equally capable historical-architectural competence, 165 followed in this by various members of his school, 166 and in particular by Lorenzo Nigro (son and brother of architects) in his book on the palace architecture of Palestine. 167 We find here again attention paid to spaces (open/covered), traffic, and town planning arrangement, that is, to all aspects of the modern architectural approach. And we find here a detailed breakdown of the palace in its various functions, to which dedicated spaces correspond: assembly/audience, living space, administration, storage, domestic work (kitchens, little workshops), and such like. The distinction between palace and official residence seems more of a terminological fact (on a political basis) than really architectural, and applies largely to the Late Bronze period, when the presence of foreign (Egyptian) residents makes it functional.

Laura Battini is at the crossroads between the Roman school (from whence she came) and the French school (where she lives and works). Over and above a number of detailed studies, largely on the neo-Assyrian and neo-Babylonian gates in the city walls and defensive systems, 168 her book on the domestic architecture from the neo-Sumerian to Old-Babylonian periods should be noted. 169

<sup>163</sup> Castel 1992; 2000.

<sup>164</sup> Margueron 1974.

<sup>165</sup> Above all on temples and palaces (the same goes for Pinnock 1994 and 2001); but cf. Matthiae 1991 on the urban aspect of Middle Bronze Age Ebla; id. 1997 on the houses.

<sup>166</sup> Baffi 1990; Baffi and Dolce (eds.) 1990 (with notes on the principal cities); Mazzoni 2006 (on the space).

<sup>167</sup> Nigro 1995.

<sup>168</sup> Battini 1997a, 1998b and 1999b (neo-Assyrian city gates); 1997b (walls of Babylon); 1998a (citadel and lower city); 2000 (geometry of Khorsabad).

<sup>169</sup> Battini 1999a; 2006.

But of particular interest is one of her recent methodological articles, 170 in which she highlights the defects of the ethno-archaeological, and anthropological in general, approaches, and of the neo-geographic models, criticizing a number of recent contributions from Pfälzner<sup>171</sup> (which, however, once the distant ethnographic parallels have been removed, remain altogether praiseworthy for the analyses of relations between spaces, finds, working functions and family structure), Deblawe, 172 Stone (who too simplistically adopts the current equations of large house = extended family, and small house = nuclear family), 173 and above all Brusasco (who sets up too many types and sub-types, and studies the circulation but not the contents). 174 In general Battini is critical of the possibility of deducing the number of inhabitants from the space (a standard ethnoarchaeological procedure), highlighting other factors, particularly wealth, and oscillations over the course of time. Certainly the calculations have a statistical value, and a general usefulness, whereas it is their application to individual cases (such and such a house is big, and therefore is home to an extended family, and conclusions of that sort) that is simplistic. But Battini's really quite polemic position seems to me to highlight above all, beyond the German-French controversy, how the main opposition is to be seen between the European (historical) positions and the American (anthropological) positions. Anyway, Stone herself is equally 'partisan' (even if less polemic in tone) when, seeking to provide a summary of the Mesopotamian city, she ignores completely both earlier contributions of the German school (she never cites Assur or Nineveh or Babylon), and the recent trends of the French (space) and German (detailed typologies) schools, and in discussing houses and quarters omits any reference to European contributions of technical analysis. 175

### 5.6 The revival of architecture: the German school

In his reply to Contenau's judgement on the 'infantile' character of Mesopotamian architecture (a judgement which, however, was considerably less extreme in the original text) Margueron left out one more detailed history of the question, and failed in particular to appreciate the theoretical positions and practical realizations of the German architectural school - from the first contributions by Koldewey and Andrae (in which, as good architects, they had al-

<sup>170</sup> Battini 2010.

<sup>171</sup> Pfälzner 1996.

<sup>172</sup> Deblawe 1994a, b; 1997a, b.

<sup>173</sup> Stone 1991.

<sup>174</sup> Brusasco 1999-2000; later id. 2007.

<sup>175</sup> Stone 2007.

ready given a clear volumetric vision, among other details) at the beginning of the century, and up to the contributions by Ernst Heinrich (engineer), who in the years 1970-80 kept that tradition alive and provided summaries which long remained fundamental points of reference: the long discussion on the house in the Reallexikon der Assyriologie, <sup>176</sup> and the two short monographs on the temple and palace, both published in a series on the history of architecture. 177 Heinrich's position is undoubtedly less advanced than Margueron's (there is the matter of generation); in particular, his typology of the house is somewhat formal and abstract, apart from the solid identification of the courtyard house, and accordingly the same goes for the typologies of temple and palace, which take their constituent elements from the house. The 'historical' part is, in the case of the temple, a sort of catalogue, and is missing in the case of the palace (but I think that the book was unfinished, from the author's death in the same year it was published). The collection of plans is extremely useful, but formally somewhat poor. Heinrich's too exclusively formal approach lacks the evaluation, dear to Margueron, of the functional aspects: it could be said that one of them is interested only in the container, and the other only in the contents.

Still of a formal approach, but excellent for the diachronic analysis, is a work by Jürgen Schmidt on the streets of the Mesopotamian urban centres, 178 really a study on the relations between open spaces and built spaces: three stages are followed, beginning from the 'agglutinated' arrangement of houses merged in the open space without order (Negativraum), typical of pre- and proto-urban centres and of villages; then to pass through a reduction of the open space which becomes transformed into haphazard streets and access alleys to the houses; finally to arrive at a more or less orthogonal grid determined by the quadrangular shape of the courtyard houses and the blocks which result from them (up to the planned orthogonal form of the new foundations). With this study, in my opinion, formal analysis combined with a sense of historical becoming, had already achieved (we are in 1964) its finest result.

Thereafter the German school of the 'children and grandchildren' of Heinrich and Schmidt and the 'great grandchildren' of Koldewey and Andrae develops in parallel to the French school, and with equal intensity. As a happy meeting between the German and French schools, as well as between tradition and modernity, we can single out the book by Peter Pfälzner, on house and oikos of Upper Mesopotamia in the Early Bronze Age: a weighty book, which really starts from the opposed sides of the two schools, that of Koldewey, Andrae, Heinrich

<sup>176</sup> Heinrich 1972–75; the philological part is handled by Edzard 1972–75.

<sup>177</sup> Heinrich 1982; 1984.

<sup>178</sup> Schmidt 1964; later cf. Tourovetz 1989.

and Schmidt, to which he himself belongs, and that of Margueron, Castel, Braemer and Aurenche, to whom he owes much.<sup>179</sup> The scholar gives ample space to ethnographic parallels, 180 but makes good use of them, a use complementary to the internal study of the archaeological evidence which makes up the greater part of the volume: a study of the materials and technical architectural aspects, 'life' of the building (change of use, restoration, destruction), a study of the areas of activity and working installations and tools (pottery, grindstones, etc.), all to culminate in the study of the *oikos* from the economic, social (relations with the extended and nuclear family), and architectural viewpoints. Perhaps the aspect most deficient is that of fitting the house into the urban fabric, and, in parallel, of fitting the *oikos* into the overall urban system.

Whereas Pfälzner's position is one of attention to the French school, a sharp closure comes from Peter Miglus who in a lengthy review of Castel's books<sup>181</sup> exposes in them a certain carelessness and imprecision both in the definition of criteria and in their application, by setting out, in contrast, a formal typology more articulated as a necessary instrument for obtaining definite results. Miglus' critical attitude is understandable, considering that he himself was working on a study largely coinciding with Castel's, a study which was published a few years later. 182 This is, in effect, a fundamental work, which analyses the Mesopotamian dwellings between the beginning of the second millennium and the middle of the first, establishing an elaborate typology (with the dwelling gravitating rather to a central hall than an open courtyard), and applying it to various periods considered in diachronic sequence. Faithful to the German tradition, Miglus dedicates his attention mainly to the formal aspects of the ground plan, and to the technical aspects of the construction. The function of the rooms is deduced from the ground plan, without attention either to the finds contained in them or to the possible ethno-archaeological parallels. Thinking of the principles of the French school, it could be said that the 'life' of the building is absent here. 183

But Miglus' polemic does not have 'national' limits, since his evaluation of the work of Heinz, whose aim is to draw socio-economic and political relationships from the urbanistic structure, is equally severe: 184 the adoption of models

**<sup>179</sup>** Pfälzner 2001, pp. 3–4.

<sup>180</sup> Ibid. pp. 12-14, 71-100 and passim.

<sup>181</sup> Miglus 1994.

**<sup>182</sup>** Miglus 1999; cf. also id. 1994; 1996a.

<sup>183</sup> The functional analysis is clearly there in the work of Pucci 2008, although developed in a German context.

<sup>184</sup> Miglus 2000, in relation to Heinz 1997a (cf. also ead. 1997b).

and theories of neo-archaeological and post-processual origin, considered devoid of a concrete comparison with reality, is clearly considered more serious in that it was carried out within the German archaeological tradition. 185 Miglus holds a strong hand in criticizing Heinz' carelessness and 'pioneering' presumption, and the limitation of the analysis (which was meant to be a guide to the whole Mesopotamian development) to a few Bronze Age sites of the Middle Euphrates. Dittmar Machule's terrible and very detailed review of Heinz' work<sup>186</sup> also appears irritated by the willingness of his young colleague to break with tradition, to identify innovative viewpoints, using, however, repetitive and inaccurate language, without logical rigour, without precise methodological suggestions, with sociological models not well understood, producing in substance an over-ambitious and presumptuous piece of work. I would say on the other hand, as a dispassionate judgement, that Heinz' methodological outline and aims are valuable, whereas the variables identified (population, space, size, density, distance) seem too generic to be able to make sense of the concrete specific historical qualities, and also the 'levels' of identified planning (categories I/II/III) appear somewhat debatable.

Polemics aside, Miglus had worked mainly at Assur and on Assur, 187 in the context of the revival of the project of a new excavation and publication of the old excavations, 188 and in this sense we note his formidable final edition of the dwelling houses of Assur, 189 as well as the entry 'Palast' in the Reallexikon der Assyriologie. 190 One of the recurrent problems for the German school (from the time of Heinrich) is the identification of the central space, both in the ordinary dwelling houses and in the great public buildings, as a covered room or as a courtyard<sup>191</sup> - a doubt which is born from the habit of working more from ground plans (which is inevitable for the buildings excavated in times by now distant) than in the concrete reality of the excavation's workplace. Even the typology set up by Novák for the houses of Nuzi, and the ensuing formal analyses, fully enters into the established German tradition (Agglutinat/Mittelsaalhaus/Hofhaus/Hürdenhaus).192

<sup>185</sup> The criticism also took in Bernbeck's work. Heinz was in any case inspired by the (German) sociology of Friedrich 1977; 1995; (ed.) 1988.

<sup>186</sup> Machule 1998; on the relationship between trends of urban planning and study of the Ancient Near-Eastern city cf. id. 1997. Machule is the excavator of Tell Mumbaga (id. 1990).

<sup>187</sup> Cf. Miglus 1982 (gates in the city walls); 1989 (Middle-Assyrian palace); 1996b and 1997 (houses).

<sup>188</sup> Assur project: cf. Pedde 2008; Lundström 2008.

**<sup>189</sup>** Miglus 1996a.

<sup>190</sup> Miglus et al. 2003-5.

<sup>191</sup> Also Schmid 1992 (on the palaces).

<sup>192</sup> Novák 1994. Cf. Dohmann-Pfälzner and Pfälzner 1996 (residential quarters of Tell Chuera).



Fig. 41: Boğazköi, ground plan of the site.

Outside Mesopotamia we should at least notice that at Boğazköi, the long and commendable direction of the prehistorian Kurt Bittel, was succeeded (in 1978) by that of the architect Peter Neve, who concentrated a new interest in the excavation on the study of the structures (above all of the 'Upper City' with its innumerable temples and system of city walls), producing from it an impressive edition from the architectural viewpoint (even if less accurate in stratigraphical details), and also producing a new topographical plan of the site [fig. 41]. <sup>193</sup> The following direction, of Jürgen Seeher (from 1994 to 2005),

**<sup>193</sup>** Neve 1982 (old excavations of Büyükkale); 1999 and 2001 (new excavations of the Upper City); summary Neve 1993.

is also characterized by an important topographical-architectural emphasis, with the decision to excavate zones devoid of emerging pieces of evidence, so presumably not monumental, with the aim of recovering a more complete image of the ancient city. The town planning history of the site has thus been made more coherent, through the great expansion of the thirteenth century to the final collapse (through being abandoned rather than through destruction, as generally believed). 194

The German preference for history over anthropology, and for architectural form over human activity distinguishes that school from the American on the one hand, and from the French on the other; and we have already seen how such a preference is also revealed in the recourse to indications provided by the (contemporary) texts rather than ethnographic parallels. But enough here to recall the activity and experiences of a Hans Nissen or a Reinhard Bernbeck, and of their commuting between Berlin and Chicago (or New York) to recognize that not everything can fall within a single monolithic school.

## 5.7 The crisis of the palace

The discovery of the first palaces of the Ancient Near East (those of the Assyrian capitals at Nineveh and Khorsabad) had occurred when in many European countries palaces and royal residences were fully functional - from Schönbrunn to Sans-Souci, from Windsor to Versailles, not to mention the Ottoman palace of Topkapı, which acted as an obvious model for the pictorial reconstructions of the Assyrian palaces. In the nineteenth-century reconstructions it is clearly the model for the royal palaces of the period; the enormous rooms are decorated and multi-coloured over every wall, but empty of furniture, and are largely occupied by small groups of functionaries (bearded or eunuchs, represented as such from the sculptured decoration) splendidly dressed and busy doing absolutely nothing. The palace is seen as a place of procession, of ceremonial presence, of display of a power and wealth that had no need of any physical activity – productive in particular – to perpetuate themselves and carry out their functions.

After the Great War and the end of *la belle époque*, the European palaces ceased to be used, and the study of Near-Eastern palaces also changed and was made more solid. On the one hand the functional study of the architecture led to an analysis (and to a 'disassemblage') of the palace building according to its specific activities: residential apartments, ceremonial display, administrative sector, storerooms and archives. On the other hand the study of the economy identified in the palace the prime mover and centre of much of the economic activity. The phrase 'palace economy' began to be used to sum up those societies in which much of productive activity depended on the palace (even if physically spread throughout the territory), and in which a significant part of the activity of transformation and exchange was also in practice conducted in the palace itself. In the 1960s, palace and temple, the two 'great organizations' of Leo Oppenheim, monopolized whatever was occurring of significance and drive in the world of Ancient Near-Eastern study. If in modern Italian, and other languages, the 'palace' is a metaphor representing the power of the state (§ 4.3), in the world of the Ancient Near East it was not just a metaphor but a factual reality.

Such a vision progressively entered into crisis from the 1970s and we can recall as emblematic the polemic between the younger Norman Yoffee<sup>195</sup> and the older F. R. Kraus.<sup>196</sup> To the former, who spoke of 'goods of the crown' the latter objected that such an expression was anachronistic and useless, because the ancient texts spoke explicitly of *Palast* – and the youthful hilarity towards the ancients who spoke German was ungenerous because the Sumerian term é-gal and Akkadian term ēkallum designate precisely the palace, both as a building and as an agency, also economic. I cannot say if and how the Assyriological world then became conscious that the debate was not just terminological: speaking of 'crown' actually scaled down the palace sector, from being the pivot of the system to a simple personal patrimony - important but always limited – pertaining to the person of the king, a sort of feudal privilege more than the supporting structure of the city or state. And with the advent of parliamentary democracy, the patrimony of the king, however visible it could be, becomes private property, of one who is the king.

The anti-state trends took on vigour from the mid 1970s, when Pierre Clastres' paper on 'La société contre l'état'197 can be argued to be the 'foundation chart' of the new approach. As far as the Mesopotamian city goes, the crisis of the role of the state means in practice a crisis of the 'great organizations' (in Leo Oppenheim's sense): the temple and the palace. The two symposiums organized by André Finet on the role of the opposition and its local power (al-

<sup>195</sup> Yoffee 1977, pp. 4-6; 'ekallum ('Palast') may most usefully be translated, "of, or pertaining to, the crown's administration" or simply "crown".

<sup>196</sup> Kraus 1958, pp. 98-106 (Chap. 7: 'The affairs of the "Palace" in the documents'); 1979, pp. 423-434; 1984, p. 317 and passim.

<sup>197</sup> Clastres 1974.

ready seen at § 5.4) can be seen as elements of a premature introduction of anti-state elements, but from then, the process of scaling down the palace made great strides, and by now the palace is no more than a mere tessera of a complex system, in which the aim is rather to find the weight of the non-palace components, both those of traditional stamp and of tribal, family, or village environment, and of strong entrepreneurial character based upon personal initiative and search for profit (§ 5.10). While the role of the communal bodies and community spaces stands firm, and above all a strong tendency persists to see the Ancient Near-Eastern royal power as polluted by 'patrimonialist' behaviour, that is, one of patronage, based upon a personal relation between lord and servant or patron, more than institutional, <sup>198</sup> the fact is, however, that when a concrete description is then wanted, of both the town-planning aspect and the economic structure of the Mesopotamian city, the central role of the palace cannot but be recognized – both in a structural sense and in the sense of its visibility.<sup>199</sup> And even the anthropologist Flannery recognized in the presence of the palace the distinctive trait between chiefdom and state.<sup>200</sup>

These critical trends did not, however, displace the central focus of Assyriological evaluation. Certain symposia in the 1970s, on 'Palace and kingship' 201 and on 'State economy', 202 were not yet touched by the new trends, and even the contributions of the two decades spanning the start of the new millennium fully reaffirm the central place of the palace. Enough to look at the book edited by Nielsen, on the examples of Babylonia, Nineveh, and the Achaemenid capitals;<sup>203</sup> or the more recent symposium of the Lincei Academy on the palace economy;<sup>204</sup> or the in-depth analysis (particularly from the town planning viewpoint) provided by Mirko Novák on the palace cities (Residenzstadt)

<sup>198</sup> In the sense of Eisenstadt 1973; id. and Roniger 1987; cf. § 6.6.

<sup>199</sup> See Sallaberger 2007 for one summary; also Roaf 1995 concentrates on temple and palace, with few lines on the dwelling houses.

**<sup>200</sup>** Flannery 1998b, pp. 21–36 (palace), 36–45 (temple).

<sup>201</sup> Garelli (ed.) 1974. The contributions more often concerned royalty than the palace, but cf. those of Margueron (theoretical/general), Güterbock (Hittite palace), Liverani (Ugarit), and Klengel (Alalakh).

<sup>202</sup> Lipinski (ed.) 1979, with contributions from Limet (neo-Sumerian), Kraus (Old Babylonian), Klengel (Alalakh), Heltzer (Ugarit), Dandamayev (neo-Babylonian), all convinced of the central position of the palace and temple, not yet touched by the neo-liberalistic criticisms, apart from Renger who talks of interaction among the three sectors.

<sup>203</sup> Nilsen (ed.) 2001, with contributions from Kuhrt, Lumsden, Stronach and Bouchalat. Cf. also Dittmann 1999.

<sup>204</sup> Godart (ed.) 2005, with the contributions of Matthiae (Ebla), Margueron (Mari), Liverani (Ugarit).

throughout Mesopotamian history until the arrival of Islam<sup>205</sup> – which remains today the most detailed description and evaluation of the position and function of the palace in the context of the Ancient Near-Eastern city. Then follows the entry on 'Palast' in the Reallexicon der Assyriologie, which in its most unusual length (a hundred pages) is the best possible witness to the permanence of the central nature of the palace in the perception of Assyriologists, <sup>206</sup> not to mention then the numerous presentations of the royal palaces of individual localities.<sup>207</sup> In other words, the real crisis of the palace is to do with its economic role, which the neo-liberalism of the end of the millennium downgraded to the rank of one oikos among many, or of one entrepreneur among many, greater indeed than the others but without a real structural and qualitative difference (we shall see this at § 5.10 and § 6.6). For me it remains rather paradoxical to note how this downgrading of the economic role can go hand in hand with the unalterable pre-eminence of its political and town planning role, almost as if there ought not to exist a powerful interconnection among the various aspects. And even diachronically, if the 'late' phase (neo-Assyrian and neo-Babylonian) sees an accentuation of the role of the private entrepreneurs and of patrimonialism, it is in this same phase that the palace (and in general the royal contribution to the outline of the city as a whole) assumes its most vigorous architectural development.

Over and above the philologists' insistence on economic and administrative aspects of the palace, the insistence of art historians on the palace as a 'message of power', or even as a captivating 'show' for the subjects (and deterrent for visitors), best exemplified by the neo-Assyrian palace, and that of Sennacherib in particular, took shape in the years 1980–90.<sup>208</sup> Above all the school of Irene Winter has been and still is productive in this sense, developing in an art-historical and semiological sense points for discussion whose roots had already been put in a different way from the time of Andrae. One comment, however, recalls the 'anomalous' essay of Clifford M. McCormick, <sup>209</sup> who starts

**<sup>205</sup>** Novák 1999; more briefly *id*. 1997.

<sup>206</sup> Postgate et al. 2003–5 (philological part); Miglus et al. 2003–5 (archaeological part); and then Renger 2003-5 (palace economy).

<sup>207</sup> Above all Durand 1987: an accurate analysis of the texts on the palace of Mari, and a comparison with the archaeological data. Also summaries such as Sallaberger 2007. And see the picture able to be drawn from the Sumerian texts (Bruschweiler 1983; Verderame 2011) on the city as seat of gods and king, protected place, quality of life, etc.

<sup>208</sup> Earlier Reade 1979; 1980; then above all Winter 1981; 1993; Russell 1991, pp. 241-262; 1998; Porter 2000.

<sup>209</sup> McCormick 2002.

from the 'built environment studies' type of approach<sup>210</sup> for studying the relationship between the shape of the building, its functions/activities, the selfperception of those who live (or work) there, and the message communicated to the outside, which in the case of the palace is a message of power. But then, wanting to compare the palace of Sennacherib with that (in any case imaginary) of Solomon, he suggests too specifically that they both mean to communicate the importance of the religious reforms undertaken by the respective sovereigns: but the link between the description of the palace of Solomon and the reforms of Joshua is very risky, and the presumed reform of Sennacherib is in any case later than the construction of the palace.

# 5.8 The crisis of the temple

The crisis of the temple differs in its reasons from that of the palace and had greater significance and effect. It began with the crisis of the 'temple-city' as inherited from Deimel, Schneider and Falkenstein (cf. § 2.9). Diakonoff's demonstration was essential, that the model of a temple that owns and manages all the cultivated land, and on which the whole population depends, is based upon erroneous calculations, and is contradicted by the documentary data, which show the presence of lands of the local communities, of family ownership (possibly even undivided ownership of extended families, but on that not everyone agrees).211 Shortly afterwards Ignace Gelb also came to a similar conclusion.212 And subsequently other scholars were to subscribe to this downscaling of the temple's economic role.<sup>213</sup> The most complete summary was given by Benjamin Foster,214 who scales down both temple ownership (against Deimel), for reasons already mentioned, and the irrigation factor (against Wittfogel), due to the secondary nature of the system of canals (Adams), which arrives, at least at a regional level, after centuries of despotism already in force. It is clear how tightly connected were the role of the temple and the role of irrigation in the 'totalizing' model of the mid-twentieth century. But even con-

<sup>210</sup> An approach suggested by Rapoport 1982; applied by Blanton 1994 to the private houses.

**<sup>211</sup>** Diakonoff 1954; 1972; 1982; cf. § 3.3.

<sup>212</sup> Gelb 1969; 1972; 1979.

<sup>213</sup> Postgate 1972; Huot 1990b; Yoffee 1995; Glassner 2000, pp. 40-43; recently Gibson 2010 (too extreme). Postgate 1992, pp. 109-136, while dismissing the model of the 'temple-city', recognizes its central position, especially for the phases of first urbanization; cf. also Manzanilla 1987.

<sup>214</sup> Foster 1981; 2005.

sidering the down-scaling by now accepted, I do, however, allow myself to 'salvage' the label of the Sumerian city as a 'temple-city', since the temple, or rather the various city temples, always constituted the principal economic agencies and the principal landowners, and between their direct activity and the various collateral results constituted the principal point of reference for the whole city: if seventeenth-century Venice can be labelled as a 'trading city' or nineteenth-century Manchester as an 'industrial city', then Sumerian Lagash can still be labelled as a 'temple-city'. 215 McGuire Gibson also, although he accepts Diakonoff's and Gelb's criticism of the temple-city model, and adopts Oppenheim's tri-partition (temple – palace – private sector), does, however, see the city developing from the nucleus of the 'temple manor'. 216 And Janos Makkay's observation seems to me sharp, that in a mixed system of land ownership, 'private' ownership does not provide the outcome of a 'social' surplus, whereas temple ownership does (in other words: the community strategy is that of the Neolithic village, and the temple strategy is that which generates the urban structure).<sup>217</sup> With particular reference to the ownership and administration of agricultural land in the Umma region at the time of the Third Ur Dynasty (the peak of state intervention, according to current opinion), a recent estimate attributes c. 50 % of the land to state administration, 25 % to regional administration, and 25% to private owners, but with this last sector marginalized in less productive land and the managing system of irrigation controlled by the public sector.<sup>218</sup>

Philological criticism of the totalizing models of both the 'temple-city' and 'despotic city' belongs to the years 1960-70, and still fits in with the vision of a compact and centralized city;<sup>219</sup> but of a completely different tone is the postmodern trend to defragment the city and its central components. In the first place the temple character of a whole series of great buildings is thrown into doubt, largely on the part of Jean-Daniel Forest: the great buildings of the 'Ubaid phase are not temples but places of ceremonial reunion;<sup>220</sup> of the complex of proto-historic Uruk the two buildings called Riemchengebäude and Steingebäude by the German excavators are salvaged as temples, while the

<sup>215</sup> Liverani 1998a, pp. 87-91; 2005c, p. 50; the position of Maekawa 1973-74; 1999, is similar.

<sup>216</sup> Gibson 1976.

<sup>217</sup> Makkay 1983.

<sup>218</sup> Studevent and Hickman 2008 (based on Steinkeller 2007 and other research being undertaken by the same author).

<sup>219</sup> An extreme criticism would seek to limit the true 'temple-city' to an ephemeral invention of Urukagina; so Nissen 1982; Maekawa 1999.

<sup>220</sup> Forest 1987; 1996a, pp. 105-108.

others are too accessible to be temples.<sup>221</sup> Still in the proto-dynastic age, the oval buildings of Khafaja and Tell el-'Ubaid are certainly temples, in that they are closed (within the encircling wall), raised high, and not accessible, whereas the other buildings published as temples but set in the urban fabric and easily accessible to the public (such as those of Sin and Nintu at Khafaja, and that of Abu at Tell Asmar) are now considered secular buildings.<sup>222</sup>

In this way great complexes rather more 'palatine' than 'templar' take shape,<sup>223</sup> but their reason for existence is not, in Forest's view, administrative, or managerial, but rather as places of more or less occasional reunion – 'nonplaces' as Marc Augé would say (cf. § 6.7). The temple, though it appears repeatedly in the administrative texts, is a 'fiction': by this Forest means that it is not a question of a building, but of an agency and administrative institution.<sup>224</sup> It remains perplexing (and I am not alone) to imagine a city that uses huge resources to build non-places and leaves the major political-economic agencies without a seat of operations; and also to understand how the texts use the same word to indicate both the house of the god and the administrative control of his property, if the buildings are then different and separate; and again, how the population comes together (in monumental buildings) for unspecified social occasions, but not to assist at and participate in the great religious feasts, with the temples that remain inaccessible, and with their great courtyards to all appearances disconsolately empty.

A very similar position had been taken by Olivier Aurenche,<sup>225</sup> who, a few years before, in studying the 'buildings of prestige' of the 'Ubaid period at Uruk, commonly defined as 'temples', suggested two alternative solutions: either 'a meeting place for the whole village population, to discuss the affairs of the community' (an idea clearly inspired by Jacobsen's 'primitive democracy'), or 'the house of the chief of the community'. Both suggestions seem unacceptable to me: in the historical age the citizen assembly is known not to have a dedicated and constructed place, whereas the temples do have; and the 'house of the chief' develops as the palace, which, being a dwelling house (albeit abnormal), has an altogether different structure and fittings.

It is noticeable how the application of the new theories to the Neolithic ('Ubaid) and proto-historic (Uruk) periods, if on the one hand understandable

<sup>221</sup> Forest 1996a, pp. 133-139.

<sup>222</sup> Forest 1996a, pp. 176-195; 1996b; also 1999.

<sup>223</sup> The definition of 'palace complex' (rather than temple) for Arslantepe of the Uruk age is habitual on the part of Frangipane 1997b; 2000; 2001; 2004; ead. (ed.) 2010, passim. Also Bretschneider 2005 (on Arslantepe, Hassek Hüyük and Gawra XIII).

<sup>224</sup> Forest 1996a, pp. 231-235.

<sup>225</sup> Aurenche 1982.

given the prehistoric competence of its proponents (and application to historical periods, where the theories are clearly contradicted by the written evidence, would be really very hard!), on the other has serious implications for the formative process of the city, implications which the proponents have not, however, developed in an explicit way. The Childean model (and more generally Marxist, but not only such) put the problem of how the decided increase, with the gathering of the surplus necessary to the urban take-off, could be accepted willingly by the farmers in the villages (producers of food), and had suggested that the role of the temple allows precisely this difficulty to be overcome, mobilizing the population in the interests of maintaining a positive relation with the divinity. And in effect the first urbanization, the innovative one compared to the system, not yet urban, which preceded it, was characterized by temple leadership, whereas the second (and then the others following) had palace leadership. This all collapses with the denial of the temple nature of the great buildings of the Eanna district of Uruk [fig. 42] - at least if the buildings of Uruk are not redefined (as McGuire Gibson does) as true palaces, residences of true kings, abolishing the state of chiefdom and making the formation of the state date back to the 'Ubaid period.<sup>226</sup>

A primitivist emphasis is also notable, of communities that assemble according to the clear model of societies at an ethnographic level, with only their storehouses larger than their family dwellings - an emphasis which denies a proto-urban society engaged in setting up an administration (with writing and archives), a system of taxation, military defence, territorial control, and whatever else. Denying the temple character of these buildings is essentially to deny the urban revolution, and the urban character of a centre such as Uruk, taken down to the level of a Polynesian chiefdom.

Even among those who do not deny the central position of the temple, the idea has made strides that temple control of agricultural lands should not be seen as a system of economic exploitation, but as a more efficient way of promoting the wellbeing of all.227 If the Marxist insistence on a relationship of exploitation is ideologically marked, equally marked, in a contrary sense, is the neo-capitalist insistence.

But for the properly historical periods, analyses directly conducted on textual evidence are agreed in recognizing in the economic functions of the temple a central role in a city context, and in its ritual function a character firmly structured according to daily and seasonal rhythms. Enough to see the studies

<sup>226</sup> Gibson 2010.

<sup>227</sup> Stone 2007, pp. 224-225.

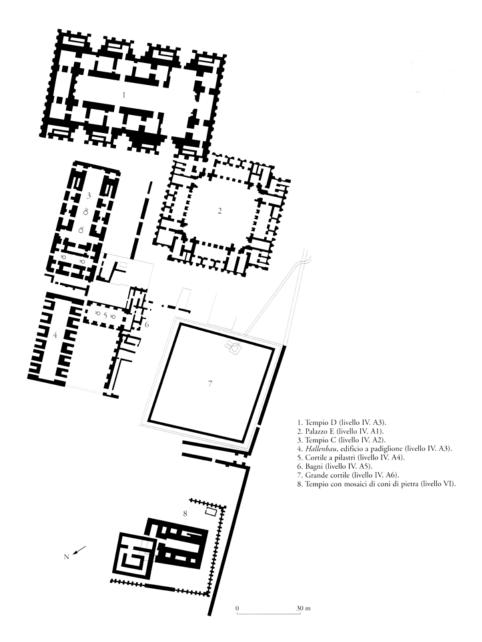


Fig. 42: The Eanna temple complex of Uruk.

on Ebabbar of Sippar,<sup>228</sup> or on Ekur and on the temple of Inanna of Nippur,<sup>229</sup> or the complete appraisal of cities such as Ur or Larsa,230 or the frequent comprehensive presentations,<sup>231</sup> to notice how the central nature of the temple maintains all its reality, even if justly downscaled and placed in a more articulated system.<sup>232</sup> Not to mention the spectacular presence of the temple buildings in the Hittite capital,<sup>233</sup> or the economic role and monumental visibility of the Egyptian temple,<sup>234</sup> which does not seem touched by the downscaling going on.

## 5.9 City-state and state-city

Aristotle (Politics 2. p. 1272b.24 ff.) in describing various examples of constitutions of the Greek *poleis*, included the case of Carthage (the Phoenician-Punic metropolis) as no more foreign to the Greek model than the cases of Sparta and Crete, and portrayed it according to the classical scheme of the 'mixed constitution', based on different measures of monarchic, aristocratic and democratic elements. So the Phoenician exception was already then beginning to make cracks in the distinction between Greek cities and eastern empires, and we have seen how the question was revived in the nineteenth century by Burckhardt and others. In the judgement of cultivated people of that time and still afterwards for as long as humanist culture remained founded upon the classics – the expression 'city-state' was a modernization of the Greek polis, and could not normally be given (exceptions apart) to eastern cities. Santo Mazzarino (though favourable to the Phoenician 'exception', cf. § 1.5) reserved the term of city-state for the Greeks, speaking of state-city for the East. The fact is that even in the East (and in the whole world) there existed states whose size was based on a city with its surrounding country, and it was necessary somehow to give them a label and contrast them with the 'territorial states' and 'empires'.

But towards the end of the twentieth century, with the certainty of the traditional classification into the city-state (western) and the palace kingdom

<sup>228</sup> Jursa 1995; Bongenaar 1997.

<sup>229</sup> Zettler 1987; 1992; Robertson 1992; Sallaberger 1997; and the excavation reports of McCown and Haines 1967; 1978.

<sup>230</sup> Huot 1990c; Weadock 1975; Charpin 1986; Tunca 1986.

<sup>231</sup> Charpin 1982 (merchants of the time); 2011 (legal, economic, and cult functions).

<sup>232</sup> Balanced summary by Robertson 1995 (also id. 1984); Roaf 1995.

<sup>233</sup> Neve 1993; also Klengel 1975; 1990; Archi 1989-90.

<sup>234</sup> Kemp 1972a; Janssen 1979; Routledge 1997.

(Near-Eastern) losing ground, and also with the growing crisis of the old monopoly of classical culture, the idea gained sway of reformulating the classification, extending the sampling to the whole world. In this way states (archaic or modern) made up of a city with its rural territory were found to be spread throughout the world, so as to lose any status of 'value'. In 1981 Griffeth and Thomas began to collect and compare salient cases on a world scale.<sup>235</sup> And also, an article of Blahoslav Hruška on Ur applied to it the term of 'city-state', even breaking down the process chronologically, with the city already emerging from the agrarian-pastoral economy in the Jamdet Nasr and Early Dynastic I phases, while the state then emerges in the Early Dynastic II and III periods (our 'second' urbanization).<sup>236</sup>

Nichols and Charlton were then, in 1997, to underscore the changed use of the term 'city-state', from the classical consensus with the specific nature of 'democratic' government (and so not applicable to Near-Eastern cities), to the modern use that includes city kingdoms (and principalities), which indeed constitute the more frequent cases, and which, given their restricted size, form 'systems' of a regional dimension.<sup>237</sup> At the same time a consciousness grew that the Greek case was largely the Athenian case (by no means the norm in the Greek world) and that even this had been a good deal watered down, having in reality little 'equality' and a very selective citizenship.<sup>238</sup> The Mesopotamian contribution to the book, entrusted to Elizabeth Stone, is truly quite bizarre, in taking the case of the Yoruba (southern Nigeria, pre-colonial period) as a model of a city-state, but at the same time seeking to show (against the actual trend, and turning again to the positions of Oppenheim and Jacobsen) that the Mesopotamian city-states were altogether close to the classical Greek model.<sup>239</sup> Two years later Stone then insists on the Yoruba model as an instrument for understanding what a Mesopotamian city-state was, with the justification that its characteristics are 'better known',240 characteristics that in Mesopotamia are neither documented nor really plausible.

<sup>235</sup> Griffeth and Thomas (eds.) 1981. See also Andrews 1995.

<sup>236</sup> Hruška 1989. Cardascia 1955 had already stated, p. 51: 'The cities of the patesi were city-

<sup>237</sup> Charlton and Nichols 1997, p. 1: 'In general we understand city-states to be small, territorially based, politically independent state systems, characterized by a capital city or town, with an economically and socially integrated adjacent hinterland'; Yoffee 1997b, in the conclusions to this book, also takes up this aspect.

<sup>238</sup> Morris 1997.

<sup>239</sup> Stone 1997, p. 25: 'The hallmarks of the Greek polis - citizenship, egalitarianism, and consensus - were also features of ancient Mesopotamian city-states'.

<sup>240</sup> Stone 1999. It was Trigger 1993 who assigned to the Yoruba the role of primary case; cf. now Peel 2000.

With, therefore, the antithesis between democratic polis and despotic eastern kingdom dismissed, the fundamental and completely objective distinction remains between the state-city and the territorial state, including a plurality of little cities and villages.<sup>241</sup> To some extent a similar distinction had already been introduced into Ancient Near-Eastern studies from the 1960s, in Giorgio Buccellati's book on city and nation in pre-classical Syria: his 'national state' is that of tribal origin, based upon the kinship factor, whereas his 'territorial state', based upon the spatial factor, is fundamentally the city-state, with its possible accumulations, expansions and sub-divisions.<sup>242</sup> The book remains, however, forgotten in the new debate.<sup>243</sup>

But the more ambitious and influential project was that directed by Mogens Herman Hansen at Copenhagen, who started from the analysis of the Greek polis in a series of books. In the first 244 he began from Aristotle's definition and suggested 'citizen-state' as a more correct term for 'city-state', rebutting the objections which were already circulating (that not all the poleis were centred on a city, that the polis was not a state), without at all hinting at the extension of the concept to the rest of the world. The second volume<sup>245</sup> also only deals with the Greek *polis*, but from the chapters as a whole a somewhat diversified picture is drawn (similar to that of Nichols and Charlton, published in the same year) and in the dense introduction Athens is recognized as being not the norm but a singular case.<sup>246</sup> Finally, the third volume, dedicated to a semantic analysis of the word polis and the modern terms for 'city' and 'state', still only looks at and talks of Greece.<sup>247</sup>

But the change (and the more complete result of the project) comes with the volume published in 2000, which presents a 'sampling' of forty complexes ('cultures') of city-states, distributed throughout the world and in all historical periods.<sup>248</sup> Hansen proceeds systematically in the introduction: first defining what a city is (on the basis of Childe's ten points, partly revised and adapted),

**<sup>241</sup>** Largely Trigger 1993; 2003; 2008, pp. 56–58; also Stone 1999, and others.

<sup>242</sup> Buccellati 1967.

<sup>243</sup> It is never cited in Hansen (ed.) 2000, neither in the general chapters not in those on Syria.

<sup>244</sup> Hansen 1993.

**<sup>245</sup>** Hansen (ed.) 1997.

<sup>246</sup> Hansen 1997, pp. 9-10.

<sup>247</sup> Hansen 1998.

<sup>248</sup> Hansen (ed.) 2000 (introduction pp. 11-34, conclusions pp. 597-623). Toynbee 1970 had distinguished four types of city-state: Sumerian-Akkadian, Phoenician-Philistine, Greek-Etruscan-Italian, and medieval European. Hansen's sampling was much wider and less Eurocentric.

then what the connection is between city and state (on the basis of the neoevolutionists), next what a city-state is (in the trivialized sense defined above), then what a 'culture' organized in a city-state is (on the basis of Renfrew's 'peer polity interaction'), and finally what the relationship is between urbanization and formation of states, and what the difference is between city-state and territorial state (or rather: macro-state). In the conclusion Hansen retraces the history of research with some allusions (but no more than that) to the problems that to me, on the contrary, appear essential (in a history of the question) – of East vs. West, of city vs. non-city, and so on. The trivialized use of the term 'culture' also requires some comment. The trivialization is not only Hansen's – other authors use instead the term 'civilization' with the same recognition of an ethnic-political complex articulated in a city-state or some other form. Once, 'civilization' was a stage, the highest stage of humanity's cultural progress, passing from the savage stage to the barbarian stage to that of civilization. Now, in contrast, it has become a regional complex, of whatever level it may be; in this case also the extension of the term implies a renunciation of its nature, a semantic (or at least connotative) impoverishment. But the use of the concepts of 'cultures' and 'civilizations' in the plural, to indicate historicalcultural complexes, has a long history (whose roots were already there in the 'cultural cycles' of German ethnography, then to pass through authors such as Oswald Spengler and Arnold Toynbee), which it is not possible to discuss here.<sup>249</sup>

Among the contributors to the volume, only Jean-Jacques Glassner seems attached, in principle, to the implicit mental equation of city-state = polis and is therefore, at least initially, sceptical of the extended and trivialized use of the term; then, however, even he describes the Sumerian cities as city-states, according to the model suggested.<sup>250</sup> In the rest of the book, limiting ourselves here to the Ancient Near East, there is obviously much on the Levant, with Bronze Age Syria and Palestine (on an archaeological basis), and the Iron Age Phoenicians and Philistines,<sup>251</sup> but without recalling the past records of the Phoenicians as 'complementary Greeks'. But then why not also the Anatolian pre-Hittite states, or the neo-Hittite or the Aramaic? For Mesopotamia, over and above the Sumerian cities discussed by Glassner, there is the emblematic case of Assur, but then why not the Early Babylonian states? Further on a case is made for the cities of the first neo-Babylonian period (before unification under

<sup>249</sup> I limit myself to referring to Rossi 2012, pp. 374–395.

<sup>250</sup> Glassner 2000.

<sup>251</sup> Chapters by Thuesen; Strange; Niemeyer.

the Chaldean dynasty)<sup>252</sup> as an example of a 'city-state culture' that emerges from the disintegration of a preceding territorial state. With a true inventory of state formations of the type that I call 'cantonal', that is, centred on a city with its rural surroundings, the list would grow greatly. The barrier has been placed according to 'cultures' that adopt the model of the territorial macro-state. For example, Egypt, which is clearly visible as a unitary state throughout its long history, is not included (and China is only there for the 'spring and autumn' phases, while before and after is considered a territorial state). But consider the role of the city and the level of unification in the Egyptian and Mesopotamian cases: Egypt also has its 'intermediate periods' of fragmentation (with the *nomes* classifiable as city-states: why not?), and Mesopotamia also has its periods of macro-state unification. Regarded closely, the difference is only one of degree, and indeed largely of different historiographic emphasis. Some additional cases (evidently to take account of criticisms and comments) were published two years later, with two chapters on the Sumerian and neo-Hittite cities.<sup>253</sup> After which the project went back to concentrating on the Greek polis:<sup>254</sup> and so closes the project, in which the 'world' catalogue was basically only an episode - the classical tradition has in the end prevailed.

## 5.10 The neo-liberalist model: market and entrepreneurs

The rediscovery and then the study of the ancient Mesopotamian cities happened at the hands of individuals and institutions of the Euro-American West, from a largely liberal and capitalist background, and so it is not surprising that the question was asked of the role of entrepreneurial activity, and in particular of mercantile activity, in the origins and then the management of the city. To simplify as much as possible, it can be said that the Western attitude went through two distinct and indeed opposing stages. A first phase stressed the difference: we (in the West) are the bearers of the values of liberty and enterprise, whereas the Ancient Near East (and also the modern) bears the antivalues of slavery and despotic direction. This attitude of antithesis prevails as long as the anti-model had a precise, and contemporary, political identification, and so a potential and real competitiveness: an anti-model represented first by the Ottoman Empire, and then (after the Great War) by the Soviet Union (with China still in the distance). By contrast, after the fall of the Berlin Wall

<sup>252</sup> Chapters by Larsen on Assur and the neo-Babylonian cities.

<sup>253</sup> Hansen (ed.) 2002; chapters by Westenholz and Thuesen.

<sup>254</sup> Hansen (ed.) 2005 (literary and philosophical sources); 2006.

(a symbolic event and date) and the 'end of history' (in Francis Fukuyama's sense)<sup>255</sup> through the definitive victory of capitalism, the western attitude was turned around, to the search for similarities rather than differences, and so in search of elements of trade and private economic enterprise in the ancient Mesopotamian cities.<sup>256</sup>

Should the occasion – singular but diagnostic – arise, the 'Pirenne model' on the origin of cities could be applied to the Ancient Near East. As is known, Pirenne considered as essential the role of trade and the market for the origin of the city in a precise and limited historical segment of mediaeval Europe;<sup>257</sup> but the claim (partly already his, but then even more of his successors) that this factor was at the base of the origin of the city in general, assigning to an individual case the value of a norm of character universal in time and space, did not find a welcome in an Assyriological context, and was indeed rejected by scholars of a more general competence. I cite, for example, Mumford: 'Since the early distribution of goods was in the hands of the temple, the modern notion that the market was the chief reason for the city's existence, at least at first, seems to have no foundation'; and again: 'it is the drawing power of the city that brings the trader, not the trader who creates the city'.258 Leo Oppenheim also, though he had at heart an image of the Mesopotamian city not dissimilar to a western (classical and mediaeval) city, thought of the market as a secondary development: 'In Mesopotamia it seems to represent a late development, stimulated by the extraordinary size of the cities, which led to the creation of supply markets', and he also stated that the activities of change entered into the sphere of the great organizations: 'industrial production ... was restricted in the ancient Near East to the great organizations ... The Mesopotamian city-dweller neither possessed nor desired to create a market for goods or objects that slaves could produce within his home'. 259 Even the craft guilds were originally contained in the great organizations, and only later assumed their independence (those of merchants already in the Old Babylonian period, those of other types of craftsmen in the neo-Babylonian age).<sup>260</sup> And Moses Finley too (who knew Oppenheim's work well, from the time when they had

<sup>255</sup> Fukuyama 1992.

<sup>256</sup> An analogous connection between the world scene and historiographic models in Morris and Manning 2005, pp. 19–22 (referring to the positions of Horden and Purcell 2000).

<sup>257</sup> Pirenne 1925; 1939.

<sup>258</sup> Mumford 1960a, p. 11; 1960b, pp. 236-237.

<sup>259</sup> Oppenheim 1977, pp. 129 and 76.

<sup>260</sup> Ibid, pp. 80-81. Cf. particularly Weisberg 1967 (artisans of ancient temple dependence demand exclusive contracts for the maintenance of the furnishings, but we are in the Persian period).

both taken part in Polanyi's symposium) expressed a similar position.<sup>261</sup> Even more extreme, in the middle of the 1950s, had been the legal historian Guillaume Cardascia, who had denied the existence of guilds (considering them categories of public dependents) even in a 'later' age.<sup>262</sup>

In the 1970s the debate concentrated upon Karl Polanyi's theory of 'administered trade' and above all on its inapplicability to the best documented case, which is that of Old Assyrian trade (cf. § 3.5),<sup>263</sup> and only made modest mention of the fundamental difficulty: how the centralized model had been conceived on the partial (in every sense) basis of the temple archives, and had then been scaled down through introducing data relative to local autonomies; and so, vice versa, the model of private traffic was supported on the (equally partial) basis of the merchants' archives alone, and perhaps would have a different balance if use had been made of data from the palace. In 1985 the economist Morris Silver exploited Polanyi's error to the full, constructing a mercantile Ancient Near East, on the single basis of data relative to trade, ignoring the data relative to production and redistribution.<sup>264</sup>

But it is with the 1990s that the neo-liberalist paradigm on the weight of the commercial and entrepreneurial factor in the origin and historical shape of the Mesopotamian city takes full form. Marvin Powell acted as the forerunner for neo-liberalist theories in the field of Assyriology:265 a strong supporter of the market, of private enterprise (with the 'capitalists' added to temple and palace as movers of the Mesopotamian economy), and of a modernist use of the concept of money.<sup>266</sup> The question of the money is diagnostic, and would benefit from at least a look back at Polanyi's good article on the 'semantics' of money,<sup>267</sup> which summarizes different functions (measure of value, means of payment, storing as treasure, etc.) that remain historically separate until the introduction of coined money with the backing of the state, which did not occur before the sixth century BC. Before then there were not only trade goods used for a measure of value (largely silver and barley), but likewise there were forms of credit, variable prices, loans at interest and such like. But to use casu-

**<sup>261</sup>** Finley 1985, pp. 28–29 and *passim*; comments of Morris and Manning 2005, pp. 12–14; and of Bedford 2005, pp. 59-62 on the relation of Polanyi/Oppenheim/Finley.

<sup>262</sup> Cardascia 1955.

<sup>263</sup> Dercksen 1999 and Veenhof 1999 discuss Early Assyrian trade as based on profit and credit.

<sup>264</sup> Silver 1985; cf. earlier at § 3.5.

<sup>265</sup> Cf. earlier Powell 1977; 1978.

<sup>266</sup> Powell 1990; 1996.

<sup>267</sup> Polanyi 1960b.

ally the terms 'money' and 'market' (not to mention 'bourse'268) serves only to provide an anachronistic image of an economy always the same, structurally the same then as today, without history and without variants. I have already mentioned elsewhere, 269 in a somewhat analogous case, the anachronistic use that Heichelheim made of the concept of 'primitive accumulation' to explain the take-off of the ancient city: not then as an accumulation of material goods (particularly foodstuffs) in the sense of Polanyi's 'staple finance', but really as a financial accumulation (through profit and loans at interest), which on the contrary is demonstrably secondary in Babylonia, well after the first urbanization.

The other great 'sponsor' of neo-liberalism was Michael Hudson, an 'outsider' in the field (as a modern economic historian at the University of New York), who organized a series of colloquia on the subject of 'privatization' at the Peabody Museum of Harvard.<sup>270</sup> In the first colloquium Hudson sets out the general nature of the problem: privatization is a process, certainly ancient (already present in the Sumerian world of the third millennium) but not primal, which starts from original family/community ownership, initially weakened by the emergence of the great institutions; and it is inside the institution of the palace that private ownership of land and private enterprise (above all commercial and financial) then appear.<sup>271</sup> Coming then more specifically to the question of the Mesopotamian case, Hudson identifies different routes of privatization: appropriation of land on the part of the king, his granting of land to members of the palace circle, appropriation of lands and offices on the part of those functionaries responsible in time of political crisis, and finally the transfer of family lands under the pressure of necessity (impoverishment, debt). The general picture is well articulated, somewhat moderate and acceptable (even if dotted with many inexactitudes and misunderstandings typical of the 'outsider') as a 'mixed' system which evolved over time. But it is clear that the emphasis (compared to preceding studies, from which clearly Hudson draws his information) is not placed on the role of the great institutions nor on that of the family community, but instead squarely on privatization and entrepreneurship.<sup>272</sup>

**<sup>268</sup>** I am alluding to the work, not without merit, of Slotsky 1997; cf. now ead. and Wallenfels 2009. Cf. earlier Bogaert 1966.

**<sup>269</sup>** Liverani 1998, pp. 6–9 (on Heichelheim 1938).

<sup>270</sup> Hudson and Levine (eds.) 1996 (with the paper by Hudson 1996b); 1999; Hudson and van de Mieroop (eds.) 2002; Hudson and Wunsch (eds.) 2004.

<sup>271</sup> Hudson 1996a.

<sup>272</sup> For a neo-Marxist panorama of Mesopotamian land ownership cf. Brentjes (ed.) 1988.

More directly pertinent to the question of the Mesopotamian city was the second colloquium, on 'urbanization and land ownership'.273 Leaving aside contributions by invited scholars, the chapter discussed here is written by Hudson himself, according to whom the Mesopotamian cities had their origin as 'commercial and ritual meeting places'. Obviously Hudson rejects Childe's position as being Marxist and materialist, rejects the technological factor as a prime mover of urbanization, and dilutes the process (which was therefore not a revolution) in the long millennia that had already begun in the 'Ice Age' (as he calls the Palaeolithic). However, he re-examines the famous 'ten criteria' with the end of showing how all ten can be rewritten in terms of ritual activity, concluding that 'all ten of Childe's urban characteristics turn out to be founded on pre-urban ritual activities'.274 In passing, Hudson also rejects the demographic factor (size and density), without, however, referring to the (non-Marxist) Boserup. At the base of the city there are therefore the ritual and commercial activities, the city is initially a public space (which is only later privatized), practically empty (only later filled with inhabitants), a place of meeting, both for festivals and religious rituals and for commercial exchange. The fact is that by maintaining that it is a question of 'meeting areas for ritual and exchange ... as early as the Ice Age', Hudson is resorting to a somewhat strange 'reasoning': because these areas of meeting are host to functions that today are concentrated in the cities, 'therefore' it was also a question of cities then.<sup>275</sup> The use of anachronisms is massive, because alongside the Palaeolithic ritual centres there are obviously also the proto-cities of Jericho and Çatal Hüyük, there are the biblical (literary and late) 'cities of asylum' projected upon Babylonian fiscal exemptions, and there is above all a huge retro-projection of modern and post-modern concepts and images, with the ancient traffic ports imagined on the basis of 'modern offshore banking centres', 'islands of free enterprise' and so on. The whole is based upon largely imaginary evidence, to the exclusion of that which is solid and proven.

But over and above the more explicit cases of Powell and Hudson, a large part of the studies of the 1990s are characterized as strongly formulated in the sense of a liberalist economy, ruled by laws of perennial validity, so applicable even to cases of remote antiquity.<sup>276</sup> I shall tackle separately the question of the

<sup>273</sup> Hudson and Levine (eds.) 1999.

<sup>274</sup> Hudson 1999, pp. 124-133.

<sup>275</sup> Hudson relies upon the contribution of Alex Marshack (pp. 19-63), who, however, limits himself to describing the Palaeolithic ritual area without connecting it at all to the process of urbanization.

<sup>276</sup> I have already cited the contributions of the economist Silver 1985; 2004; 2006.

first urbanization as based on the commercial factor, and with the insistence of making a 'world-system' - which had actually been suggested exclusively for the modern era – date as far back as the age of Uruk (§ 5.11).<sup>277</sup> As for the extreme positions of David Warburton, who would like to explain everything by the interest rate, the savage review by Hudson himself spoke volumes on the dominating level of anachronism.<sup>278</sup>

Polanyi's reading is defended above all by Johannes Renger, in a rich series of writings in favour of a 'redistributive' vision of the Mesopotamian economy, and so implicitly of a city strongly centred on temple and palace.<sup>279</sup> Critical restatements of the controversy were given by both Powell and Renger, 280 and since both scholars knew the evidence well, the fact that they deduced from it such different scenarios can be due to two factors. First of all, at an interpretative level, the influence of their respective 'ideological' positions (more or less explicit) filters through, which gives rise to different solutions on individual points. For example, weighed silver acted as a measure of value, but is it correct to define it tout court as 'money'?<sup>281</sup> Are the places (not, however, expressly structured) in which local buying and selling took place real 'markets', and above all do they imply the practice of a market economy? How much volume of economic transactions passed through these market places, and how much, on the other hand, passed through the palace? The prices fluctuated (even if not by much),<sup>282</sup> implying an effect of a supply and demand relationship, but is this a typical trait of the market, or does it happen in any type of economy (especially in agrarian societies due to seasonal variations)? And were the 'fixed' prices set by the palace pure utopia or do they play a role as a model of reference? In short, the judgement of whether we are dealing with a market economy or a redistributive economy is partly a question of interpretative choice.

But beside the interpretative factor, there is also a clear complexity in the evidence, which, though it makes possible different characterizations, is better

<sup>277</sup> To the insistence of Algaze (cf. § 5.11) can be added, among others, the positions of the economist Frank 1993 and the archaeologist Oates 1993.

<sup>278</sup> Warburton 2003; review by Hudson 2005.

<sup>279</sup> Renger moved himself from a strictly Polanyian position (Renger 1984) to a more complex one: cf. id. 1990; 1994; 1995; 1996; 2000; 2004; 2003-5.

<sup>280</sup> Powell 1999; Renger 2007; also Stol 2004, pp. 904–908 (critical of Polanyi and of Renger).

<sup>281</sup> For Bongenaar 1999 (who knows Polanyi's article), the silver is not an 'all-purpose money', and the Mesopotamian economy cannot be defined as a market. Besides, tin and barley also filled the same function (Müller 1982).

<sup>282</sup> Documented by the daily records in the astronomical diaries (Slotsky 1997), monthly in the lists of Hellenistic age (Slotsky and Wallenfels 2009).

reflected, however, in what can be defined as a mixed (or even 'dual') solution of compromise, with reciprocal concessions both on the part of the supporters of the state system<sup>283</sup> and on the part of the neo-liberalists,<sup>284</sup> by constituting a sort of 'normalized paradigm'<sup>285</sup> in which, alongside the economic role of the temple and palace, equal emphasis can be given to the role of private initiative. A basically 'mixed' vision had already been suggested in the 1960s, and we recall how Leo Oppenheim emphasized on the one hand the role of the 'great organizations' but on the other also that of the private/family sector. But there is a difference: in the 1960s the extra-palatine sector was for the most part thought to be hinged on the local community, on extended families, in a word, on the basic fabric of the ordinary population. In the 1990s, however, the private sector is mainly hinged on mercantile entrepreneurship, moving from the production of food to its trade, and assuming – so to speak – a 'bourgeois' rather than countryman aspect. It is not by chance that both the Leiden school<sup>286</sup> and the Vienna school<sup>287</sup> pass from the old insistence on the more ancient phases to a new insistence on the neo-Babylonian period, a phase of growing entrepreneurship and declining institutions. And not by chance the relationship between public and private is no longer seen so much as a structural division of spheres and competence, but rather as an intermingling, with the public institutions making use of contractors and assuming conduct based on private enterprise, with the functionaries growing rich from their privileged role, and with the entrepreneurs tending also to assume a public 'coverage'. It looks just like the world of today.

But to me, looking at the mixed system in a sequential sense seems both useful and enlightening.<sup>288</sup> Look at the merchants: when they make up their accounts with the palace (which entrusts to them an 'endowment' with the task of transforming it into foreign goods) they are acting in a governmentcontrolled perspective, of administered trade, dominated by fixed prices and import targets, but when they then go forth to carry out the exchange also in

<sup>283</sup> Earlier Renger 1979; even Neumann 1987a, b (artisanal), 1999 (trade), 2002, found private spaces also in the controlling economy of Ur III; and the same in de Maaijer 1997 and Studevent and Hickman 2008 for land ownership; now Garfinkle 2012 (trade).

<sup>284</sup> Stol 1982; Steinkeller 1996; 1999 (artisanal); 2004 (trade); Veenhof 1988; 1999.

<sup>285</sup> Postgate 1992, pp. 225-240; 2003; Charpin 1982; 1987; van de Mieroop 1992a; Adams 2004, pp. 55-58; Goddeeris 2007. Also the contributions of Lamberg and Karlovsky and Dandamayev to the colloquium of Hudson and Levine (eds.) 1996 give a 'mixed' judgement.

<sup>286</sup> In particular van Driel 1994; 1999a, b; 2002.

<sup>287</sup> In particular Jursa 1995; 2004; 2007.

<sup>288</sup> Snell 1977; 1982; Liverani 1998, pp. 58-73; 2005c; also Neumann 1999 (Ur III); Radner 1999 (neo-Assyrian period); Postgate 2003.

distant lands, at that point they are acting 'economically', both in getting the most favourable rates of exchange (based on the circumstances of the time, but also on the difference in economic systems between countries that are producers of prime materials and great centres of import and consumption) and in exploiting the 'endowment' for financial uses too (loans at interest) not pertinent to the public assignment. And look at the craftsmen: when they are dealing with the palace, they think in terms of fixed levels, both in the relation between the prime material assigned to them and a worked object, and in the relation between estimated time and work; but when they then actually carry out the work, possibly even in places far from the centre, they obviously tend to maximise the profits. In other words: the conduct of the individual operators is dictated to a large extent (even if not exclusively) by the laws of maximum profit with least effort; but the administration, unable to control the daily material aspect of economic activity, must establish fixed parameters and do the accounts on the basis of these.

The complexity of the system is obvious and known. In neo-Marxist terms it can be said that in every 'socio-economic formation' two or more different 'modes of production' co-exist. In the Ancient Near East, simplifying to the utmost, a 'domestic mode of production', of a self-sufficient type based on private enterprise, coexists with a 'temple/palace mode of production'. Over and above giving space to both (and other possibilities that a less schematic description might choose to identify), we need also to judge which is the 'hegemonic mode' (in a Gramscian sense). And most probably for the entire Bronze Age the temple/palace mode was hegemonic, and was so both in a structural sense (because it could not survive without the flow of tribute which was given to it by the domestic units) and from an estimate of the respective importance. Later, however, and particularly in the neo-Babylonian age, private activities acquired importance and major freedom of action, even though it remained difficult for them to undermine the hegemony of the great imperial palaces. But even abandoning the neo-Marxist simplification, and adopting more sophisticated (and computerized) techniques of analysis,<sup>289</sup> the complexity of the system that emerges still remains capable of analysis in terms of flows (of material goods but not only: decisions, prestige, etc.) and of hegemony.

How can all this be translated into the shape of the Mesopotamian city? There is no doubt that temple and palace remain central, and the material nature of the buildings is less flexible than that of the schemes of flow. And remember that the 'late' period (neo-Babylonian and Achaemenid), which indeed sees a growing role for private entrepreneurship,<sup>290</sup> is also the period in which temples and palaces assume enormous proportions: just think of the Babylon of Nebuchadnezzar II or the Persepolis of Darius. On the other hand, the increased attention paid to civil residential quarters and diffused structures (communal bodies, guilds) has not identified places specifically dedicated to market activities. Local street markets and recurrent fairs met the family needs (the 'local exchange'),<sup>291</sup> whereas distant trade depended directly on the palace – where foreign merchants also had a residential quarter of their own outside the encircling walls. Some attempts to identify expressly constructed market places, places which might be more structured than simple open spaces inside the city gates, have been shown to be erroneous.<sup>292</sup> The only plausible suggestion, as far as I can see, comes from Margueron, who interprets as a market place, as a sort of modern suq, a triangular area (in proto-dynastic Mari) with possible booths fronted by a portico:<sup>293</sup> the suggestion is based upon the ground plan of the complex and appears reasonable, but unfortunately nothing is said to us of the finds, which might provide the necessary relevant decisive elements.

## 5.11 The 'world-system' and the expansion of Uruk

Immanuel Wallerstein's weighty work on the 'world-system' was published between 1974 and 1989,294 and though it was already clear from the title (The *Modern World-System*) that it was dealing with the modern world, and with the European political-economic expansion into the entire world, the work immediately (right from the first volume) also aroused lively interest on the part of ancient historians, struck by its methodological importance per se, and above all tempted to identify world-systems dating always further back, as far as remotest antiquity. The merits and limitations of this retroactive application to systems that Wallerstein himself did not consider relevant were presented by Philip Kohl in an excellent article,<sup>295</sup> in which the Early Bronze Age was indi-

<sup>290</sup> It is the period of the great commercial and financial 'family firms' of the Egibi and the Murashu.

<sup>291</sup> On the fairs Biga 2003; Brinker 2010.

<sup>292</sup> The stalls of the Iron Age Israelite cities were taken to be markets by Herr 1988; but they really are stalls, with the mangers still in place and the ground permeated with horses' urine (pointers at § 2.4).

<sup>293</sup> Margueron 2004, pp. 150 (with fig. 122) and 160 (with figs. 131–132).

<sup>294</sup> Wallerstein 1974; 1980; 1989. McNeill 1963 had already (briefly) presented a similar

**<sup>295</sup>** Kohl 1987a, b, recently 2009, pp. 245–252.

cated for an advantageous application, when Mesopotamia, Iran, Central Asia, the Indus Valley, and the Gulf area interacted fairly intensely on a broad horizon (cf. § 4.7). In the same book in which Kohl's article was re-published, Carl Lamberg-Karlovsky also tackled this wide interaction between the various civilizations of south-western Asia of the third millennium.<sup>296</sup> The archaeologist-Indologist Shereen Ratnagar<sup>297</sup> likewise favours application of the 'worldsystem' model to the whole of the Early Bronze Age cultures, an entirety which in effect extends across a very large area (from the Mediterranean to India); while emphasizing (through clear neo-Marxist and Polanyian influence) the differences between a capitalist world-system and possible pre-capitalist systems not centred on the market, she nevertheless proposes the identification of the only world-system of antiquity in the complex of Mesopotamia / the Gulf / Iran / the Indus valley / Central Asia of the third millennium. A less decided position is taken by Maurizio Tosi and his school, who give a certain emphasis inside the system to the diversities, the characteristics peculiar to each component.<sup>298</sup>

Authoritative, but in the end too radical, support then comes from Gunder Frank,<sup>299</sup> who – over and above retracing the question of primary and secondary urbanization inside the 'world-system', and highlighting that the system includes ecological diversities and exchange of surplus that differ among them – poses questions about the remote origin of the 'world-system' and of the existence of only one world-system, or many, or none. For Frank, there is only one world-system, which runs through the whole of world history and which was already in existence at least from 2700 BC, with a 'centre' somewhat paradoxically placed in the emptiness of Central Asia in order to connect the Near East and China. Frank's reasoning (as already said at § 4.4) is that a system exists if component A would be different were it not in a relationship with component B and vice versa. But different how much? A relationship of very long-distance trade, occasional and marginal, means much less on the structural level: the components would develop just as well separately.

Another important aspect (to which the name of Gunder Frank immediately calls attention) is that the existence of a world-system, in the centuries of the modern world and European expansion, entails the double process of growth of the centre and depression of the periphery: the areas from which the centre siphons off resources, both human and material, are damaged by this,

<sup>296</sup> Lamberg-Karlovsky 1989; also Edens 1992.

<sup>297</sup> Ratnagar 2001; 2004.

<sup>298</sup> Tosi 1973; 1977; Cortesi et al. 2008; Vidale 2010.

<sup>299</sup> Gills and Frank 1990; Frank 1991; 1993; Frank and Gills 1992; Frank and Gills (eds.) 1993.

with the result of seeing not only an increased gap between them and the exploiting areas, but also a decline (even catastrophic) in absolute terms. Is this mechanism of underdevelopment, which was insisted on so much by Marxist authors (and not them alone) in the years 1960–70,<sup>300</sup> also applicable to the presumed world-systems of antiquity and above all of proto-history? I would not say so, even if the question has never been examined analytically in the last decades of spreading capitalism. In the context of 'Greater Mesopotamia' in the age of Uruk, if the Lower Mesopotamian 'centre' undoubtedly benefitted from the influx of metals and semi-precious stones, the periphery likewise, but with the need to organize itself for production and exchange, benefitted on the socio-political level of contact with more developed centres in a more complex system, and the primary materials exported (in quantities which would today be risible) did not provoke any repercussions of underdevelopment.

But for Mesopotamia, the greatest supporter of a proto-historic use of the concept of a world system was and is Guillermo Algaze (earlier a pupil of Adams at Chicago), who applied it with great conviction and scant reservations to the expansion of the first urbanization, that of Uruk,<sup>301</sup> outlining a system which sees at its centre the metropolis of Uruk, and then a series of colonies (in the Upper Mesopotamian belt) and of outposts (in the Anatolian and Iranian high lands). The system is created due to three reasons: (1) a developed society has a need to regularize the inflow of raw materials, (2) the peripheral elites have a need (for the sake of internal prestige) to be admitted to the mechanisms of the developed centre, (3) the 'tyranny of space' (problems of transport) requires points of intermediate support.<sup>302</sup>

The very title of Algaze's first book deliberately echoes that of Wallerstein, substituting 'Uruk' for 'Modern'. Obviously possible proto-historic worldsystems could at the most embrace one, even wide, region, but certainly not the whole world. But Wallerstein himself made it clear that the 'world-system' (a system which is/makes the world) is not a 'world system' (system of a world scale); the world is not the planet Earth, it is a spatial extension in which the system functions.<sup>303</sup> Certainly, however, if you put on a map certain presumed world-systems of proto-history you notice immediately their limitations in pro-

<sup>300</sup> Frank 1967; Emmanuel 1972; Amin 1973; 1976; Wolf 1982.

**<sup>301</sup>** Algaze 1989; 1993a; also 1993b, c; most recently *id*. 2007 maintains his position.

**<sup>302</sup>** Algaze 1993b.

<sup>303</sup> Wallerstein 1991, but ambiguous: on the one hand the world-system is not necessarily of world extension, on the other the only existing world system (the capitalists, from 1500 AD until today, the only one based on incessant accumulation of capital) is, while earlier there were many mini-systems (with occasional accumulation).

portion to the pomposity of the definition, and perhaps it would be better to speak of regional systems - but definitely the charm of the formula and its very novelty is then lost.

Indubitably the supporters of the proto-historic world-system (with Algaze at the head) must insist upon the role of trade as a factor of first urbanization, digging up old alleged analogies with the cities of mediaeval Europe and above all anachronistic subversions 'à la Jacobs' in the course of history. Particular comment is needed on a later contribution from Algaze<sup>304</sup> who, starting from the singular nature of Lower Mesopotamia as an explanation of its role as an advance guard of urbanization (The Mesopotamian Advantage) falls, however, into various misunderstandings: the role of rivers and canals as serviceable not so much for the high agricultural yield as for the ease of transporting merchandise (but it is a question of internal transport!); the typically modern and neo-capitalist idea that the mover of urbanization and development lies in the capacity for export ('Export-Driven Economies'), completely contrary to the ancient sources, which give preference to the capacity for import; and finally the development as favoured, not by the expansion of the territorial empire, but by the competition between neighbouring states – this concept is also one extremely modern and politicized.

If it is plausible that trade plays a role in the creation by the capital Uruk of a network of 'colonies' (on the mid-Euphrates and mid-Tigris) and 'outposts' (in south-eastern Anatolia and in Iran) – even though it is not accepted by everyone and is indeed less applicable to all areas - one of trade's primary roles, however, in determining (before the expansion) the growth of Uruk itself,<sup>305</sup> seems out of place (with all my regard and liking for my friend Algaze), and deadens that primitive accumulation of capital that is at the foundation of the urban revolution: decisive technological innovations, widespread irrigation, a notable surplus of agricultural produce; maintenance of full-time specialists, organization of a redistributive system on the part of the temple elite. I set out these factors in full in one of my books,306 and would not repeat myself here, were it not to reassert that Mesopotamia's position of 'advantage' lies in the technological and environmental conditions that allowed the saving of the social excess necessary to development.

On how those directly interested assessed the respective roles of foreign goods and the production of food I would like, however, to cite an Egyptian saying from the New Kingdom and a Sumerian proverb. The first says: 'There

<sup>304</sup> Algaze 2001b.

<sup>305</sup> Algaze 2008.

**<sup>306</sup>** Liverani 1998; also Huot (ed.) 1990, pp. 27–42 is somewhat Childian.

is no one whose hand spins gold / there is no one who has become drunk from silver / one does not eat genuine lapis lazuli / barley is the basis of wellbeing'. And the second, even more direct: 'He who has gold, he who has silver, he who has lapis lazuli, he who has cattle, he who has sheep – (all) wait at the door of he who has barley'.307

To sum up, the points in Algaze's position that are not convincing are three: the fact of basing himself upon modern parallels, which have a capitalist background of market economies, and of refuting the difference between ancient and modern civilization; the consequent over-valuation of the role of trade (and transport) and undervaluation of primary production; the fact of applying to urbanization first and primary that which, if anything, explains the foundation of the colonies. Also the idea that the expansion of Uruk is a first case of 'imperialism' (even if an informal imperialism), based on unequal exchange and international division of labour which is different from modern examples only in degree,<sup>308</sup> seems (to me and others) somewhat exaggerated. Of Uruk we do not know either what its relations were with other centres of Lower Mesopotamia, which remain largely unknown at this period, or if the colonies came properly from Uruk and not indeed from Susa (as some indications lead us to suspect) or from various parallel cities, and nor do we know what political status the colonies had with the mother country.<sup>309</sup> Even the exact chronology of the expansion is still debated: the absence in the colonies of written tablets, which appear at Uruk for the first time in the culminating phases, could lead to thinking that the colonies belong to an early phase, but other explanations are also possible, both structural (the archives of Uruk belong to great temple complexes, which are absent in the colonies) and attributable to accident (the element of chance on the finds). The opposite and extreme suggestion of Gregory Johnson, that the colonies were places of refuge, the result not of driving expansion but rather of the collapse of the system, seems hardly plausible.310

The presence of the first administrative archives of 'archaic' Uruk (stratum IV of the Eanna) has been important in the history of our studies, having provided Childe with a reason for including the presence of writing among the distinctive criteria for the first urbanization. But in the course of our studies a strange imbalance has been detected between the competences of pre- and

**<sup>307</sup>** Citations in Liverani 2011b, p. 100.

<sup>308</sup> Algaze 1989; 2001a. Gibson 2010 also sees a true Uruk empire, with military conquest of the north.

<sup>309</sup> On individual sites I refer to the information in Algaze 1989; 2008; Butterlin 2003.

<sup>310</sup> Johnson 1988-89.

proto-historians on the one hand and of philologists (Assyriologists) on the other. The former, justly intent upon reconstructing the process which led to the first urbanization, have concentrated on the comparison with the preceding phases, and have greatly neglected the documentary evidence of the successive periods (which is obviously much fuller), also because the archaic tablets, published from 1936,311 long remained largely undeciphered, and so were treated by the archaeologists as important 'objects' but without going on to see their contents. However, the decipherment carried out in the 1980s by the Berlin team directed by Hans Nissen<sup>312</sup> has shown (among other matters) a high level of continuity between the archaic administrative procedures and those of the proto-dynastic and even neo-Sumerian periods, and so the attention of historians of a philological bent has been concentrated upon comparisons with the successive documentation.

This passage from qualitative to quantitative had already begun at the time of Uruk IV – this construction of an administrative world, which the later texts document in greater quantity and detail. Already with Uruk IV the selection of separate elements is in full force, of standard quantities, and of qualities considered significant, as regards the continuum of material reality; the construction (also material) of a 'sexagesimal' landscape is already in action,<sup>313</sup> made of fields of fixed measurement and pre-established yield, of herds that give birth at fixed levels, of a possibility also of quantifying manpower and the passage of time,314 all towards the end of organizing and controlling production and redistribution according to parameters that are certain and of depersonalized validity. This passage from qualitative to quantitative is a by no means secondary component of the urban revolution, which anthropologists accustomed to dealing with pre-literate societies do not always value in due measure.315 Yet it is from the texts that this change of mentality and socialization can be best recovered, which is a unique opportunity to study historically the 'urban' mentality at its first appearance.

Other solutions have been put forward as a counter-argument to the protoimperial 'world-system' of Uruk and the role of trade, some a little vague, others more sharply opposed. In the mid-1970s Gregory Johnson had already suggested that the emergence of a 'central place', and so of the city, was due

**<sup>311</sup>** Falkenstein 1936.

<sup>312</sup> Nissen, Damerow, and Englund 1990 (to whom I refer for the more technical bibliogra-

<sup>313</sup> Liverani 1998, passim; id. 1995c; 1996a.

<sup>314</sup> Englund 1988.

<sup>315</sup> But see Goody 1986; 1987.

to the reorganization of local exchange, in such a way as to make it more efficient. Similarly, Fekhri Hassan also thought that at the base of urbanization there was a 'managerial and administrative transformation'. And for Henry Wright too the growth of the population generates a growing demand for goods, but also growing internal competition, which emerges in a more efficient organization of the redistribution and in urban coalescence with a specialized administration.<sup>316</sup> These suggestions (and it goes without saying that they reconnect with Polanyi's 'redistributive' city) actually contradict the weight of long-distance trade (which rather applies to the secondary urbanization), which is at the foundation of Algaze's theory.

But then at the end of the 1990s and in the first years of the 2000s a full series of conferences discussed the expansion of Uruk in the north, stressing the non-passive role of the periphery,<sup>317</sup> and also of developments even before Uruk, in the sense of urbanization.<sup>318</sup> While recognizing the merits in Algaze's vision,<sup>319</sup> the general trend is that of putting together a multi-factor process<sup>320</sup> – within whose context trade does not play the role of prime mover (and certainly not of export if at all of import) – of establishing a varied typology of the relationships,<sup>321</sup> and above all of recognizing an active role for the periphery, with Late Chalcolithic developments already leading to a proto-state society before the Uruk influx.<sup>322</sup> And outside the conferences we should also note the positions of Butterlin, who first of all criticizes Algaze's world-system in an article, and in general all the 'material' approaches to the expansion of Uruk, highlighting deficiencies and flaws in the surveys, by means of an 'expressive cartography' (without, however, suggesting a clear alternative), and then in a book retraces the whole question (field work and theoretical models), periodization and regional peculiarities, acculturation and imperialism, setting out a

**<sup>316</sup>** Johnson 1973, pp. 157–158; 1975; Hassan 1981, pp. 231–257; Wright 1977.

<sup>317</sup> Nissen 1995 remains in line with Algaze, in favouring the role of central-south Mesopotamia and its expansion, framed in a historical series of analogous processes.

<sup>318</sup> Stein (ed.) 1999; Rothman (ed.) 1989; 2001; Postgate (ed.) 2002.

<sup>319</sup> Algaze 2001a, b: reaffirms his position.

<sup>320</sup> In particular Wright 2001; Nissen 2002.

<sup>321</sup> Rothman 2001: progressively 'Emulation, Adoption, Colonization'. Lupton 1996: 'Precontact period' (with centralization and already local complexity), 'Contact period' (but without centre/periphery opposition), 'Post-contact period' (regionalization). On the true 'outposts' (with walls separating them from the indigenous settlement) cf. Blader 2002 (Godin Tepe; but earlier Weiss and Young 1975); Stein 2001 (Hacinebi), then Forest and Vallet 2008 (Jebel Aruda).

<sup>322</sup> The case of Arslantepe is an excellent example: cf. Frangipane and Palmieri (eds.) 1983; Frangipane 1993; 1997a, b; 2001; 2002; ead. (ed.) 2004; 2010. Also Tepe Gawra: cf. Rothman 2001; 2002; Stein 2001; 2002a. In general Erarslan 2006; 2009.

picture much more complex and less defined than that of Algaze.<sup>323</sup> Norman Yoffee suggests the concept of 'sphere of interaction' (coined by Joseph Caldwell for the Amerindian Hopewell culture), as a counterpart (but more limited spatially) in a cultural context of the world-system's economic-political context: also, in this case a far less extreme picture is obtained.<sup>324</sup> And finally Gil Stein has presented a radical criticism of the world-system, substituting the 'colonial' viewpoint with that of 'trade diaspora', maintaining that interaction is always multi-directional, of a varied nature ('top-down' but also 'bottomup'), organized through class, gender and race, and above all able to be placed on a scale which ranges from situations in which a strong colonizing state dominates the indigenous peoples, to a situation in which the local states dominate the merchants, finally to give preference in the case of Uruk to the median condition, of an equality and interdependence between South Mesopotamian merchants and North Mesopotamian and Anatolian indigenous peoples.325

But - returning to the example of Uruk as a point of general considerations - the true alternative to the world-system is the system of 'peer polity interaction' proposed by Colin Renfrew in 1986<sup>326</sup> – even if the two systems do not seem to me to have ever been contrasted in an explicit way, and even if the two models have a different scope (the world-system basically 'universal', the interactive system clearly regional). According to Renfrew's own definition, 'Peer polity interaction designates the full range of interchanges taking place (including imitation and emulation, competition, warfare, and the exchange of material goods and information) between autonomous (i.e. self-governing and in that sense politically independent) socio-political units which are situated beside or close to each other within a single geographical region, or in some cases more widely'.327 It is clear that however focused the model of the world system is on a centre which dominates/exploits a periphery, just as much pluralistic is a group of equal states, of a cantonal size (the 'early state module' in Renfrew's terminology), each one centred upon its city, but all interacting on a footing of equality (or at least of 'equal dignity' as is said nowadays). The cluster, then, of a group of archaic modular states, endowed with common characteristics, is defined as a 'civilization', 328 with a trivialized use in a spa-

<sup>323</sup> Butterlin 1998; 2003.

<sup>324</sup> Yoffee 2005, pp. 204-208.

<sup>325</sup> Stein 2002b.

<sup>326</sup> Renfrew and Cherry (eds.) 1986; the first points are already in Renfrew 1975, and now id. 2008, pp. 40-41.

**<sup>327</sup>** Renfrew in *id.* and Cherry (eds.) 1986, p. 1.

<sup>328</sup> Ibid. p. 2.

tial/descriptive sense of that which had been a key term of nineteenth-century evolutionism and twentieth-century idealism.<sup>329</sup> It is clear how both systems position themselves in the political and economic mood of the end of the millennium, in the first case (world-system) having as model an aggressive and imperialistic capitalism, such as the proto-modern European on which Wallerstein's work was in effect based, and in the second case (equal interaction) a neo-capitalism more appealing and pluralistic, which granted equal opportunities and equal success to all.

## 5.12 North and South, centre and periphery

The central country of this story of ours, where the urban excavations were begun in the mid-nineteenth century, and which then saw the major concentration of work and results, that is, present-day Iraq, had to cede its principal role from the 1980s, for well-known political and military reasons: first of all the war between Iran and Iraq (1980-88), then the first Gulf War following the Iraqi invasion of Kuwait (1991), finally the second Gulf War (2003), following the attack on the Twin Towers, and overall the political instability between one war and another, which still persists, and the loss of control over the territory (and of its cultural heritage) on the part of the central authority. This whole sequence of events provoked a 'migration' of archaeological missions, which, having abandoned the now impracticable Lower Mesopotamian alluvium took themselves off to the surrounding regions. But since Iran also knew a similar period of impracticability (right from the beginning of the Khomeini revolution until today), and the southern Levant knew a fresh upsurge of the now gangrenous Israeli-Palestinian problem, with the Israeli invasion of Lebanon (1982), with the intifada and growing Israeli repression, in practice the countries considered stable enough to be able to host Western archaeological missions remained two: Syria and Turkey. This extrinsic fact, in being of a political-military nature, assumes, however, the garb of a theoretical and historiographical character, with the abandonment of the old vision of an Ancient Near East firmly centred on Mesopotamia and Egypt, to lend to other areas too an equal interest and value. It is not by chance that it was in these decades (the final two of the last century) that the expression 'Greater Mesopotamia' gained ground (we could say 'Wider Mesopotamia') to include also the adjacent re-

<sup>329 &#</sup>x27;Peer polities interaction' is revived by Erwin 1997, with a simulation based upon advanced mathematical models (too difficult for me to follow), fit for analysing non-linear phenomena, but perhaps losing touch with the actual history.

gions. Let it be said here, as an aside: this new vision does not yet appear, right up until now, to be noticed by generalist scholars, who continue to organize conferences and collected volumes on the city and other connected problems, in which the Ancient Near East is represented by Mesopotamia in the strict sense alone, as sufficiently indicative of a group which is, on the contrary, strongly diversified.<sup>330</sup>

Actually, a number of missions had preceded the 'migration', beginning to work inside Syria and in eastern Anatolia from the early 1960s. I recall that, when the mission to Ebla began, two tables of archaeologists could be seen in the Hotel Baron at Aleppo: the table of the German mission of Tell Chuera directed by Anton Moortgat, silent and hierarchical, and that of Tell Mardikh itself (which would then be identified as the ancient Ebla) directed by Paolo Matthiae, rowdy and disorderly. But it was the discovery of the royal archives of Ebla, in the years 1974–76, that attracted the attention of the whole Assyriological world (and not alone), both because of the objective interest of the discovery, and because of certain presumed 'biblical' implications initially suggested (and then justly cast aside). The peculiarities of the Syrian world compared to the Mesopotamian quickly became evident. On the one hand, the extensive excavation of the Middle Bronze Age city (eighteenth to seventeenth centuries BC) revealed, so to speak, a 'normal' urban aspect, made that is of an impressive surrounding wall, of great palace complexes [fig. 43], of various temple buildings, and of quarters of residential houses, but the temples were relatively modest (if compared to the Sumerian) and largely devoid of those annexes of a productive and redistributive nature typical of the Mesopotamian temple.331 This is a consequence both of the different productive base (agrarian-pastoral economy in a rain-fed governance, without irrigation) and of the absence of a 'first urbanization' centred on the role of the temple. On the other hand, what appeared from the archives (of palace G, of the 24th century BC)332 was an economic and political system much more multi-polar and participatory than that of the contemporary Sumerian, with a king visibly influenced by high bureaucrats but also by communal bodies ('elders' and representatives of local autonomies).

Alongside the assessments of Paolo Matthiae and other members of the mission, as later above all of the epigraphists Alfonso Archi and Maria Giovanna

<sup>330</sup> For example, the book on the archaic state by Feinman and Marcus (eds.) 1998 has chapters on Mesopotamia, Egypt and the Indus, but nothing of the Levant, Anatolia or Iran.

<sup>331</sup> On the archaeology of Ebla see Matthiae 1977 (updated new editions 1989; 1995); for a town planning valuation id. 1991. The books of the first epigraphist G. Pettinato are crammed with errors and misunderstandings which make them unreliable.

<sup>332</sup> See now Matthiae 2008.

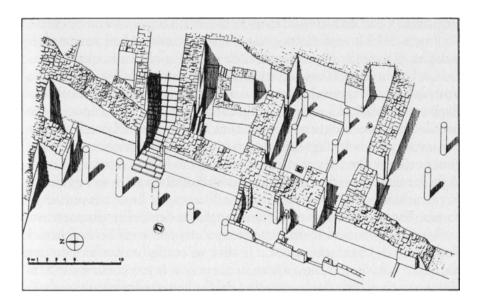


Fig. 43: Ebla, axonometry of Royal Palace G.

Biga, two articles of Ignace Gelb had a considerable effect, written on the heels of the publication of the first volumes of texts. The first article<sup>333</sup> suggested the label of 'Kish civilization' for designating Upper Mesopotamia (Semitic) as contrasted to the south (Sumerian), and included therein the world of Ebla, both for linguistic reasons (the language of Ebla was Semitic) and for reasons of political organization (the great territorial kingdom as against the temple-city of the Sumerian south). The second article<sup>334</sup> compared the productive system which emerged from the archives of Ebla with that which had emerged from pre-sargonic Lagash (both archives date back to the same century), and considered their very different ecological bases, in the sense already stated: rain-fed agriculture as against irrigated agriculture, with all that follows, beginning with the very different yield of cereal cultivation (and so availability of a surplus), up to the political and administrative implications. Piotr Steinkeller (once in fact a pupil of Gelb's) was to return to this line repeatedly, distinguishing the different territorial size (the regional kingdom of Kish against the city-state of the Sumerian south) and the different configurations of the city of the North and of the South, 335 and providing recently the most concrete and detailed con-

<sup>333</sup> Gelb 1981.

<sup>334</sup> Gelb 1986.

<sup>335</sup> Respectively Steinkeller 1993 and 1999.

trasting characterization of southern Mesopotamia compared to the Central-North.<sup>336</sup> His study gives rise to certain objections, however: it is true that the archaeological surveys underestimate the little settlements, but it is also true that the texts of the state archives underestimate the communities of the village and concentrate attention on the management of the public lands. The very many hamlets cited in the texts (and invisible in the surveys) are specialized state settlements, not to be confused with village communities. The archaeological impression that the cities of the South had 'burnt' the village communities for the sake of direct control of the lands is therefore not denied but confirmed by the texts. For my part I suggested taking due account of a very concrete aspect, which is the different arrangement of the fields: the 'Sumerian' landscape of the South, with the long fields of temple colonization, required few villages but many specialized settlements, whereas the 'Akkadian' landscape of the North, with its little square fields of family management, preserved the village community much better.337 Steinkeller himself admits that the building and control of irrigation tends to destroy the communities, but that then the existing communities necessary to make a 'feudal' economy (in the sense of Kula) profitable, are not the heirs of the original, as Diakonoff wishes, but are new state foundations, remaining in my eyes an ideological construct, altogether undemonstrated and also little plausible.

But returning to Gelb's suggestions from the 1980s, the picture which emerged from Ebla was no longer an isolated example: numerous excavations of important sites of the Syrian Jezira (which corresponds to the larger part of Upper Mesopotamia), such as Tell Brak, Tell Leilan, Tell Mozan, Tell Beidar and so many others too that it is impossible to mention here, provided the base for outlining the town-planning, political and economic aspects of Upper Mesopotamia in a measure in no way inferior (and on the contrary of a quality sharply superior) to that already long available for Lower Mesopotamia. Bear in mind, so as to assess the innovation, that only fifteen years earlier a presentation of Upper Mesopotamia in the long period that stretches from the Late Chalcolithic Age right up to the Akkad dynasty used the definition 'Era of townships' not having the courage to say that it was a question of real cities and a properly urban phase.<sup>338</sup> The burgeoning of excavations of the Jezira produced

<sup>336</sup> Steinkeller 2007.

**<sup>337</sup>** Liverani 1988–89; 1996a, b; 1997b.

<sup>338</sup> Jawad 1965. Even the second edition of the Cambridge Ancient History, which was published in separate fascicles in these years, speaks clearly of urbanization only for Lower Mesopotamia.

a series of studies<sup>339</sup> and important conferences which insistently defined the diverse ecological conditions, their results on the settlements and production, and finally the diverse socio-political configurations.340 The way ahead had been lucidly indicated from 1994 by Tony Wilkinson, who began from the different size of urban centres, determined by different agricultural yields, in order to suggest for the Jezira a functional model of cells of 5 km in radius, with centres of 12/14 hectares, which cluster in macro-groups with a central cell and half a dozen peripheral ones, which also contribute to the maintenance of the central site, which can in this way reach 100 hectares.<sup>341</sup> In short, and leaving aside this and other specific suggestions, it becomes clear that the relations between Lower and Upper Mesopotamia are no longer seen according to the scheme of 'centre and periphery' but as two parallel developments, diverse and interactive on a footing of equality.<sup>342</sup> As a result, a 'Mesopotamian city' does not exist, there exist at least two, with ecological, socio-economic and also political foundations – and in this sense the decision of the editors of a book published in 2004, on the study of ancient economies on an archaeological foundation, is emblematic, in entrusting to two separate authors one chapter on Southern and another on Northern Mesopotamia.<sup>343</sup>

The obvious result of this position was that the development of the first urbanization also became for many scholars a process no longer mono-centric (hinging on the priority of Uruk and its 'colonial' expansion), but rather manycentred. McGuire Gibson in particular, on the basis of the great urban size of Tell Hamukar (excavated by him) and of Tell Brak (already known for longer) suggests a parallel growth of South and North from the time of 'Early Ubaid', while admitting a mild precedence for the South.<sup>344</sup> Even more ardently, Joan Oates, who directed the mission at Tell Brak, not only presents a parallel development, but is in favour of priority for the urbanization of the North.<sup>345</sup> If, however, we allow Henry Wright's suggestion, to make the first state formation and urbanization date back to the 'Early Uruk' phase, however badly docu-

<sup>339</sup> Nissen 1982; Dohmann-Pfälzner and Pfälzner 1996; Stone 1997, pp. 20-25; Lamberg and Karlovsky 1999; van Driel 2000b; Wilkinson 2003; id. et al. 2007.

<sup>340</sup> Lebeau (ed.) 1998 (chapters by Wilkinson and Lyonnet); del Olmo Lete and Montero Fenellos (eds.) 1999 (chapters by McClellan, Margueron, Algaze); Rouault and Wäfler (eds.) 2000; Jaas (ed.) 2000 (chapters by Wilkinson, Lyon, Lafont, Wiggermann, Jas, van Driel).

<sup>341</sup> Wilkinson 1994.

<sup>342</sup> Böhme and Kulemann 1995; Pfälzner 1997b.

<sup>343</sup> Adams 2004 and Stein 2004.

<sup>344</sup> Gibson 2010. Also Algaze 2001a and 2007 maintains the south's precedence (the 'Sumerian advantage').

<sup>345</sup> Oates et al. 2007; also the popular work by Lawler 2006.

mented it is,346 then the priority of the North does not have a rational basis to support it. And note that in 2004 (so on the eve of the discoveries of Hamukar and the evaluation of the discoveries of Tell Brak) Gil Stein still estimated the North as later by a millennium than the South, considering the North urbanized only with the 'second' urbanization (§ 4.5).<sup>347</sup> To understand this variety of positions we must bear in mind that the development of the North followed and was actually much better documented than that of the South, which remained at an unsatisfactory level for reasons both structural (sedimentation of the alluvium) and contingent (the political instability of Iraq), and so in need of strong measures of interpolation. But on the other hand the judgement of the expansion of the Uruk phenomenon in the North could be assessed differently, either as exterior and ephemeral, or indeed as structural and of maximum importance.

The contrast between the Mesopotamian North and South is to some extent adjusted to the difference in the landscapes: in particular the Mid-Euphrates has neither rain-fed agriculture like the Jezira nor catchment basins like the South, but canals parallel to the river to keep the water level higher and irrigate the fields situated between canal and river. But the case now cited of the Uruk expansion widens the scenario to take in completely different landscapes of the Anatolian and Iranian high lands, and we have already seen (at § 5.11) how the new paradigm also confers on the proto-urban centres of the Upper Euphrates and in general of the mountain area – which in the old paradigm was a remote periphery nourished by its 'secondary' relation with the centre an autonomous growth coming before contact with the southern alluvium. But the same mountain centres (with Arslantepe at the head), while endowed with urban complexity, appear more modest in size if compared to the lowland centres, through evident smallness of their basins of agrarian-pastoral support, to the point of speaking, with Marcella Frangipane, of 'citadels without cities'.<sup>348</sup> And so a differentiated characterization is laid down for the various regions – really to avoid the equivocation with which we began, of a Mesopotamia representative of the whole Near East, with a contour so modest as to be able to be obscured and forgotten.

This diversified characterization assumes greater visibility in the periods in which the mountain belt reaches higher levels of urbanization and state formation. It is fitting here to concentrate on a number of cases in this striking

**<sup>346</sup>** Wright 1977, pp. 386–389 (the developments of the north were still unknown).

<sup>347</sup> Stein 2004, passim.

<sup>348</sup> From the latest Frangipane (ed.) 2010, passim. For the earlier contributions I go back to § 5.11. Algaze 1999, p. 538 note 2 denies to Arslantepe the qualification of a state.

sense: the capitals of the Hittite Empire (Boğazköi, the ancient Khattusha), the Iron Age cities and citadels on the Anatolian, Armenian and Iranian high lands (Phrygia, Urartu, Mannea, Media), and the cities of the southern Levant (Israel and surroundings) also of the Iron Age, referring to other still important cases (from the Southern Arabian cities to the Imperial Persian residences) as being mentioned elsewhere (§ 4.7), for reasons of space.

The new excavations (especially those post-war) of Boğazköi mark a complete liberation from the rough methods and aims of recovery of tablets of the Winckler period, and became the benchmark excavation for Anatolia of the Middle and Late Bronze Age. The sequence of directors (Bittel, Neve, Seeher) has already been described at § 5.6, but here the interest is largely in making clear how the acropolis of the city gathered in separate buildings those functions that in the Mesopotamian alluvium were concentrated all together in the palace (royal residence, archive and storerooms, ceremonial rooms), and how the climatic factor (winter snowfall, abundant rainfall) and the materials used (wood and stone) translated into pillared halls, colonnades around paved courtyards, flights of steps, etc.<sup>349</sup> Another characteristic peculiar to the city is the enormous number of temples in the 'upper city', all of a similar plan and size, owing not so much to polytheism as to a political willingness to concentrate in the capital the cult of the divinities (all very similar to each other) of all the peripheral centres. With the 1970s and following years, other excavations in 'provincial' sites<sup>350</sup> were placed alongside that of the capital to fill in part the gap between the abundance of place-names in the texts, and the scarcity of identified archaeological sites.

After the end of the Hittite Empire (around 1180 BC), and after an interval of settlement depression (which marks the hiatus between the 'third' and 'fourth' urbanization, as defined at § 4.5), cities and citadels emerge right across the high lands: the Phrygian centres in Anatolia, the Urartian in Armenia, and those of the Mannaeans and Medes in the shelter of the centralnorthern Zagros. If the Urartian centres had already been identified and examined earlier (cf. § 2.5), the activity in the centres of the Zagros occurred in the period after the Second World War, from an impulse largely American (and in the climate of westernization of the Persia of Reza Pahlevi). It was with the 1970s that the excavations of Hasalu and of Godin Tepe attracted

<sup>349</sup> See the summaries of Bittel 1970; Neve 1993; also Archi 1976; and now Seeher 2008; Orthmann 2008, and other contributions in Wilhelm (ed.) 2008. On the architecture Naumann 1957 remains useful.

<sup>350</sup> Maşat Hüyük: Özgüç 1978; 1982; Kuşaklı: Müller and Karpe 2001.

attention to the citadels of the Mannaeans (Iranian Azerbaijan),<sup>351</sup> and those of Nush-i Jan and Baba Jan to the citadels of the Medes (in central Zagros, the region around Hamadan, ancient Ecbatana).<sup>352</sup> In a Phrygian context, the excavations of Gordion had begun in the mid-1950s, from the obvious interest due to the connections with the Greek world.

The lesser availability of the agricultural surplus was to keep these settlements of the high ground at reduced dimensions (exceptions apart), and the use of stone and wood was to develop buildings and as a result a town planning of a very different type from the Mesopotamian.<sup>353</sup> In the Phrygian centres the *megaron* type was to impose itself, a building with an oblong hall marked by two lines of pillars or columns, and with a porch at the entrance, a type well documented in the Phrygian phase of Boğazköi, 354 but above all in the capital of the Phrygian kingdom at Gordion (Yassihüyük),<sup>355</sup> and also at Kerkenes<sup>356</sup> (not excavated but clearly visible on the surface). This last site is the one of exceptional size which I mentioned, stretching over 270 hectares (not necessarily all built on). In the Urartian and Mannean-Median centres the equivalent of the *megaron* is the pillared hall, of a shape less lengthened and without a porch, a type already well-documented from the eleventh to tenth centuries BC at Hasanlu and then spread over the whole area, beginning perhaps from a legacy of the Hittite Empire preserved in sites such as Melid (Arslantepe) and others on the Upper Euphrates.<sup>357</sup> Both types are adopted, as far as can be seen, as normal dwelling houses, obviously at a certain level of prestige, with emphasis on the ceremonial function of banquets and meetings, dismissing the functions of the more banal daily life to lesser contexts, and reflecting a type of well-born and patrician society quite different from that of the alluvium. Then in Urartu, given its political structure as a great kingdom with ambitions of hegemony over all the high lands of Anatolia up to the Zagros, the centres are characterized by impressive defensive structures and by the presence of temples (more often than palaces), of huge storehouses, of stables, in a land studded all over with smaller fortresses, hydraulic

<sup>351</sup> Hasanlu: Dyson 1965; 1977; 1989; 2002; Young 1966. Godin Tepe: Young 1969; 1994; id. and Levine 1974.

<sup>352</sup> Baba Jan: Goff 1968; 1969; 1970. Nush-i Jan: final report Stronach and Roaf 2007.

<sup>353</sup> Stone's 2008 contrast of Mashkan-shapir with Ayanis derives from personal experiences, does not obtain a level of acceptable generalization and emphasizes misleading comparisons (Cuzco and the Yoruba).

**<sup>354</sup>** Bittel and Naumann 1952; Bittel *et al.* 1957; Neve 1982.

<sup>355</sup> De Vries 1990; Sams 1994; Voigt 1994.

<sup>356</sup> Summers 2007; id. et al 2004.

<sup>357</sup> History of the type in Liverani 2011c.

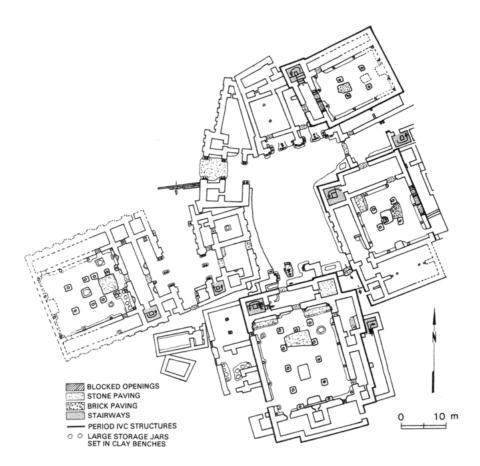


Fig. 44: Hasanlu IV, ground plan.

works (the first subterranean canals, *qanat*, date back to this period, notwith-standing some opinions to the contrary), rock inscriptions and border steles.<sup>358</sup> By way of contrast, in Media of the eighth to seventh centuries, still at the organizational level of a chiefdom, the citadels arise like 'cathedrals in the desert', in the sense that they are very well defended and host only the buildings of the well-born (pillared chambers) and cult buildings, with the 'normal' population placed, apparently, in villages and seasonal camps. Outside Urartu too, there are noticeable differences in a mountain context: if the plan of Hasanlu [fig. 44] is compared to that of Nush-i Jan [fig. 45] (two sites

**<sup>358</sup>** I refer to Forbes 1983; Kleiss 1976; 1988; on the benchmark excavation of Bastam cf. Kleiss (ed.) 1979–88.

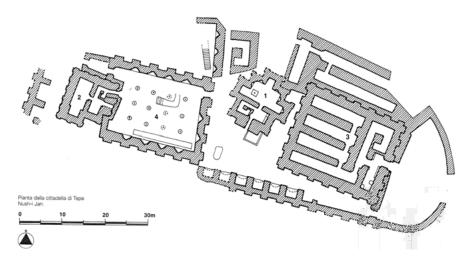


Fig. 45: Tepe Nush-i-Jan, ground plan.

well excavated over sufficient extent) it is immediately noticeable that the former presents a plurality of buildings (centred upon pillared halls) of similar rank and only one common structure, significantly the great stables; whereas the latter presents only well-defended common structures (of storage and cult). So the first case refers to a pluralistic elite, the second to a chief on whom resources are centred. The neo-evolutionists would say that the first type of settlement corresponds to a simple chiefdom, and the second to a complex chiefdom, whereas Urartu is a true kingdom. Everything will then flow together, with dimensions tremendously increased, in the great imperial Achaemenid capitals of Pasargadae, Susa, and above all Persepolis.<sup>359</sup>

Obviously the most studied case, on the basis of a much more extensive documentation, fruit of capillary excavations and repeated surveys,<sup>360</sup> is that of Israel (and the contiguous peoples: Philistines, Moabites, Edomites, Ammonites) in the course of the first to second Iron Ages.<sup>361</sup> The studies of the years 1980–90 well defined the town planning type of the southern Levant, and the emergence of a settlement system at three levels.<sup>362</sup> The basic level is

**<sup>359</sup>** On the path of architectural types from Media and Urartu to Achaemenid Persia cf. Francovich 1966; Stronach 1967; 1985; Kleiss 1980; 1989; Jacubiek 2003.

**<sup>360</sup>** On survey procedures in the Levant see Banning 1996.

<sup>361</sup> Finkelstein 1988; 1996; popular work id. and Silberman 2001.

**<sup>362</sup>** Shiloh 1978; Fritz 1990; 1994; Herzog 1978; 1997; also Schloen 2001 pp. 135–183; historical-theoretical introduction by Grabbe 2001; Rogerson and Vincent 2009 is general, biblical more than archaeological.

represented by small towns of limited extent (for reasons already stated), in a word, large very well fortified villages of a roundish shape (derived from the shape of the *tell* more than from a conscious intention), with the town gates as a characteristic element,<sup>363</sup> and with dwelling houses and street systems laid out in concentric circles, with the external circle of houses built against the encircling wall. Among the community structures, apart from the modest cult buildings, are noticeable those of access to water resources (cisterns, subterranean springs), essential in case of siege. The type is best represented by the sites of Beer-sheva in the Negev and Tell en-Nasbe in the high central plain,<sup>364</sup> and derives, to all evidence, from the type of agro-pastoral village of the first Iron Age, with a central space surrounded by a continuous circle of houses. Also the type of dwelling house, the house divided in three longitudinally, with the open-air central space, is of agro-pastoral origin,<sup>365</sup> Obviously the palace is only present in the royal capitals, in particular at Samaria (given the impracticability of Jerusalem); and the intermediate rank is represented by the district administrative centres (such as Megiddo), where the royal presence materializes above all militarily, with stables much in evidence (as already said at § 2.4) As an 'appendix' (in a way) to the Levant, finally the urbanization of Cyprus can be noted, rather later (c. 1700–1400 BC) compared to the mainland regions.366

The vision of a multi-centred Near East differentiated above all by environmental premises and political-cultural routes<sup>367</sup> does however collide - towards the end of the same years, the 1980s – with the vigorous emergence of the 'centre/periphery' model, used occasionally before and with limited reference to the Mesopotamian context (urbanized centres in the alluvium, with a 'dimorphic' periphery),<sup>368</sup> but raised to the first level through the influence of Wallerstein's world-system, of which we have already spoken (§ 5.11), and through the recovery of the model dating further back of unequal exchanges

<sup>363</sup> Herzog 1986 also mentions multiple functions (military, judicial, commercial etc.); also Wright 1984; Otto 1995; Mazzoni 1997.

<sup>364</sup> McClellan 1984.

<sup>365</sup> On the architecture of Israel Kempinski and Reich (eds.) 1992; on the Levant in general Braemer 1982. On the three-room house Shiloh 1970; 1987; Fritz 1977.

<sup>366</sup> Knapp 1986; 1988.

<sup>367</sup> Falconer and Savage 1995 compares the urbanizations in Lower Mesopotamia ('Hyperurbanization'), in the Diyala ('Small Scale Urbanism') and in the Levant on the basis of the 'Rank-Size' curves, to show that the Levant is not a periphery of Lower Mesopotamia but another matter.

<sup>368</sup> For example Rowton 1980; also Steinkeller 1987.

and underdevelopment.<sup>369</sup> In its more general ideological and political implications, there is no doubt that the centre/periphery model is more traditional, containing aspects of centralism and imperialism, and also of diffusionism, whereas the multi-polar model is more bluntly post-imperialist and globalized. But with reference to the ancient evidence, in contexts very different from those of our world of today, it appears quite clear how the centre/periphery model retains a much greater explicit force.

## 5.13 The theory of systems and the question of collapse

There is a passage in Musil's *The man without qualities*,<sup>370</sup> written between 1923 and 1931, which expresses in metaphorical terms the union of history with physical, although not mechanical, facts: 'The path of history was therefore not that of a billiard ball - which, once it is hit, takes a definite line - but resembles the movement of clouds, or the path of a man sauntering through the streets, turned aside by a shadow here, a crowd there, an unusual architectural outcrop, until at last he arrives at a place he never knew or meant to go to'. The course of history is not therefore similar to the inexorable trajectory of the planet, but to the more unforeseeable movement of the clouds.

In these same years the very concept of physical laws was being reconsidered: Werner Heisenberg formulated his 'Uncertainty Principle' in 1927 (and won the Nobel prize for it in 1932). Talk began of a single atom's 'free will' (paradoxically overturning the historiographic problem), of statistical validity of physical laws, a validity rendered compelling by the enormous number of interacting elements, whose individual 'wills' are annulled and whose anomalies are reabsorbed into the law of large numbers. The 'materialistic' historiographic trends recovered at one blow all their credibility: like the individual atom, so also the individual human personality remains free per se, but at the end of the day irrelevant, in that it is inserted into a more complex body (society), which modifies it through depersonalized processes. Naturally it is a question of scale, of the size of the phenomena which are being studied. The historian interested in a single event or single personality will be able to emphasize free initiative and ignore the great numbers, and can, in a word, study the individual case (and at the extreme, the exception) quite apart from the norm. But the historian interested in great phenomena will be able to formulate laws

<sup>369</sup> Rowlands 1987; Cherry 1987, pp. 163-168; Champion 1989 (the Near East is missing from the book); detailed history of the question in Reculeau 2009.

<sup>370</sup> Vol. I p. 392 of the English translation by Sophie Wilkins, London 1996.

and advance valid forecasts on the more or less near future. In certain more depersonalized sectors, such as demography and economics, the confirmation of a statistical history, based on series of abundant and recurring data, becomes a complete and impregnable fact.

But let us return to the passage from Musil, illuminating in his imaginative genius: the billiard ball and the cloud are two elements both purely physical; the liberty of human initiative does not enter into it. The predictability of the movement of one and the unpredictability of the movement of the other are due to different levels of complexity and cohesion. Physicists speak of 'linear' and 'non-linear' systems, depending on whether their behaviour is determined or less so by the sum of the stimuli which they receive. And so the billiard ball behaves in a 'linear' fashion; the factors for calculation are, all things considered, few: the impulse given by the cue, the friction of the cloth, the geometry of the rebounds. The question with the cloud is different: even if all the atmospheric conditions (pressure, humidity, heat) were known, a determination, or forecast if you prefer, of its course is not possible, and becomes even harder as soon as the temporal projection is lengthened. With the advent of satellites weather forecasts have become more reliable, but for historical phenomena, in particular economic ones, the 'weather forecasts' remain unpredictable. A book could be put together on how even short-term forecasts are then always contradicted by reality, not only because the forecasts are somewhat contentious, but also because the variables are enormous.

It was necessary to wait for the advent of the computer, so that the historian, or at least a certain sort of historian, constructor of explicit models of situations and evolutionary trends, could not only command an efficient work instrument, but above all could use procedures and models formulated by specialists of the 'General theory of systems'. Our central question is that of the growth and decline of cities, of states, and more generally of entire civilizations, which all form a parabola, which, among other characteristics, lends itself to the insistent use of metaphors – biological (the city as an organism: birth and death), astronomical (the city as a temporal cycle: dawn and dusk), or architectural (the city as a building: construction and collapse).<sup>371</sup> Now in the dosage (if we might so call it) of attention paid over the course of time to the two phases of the parabola a curious contradiction can be noted. On the one hand it is clear that collapse and destruction are archaeologically much easier to identify and visualize than growth. The end of a city (or, put better, of a phase of occupation of an urban site) can be felt by hand, both in the

<sup>371</sup> Cf. also Lowenthal 1985, pp. 140-142.

form of an unexpected catastrophe, which translates into a stratum of fire and collapse, and in the form of abandonment, followed by a period of non-occupation or more often by a miserable frequenting by squatters. Also, as far as the artistic, pictorial or literary imagination goes, collapse has always been much more popular and fascinating than growth, and we saw from many relevant examples in the first chapter – with the collapse of the Tower of Babel as a symbol of our imminent collapse.<sup>372</sup> Both these evident disparities (of visibility, of allure) are explained by noticing that collapse is normally an 'event', while formation is a 'process'. Formation is a process even when it is a question of building ex nihilo a new capital, which is, yes, an event, but inserts itself into a more overall process of economic or political growth. And vice versa, collapse is normally an event even when it is historically expected from a phase of decline. As Jakob Burckhardt said (in 1870) 'In nature, annihilation only comes about by the action of external causes, catastrophes of nature or climate, the overruning of weaker species by bolder, of nobler by baser. In history the way of annihilation is invariably prepared by inward degeneration, by a decrease of life. Only then can a shock from outside put an end to the whole'.373 The shock would not have an effect without the degeneration, but a shock is still always necessary.

In apparent contradiction to this traditional preference for disasters, there is a need, however, to notice how in the course of study historians' attention has for long concentrated on the phenomenon of growth. As an impressionistic estimate, for every conference or book there has been on crisis, up until recent times, there have been at least twenty on growth or urbanization. This preference is also explained in the same way: historians prefer to investigate processes (while populizers prefer events), and the processes require greater attention and greater labour.

Returning, however, to what Burckhardt said on the different measure of natural and human causes between processes and events, the passage is excellent, but today – in the light of the systematic approach, or even of theories of catastrophes - it appears altogether inadequate. Theories of systems and theories of catastrophes have changed our approach to collapse, fundamentally due to a technical factor, the electronic elaboration of data, which, however, has had essential methodological consequences: it has allowed the analysis of the structure of a society as constituted of various sub-groups which interact with each other, and the structure of a process as constituted of different fac-

<sup>372</sup> Gottman 1983, Chapter 1/7 Skyline and Tower of Babel with a skyscraper, a new tower, expression of the modern megalopolis, which makes us fear an imminent collapse.

<sup>373</sup> Burckhardt 1905, p. 103 of the English translation.

tors which in turn influence each other. The passage from a way of regarding processes as mono-faceted to a way of seeing them as multi-faceted is for us by now commonplace, but rereading the explanations of the pre-electronic past the difference leaps to the eyes and the enrichment can be seen as prodigious.374

The 'new' way of understanding processes had the effect of putting growth and decline on the same level, not only insofar as both are endowed with similar complexity and multi-faceted characteristics, but also in that both constituent parts are of one single and larger event. So attention to decline and crisis, collapse and catastrophe grew noticeably in the 1970s. With a good measure of simplification, we may recall that in 1972 the 'Club of Rome' commissioned from the scholars of MIT a report on 'The limits to growth',<sup>375</sup> in which the development of a series of factors (population, natural resources, pollution, food, industrial production) interacting among themselves in an interweaving of reciprocal 'feedback', would inevitably produce final collapse, had they not shown the foresight of changing the development of one or more factors in such a way as to obtain a lasting 'global equilibrium'. The old dream of Volney and so many others, of avoiding our next catastrophe by using the experience of past catastrophes, seemed thus to assume a scientific aspect worthy of all respect – save then for convincing the governments of the whole world to assume the relevant compelling decisions, with which we stay for ever at the level of dreams.

But at this point I think it correct to introduce, alongside the technological fact, also an emotive fact. The pre-eminent attention to the processes of growth had been typical of a long phase of European history lived under the banner of progress - of the tenor of life, the production of goods, the conquests of markets - for which limits were neither placed nor foreseen. The attention to collapse crept in and coincided with the emergence of widespread concerns (political, economic, ecological) about the sustainability of this development in the long term, and work on the limits of the development really bore the stamp of this anxiety. It is noticeable that in the nineteenth-century vision the collapse was normally of others, not ours; it was something which happened

<sup>374</sup> I am repeating here what I have already said in Liverani 2008a. Among the many multifaceted approaches see Flannery 1972b (truly systemic approach); Jarrige 1973 (against the traditional mono-causal explanations, and in favour of a multi-faceted approach) and Cohen 1978 (on the origins of the state; demographic factors in the first place, but also others, both external – such as trade, war, tributary relationships – and internal, such as culture, ethnicity, religious and political ideologies).

<sup>375</sup> Meadows et al. 1972; 1973.

in the past and to alien civilizations, and only rarely were heard the tones of a preoccupation with our own futures: from the 'Enlightened' meditations of Volney on the 'revolutions' (in an astronomical sense) of the empires, to the contemporary (1798) picture of Joseph Gandy, who imagined the Bank of England (just built by the celebrated architect Sir John Soane) as reduced to a ruin. Gandy himself would then complete (1830) a larger vision of the whole of London reduced to ruins.<sup>376</sup> Modern preoccupations, in contrast, really concentrate on the outcome of our own economy, of our way of life – and we can amuse ourselves with the ruins of others, whether ancient or modern, and even rejoice, since the others have become our competitors in a world in which it is altogether evident that there is not room for the well-being of all.

In the same year, 1972, René Thom's book on the concept of catastrophe was published,<sup>377</sup> as a mathematical formalization of the breaking point, when the adding of factors provokes the collapse of the entire system and its reconfiguration in a changed form: 'The sight of the universe is of an incessant movement of birth, development and destruction of forms. The object of every science is to forecast this evolution of forms and, if possible, explain it'.378 Obviously mathematical formalization has its own fascination, even for those (like me, but I think for most 'humanists') not in a position really to understand it. In reading the popular presentation of Woodcock and Davis,<sup>379</sup> I have understood that the outcome of the Roman Empire is a 'cusp catastrophe', structurally comparable to the representation of variations in a dog's aggressiveness;<sup>380</sup> but then, on causes and modality the mathematical model can say nothing that we did not already know, being inevitably constructed on precisely what we did already know. The difference lies in the fact that earlier, in the 'old model', lists of causes and pre-existing reasons could be established, as Alexander Demandt did, putting together a list of 210 causes for the fall of the Roman Empire, suggested by various authors.<sup>381</sup> With the 'new model' on the other hand, it is the play of interaction and 'feedback' between diverse factors that counts towards constructing the model. And so, to exemplify, the question of negative effects of agricultural over-exploitation (excessive irrigation, reduction of fallow periods, introduction of summer cultivation, colonization of mar-

<sup>376</sup> See Woodward 2008, pp. 147-154 (with the first picture at fig. 13 and the second on the cover).

**<sup>377</sup>** Thom 1972.

**<sup>378</sup>** *Ibid.* p. 17.

<sup>379</sup> Woodcock and Davis 1978, especially fig. 27.

<sup>380</sup> Ibid. with fig. 21. The case of the Roman Empire is recurrent, cf. earlier Zeeman 1976.

<sup>381</sup> Demandt 1984.

ginal lands at the expense of pastoral farming, deforestation of the mountains) had already been pointed out for several decades,<sup>382</sup> but has only recently received a properly systematic treatment.383

From that point the neo-archaeologists (starting from Kent Flannery<sup>384</sup> and Colin Renfrew<sup>385</sup>) began to make use of the new technologies and new models, applying to the past the art of simulation which had been invented to predict the future. There was, however, a difficulty which could be ignored conceptually but which was operatively frustrating, and this was the lack or scarcity of certain data to insert into the complex calculations. Models suitable for controlling 'great numbers' can only be poorly mimicked with the 'small numbers' which we have available. The simulations of the past, therefore, flourished more in the shape of schemes of flow,<sup>386</sup> of non-quantified theoretical models, than of true and real diagrams with the curves which interweave so wondrously until ending in the flat organisation chart of the final catastrophe.

So we pretend that ancient history is a science, and that our homework – to re-use Thom's phrase here – is not only that of identifying discontinuity (so far well and good, that is what we do as a profession) but also 'to foresee and if possible explain it'. I allow myself here a small correction: 'to explain it and if possible foresee it' because it does not seem to me possible to give a prediction without first explaining the mechanism. Anyway, for ancient historians the problem is upside down, or, if we prefer, it is simplified: there is no need to foresee, basing ourselves on the development of known factors; on the contrary we actually start from knowing what has happened, to try to identify in that the unknown factors. But we should be grateful to the systemic approach for at least three solid points, from which to begin. The first is that, contrary to what ancients thought, it is not so much knowledge of the past to explain the present and to equip us for predicting the future, but is rather knowledge of the present (where the data are definite) to help us to 'predict the past'. The

<sup>382</sup> Jacobsen and Adams 1958; Gibson 1974.

<sup>383</sup> Redman 1999.

**<sup>384</sup>** Flannery 1972b suggests a systemic mechanism for the study of the growth (and possible collapse or devolution) of the political system, which is not something to analyse here, since it is looking at institutional evolution rather than that of town planning.

<sup>385</sup> Renfrew (ed.) 1973; Renfrew 1978; 1979 with explicit use of the theory of catastrophe. On the archaeological use of the theory of systems see Watson, LeBlanc, and Redman 1971 and 1984, pp. 67-111; Wenke 1981; and above all Van der Leeuw 1981 (introduction, very influential in the archaeological field, to the use of the models of the new mathematics for the study of change and spatial distribution) and Hill 1977 (with an exhaustive bibliography on the argu-

<sup>386</sup> Starting at least from Redman 1978; cf. Liverani 1986, pp. 53-57; Davies 2005.

second point is that the course of history is complex in time and space, it is a continuous following and drawing alongside of ups and downs, of growth and crisis, in an interconnected space of variable dimensions, with phenomena of secondary (induced) collapse or instead compensatory growth. This tangle of complexity cannot be arbitrarily simplified, giving preference to a single line of our choice, inevitably ideological and teleological; and even the old distinction between internal and external factors loses weight, since everything is a part of the system, and it is up to us to arrange the system in a way that embraces all the interacting factors. The third point is that discontinuity gives rise to a form (to use Thom's term) different from that preceding, and so then we need above all to define the two forms (the one before and the one after the crisis) to understand what the discontinuity consists of, rather than complaining a priori of its negativity.

In 1988 two books were published on the collapse of the Ancient Near East, one by Joseph Tainter and one by Norman Yoffee and George Cowgill, who in truth were not so much centred upon the collapse of individual cities, which is a more simple problem, but on that of entire 'civilizations'.<sup>387</sup> And the following year a long article by Bill Dever was published which explicitly used the theory of systems and multi-factored analyses to study the growth and collapse of urbanization of the Ancient Bronze Age in Palestine.<sup>388</sup> If a city collapses it will be possible to argue over the means and causes, but the fact remains materially certain and indisputable: collapse of physical structures, decrease in the population present. But when we speak of the collapse of an empire or civilization, what is it that has really collapsed? Where is the discontinuity, the perceptible exception from normal long-term change? The systemic approach has been criticized by the post-processual Ian Hodder as materialistic: 389 but everything depends on what indicators are considered decisive. Abrupt decrease in the population present seems the parameter emblematic of collapse, and certain graphs on population trends, or, in archaeology, on settlement hectares, provide concise visualization of what a collapse is;390 but neither Tainter nor Yoffee and Cowgill take it into consideration.<sup>391</sup> Equally materialistic is the cal-

<sup>387</sup> Tainter 1988 (and then id. 1999); Yoffee and Cowgill 1988 (and earlier Yoffee 1979, and then id. 2005, pp. 131-160; id. 2011, with the schemes of hierarchic towns in the Early, Middle, Late, Imperial and Post-Assyrian periods.

<sup>388</sup> Dever 1989.

<sup>389</sup> Hodder 1986, pp. 20-40.

**<sup>390</sup>** Cf. for example the graph in Adams 1965, p. 115, fig. 25.

**<sup>391</sup>** The demographic collapse (clear in the case of America after the Spanish conquest) is instead considered by the more popular Diamond 2005.

culation of physical extent, especially if applied to an empire, and graphs on the growth and decline of the Roman Empire or the Chinese Empire have been adopted as clear portrayals of the parabola that develops 'normally'.392 But more often, for reasons already given, the process of growth is more progressive, and that of decline is more abrupt, sometimes even vertical: I cite here the curve of the extent of the Iranian city of Shakr-I Sokhte,<sup>393</sup> but similar curves could be constructed for numerous other cases. And it is noticeable that past collapses were once treated as picturesque and romantic, and now that we are inside, it is a question of understanding how to get out of it (now and in the past): so collapse and rebirth.<sup>394</sup>

If the purely quantitative datum is not satisfactory, perhaps we should say that the political structure collapses, the social order, the economic system – in a word the organizational complexity: and this is actually Tainter's essential thesis. Or we might wish to measure as a principal indicator of collapse the entity of cultural production (which is basically that which remains to us from the past): buildings, writings, intellectualism, art? Or more banally the Gross Domestic Product – but how can this be done, with the scanty data which we have, to measure the GDP of the third dynasty of Ur, or of the Assyrian Empire? Or we might even wish to measure a more intimate indicator, the level of happiness, today they would say 'perceived wellbeing'? All these waverings, however, cannot lead to a denial of discontinuity, in favour of continuity, following a modern trend.<sup>395</sup> When I studied the collapse of the Assyrian Empire,<sup>396</sup> all the elements that were in some measure quantifiable (extent, building activity, radius of military action, relationship between capital and country, between expenditure and production, etc.) indicated a vertical collapse, highlighted besides by the fate of the city razed to the ground and remaining for centuries at the level of villages and rubble – so that the suggestions of minimizing the Assyrian collapse, on the basis of a few scribes remaining still active for a few years<sup>397</sup> (like the proverbial Japanese soldier on a Pacific islet), run the risk of looking too closely at a tree to be able to see the forest. And the same can be said of the fate of the Hittite Empire and its capital, which will have been

<sup>392</sup> Cf. Tainter 1988, p. 125, fig. 21; Cherry 1987, pp. 159-163 with fig. 5 (both taken from Taagepera 1968).

<sup>393</sup> Tosi 1977, fig. 5; also Biscione 1977; 1983.

<sup>394</sup> Schwartz and Nichols (eds.) 2006; Berlejung (ed.) 2012.

**<sup>395</sup>** See the criticism of Ward-Perkins 2005.

**<sup>396</sup>** Liverani 2008a.

<sup>397</sup> Dalley 1993. After the Assyrian collapse the valley of Khabur still resisted but under Babylonian sovereignty, cf. Kühne 2011.

abandoned rather than destroyed, but remained anyway depopulated for centuries before hosting a Phrygian village of a very modest level of power and complexity.

## 5.14 The climatic factor and the early environment

As the analysis of cycles of urbanization extends further to different regions, and more temporal coincidences are met with, so too does some sort of explanation of these coincidences become necessary, and in the course of research different explanations have followed each other. To simplify, three phases can be identified. First, urbanization was thought to be diffused, starting from a single centre or at maximum from a pair of centres, and it was thought that this process of diffusion (by means of migrations of people, or of elites, or of techniques and ideas) was enough to explain the temporal coincidences and the temporal distribution. Next, single-centre origins and migrations were rejected, but the dragging effect that primary urbanizations exercised on secondary ones was maintained. Finally, recently and really as the world was globalized, there was a localising reaction, intent upon minimizing the effect of external 'input' so as to value instead the internal dynamics of development. If there is an influence, the 'merit' is not due to the culture which provides the model ('imperialist' approach) but to that which assumes it ('equal dignity' approach). Each civilization has inside it the prime mover of its evolution, and the best condition for the study of evolutionary phenomena is that of the island. But then, what to do with the coincidences and temporal distribution?

To read certain works of neo-archaeologists and proto-historians it seems that their theoretical model is Wilhelm Leibniz' Monadologia (1714): The Monads 'do not have windows', they cannot communicate among themselves; 'There is no way of explaining how a Monad can be altered in quality or internally changed by any other created thing; since it is impossible to change the place of anything in it or to conceive in it any internal motion which could be produced, directed, increased or diminished therein, although all this is possible in the case of compounds, in which there are changes among the parts. The Monads have no windows, through which anything could go in or come out' (§ 7). How then to explain the evident fact that human beings and human groups interact? The reason is in the so-called 'pre-established harmony': 'Since one created Monad cannot have any physical influence upon the inner being of another, it is only by this means [the mediation of God] that the one can be dependent upon the other' (§ 51). The world functions like a mechanical toy theatre, a clock apparatus, of those that were popular in Leibniz' day: when the damsel passes in front of the gentleman, he bows his head as a mark of respect, not because he sees her, but because the clockmaker had prearranged this coincidence from the beginning.

Now, if the first urbanization and then the successive cycles are strictly linked from region to region, the cases are two: either there is some sort of 'pre-established harmony' or 'the Monads have windows'. For those who opt for this second, more traditional, explanation, it is possible to think of a 'Darwinian' mechanism, through which a winning mutation (that is, endowed with greater strength) expands necessarily at the expense of whoever remains outside the mutation itself – and the DNA genome project has scientifically clarified the genetic mechanisms of this diffusion.<sup>398</sup> In other words, the socioeconomic mutation of urbanization, entailing an increase in productivity and widening of the socio-political dimension, tended to spread like a contagion. Whoever prefers instead to have recourse to the pre-established harmony will need to think of a cosmic clockmaker, extra-human, and since it is by now clear that the God creator is not interested in the progress of our terrestrial world (we could say: God exists, but is outside the room), then the regulatory factor is, according to all the evidence, the climate, whose oscillations directly determine (especially in the zones at critical equilibrium) the highs and lows of human occupation, and indirectly also provoke those population movements that are sometimes (jointly) responsible for decline and collapse.

The preferred explanation (even if the object of heated debate) in the last decades of the last century was in effect the climatic one. The influence of climate on the events of human society has a long history, starting when there was not yet evidence going beyond the great cycles of 'glaciation' - which, apart from anything else, left the entire historical phase inside one 'interglacial' period and so could perhaps be urged for the forming of the Neolithic Age but certainly not for urbanization. Besides, after a certain favour on the part of positivist historiography over the end of the nineteenth and beginning of the twentieth centuries, the climatic factor was put aside and long obscured by idealist historiography in the period between the two wars, with its preference for human events being caused by exclusively human factors. But a revival of historical consideration of the environmental and climatic factor took place from the 1960s, for a double reason: the habit of archaeologists to collaborate with scholars of the early environment, and the development of a 'new climatology' which, using more refined technical procedures, succeeded in documenting even minor events, middle and short-term oscillations, also much present in the historical phases. Historical studies took note of it then, but above all in the 1980s,<sup>399</sup> with a clear preference in linking the climatic factor to the processes of collapse rather than to those of growth. So in the case of urbanization the change was cited to explain the crisis of the cities and the abandonment of entire semi-arid zones, or rather their reconversion to a lighter pastoral settlement, while not cited to explain their growth. Catastrophes, one knows, especially if unexpected, are much more spectacular, more impressive, than growth, which is always slow.

Bridging, so to speak, the dramatic climatic changes of prehistory and those more contained of the last millennia, is the recurrent question of the climatic factor's possible influence on the first urbanization: lowering of the sea level in the Persian Gulf would have allowed the first occupation ('Ubaid) of Lower Mesopotamia, and be followed by the first urbanization (Uruk) in the previously impracticable delta zone. This explanation, held particularly in the German world (because the core samplings of the sea bottoms, on which it is based, are German)<sup>400</sup> seems to me simplistic, and besides contradicted by more complete reconstructions of the geo-morphological history of the region.401

The climatic explanations are still being debated, but it is more a question of form than of substance. A simplistic and purely mechanical explanation leaves historians dissatisfied and annoyed, but an aprioristic denial ignores the fact that environmental conditions constitute the concrete scene of human events, and that these conditions change (and even greatly) in the course of time. To go back to Jakob Burckhardt's words cited earlier, the effect of external causes (in primis climatic) is much easier if 'prepared by inward degeneration'. And so, in the case of a city, the population repairs the ruin of an earthquake by rebuilding the houses, but if an entire region remains de-urbanized and more or less depopulated for centuries, then it is necessary to look for the signs of that internal crisis, onto which the external shock was grafted and so played a decisive role, though insufficient per se. In other words, the climatic explanations of collapses always need to be inserted into a more complex scenario, alongside socio-economic and political factors. The altogether positive result, however, of the 'new climatology' consists of having contributed to the reconstruction of the early environments in their diachronic transformation,

<sup>399</sup> For the evidence I refer to Liverani 2012a, limiting myself here to recalling Liverani 1968 and Crown 1971; 1972.

<sup>400</sup> In particular Nissen 1983. On environmental change as the origin of urbanization cf. Hole 1994.

<sup>401</sup> Sanlaville 1989; then excellent Verhoeven 1998.

and so of having placed the phenomena (in our case: of growth and decline of urbanization) in non-anachronistic scenarios.

The most persistent example is that of second urbanization in Upper Mesopotamia, at the time of the collapse of the Akkad Empire, towards the end of the third millennium. The case has been advanced in various articles by the Yale archaeologist and excavator of Tell Leilan, Harvey Weiss, with his associates and palaeo-climatologist colleagues, and is confirmed in spite of initial resistance and perplexity. 402 It is noticeable that the Upper Mesopotamian collapse is contemporary with that yet sharper and more distinct (and long identified in the archaeological record) of the southern Levant, where the period between the end of Early Bronze Age II-III urbanization and the beginning of that of the Middle Bronze Age was at first (up until the 1960s) attributed to migratory factors, to the arrival, that is, of the nomadic tribes of the Amorites,<sup>403</sup> and then (1970s) to internal crisis of the 'dimorphic' (urban/pastoral) system.404 Evidently, therefore, climatic worsening can be behind (in both cases) the dilemma of invasion/internal crisis as a prime mover, more necessary as the area involved in the crisis grows wider. 405

The collapse of the third urbanization and the 'dark' period at the end of the second millennium was also linked to a climatic crisis, 406 to widespread notices (in Hittite and Egyptian texts) of famines, and to migrations of starving people. Earlier the dendro-chronological sequence at Gordion, studied by Peter Kuniholm of Cornell University, showed a sequence of a number of decidedly arid years, and then other scientific evidence appears alongside the quite explicit textual data.<sup>407</sup> In this example the climatic episode was short but harsh, and provoked the violent migrations which came from the Egyptian and Balkan areas into the Levant and Anatolia, destroying a large part of the Syrian and Anatolian cities – with the case of Ugarit a clear example.<sup>408</sup>

But to return to the historiographic success of the 'new climatology', what is the more general historical frame here? As I have already said elsewhere, western civilization seems to behave itself like a child with its toy, joining study to destruction, even to the point of ruin: the child destroys the toy in order to

<sup>402</sup> Weiss et al. 1993a, b; Staubwasser and Weiss 2006.

<sup>403</sup> Summary in Kenyon 1966.

<sup>404</sup> Above all Dever 1989 (culmination of several articles in the 1970s), and earlier Liverani 1970 and 1973.

<sup>405</sup> The climatic factor was adopted by Rosen 1989; the summary by Palumbo 1990 is geared towards internal factors.

<sup>406</sup> Neumann and Parpola 1982; Kirleis and Herles 2007.

<sup>407</sup> Cf. now Kaniewski et al. 2010.

<sup>408</sup> Liverani 1995b.

see how it works 'inside'; the western world sets itself to study (and 'save') that which it is destroying, and does this at the last useful moment or perhaps when it is already too late: thus with the 'native' populations, with the cultural heritage, and with the environment. 409 There is no doubt, in fact, that the 'ecological' interest that has permeated socio-political, but also historical-cultural, thinking from the 1960s onwards is a backlash from the widespread compromising of our environment, through unthinking over-exploitation and culpable negligence. The dramatic environmental changes that we are living through (right up to actual 'global warming') have prompted us to study those of the past, by now very aware that the environment changes, and that certain cities whose positions in today's desert or semi-desert landscape seem incomprehensible, were actually surrounded, under very different climatic conditions, by a different landscape, which they were able to exploit.

The suggestion could also be made that the modern world's undoubted self-blame for the impending (and culpable) ecological disaster has helped to transfer to more ancient periods the belief that, alongside the changes due to the climate, those due to man also need to be assessed. Enough here to cite Karl Butzer's contribution in the 1960s: the prehistoric landscape is determined by climate, but the historical landscape by human intervention: irrigation (with the system peculiar to the Nile valley), technological development, demographic development, and urbanization, 410 or, to recall yet once more the emphasis placed by Adams and by Gibson on 'engineered disasters', from agricultural overexploitation. 411 Certain phenomena of deterioration from overexploitation are unquestionable, but this was a matter of reversible effects, which anyway did not determine any climatic change. Other examples seem exaggerated: with the low technological levels of the time, deforestation and pollution must have been so modest as to have no noticeable climatic effects.

On the operational level, with the 1980s, early-climatic and geo-morphological enquiries intensified,<sup>412</sup> then to be summarised in collected volumes<sup>413</sup> and appropriate manuals.414 If the French mission at Mari and in the area of

<sup>409</sup> Liverani 2005a, p. 223.

<sup>410</sup> Butzer 1964 (limited to prehistory); 1976 (only on Egypt); latest 1995 (excellent summary).

<sup>411</sup> Jacobsen and Adams 1958; Gibson 1974.

<sup>412</sup> Besançon and Sanlaville 1981 for the Middle Euphrates, also Geyer 1985; Geyer and Monchambert 1987.

**<sup>413</sup>** Brice (ed.) 1978; Bintliff *et al.* (eds.) 1988.

<sup>414</sup> From that of Butzer 1964 to the recent one by Waters 1992 (from a North American perspective alone); Cremaschi 2000 (which includes North African, Near-Eastern and Central Asian horizons); Nützel 2004.

the Middle Euphrates, 415 and the Belgian mission at Sippar and in the Akkadian area paid particular attention to geo-morphology (see at § 5.2), a complex programme of early-environmental reconstruction was by now practised by various missions, and can even be considered a 'normal' paradigm - though special mention is at least due to the mission of Tell Sheikh Hamed.<sup>416</sup> Textual evidence was also used, above all from 1980, for environmental reconstruction, both with the project of the 'Rome school' relevant above all to the agrarian landscape and the shape of the fields (but also of the urban buildings) as recoverable from administrative and legal texts;<sup>417</sup> and with the 'Bulletin on Sumerian Agriculture' edited at Cambridge by Nicholas Postgate between 1984 and 1995, 418 with contributions on the flora and agricultural practices, on irrigation and on domestic animals. Reconstruction of the environment therefore looks at the land in its entirety and above all the cultivated countryside, rather than the properly urban environment. But this territorial reconstruction makes the placing of cities in their context more realistic than it had been down to the 'ecological' revolution.

## 5.15 The demographic factor

At the beginning of the poem of Gilgamesh, in describing and celebrating (and certainly not belittling) the city of Uruk, it is said that a square mile is of houses, a square mile of urban vegetable gardens, a square mile of clay-pits (and I would add: of rubbish pits), and half a square mile is the temple area. The Mesopotamian city, even though densely inhabited, had therefore ample spare spaces, and calculations of its demographic capacity must take that into account. But for long this general indication was not much taken into account and the estimates have often tended to provide numbers that are far too high.

It is well known that all pre-modern history, not having available coherent and continuous quantitative data, is a pre-statistical history. But it is equally well known that a sort of quantification, however approximate, is nevertheless

<sup>415</sup> Final volume Geyer and Monchambert 2003 (more diverse articles of predictions and summaries).

<sup>416</sup> Kühne (ed.) 1991, with excellent graphic and photographic documentation, and chapters on the geo-morphology (Ergenziger) and on the canals (Ergenziger and Kühne); also Ergenziger et al. 1988. I saw Reculeau 2011 too late to be able to use it.

<sup>417</sup> Zaccagnini 1979 (Nuzi; argument taken up by Müller 1994); Liverani 1988-89 (Ur III); 1996a (summary); Fales 1989 and 1990 (Assyria); Mori 2003 and 2007 (Emar).

<sup>418</sup> Postgate and Powell (eds.) 1984-1995; cf. also Foster 1999.

indispensable for assessing historical phenomena. For the city, the assessment of the number of inhabitants is essential, not certainly to establish on this basis what is the minimum 'threshold' of the city (because such thresholds vary historically), but to estimate the historical size of the phenomenon, the typology of the city, the level of urbanization of the total population, the comparison between different cities of the same period and so on. And in effect, once the first 'mythical' phase is overcome, which oscillates between the two opposite extremes of the 'empty' city and the innumerable crowds of subjects/slaves, and once sufficient samples of an urban fabric are available (following the German excavations first and those under the mandates next), the problem is posed to us. We have already seen how Frankfort (§ 2.13) had first attempted estimates, which for long remained classic points of reference, and how then Adams (§ 4.2) had systematically practised quantitative estimations to outline the demographic and settlement trend of ancient Mesopotamia.

These evaluations are based substantially on comparison with modern settlements: first (in the 'colonial' age) using the model of the Islamic city, and then (with the advent of ethno-archaeology) using the model of modern Near-Eastern villages. 419 Obviously the two models provide very different quantitative references: the first, applicable to the city, provides very high estimates, given the crowded nature of Islamic cities, with houses of several storeys and a dense urban fabric with narrow alleys, whereas the second model, applicable to villages, provides a very low estimate, given the outspread fabric of houses interspersed by wide areas for work and for human and animal traffic. It was clear to all that the density of inhabitants per hectare was noticeably influenced by different factors: the presence (in the city) or absence (in the village) of a surrounding wall which takes in the inhabited space, the incidence of spaces for circulation, the incidence of public and monumental buildings, the level of abandonment/destruction of buildings, the heaps of refuse, and such like. These are all elements that it is possible (at least partly) to assess in an amply excavated city, but not for sites where modest soundings have been carried out, and even less for sites known only from an analysis of the surface remains. At the diachronic level then, while a calculation is easier for an amply excavated stratigraphic level, estimates through levels (particularly deeper ones) remaining as yet only sounded are much more problematic. And on the regional level, if the fossil-guides used to date the tell have too wide a definition, then the probability that not all the settlements assigned to a given period were inhabited contemporaneously becomes crucial.

Taking account of all this, the processes which found practical implementation in Near-Eastern archaeology were the following. (1) Calculate the area settled, period by period, and apply a parameter of inhabitants per hectare. The system is easily practicable (and is, in fact, that most often practised), both for excavated sites and for those with surface surveys; but it is very imprecise, as the variety of parameters used by different authors illustrates: 100, or 125, or 200 (and more) inhabitants per hectare; or (in Israel) up to 50 per dunam.<sup>420</sup> (2) Calculate the settlement area alone, that used for dwelling, and then apply ethno-archaeological parameters (variable according to the type and size of the settlement).<sup>421</sup> The system is more precise, but obviously only applicable to excavated areas (now also to those well mapped by geomagnetism), and the extension of the datum to the whole site carries a good dose of interpolation. (3) Count the number of dwelling houses (in the areas excavated), calculate the total, and multiply by the median family size. Here also the parameter used varies (a factor of 5 is often used; but there are those who suggest a factor of 8, which seems excessive), also because the farming family is normally composed of father, mother and a pair of children (survivors of the high level of perinatal mortality) and a maximum of one servant; whereas an urban family of high class could be composed of more wives, certainly more children, and numerous servants. The size (in square metres) of the dwelling house is an element of estimation, but the existence (and extent) of a second floor is not always known. (4) Calculate the food resources of the lands of the city (process of the site catchment type, cf. § 5.3) and/or those contained in the storerooms/silos of the city, as well as the reserves of drinking water (wells and cisterns). The process is more applicable to a prehistoric village than a city (which receives resources also from further away) and runs the risk of providing exaggerated estimates through excess, given through counting that all the resources of the territory were exploited, and/or that the storerooms were fully filled to capacity. It provides rather a maximum limit compatible with the technology of the time, which is not a real and correct estimate. (5) Finally, recover data from the texts (where they exist) taking account, however, of the propagandist distortion of the celebratory ones, and of the conventions of the administrative ones.422

**<sup>420</sup>** Shiloh 1980 (the *dunam* is a tenth of a hectare).

<sup>421</sup> Postgate 1994 estimates the 'urban space' at 95% of the tell, the 'residential space' at 90% of the urban space and the 'roofed space' at 40% of the residential space.

<sup>422</sup> On the various methods, cf. Kramer 1980; more critical Hassan 1981 (with comments by Ammerman 1989).

Here I can take a concrete example, relative to an amply excavated city, that of Ugarit in the fourteenth to thirteenth centuries. W. R. Garr<sup>423</sup> estimated that of the total area, 72.5% was residential, and 27.5% was public/monumental. But only 47.9 % was covered area and so effectively lived in, for a total of 7.64 hectares, which multiplied by the factor of ten square metres per inhabitant gives a total of 7640 inhabitants. Now the preceding calculations carried out on the texts<sup>424</sup> gave more or less the same result, which can therefore be considered quite rational, so much so as to be adopted by the French mission as well for the project of town planning study of the site.<sup>425</sup> For the demographic estimate of the whole territory, while the example of Ugarit does not appear suitable (it still lacks extensive surveys, and difficulties remain from the modern exploitation of the area), that of Alalakh in the fifteenth to fourteenth centuries is, on the other hand, thanks to the detailed lists of villages with the number of houses and inhabitants: here also archaeological analysis<sup>426</sup> provides confirmation of what had already been recovered from the texts.<sup>427</sup> For Khattusha (Boğazköi) also the estimates (15/20,000 inhabitants) between the archaeological data and the texts are more or less in agreement. 428 One certainly abnormal example, on the other hand, involves a quarter of Assur, studied on the archivist/prosopographic data compared with the area of the houses, to arrive at a density of 600–700 people per hectare.<sup>429</sup>

Demographic estimates are frequently put forward by Israeli archaeologists, of the Department of Antiquities and of the University of Tell Aviv, with attention both to the problems of method and the parameters to be used, 430 and to their application to individual sites<sup>431</sup> and entire districts, period by period.<sup>432</sup> The demographic estimates carried out by Robert Adams for Lower Mesopotamia (to which I refer at § 4.2 and § 5.2) are necessarily rougher; and the assessments put forward for Egypt are rougher still.<sup>433</sup> For Upper Mesopotamia it is

<sup>423</sup> Garr 1987.

<sup>424</sup> Liverani 1979b.

<sup>425</sup> You 1992. My estimates were on the other hand criticized by Schloen 2001, pp. 317–347.

<sup>426</sup> Casana 2009.

<sup>427</sup> Liverani 1975; Serangeli 1978; now Niedorf 2008; von Dassow 2008.

<sup>428</sup> Bittel and Naumann 1952, p. 26; Mora 1977.

<sup>429</sup> Åkerman 1999–2001 seems ill informed on the problems of early demographic estimates and his analysis is too simplified.

<sup>430</sup> Shiloh 1980; Zorn 1994; Schloen 2001, pp. 135-183.

<sup>431</sup> Tell en-Nasbah would have had 800/1000 inhabitants in Iron Age II, and only half that in the neo-Babylonian period.

<sup>432</sup> Broshi and Gophna 1984 (Early Bronze II/III); 1986 (Middle Bronze II); Gophna and Portugali 1988 (Early/Middle Bronze); Broshi and Finkelstein 1992 (Iron Age).

<sup>433</sup> Butzer 1976, pp. 81-98; O'Connor 1972a, b.

the survey carried out by Tony Wilkinson and colleagues (§ 5.3) that provide more concrete and reliable data. By now it would be appropriate to redo Adams' calculations, beginning from updated calculations differentiated between cities and villages.<sup>434</sup> Ottoman Aleppo had c.300 inhabitants per hectare, with twostoreyed houses and families averaging 7 people, and so for the great walled cities of the Ancient Near East, calculating one and a half floors (partial upper floor) and families averaging 5.5 people, we arrive at a density of 175 people per hectare. For the average small towns the density may drop to 100, and for the open villages to a maximum of 50 (but they could also be less).<sup>435</sup>

A different problem, even if correlated to that of the demographic estimates ('How many Sumerians per hectare?' as Nicholas Postgate asked)<sup>436</sup> is that of evaluating the weight of the demographic factor in determining the phenomena of urbanization, and in particular that of the first urbanization. Was it the demographic push that primed the 'urban revolution' or was it the consequence of it (with the first factor to be identified in technological innovation)? The problem has been noticed from the 1960s at least, and I limit myself here to cite how Morton Fried, claiming the demographic factor in the evolution of the social structures, 437 criticized Adams for having minimized them. 438 But afterwards Adams himself would state that demographic growth preceded the urban explosion and so was one cause, or at least a pre-condition.<sup>439</sup>

But the question was raised to the first level following the publication (in 1965) of the authoritative book by the economist Ester Boserup, 440 who upturned the relationship between growth of the population and technological innovation, considering the demographic pressure as the 'independent variable' and technical progress as the dependent variable. After various debates (and also criticisms) on the model's acceptability in a prehistoric and ancient context, 441 Boserup returns to the theme with a second book (in 1981), in which

<sup>434</sup> I refer to Marcus 1989 for the cities: Aurenche 1981 for the villages. For the cities the town planner Bairoch 1985<sup>2</sup> suggested from 200 to 400 people per hectare.

<sup>435</sup> The data in Kramer 1982, pp. 155-181, are more optimistic (in villages from 60 to 150 people per hectare; in the cities from 90 to 190). Castel 1992, pp. 99-101, in criticising the simplistic equation between square metres and number of inhabitants, reveals a certain French intolerance for American anthropological methods.

**<sup>436</sup>** Postgate 1994. cf. also *id*. 1992–93, pp. 432–435.

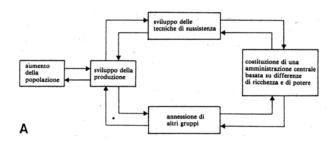
<sup>437</sup> Fried 1967, pp. 196-199; Carneiro 1967 also establishes a connection between demographic size and organizational complexity of a community.

**<sup>438</sup>** Adams 1966, pp. 44–45.

<sup>439</sup> Adams 1972c, pp. 61-62.

**<sup>440</sup>** Boserup 1965.

<sup>441</sup> The conference edited by Spooner (ed.) 1972 is entirely based on the 'Boserup model'; cf. the criticisms of Hassan 1978; 1979; 1981, pp. 161-175 and 231-257 (and then Chapman 1988;



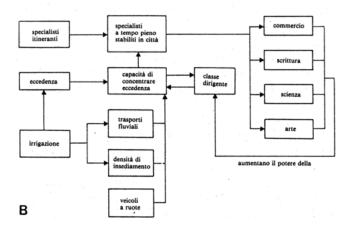
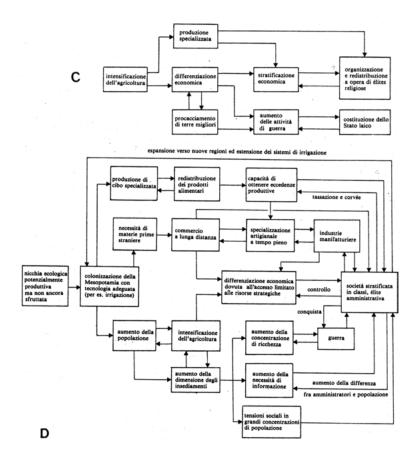


Fig. 46: Flowcharts on the origin of the city. A: Boserup; B: Childe; C: Adams; D: Redman.

various pages are also dedicated to the process of urbanization, and the Mesopotamian example in particular.<sup>442</sup> It will therefore be better to refer ourselves largely to this second book. Now, the thesis that the demographic factor interacts with other factors in determining the passage to systems of greater productivity is undoubtedly valid, as a general model of a type of system, provided, however, that the importance of other factors and their effect in determining

Ramazzotti 1999, pp. 27–35; Hassan 1999). Convinced support from Smith 1972; Young 1972; Smith and Young 1972; 1983; Wheatley 1972; Gibson 1973; Wright and Johnson 1977; also positive Cohen 1978. Opposed is Oates 1980.

**<sup>442</sup>** Boserup 1981, pp. 63–90. On the Mesopotamian example, Boserup bases herself above all on Smith and Young 1972 (in their turn based upon Boserup 1965) and on various contributions of Robert Adams.



the demographic growth itself are also recognized. The application of the model to agricultural growth (which is the author's real field of interest) remains convincing, but its application to urbanization is, in my view, less so. The emblematic description 'Fertility of land and agricultural technology were secondary factors; the prime condition for early urbanization was a sufficiently large and dense population'. 443 seems to leave the demographic data in the void. How could it ever be possible to have a 'sufficiently large and dense population' in a region devoid of fertile land and adequate technical productivity? The beauty of the systemic approach – as compared to the popular dilemma between chicken and egg – really lies in outlining the interaction between the various factors in determining the progressive growth of the whole [see fig. 46]. The whole statistical approach on a world scale, which is the basis of the 'Boserup model',

ends up obscuring the determining moments and factors, case by case: and the 'Mesopotamian case' cannot be influenced by the different 'Peruvian case' nor vice versa.

Let us take the age-old question of Mesopotamian irrigation, which Boserup (as Adams had done before) sees growing in size and complexity with the growth of the city and state: from the modest prehistoric irrigation, at a level of individual productive units, up to the extensive and integrated regional system. 444 This parallel growth really should make it clear that irrigation is in effect a factor, and to decide whether it is, there is no need to see if it is a factor in Peru or temperate Europe; the point is to notice that all the cities of first urbanization are placed on rivers, at the centre of irrigated agricultural districts: they are all there, on the banks of rivers, and ten kilometres away there are none. Let us try to imagine an administration (neo-Sumerian or Old Babylonian) that needs to decide if it would be fitting to dig a canal or not. The ancient problems, of a scholastic context (serving as training for the scribeadministrators),<sup>445</sup> were formulated in exactly this way: given a canal so long and so deep, and given that the labour costs so much barley per unit of volume dug out, if we make use of a determined quantity of barley, what length of canal can we dig? Today we put the problem differently: considering that the cost of the operation is so much, and forecasting that the annual profits will be so much, how many years will it take to amortise the costs and make the work productive? The reply of the 'Boserup model' is obvious: if we have a sufficient number of farming families to put to work on the irrigated fields of the new canal, then the operation is profitable, otherwise not. So it is profitable if there is demographic pressure. But why did the neo-Sumerian scribe-administrator not pose the question of profitability? Because the temple administration which decides to excavate the canal does not put the families to cultivate the fields, it will cultivate them centrally, with a few (very few) staff and with use of forced labour (from the surrounding villages) at critical times (seedsowing, harvest, transporting and storing), paid by rations only on the days worked. Witold Kula's principle on the 'feudal system' is valid here: an estate which bases itself on corvée work would have its account deep in the red if it had to calculate the forced work at commercial rates, but instead it receives profits because it unloads the 'social' costs elsewhere.446

Let us turn to the case of primary urbanization. There is no question of a Mesopotamian exception, but a whole series of primary cases (Mesopotamia,

**<sup>444</sup>** Also for Kappel 1974 the formation of the state precedes large-scale irrigation.

<sup>445</sup> Nemet and Nejat 1992. The texts were published by Neugebauer and Sachs 1945.

<sup>446</sup> Kula 1970; I am inspired by this model in Liverani 1982.

Egypt, the Indus Valley, China) to be based on irrigation, on the increase of the production of the agricultural surplus intended for the maintenance of specialists and managers. The best setting for this process is the alluvial valley, and it is there that it takes place, very early and at a high level. The growth of population, which normally remains steady at very modest annual rates (close to zero) in the long Neolithic millennia, has a most remarkable increase, actually linked to the first urbanization, as a most remarkable rise had already been noticed in the longer and less defined passage from a gathering economy to that of production. Childe's revolutions, with all their retouchings, really had taken place.

I believe that the over-estimation of demographic pressure as a prime factor of technical and organizational progress is the clear result of the modern preoccupation with the actual trend of over-population which increasingly renders the available resources always more insufficient and so impels research into more efficient productive systems. But is it legitimate to project this syndrome into the remote past? The land is overabundant compared to the population, and the preoccupation of the ancient Mesopotamians was the opposite from the modern one: it was the fear of extinction through lack of population. In various kinds of text - from the myths (such as that of Atram-khasis) to the prophecies to the curses - the precursors of the 'seven horsemen of the Apocalypse' emerge: famine, hunger, war, flood, and plague endanger the continuity of a life always caught up in endemic scarcity, which is not a scarcity of resources, but a scarcity of men.

# 6 Post-modernity: computerization and deconstruction

#### 6.1 Tourist enjoyment and totalizing restoration

The taste for ruins had enjoyed its great romantic season in the period bridging the eighteenth and nineteenth centuries, when the world (European/Mediterranean and Near East) was full of ruins, much more than now. Ruins of buildings but also of whole cities. Authentic ruins but also imitation ones. Every family that could – aristocratic or rich middle class – had a ruin built in their garden, Gothic or classical as it might be. It was an elitist and solitary taste, linked to meditation on human destinies. We have seen, right at the beginning of our journey (§ 1.1) how Assyria and Babylon, ill-adapted as their brick ruins were, destroyed by time and weather rather than by divine vendettas, also served for similar meditation and association. And we have seen how the elite tourism of the Grand Tour lapped too against those regions, in search perhaps of the Tower of Babel or the Earthly Paradise.

Mass tourism and media popularization swept all this aside, from the time of the Second World War. The mass tourist does not like ruins (can't find his way around, can't understand anything), he likes whole buildings, as intact as they came out of the architect's mind, even better if livened up with on-going activities and people who live there. But since the buildings and entire ancient cities are not there, then let them be restored, at least to prevent the ruins becoming heaps of rubble, but also to make them more enjoyable, more alive and 'real'. So in the Near-Eastern countries that decided to turn to tourism - Egypt to begin with, but then followed by the rest - the departments in charge of Antiquities were made suitably aware of the question of restoration, and inserted clauses in the conservation laws so that excavation concessions included an obligation of conservation and restoration of monuments excavated, of those considered worth being conserved and enjoyed by the local and international public. Provisions were made for the older excavations ('colonial' and pre-colonial) to be restored, when opportune and appropriate, taking advantage of funding from international organizations.

But there are ways and ways of restoration. There is the 'philological' or 'historical' restoration (with which we are familiar in Italy through the work of Cesare Brandi and the wonderful *Istituto Centrale per il Restauro*), which highlights the phases of construction, the later constructions, the phases of decline,

and yet keeps the monument in its actual state. But there is also the totalizing restoration, which aims to reconstruct the original state of the monument and present it intact, as a 1:1 scale model superimposed on the original site. Borges and his 1:1 map of the Chinese Empire, superimposed on the real world, springs to mind.

Naturally, were it not for the interweaving with tourism, the two ideal types of restoration could live together in separate areas: a 'philological' restoration of the real monument, and a totalizing restoration in the form of a model, or even better in a virtual form, given that present electronic instruments allow us to obtain excellent results, which can, if wished, be animated and brought 'to life', quite apart from costing far, far less than a true and large restoration. But I said 'were it not for tourism' because in effect the 'cultural' tourist, who has already seen in his own home, before leaving, in a televised documentary, the virtual, totalizing and animated restoration, recognizes, however, an added value in going to the place and seeing the real thing. To be able to say 'I was there' confers great prestige on him (at least in his own eyes), and there are those who year after year tick off as 'done' a new site from the list of those to see. They are right: no virtual visualization can give the magic of the place, of the context, the landscape, the true light and smells, of walking inside, of touching with the hand, of taking your own photograph (and let us not say: of putting your name on it). But they are wrong if they want the real thing, inside which they can walk, to have the same finish as the virtual restoration, a finish which the ancient monument does not have and never could have had, not even the day of its beginning. They are wrong from an historical and cultural viewpoint, but as a customer they are always right. This is why the Near-Eastern states ready themselves to present to tourists monuments in a state of perfect conservation.

The Poles, who had developed a school of totalizing restoration, began by reconstructing Warsaw, devastated by the bombardments of the Second World War, exactly as it was, with the shapes and colours taken from the canvases of Canaletto. Summoned to Egypt to reconstruct the Theban temple of Hatshepsut, they put back up what must have been there originally, going well beyond the job of conservation. But an operation which could succeed for a building whose height was already partially conserved, and which was built in stone, could not succeed if transferred to buildings in brick, by now destroyed after

<sup>1</sup> I ought not to enter into its merits here: I refer to Brandi 1963 (and the 'Carta del Restauro' which is from 1972); also id. 2009, pp. 35-63; Melucco 1989, pp. 200-233; Cordaro 2009. On the interweaving between journey, ruin, restoration and display see Barbanera 2009, pp. 58-76 (to whom I refer for bibliographic developments).



Fig. 47: Emakh of Babylon, modern reconstruction.

decades and decades of neglect following the excavation under the mandates, and of which very little remained other than the ground plan. And so we have rebuilding of temple buildings such as, for example, Emakh of Babylon,<sup>2</sup> simply built ex novo, on the actual site, a 1:1 scale model raised as it was in the reconstructive drawings of Andrae and Koldewey [fig. 47]. Or reconstructing large parts of the walls of Nineveh with a standardized repetition of unlikely decorative crowning taken from ancient and modern drawings. All this to the end of providing an enjoyable and satisfying image for the impatient tourist: but also (and perhaps largely) to the end of celebrating ancient Babylonia as a prototype of the Iraq of Saddam Hussein, to whom is in fact due the political stimulus to restore the whole of Babylon in the way described above.<sup>3</sup>

In any case we need to consider that what archaeologists recover by means of the excavation is not normally the *original* aspect of the monument but the final one at the end of a use more or less prolonged and marked by deterioration and rebuilding, up to the decisive obliteration through collapse or destruc-

<sup>2</sup> See the criticisms of Cavigneaux 1986; in general Fales 2004, pp. 167–171; on the relationship to Koldewey's and Andrae's drawings, Micale 2005, p. 152; 2008a, b.

<sup>3</sup> On Saddam's archaeological-political project, Fales 2004, pp. 160-171 and 232-250; Bernhardsson 2005 (with comments of Gibson 2006); Brusasco 2012, pp. 19-48.

tion or abandonment followed by intentional deposits or progressive burying. We need only visit a traditional village, with houses of unfired brick, to appreciate what must have been the state of decay, of partial conservation and of repeated repairs, when the inhabited area still existed as such, before finally being abandoned or destroyed. This is the 'real thing' that we ought to get used to visualizing, not a sort of ideal project, finished and intact, as designed by the architect to win the competition for the contract.

Now, the reconstructive drawings of Koldewey and Andrae, carried out at the beginning of the twentieth century, were hypothetic solutions, which were then partly corrected, and which anyway were inserted in a range of possible solutions. There is nothing wrong - on the contrary! - if small models are derived from these drawings to display in the local museum or in the great Western museums, to give an idea of the whole. But to transform them into a pseudo-restoration (which is actually a construction ex novo) is a clear distortion, devoid of any scientific or cultural worth. It is basically the principle of pop-art, of reproducing little objects on an abnormal scale: the small threedimensional models (for museums and exhibitions) become amplified to a 'real' scale, with an effect of alienation. Quite apart from anything else, the building remade ex novo presents a deeply marked and even more alien contrast to the desolation that surrounds it, with the effect of a surreal 'cathedral in the desert', the direct opposite of the aim of contextualization which it was thought it could offer to the tourist. Not to mention partial restorations like that of the ziggurat of 'Agar Quf,4 which fascinated generations of travellers in search of the Tower of Babel, and whose summit now comes out, unexpectedly, above a base reconstructed as new [fig. 48]. But it is easy to foresee that neglect (not to mention war) will quickly allow the readmission of these buildings too to the category of ruins (and then of heaps of rubble). Anyway, the European experts involved in the operation, after having sought (in vain) to put forward their reservations, withdrew from it.5

But if anyone were to wish to defend the choice of total restoration, he would have a way at his disposal, which is that of its 'eastern' character. In ancient Mesopotamia, buildings in unfired brick decayed and also collapsed periodically, after one or two centuries for the great temple and palace buildings, and much more often for ordinary dwelling houses, and it was necessary to provide for putting them back into use. Assyrian and Babylonian architects' technique of restoration was that of a complete rebuilding: the ruins were re-

<sup>4</sup> Photograph in Reade 2008a, fig. 12. But the Turin suggestion of systematization (Gullini et al. 1987, p. 251) also appeared somewhat alien.

<sup>5</sup> Renger 1978, Bergamini 2003; Parapetti 1979; 1997, p. 142; 2008.



Fig. 48: 'Aqar Quf, the modern restoration.

moved as far as the bottom of the foundation trenches of the walls, and the whole was reconstructed from the beginning. The ideology of the reconstruction of the Assyrian and Babylonian kings, needing to satisfy both the value of continuity and that of supremacy, proclaimed that the building had been rebuilt as it had been from its first beginnings, but larger, higher, more solid, more beautiful. But in the wider Asiatic world, ancient and modern, from the Islamic world to India and to China, where they also build in solid stone, the operations of restoration are never 'philological', and no attempt is made to conserve the traces of decay and rebuilding; they wish only to produce a new monument, complete and decorated 'as new'. So much so that sometimes it becomes difficult to run back through a true history (in distinct diachronic phases) of the architecture and town planning when basing it on monuments remade in recent centuries, but remade like the ancient ones. Perhaps this 'Asiatic' custom makes sense of the Iraqi and general Near-Eastern disregard for the 'philology' of the restoration.

But alongside the aim of encouraging tourism, there is also another aim in looking after the conservation and improvement of antiquities, which is that of building a national identity dating back to a long tradition<sup>6</sup> – on the basis, as became habitual in western historiography, of 'invented traditions' and 'im-

<sup>6</sup> Micale 2009, with bibliography at notes 33-34 and 38.

agined communities'. We are dealing here with a notable innovation (if we prefer, a trait of modernism and, to some extent, of localism) in contrast to the truly Islamic tradition of disdain for everything before the advent of Islam; and it has been observed that the clearest examples are owing to secular and philo-Western regimes (from the Iran of the Shah to the Iraq of Saddam).8 But for the ordinary (deeply Islamic) population too, whereas ostentatiously 'Western' antiquities, like Hellenistic and Roman Imperial ones, and also Byzantine (and Christian in general), represented an interval, long but foreign, the link with pre-classical civilizations could be accepted, even on the religious level, as somewhat neutral and therefore innocuous. The Turks, if I am not mistaken, began to value their pre-classical civilizations, the ruins and excavations of the Hittite era, but also the more distant Sumerian ancestry (given the linguistic affinities), skipping, on the other hand, everything that sounded Greek (in western Anatolia) or Armenian (in eastern Anatolia). And if the Graeco-Roman ruins were then looked after (for tourist purposes), the Armenian ones, however, continued to be abandoned and quite systematically destroyed. As for the Kurds – but you know, they are wretched people who have no monuments of their own – they can simply be ignored. The construction of Turkish identity is, in any case, a complex question, between the European connection and the Central Asiatic, between the imperial memory (Seleucid and Ottoman) and the nomadic, between the pan-Islamic community and hostility towards the Arab world.

Equally early was the well-known case of Egypt, where the interests of tourism long remained and still remain important, but where the wish to keep a separate identity inside the Arab-Islamic world also has a long political tradition. But even in a country like the Yemen the wish to value the pre-Islamic cities (over and above the traditional modern ones: thinking of UNESCO's restoration of San'a) as a root of national tradition knew a phase of practical action, before the deterioration of the political situation put an end to its practicality for archaeology. In Syria, and even more in Lebanon, with their multiethnic and multi-religious nature, identification with the past was reserved rather for minority and non-Islamic elements: the self-identification of the Maronites with the Phoenicians is typical, and of the 'Chaldean' (so-called Assyrian) Christians with the ancient Assyrians.9

In Iran the Pahlavi dynasty celebrated the 2500<sup>th</sup> anniversary of Cyrus the Great as a sign of multi-millennial continuity, whereas the Khomeini revolution

<sup>7</sup> Hobsbawm and Ranger (eds.) 1983; Anderson 1991.

<sup>8</sup> Micale 2008b.

<sup>9</sup> On the Maronites/Phoenicians Liverani 1998c; on the Chaldeans/Assyrians Micale 2010.

then turned to the more traditional Islamic attitude, causing fears that Persepolis could come to an end similar to that of the Buddhas of Bampur. The most deplored example was that of Iraq, where Saddam Hussein built an entire Babylonian revival (unwittingly imitating Mussolini's recreation of Rome), with figures such as Hammurabi and Nebuchadnezzar assumed as a model of his own regime, and promoting as a consequence the total restoration of which we already spoke. 10 But the most solid example was undoubtedly that of Israel, which the returned Zionists planned actually as a sign of the return of a national home and identity, and of the revival of a continuity which had been cut short by the bi-millennial exile. The new state of Israel not only encouraged excavations and restorations of the Israelite sites (and strata) at the expense of those earlier and later, but elected a number of sites as symbols of national identity – from the Temple of Jerusalem to the fortress of Masada. As a reaction, the formation of a Palestinian identity sought but rather spasmodically to re-evaluate pre-Israelite antiquity (Canaanite) to obtain an even older link, 11

All these events - both those of restoration and tourism, and those of 'archaeological' construction of national identity - gave rise to various academic conferences, in which, however, the Near-Eastern examples were little discussed. 12 The absence is glaring in the (in other respects very valuable) series, One World Archaeology: the volume on ethnic and nationalist motivations in evaluating cultural heritage<sup>13</sup> has nothing on the Near East; and so too is there nothing on the Near East in the volume on archaeology and cultural identity, 14 or in the volume, The Politics of the Past. 15 It is always European examples or cases from third world countries that are cited, while the Islamic world remains absent, implying that it is not 'suitable' or that scholars in this field are not interested in it. Even in the volume on the same topic, though co-edited by the Near-Eastern archaeologist Philip Kohl, <sup>16</sup> very little is said on the Near East (Saddam, or Egypt, or Turkey) and nothing of Israel.

The book edited by Lynn Meskell<sup>17</sup> was meant to mitigate this 'lack of attention' (which to me seems indicative rather of political problems); in the

<sup>10</sup> On the political use of the antiquities in Iraq and Iran, Fagan 2007, pp. 309-342; on the case of Saddam cf. note 3.

<sup>11</sup> For a Palestinian view cf. Yahya 2005.

<sup>12</sup> Trigger 1984a cites Israel, Egypt and Iran for the nationalist use of archaeology, but cites nothing from the Ancient Near East for colonial archaeology.

<sup>13</sup> Clere (ed.) 1984.

<sup>14</sup> Shennan (ed.) 1989.

<sup>15</sup> Gathercole and Lowenthal (eds.) 1992; Bond and Gilliam (eds.) 1994.

<sup>16</sup> Kohl and Fawcett (eds.) 1995.

<sup>17</sup> Meskell (ed.) 1998.

introduction she complains precisely of how the connection between nationalism and archaeology, and the construction of national identity through the evaluation (or invention) of traditions dating far back, are strangely little studied in the Near East and Eastern Mediterranean. Then, however, in the chapters on individual countries the deterrent weight of the question of Israel (very influential in the whole American context) is ignored, and regional discussions are entrusted to scholars of the countries involved, 18 scholars certainly competent and authoritative, but who appear to wish to speak of anything other than highlighting the nationalist politics of their own countries.<sup>19</sup> It is undoubtedly a question of a political-cultural nexus of great delicacy, such as to excite reactions of every sort; but there is still a need to take note of it here in a calm and responsible way.

## 6.2 Political instability and growing costs: the virtual excavation

Two relatively long periods, of Ottoman Imperial rule (formally up to 1918) and of the 'colonial' mandates - divided by a combination of great instability, the First World War and the collapse of the Ottoman Empire – were both characterized by substantial stability, which translated, within the limits and under the conditions dictated by the governments, to an excellent opportunity for archaeological work in the field, with projects of great staying-power in both time and space, which made the large urban excavations possible. The postmandate period (roughly from 1960 until today) has been, in contrast, characterized by different factors of instability, which have led to the impossibility (or at least the extreme difficulty) of working in the field, in certain periods and certain regions, and for missions of certain nationalities. The cases are different in their reasons and dimensions, and it will be enough here to cite a few.

Iran, an archaeological paradise for American missions at the time of the Shah, was closed to Western missions (with some difference of degree) following Khomeini's revolution; and a cautious re-opening was immediately halted on the accession of Ahmedinejad. Afghanistan, where working was always difficult, was obviously closed following Western intervention after September 11,

<sup>18</sup> Ozdoğan (Turkey), Hassan (Egypt), Naccache (Lebanon), Bahrani (Iraq), Silberman (Israel; cf. also id. 1998).

<sup>19</sup> The single foreigner (Potts on the Gulf countries) is the only one to examine the subject fully, highlighting how the practice of tourist-nationalist archaeology puts the Islamic neglect of the jahilīya into crisis.

and Iraq was closed from the Iran-Iraq war (so from 1980), through the two Gulf Wars, and up to today. The permanent closure of Saudi Arabia is, on the other hand, motivated by religious reasons. The Southern Levant, a politically correct term to indicate the complex of Jordan-Palestine-Israel, with the addition of Lebanon, has been the theatre, since the setting-up of the state of Israel, of a series of wars, both open and underground, which have hindered work in different areas and periods, and have also made it difficult even where formally possible. Even in stable countries such as Turkey local ethnic problems (for instance the Kurdish question) have constituted a serious obstacle. Not to mention the areas of the Caucasus and Transcaucasia. And finally not to mention the instability produced more recently – even as I write – by the piazza risings of the 'Islamic Spring' and the consequences of brutal repression. Before the actual almost-total block, there were already, however, real migrations of archaeological missions, from the areas at risk towards those more calm, and more generally a tendency to abandon great multi-year projects to concentrate on targeted, short-term, undertakings. The great urban excavations, which had been the rule in the mandated age, have by now become an exception.

Added to the practical impossibility of working where there is a war, is the unease at working in a country where minorities are oppressed and civil rights are not observed.<sup>20</sup> A true jump in Euro-centrism was experienced on the occasion of the war against Saddam Hussein, with the resultant 'collateral damage' to the archaeological legacy, in primis to the Museum of Baghdad, but more seriously to the great tell, especially of the South.21 At a journalistic level, and in the judgement of European and American public opinion, alarm for the destiny of the remains of the origins of 'our' civilization prevailed over the destiny of (Iraqi) human beings. The old idea was thus revived, because of the war, that the actual inhabitants were like intruders, interposed between the ancient civilizations and us, the moral heirs.<sup>22</sup>

Parallel to the political-military instability, another factor of a totally different tenor was in play, which can be linked to the politics of development and of regional planning, and to Western intervention of a neo-capitalist type. I am referring in primis to the construction of dams on the main rivers of the area, but also to the programmes of urban and agricultural development, to the construction of great infrastructures (roads, airports), and to the activities of petro-

<sup>20</sup> Steele 2005, pp. 55-61.

<sup>21</sup> On the sack of Iraq (museums and sites) during and after the war, see Löw, 2003a, b; Schipper 2004; Fales 2004; Foster and Polinger-Foster 2009, pp. 191-210 (all with rich bibliog-

<sup>22</sup> Pollock 2005, pp. 83–86; I myself wrote in this sense on the 'manifesto' of 15<sup>th</sup> January

leum exploitation, which are also part of the same scenario, and which remove growing spaces from archaeological research. I have already spoken (§ 4.2) of the construction of dams with the consequent filling by artificial lakes of the very large tracts of the fluvial valleys, which began in the 1960s but is still now removing always more areas from archaeological research.<sup>23</sup> The 'advantages' linked to the salvage operations (in the ease of obtaining excavation concessions, in the greater access to funding, in the sharing of the finds, and in the host country's logistical facilitation) do not, in the long term, balance the future impossibility of carrying out work on the submerged tracts, and even less of practising anew a policy of great urban excavations. The apocalyptic scenario that I provocatively imagined<sup>24</sup> – that in the symbolic year 2084 (of Orwellian inspiration), with the whole archaeological landscape by now blighted by environmental pollution, war, petroleum, urbanization, infrastructures and industrial agriculture, it will be possible to excavate only the sites left trapped under the lakes of the dams, by now filled up by sedimentation – does not contradict the fact that actually the larger part of the land historically most important for the study of the origins of the city and its history over the millennia has to be considered as lost.

A third factor which weighs greatly on the possibility of continuing the great urban excavation is the increase in costs, which has at least three different reasons at its base. The first reason is the increase in the wages of the local workmen, and without a good number of workmen a prehistoric excavation can certainly be carried out, but not an urban excavation. In a few countries the pay is still contracted directly between the director of the mission and the workmen, but increased standards of living have nevertheless led to a rate of payment substantially higher than that of the mandated period. But by now everywhere is turning to the adoption of work contracts regulated by the state, with quotas of government taxes, social security provision, and accident insurance. We can estimate that the cost of manpower will rise by a factor of 10. It is correct that it is like this, and anyway Near-Eastern wages are still lower than those of Western countries (where, however, the workmen's 'productivity' is somewhat higher), but the fact remains that no one is now able to take on a hundred workmen. In Israel recourse is had to the system in use in Western countries, of using archaeology students or even amateur volunteers as workmen. But this system (which anyway has a cost) does not up until now appear extendible to Islamic countries.

<sup>23</sup> Sommerfield 2011 points out the case of Assur, threatened both by lack of control and clandestine excavations, and the dam project that would partly submerge the site.

<sup>24</sup> Liverani 1996b; comments by Matthews 2003, p. 189.

The second reason for growing costs is the necessity to carry out a whole series of physical-chemical analyses and radio-carbon dating, up to including on the staff of the mission a series of non-archaeological specialists. These requirements are by now considered an indispensable requisite not only for prehistoric excavations but also in the great urban excavations of the historical period. It is true that in the phase of the first experimentation of innovative techniques of analysis, 'scientific' colleagues of the same university gladly agreed to collaborate without payment, including collaboration in the actual programmes of research. But once the technique, now tried and tested, has become a simple routine procedure, without further results of scientific advance, this collaboration is no longer available, and recourse has to be made more often to laboratories charging fees – and we are talking of laboratories (American or North European) which give a guarantee of reliability at an international level. There is then a collateral aspect, which has manifested itself more recently: the growing personal impermanence of a young generation (both archaeological and scientific) makes it always more difficult to find permanent staff who include participation in the mission among their 'official' working responsibilities. Those not in established posts, members of a cooperative or professionals liable to VAT, not only require adequate payment, so that a restorer costs more than the director of the mission, but also their work is limited in time to the length of their contract. Even when they are personally motivated to collaborate, they must, however, jump from one contract to another in order to survive, and cannot prolong the work in the field into further labour of study on the results. The third reason for the increase in costs is that monumental restoration and the so-called 'display' of the excavated site are now become an obligation, and also in this case both the costs of projection and realization and the fee to which architects and those involved in the project have become accustomed mean that the expense of the restoration and the display can be more that the costs of the excavation itself.

Given that the costs have become unsustainable, and that by contrast available resources have been and always will be more reduced and unpredictable because of the financial crisis that is devastating the whole world, what can be done to continue the work and gain a knowledge of the cities (and the entire civilizations) of the remote past? From the post-mandated phase the great urban excavations have been replaced with a strategy of extensive surveys completed by targeted soundings<sup>25</sup> and from identification of visible built structures on the surface. Some urban 'great excavations' are still continuing, on the part of Germans (Boğazköi, Uruk), French (Mari, Ugarit) and also Italians (Ebla), but the new system was already in use by the British between the

<sup>25</sup> Matthews 2003, pp. 157-168; Gates 2005.



Fig. 49: Tell Taya, reconstruction of ground plan from the remains visible on the surface.

1970s and 1980s. In the first years of the 70s Julian Reade outlined large areas (155 hectares, of which 65 were densely inhabited) at Tell Taya, <sup>26</sup> where natural erosion had uncovered the foundations of walls of a great city of the middle of the third millennium: a unique example of town-planning evidence of the age (with houses and streets) obtained practically without excavation [fig. 49]. Nicholas Postgate too, in the great proto-dynastic site of Abu Salabikh [fig. 50],

<sup>26</sup> Reade 1973, with plates LVIII-LXIII; 1982, with fig. 58.

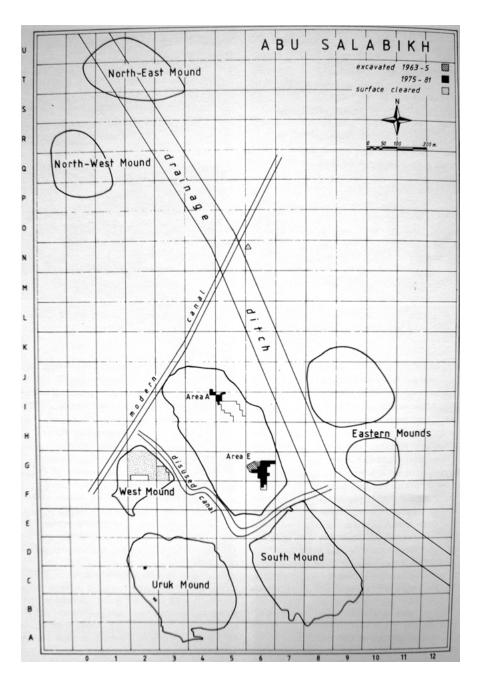


Fig. 50: Abu Salabikh, diagram of the city.

where, however, he carried out real excavations of the traditional type, brought to light an entire urban quarter without excavation, but with 'scraping' of the surface to outline the walls, and intensive gathering of sherds to date them.<sup>27</sup>

Clearly analysis of surfaces is most applicable to sites in which erosion (by wind, and also water) has highlighted the presence of urban occupation of a given period, without (or with modest) later superimposed layers, whereas the system is not applicable to strongly stratified sites. Yet recently a solid Late Bronze Age quarter in the site of Tell Bazi was excavated by Adelheid Otto with relative ease, being found just below the surface.<sup>28</sup> Particular mention is due to the Mashkan-shapir project, directed by Elizabeth Stone, which should have been based on an initial survey (1987–89) followed then by a real excavation. But the excavation was interrupted at the outbreak of war (1990), and so it had to be reformulated as a 'virtual' excavation, based solely on the analysis of surfaces and modest soundings.<sup>29</sup> The site is suitable, inasmuch as it is of one period (Old Babylonian, neo-foundation of Sin-iddinam of Larsa) with modest later superimposed layers; the methodology is somewhat traditional (geo-magnetism and high-definition satellite imaging were not yet available): survey on foot with pottery collection on 50 by 50 squares, with use of SPOT satellite imaging, kite aerial photographs, and carrying out of geo-morphological mapping. The theoretical outline is very ambitious, intended to recover the social structure of the city; but it does not consider anything that is not both Anglo-American and of an anthropological slant. It supports collaboration between archaeology and philology, but then returns to the Yoruba for an idea of the socio-political picture. As more important results, it highlights both the canals that enter and cross the whole extent of the city, and the areas of concentration of the remains of work (above all in metals) as shown by quarters functionally differentiated.

But by now we are moving ahead in every case towards recourse to a truly virtual excavation, made of interventions targeted but reduced on the ground, recourse to techniques of remote sensing to identify and outline the structures (§ 6.3), and with analysis of soils and organic remains to identify flora and fauna.<sup>30</sup> The temptation is strong. If a field-sounding is enough to recover the building technique and the structure of the walls, is there then any need to excavate

<sup>27</sup> Postgate 1982 (with fig. 47); 1983; 1987; 1990a; 1992–93; Matthews 1987; Pollock 1987; 1990; 1991; 2001.

<sup>28</sup> Otto 2006.

<sup>29</sup> Stone 1994; 1995; 2005; 2007; 2008; Stone and Zimanski 2004a.

<sup>30</sup> Cf. Adams 1999 on the new working paradigm: from survey on the ground completed by excavation of individual sites, to the use of satellite imaging to effect a regional analysis at the drawing board.

systematically an entire quarter, whose rough plan is already known without any effort, from a geo-magnetic survey? And if a few soil samples are enough to identify the DNA present and the animal species belonging to it, what need is there then to gather thousands of bone fragments, to be identified one by one? Then computerized drawings come into the picture and the techniques of simulation, and more than a good dose of interpolation, to systematize all the information and reconfigure an entire city without excavating much of it at all.

## 6.3 Simulations and computer graphics

The virtual excavation would not have been practicable, and not even imaginable, before the advent of computer technologies, to which we have already referred many times, and which are above all aimed at obtaining 'simulations'.31 After the two phases of 'discovering the past' and 'explaining the past' (§ 5.2), then came the phase of 'simulating the past'. The necessity arises from a combination of several factors. The mass of evidence has become ever greater: in one cubic metre of ground excavated the number of data recorded a century ago went from 0 to 1, now it goes from 10 to 50 and beyond. But at the same time a consciousness has grown, derived from the scientific approach, that the data available are still altogether derisory compared to the universe which they must represent (or more exactly: that we claim or hope that they can represent). So the data, taken one by one, do not provide a balanced image of the reality (as was implicitly thought in a pre-statistical and pre-computer era), which can only be simulated on the basis of data treated statistically. Computer tools provide the necessary technology to proceed in this sense, both in a data retrieval stage and in a recording stage, in a processing stage, and finally in a stage of visual representation.<sup>32</sup> The problem, however, is that the procedure of simulation, which is normally used to forecast the future (in economics as in meteorology), while making use of abundant and secure data (of the present) from which to start, if checked afterwards often has inexact results, and sometimes completely wrong. Just think of using it to simulate the past, on a series of incomplete and uncertain data.

We start from data retrieval, through looking at the three technical procedures that have become usual in the last twenty years. The first is that of analysis

<sup>31</sup> The founding moment is given by the book by Sabloff (ed.) 1981, with comments by Renfrew 1981.

<sup>32</sup> For an introduction cf. Rahtz (ed.) 1988; earlier Scollar 1978.

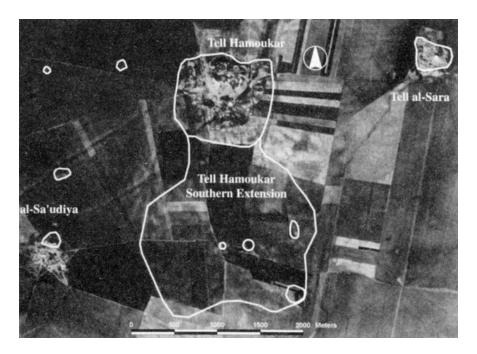


Fig. 51: CORONA satellite image of the area of Tell Hamukar.

of satellite images, which have by now replaced aerial photography<sup>33</sup> and have greatly facilitated territorial inventories carried out with the aim of both research and conservation.<sup>34</sup> Up until the 1980s LANDSAT images were mainly used, with a rather low definition: then came the French SPOT images;<sup>35</sup> and next, after 2000, the use spread of both CORONA images [fig. 51] (declassified American)<sup>36</sup> and IKONOS (with very high definition, but also rather expensive). The other great resource is given by geophysical prospecting, and in particular by geomagnetism: after initial difficulties a thoroughly appropriate technology has

**<sup>33</sup>** Huot (ed.) 1989 for Larsa (work of 1985) used aerial photographs, with excellent success in dealing with limited areas, (the *tell*).

**<sup>34</sup>** General introduction (somewhat technical) in Verhoeven and Daels 1994; history of the question in Kouchoukos 2001; Kennedy 1997; 1998; Pournelle 2007. On the use of Digital Global Imagery for the purpose of conservation of the great Iraqi *tell*, cf. Curtis *et al.* 2008 (with figs. 2–11).

**<sup>35</sup>** Postgate 1992–93 uses SPOT. Gasche (ed.) 2004–7 still uses LANDSAT images, suitable for wide-scale surveys.

**<sup>36</sup>** Much used by the Americans, especially at Chicago, cf. Philip *et al.* 2002; Wilkinson *et al.* 2005; Hritz 2004; Altaweel 2003; 2008; Ur 2002a; 2003; 2005; De Schacht *et al.* 2008.

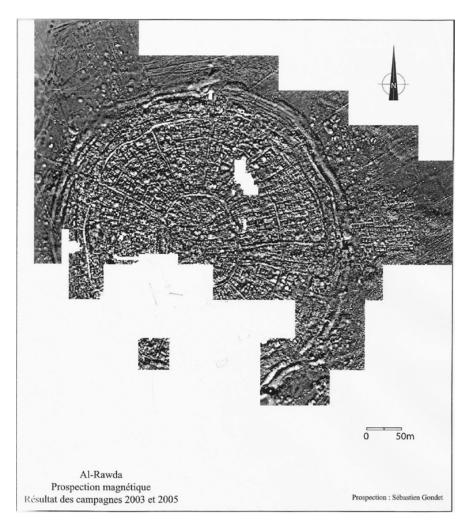


Fig. 52: Al-Rawda, image of the geo-magnetic prospecting.

been steadily developed (especially in Germany), which gives excellent results.<sup>37</sup> Among the most successful examples can be seen the reconstructions of the urban fabric of Kuşaklı,38 or the rounded ground-plans of al-Rawda39 [fig. 52]

<sup>37</sup> On the first phases of application see Becker 1991; id. et al. 1994.

<sup>38</sup> Müller and Karpe 1996, Abb. 22-24; 1997, Abb. 24-26.

<sup>39</sup> Gondet and Castel 2004; Castel et al. 2008.

and of Tell Chuera. 40 Obviously, while the choice of the depth to which to apply the geo-magnetic survey can be selected, the clearest results are obtained from the superficial strata, and above all from mono-phase settlements, whereas exploration of deeper levels remains far less practicable. And finally, in the course of excavation, operations of topographical survey, that is, of threedimensional placing of points relative to both the structures and the finds, have become hugely faster and more precise with the use of DGPS (Differential Global Positioning System), an instrument which has by now replaced the old optical tools and allows working from a single position without further need of triangulation, with a great speed and accuracy unimaginable in the past.<sup>41</sup>

Once spatial distributions of the settlements in the territory are obtained (through satellite images), together with plans of cities, also un-excavated, (through geo-magnetism), and three-dimensional positioning of every required point, it is necessary to proceed to the archiving and organization of a huge mass of data, which, having been acquired quickly, tends to assume dimensions that are unmanageable 'by hand'. At this stage, of setting up a computer 'data-bank', the innovation of the last twenty years has been provided by GIS (Geographic Information System), which enables an enormous amount of spatial data (we could say practically infinite, for archaeological needs) to be acquired, managed, analysed, extracted and also visualized. Obviously every archaeological mission, every self-respecting territorial or urban project, states that it intends to set up its own GIS,<sup>42</sup> even if then, given the high costs (financial but also human) and lengthy expenditure of time, very few completed and functioning GIS are actually known.

The fact remains that the interpretative models suggested successfully, and relating to the spatial distribution of settlements, are often based upon modest quantities of data (compared to the theoretical possibility of the computer technology described above) obtained from traditional surveys which did not foresee sophisticated analytic processing and which are therefore not now suitable for supporting it.<sup>43</sup> I can linger here only on the use of 'Artificial Neural Networks', strongly and warmly supported by Marco Ramazzotti<sup>44</sup> – immediately admitting that we are dealing with a methodology very difficult to follow for anyone (like me) not trained in the 'New Mathematics'. Nevertheless this meth-

**<sup>40</sup>** Mever 2006.

<sup>41</sup> Among the first attempts at computerized topographical survey cf. Stephani 1991 (Assur).

<sup>42</sup> One example among so many: Fortin et al. 2008 (Tell 'Asharne).

<sup>43</sup> De Guio 1992; id. and Secco 1988 on models of the Artificial Neural Network type and 'percmodels' (models of percolation), applied to Mesopotamia (Adams' surveys).

<sup>44</sup> Ramazzotti 1997; 1999; 2002.

odology has been applied to data provided by Adams' surveys, whose comprehensiveness (compared to samples of more detailed analysis), reciprocal comparability (Diyala compared to Uruk-Nippur), and broad network of periodization were compatible with the analyses that Adams carried out himself (cf. § 4.2 and § 5.2) but do not seem to support more sophisticated analyses. The value of artificial neural networks (ANN), according to Ramazzotti, is that they allow many more factors to be included (against the traditional methods, which only compare two or three), leading to much more 'fuzzy', and therefore more realistic, results. But this value is at the same time a problem. Historical interpretation must know how to choose, in the spatial and diachronic continuum, those pauses that highlight and explain what happens. A wish to come closer to reality (which is made up of infinite particular examples), risks thwarting every attempt at historical reconstruction; and it is true that traditional models are contaminated with ideologies and aprioristic thinking, but so too is the new approach, with its preference for continuity as opposed to fractures. The results appear at least questionable. (1) There may have already been urbanization in the Late 'Ubaid period – but where are temples and palaces, socio-economic stratification, written records, and all the elements that make up the state and the city as understood in a structural sense? (2) The Middle Uruk phase is not differentiated – and this is possible but not definitive; the question remains controversial. (3) There is continuity between Late Uruk and Jemdet Nasr - but this does not match the data from the periphery, obtained more recently. (4) The urbanization of Early Dynastic I is itself also a continuation of preceding phases, there is not a phase of de-urbanization and then a 'second urbanization' – and this will indeed be true for the Mesopotamian alluvium, but in the surrounding regions collapse and revival are seen quite clearly. To sum up, an overall picture without cycles or collapses is given, which does not seem to take account of the fact (by contrast decisive) that the temporal grid of the old surveys was too wide to highlight pauses and changes included within one single phase.

More widespread, on the other hand, is the use of computerized simulation to obtain visual results, or at least results that could be visualized. Two initiatives by Tony Wilkinson are noticeable on the territorial level. The first is that of reconstructing the network of canals, using data provided by the SRTM (Shuttle Radar Topography Mission) of NASA, a three-dimensional digital mapping of the Earth's surface with a definition of 30 m horizontal and 15 m vertical.<sup>45</sup> The second is the setting up of the working group MASS (Modeling An-

<sup>45</sup> Hritz and Wilkinson 2006.

cient Settlement Systems), 46 but the data entered derives from contexts historically so diverse and also distant (also modern, also extra-Mesopotamian) that the first results obtained up until now appear of disconcerting triviality, and devoid of links to evidence historically distinctive.

Much more concrete are the computer graphics applied to archaeology, to visualization of cities and single monuments. We all know the results, with the possibility not only of reconstructing a building but also of visualizing it from whatever direction and height wished, to enter inside it and wander through it at one's pleasure.<sup>47</sup> We know them because actually their most obvious application is for education in schools and above all the popularization of the mass media: everyone likes to enter inside an ancient building (we have already said this at § 1.8) and see it in all its splendour, and brought back to life, populated by human figures moving around. There is, for example, a website with a reconstruction of the palace of Assurnasirpal II at Nimrud, virtual and able to be visited at will.<sup>48</sup> Obviously a computerized series of reconstruction requires a remarkable effort at understanding and analysing the data, and so contributes to their analysis and understanding. Much more often, however, short-cuts are used, with the aim rather of exhibiting in an enticing form that which is thought to have been understood, and then the simulation is not a research tool, and nor is it the result – so that certain recent three-dimensional reconstructions do not distance themselves from those already obtained a century ago by Koldewey without information technology, even adopting their decorative style.<sup>49</sup> And with some snags. Above all, the measures of interpolation introduced to obtain a concrete simulation make it difficult to distinguish what is true from what is pure fantasy. This defect was present to some extent in the traditional reconstructions (we have seen it at § 2.2 for those of the German school), but now it becomes more serious, because a traditional reconstruction (like a philological restoration) can also remain and present itself as incomplete, to highlight the gaps in our knowledge, whereas a virtual reconstruction wants to be and must be complete. Besides, the preference for captivating forms and 'fancy' colours works to the detriment of philological accuracy, the decor loses in elegance without gaining in reliability, and the surfaces become supports for polychrome decoration, no longer functional structures. As for the loss of elegance, a fine exception has been made by a work on Ancient Egypt,<sup>50</sup>

**<sup>46</sup>** Wilkinson et al. 2007.

<sup>47</sup> Reilly and Rahtz (eds.) 1992.

<sup>48</sup> Micale 2007b, pp. 5-7.

<sup>49</sup> Micale 2007b; 2008a.

<sup>50</sup> Aufrère, Galvin, and Goyon 1991; 1994; 1997.

with splendid colour visualizations of urban and rural landscapes and individual monuments, in a traditional graphic style, even if unquestionably based upon computer support – but nothing similar exists for Mesopotamia.

Finally, the graphic reconstructions of the ancient Mesopotamian cities (but this goes for antiquity in general) have always been, from Layard and Koldewey and Andrae onwards, ideal models, more town-planning projects than the reality of the living cities, buildings as we might imagine were it the day of their inauguration (if there ever was one). In reality the buildings found in the archaeological record were almost always either in the course of construction or of restoration, or in the course of decay: it is enough to wander around the streets of any Near-Eastern city or village to appreciate this. The views of Babylon (as of other cities) seem still to be derived more from Herodotus than from archaeology: they are perfect cities, the streets are straight, the plots are all built on, the inhabitants are all well-dressed – whereas the reality was without doubt of crooked streets, of ruins and building plots, of dumps of rubbish, of animal carcasses. This aspect of a perfect projection rather than of a living reality has been accentuated in the virtual reconstruction with the aim (stated or not) of entertainment.

#### 6.4 Globalization: Eastern and Western

International bodies, with UNESCO in the lead, have for some time established rules for antiquities and works of art to belong to the countries where they were created, putting an end (at least at a legal level) to the ambiguity of the Western 'spiritual heirs' of the Ancient Near-Eastern legacy.<sup>51</sup> However, one cannot help but observe how the legislations of the 'importer' countries remain somewhat elastic, the interests of museums and private collectors are strong, and the activities of clandestine excavators and dealers in antiquities continue to prosper. Sufficient to think of the boom following the loss of control of Iraqi territory. A country like Italy seems more intent on the recovery of its own works of art than inclined to give back those of others. And Near-Eastern countries also come up with sometimes absurd claims: I recall that Libya wanted back all the money coined in ancient times in the Libyan mints (money, everyone knows, excites greed, and the golden coinage of Cyrene is irresistible). And there is also an undeniable backwash of Islamic intolerance of pre-Islamic cultures, as has been seen with the destruction of the Buddhist monuments in

<sup>51</sup> Bernbeck and Lamprichs 1992; Bernbeck and Pollock 2004; Seeden 1994.

Afghanistan,<sup>52</sup> and also (but with motivation not only ideological) with the sacking of the museums of Cairo and Baghdad – with the consequential revival (at least at the level of the media and public opinion) of the Western ideology of the spiritual legacy and the legitimacy of appropriation as a 'rescue'.

In the process of demystification of the Western claims, Edward Said's 'cult' book has been very influential on 'Orientalism' as a cultural arm of colonialism and imperialism; a book which, in spite of certain deficiencies in its information and distortions of judgement (on which orientalists of the old school have raged polemically), remains a strongly positive contribution.<sup>53</sup> This cannot be equally said of the work of Martin Bernal on 'Black Athena',54 where the level of arbitrary judgement and the lack of critical method overcome by far the positive value of the initial intent of 'de-Westernizing' Greece by highlighting her debt to the East and above all to Egypt.<sup>55</sup> In symbolizing this debt in the image of a black Athene (but her Phidian statue in the Parthenon was 'chryselephantine': it had hair blond as gold and face white as ivory!), Bernal meant to sit astride (with great publishing success) the Afro-American movement of *Black Studies*, which imagines the Egyptian pharaohs as black sub-Saharans (in race and culture), and lobbying and commercial considerations explain the emphasis on the debt to Egypt rather than that to the Levant, and account for the very different publishing success of the opportunist Bernal compared to the professional Said. But differences apart, it is clear how both works are framed within the process of political and cultural globalization, and could not be imagined before it.

By now, in historical studies more conscious of the political and cultural implications of research, including in ancient history, the opposition between East and West, and so between an 'eastern' city and a city which has no need even to be labelled as 'western' because it is the only true one, is no longer proposable.<sup>56</sup> In a globalized and multi-polar world there cannot be a similar bipartition, which necessarily refers to a centre, a single pole, with regard to which half the world is of the East and half of the West. There is at least a need to grow accustomed to using the plural - Easts or Wests - because inside the

<sup>52</sup> And now with the extensive destruction of archaaeological sites in Iraq (from Nimrud to Hatra) and in Syria (Palmyra) on the part of the 'new Caliphate' of ISIS.

<sup>53</sup> Cf. § 1.6; on the cultural aspects of Said's orientalism cf. also MacKenzie 1995, pp. 1–19 and passim.

**<sup>54</sup>** Bernal 1987–91.

<sup>55</sup> See Lefkowitz and Rogers 1996 (where I have set out my own position); van Binsbergen

**<sup>56</sup>** I refer to § 3.9, especially on the outdated position of the geographer Wirth.

East, or let us rather say, inside Asia, there have been and still are historicalcultural realities as different from each other as they are different from Western realities, which are also profoundly diverse.<sup>57</sup> And so, to return to our ancient horizon, the Mesopotamian city is very different from the Levantine, from the Egyptian, from the Central Asian, from the early Indian, and from the South Arabian, and indeed we have seen how the city of Lower Mesopotamia is very different from that of Upper Mesopotamia, and the Median from the Persian and the Phrygian from the Urartian. This variegated reality need not, however, persuade us to renounce the study of the more general phenomenon of the Ancient Near-Eastern city – or, to say it more poetically with Italo Calvino 'If I tell you that the city of my quest is discontinuous in space and time, now more thinly scattered, now more dense, you should not think that it is possible to stop seeking it'.58 Returning to the normal register, it is a question of classification or, if we prefer, of grouping: certain more general characteristics apply to the greater part, whereas more specific characteristics distinguish one variety from another, and characteristics even more specialized distinguish each individual city. Positions (which occur more often than one can bear) on the impossibility of studying 'the Mesopotamian city' because every city is different from the rest have no logical sense: the four cats that I have at home are very different one from the other in personality and behaviour, but zoology classifies them all as cats. Nor need we avoid giving one of our interpretations of the Mesopotamian cities, on the grounds that the only valid interpretation is that given by the inhabitants themselves, whereas ours is inevitably Euro-centric.<sup>59</sup>

What, on the other hand, becomes more of a problem (while in the past it was not at all) is attributing a different value to those influences, to those transfers of urban models, when they cross the frontier between East and West, compared to the trivialization of the crossings that happen inside the 'Near East' group. An emblematic case is that of the origins of the Greek polis. Here two extreme positions still exist: that of many classicists always devoted to the uniqueness of the phenomenon, and that of the comparativist trivializers who do not recognize classificatory diversity between all states of a cantonal size, centred on a city (we saw this at § 5.9). The phenomenon, to be studied and historically concrete, is the emergence of the Greek city-state through speciali-

<sup>57</sup> The plural dates back at least to 1995; in Italy it is used by Capasso and Sanna 1997; Marramao 2003, pp. 56-72; Pasquinelli (ed.) 2005, p. 39 and passim; Liverani 2014.

<sup>58</sup> Calvino 1972, p. 163 of the Milan 2010 edition: 'Se ti dico che la città cui tende il mio viaggio è discontinua nello spazio e nel tempo, ora più rada ora più densa, tu non devi credere che si possa smettere di cercarla'.

<sup>59</sup> So Butzer 2008.

zation from the more general context of the eastern Mediterranean, following the passage from the Bronze Age to the Iron Age;60 and then to follow the further emergence (with the reforms of Cleisthenes) of the Athenian polis of a democratic type. These passages had different outcomes, and so the Greek polis is different from the Phoenician royal town, but the Athenian model is equally different inside the Greek world from the non-democratic city-states and from the political formations (especially in the Hellenic North-West) not centred on a city.<sup>61</sup> So not only should the Athenian model be demystified as an absolute representative of the western world, but also the age-old suspicion of a Phoenician influence in the formation of the Greek polis<sup>62</sup> should be reconsidered not as an influence (in one sense or the other) but as a common development along general lines, but then diverging into specific solutions. Man did not descend from the ape any more than the ape descended from man.

Does something remain of the city as a seat of specific 'western' values? Perhaps, if one believes that the western tradition makes of the city the seat of liberty (Stadtluft macht frei), whereas in the Ancient Near East liberty conquers rather through flight, far from the oppressive palace, on the steppes and in the mountain forests, in the world of the nomads, and bands of bandits:<sup>63</sup> we could say Stadtflucht macht frei. And we might here cite the ideal of the Bedouin Arab, free and proud, very different from the oppressed farmer under the power of the city, a real but idealized stereotype of nineteenth-century European Romanticism. In the neo-Babylonian age, however, in Babylon under Assyrian domination, with the royal palace 500 km away, we find the demands of an autonomous citizenship which – by a good stretch of the imagination – could have been written by a Greek city to a Persian despot: 'Ever since the kings, our lords, sat on the throne, you have been intent on securing our privileged status (kidinnūtu) and our happiness. But what of us, who have had our fill of safeguarding those of (our) Elamite [modern Fars], Tabalite [Cappadocia] and Ahlamite [i.e. nomadic] women! When the kings, our lords, did their elementary studies, the gods bestowed great wisdom and magnanimity on you. Babylon, (is) the Bond of the Lands. Whoever enters inside it, his privileged status is secured ... Not even a dog that enters inside it is killed'.64 And the claims of the privileged citizens against the abuse of royal power are expressed in anoth-

<sup>60</sup> Liverani 2002.

<sup>61</sup> For a balanced vision (not classical-centred) of relations between Greece and the Orient, cf. Rollinger 2006.

<sup>62</sup> Modernized vision in Raaflaub 2004.

<sup>63</sup> Cf. Snell 2001; but earlier Liverani 1965; Renger 1972.

<sup>64</sup> Reynolds 2003, no. 158.

er text (also from the period when Babylon was under Assyrian domination), which re-employs the form of omens to express purely political relationships: 'If [a king] improperly convicts a citizen of Sippar, but acquits a foreigner ...; if citizens of Nippur are brought to him for judgement, but he accepts a present and improperly convicts them ...; if he takes the silver of the citizens of Babylon and adds it to his own coffers ...; if he imposes a fine on the citizens of Nippur, Sippar, or Babylon, or if he puts them in prison ...; if he mobilized the whole of Sippar, Nippur, and Babylon and imposed forced labour on the people ...' and so on, always with the consequences of collapse of the kingdom through divine punishment.65

The question of liberty, both civic and individual, obviously recalls the great debate on the so-called 'Asiatic values', proposed in the mid-1990s as a claim of the far-eastern world, in the process of rapid development, to have also their own 'values', against the Western claim of monopolizing them. Different values, even opposite, but of equal dignity: common values (as against individualistic), thrift and dedication to work (as against consumerism and free time), social harmony and political consensus (as against confrontation and dissent), respect for the leaders and the elders, family cohesion, and so on.<sup>66</sup> But the debate remains open, also on the part of Asiatic scholars such as the economist (and Nobel prize winner) Amartya Sen,<sup>67</sup> in disagreement both conceptually with the monolithic opposition of Asia and the West (so in favour of globalization, also cultural), and politically averse to single-party states and dictatorship (in favour of democracy), and economically opposed to the politics of planning and state intervention (in favour of free trade). I ought not here to enter into the details of this debate, but it seems clear that globalization causes localizing reactions, sometimes of small size (of a single race or city or village) but sometimes of continental dimensions, and that, on the other hand, the 'victory' of democracy and free trade is not so complete and definitive as to decree the 'end of history'.68

## 6.5 Generalized complexity and continuism

Revolutions, one knows, are no longer pleasing. Not only are those violent and bloody ones not pleasant, which produce unlimited human suffering, through

**<sup>65</sup>** Lambert 1960, pp. 112–115.

<sup>66</sup> For essential information see F. Monceri on the website juragentium.unifi.it.

<sup>67</sup> Sen 1999; 2000.

<sup>68</sup> Fukuyama 1992.

a mixture between a utopian wish for change and definite vendetta, but also unpleasing are the metaphorical and indeed completely peaceful ones, which cause a decided change, of 180° as is often said. And so the urban revolution (which belongs to the second type) is no longer fashionable, and to allay its persistent legacy two methods are used, either the obvious one of criticizing it and highlighting its weaknesses or incongruities, or the gentler one of diluting it and multiplying it in time and space. Between Gordon Childe's two classical 'revolutions', the neolithization and urbanization ones, have been inserted at least Kent Flannery's 'Rank Revolution', which determined the emergence of the chiefdom, and Andrew Sherratt's 'Secondary Products Revolution', or even Joy McCorriston's 'Fiber Revolution' which pre-determined the emergence of urbanization.<sup>69</sup> Then, distinguishing between simple and complex chiefdoms, incipient and mature states, towns and cities, and diluting all the passages in time (among various premises and consequences) we find the revolution turned from an event into a process. Next, scattering processes of urbanization all around the world, without any longer distinguishing primary and secondary cases, and not even completed processes from processes scarcely sketched out, we find that the deconstruction of the phenomenon has been achieved.

It is noticeable that, even following the information technology revolution and the advent of the general theory of systems, and also of the theory of catastrophes, it has not been said that the articulation into epochs should be renounced in favour of a continuous process. In more exact terms, the study of change now arrives at the idea of a process rather 'punctuated' (that is the appropriate term) than homogeneously continuous: there are long periods of accumulation up to the point when a leap occurs, and the metaphor of steps compared to a continuous ramp expresses the idea well.<sup>70</sup>

In parallel we have witnessed a more general use of 'complexity', a key term in both neo-evolutionism and post-processualism, a status which by now is denied to no one (a little like 'primariness').<sup>71</sup> No historian would admit to studying a simple phenomenon, no archaeologist would accept that the site which he is excavating could be defined as simple. And so we have not only the complex chiefdom, which foreshadows the formation of states, but also the complex hunters-and-gatherers, which foreshadow neolithization.<sup>72</sup> I can al-

<sup>69</sup> Flannery 1994 (cf. Guidi 2000, chap. 4, which does not, however, cite him); Sherratt 1981; 1983; McCorriston 1997.

<sup>70</sup> Adams 2001; now id. 2004, pp. 45-46 on the 'urban revolution as not so rapid ('longue durée transition') but nevertheless radical.

<sup>71</sup> On 'complexity' in archaeology cf. van der Leeuw (ed.) 1981; in a scientific field Nicolis and Prigogine 1989, and the splendid anecdotal presentation of Waldrop 1992.

<sup>72</sup> Price 1981; Price and Brown 1985; Cohen 1985.

low myself a touch of irony, in noting that back in the Earthly Paradise, the day after the creation, what with Adam and Eve, Yahweh and the serpent and the angel, and the tree of life and that of good and evil, the situation was unquestionably complex.<sup>73</sup> Few now defend the idea that the real socioeconomic complexity is that which occurs following urbanization,<sup>74</sup> with its specialization of labour, economic stratification, territorial diversification and whatever else. Besides, it has been noted that the concept itself of 'complexity' is too simple and ambiguous: there is a need to distinguish between 'heterogeneity' (distribution of the population in social groups) and 'inequality' (differences in access to material and social resources).75

For my part I admit to regretting (perfectly aware of appearing out-of-date) the beautiful, simple and elegant models, like that of Childe on the urban revolution, before the neo-evolutionists blurred everything in an excess of continuity, and then the theory of systems introduced a multi-faceted complexity which risks obscuring the truly efficient factors with background noise.<sup>76</sup> From another viewpoint, it is true, as observed recently by the classicist Robin Osborne, that 'Urbanization has become a somewhat unfashionable topic among archaeologists'. After the emphasis of the 1950s on the origin of the city, there is the neo-evolutionist emphasis of the 60s and 70s on the origin of the state, then with the New Archaeology and the anthropological approach there is not much interest in the great urban structures, and finally with post-processual archaeology interest turns to the individual (cognitive archaeology), to communities understood generically, to burials and symbolism, with little material substance and few great structures.77

Another key-word of recent trends is actually 'heterarchy', preferred in being pluralistic and democratic to 'hierarchy', obviously despotic. The theorist of heterarchy is Carole Crumley, who defines it as 'the relation of elements to one another when they are unranked or when they possess the potential for being ranked in a number of different ways'. She recognizes the existence of hierarchical societies, but her preference is obviously for heterarchical ones: While hierarchy undoubtedly characterizes power relations in some societies, it is equally true that coalitions, federations, and other examples of shared or counterpoised power abound'.78 Others speak of the decentralized nature of

<sup>73</sup> Liverani 1998a, p. 12; pp. 10-11 of the English translation.

**<sup>74</sup>** For example Adams 2001.

<sup>75</sup> McGuire 1983.

**<sup>76</sup>** Liverani 1998b.

<sup>77</sup> Osborne 2005.

<sup>78</sup> Crumley 1995, p. 3; also ead. 1987.

power, which passes from one group or person to another inside a society.<sup>79</sup> None the less correct, if applied to a society of a certain level and character, but problems arise in wishing to introduce excessive measures of heterarchy to highly centralized societies like those of the Ancient Near East. That which is true is true, not that which appeals.

And so Stone states that the studies of the 1990s 'succeeded in replacing the old emphasis on a hierarchical temple-centered society with a stress on the flexibility of Mesopotamian social institutions, on its entrepreneurial character, and on the interplay between hierarchy and heterarchy which characterized its political relations'.80 But then, in selecting the urban excavations on which to base an understanding of Mesopotamian urbanism, she chooses exclusively Anglo-American examples, with the startling absence of Babylon, Uruk, Nineveh, Assur, Nimrud, Khorsabad, Mari – that is, all the examples, also the most striking, that were the basis for the vision of the city centred upon temple and palace. The whole essay is a hymn to continuity, in time (short term: Ur III/ Isin-Larsa, and long term: Islamic similarities), in space (socio-economic and building homogeneity, urban-rural continuum), with emphasis on social cohesion (there is no exploitation, the institutions serve to maximize resources). Her modernism filters through when, wishing to venture an estimate, she calculates, 'well over 50 per cent of the population making their living through agriculture'81 - when current estimates (for all the pre-industrial economies) say that a good 80% of the active population must have been assigned to primary production.

The question of the urban-rural continuum is also clearly visible in Piotr Steinkeller's important contribution to the same volume.82 Steinkeller bases himself upon a dimensional progression of the settlements, without gaps (hamlet-village-town-small city-capital city) and on the economically agricultural base of the city. Now, it is unquestionably true that the city was populated by and economically based upon the country, but it is equally true that the villages had neither the defences nor the real services of the city, and that levels of living and wealth, and also the proximity/distance from decision-making centres, were completely different in the two contexts, forming a very marked dichotomy. Let us interpret it: just as the urban/rural contrast was influenced by nineteenth-century modernity, equally the urban-rural continuum has been influenced by the post-modernity of the end of the millennium, from our being

<sup>79</sup> Parkinson and Galaty 2007.

<sup>80</sup> Stone 2007, p. 215.

<sup>81</sup> Ibid. p. 231.

<sup>82</sup> Steinkeller 2007.

accustomed to seeing services and urban specialization now disseminated through the territory, communications (physical and computerized) pervasive, and the political status completely homogeneous.

And finally, recent trends to replace the 'colonial' model with that of the 'trade diaspora' (as seen earlier at § 5.11)83 also belong to the neo-capitalist trend towards control, no longer by way of differentiation but by means of assimilation, assigning to everything an equally active role, a substantial equity in giving and receiving, without any longer distinguishing between a 'centre' and a 'periphery': as if assigning to someone a peripheral rank diminishes their dignity. But how was this trend born right in the centre of the economic world? And how is it that its supporters know (or at least cite) only works written in English, without applying equality of rank and dignity to languages and above all ideas that also flourish in the 'periphery'?

#### 6.6 Anti-state localism: the oikos revisited

When Max Weber, in the footprints of Aristotle, suggested the oikos as a loadbearing element of the ancient economy, he did so having in mind the great patrician organizations of the Hellenistic and Roman ages, and maintaining clearly the hierarchic distinction of the Palace well above all private estates: 'The economic activities of the Mesopotamian monarchy constituted an oikos which far surpassed in size the private sector'.84 And then again Ignace Gelb, in proposing the model of the *oikos*/household as a basic structure of the economy, apart from remaining at an empirical level and quite ignorant of the long history of the question, limits it to the management of agriculture in the third millennium, and has in mind holdings of a certain size (he translates the Sumerian/Akkadian bîtum as 'household' or 'estate' or 'manor').85 At this point the debate on the use of the term takes two different directions. The first thread (as already seen at § 3.3) was connected to Gelb's distance from Diakonoff's suggestions on the extended family and rural communities.

But a second and more influential thread concerns the extension of the term and concept of oikos to minimal entities too. Perhaps it was an influence from the corresponding English 'household', which actually fits any domestic organization, of very variable size (as the size of its corresponding physical

<sup>83</sup> I am referring above all to Stein 2002b.

**<sup>84</sup>** Weber 1909, p. 85 of the English translation.

<sup>85</sup> Gelb 1967. Gelb 1979 still gathers a great amount of data but the processing remains trivial (public/private household, nuclear/extended families etc.).

structure, the house, is very variable). Certainly there was an influence from studies of economic anthropology, and also from those of Neolithic prehistory (pre-urban),86 which, dealing with simple societies, without palaces nor any kind of 'great organization', had in mind holdings of very small size, managed by small nuclear families.<sup>87</sup> The anthropological approach insists above all on the relation between oikos and family, and on the passage from a patriarchal family (extended) with a household, to a nuclear family as a small cell included in the industrial economy.88 Transferring this scheme to the Ancient Near East, we need to derive from it that the families of a rural background, primary producers on an agrarian-pastoral base, enter into the patriarchal model, apart from those dependent on the palace, who, working in secondary and tertiary sectors, develop movements towards the nuclear family.

The attention to the oikos as a structural element of the Ancient Near-Eastern economy already had different applications in the 1990s, particularly to the pre-urban period of 'Ubaid and therefore in connection with the stage of chiefdom.<sup>89</sup> But the principal advocate of an extension (and trivialization) of the oikos to historical periods too was David Schloen, author of a book which began from Ugarit to take on an application to the whole of the Ancient Near East.<sup>90</sup> Once a philosophical-hermeneutical system (in truth not at all clear) has been overcome, then the sociological-Weberian one,91 the 'Patrimonial Household Model' is described as being present at Ugarit and then in the whole of the Ancient Near East. The whole book is imbued by persistent criticism of the model of two sectors (palace/private) as proposed by Diakonoff and the supporters of the 'Asiatic mode'. The totalizing insistence on the *oikos* prompts Schloen to discard the importance of the city and state, in favour of a 'fractal'

<sup>86</sup> Netting, Wilk, and Arnould (eds.) 1984, with the introductory part (pp. xiii-xxxviii, 1-28) on the connection of household/family; Coupland and Banning (eds.) 1996, with the introduction (Banning) on the connection of 'big house'/oikos/extended family; and the chapter on the Ancient Near East (Banning; also id. 1996), which finds the oikos in Mesopotamia in the 'Ubaid period, but not in the Levant in the Neolithic pre-pottery (but the difference is diachronic, not in area!). See also Allison 1999 (with Graeco-Roman and Mesopotamian exemplification).

**<sup>87</sup>** For Goody 1972 the productive unit is always small, with an average size of 6–7 members (cf. his Tab. 1.6).

<sup>88</sup> Cf. Laslett and Wall (eds.) 1972, with early-modern Western examples, but a useful introduction.

<sup>89</sup> I limit myself here to mentioning McClellan 1997; Wattenmaker 1987; 1998; Lamberg and Karlovsky 1999; Fortin and Aurenche (eds.) 1998.

<sup>90</sup> Schloen 2001; briefly id. 2003. His model is adopted in the territorial study by Wilkinson et al. 2007 (cf. p. 55) but I would say is of very little use compared to the 'Diakonoff model'.

<sup>91</sup> Weber's influence is pervasive, and highlighted also by the title of Chapter Six: the Patrimonial Ethic and the Spirit of Capitalism.

vision in which the whole kingdom is an oikos, and inside it there are great public *oikoi* and little family *oikoi*. There is no city/country dichotomy, because the urban families are basically of farming stock (but the structural distinction between city and country/villages is based on something else completely!), nor a public/private dichotomy: all relations are client-based, and so there is no distinction between palace dependents and free members of local communities (the Marxist distinction between who possesses or does not possess the means of production is adumbrated but not accepted). There is no bureaucracy (that is, there is no rational administration, depersonalized, at least in theory), everything is based on the patronage relationship between master (the father of the house, or the king as it might be) and servant/client (son or subject or servant). So the state does not have its own ethical-political legitimacy, but seems to be a sort of mafia organization. However that may be, city and state come out badly, completely destructured.92

In effect, the most consistent result of the 'fractal' vision of the oikos is identifiable in the 'patrimonial' nature of socio-political relations at all levels. Fifteen or so years earlier Piotr Michalowski had already aired the doubt as to whether the Ancient Near-Eastern state was really bureaucratic and not rather patrimonial, in Weber's sense, and through a clear influence on patrimonial power from Eisenstadt's studies.<sup>93</sup> The doubt is resolved by Schloen in the sense of patrimonialism, and thereafter there have been various other contributions on the 'inappropriate' connections and collusions between public and private (cf. § 6.7), which are successful in rendering much more realistic a picture which, as formulated in the time of Oppenheim, erred through an excess of rationality and abstraction.<sup>94</sup> But there is, nevertheless, a marked difference between Weber's oikos, the load-bearing element of a strong and compact state, and the Weberian Schloen's oikos, fractal structure of a pluralistic and disjointed state. Besides, the recent use of the concept of 'agency' is also insert-

<sup>92</sup> The title of the article by Schloen 2003 is indicative: the state must be a 'state of mind'. On the 'fractal' vision cf. also Lehner 2000 (Egypt).

<sup>93</sup> Michaelowski 1987, and cf. Eisentstadt and Roniger 1987. For Weber 1956 (English translation, pp. 215-240) the rational power is bureaucratic, and the traditional is patrimonial. For the avoidance of misunderstanding, I note that the term 'patrimonial' has nothing to do with 'patrimony' but with the relation of personal 'patronage' between lord (patron) and servant.

<sup>94</sup> The positions of Marxist scholars remained in defence of the royal oikos as structurally different from domestic ones, but increasingly less hard-line, cf. Zablocka 1974 (land ownership of the Assyrian king); Bernbeck 1994 (transition from the domestic mode of the Neolithic Age to the tributary mode with the advent of urbanization); Neumann 2002 (royal and temple oikos of Ur III); Marzahn 2002 and Renger 2004 (Oikos Wirtschaft inserted into the tributäre Wirtschaft).

ed here: instead of reconstructing the structural features of social order and historical change, studying the role of individual 'agents' is proposed: single individuals or small groups (social sub-groups).95 From the unifying model we turn to a fragmentation which is undoubtedly typical of real life, but does not help in understanding how and by how much individuals' behaviour was determined historically by their settlement in a certain social structure of a certain period. It makes you bear in mind the free will of electrons compared to the 'laws' of physics.

A fractal conception of the *oikos* and insistence on client-based patrimonialism brings the concept of 'power' into the discussion. The old division between king and subjects, governing and governed, is by now considered ingenuous and ideologized. In going through the history of the concept from Weber until today, Paynter and McGuire have theorized heterogeneous power, the coexistence of further powers, 'domination vs. resistance', 'power to/power over', and so on.<sup>96</sup> Whoever studies power in the Ancient Near East would once have put the palace at the centre, but now chooses the moments of crisis and the aspects of weakness.<sup>97</sup> The strong centralized state is put in crisis by devolution, by diffused power, 98 with the heterarchy supplanting the hierarchy in the preferences of scholars of an anthropological slant (§ 6.5). The role of the capital city appears today less important (to the advantage of the diffused *oikos*) than traditionally held: the city's and the palace's control over the territory is difficult, local autonomies are strong, taxation and corvée are no longer of such importance.<sup>99</sup> We seem to be in post-war Iraq.

A study limited to the city of Emar goes as far as denial of the image of the city as constituted from the union of great organizations with the city dwellers:100 but obviously at Emar there is no palace, due to the simple fact that we are not dealing with a capital city and the palace of reference will be elsewhere (in this case at Carchemish), with local representation, a governor or similar. And besides, in the legal texts of Emar there is the temple of Ninurta to represent the 'great organizations' paired with the local community. Archaeological interest in non-palace urban centres is altogether positive (and the case of Tell Bazi is in this sense exemplary: a city without a palace but with a temple), 101

<sup>95</sup> See the introduction of Steadman and Ross (eds.) 2010, pp. 1-10, and the bibliography cited at pp. 28-29.

<sup>96</sup> Paynter and McGuire 1991. Cf. Paynter 1982; 1989.

<sup>97</sup> Heinz and Feldman (eds.) 2007; Heinz 2008.

<sup>98</sup> Blanton 1998.

<sup>99</sup> Reculaeu 2009.

<sup>100</sup> Viano 2010.

<sup>101</sup> Otto 2008.

provided that it is remembered that from a structural point of view these nonpalace centres are the equivalent of decentralized urban quarters: the palace 'is', even if displaced elsewhere, but it nevertheless determines the lives and economy of the inhabitants. And the image of the Ancient Near-Eastern city made up of networks of streets and residential quarters, more than of temples and palaces, is excellent for rebalancing our usual vision, upholding aspects and sectors often neglected;<sup>102</sup> once, however, that balance has been achieved, it is necessary also to restore the role and the importance of the great organizations. But certainly the new urban image, less monumental and rather functional/everyday, is more in sympathy with post-modern tastes.

And so also the distinction between public space and private space, <sup>103</sup> which came to the fore from the time when 'space' ousted 'place', was then denied as being post-modern, and therefore not applicable to antiquity, 104 without noticing how profoundly post-modern this denial is. If all the oikoi are structurally equal, and if the state does not have its own spaces and therefore does not exist, we have to ask ourselves: well then, how can we label the buildings of power, the palaces, the temples, the fortifications, the arsenals? Are they perhaps also these private spaces, but of a private individual who has become (to say it à la Orwell) a little more equal than the others? And has he become so without passing from a client-based practice to an institutional formalization? Taxes and corvee are perhaps the bribes taken by an organized criminality, which, however, has had the ambition to make itself the centre of the cosmos, representing the divine on earth, controller of the whole territory, starting from a palace, not hidden in a cupboard under the stairs, but on the contrary brazenly evident to anyone who looks at it, even from afar.

Coming now to the material aspects of the question, and so to the characterization of the Mesopotamian house, we need to admit that we still have nothing comparable to the sophistication of approach and method of the classical world,<sup>105</sup> and not even to the more ordinary formal classification of social anthropologists. 106 When in the mid-1990s a meeting of Rencontres Assyriologiques was dedicated to the theme 'House and household', 107 it had one introduction of prehistoric archaeology (of an ethno-archaeological slant) and one of historical archaeology, 108 but then the analytic contributions were almost

<sup>102</sup> Baker 2007.

<sup>103</sup> Sievertsen 2002; Bracci 2003.

<sup>104</sup> Götzelt 2002; Starzmann 2008.

<sup>105</sup> Morris 2005.

**<sup>106</sup>** Banning 1997.

<sup>107</sup> Veenhof (ed.) 1996.

<sup>108</sup> Chapters of Aurenche and Margueron.

all based on the texts and centred on the question of the nuclear or extended family.<sup>109</sup> To the properly architectural accurate analyses of the private house in the historical age, which characterise the final decades of the last century on the part of both the French school and the German (§§ 5.5–6), there seems to me no parallel corresponding advance in the analysis of its socio-economic structure as really reflected in the archaeological material. By now the term 'household' is used in place of the term 'house', certainly to underscore exactly the socio-economic aspects, but without the type of analysis having actually marked a substantial turning-point.

## 6.7 Non-places and non-cities: the structure denied

We live in an age of crisis of the city traditionally understood as an autonomous entity, a bounded place, compact (once upon a time there were walls), 110 and contrasted to the countryside. Now we live in complex and disjointed cities.<sup>111</sup> It has been said that the contemporary city (as opposed to the modern one), characterized by fragmentation, incompleteness, dispersion, discontinuity, is a city 'without a plan'. 112 It is a matter of structural transformation and of crisis of image, certainly not a dimensional crisis: in quantitative or statistical terms it is rather the rural population that is in strong decline, whereas the metropoleis, particularly in countries of more recent urbanization, have become enormous and are in continuous growth. After the model of the 'Megalopolis'<sup>113</sup> the idea was put forward, in various forms, of the 'Postmetropolis', <sup>114</sup> of the 'Global City', 115 or still better of the 'Metropolitan Area' ('non-place urban realm'),116 which avoids the actual use of the term city or the suffix -polis. From the model of the compact, and specialized, city within its own walls, seat of political and administrative and ceremonial power, in contrast to the country base of primary and secondary activities, we pass to the model of a metropolis articulated in centres, peripheral centres, peripheries and semi-peripher-

<sup>109</sup> Chapters of Charpin, Dosch, Diakonoff, Stone. Cf. also Postgate 1992, pp. 88–108.

<sup>110</sup> On the nineteenth-century decommissioning of the European urban walls cf. de Seta and Le Goff (eds.) 1989; also Tracy (ed.) 2000.

<sup>111</sup> For an introduction to the question see Martinotti 1993, pp. 19-60; 2009; also Saggio 2010; Gregotti 2011.

<sup>112</sup> Secchi 2000.

<sup>113</sup> Gottmann 1961; also Castells 1970a.

<sup>114</sup> Soja 1999; 2009; Gregotti 2011.

<sup>115</sup> Sassen 1991; 1994.

<sup>116</sup> Martinotti 1993, p. 63, with reference to Sharpe and Wallock 1987, p. 2.

ies, and with frequent, systematic, daily displacements (commuting), or occasionally of events, and distinctions between those who dwell there, those who work there, those who consume there – a distinction once rather rare. It is worth remembering that the question of the metropolis, the *Großstadt*, had already been posed at the beginning of the twentieth century, on the part of German town-planners and sociologists; but they were dealing then with a positive model, the outcome and culmination of modernity and capitalism.<sup>117</sup> On the other hand, the megalopolis of the end of the millennium, a negative model of the defeating of the traditional city, by now on the edge of collapse, in the context of the city-territory *continuum*, was launched (at the beginning of the 1960s) by Gottmann with his study on the region of the North-East United States, enormous conurbations made up of cities, suburbs, and urbanized countryside, 118 a vision which recalls in very different terms the history of 'Great Babylon': only that then the city was defined by its encircling walls, and today by the availability of services spread throughout the land.

The fundamental point, in effect, is the revolution in communications and the consequent capillary diffusion of 'services', once typically urban, into the countryside: hospitals, administrative offices, commercial centres, cultural and entertainment centres, public transport always more rapid and widespread, utilization of computer networks (typically not localized). In the world of older industrialization phenomena of stagnation occurred in the great metropoleis, with an increase of population in towns that were smaller but well provided with services. But above all the countryside loses its agricultural character, and becomes 'industrial', both through the spread into the country of industrial establishments, and because agricultural production itself is organized in an industrial way (and with few permanent workers). From the relationship of centre/periphery we pass to imagining 'a single periphery without a centre'. 119 And somewhat paradoxically the 'urban revolution' and the 'urban era' are applicable to modernity in a strict sense, when the distinctive traits of the city are diluted throughout its territory, when 'the whole society becomes urban'. 120

The work of this book (and the competence of its author) is certainly not to confront the question of modernity, but to see if and how recent trends have

<sup>117</sup> Cacciari 1973 stresses the negativity of the theorists of the Großstadt of the beginning of the twentieth century too, but seems to me influenced by succeeding developments.

<sup>118</sup> Gottmann 1961.

<sup>119</sup> Gregotti 2011, p. 106.

**<sup>120</sup>** Lefebvre 1972, p. 72; also *id*. 1974, pp. 155–179; and earlier *id*. 1970, p. 7: 'Nous appellerons "société urbaine" la société qui résulte de l'urbanisation complète, aujourd'hui virtuelle, demain réelle'.

had an effect on the study of the ancient city. In principle they should not, since the ancient Near-Eastern city is absolutely foreign to modernity, and if it was thought earlier in the nineteenth century to be 'different' from 'our' city, so much the more should it be now that the cities in which we live are further distanced from the old urban model. And yet the movements of an age happen even unconsciously, bringing to scholars' attention new themes (and also new methods) which it seems opportune to adopt. For example, I ask myself whether, in the context of the traditional model, it would have been possible to think of a 'city without a citadel' (that is, without a controlling political centre) as, for example, those of the Middle Niger in a pre- and early Islamic period 121 (on the model of the enormous South African townships, huge 'villages' without a materialized political structure), or like those of certain pre-urban Euro-Asiatic cultures, with settlements of several hundred hectares.<sup>122</sup> Or, vice versa, to think of 'citadels without cities', just controlling and administering centres, whose productive base does not gather around it to form an urban agglomeration of an entity of some kind<sup>123</sup> (cf. § 5.12). Or even more, to insist on capitals 'estranged' from their economic context ('disembedded capitals'), 124 new foundations situated in places chosen abstractly, cities as hubs of functions apart from their built-up materiality and population density, temporary capitals and itinerant palaces (but for different causes from the normal climatic/seasonal one, well-known above all from the Achaemenid example).

Another interesting example: it has always been maintained that, unlike the cities of the periphery (Northern Mesopotamia, the Levant, Anatolia), small and compact, those of Lower Mesopotamia are often composed of various tell, separated by hollows (because of canals, or simply roads), or even of separate cities (the emblematic example is Sippar);<sup>125</sup> but only recently has this been translated into a sort of dismantling of the city, visualized as scattered, no longer shut within its walls;126 or even with ample 'external cities', outside the

<sup>121</sup> McIntosh and McIntosh 1993.

<sup>122</sup> Kohl 2009; Vidale 2010.

**<sup>123</sup>** Arslantepe according to Frangipane (ed.) 2010; earlier ead. 1993; 1997a, b; 2001; 2002; (ed.) 2004. Also the citadels of Media (cf. § 5.12) and the centres of the Oxus (cf. Vidale 2010, pp. 83-85).

<sup>124</sup> Earlier Blanton 1976; then Joffe 1998 on the Near-Eastern world.

<sup>125</sup> The fractioning of Sippar into various settlements (cf. Harris 1975, pp. 10–14; Leick 2001, pp. 162-185) has been re-scaled by Charpin 1988 into only two centres: the 'Sippar of Shamash' (Abu Habba) and the 'Sippar Annunitum' (Tell ed-Der).

<sup>126</sup> Stone 1999; (ed.) 2007 (Mashkan-shapir); also Postgate 1982 with fig. 45; 1992-93 (Abu Salabikh); Huot et al 1989 (Larsa); Carroué 1983 (Lagash); earlier Gibson 1975, with fig. 2 at p. 6 (Nippur). See Pierotti 1972, pp. 37-107 on the walled city as the norm for the ancient city, up to the threshold of modernity.

encircling walls. 127 And even inside the city interest in the dismantled places – the buildings in ruins (or building plots), the rubbish heaps – have only recently attracted attention.<sup>128</sup> A certain revival of interest in anti-urban attitudes (of, however, nomadic contextualization, very different from the post-modern one)129 could also have been stimulated by certain modern trends towards 'flight from the mad city' in search of more tranquil places, in luxury niches or in the countryside. 130

The preference for the concept of 'space', to the detriment of that of 'place' (of which I have already spoken at § 5.5), then leads to the concept of 'nonplace', a space devoid of the qualities of 'place', which are historical singularity, functional insertion into a structure, and geometrical actualization.<sup>131</sup> And the concept of the 'chronotope' as a place which assumes and abandons its function according to the time (the hour, the day, the season)<sup>132</sup> also has something to do with the non-place. Over and above the various definitions suggested, it could be said that a 'place' understood in a town-planning sense is a space constructed with a view to a precise function: the 'non-place' on the other hand is not intentionally destined for a specific function but can be host to one or more of them, informally, also according to the time. 133 In this sense the ceremonial buildings of the Uruk period, as imagined by Forest (who denies the function and definition of 'temples', cf. § 5.8), would have been of the type of 'non-places' or 'chronotopes', used to meet, talk, 'see people, do things'. But it is noticeable that at the base of Forest's theory there are very real misunderstandings: that in Sumerian there is no word for 'temple' (they say 'the house of the god' but what is the difference?), and that the temple

<sup>127</sup> For example Tell Mozan as outlined by Pfälzner and Wissing 2004, taken up by Goldhausen and Ricci 2005, with a risk of altering the settlement and demographic hierarchies.

<sup>128</sup> For example Baker 2009; but on urban refuse Henrickson 1992.

<sup>129</sup> Valid for the Rechabites and for certain positions of the Israelite prophecy (Frick 1977, pp. 209-231; Jacob 1977; Benjamin 1983; then Blenkinsopp 2001; Carroll 2001; Roddy 2008). On the other hand the nature of Neo-Assyrian prophecy (pre-axial, organic to power) is favourable to the city (seat of the gods and the king), cf. Nissinen 2001. Pezzoli-Olgiati 2002, pp. 175-217, perhaps influenced by its familiarity with the biblical and post-biblical texts, speaks of Mesopotamian 'condemnation' of the city; but the passages cited do not condemn the city, but instead lament its destruction, due to specific faults of the king; cf. also Hallo 1996, pp. 1-2.

**<sup>130</sup>** Rykwert 2003, pp. 165–198.

<sup>131</sup> Augé 1992; cf. also de Certau 1990; but Webber 1964 already goes in this direction (even if he does not use the term).

<sup>132</sup> On 'chronotope' in a town-planning sense cf. Bazzani et al. 2009, pp. 227, 235-236 and passim.

<sup>133</sup> On the progression agora-piazza-mall cf. Leontidou 2009 (and note the decrease of the functionally specific and intentional destination).

that appears in the texts is a 'fiction', in the sense that it is a question of an administrative agency and not of a building.<sup>134</sup> I have already spoken of my difficulty in imagining a community in which economics and politics have as their fulcrum the temple-agency, but which does not set aside for it a building (unless insignificant) while reserving immense resources for constructing 'nonplaces' of general socialization. But above all, can we imagine anyone proposing a similar image before the de-structuring mode of post-modernity?

And so the old scheme – all too clear and simple – of a distinction between the public and private sector, has been as though dissolved by the insistence on patrimonialism, on 'inappropriate' connections between the two spheres, and in particular on the positions of the entrepreneurs as public officials or conspiring with them, especially in the neo-Babylonian period, <sup>135</sup> or even on the domestic placing of archives with state contents, <sup>136</sup> on the private enterprise activities of the palaces, <sup>137</sup> on the transfer for profit of parts of the temples' endowments, or on institutions (and individual functionaries) who should have been specialized by their sector for the service of the community ('system serving') but instead degenerated to their own advantage ('self-serving').<sup>138</sup> This picture of corruption becoming systemic sounds familiar to our ears and perhaps these insistences owe something to our present conditions. Very recently Seth Richardson, in presenting the Mesopotamian states as weak, incomplete, defective realizations of an aspiration to total control, explicitly draws his inspiration from present-day situations of client-groups and local powers (also patently illegal) which compete with the state or replace it in territorial and social control.139

Perhaps the most explicit and conscious summary of what is happening in the study of the Mesopotamian city is that given by Gil Stein with reference to the structures of power, which is worth citing in whole: 'Instead of viewing chiefdoms and states as well-bounded, homogeneous adaptive systems with clearly defined structures, the focus on power relationships views these polities as "fuzzy" networks with poorly defined and contingent boundaries formed through distinct and constantly shifting patterns of cooperation and competition among emergent elites and other groups', and again 'there is a clear move-

<sup>134</sup> Forest 1996a, pp. 231–235; also id. 1987; 1999. Collins 2000 also stresses the ideological aspects of the first urbanization.

<sup>135</sup> Cf. Beaulieu 2000 (Larsa); Bongenaar 2000 (Sippar); Wunsch 2000 (Babylon).

<sup>136</sup> Cf. van Soldt 2000 for Ugarit.

<sup>137</sup> Silver 2006.

<sup>138</sup> Flannery 1972b; followed by Frangipane 2000.

<sup>139</sup> Richardson 2012.

ment away from a view of states as highly centralized, omnipotent entities toward a heterogeneous model that recognizes variability in state/urban organization and explores the limits of state power within the broader society'. 140

From a first impression, the denial of the temple function of the great buildings of Uruk (and of so many other presumed Mesopotamian temples) seems to contradict the trends towards the symbolic and the religious as foundations of urbanization, trends typical of the post-modern phase. In fact, as Cardini says, there is a tendency today to see the sacredness of the city rather than in the city, <sup>141</sup> and therefore devaluation of the temple as a political-economic structure can very well go hand in hand with emphasis on the religious/ symbolic aspects of the city. This emphasis on the symbolic and on the religious factor, typical of post-processual archaeology,142 when applied to the origin of urbanization sometimes leads to recovery of the old Fustel de Coulanges, as in the book by Pezzoli-Olgiati on the religious interpretations of the ancient city, or in the introduction by Joyce Marcus and Jeremy Sabloff to their book (one of the interdisciplinary seminars of Santa Fé) which means to give an up-to-date report on trends and views in the study of the ancient city. 143 The programmatic position of the two editors<sup>144</sup> is contradicted more than intended both by the greater part of the analytic contributions of the different contributors to the conference, who deal largely with the material aspects of urbanization, and by the position of Fustel himself, who had only used literary data, with a great disdain for archaeological results, and had a classical-centric position, ignoring the rest of the world - exactly the opposite of the book now cited, strongly archaeological and comparative.

Perhaps the most interesting and radical position is that which sees the 'revolutions' as 'mental' facts: the change in mentality precedes and causes the technological change, with a complete overturning of Gordon Childe's position. If Cauvin gives it a programmatic application with reference to neolithiza-

<sup>140</sup> Stein 1998, pp. 6 and 10; but also Yoffee 1995, pp. 299-300; Adams 2004, pp. 47-48; Cowgill 2004.

<sup>141</sup> Cardini (ed.) 1994, with a chapter on the Ancient Near East of Xella 1994, who, however, presents rather the sacredness in the city, associating polytheism with complexity and urbanization, and maintaining the centrality of the temple in the Mesopotamian city.

<sup>142</sup> Cf. Hodder 1986; 1989; 1992; Meltzer, Fowler, and Sabloff (eds.) 1986; and above all Knapp 1996 on the variegated influence of 'postmodernism' on archaeology and ancient history. Recently Trigger 2008, pp. 58-62.

<sup>143</sup> Pezzoli-Olgiati 2002; Marcus and Sabloff 2008a, pp. 3-6. See also the conferences edited by Goodnick Westenholz (ed.) 1996 and 1998, with chapters on Babylonia (ead.), Ur (Sigrist), 'Amarna (Shaw; Fritz), Khattusha (Hawkins), Jerusalem (Bahat and Hurwitz), etc.

<sup>144</sup> Set out mainly in the conclusions, Marcus and Sabloff 2008b.

tion,145 and there are various mentions, above all by the French prehistoric school, to its applicability also to urbanization, 146 that which distinguishes the townsman from the countryman is not the level of complexity (of specialization, of rank diversification), nor the availability of services, nor their position in the productive or decision-making chain, but is the different mentality. Good, and partly already said a century ago by the urban sociologists of the Chicago school; but, being applied to an urban context already in being, does not seem to me an explanation of the origin of urbanization.

## 6.8 Epilogue

The journey traced by the book follows the course of a parabola, not in the evangelical sense of 'parable' but in the sense of a journey first ascending and then descending. For town planning and its visualization you depart from the imaginary city, arrive at the concretely excavated city and finally berth at the virtual city. For the socio-political aspects you begin from the denial that an 'Eastern' city could have existed, and pass through the formulation of specific Ancient Near-Eastern models, to berth at a continuum of Easts and Wests, In more general terms you begin from philosophical theory and evolutionist imagination to arrive at envisaging a materially existing city, a coagulum of all the certainties, with an encircling wall and city gates, palace and temple, houses and streets, inhabitants and their activities, but then all the certainties are cast into doubt by trivializing the historical characterization in a spatial-temporal homogenization which has much to do with the end of history. 147 First the propulsive centres of urbanization were imagined, and then they were identified, but then the scruple of equal opportunity prevailed to disseminate a little of primary and secondary urbanizations in all the continents – even where we have in front of our eyes huge phenomena of imitation, adaptation and (a word by now censored) diffusion. Squeezed between nineteenth-century philosophy and the technology of the new millennium, the phase of strictly historical and archaeological enquiry is limited to a century. And one thinks of the trivialization of concepts once pregnant with meaning, endowed with value, for good or for bad, like that of the city-state (now simply a dimensional entity) or that

**<sup>145</sup>** Cauvin 1994.

<sup>146</sup> Nissen 1987 also thinks that the urban revolution was such only through the emergence of an 'urban consciousness'.

<sup>147</sup> One thinks of the position of Yoffee 2005: the certainties of the twentieth-century model as 'myths' and 'factoids'.

of 'civilization' (now reduced to a geographical-cultural group), or indeed of state and empire (a rank now denied to no one, provided it was placed elsewhere, in the past). The end of ideology, but also the end of ideas? Of structured systems?

The meaning of parabola has unquestionably a factual base in the events of the European city, the Western in general, in which the generations of scholars here examined have lived and worked, and which passes from the walled city to the industrial city and to the dispersed city. He But I admit that it also has something to do with the cycle of Ancient Near-Eastern studies, first grown as endowed with specific characteristics, but now in decline into a generic component of world globalization, without any more ideology, without any more history. Perhaps instead the sense of a parabola has even something to do with the personal story of the author, or simply with his date of birth, with his training in the decades of the positive models, and with the reaction of elderly disappointment at seeing them destroyed. I imagine that an author of the present generation can and should see the journey in a different way, and not share (or not feel) the sense of a cycle enriched with a geometric elegance and in itself brought to an end, and could suggest other historiographic reconstructions which I could not even foretell – but that is another story.

Another question, which should have emerged from reading this book, is what has been the impact of the problem of the Ancient Near-Eastern city on our modern culture. Once, placed before the demand, a little brutal but altogether legitimate, of what it was possible for us to import from the Ancient Near East, and from history in general, I suggested imagining a history textbook for secondary schools (but do they still teach history?) with the page divided into three columns side by side: in the central column should be put 'history' as traditionally understood, the story of an event or the analysis of a phenomenon of the past; in the left-hand column should be put all the words and concepts which are coupled to this event or this phenomenon, or originally drawn from it; and in the right-hand column the cultural works (of art, literature, cinema, music and so on) which illustrate it or in some way refer to it. 149 Only in this way would the relationship between us and that event or phenomenon of the past become conscious and critically open to evaluation. And only in establishing such a relationship would it become natural 'to remember' the history, which otherwise (transformed into a collection of dates

<sup>148</sup> See, for example, Benevolo 1993.

<sup>149</sup> Liverani 2008b.

and names of people dead long ago, of events which say nothing to us, of problems which are not ours) becomes a sort of sadistic torture or a crazed and clapped-out mosaic.

Now let us imagine the page dealing with the event (or rather myth) of the Tower of Babel: the lateral columns would be very full. In the column on the left would be found the term 'Babel' to indicate confusion ('a Babel of tongues' 'the Babel of regulations' 'the Babel of traffic'), but also the question of the single origin of language, the theory of the original language, the question of bilingualism and of translation. There could also be a mention of the recurrent scheme of hybris-nemesis - (human) arrogance and (divine) punishment which is found is so many philosophies of history. In the right-hand column a place would be found for the works of art and literature which derive from this event: the painted portrayals of the Tower of Babel and the pre-archaeological reconstructions of Babylon, the important literary works (Borges' La biblioteca de Babel springs immediately to mind), a lyrical opera like Nabucco, placed against the background of the Babylonian exile, film clips like Griffith's Intolerance or even Fritz Lang's Metropolis; and so on.<sup>150</sup> But then let us imagine the page where Uruk and the first urbanization is spoken of, a crucial phenomenon in the history of humanity: it will be disconsolately empty. Some years ago Franco Battiato tried to make a Gilgamesh, but it was a fiasco.

I mean that of this, at least now defined, parabola it is the initial phase, that of imagining the unknown, that has kept its roots very deep in our culture, whereas the later acquisitions (both the 'certainties' and then the criticisms) have not succeeded in penetrating. 'Babylonia' or 'Babylon' or 'Babel' is a name much used by bars, night clubs, restaurants, discotheques, commercial centres, large shopping centres, websites, TV channels, newspaper columns, language schools, dictionaries and automatic translators, films of science fiction and horror, television series, theatrical companies, pop songs, and such like. It is due to the biblical text (and to a much lesser extent to the classics), but not because it is widely read among the young (who reads the Bible any more, who reads the classics any more?) but because the anecdote (obviously mythical, and with false etymology, but what does that matter?) has its own effective fantasy that 'says something' even to those who could not tell the story; it is a powerful symbol of chaos and depravation. All the 'serious' work done by generations of scholars, archaeologists and philolo-

<sup>150</sup> The work is largely to do; but cf. Glassner 2003, pp. 64-94 and 199-228 (unfortunately without reference to evidence); Seymour 2008 f. On Intolerance cf. McCall 1998, pp. 208-210; Allard 2008c.

gists and historians, with the rediscovery of the ancient cities, and also with the decipherment of writings and entire literatures, seems to have passed in vain. It is true that there are groups of young (and not so young) enthusiasts of archaeology, but the valuation that the media give to this passion is that to interest the public there is a need to speak of 'mysteries' or at least of 'secrets'. What poor comfort!

## **Bibliography**

- AA.VV. 1970. L'expérience française des villes nouvelles. Paris.
- Abdel Haleem, M.A.S. (tr.). 2010. The Qur'an. English translation with parallel Arabic text. Oxford.
- Abrams, Ph. and E. A. Wrigley (eds.). 1978. Towns in Society. Essays in Economic History and Historical Sociology. Cambridge UK.
- Abusch, Tz. et al. (eds.). 2001. Historiography in the Cuneiform World I. Bethesda MD.
- Adams, R. McC. 1956. 'Some Hypotheses on the Development of Early Civilizations'. In *AmAnt* 21: 227–232.
- Adams, R. McC. 1958. 'Survey of Ancient Water Courses and Settlements in Central Iraq'. In *Sumer* 14: 101–103 (with figs. 1–6).
- Adams, R. McC. 1960a. 'The Rise of Cities'. In Scientific American 9: 153-172.
- Adams, R. McC. 1960b. 'Factors Influencing the Rise of Civilization in the Alluvium: Illustrated by Mesopotamia'. In Kraeling and Adams (eds.). 24–34.
- Adams, R. McC. 1960c. 'Early Civilizations, Subsistence, and Environment'. In Kraeling andAdams (eds.). 269–295.
- Adams, R. McC. 1962. 'Agriculture and Urban Life in Early Southwestern Iran'. In *Science* 136: 109–122.
- Adams, R. McC. 1965. Land behind Baghdad. A History of Settlement on the Diyala Plains. Chicago.
- Adams, R. McC. 1966. The Evolution of Urban Society: Early Mesopotamia and Prehispanic Mexico. New York.
- Adams, R. McC. 1969. 'The Study of Ancient Mesopotamian Settlement Patterns and the Problem of Urban Origins'. In *Sumer* 25: 111–123.
- Adams, R. McC. 1972a. 'Settlement and Irrigation Patterns in Ancient Akkad'. In Gibson: 182–
- Adams, R. McC. 1972b. 'Patterns of Urbanization in Early Southern Mesopotamia'. In Ucko, Tringham, and Dimbleby (eds.). 735–750.
- Adams, R. McC. 1972c. 'Demography and the "Urban Revolution" in Lowland Mesopotamia'. In Spooner (ed.). 60–63.
- Adams, R. McC. 1974. 'Historic Patterns of Mesopotamian Irrigation Agriculture'. In Downing and Gibson (eds.). 1–6.
- Adams, R. McC. 1978. 'Strategies of Maximization, Stability, and Resilience in Mesopotamian Society, Settlement, and Agriculture'. In *Proceedings of the American Philosophical Society* 122: 329–335.
- Adams, R. McC. 1981. Heartland of Cities. Surveys of Ancient Settlement and Land Use on the Central Floodplain of the Euphrates. Chicago.
- Adams, R. McC. 1982. 'Property Rights and Functional Tenure in Mesopotamian Rural Communities'. In Dandamayev *et al.* (eds.). 1–14.
- Adams, R. McC. 1983. 'Natural and Social Science Paradigms in Near-Eastern Prehistory'. In Young, Smith and Mortensen (eds.). 369–374.
- Adams, R. McC. 1984. 'Mesopotamian Social Evolution: Old Outlooks, New Goals'. In T. Earle (ed.), On the Evolution of Complex Societies. Essays in Honor of H. Hoijer. Malibu CA. 79–129.
- Adams, R. McC. 1999. 'Steps toward Regional Understanding of the Mesopotamian Plain'. In Kühne, Bernbeck, and Bartl (eds.). 33–48.

- Adams, R. McC. 2001. 'Complexity in Archaic States'. In Journal of Anthropological Archaeology 20: 345-360.
- Adams, R. McC. 2004. 'Reflections on the Early Southern Mesopotamian Economy'. In G. M. Feinman and L. M. Nicholas (eds.), Archaelogical Perspectives on Political Economies. Salt Lake City. 41-59.
- Adams, R. McC. 2012. 'Ancient Mesopotamian Urbanism and Blurred Disciplinary Boundaries'. In ARA 41. 1-20.
- Adams, R. McC. and H. J. Nissen. 1972. The Uruk Countryside. The Natural Setting of the Urban Societies. Chicago.
- Adler, E. N. 1930. Jewish Travellers in the Middle Ages. New York.
- Aerts, E. and H. Klengel (eds.). 1990. The Town as Regional Economic Centre in the Ancient Near East (Studies in Social and Economic History 20). Leuven.
- Åkerman, K. 1999–2001. 'The "Aussenhaken Area" in the City of Assur during the Second Half of the 7<sup>th</sup> Century BC. A Study of a Neo-Assyrian City Quarter and its Demography'. In SAAB 13: 217-222.
- Akkermans, P. 1989. 'The Neolithic of the Balikh Valley, Northern Syria: a First Assessment'. In PO 15: 122-134.
- Akkermans, P. 1993. Villages in the Steppe. Later Neolithic Settlement and Subsistence in the Balikh Valley, Northern Syria (International Monographs in Prehistory. Archaeological Series 5). Ann Arbor MI.
- Alaura, S. 2002. 'La prima trattativa diplomatica dei "Musei Reali di Berlino" per una concessione di scavo a Boğazköy'. In S. De Martino and F. Pecchioli Daddi (eds.), Anatolia Antica. Studi in memoria di F. Imparati I. Firenze. 23-46.
- Alaura, S. 2006. 'Nach Boghasköi!' Zur Vorgeschichte der Ausgrabungen in Boğazköy-Hattuša und zu den archäologischen Forschungen bis zum Ersten Weltkrieg (SDOG 13).
- Alaura, S. 2007. 'Otto Puchstein und Sendjirli (Zincirli)'. In D. Groddek and M. Zorman, Tabularia Hethaeorum. Hethitologische Beiträge S. Košak (Dresdner Beiträge zur Hethitologie 25). Wiesbaden. 13-31.
- Alaura, S. 2010a. 'Die Anschaffungspolitik beim Erwerb vorderasiatischer und ägyptischer Altertümer für die Museen zu Berlin im Jahre 1885/86'. In AoF 37: 3-26.
- Alaura, S. 2010b. 'Die Fortführung der Ausgrabungen in Troia nach dem Tode Heinrich Schliemanns: Otto Puchstein und Robert Koldewey'. In Alter Orient aktuell 11: 19-22.
- Alaura, S. 2010c. 'Die wissenschaftliche Korrespondenz Otto Puchsteins in der Handschriftenabteilung der Staatsbibliothek zu Berlin'. In SMEA 52: 5-31.
- Alberti, L. B. 1485. De re aedificatoria. Firenze.
- Albrecht, S. 1999. 'Der Turm zu Babel als bildlicher Mythos. Malerei Graphik Architektur'. In Renger (ed.). 553-574.
- Albright, W. F. 1922. 'The Location of the Garden of Eden'. In American Journal of Semitic Languages and Literatures 39: 15-31.
- Albright, W. F. 1931. 'On the Map Found at Nuzi'. In BASOR 42: 7-10.
- Alcock, S. E. 2002. Archaeologies of the Greek Past. Landscape, Monuments, and Memories. Cambridge UK.
- Alexandre, M. 1988. 'Entre ciel et terre: les premiers débats sur le site du Paradis'. In F. Jouan and B. Deforge (eds.), Peuples et pays mythiques. Paris. 187-224.
- Algaze, G. 1983-84. 'Private Houses and Graves at Ingharra, a Reconstruction'. In Mesopotamia 18-19: 135-193.

- Algaze, G. 1989. 'The Uruk Expansion: Cross-Cultural Exchange in Early Mesopotamian Civilization'. In *CA* 30: 571–608.
- Algaze, G. 1993a. The Uruk World System. Chicago.
- Algaze, G. 1993b. 'Expansionary Dynamics of Some Early Pristine States'. In *AmAnthr* 95: 304–333.
- Algaze, G. 1993c. 'Processual Regularities in the Expansion of Early Sumerian and Mature Harappan Civilizations'. In Frangipane *et al.* (eds.). 221–231.
- Algaze, G. 1999. 'Trends in the Archaeological Development of the Upper Euphrates Basin of Southeastern Anatolia during the Late Chalcolithic and Early Bronze Ages'. In del Olmo Lete and Montero Fenellós (eds.). 535–572.
- Algaze, G. 2001a. 'The Prehistory of Imperialism. The Case of the Uruk Period Mesopotamia'. In Rothman (ed.) 2001: 27–83.
- Algaze, G. 2001b. 'Initial Social Complexity in Southwestern Asia: The Mesopotamian Advantage'. In CA 42: 199–233.
- Algaze, G. 2007. 'The Sumerian Takeoff'. In Stone (ed.). 343-368.
- Algaze, G. 2008. Ancient Mesopotamia at the Dawn of Civilization. The Evolution of an Urban Landscape. Chicago.
- Algaze, G. (ed.). 1990. Town and Country in Southeastern Anatolia. II. The Stratigraphic Sequence at Kurban Höyük I-II (OIP 110). Chicago.
- Allard, S. 2008a. 'Le mythe de Babylone du XVIe au XIXe siècle'. In André-Salvini (ed.). 437–453 (also in Wullen and Schauerte (eds.). 135–167).
- Allard, S. 2008b. 'Babylone au théâtre'. In André-Salvini (ed.). 476-481.
- Allard, S. 2008c. 'Intolérance de D. W. Griffith: Babylone enfin resuscitée'. In André-Salvini (ed.). 498-500 (also in Wullen and Schauerte (eds.). 107-109).
- Allchin, B. and R. Allchin. 1982. The Rise of Civilization in India and Pakistan. Cambridge UK.
- Allchin, R. (ed.). 1982. The Archaeology of Early Historic South Asia: The Emergence of Cities and States. Cambridge UK.
- Allinger-Csollich. 2004. 'Der Wandel des Bildes vom "babylonischen Turm": Die Ausgrabungen der Universität Innsbruck in Borsippa'. In Schipper (ed.). 125–142.
- Allison, P. M. 1999. 'Introduction'. In Ead. (ed.). 1-18.
- Allison, P. M. (ed.). 1999. The Archaeology of Household Activities. London-New York.
- Alt, A. 1936. Josua. Republished in Kleine Schriften zur Geschichte des Volkes Israel I. München 1959. 176–192.
- Altaweel, M. 2003. 'The Roads of Ashur and Nineveh'. In Akkadica 124: 221-228.
- Altaweel, M. 2008. The Imperial Landscape of Ashur: Settlement and Land Use in the Assyrian Heartland (Heidelberger Studien zum Alten Orient 11). Heidelberg.
- Ambos, C. 2004. Mesopotamische Baurituale aus dem 1. Jahrtausend v. Chr. Dresden.
- Amin, S. 1973. Le développement inégal. Paris.
- Amin, S. 1976. Impérialisme et sous-développement en Afrique. Paris.
- Amiran, R. 1970. 'The Beginnings of Urbanization in Canaan'. In Sanders (ed.). 83-100.
- Ammerman, A. J. 1981. 'Surveys and Archaeological Research'. In ARA 19: 63-88.
- Ammerman, A. J. 1989. 'Population Studies and the Archaeologist'. In *Norwegian Archaeological Review* 22: 65–87.
- Ampolo, C. 1980. 'Introduzione'. In Ampolo (ed.). 1980: xiii-iliv.
- Ampolo, C. (ed.). 1980. La città antica. Guida storica e critica. Roma-Bari.
- Anastasio, S. 2011. Costruire tra i due fiumi. Introduzione all'edilizia in Mesopotamia tra neolitico ed età del ferro (Millenni 8). Firenze.

Andersen, F. I. 1961. 'The Early Sumerian City-State in Recent Soviet Historiography'. In Abr-Nahrain 1: 56-61.

Anderson, B. 1991. Imagined Communities. Reflections on the Origin and Spread of Nationalism. London.

Andrae, W. 1904. 'Zum Plan von Assur'. In MDOG 22: 52-61.

Andrae, W. 1905a. 'Zusammenfassender Bericht über die Grabung in Assur. 1. Topographisches'. In MDOG 27: 6-22.

Andrae, W. 1905b. 'Zum Plan von Assur-Nord'. In MDOG 28: 39-59.

Andrae, W. 1906. 'Zum Plan von Assur-West'. In MDOG 32: 27-38.

Andrae, W. 1909. Der Anu-Adad Tempel (WVDOG 10). Leipzig.

Andrae, W. 1913a. Die Festungswerke von Assur I-II (WVDOG 23). Leipzig.

Andrae, W. 1913b. Die Stelenreihen in Assur (WVDOG 24). Leipzig.

Andrae, W. 1921. 'Die Ischtar-Tempel in Assur'. In MDOG 61: 4-20.

Andrae, W. 1922. Die archaischen Ischtar-Tempel in Assur (WVDOG 39). Leipzig.

Andrae, W. 1929. 'Die Technik des Ausgrabens'. In Zeitschrift für Bauwesen 79: 116-122.

Andrae, W. 1930. Das Gotteshaus und die Urformen des Bauens im Alten Orient. Berlin.

Andrae, W. 1935. Die jüngeren Ischtar-Tempel in Assur (WVDOG 58). Leipzig.

Andrae, W. 1938a. Das wiedererstandene Assur (SDOG 9). Leipzig.

Andrae, W. 1938b. 'Das wieder erstandene Assur'. In MDOG 76: 1-12.

Andrae, W. 1943. 'Sendschirli'. In MDOG 80: 25-40.

Andrae, W. 1949. 'Bauwerk als Geschichtsurkunde'. In ArOr 17: 21-26.

Andrae, W. 1952. Babylon. Die versunkene Weltstadt und ihr Ausgräber Robert Koldewey.

Andrae, W. 1957. 'Ausgrabung, geistgeschichtlich gesehen'. In Das Goetheanum 36: 83-85.

Andrae, W. 1961. Lebenserinnerungen eines Ausgräbers. Berlin 1961 (2a ediz. Stuttgart

Andrae, E. and T. M. Boehmer. 1992. Bilder eines Ausgräbers / Sketches by an Excavator. Rerlin

André-Salvini, B. 1992. 'Une carte topographique des environs de la ville de Girsu'. In Geographia Antiqua 1: 57–66.

André-Salvini, B. (ed.). 2008. Babylone. A Babylone d'hier et d'aujourd'hui. Paris.

Andrews, A. P. 1995. First Cities. Smithsonian Exploring the Ancient World. Washington DC.

Archi, A. 1973. 'Bureaucratie et communautés d'hommes libres dans le système économique hittite'. In E. Neu and C. Rüster (eds.), Festschrift H. Otten. Wiesbaden: 17-23.

Archi, A. 1976. 'Città e territorio in Siria e in Anatolia'. In Dialoghi di Archeologia 9-10: 75-107 (reprinted in Ampolo 1980: 35-65).

Archi, A. 1989-90. 'Funzioni economiche del tempio ittita'. In SA 3-4: 119-126.

Archi, A. (ed.). 1984. Circulation of Goods in Non-Palatial Contexts in the Ancient Near East. Roma.

Argan, G. C. 1957. Walter Gropius e la Bauhaus. Torino (I cite from the new edition with introductory note by M. Biraghi, Torino 2010).

Asher-Greve, J. M. 2006. 'From "Semiramis of Babylon" to "Semiramis of Hammersmith". In Holloway (ed.). 322-373.

Asheri, D. 1975. 'Osservazioni sulle origini dell'urbanistica ippodamea'. In Rivista Storica Italiana 87: 5-16.

Ashmore, W. and A. B. Knapp (eds.). 1999. Archaeologies of Landscape: Contemporary Perspectives. Oxford.

- Assunto, R. 1973. L'antichità come futuro. Studio sull'estetica del Neoclassicismo europeo. Milano.
- Aufrecht, W. E., N. A. Mirau, and S. W. Gauley (eds.). 1997. Aspects of Urbanism in Antiquity. From Mesopotamia to Crete (JSOT Suppl. 244). Sheffield.
- Aufrère, S., J.-Cl. Golvin, and J.-Cl. Goyon. 1991, 1994, 1997. L'Egypte restituée I-III. Paris.
- Augé, M. 1992. Non-lieux. Introduction à une anthropologie de la surmodernité. Paris.
- Augé, M. 2003. Le temps en ruines. Paris.
- Aurenche, O. 1981a. La maison orientale. L'architecture du Proche Orient ancien dès origines au milieu du quatrième millénaire I-III (BAH 109). Paris.
- Aurenche, O. 1981b. 'L'architecture mésopotamienne du 7e au 4e millénaires'. In *PO* 7(2): 43-55.
- Aurenche, O. 1981c. 'Essai de démographie archéologique. L'exemple des villages du Proche Orient ancien'. In PO 7(1): 93-106.
- Aurenche, O. 1982. 'A l'origine du temple et du palais dans les civilisations de la Mésopotamie ancienne'. In *Ktèma* 7: 236–259.
- Aurenche, O. 1985a. 'L'apport de l'observation ethnographique à la compréhension des monuments anciens: palais de Mari et palais actuels du Proche-Orient'. In MARI 4: 347–374.
- Aurenche, O. 1985b. 'L'architecture anatolienne du 7ème au 4ème millénaires avant J.-C.'. In Liverani, Palmieri, and Peroni (eds.). 163–175.
- Aurenche, O. 1985c. 'Le dessin d'architecture dans le Proche-Orient des origines au milieu du IVe millénaire'. In Brommelaer (ed.). 9–18.
- Aurenche, O. 1998. 'Villages d'été, villages d'hiver: un modèle peu connu d'occupation de l'espace dans la vallée de l'Euphrate (20e siècle après J.-C.)'. In Fortin and Aurenche (eds.). 35–42.
- Aurenche, O. 2006. 'La tour de Jéricho, encore et toujours', in Syria 83: 63-68.
- Aurenche, O. 2012. Vous avez dit ethnoarchéologue? Lyon.
- Aurenche, O. (ed.), 1984. Nomades et sédentaires: perspectives ethnoarchéologiques. Paris.
- Azara, P., R. Mar, and E. Subías (eds.). 2001. *Mites de fundació de ciutats al món antic (Mesopotàmia, Grècia i Roma)* (Museu d'Arquelogia de Catalunya, Monografies 2). Barcelona.
- Bacon, E. 19742. Design of Cities. London.
- Badawy, A. 1955. A History of Egyptian Architecture. Vol. I: The Old Kingdom. Berkeley-Los Angeles.
- Badawy, A. 1960. 'Orthogonal and Axial Town Planning in Egypt'. In ZAS 85: 1-12.
- Badawy, A. 1966. A History of Egyptian Architecture. Vol. II: The First Intermediate Period, the Middle Kingdom, and the Second Intermediate Period. Berkeley-Los Angeles.
- Badawy, A. 1967. 'The Civic Sense of Pharaoh and Urban Development in Ancient Egypt'. In *JARCE* 6: 103–109.
- Badawy, A. 1968. A History of Egyptian Architecture. Vol. III: The Empire (the New Kingdom). Berkeley-Los Angeles.
- Baffi, F. 1990. 'Tradizione e innovazione nell'architettura assira del II millennio a.C.'. In ead. and Dolce (eds.). 21–34.
- Baffi, F. 1997. 'Tukulti-Ninurta I, re costruttore'. In CMAO 7: 7-26.
- Baffi, F. and R. Dolce. 1990. Archeologia della Mesopotamia. L'età cassita e medioassira. Roma.
- Bagg, A. 2000a. Assyrische Wasserbauten. Landwirtschaftliche Wasserbauten im Kernland Assyriens (BaF 24). Mainz.

- Bagg, A. 2000b. 'Irrigation in Northern Mesopotamia: Water for the Assyrian Capitals'. In Irrigation and Drainage Systems 14: 301–324.
- Bagg, A. 2011. 'Mesopotamische Bauzeichnungen'. In Selz (ed.). 543-586.
- Bahrani, Z. 2000. 'The Extraterrestrial Orient: Colonizing Mesopotamia in Space and Time'. In Milano et al. (eds.). III, 5-10.
- Bahrani, Z. 2001a. Women of Babylon. Gender and Representation in Mesopotamia. London-New York.
- Bahrani, Z. 2001b. 'History in Reverse: Archaeological Illustration and the Invention of Assyria'. In Abusch et al. (eds.). 5-28.
- Bahrani, Z. 2003. The Graven Image. Representation in Babylonia and Assyria. Philadelphia.
- Bahrani, Z. 2007. 'The Babylonian Visual Image'. In Leick (ed.). 155-170.
- Bailey, A. M. and J. R. Llobera (eds.). 1981. The Asiatic Mode of Production: Science and Politics. London.
- Baines, J. and N. Yoffee. 1998. 'Order, Legitimacy, and Wealth in Ancient Egypt and Mesopotamia'. In Feinman and Marcus (eds.). 199-260.
- Bairoch, P. 1963. Révolution industrielle et sous-développement. Paris.
- Bairoch, P. 1978. 'Città/campagna'. In Enciclopedia Einaudi 3. Torino. 85-106.
- Bairoch, P. 1985. De Jéricho à Mexico. Villes et économies dans l'histoire. Paris.
- Baker, H. B. 2007. 'Urban Form in the First Millennium BC'. In Leick (ed.). 66-77.
- Baker, H. B. 2009. 'A Waste of Space? Unbuilt Land in the Babylonian Cities of the First Millennium BC'. In Iraq 71: 89-98.
- Ball, W., S. Tucker, and T. J. Wilkinson. 1989. 'The Tell al-Hawa Project. Archaeological Investigations in the North Jazira 1986-87'. In Iraq 51: 1-66.
- Baltrušaitis, J. 1967. Essai sur la légende d'un mythe. La quête d'Isis. Introduction à l'égyptomanie. Paris.
- Banks, E. J. 1912. Bismya, or The Lost City of Adab. New York-London.
- Banning, E. B. 1996. 'Highlands and Lowlands: Problems and Survey Frameworks for Rural Archaeology in the Near East'. In BASOR 301: 25-45.
- Banning, E. B. 1997. 'Spatial Perspectives on Early Urban Development in Mesopotamia'. In Aufrecht et al. (eds.). 17-34.
- Banning, E. B. and B. F. Byrd. 1989. 'Alternative Approaches for Exploring Levantine Neolithic Architecture'. In PO 15: 154-160.
- Bagir, T. 1959. Tell Harmal. Baghdad.
- Bär, J. 2003. 'Walter Andrae Ein Wegbereiter der modernen Archäologie, Grabungstechnik, Dokumentation, naturwissenschaftliche Analysen und Alltag'. In Marzahn and Salje (eds.), 45-52.
- Barbanera, M. 1998. L'archeologia degli italiani. Roma.
- Barbanera, M. 2009. 'Metamorfosi delle rovine e identità culturale'. In id. (ed.). 15-85.
- Barbanera, M. (ed.). 2009. Relitti riletti. Metamorfosi delle rovine e identità culturale. Torino.
- Bard, K. A. 1997. 'Urbanism and the Rise of Complex Society in the Early State of Egypt'. In Manzanilla (ed.). 59-84.
- Bard, K. A. 2008. 'Royal Cities and Cult Centers, Administrative Towns, and Workmen's Settlements in Ancient Egypt'. In Marcus and Sabloff (eds.). 165–182.
- Barjamovic, G. 2004. 'Civic Institutions and Self-Government in Southern Mesopotamia in the Mid-First Millennium BC'. In J. Gerrit (ed.), Assyria and beyond. Studies Presented to M. T. Larsen. Leiden-Istanbul. 47-98.
- Barker, G. (ed.). 1999. Companion Encyclopaedia of Archaeology I-II. London-New York.

- Barrelet, M.-T. (ed.). 1980. L'archéologie de l'Iraq. Perspectives et limites de l'interprétation anthropologique des documents. Paris.
- Barstad, H. M. 1996. The Myth of the Empty Land: A Study in the History and Archaeology of Judah during the 'Exilic' Period. Oslo.
- Barstad, H. M. 2003. 'After the "Myth of the Empty Land" Major Challenges in the Study of Neo-Babylonian Judah'. In Lipschits and Blenkinsopp (eds.). 3–20.
- Bartash, V. 2010. 'Puḥru: Assembly as a Political Institution in Enūma eliš', in *Language in the Ancient Near East* II (RAI 53 = Orientalia et Classica 30/2 = Babel und Bibel 4/2). Winona Lake IN. 1083–1108.
- Bartl, K., R. Bernbeck, and M. Heinz (eds.). 1995. Zwischen Euphrat und Indus. Aktuelle Forschungsprobleme in der Vorderasiatischen Archäologie. Hildesheim.
- Bar-Yosef, O. 1986. 'The Walls of Jericho. An Alternative Interpretation'. In CA 27/2: 157–162.
- Battini, L. 1997a. 'Le porte neo-assire: un esempio di scambio culturale?' In CMAO 7: 27-56.
- Battini, L. 1997b. 'Les systèmes défensifs à Babylone', in Akkadica 104/105: 24-57.
- Battini, L. 1998a. 'Opposition entre acropole et ville basse comme critère de définition de la ville mésopotamienne', in *Akkadica* 108: 5–29.
- Battini, L. 1998b. 'Les portes urbaines de la capitale de Sargon II: étude sur la propagande royale à travers les données archéologiques et textuelles'. In J. Prosecký (ed.), Intellectual Life of the Ancient Near East (RAI 43). Prague. 41–55.
- Battini, L. 1999a. L'espace domestique en Mésopotamie de la Ille dynastie d'Ur à l'époque paléobabylonienne I–II (BAR Int. 767). Oxford.
- Battini, L. 1999b. 'Réflections sur les noms des portes urbaines en Mésopotamie'. In J. J. Ayán and J. Cordoba (eds.), *Homenaje al Prof. A. R. Garrido Herrero* (= *Isimu* 2). Madrid. 31–46.
- Battini, L. 2000. 'Des rapports géométriques en architecture: le cas de Dūr-Šarrukīn'. In *RA* 94: 33–56.
- Battini, L. 2006. 'Pour une nouvelle classification de l'architecture domestique en Mésopotamie du IIIe au Ier mill. av. J.-C.'. In Akkadica 127: 73-92.
- Battini, L. 2010. 'Des théories archéologiques: le cas du Proche-Orient ancien'. In *Syria* 87:
- Bazzani, A. *et al.* 2009. 'The Physics of the City: Modeling Complex Mobility'. In Diamantini and Martinotti. 215–245.
- Beaulieu, P. A. 2000. 'A Finger in Every Pie: the Institutional Connections of a Family of Entrepreneurs in Neo-Babylonian Larsa'. In Bongenaar (ed.). 43–72.
- Becker, H. 1991. 'Zur magnetischen Prospektion in Assur'. In MDOG 123: 123-131.
- Becker, H., J. Fassbinder, and F. Chouker. 1994. 'Magnetische und elektrische Prospektion in Munbaqa/Ekalte'. In MDOG 126: 65-80.
- Beckman, G. 1982. 'The Hittite Assembly'. In JAOS 102: 435-442.
- Beckman, G. 1999. 'The City and the Country in Hatti'. In Klengel and Renger (eds.). 161-169.
- Bedford, P. R. 2005. 'The Economy of the Near East in the First Millennium BC'. In Morris and Manning (eds.). 58–83.
- Belck, W. 1901. Beiträge zur alten Geographie und Geschichte Vorderasiens. Leipzig.
- Bell, G. L. 1908. Syria: the Desert and the Sown. London.
- Beloch, J. 1898. 'Antike und Moderne Großstädte'. In Zeitschrift für Sozialwissenschaften.
- Ben-Arieh, Y. 1979. The Rediscovery of the Holy Land in the Nineteenth Century. Jerusalem.
- Benevolo, L. 1988. Storia della città orientale. Roma-Bari.
- Benevolo, L. 1993. La città nella storia d'Europa. Roma-Bari.
- Benjamin, D. C. 1983. Deuteronomy and City Life. New York-London.

- Berchet, J. C. 1985. Le voyage en Orient. Paris.
- Bergamini, G. 2003. I datteri di Babilonia. Milano.
- Berlejung, A. (ed.). 2012. Disaster and Relief Management. Katastrophen und ihre Bewältigung. Tübingen.
- Bernal, M. 1987-91. Black Athena. The Afroasiatic Roots of Classical Civilization I-II. New Brunswick NJ.
- Bernardi, M. 1992. Archeologia del paesaggio I-II. Firenze.
- Bernbeck, R. 1994. Die Auflösung der Häuslichen Produktionsweise. Das Beispiel Mesopotamiens (BBVO 14). Berlin.
- Bernbeck, R. 2008. 'Sex/Gender/Power and Sammuramat: a View from the Syrian Steppe'. In D. Bonatz, R. N. Czichon, and F. J. Kreppner (eds.), Fundstellen. Gesammelte Schriften zur Archäologie und Geschichte Altvorderasien ad honorem H. Kühne. Wiesbaden. 351-369.
- Bernbeck, R. and R. Lamprichs. 1992. 'Museen, Macht und Besitz: Wohin mit den Altertümern?' In Das Altertum 38: 109-124.
- Bernbeck, R. and S. Pollock. 2004. 'The Political Economy of Archaeological Practice and the Production of Heritage in the Middle East'. In L. Meskell and R. Preucel (eds.), The Blackwell Companion to Social Archaeology. Oxford. 335-352.
- Bernhardsson, M. T. 2005. Reclaiming a Plundered Past: Archaeology and Nation Building in Modern Iraq. Austin.
- Besançon, J. and P. Sanlaville. 1981. 'Aperçu géomorphologique sur la vallée de l'Euphrate Syrien'. In PO 7(2): 5-18.
- Bezold, C. 1889-99. Catalogue of the Cuneiform Tablets in the Kuyunjik Collection of the British Museum I-V. London.
- Bezold, C. and A. Götze. 1926. Babylonisch-assyrisches Glossar. Heidelberg.
- Bianchi, A. and M. Liverani (eds.). 2004. Vere Gordon Childe. La rivoluzione urbana. Reggio Calabria.
- Bietak, M. 1979. 'Urban Archaeology and the "Town Problem" in Ancient Egypt'. In K. R. Weeks (ed.), Egyptology and the Social Sciences. Cairo. 97-144.
- Bietak, M. 1986. 'La naissance de la notion de ville dans l'Egypte ancienne, un acte politique?' In Cahiers de Recherches de l'Institut de Papyrologie et d'Egyptologie de Lille 8: 29-35.
- Bietak, M. 1997. Avaris. The Capital of the Hyksos. London.
- Bietak, M. 2010. 'Houses, Palaces and Development of Social Structure in Avaris'. In id. et al. (eds.), Cities and Urbanism in Ancient Egypt (Österreichische Akademie der Wissenschaften, Denkschriften der Gesamtakademie 60). Wien. 11-68.
- Biga, M. G. 2003. 'Feste e fiere a Ebla'. In C. Zaccagnini (ed.), Mercanti e politica nel mondo antico. Roma. 55-68.
- Biggi, M. A. (ed.). 2006. La musica degli occhi, scritti di Pietro Gonzaga. Firenze.
- Biggs, R. D., J. Myers and M. T. Roth (eds.). 2008. Proceedings of the 51st Rencontre Assyriologique Internationale (SAOC 62). Chicago.
- Binford, L. R. 1962. 'Archaeology as Anthropology'. In AmAnt 28: 217-225.
- Bintliff, J. L. 1992. 'Appearance and Reality: Understanding the Buried Landscape through New Techniques in Field Survey'. In Bernardi (ed.). 89-137.
- Bintliff, J. L. 1999. 'Settlement and Territory'. In Barker (ed.). 505-545.
- Bintliff, J. L. (ed.). 1991. *The Annales School and Archaeology*. London.
- Bintliff, J. L., D. A. Davidson, and E. G. Grant (eds.). 1988. Conceptual Issues in Environmental Archaeology. Edinburgh.

- Biraghi, M. 2008. Storia dell'architettura contemporanea I-II. Torino.
- Biscione, R. 1977. 'The Crisis of the Central Asian Urbanization in the 2<sup>nd</sup> Millennium BC and Villages as an Alternative System'. In Deshayes (ed.). 113–127.
- Biscione, R. 1983. 'Shahr-i Sokhta: Development and Crisis of a 3<sup>rd</sup> Millennium Proto-Urban Site in Eastern Iran'. In Bruschweiler (ed.). 23–37.
- Bittel, K. 1970. Hattusha. The Capital of the Hittites. Oxford.
- Bittel, K. (ed.) 1953. 'Vorläufiger Bericht über die Ausgrabungen in Boğazköy im Jahre 1952'. In MDOG 86: 1–76.
- Bittel, K. 1998. Reisen und Ausgrabungen in Ägypten, Kleinasien, Bulgarien und Griechenland 1930–1934 (Akademie der Wissenschaften und der Literatur, Mainz. Abhandlungen der Geistes- und Sozialwissenschaftlichen Klasse, 1988 5). Stuttgart.
- Bittel, K. and R. Naumann. 1952. Boğazköy-Hattuša. I. Architektur, Topographie, Landeskunde und Siedlungsgeschichte (WVDOG 63). Stuttgart.
- Bittel, K. et al. 1957. Boğazköy. III. Funde aus den Grabungen 1952–1955. Berlin.
- Black, J. A. 1987. 'Babylonian Textual Evidence'. In Gasche et al. 15-21.
- Blanton, R. E. 1976. 'Anthropological Studies of Cities'. In ARA 5: 249-264.
- Blanton, R. E. 1994. Houses and Households, a Comparative Study. London-New York.
- Blanton, R. E. 1998. 'Beyond Centralization: Steps toward a Theory of Egalitarian Behavior in Archaic States'. In Feinman and Marcus (eds.). 135–172.
- Blenkinsopp, J. 2001. 'Cityscape to Landscape: The 'Back to Nature' Theme in Isaiah 1–35'. In Grabbe and Haak (eds.). 34–44.
- Bliss, F. J. 1894. A Mound of Many Cities; or, Tell el Hesy Excavated. London (I cite from the 1898 edition).
- Boardman, J. 2002. The Archaeology of Nostalgia. How the Greek Re-created their Mythical Past. London.
- Bockmuehl, M. 2010. 'Locating Paradise'. In id. and G. G. Stroumsa (eds.), *Paradise in Antiquity. Jewish and Christian Views*. Cambridge UK. 192–209.
- Boehmer, R. M. 1987. *Uruk. Kampagne 38, 1985* (Ausgrabungen in Uruk-Warka, Endberichte 1). Mainz.
- Böhme, S. and S. Kulemann. 1995. 'Das frühbronzezeitliche Nordmesopotamien: Nur provinzielles Hinterland?' In Bartl *et al.* (eds.). 91–99.
- Bogaert, R. 1966. Les origines antiques de la banque de depot. Leiden.
- Bohrer, F. N. 1989. 'Assyria as Art: A Perspective on the Early Reception of Ancient Near-Eastern Artifacts'. In *Culture & History* 4: 7–33.
- Bohrer, F. N. 1992. 'The Printed Orient. The Production of A. H. Layard's Earliest Works'. In A. Gunter (ed.). *The Construction of the Ancient Near East* (= *Culture & History* 11). Copenhagen. 85–105.
- Bohrer, F. N. 1998. 'Inventing Assyria: Exoticism and Reception in Nineteenth-Century England and France'. In *The Art Bulletin* 80(2): 336–356; reprinted in Holloway (ed.). 2006. 222–266 (from whom I cite).
- Bohrer, F. N. 2001. 'Layard and Botta: Archaeology, Imperialism, and Aesthetics'. In Abusch et al. (eds.). 55-63.
- Bohrer, F. N. 2003. Orientalism and Visual Culture: Imaging Mesopotamia in Nineteenth Century Europe. Cambridge UK.
- Boiy, T. 2004. Late Achaemenid and Hellenistic Babylon (OLA 136). Leuven.
- Bond, G. C. and A. Gilliam (eds.). 1994. Social Construction of the Past. Representation as *Power* (OWA, 24). London-New York.

Bongenaar, A. 2000. 'Private Archives in Neo-Babylonian Sippar and Their Institutional Connections'. In id. (ed.). 73-94.

Bongenaar, A. (ed.). 2000. Interdependency of Institutions and Private Entrepreneurs (PIHANS 87). Leiden.

Bongenaar, A. C. V. 1997. The Neo-Babylonian Ebabbar Temple at Sippar: Its Administration and Its Prosopography (PIHANS 80). Leiden-Istanbul.

Bongenaar, A. C. V. 1999. 'Money in the Neo-Babylonian Institutions'. In Dercksen (ed.). 159-174.

Bonnet, C. 1986. Kerma. Territoire et métropole. Le Caire.

Borchardt, I. and E. Bleibtreu. 2011. 'Aspektive und Perspective im neuassyrischen Flachbild'. In Selz (ed.). 477-542.

Borchardt, L. and H. Ricke. 1980. Die Wohnhäuser in Tell el-Amarna (WVDOG 91). Berlin.

Borst, A. 1957-63. Der Turmbau von Babel. Geschichte der Meinungen über Ursprung und Vielfalt der Sprachen und Völker I-IV. Stuttgart.

Borst, H. 1983. 'Le récit de Babel - Gn 11, 1-9'. In Bruschweiler (ed.). 231-237.

Boserup, E. 1965. The Conditions of Agricultural Growth. London.

Boserup, E. 1981. Population and Technology. Oxford.

Botero, G. 1598. Della Ragione di Stato libri dieci. Con tre libri delle Cause della grandezza delle Città. Venezia (facsimile reprint, Bologna 1990 and English translation by Symcox, 2012, Toronto).

Botta, P. E. and E. Flandin. 1849-50. Monument de Ninive, découvert et décrit par M. P. E. Botta, mesuré et dessiné par M. E. Flandin I-V. Paris.

Bottéro, J. 1975. 'Le pouvoir royal et ses limitations d'après les textes divinatoires'. In Finet (ed.). 119-164.

Bottéro, J. 1982. 'Les pouvoirs locaux en Mésopotamie selon la documentation divinatoire'. In Finet (ed.). 6-23.

Boucharlat, R. 2002. Pasargade. Lyon.

Boucher de Perthes, J. 1847-1949. Antiquités celtiques et antédiluviennes. Paris.

Boucher de Perthes, J. 1860. De l'homme antédiluvien et ses oeuvres. Paris.

Boysan-Dietrich, N. 1987. Das hethitische Lehmhaus (Texte der Hethiter 12). Heidelberg.

Bracci, S. 2003. 'Rapporto tra spazio pubblico e spazio privato nelle città del Sud della Mesopotamia tra il IV ed il I mill. A.C.'. In G. Regalzi (ed.), Le discipline orientalistiche come scienze storiche. Roma. 43-52.

Brackman, A. C. 1980. The Luck of Nineveh. London.

Bradford, J. 1957. Ancient Landscapes. Studies in Field Archaeology. London.

Braemer, F. 1982. L'architecture domestique du Levant à l'âge du Fer. Paris.

Braemer, F. 1997. 'L'architecture domestique de l'âge du Fer en Syrie du Nord'. In Castel et al. (eds.). 61–71.

Braidwood, R. J. 1937. Mounds in the Plain of Antioch. An Archaeological Survey (OIP 48). Chicago.

Braidwood, R. J. 1952. The Near East and the Foundations for Civilization. Eugene Oregon.

Braidwood, R. J. 1957. 'Jericho and its Setting in Near-Eastern History'. In An 31: 73-81.

Braidwood, R. J. 1960. 'The Agricultural Revolution'. In Scientific American 203: 130-148.

Braidwood, R. J. 1973a. 'The Early Village in Southwestern Asia'. In JNES 32: 34-39.

Braidwood, R. J. 1973b. 'Archaeology: View from Southwestern Asia'. In Redman (ed.). 33-46.

Braidwood, R. J. 1974. 'The Iraq Jarmo Project'. In G. Willey (ed.), Archaeological Researches in Retrospect. Cambridge MA. 59-83.

- Braidwood, R. J. 1985. 'The First Great Change'. In Liverani, Palmieri, and Peroni (eds.). 141–148.
- Braidwood, R. J. and L. S. Braidwood. 1953. 'The Earliest Village Communities of Southern Asia'. In *CHM* 1/2: 278-310.
- Braidwood, R. J. and L. S. Braidwood. 1960. Excavations in the Plain of Antioch, I. The Early Assemblages. Phases A-J (OIP 61). Chicago.
- Braidwood, R. J., H. Cambel, and W. Schirmer. 1981. Beginnings of Village-Farming Communities in Southeastern Turkey: Çayönü Tepesi. In Journal of Field Archaeology 8: 249–258.
- Braidwood, R. J. and B. Howe. 1960. *Prehistoric Investigations in Iraqi Kurdistan* (SAOC 31). Chicago.
- Braidwood, R. J. and G. R. Willey. 1962. Courses Toward Urban Life. Chicago.
- Braidwood, R. J. et al. 1983. Prehistoric Archaeology along the Zagros Flanks (OIP 105). Chicago.
- Brandi, C. 1963. Teoria del restauro. Roma (new edition Torino 1977).
- Brandi, C. 2009. Il restauro. Teoria e pratica 1939-1986 (edited by M. Cordaro). Roma.
- Braudel, F. 1979. Les structures du quotidian. Paris.
- Breasted, J. H. 1928. The Oriental Institute of the University of Chicago. Chicago.
- Breasted, J. H. 1933. The Task of the Orientalist and Its Place in Science and History. In The Oriental Institute (= The University of Chicago Survey XII). Chicago. 1–26.
- Breniquet, C. 1991. 'Tell es-Sawwan. Réalités et problèmes'. In Iraq 53: 75-90.
- Brentjes, B. 1968. 'Zum Verhältnis von Dorf und Stadt in Altvorderasien'. In Wissenschaftliche Zeitschrift der Universität Halle 17/6: 9-41.
- Brentjes, B. 1982. 'Die Dorfgemeinde in der Geschichte und im System der Marxschen Analyse der Ur- und Frühgeschichte'. In *id.* (ed.), *Dorfgemeinde und Stadt in Asien*. Halle. 7–21.
- Brentjes, B. 1987. 'Die Stadt im Vorderen Orient'. In Das Altertum 33: 5-15.
- Brentjes, B. (ed.). 1988. *Das Grundeigentum in Mesopotamien* (Jahrbuch für Wirtschaftsgeschichte, Sonderband 1987). Berlin.
- Bretschneider, J. 1991. 'Architekturmodelle in Vorderasien und der östlichen Ägäis von Neolithikum bis in das 1. Jahrtausend' (AOAT 229). Neukirchen.
- Bretschneider, J. 2005. 'Das Verhältnis von Palast und Tempel im frühen Mesopotamien'. In *UF* 37: 9–25.
- Briant, P. 1975. 'Villages et communautés villageoises d'Asie achéménide et hellénistique'. In JESHO 18: 165–188.
- Briant, P. 2002. 'L'État, la terre et l'eau entre Nil et Syr-Darya. Remarques introductives'. In *AnnESC* 57/3: 517–529.
- Brice, W. C. (ed.). 1978. The Environmental History of the Near and Middle East since the Last Ice Age. London–NewYork–San Francisco.
- Brilli, A. 2009. Il viaggio in Oriente. Bologna.
- Brinker, C. 2010. 'The Meaning and Significance of the Old Assyrian sikkātum'. In *AoF* 37: 49–62.
- Brinkman, J. A. 1984. 'Settlement Surveys and Documentary Evidence: Regional Variation and Secular Trend in Mesopotamian Demography'. In *JNES* 43: 169–180.
- [Brommelaer, J.-F. (ed.)]. 1985. Le dessin d'architecture dans les sociétés antiques. Actes du Colloque de Strasbourg 1984 (Travaux du Centre de Recherche sur le Proche Orient et la Grèce antique 8). Leiden.

- Broshi, M. and I. Finkelstein. 1992. 'The Population of Palestine in Iron Age II'. In BASOR 287: 47-60.
- Broshi, M. and R. Gophna. 1984. 'The Settlement and Population of Palestine During the Early Bronze Age II-III'. In BASOR 253: 41-53.
- Broshi, M. and R. Gophna. 1986. 'Middle Bronze Age II Palestine: Its Settlements and Population'. In BASOR 261: 73-90.
- Brothwell, D. and E. Higgs (eds.). 1963. Science in Archaeology. A Survey of Progress and Research. London.
- Bruni, F. 2012. 'Sul lessico politico di Guicciardini'. In Seminario di Letteratura Italiana 131. 221-258.
- Brunner, U. 2003. 'The Sustainable Sabean Irrigation in Yemen'. In M. Liverani (ed.), Arid Lands in Roman Times. Firenze. 129-134.
- Bruns, H. 1987-89. 'La cité antique de Max Weber'. In Opus 6-8: 29-42.
- Brusasco, P. 1999-2000. 'Family Archives and the Social Use of Space in Old Babylonian Houses at Ur'. In Mesopotamia 34-35: 1-173.
- Brusasco, P. 2007. The Archaeology of Verbal and Nonverbal Meaning. Mesopotamian Domestic Architecture and Its Textual Dimension (BAR Int. 1631). Oxford.
- Brusasco, P. 2012. Babilonia. All'origine del mito. Milano.
- Bruschweiler, F. 1983. 'La ville dans les textes littéraires sumériens'. In ead. (ed.), 181-198.
- Bruschweiler, F. (ed.). 1983, La ville dans le Proche-Orient ancien (Les Cahiers du CEPOA 1). Leuven.
- Buccellati, G. 1967. Cities and Nations of Ancient Syria (Studi Semitici 26). Roma.
- Buccellati, G. 1977. 'The "Urban Revolution" in a Socio-Political Perspective'. In Mesopotamia 12: 19-39.
- Bücher, K. 1893. Die Entstehung der Volkswirtschaft. Tübingen.
- Bücher, K. et al. 1903. Die Großstadt. Vorträge und Aufsätze zur Städteausstellung. Dresden.
- Buckingham, J. S. 1827. Travels in Mesopotamia... with Researches on the Ruins of Nineveh, Babylon, and Other Ancient Cities. London (reprinted 1971 by Gregg International Publishers).
- Budge, E. A. W. 1925. The Rise & Progress of Assyriology. London.
- Bulmer, M. 1984. The Chicago School of Sociology. Chicago.
- Burckhardt, J. 1898. Griechische Kulturgeschichte I. Berlin-Stuttgart (I cite from the Eng. transl. History of Greek culture. New York. 2002).
- Burckhardt, J. 1905. Weltgeschichtliche Betrachtungen, republished in Gesamtausgabe VII. Berlin-Leipzig 1929 (Eng. trans. Reflections on History. London 1943).
- Burney, C. A. 1957. 'Urartian Fortresses and Towns in the Van Region'. In AnSt 7: 37-53.
- Burney, C. A. and G. R. H. Lawson. 1960. 'Measured Plans of Urartian Fortresses'. In AnSt 10: 177-196.
- Bustarret, C. 1991. 'Les premières photographies archéologiques: Victor Place et les fouilles de Ninive'. In Histoire de l'Art 13: 7-21.
- Butterlin, P. 1998. 'Espaces urukéens en Syrie: problèmes de cartographie et de méthodologie'. In Fortin and Aurenche (eds.). 149-166.
- Butterlin, P. 2003. Les temps proto-urbains de Mésopotamie. Paris.
- Butterlin, P., M. Lebeau, J.-Y. Monchambert, J. L. Montero Fenollós, and B. Muller (eds.). 2006. Les espaces syro-mésopotamiens. Volume d'hommage offert à J.-Cl. Margueron (= Subartu 17). Turnhout.
- Butzer, K. 1964. Environment and Archaeology. An Ecological Approach to Prehistory. Chicago (2nd edition 1966).

- Butzer, K. 1976. Early Hydraulic Civilization in Egypt. A Study in Cultural Ecology. Chicago.
- Butzer, K. 1982. Archaeology as Human Ecology: Method and Theory for a Contextual Approach. Cambridge UK.
- Butzer, K. 1995. 'Environmental Change in the Near East and Human Impact on the Land'. In Sasson (ed.). I. 123–151.
- Butzer, K. 1996. 'Irrigation, Raised Fields and State Management: Wittfogel Redux?' In An 70: 200–204.
- Butzer, K. 2008. 'Other Perspectives on Urbanism: Beyond the Disciplinary Boundaries'. In Marcus and Sabloff (eds.). 77–92.
- Byrd, B. F. 1994. 'Public and Private, Domestic and Corporate: The Emergence of the Southwest Asian Village'. In *AmAnt* 59: 639–666.
- Byron, G. G. 1821. 'Letter to [John Murray]'. In Works V. London 1901. 536-566.
- Cacciari, M. 1973. Metropolis. Saggi sulla grande città di Sombart, Endell, Scheffler e Simmel. Roma.
- Cahen, C. 1958. 'Zur Geschichte des städtischen Gesellschaft im islamischen Orient des Mittelalters'. In Saeculum 9: 59–76.
- Callot, O. 1983. *Une maison à Ougarit. Étude d'architecture domestique* (Ras Shamra-Ougarit 1). Paris.
- Callot, O. 1985. 'Rôle et méthodes des "constructeurs de maison" à Ras Shamra-Ougarit'. In Brommelaer (ed.). 19–28.
- Callot, O. 1987. 'Les huileries du Bronze Récent à Ougarit. Premiers éléments pour une étude'. In Yon (ed.). 197–212.
- Callot, O. 1994. La tranchée 'Ville Sud'. Etude d'architecture domestique (Ras Shamra-Ougarit 10). Paris.
- Callot, O. 2011. Les sanctuaires de l'acropole d'Ougarit: les templs de Baal et de Dagan (Ras Shamra-Ougarit 19). Paris.
- Callot, O. and Y. Calvet. 2000. 'Rues et places à Ougarit au Bronze Récent'. In Matthiae *et al.* (eds.). 157–164.
- Callot, O. and M. Yon. 1995. 'Urbanisme et architecture'. In Yon et al. (eds.). 155-168.
- Calvet, Y. 1981. 'Installations hydrauliques d'Ugarit'. In L'homme et l'eau en Méditerranée et au Proche-Orient I. Lyon. 33–48.
- Calvet, Y. 1994a. 'Le temple babylonien de Larsa, problèmes d'orientation'. In G. Roux (ed.), *Temples et sanctuaires*. Lyon. 9–22.
- Calvet, Y. 1994b. 'Les grandes résidences paléo-babyloniennes de Larsa'. In Gasche *et al.* (eds.). 215–228.
- Calvet, Y. 1996. 'Maisons privées paléo-babyloniennes à Larsa: remarques d'architecture'. In Veenhof (ed.). 197–209.
- Calvet, Y. and B. Geyer. 1987. 'L'eau dans l'habitat'. In Yon (ed.). 129-156.
- Calvet, Y. and B. Geyer. 1995. 'Environnement et ressources en eau dans la région d'Ougarit'. In Yon *et al.* (eds.). 169–182.
- Calvino, I. 1972. Le città invisibili. Torino (I cite from the new edition Milano 2010).
- Cambi, F. and N. Terrenato. 1994. Introduzione all'archeologia dei paesaggi. Roma.
- Canfora, L. 1979. La Germania di Tacito da Engels al nazismo. Napoli.
- Capasso, A. and G. Sanna. 1997. Orienti e Occidenti. Confronti e corrispondenze fra mondi e culture. Roma.
- Capogrossi Colognesi, L. 2000. Max Weber e le economie del mondo antico. Roma-Bari.
- Cardascia, G. 1955. 'Les villes de Mésopotamie. Institutions économiques et sociales'. In *La ville. 2: Institutions économiques et sociales* (Recueils de la Société Jean Bodin 7).

  Bruxelles. 51–61.

- Cardini, F. 2004. 'Alla cerca del Paradiso'. In id. L'invenzione dell'Occidente. Rimini. 91-113.
- Cardini, F. (ed.). 1994. La città e il sacro. Milano.
- Carena, C. 1981. 'Rovina/restauro'. In Enciclopedia Einaudi XII. Torino. 270-294.
- Carneiro, R. 1967. 'On the Relationship between Size of Population and Complexity of Social Organization'. In Southwestern Journal of Anthropology 23: 234-242.
- Carneiro, R. 1970. 'A Theory of the Origin of the State'. In Science 169: 733-738.
- Carneiro, R. 1973. 'The Four Faces of Evolution'. In J. J. Honigman (ed.), Handbook of Social and Cultural Anthropology. Chicago. 89-110.
- Carneiro, R. 1981. 'The Chiefdom: Precursor of the State'. In G. D. Jones and P. R. Kautz (eds.), The Transition to Statehood in the New World. Cambridge UK. 37-79.
- Carroll, R. P. 2001. 'City of Chaos, City of Stone, City of Flesh: Urbanscapes in Prophetic Discourses'. In Grabbe and Haak (eds.). 47-61.
- Carroué, F. 1983. 'Les villes de l'état de Lagash au 3ème millénaire'. In Bruschweiler (ed.).
- Carter, E. 1992. 'A History of Excavations at Susa: Personalities and Archaeological Methodologies'. In Harper, Aruz, and Tallon (eds.). 20-24.
- Carter, R. A. and G. Philip (eds.). 2010. Beyond the Ubaid. Transformation and Integration in the Late Prehistoric Societies of the Middle East (SAOC 63). Chicago.
- Casana, J. 2009. 'Alalakh and the Archaeological Landscape of Mukish: The Political Geography and Population of a Late Bronze Age Kingdom'. In BASOR 353: 7-37.
- Castagnoli, F. 1956. Ippodamo di Mileto e l'urbanistica a pianta ortogonale. Roma.
- Castagnoli, F. 1971. Orthogonal Town Planning in Antiquity. Cambridge MA.
- Castel, C. 1992. Habitat urbain néo-assyrien et néo-babylonien. De l'espace bâti à l'espace vécu I-II (BAH 118). Paris.
- Castel, C. 2000. 'Le quartier dit "Hyksôs" dans la ville basse orientale d'Ougarit'. In Matthiae et al. (eds.). 185-198.
- Castel, C. and D. Charpin. 1997. 'Les maisons mésopotamiennes. Essai de dialogue entre archéologue et épigraphiste'. In Castel et al. (eds.). 243-253.
- Castel, C., M. Magdissi, and F. Villeneuve (eds.). 1997. Les maisons dans la Syrie antique, du IIIe millénaire aux débuts de l'Islam (BAH 150). Paris.
- Castel, C. et al. 2008. 'Rapport préliminaire sur les activités de la mission archéologique franco-syrienne dans la micro-région d'al-Rawda (Shamiyeh): quatrième et cinquième campagnes (2005 et 2006)'. In Akkadica 129: 5-54.
- Castells, M. 1972. La question urbaine. Paris.
- Castells, M. 1970b. 'Structures sociales et processus d'urbanisation: analyse comparative intersociétale'. In AnnESC 25: 1155-1199.
- Cathcart, K. J. 2011. 'The Earliest Contributions to the Decipherment of Sumerian and Akkadian'. In Cuneiform Digital Library 2011.1: 1-12.
- Cattaneo, C. 1858. 'La città considerata come principio ideale delle istorie italianei' [1858]. in id. La città come principio edited by M. Brusatin. Padova 1972. 7-47.
- Caubet, A. (ed.). 1995. Khorsabad, le palais de Sargon II, roi d'Assyrie. Paris.
- Cauvin, J. 1994. Naissance des divinités, naissance de l'agriculture. La révolution des symboles au Néolithique. Paris.
- Cavigneaux, A. 1986. 'Babylone: les monuments et la vie'. In Dossiers Histoire et Archéologie 103: 48-51.
- Černý, J. 1973. A Community of Workmen at Thebes in the Ramesside Period (Bibliothèque d'Etudes 50). Cairo.
- Chamonard, J. 1920. 'A propos du Service des Antiquités de Syrie'. In Syria 1: 81-86.

- Champion, T. C. 1989. 'Introduction'. In *id*. (ed.), *Centre and Periphery: Comparative Studies in Archaeology*. Boston. 1–21.
- Chantre, R. 1898. Mission scientifique en Cappadoce, 1893-1894. Paris.
- Chapman, J. 1988. 'Putting Pressure on Population: Social Alternatives to Malthus and Boserup'. In Bintliff *et al.* (eds.). 291–310.
- Charlton, Th. H. 1981. 'Archaeology, Ethnohistory, and Ethnology: Interpretive Interfaces'. In M. B. Schiffer (ed.), *Advances in Archaeological Method and Theory*. Vol. 4. New York–London. 129–176.
- Charlton, Th. H. and D. L. Nichols. 1997. 'The City-State Concept: Development and Applications'. In Nichols and Charlton (eds.). 1–14.
- Charpin, D. 1982. 'Marchands du palais et marchands du temple à la fin de la 1ère dynastie de Babylone'. In JA 270: 25–65.
- Charpin, D. 1986. *Le clergé d'Ur au siècle d'Hammurabi* (Hautes Études Orientales 22). Genève-Paris.
- Charpin, D. 1987. 'Le rôle économique du palais en Babylonie sous Hammurabi et ses successeurs'. In Lévy (ed.). 111–126.
- Charpin, D. 1988. 'Sippar: deux villes jumelles'. In RA 82: 13-32.
- Charpin, D. 1989-90. 'Un quartier de Nippur et le problème des écoles à l'époque paléobabylonienne'. In RA 83: 97-112; 84: 1-16.
- Charpin, D. 2011. 'Zur Funktion mesopotamischer Tempel'. In Selz (ed.). 403-422.
- Cherry, J. F. 1987. 'Power in Space: Archaeological and Geographical Studies of the State'. In Wagstaff (ed.). 146–172.
- Chevalier, N. 1994. 'Les fouilles en Assyrie évoqués par la photographie'. In AA.VV. 66-69.
- Chevalier, N. 1995. 'L'activité archéologique des Consuls de France au XIXe siècle en Assyrie'. In Caubet (ed.). 79–105.
- Chevalier, N. 2002. La recherché archéologique française au Moyen-Orient 1842-1947. Paris.
- Chevalier, N. 2008. 'Fouiller un palais assyrien au XIXe siècle: Victor Place à Khorsabad'. In Cordoba *et al.* (eds.). I. 403-416.
- Childe, V. Gordon. 1925. The Dawn of European Civilization. London.
- Childe, V. Gordon. 1928. The Most Ancient East: the Oriental Prelude to European Prehistory.
- Childe, V. Gordon. 1934. New Light on the Most Ancient East. London.
- Childe, V. Gordon. 1936. Man Makes Himself. London.
- Childe, V. Gordon. 1942. What Happened in History. Harmondsworth.
- Childe, V. Gordon. 1944. 'Archaeological Ages as Technological Stages'. In *Journal of the Royal Anthropological Institute* 74: 7–24.
- Childe, V. Gordon. 1950. 'The Urban Revolution'. In TPR 21: 3-17.
- Childe, V. Gordon. 1951. Social Evolution. New York.
- Childe, V. Gordon. 1957. 'Civilization, Cities, and Towns'. In An 31: 36-38.
- Childe, V. Gordon. 1958. The Prehistory of European Society. Harmondsworth.
- Chisholm, M. 1962. Rural Settlement and Land Use. Chicago.
- Choay, F. 1965. L'urbanisme. Utopies et réalités. Paris.
- Choay, F. 1970. 'L'histoire et la méthode en urbanisme'. In AnnESC 25: 1143-1154.
- Chorley, R. J. and P. Haggett (eds.). 1967. Models in Geography. London.
- Christaller, W. 1933. Die zentralen Orte in Süddeutschland. Jena. (English trans. Central Places in Southern Germany. Englewood Cliffs NJ 1966).
- Claessen, H. J. M. 1978. 'The Early State: A Structural Approach'. In *id.* and Skalník (eds.). 533–596.

- Claessen, H. J. M. 1981. 'Reaching for the Moon? Some Problems and Prospects of Cultural Evolutionism'. In van der Leeuw (ed.). 14-37.
- Claessen, H. J. M. 1984. 'The Internal Dynamics of the Early State'. In CA 25: 365-379.
- Claessen, H. J. M. and P. Skalník. 1978. 'The Early State: Theories and Hypotheses'. In id. and id. (eds.). 3-29.
- Claessen, H. J. M. and P. Skalník (eds.). 1978. The Early State. The Hague-Paris-New York.
- Clark, D. P. and V. H. Matthews (eds.). 2003. One Hundred Years of American Archaeology in the Middle East, Boston.
- Clastres, P. 1974. La société contre l'état: recherches d'anthropologie politique. Paris.
- Clere, H. F. (ed.). 1989. Archaeological Heritage Management in the Modern World (OWA 9). Boston.
- Coe, M. D. 1992. Breaking the Maya Code. London.
- Cohen, M. N. 1985. 'Prehistoric Hunter-Gatherers: The Meaning of Social Complexity'. In Price and Brown (eds.). 99-119.
- Cohen, R. 1978. 'State Origins: A Reappraisal'. In Claessen and Skalník (eds.). 31-75.
- Cohen, R. and E. R. Service (eds.). 1978. The Origins of the State. The Anthropology of Political Evolution. Philadelphia.
- Cole, S. W. and H. Gasche. 1998. 'Second- and First-Millennium BC Rivers in Northern Babylonia'. In Gasche and Tanret (eds.). 1–64.
- Cole, S. W. and H. Gasche. 1999. 'Levees, Floods, and River Networks of Northern Babilonia: 2000-1500 and 1000-500 BC. - A Preliminary Report'. In Renger (ed.). 87-110.
- Collins, P. 2000. The Uruk Phenomenon. The Role of Social Ideology in the Expansion of the Uruk Culture during the Fourth Millennium BC (BAR Int. 900). Oxford.
- Conder, C. R. and H. Kitchener. 1881-88. Survey of Western Palestine. [I-IX]. London.
- Conder, C. R. and H. Kitchener. 1889. Survey of Eastern Palestine. London.
- Contenau, G. 1927. Manuel d'archéologie orientale I. Paris.
- Cooper, J. 1983. The Curse of Agade. Baltimore.
- Cooper, J. 1991. 'Posing the Sumerian Question: Race and Scholarship in the Early History of Assyriology'. In Aula Orientalis 9: 47-66.
- Cooper, J. 1993. 'Sumerian and Aryan. Racial Theory, Academic Politics and Parisian Assyriology'. In Revue de l'Histoire des Religions 210: 169-205.
- Cooper, L. 2006a. Early Urbanism on the Syrian Euphrates. New York-London.
- Cooper, L. 2006b. 'The Demise and Regeneration of Bronze Age Urban Centers in the Euphrates Valley of Syria'. In Schwartz and Nichols (eds.). 18-37.
- Coppa, M. 1969. Storia dell'urbanistica, dalle origini all'ellenismo I-II. Torino.
- Cordaro, M. 2009. 'Introduzione'. In Brandi 2009. 7-28.
- Córdoba, J. M. 2003. 'Walter Andrae und die Wiederentdeckung Assurs. Das Abenteuer der architektonischen Zeichnung innerhalb der Archäologie des Alten Orients'. In P. A. Miglus and J. M. Córdoba (eds.), Assur und sein Umland (= Isimu 6). Madrid. 35-60.
- Córdoba, J. M., M. Molist, C. Pérez, I. Rubio, and S. Martinez (eds.). 2008. Proceedings of the 5<sup>th</sup> International Congress of the Archaeology of the Ancient Near East I–III. Madrid.
- Cortesi, E., M. Tosi, A. Lazzari, and M. Vidale. 2008. 'Cultural Relationships beyond the Iranian Plateau: The Hilmand Civilization, Baluchistan and the Indus Valley in the 3rd Millennium BCE'. In PO 34/2: 5-35.
- Coupland, G. and E. B. Banning (eds.). 1996. People Who Lived in Big Houses: Archaeological Perspectives on Large Domestic Structures (Monographs in WA 27). Madison WI.
- Courtois, J. C. 1979. 'L'architecture domestique à Ugarit au Bronze Récent'. In UF 11: 105-134.

- Cowgill, G. L. 2004. 'Origins and Development of Urbanism: Archaeological Perspectives'. In *ARA* 33: 525–549.
- Crawford, O. G. S. 1923. 'Air Survey and Archaeology'. In Geographical Journal 61: 342-360.

Crawford, O. G. S. 1929. Air-Photography for Archaeologists. London.

Cremaschi, M. 2000. Manuale di geoarcheologia. Roma-Bari.

Crespi Morbio, V. (ed.). 2004. La Scala e l'Oriente, 1778-2004. Catalogo della mostra. Milano.

Cribb, R. 1991. Nomads in Archaeology. Cambridge UK.

Crone, P. 1986. 'The Tribe and the State'. In J. A. Hall (ed.), States in History. Oxford. 48-77.

Crone, P. 1986. The Tribe and the State'. In J. A. Hall ( Cros, G. 1910. Nouvelles fouilles de Tello I. Paris.

Cros, G. 1911. Nouvelles fouilles de Tello II. Paris.

Cros, G. 1914. Nouvelles fouilles de Tello III. Paris.

Crossen, C. 2011. 'William Kenneth Loftus and the Beginnings of "Scientific" Archaeology in Iraq'. In Selz (ed.). 423–475.

Crown, A. D. 1971. 'Climatic Change, Ecology and Migration'. In *Australian Journal of Biblical Archaeology* I(4): 3–22.

Crown, A. D. 1972. 'Toward a Reconstruction of the Climate of Palestine 8000 B.C. – O B.C.'. In INES 3: 312–330.

Crumley, C. L. 1976. 'Toward a Locational Definition of State Systems of Settlement'. In *AmAnthr* 78: 59–73.

Crumley, C. L. 1987. 'A Dialectical Critique of Hierarchy'. In T. C. Patterson and Ch. W. Gailey (eds.), *Power Relations and State Formation*. Washington DC. 155–168.

Crumley, C. L. 1995. 'Heterarchy and the Analysis of Complex Societies'. In R. M. Ehrenreich, C. L. Crumley, and J. E. Levy (eds.), *Heterarchy and the Analysis of Complex Societies*. Washington DC. 1–6.

Crüsemann, N. 2001. Vom Zweistromland zum Kupfergraben. Vorgeschichte und Entstehungsjahre (1899–1918) der Vorderasiatischen Abteilung der Berliner Museen vor fach- und kulturpolitischen Hintergrund (Jahrbuch der Berliner Museen, NF 42). Berlin.

Crüsemann, N. 2003. 'Ja! Wir werden das Licht des deutschen Genius auch dorthin tragen. Der Beginn der Ausgrabungen in Assur im Spiegel preussisch-deutscher Orientpolitik unter Wilhelm II'. In Marzahn and Salje (eds.). 35–44.

Cuneo, P. 1986. Storia dell'urbanistica. Il mondo islamico. Roma-Bari.

Curtis, J. (ed.). 1982. Fifty Years of Mesopotamian Discovery. London.

Curtis, J. *et al.* 2008. 'An Assessment of Archaeological Sites in June 2008: an Iraqi-British Project'. In *Iraq* 70: 215–237.

Czichon, R. M. 1997. 'Studien zur Regionalgeschichte von Ḥattuša/Boğazköy 1996'. In MDOG 129: 89–102.

Czichon, R. M. 1998. 'Studien zur Regionalgeschichte von Ḥattuša/Boğazköy 1997'. In MDOG 130: 83-92.

Dalley, S. 1993. 'Nineveh after 612 BC'. In AoF 20: 134-147.

Dalley, S. 1994. 'Nineveh, Babylon and the Hanging Gardens: Cuneiform and Classical Sources Reconciled'. In *Iraq* 56: 45–58.

Dalley, S. 1996. 'Herodotus and Babylon'. In OLZ 91: 525-532.

Dalley, S. 1997. 'The Hanging Gardens of Babylon at Nineveh'. In Waetzoldt and Hauptmann (eds.). 19–24.

Dalley, S. 2002. 'More about the Hanging Gardens'. In L. al-Gailani Werr (ed.), *Of Pots and Plans. Papers Presented to D. Oates*. London. 67–73.

Dalley, S. 2008. 'Babylon as a Name for Other Cities Including Nineveh'. In Biggs, Myers, and Roth (eds.). 25–33.

- Dalley, S. (ed.). 1998. The Legacy of Mesopotamia. Oxford.
- Dalman, G. 1928-42. Arbeit und Sitte in Palästina I-VIII. Gütersloh.
- Dalton, G. and P. Bohannan. 1962. Markets in Africa. Evanston Ill.
- D'Altroy, T. N. and T. K. Earle. 1985. 'Staple Finance, Wealth Finance, and Storage in the Inka Political Economy'. In CA 26: 187-206.
- Dan, R. 2010. 'Zernaki Tepe, una città ippodamea nella terra di Urartu'. In Bollettino della Unione Storia ed Arte 5: 81-92.
- Dandamayev, M. A. 1982. 'The Neo-Babylonian Elders'. In id. et al. (eds.). 38-41.
- Dandamayev, M. A. 1986. 'Economy of Tabiya, a Babylonian of the Sixth Century B.C.'. In Oikumene 5: 51-54.
- Dandamayev, M. A. 1988. 'The Neo-Babylonian Popular Assembly'. In P. Vravoušek and V. Souček (eds.), Šulmu. Prague. 63-71.
- Dandamayev, M. A. 1995. 'Babylonian Popular Assemblies in the First Mill. B.C.'. In BCSMS 30: 23-29.
- Dandamayev, M. A. 1997. 'The Composition of the Citizens in First Millennium Babylonia'. In AoF 24: 135-147.
- Dandamayev, M. A. 2004. 'Twin Towns and Ethnic Minorities in First-Millennium Babylonia'. In Rollinger and Ulf (eds.). 137-151.
- Dandamayev, M. A. et al. (eds.). 1982. Societies and Languages of the Ancient Near East. Studies in Honour of I. M. Diakonoff. Warminster.
- Daniel, G. 1950. A Hundred Years of Archaeology. London.
- Daniel, G. 1967. The Origins and Growth of Archaeology. New York.
- Davies, J. K. 1998. 'Ancient Economies: Models and Muddles'. In Parkins and Smith (eds.). 225-256.
- Davies, J. K. 2005. 'Linear and Nonlinear Flow Models for Ancient Economies'. In Morris and Manning (eds.). 127-156.
- Davis, M. 2008. Dame Kathleen Kenyon: Digging up the Holy Land. Walnut Creek CA.
- Davoli, P. 1994. Città e villaggi dell'antico Egitto. Imola.
- Deblawe, F. 1994a. A Spatial Analysis of Mesopotamian Buildings from the Late Bronze Age till the Parthian Period. Ann Arbor.
- Deblawe, F. 1994b. 'Spacing and Statistics, or a Different Method to Analyze Buildings. A Test with Mesopotamian Houses from the Late Bronze and Iron Ages'. In Akkadica 89-90: 1-8.
- Deblawe, F. 1997a. 'Discriminant Analysis by Means of Selected Spatial Variables derived from Mesopotamian Buildings of the Late Bronze Age till the Parthian Period'. In Mesopotamia 32: 271-288.
- Deblawe, F. 1997b. 'A Test Study of Circulation and Access Patterns in Assyrian Architecture'. In Waetzoldt and Hauptmann (eds.). 239-246.
- De Certeau, M. 1990. L'invention du quotidian. Paris.
- De Genouillac, M. 1934. Fouilles de Tello I. Paris.
- De Guio, A. 1992. "Archeologia della complessità" e calcolatori: un percorso di sopravvivenza fra teoria e caos, "attrattori strani", frattali e... frattaglie del postmodernismo'. In Bernardi (ed.). 305-389.
- De Guio, A. and G. Secco. 1988. 'Archaeological Applications of the "Percolation Method" for Data Analysis and Pattern Recognition'. In S. Ratz (ed.), Computer and Quantitative Methods in Archaeology (BAR Int. 446). Oxford. II. 63-93.
- Deimel, A. 1925. 'Wo lag das Paradies?' In Or 15: 44-54.

Deimel, A. 1931. Šumerische Tempelwirtschaft zur Zeit Urukaginas und seiner Vorgänger (Analecta Orientalia 2). Roma.

DeJong Ellis, M. (ed.). 1992. Nippur at the Centennial (RAI 35). Philadelphia.

Delitzsch, F. 1881. Wo lag das Paradies? Leipzig.

Delitzsch, F. 1887-90. Assyrisches Wörterbuch. Leipzig.

Delitzsch, F. 1889. Assyrische Grammatik. Berlin.

Delitzsch, F. 1900. Assyrische Lesestücke. Leipzig.

Delitzsch, F. 1903. 'Zur Topographie Babylons'. In MDOG 19: 28-35.

del Olmo Lete, G. and J.-L. Montero Fenellós (eds.). 1999. *Archaeology of the Upper Syrian Euphrates. The Tishrin Dam Area* (= Aula Orientalis Supplementa 15). Barcelona.

Delougaz, P. 1940. The Temple Oval at Khāfajah (OIP 53). Chicago.

Delougaz, P., H. D. Hill, and S. Lloyd. 1967. *Private Houses and Graves in the Diyala Region* (OIP 88). Chicago.

Delougaz, P. and S. Lloyd. 1942. *Pre-Sargonid Temples in the Diyala Region* (OIP 58). Chicago.

de Maaijer, R. 1997. 'Land Tenure in Ur III Lagaš'. In B. Haring and R. de Maaijer (eds.), Landless and Hungry? Access to Land in Early and Traditional Societies. Leiden, 43-61.

de Maigret, A. 1978. 'Fluttuazioni territoriali e caratteristiche tipologiche degli insediamenti nella regione del Matah (Siria)'. In *Atti del 1º Convegno italiano sul Vicino Oriente antico* (Orientis Antiqui Collectio 13). Roma. 83–94.

de Maigret, A. 1981. 'Il fattore idrologico nell'economia di Ebla'. In OA 20: 1-36.

de Maigret, A. 1996. Arabia Felix. Milano.

Demandt, A. 1984. Der Fall Roms. München.

De Mecquenem, R. 1922. 'Fouilles de Suse. Campagnes des années 1914, 1921, 1922'. In *RA* 19: 109–140.

De Miroschedji, P. R. 1971. *L'époque pré-urbaine en Palestine* (Cahiers de la Revue Biblique 13). Paris.

De Miroschedji, P. R. 1989. 'Le processus d'urbanisation en Palestine au Bronze ancien: chronologie et rythmes'. In *id.* (ed.). 63–79.

De Miroschedji, P. R. (ed.). 1989. *L'urbanisation de la Palestine à l'âge du Bronze ancien* I–II (BAR Int. 527). Oxford.

de Morgan, J. 1900. 'Travaux souterrains'. In *Mémoires de la Délégation en Perse* I. Paris. 81–87.

de Morgan, J. 1905. 'Etat des travaux à Suse en 1904'. In *Mémoires de la Délégation en Perse* VII. Paris. 5-7.

De Polignac, F. 1984. La naissance de la cité grecque. Paris.

Dercksen, J. G. 1999. 'On the Financing of Old Assyrian Merchants'. In id. (ed.). 85-99.

Dercksen, J. G. 2004. Old Assyrian Institutions (PIHANS 98). Leiden.

Dercksen, J. G. (ed.). 1999. *Trade and Finance in Ancient Mesopotamia* (PIHANS 84). Leiden–Istanbul.

Dercksen, J. G. (ed.). 2004. Assyria and Beyond. Studies Presented to M. T. Larsen (PIHANS 100). Leiden-Istanbul.

De Roos, J. 1995. 'Early Travellers to Boğazköy'. In Th. P. J. van den Hout and J. de Roos (eds.), Studio Historiae Ardens. Ancient Near-Eastern Studies presented to Ph. H. J. Houwink ten Cate (PIHANS 74). Leiden. 261–269.

De Schacht, T., W. Gheyle, R. Goosens, and A. De Wulf. 2008. 'Archaeological Research and CORONA: On the Use, Misuse, and Full Potential of Historical Remote Sensing Data'. In Cordoba *et al.* (eds.). I. 611–618.

- de Seta, C. 1975. 'Città e territorio in Carlo Cattaneo'. In SS 16 (= id. 1996. 241-261).
- de Seta, C. 1996. La città europea. Milano.
- de Seta, C. 2011. Ritratti di città. Dal Rinascimento al secolo XVIII. Torino.
- de Seta, C. and J. Le Goff (eds.). 1989. La città e le mura. Roma-Bari.
- Deshayes, J. (ed.). 1977. Le plateau iranien et l'Asie Centrale des origines à la conquete islamique. Paris.
- Dever, W. G. 1981. 'The Impact of the "New Archaeology" on Syro-Palestinian Archaeology'. In BASOR 242: 15-30.
- Dever, W. G. 1989. 'The Collapse of the Urban Early Bronze Age in Palestine Toward a Systemic Analysis'. In de Miroschedji (ed.). 225-246.
- Dever, W. G. 'Archaeology, Urbanism, and the Rise of the Israelite State'. In Aufrecht et al. (eds.). 172-193.
- Devolder, M. 2005. 'Distribution sociale de l'architecture domestique à Ougarit'. In Res Antiquae 2: 237-263.
- DeVries, K. 1990. 'The Gordion Excavation Seasons of 1969-1973 and Subsequent Research'. In AJA 94: 371-406.
- Diakonoff, I. M. 1954. 'Sales of Lands in Pre-Sargonic Sumer'. In Papers Presented by the Soviet Delegation at the 23<sup>rd</sup> International Congress of Orientalists. Moscow. 19–29.
- Diakonoff, I. M. 1956. 'The Rise of the Despotic State in Ancient Mesopotamia'. In id. (ed.). 1969. 173-203.
- Diakonoff, I. M. 1971. 'On the Structure of Old Babylonian Society'. In Klengel (ed.), 15-31.
- Diakonoff, I. M. 1972. 'Socio-Economic Classes in Babylonia and the Babylonian Concept of Social Stratification'. In Edzard (ed.). 41-52.
- Diakonoff, I. M. 1974. Structure of Society and State in Early Dynastic Sumer (Monographs of the Ancient Near East 1/3). Malibu CA.
- Diakonoff, I. M. 1975. 'The Rural Community in the Ancient Near East'. In JESHO 18: 121-133.
- Diakonoff, I. M. 1982. 'The Structure of Near-Eastern Society before the Middle of the Second Millennium B.C.'. In Oikumene 3: 7-100.
- Diakonoff, I. M. 1985. 'Extended Families in Old Babylonian Ur'. In ZA 75: 47-65.
- Diakonoff, I. M. 1996. 'Extended Family Households in Mesopotamia (III-II Millennia B.C.)'. In Veenhof (ed.). 55-60.
- Diakonoff, I. M. (ed.). 1969. Ancient Mesopotamia. Socio-Economic History. A Collection of Studies by Soviet Scholars. Moscow.
- Diamantini, D. and G. Martinotti. 2009. Urban Civilization from Yesterday to the Next Day. Napoli.
- Diamond, J. 2005. Collapse. How Societies Choose to Fail or Succeed. New York.
- Dietrich, M. 2002. 'Der "Garten Eden" und die babylonischen Parkanlagen im Tempelbezirk'. In J. Hahn (ed.), Religiöse Landschaften (AOAT 301). Münster. 1-29.
- Di Paolo, S. 2006. 'Archeologia e territorio nella letteratura di viaggio sul Vicino Oriente (XVII-XIX secolo): la scoperta e lo stereotipo'. In *Isimu* 9: 21-35.
- Di Paolo, S. 2008. 'Dalle straordinarie avventure di Lady Hester Stanhope alla "Crociata" archeologica di Butler: la politica "religiosa" dei viaggi e delle esplorazioni scientifiche nella regione di Damasco tra XIX e XX secolo'. In Cordoba et al. (eds.). I. 647-659.
- Dittmann, R. 1997-98. 'Bericht über die 1989 von der FU Berlin in Assur und Kar-Tukulti-Ninurta durchgeführten Arbeiten'. In Sumer 49: 29-88.
- Dittmann, R. 1999. 'Einbindungen altorientalischer Städte'. In Kühne, Bernbeck and Bartl (eds.). 159-183.

- Dohmann-Pfälzner, H. and P. Pfälzner. 1997. 'Untersuchungen zur Urbanisierung Nordmesopotamiens im 3. Jt. v. Chr.: Wohnquartierplanung und städtische Zentrumgestaltung in Tall Chu¢ra'. In *DaM* 9: 1–13.
- Dolce, R. 1997. 'The City of Kar-Tukulti-Ninurta: Cosmic Characteristics and Topographical Approach'. In Waetzoldt and Hauptmann (eds.). 251–258.
- Dolce, R. and Pellitteri (eds.). 2011. Città nel Vicino Oriente e nel Mediterraneo. Palermo.
- Donadoni, S. 1994. 'Le città regali del Nuovo Regno'. In Mazzoni (ed.). 165-173.
- Downing, Th. E. and McG. Gibson (eds.). 1974. Irrigation's Impact on Society (Anthropological Papers 25). Tucson AZ.
- Doyen, F. 2010. 'La residence d'élite: un type de structure dans l'organisation spatiale urbaine du Moyen Empire'. In Bietak *et al.* (eds.). 81–101.
- Drower, M. S. 1985. Flinders Petrie. A Life in Archaeology. London.
- Dumont, L. 1966a. 'The Village Community from Munro to Maine'. In *Contributions to Indian Sociology* 9: 67–89.
- Dumont, L. 1966b. Homo Hierarchicus. Paris.
- Dunn, S. P. 1982. The Rise and Fall of the Asiatic Mode of Production. London.
- Dunnell, R. C. 1980. 'Evolutionary Theory and Archaeology'. In *Advances in Archaeological Method and Theory* 3: 35–99.
- Durand, J. M. 1987. 'L'organisation de l'espace dans le palais de Mari, le témoignage des textes'. In Lévy (ed.). 39-110.
- Durand, J. M. 1988. 'Les anciens de Talhayûm'. In RA 82: 97-113.
- Durand, J. M. 1989. 'L'assemblée en Syrie à l'époque pré-amorite'. In *Quaderni di Semitistica* 16: 27-44.
- Durkheim, E. 1892. La division du travail social. Paris.
- Dyson, R. H. 1965. 'Problems of Protohistoric Iran as seen from Hasanlu'. In JNES 24: 193–217.
- Dyson, R. H. 1977. 'Architecture of the Iron I Period at Hasanlu in Western Iran', in Deshayes (ed.), 155–169.
- Dyson, R. H. 1989. 'The Iron Age Architecture at Hasanlu: An Essay'. In *Expedition 31*, Nos. 2–3: 107–127.
- Earle, E. W. 1923. Turkey, the Great Powers, and the Baghdad Railway 1888–1914. A Study in Imperialism. New York.
- Earle, E. W. 1977. 'A Reappraisal of Redistribution'. In *id.* and J. E. Ericson (eds.), *Exchange Systems in Prehistory*. New York. 213–229.
- Earle, E. W. 1987. 'Chiefdoms in Archaeological and Ethnohistorical Perspective'. In ARA 16: 279-308.
- Earle, E. W. (ed.). 1991. Chiefdoms: Power, Economy, and Ideology. Cambridge UK.
- Eco, U. 1993. La ricerca della lingua perfetta nella cultura europea. Roma-Bari.
- Edens, Ch. 1992. 'Dynamics of Trade in the Ancient Mesopotamian "World System". In *AmAnthr* 94: 118–139.
- Edzard, D. O. 1972-75. 'Haus. A. Philologisch'. In RIA IV: 220-224.
- Edzard, D. O. (ed.). 1972. Gesellschaftsklassen im Alten Zweistromland und in den angrenzenden Gebieten (RAI 18 = Bayerische Akademie der Wissenschaften, Phil.-hist. Klasse, Abhandlungen, NF 75). München.
- Eichmann, R. 1989. Uruk. Die Stratigraphie. Grabungen 1912–1977 in den Bereichen 'Eanna' und 'Anu-Ziqqurrat' (Ausgrabungen in Uruk-Warka Endberichte 3). Mainz.
- Eickhoff, T. 1985. Kar-Tukulti-Ninurta. Eine mittelassyrische Kult- und Residenzstadt (ADOG 21). Berlin.

- Eisenstadt, S. N. and L. Roniger. 1987. 'Patron-Client Relations as a Model of Structuring Social Exchange'. In Comparative Studies in Society and History 22: 42-77.
- Ellis, R. S. 1968. Foundation Deposits in Ancient Mesopotamia (Yale Near-Eastern Researches 2). New Haven-London.
- Ellis, R. S. 2001. 'Mesopotamian Foundation Ceremonies and Deposits'. In Azara et al. (eds.). 75-80.
- Emmanuel, A. 1972. L'échange inégal. Paris.
- Engels, F. 1884. Der Ursprung der Familie, des Privateigentums und des Staates. Zürich. (English edn. London 2010. The Origin of the Family, Private Property and the State.)
- Englund, R. K. 1988. 'Administrative Timekeeping in Ancient Mesopotamia'. In JESHO 31: 121-185.
- Erarslan, A. 2006. 'Local Steps toward Urbanism in Eastern and Southeastern Anatolia (3000-2600 BC)'. In Anatolica 32: 55-70.
- Erarslan, A. 2009. 'Emergence of Local Trajectories in Southeastern Anatolia at the Fourth and Early Third Millennium BC'. In Akkadica 130: 189-210.
- Ergenziger, P. E., W. Frey, H. Kuhne, and H. Kurschner. 1988. 'The Reconstruction of Environment, Irrigation and Development of Settlement on the habur in North-East Syria'. In Bintliff et al. (eds.). 108-128.
- Ergenziger, P. E. and H. Kühne. 1991. 'Ein regionales Bewässerungssystem am hābūr'. In Kühne (ed.). 163-190.
- Erwin, H. R. 1997. 'The Dynamics of Peer Polities'. In S. van der Leeuw and J. McGlade (eds.), Time, Process and Structured Transformation in Archaeology (OWA 26). London-New York, 57-96.
- Erzen, A. 1962. 'Untersuchungen in der urartäischen Stadt Toprakkale bei Van in den Jahren 1959-61'. In Archäologischer Anzeiger 1962: 383-414.
- Erzen, A. 1978. Çavuştepe, I, Ankara (in Turkish, German trans. Ankara 1988).
- Esse, D. L. 1989. 'Secondary State Formation and Collapse in the Early Bronze Age Palestine'. In de Miroschedji (ed.). 81-96.
- Evans, G. 1958. 'Ancient Mesopotamian Assemblies'. In JAOS 78: 1-11, 114-115.
- Eyre, C. J. 1999. 'Village Economy in Pharaonic Egypt'. In A. K. Bowman and E. Rogan (eds.), Agriculture in Egypt from Pharaonic to Modern Times. London. 33-60.
- Fagan, B. M. 2007. Return to Babylon. Travelers, Archaeologists, and Monuments in Mesopotamia. Revised edition. Boulder COL.
- Fairman, H. W. 1949. 'Town Planning in Pharaonic Egypt'. In TPR 20: 22-52.
- Falconer, S. E. 1994. 'The Development and Decline of Bronze Age Civilization in the Southern Levant: A Reassessment of Urbanism and Ruralism'. In C. Mathers and S. Stoddart (eds.), Development and Decline in the Mediterranean Bronze Age (Sheffield Archaeological Monographs 8). Sheffield. 305-333.
- Falconer, S. E. and S. H. Savage. 1995. 'Heartlands and Hinterlands: Alternative Trajectories of Early Urbanization in Mesopotamia and Southern Levant'. In AmAnt 60: 37-58.
- Fales, F. M. 1989. 'The Assyrian Village of Bit Abu-Ila'a'. In C. Zaccagnini (ed.), Production and Consumption. Budapest. 169-200.
- Fales, F. M. 1990. 'The Rural Landscape of the Neo-Assyrian Empire'. In SAAB 4/2: 81-142.
- Fales, F. M. 2004. Saccheggio in Mesopotamia. Udine.
- Falkenstein, A. 1936. Archaische Texte aus Uruk. Leipzig.
- Falkenstein, A. 1941. Topographie von Uruk. I. Uruk zur Seleukidenzeit (= Ausgrabungen in Uruk-Warka 1). Leipzig.
- Falkenstein, A. 1954. 'La cite-temple sumérienne'. In CHM 1(4): 784-814.

- Faust, A. 2000. 'The Rural Community in Ancient Israel during the Iron Age II'. In *BASOR* 317: 17–39.
- Feinman, G. M. and J. Marcus (eds.). 1998. Archaic States. Santa Fé NM.
- Fenollós, J. L. Montero. 2011. 'The Tower of Babel before Archaeology. The Ziggurat of Babylon According to European Travellers (XII–XVII Centuries)'. In *Res Antiquitatis* 2: 31–49.
- Fenollós, J. L. Montero (ed.). 2010. Torre de Babel. Historia y mito. Murcia.
- Fergusson, J. 1851. The Palaces of Nineveh and Persepolis Restored. London.
- Ferioli, P., E. Fiandra, G. G. Fissore, and M. Frangipane (eds.). 1994. Archives before Writing. Roma.
- Fernea, R. A. 1970. Shaykh and Effendi: Changing Patterns of Authority among the El Shabana of Southern Iraq (Harvard Middle Eastern Studies 14). Cambridge MA.
- Fernman, P. F. 2000. William Foxwell Albright and the Origins of Biblical Archaeology. Berrien Springs MI.
- Finet, A. 1982a. 'Y eut-il une démocracie mésopotamienne?' In id. (ed.). 144-151.
- Finet, A. 1982b. 'Les autorités locales dans le royaume de Mari'. In Akkadica 26: 1-16.
- Finet, A. (ed.). 1975. La voix de l'opposition en Mésopotamie. Bruxelles.
- Finet, A. (ed.). 1982. Les pouvoirs locaux en Mésopotamie et dans les régions adjacentes. Bruxelles.
- Finkbeiner, U. 1984. 'Survey des Stadtgebietes von Uruk'. In BaM 15: 87-140.
- Finkbeiner, U. 1991. Uruk. Kampagne 35–37, 1982–1984. Die archäologische Überflächenuntersuchung (Survey) (Ausgrabungen in Uruk-Warka Endberichte 4). Mainz.
- Finkbeiner, U. 1993. Uruk. Analytisches Register zu den Grabungsberichten, Kampagnen 1912/13 bis 1976/77. Berlin.
- Finkbeiner, U. and W. Röllig (eds.). 1986. *Jamdat Naşr: Period or Regional Style?* (TAVO Bh., B 62). Wiesbaden.
- Finkel, I. and M. Seymour (eds.). 2008. Babylon. Myth and Reality. London.
- Finkelstein, I. 1988. The Archaeology of the Israelite Settlement. Jerusalem.
- Finkelstein, I. 1995. Living on the Fringe. Sheffield.
- Finkelstein, I. 1996. 'The Archaeology of the United Monarchy: An Alternative View'. In *Levant* 28: 177–187.
- Finkelstein, I. and R. Gophna. 1993. 'Settlement, Demographic, and Economic Patterns in the Highlands of Palestine in the Chalcolithic and Early Bronze Period and the Beginning of Urbanism'. In BASOR 289: 1–22.
- Finkelstein, I. and N. A. Silberman. 2001. The Bible Unearthed. New York.
- Finkelstein, I., D. Ussishkin, and B. Halpern (eds.). 2006. *Megiddo, IV. The 1988–2002 Seasons*. Tel Aviv.
- Finley, M. I. 1973. The Ancient Economy. London.
- Finley, M. I. 1977. 'The Ancient City: from Fustel de Coulanges to Max Weber and beyond'. In *Comparative Studies in Society and History* 19: 305–327 (republished in B. D. Shaw and R. P. Saller [eds.], *Economy and Society in Ancient Greece*. London 1981. 3–23).
- Finley, M. I. 1979. The Bücher-Meyer Controversy. New York.
- Finotto, F. 1992. La città chiusa. Storia delle teorie urbanistiche dal Medioevo al Settecento. Venezia.
- Fisher, C. S. 1929. The Excavation of Armageddon (OIC 4). Chicago.
- Flanagan, J. W. 2000. 'Space'. In A. K. M. Adam (ed.), Handbook of Postmodern Biblical Interpretation. St. Louis. 239–244.

- Flanagan, J. W. 2001. 'Ancient Perceptions of Space / Perceptions of Ancient Space'. In Semeia 87: 15-43.
- Flandin, E. and P. Coste. 1844-52. Voyage en Perse I-IV. Paris.
- Flannery, K. V. 1972a. 'The Origins of the Village as Settlement Type in Mesoamerica and the Near East: A Comparative Study'. In Ucko, Tringham, and Dimbleby (eds.). 23-53.
- Flannery, K. V. 1972b. 'The Cultural Evolution of Civilizations'. In Annual Review of Ecology and Systematics 3: 399-426.
- Flannery, K. V. 1973. 'Archaeology with a Capital "S". In Redman (ed.). 47-53.
- Flannery, K. V. 1994. 'Childe the Evolutionist'. In Harris (ed.). 101–112.
- Flannery, K. V. 1998a. 'Introduction to the Second Edition'. In Levy (ed.). xvii-xx.
- Flannery, K. V. 1998b. 'The Ground Plan of Archaic States'. In Feinman and Marcus (eds.). 15-
- Flannery, K. V. 1999. 'Process and Agency in Early State Formation'. In Cambridge Archaeological Journal 9: 3-21.
- Flannery, K. V. (ed.). 1976. The Early Mesoamerican Village. New York.
- Fleming, D. E. 2004. Democracy's Ancient Ancestors. Mari and the Early Collective Governance. Cambridge UK.
- Fletcher, J. E. 2011. A Study of the Life and Works of Athanasius Kircher. Leiden.
- Forbes, Th. B. 1983. *Urartian Architecture* (BAR Int. 170). Oxford.
- Forest, J.-D. 1987. 'La grande architecture obeidienne: sa forme et sa fonction'. In J.-L. Huot (ed.), Préhistoire de la Mésopotamie. Paris. 385-423.
- Forest, J.-D. 1996a. Mésopotamie. L'apparition de l'état, VII<sup>e</sup>-III<sup>e</sup> millénaires. Paris.
- Forest, J.-D. 1996b. 'Les pseudo-temples de la Diyala ou le contrôle de la population urbaine au Dynastique Archaïque'. In H. Gasche and B. Hrouda (eds.) Histoire, arts de l'espace et industrie de la terre. Etudes offertes en hommage à A. Spycket. Neuchâtel. 97-111.
- Forest, J.-D. 1997. 'L'habitat urukien du Djebel Aruda. Approche fonctionnelle et arrière-plans symboliques'. In Castel et al. (eds.). 217-234.
- Forest, J.-D. 1999. Les premiers temples de Mésopotamie (4e et 3e millénaires) (BAR Int. 765).
- Forest, J.-D. 2005. 'The State: The Process of State Formation as Seen from Mesopotamia'. In Pollock and Bernbeck (eds.). 184-206.
- Forest, J.-D. and R. Vallet. 2008. 'Uruk Architecture from Abroad: Some Thoughts about Hassek Höyük'. In Córdoba et al. (eds.). 39-53.
- Fortin, M. 1997. 'Urbanisation et 'redistribution' de surplus agricoles en Mésopotamie septentrionale (3000-2500 av. J.-C.)'. In Aufrecht et al. (eds.). 50-81.
- Fortin, M. and O. Aurenche (eds.). 1998. Espace naturel, espace habité en Syrie du Nord  $(10^e-2^e \text{ millénaires av. J.-C.})$  (= BCSMS 33). Lyon-Toronto.
- Fortin, M., L.-M. Losier, and J. Pouliot. 2008. 'La géomatique au service des fouilles archéologiques: l'exemple de Tell 'Acharneh, en Syrie'. In Córdoba et al. (eds.). 55-71.
- Foster, B. 1981. 'A New Look at the Sumerian Temple State'. In JESHO 24: 225-241.
- Foster, B. 1999. 'A Century of Mesopotamian Agriculture'. In Klengel and Renger (eds.). 1-10.
- Foster, B. 2005. 'Shuruppak and the Sumerian City-State', in L. Kogan, N. Kosleva, S. Loesov, and S. Tishchenko (eds.), Memorial I. M. Diakonoff (= Orientalia et Classica 8 = Babel und Bibel 2). Winona Lake IN. 71-88.
- Foster, B. and K. Polinger Foster. 2009. Civilizations of Ancient Iraq. Princeton.
- Foucault-Forest, Ch. 1997. 'Modèles d'organisation de l'espace dans l'habitat du Bronze Moyen et du Bronze Récent en Palestine'. In Castel et al. (eds.). 151-160.

- Frahm, E. 2003. 'Zwischen Dichtung und Wahrheit. Assur und Assyrien in den Augen der Nachwelt'. In Marzahn and Salje (eds.). 19–28.
- Frahm, E. 2006. 'Images of Assyria in Nineteenth- and Twentieth-Century Western Scholarship'. In Holloway (ed.). 74–94.
- Frahm, E. 2011. 'Mensch, Land und Volk: Assur im Alten Testament'. In Renger (ed.). 267–286
- Francovich, G. de. 1966. 'Problems of Achaemenid Architecture'. In *East and West* 16: 201–260.
- Frangipane, M. 1993. 'Local Components in the Development of Centralized Societies in Syro-Anatolian Regions'. In *ead. et al.* (eds.). 133–161.
- Frangipane, M. 1997a. 'Arslantepe-Malatya. External Factors and Local Components in the Development of an Early State Society'. In Manzanilla (ed.). 43–58.
- Frangipane, M. 1997b. 'A 4<sup>th</sup> Millennium Temple/Palace Complex at Arslantepe-Malatya. North-South Relations and the Formation of Early State Societies in the Northern Regions of Greater Mesopotamia'. In *PO* 23/1: 45–74.
- Frangipane, M. 2000. 'The Development of Administration from Collective to Centralized Economies in the Mesopotamian World'. In G. M. Feinman and L. Manzanilla (eds.), Cultural Evolution: Contemporary Viewpoints. New York. 215–232.
- Frangipane, M. 2001. 'Centralization Processes in Greater Mesopotamia'. In Rothman (ed.). 307–347.
- Frangipane, M. 2002. ""Non-Uruk" Developments and Uruk-Linked Features on the Northern Borders of Greater Mesopotamia'. In Postgate (ed.). 123–148.
- Frangipane, M. (ed.). 2004. Alle origini del potere. Arslantepe, la collina dei leoni. Milano.
- Frangipane, M. (ed.). 2007. Arslantepe Cretulae. An Early Centralized Administrative System before Writing. Roma.
- Frangipane, M. (ed.). 2010. Economic Centralization in Formative States. The Archaeological Reconstruction of the Economic System in 4<sup>th</sup> Millennium Arslantepe. Roma.
- Frangipane, M., H. Hauptmann, M. Liverani, P. Matthiae, and M. Mellink (eds.). 1993.

  Between the Rivers and over the Mountains. Archaeologica anatolica et mesopotamica

  Alba Palmieri dedicate. Roma.
- Frangipane, M. and A. Palmieri. 1987. 'Urbanization in Perimesopotamian Areas: The Case of Eastern Anatolia'. In Manzanilla (ed.). 295–318.
- Frangipane, M. and A. Palmieri (eds.). 1983. 'Perspectives on Protourbanization in Eastern Anatolia: Arslantepe (Malatya)'. In *Origini* 12(2): 287–668.
- Frank, A. Gunder. 1967. Capitalism and Underdevelopment in Latin America. New York.
- Frank, A. Gunder. 1991. 'A Plea for World System History'. In Journal of World History 2: 1-28.
- Frank, A. Gunder. 1993. 'Bronze Age World System Cycles'. In CA 34: 383-429.
- Frank, A. Gunder and B. K. Gills. 1992. 'The Five Thousand Year World System: An Interdisciplinary Introduction'. In *Humboldt Journal of Social Change* 20: 1–79.
- Frank, A. Gunder and B. K. Gills (eds.). 1993. The World System: Five Hundred Years or Five Thousand. London-New York.
- Frankenberg, R. 1967. 'Economic Anthropology'. In R. Firth (ed.), *Themes in Economic Anthropology* (ASA Monographs 6). London. 47–89.
- Frankfort, H. 1923. The City of Akhenaten I-III. London.
- Frankfort, H. 1932. Tell Asmar, Khafaja and Khorsabad (OIC 16). Chicago.
- Frankfort, H. 1934. Iraq Excavations of the Oriental Institute, 1932-33 (OIC 17). Chicago.
- Frankfort, H. 1935. Oriental Institute Discoveries in Iraq, 1933–34 (OIC 19). Chicago.

Frankfort, H. 1936. Progress of the Work of the Oriental Institute in Iraq, 1934-35 (OIC 20). Chicago.

Frankfort, H. 1950. 'Town Planning in Ancient Mesopotamia'. In TPR 21: 99-115.

Frankfort, H. 1951. The Birth of Civilization in the Near East. Bloomington IN.

Frankfort, H. 1954. The Art and Architecture of the Ancient Orient. Harmondsworth.

Frankfort, H. (ed.). 1946. The Intellectual Adventure of Ancient Man. An Essay on Speculative Thought in the Ancient Near East. Chicago.

Frankfort, H., Th. Jacobsen, and C. Preusser. 1932. Tell Asmar and Khafajeh. The First Season's Work in Eshnunna, 1930-31 (OIC 13). Chicago.

Frankfort, H. and S. Lloyd. 1940. The Gimilsin Temple and the Palace of the Rulers at Tell Asmar (OIP 43). Chicago.

Freedman, S. M. 1998. If a City is Set on a Height I (Occasional Publications of the S. N. Kramer Fund 17). Philadelphia.

Freischlader, L. 2000. 'Die Orientreise Kaiser Wilhelm II. im Jahre 1898. Vorgeschichte, Verlauf und Ergebnisse'. In H.-D. Bienert and B. Müller-Neuhof (eds.), At the Crossroad. Essays on the Archaeology, History and Current Affairs in the Middle East. Amman. 181-217.

French, D. 1972. 'Settlement Distribution in the Konya Plain, south central Turkey'. In Ucko, Tringham, and Dimbleby (eds.). 231-238.

Frick, F. S. 1977. The City in Ancient Israel (SBL Dissertation Series 36). Missoula MO.

Fried, L. S. 2003. 'The Land Lay Desolate: Conquest and Restoration in the Ancient Near East'. In Lipschits and Blenkinsoop (eds.). 21-54.

Fried, M. 1967. The Evolution of Political Society. New York.

Fried, M. 1978. 'The State, the Chicken, and the Egg: or, What Came First?' In Cohen and Service (eds.). 35–47.

Friedrich, J. 1977. Stadtanalyse. Soziale und räumliche Organisation der Gesellschaft. Opladen.

Friedrich, J. 1995. Stadtsoziologie. Opladen.

Friedrich, J. (ed.). 1988. Soziologische Stadtforschung (Kölner Zeitschrift für Soziologie und Sozialpsychologie Sonderheft 29). Opladen.

Fritz, V. 1977. 'Bestimmung und Herkunft des Pfeilerhauses in Israel'. In ZDPV 93: 30-45.

Fritz, V. 1990. Die Stadt im alten Israel. München 1990.

Fritz, V. 1994. 'The Character of Urbanization in Palestine at the Beginning of the Iron Age'. In Mazzoni (ed.). 231-252.

Fromkin, D. 1989. A Peace to End All Peace. New York.

Fukuyma, F. 1992. The End of History and the Last Man. New York.

Fusaro, F. 1984. La città islamica. Roma-Bari.

Fustel de Coulanges, N. D. 1864. La cité antique. Etude sur le culte, le droit, les institutions de la Grèce et de Rome. Paris (I quote from the seventh edition, Paris 1878).

Garaudy, R. (ed.). 1969. Sur le 'mode de production asiatique'. Paris.

Garelli, P. (ed.). 1974. Le palais et la royauté (= RAI 19). Paris.

Garfinkle, S. J. 2012. Entrepreneurs and Enterprise in Early Mesopotamia. A Study of Three Archives fom the Third Dynasty of Ur. Bethesda MD.

Garr, W. R. 1987. 'A Population Estimate of Ancient Ugarit'. In BASOR 266: 31-46.

Gasche, H. 2010. 'Les défenses avancées de Babylone à l'époque de Nabuchodonosor II'. In Mesopotamia 45: 113-121.

Gasche, H. (ed.). 1987-96. Northern Akkad Project Reports 1-10. Ghent.

- Gasche, H. (ed.). 2004–2007. 'The Persian Gulf Shorelines and the Karkheh, Karun, and Jarrahi Rivers: A Geo-Morphological Approach'. In *Akkadica* 125 (2004): 141–215; 126 (2005): 1–43; 128 (2007): 1–72.
- Gasche, H. and S. W. Cole. 2003. 'Fleuves, irrigation et inondations en Basse Mésopotamie et en Susine'. In L. Fantini Terzi (ed.), *Scienze moderne e antiche sapienze*. Milano, 67–89.
- Gasche, H. and M. Tanret (eds.). 1998. Changing Watercourses in Babylonia. Toward a Reconstruction of the Ancient Environment in Lower Mesopotamia. Vol. I. Ghent.
- Gasche, H., M. Tanret, S. W. Cole, and K. Verhoeven. 2002. 'Fleuves du temp et de la vie. Permanence et instabilité du réseu fluviatile babylonien entre 2500 et 1500 avant notre ère'. In *AnnESC* 57(3): 531–544.
- Gasche, H., M. Tanret, C. Janssen, and A. Degraeve (eds.). 1994. *Cinquante-deux reflections* sur le Proche-Orient ancien (Mesopotamian History and Environment, Occasional Publications 2). Leuven.
- Gasche, H. et al. 1987. ḥabl aṣ-ṣaḥr 1983-85: Nebuchadnezzar II's Cross-Country Wall North of Sippar (= Northern Akkad Project Reports 1). Ghent.
- Gates, Ch. 2003. Ancient Cities. The Archaeology of Urban Life in the Ancient Near East and Egypt, Greece and Rome. London-New York.
- Gates, M.-H. 2005. 'Archaeology and the Ancient Near East: Methods and Limits'. In Snell (ed.). 65–78.
- Gathercole, P. and D. Lowenthal (eds.). 1990. The Politics of the Past (OWA 12). Boston.
- Gelb, I. J. 1960. 'The Function of Language in the Cultural Process of Expansion of Mesopotamian Society'. In Kraeling and Adams (eds.). 315–327.
- Gelb, I. J. 1967. 'Approaches to the Study of Ancient Society'. In JAOS 87: 1-8.
- Gelb, I. J. 1969. 'On the Alleged Temple and State Economies in Ancient Mesopotamia'. In *Studi in onore di E. Volterra* VI. Milano. 137–154.
- Gelb, I. J. 1972. 'From Freedom to Slavery'. In Edzard (ed.). 81-92.
- Gelb, I. J. 1979. 'Household and Family in Early Mesopotamia'. In Lipinski (ed.). 1-97.
- Gelb, I. J. 1981. 'Ebla and the Kish Civilization'. In L. Cagni (ed.), La lingua di Ebla. Napoli. 9–73.
- Gelb, I. J. 1986. 'Ebla and Lagash: Environmental Contrast'. In Weiss (ed.). 157-167.
- Gelb, I. J., P. Steinkeller, and R. M. Whiting. 1991. *Earliest Land Tenure Systems in the Near East: Ancient Kudurrus* I–II (OIP 104). Chicago.
- Gelvin, J. L. 2008. The Modern Middle East. A History. Oxford-New York.
- Gentili, B. and C. Prato. 1979. Poetarum elegiacorum testimonia et fragmenta I. Leipzig.
- George, A. R. 1992. Babylonian Topographical Texts (OLA 40). Leuven.
- George, A. R. 1993. *House Most High. The Temples of Ancient Mesopotamia* (Mesopotamian Civilizations 5). Winona Lake IN.
- George, A. R. 1997. "Bond of the Lands": Babylon, the Cosmic Capital. In Wilhelm (ed.). 125–145.
- George, A. R. 2005–06. 'The Tower of Babel: Archaeology, History and Cuneiform Texts'. In *AfO* 51: 75–95.
- George, A. R. 2008a. 'A Tour of Nebuchadnezzar's Babylon'. In Finkel and Seymour (eds.). 54–59.
- George, A. R. 2008b. 'Ancient Descriptions: the Babylonian Topographical Texts'. In Finkel and Seymour (eds.). 60–65 (also in Marzahn and Schauerte [eds.]. 2008. 405–412).
- Geyer, B. 1985. 'Géomorphologie et occupation du sol de la moyenne vallée de l'Euphrate dans la région de Mari'. In MARI 4: 27-40.

- Geyer, B. and J.-Y. Monchambert. 1987. 'Prospections de la moyenne vallée de l'Euphrate. Rapport préliminaire 1982-1985'. In MARI 5: 293-344.
- Geyer, B. and J.-Y. Monchambert. 2003. La basse vallée de l'Euphrate syrien du Néolithique à l'evènement de l'Islam I-II (BAH 166). Beyrouth.
- Gibbon, E. 1900. The Memoirs of the Life of E. Gibbon. London.
- Gibbon, E. 1952. The Decline and Fall of the Roman Empire, a one-volume abridgment by D. A. Saunders.
- Gibson, McGuire. 1972. The City and Area of Kish. Miami.
- Gibson, McGuire. 1973. 'Population Shift and the Rise of Mesopotamian Civilization'. In Renfrew (ed.). 447-463.
- Gibson, McGuire. 1974. 'Violation of Fallow and Engineered Disaster in Mesopotamian Civilization'. In Downing and Gibson (eds.). 7-19.
- Gibson, McGuire. 1975. Excavations at Nippur, Eleventh Season (OIC 22). Chicago.
- Gibson, McGuire. 1976. 'By Stage and Cycle to Sumer'. In Schmandt and Besserat (ed.). 51-58.
- Gibson, McGuire. 1978. Excavations at Nippur, Twelfth Season (OIC 23). Chicago.
- Gibson, McGuire. 1980. 'Current Research at Nippur: Ecological Anthropological and Documentary Interplay'. In Barrelet (ed.). 193-206.
- Gibson, McGuire. 1992. 'Patterns of Occupation at Nippur'. In deJong Ellis (ed.). 33-54.
- Gibson, McGuire. 2006. 'Archaeology and Nation-Building in Iraq'. In JAOS 126: 245-252.
- Gibson, McGuire. 2008. 'The Oriental Institute and Its Role in Mesopotamian Archaeology'. In Biggs, Myers and Roth (eds.). 383-388.
- Gibson, McGuire. 2010. 'The Dead Hand of Deimel'. In Carter and Philip (eds.). 85-92.
- Gibson, McGuire and R. D. Biggs (eds.). 1987. The Organization of Power. Aspects of Bureaucracy in the Ancient Near East (SAOC 46). Chicago.
- Giedion, S. 1941. Space, Time and Architecture. Cambridge MA (new edition Princeton 1964).
- Gilibert, R. 2008. 'On Kār Tukulti-Ninurta: Chronology and Politics of a Middle Assyrian Ville Neuve'. In D. Bonatz, R. M. Czichon, and F. J. Kreppner (eds.), Fundstellen. Gesammelte Schriften zur Archäologie und Geschichte Altvorderasien ad honorem Hartmut Kühne. Wiesbaden. 177-188.
- Gilissen, J. (ed.). 1983. Les communautés rurales (Recueils de la Société Jean Bodin 41). Paris.
- Gills, B. K. and A. G. Frank. 1990. 'The Cumulation of Accumulation: Theses and Research Agenda for 5000 Years of World System History'. In Dialectical Anthropology 15: 19-42.
- Ginzberg, L. 1995. Le leggende degli Ebrei, I. Dalla creazione al diluvio. Milano.
- Giuliano, A. 1966. Urbanistica delle città greche. Milano.
- Glassner, J.-J. 2000. 'Les petits états mésopotamiens à la fin du 4e et au cours du 3e millénaire'. In Hudson (ed.). 35-54.
- Glassner, J.-J. 2003. La Tour de Babylone. Que reste-t-il de la Mésopotamie? Paris.
- Gledhill, J. 1988. 'Introduction: The Comparative Analysis of Social and Political Transitions'. In id., Bender and Larsen (eds.). 1-29.
- Gledhill, J., B. Bender, and M. T. Larsen (eds.). 1988. State and Society. The Emergence and Development of Social Hierarchy and Political Centralization (OWA 4). London.
- Gledhill, J. and M. T. Larsen. 1982. 'The Polanyi Paradigm and a Dynamic Analysis of Archaic States'. In C. Renfrew, M. Rowlands, and B. A. Segraves (eds.), Theory and Explanation in Archaeology. New York-London. 197-229.
- Glotz, G. 1928. La cité grecque. Paris.
- Glueck, N. 1933–34. *Explorations in Eastern Palestine* I (= AASOR 14). New Haven.

Glueck, N. 1934-35. Explorations in Eastern Palestine II (= AASOR 15). New Haven.

Glueck, N. 1937-39. Explorations in Eastern Palestine III (= AASOR 18-19). New Haven.

Glueck, N. 1945–49. Explorations in Eastern Palestine IV (= AASOR 25–28). New Haven.

Glueck, N. 1970. The Other Side of Jordan. Cambridge MA.

Godart, L. (ed.). 2005. L'economia palaziale e la nascita della moneta: dalla Mesopotamia all'Egeo. Roma.

Godbout, J. T. 1992. L'esprit du don. Paris.

Goddeeris, A. 2007. 'The Old Babylonian Economy'. In Leick (ed.). 198-209.

Godelier, M. 1970a. Sulle società precapitalistiche. Milano.

Godelier, M. 1970b. Antropologia, storia, marxismo. Parma.

Goelet, O. 1999. 'Town and Country in Ancient Egypt'. In Hudson and Levine (eds.). 65-116.

Goff, C. 1968. 'Luristan in the First Half of the First Millennium B.C. A Preliminary Report on the First Season's Excavatios at Bābā Jān'. In *Iran* 6: 105–134.

Goff, C. 1969. 'Excavations at Baba Jan, 1967'. In Iran 7: 115-130.

Goff, C. 1970. 'Excavations at Baba Jan, 1968'. In Iran 8: 141-156.

Goldhausen, M. and A. Ricci. 2005. 'Political Centralization in the Syrian Jezira during the 3<sup>rd</sup> Millennium: A Case Study in Settlement Hierarchy'. In *AoF* 32: 132–157.

Gondet, S. and C. Castel. 2004. 'Prospection géophysique à al-Rawda et urbanisme en Syrie au Bronze Ancien'. In *PO* 30(2): 93–109.

Gonen, R. 1984. 'Urban Canaan in the Late Bronze Period'. In BASOR 253: 61-73.

Goodnick Westenholz, J. (ed.). 1996. Royal Cities of the Biblical World. Jerusalem.

Goodnick Westenholz, J. (ed.). 1998. Capital Cities. Jerusalem.

Goody, J. 1972. 'The Evolution of the Family'. In Laslett and Wall (eds.). 103-124.

Goody, J. 1977. The Domestication of the Savage Mind. Cambridge UK.

Goody, J. 1986. The Logic of Writing and the Organization of Society. Cambridge UK.

Goody, J. 1987. The Interface between the Written and the Oral. Cambridge UK.

Gophna, R. and J. Portugali. 1988. 'Settlement and Demographic Processes in Israel's Coastal Plain from Chalcolithic to the Middle Bronze Age'. In BASOR 269: 11–28.

Gottmann, J. 1961. Megalopolis. The Urbanized Northwestern Seaboard of the United States. New York.

Gottmann, J. 1966. 'La creation de villes neuves'. In *Revue économique et sociale* 24/2: 111–123.

Gottmann, J. 1983. La città invincibile. Una confutazione dell'urbanistica negativa. Milano.

Götzelt, Th. 2002. 'Descent, Private and Public: Social Environments in Early Mesopotamia (Old Babylonian Period)'. In *AoF* 29: 339–354.

Goudie, A. S. 1987. 'Geography and Archaeology: The Growth of a Relationship'. In Wagstaff (ed.). 11–25.

Grabbe, L. L. 2001. 'Sup-Urbs or only Hyp-Urbs? Prophets and Populations in Ancient Israel and Socio-Historical Method'. In *id.* and Haak (eds.). 95–123.

Grabbe, L. L. and R. D. Haak (eds.). 2001. 'Every City Shall Be Forsaken'. Urbanism and Prophecy in Ancient Israel and the Near East (JSOT Suppl. 330). Sheffield.

Greco, E. and M. Torelli. 1983. Storia dell'urbanistica. Il mondo Greco. Roma-Bari.

Green, S. 1981. Prehistorian. A Biography of V. Gordon Childe. Bradford-on-Avon.

Greenberg, R. 2002. Early Urbanizations in the Levant. A Regional Narrative. London-New York

Greene, K. 1999. 'V. Gordon Childe and the Vocabulary of Revolutionary Change'. In An 73: 97–109.

Greenfield, J. 1989. The Return of Cultural Treasures. Cambridge UK.

- Gregotti, V. 2011. Architettura e postmetropoli. Torino.
- Grendi, E. 1978. Polanyi: dall'antropologia economica alla microanalisi storica. Milano.
- Griffeth, R. and C. G. Thomas (eds.). 1981. The City State in Five Cultures. Santa Barbara CA.
- Grimal, N. 2000. 'Cités, villes et État de l'Égypte pharaonique'. In Nicolet (ed.). 54-64.
- Guidi, A. 1988. Storia della paletnologia. Roma-Bari.
- Guidi, A. 2000. Preistoria della complessità sociale. Roma-Bari.
- Guidi, A. 2003. 'Archeologia ed evoluzione sociale: modelli teorici a confronto'. In J.-C. Gardin (ed.), I modelli della ricerca archeologica. Il ruolo dell'informatica. Roma. 25-54.
- Gullini, G. 1970-71. 'Struttura e spazio nell'architettura mesopotamica arcaica. Da Eridu alle soglie del Protodinastico'. In Mesopotamia 5-6: 181-273 (English Summary, 274-279).
- Gullini, G. 1972. 'Tradizione e originalità nell'architettura achemenide a Pasargade'. In PdP 27: 13-39.
- Gullini, G., R. Parapetti, and G. Chiari. 1987. 'Attività di consulenza, progettazione e collaborazione scientifica'. In La terra tra i due fiumi. Roma. 241-252.
- Gut, R. 2002. 'The Significance of the Uruk Sequence at Nineveh'. In Postgate (ed.). 17-48.
- Guy, P. L. O. 1931. New Light from Armageddon (OIC 9). Chicago.
- Haas, V. 1998. '1906-1912: Hattuscha (Boğazköy). Die Hauptstadt der Hethiter'. In Wilhelm (ed.). 92-99.
- Haas, V. 1999. 'Die literarische Rezeption Babylons von der Antike bis zur Gegenwart'. In Renger (ed.). 523-552.
- Haase, C.-P. 2008. 'Babylon in der arabischen und islamischen Überlieferung'. In Marzahn and Schauerte (eds.). 509-514.
- Hachmann, R. 1994. 'Die "Befestigungen" des akeramischen Jericho'. In BaM 25: 19-74.
- Haggett, P. 1965. Locational Analysis in Human Geography. New York.
- Haines, R. C. (ed.). 1971. Excavations in the Plain of Antioch. II. The Structural Remains of the Later Phases (OIP 95). Chicago.
- Halévy, J. 1874. 'Observations critiques sur les prétendus Touraniens de la Babylonie'. In Journal Asiatique 1874: 461-536.
- Hall, H. R. and C. L. Woolley. 1927. Ur Excavations. I. Al-'Ubaid. Oxford.
- Haller, A. and W. Andrae. 1955. Die Heiligtümer des Gottes Assur und der SinŠamaš-Tempel in Assur (WVDOG 67). Berlin.
- Hallo, W. W. 1996. Origins. The Ancient Near-Eastern Background of Some Modern Western Institutions. Leiden.
- Halstead, P. 2011. 'Redistribution in Aegean Palatial Societies: Terminology, Scale and Significance'. In AJA 115: 229-235.
- Hamilton, W. J. 1842. Researches in Asia Minor, Pontus and Armenia I-II. London.
- Hammond, M. 1972. The City in the Ancient World. Cambridge MA.
- Hann, Ch. H. 1992. 'Radical Functionalism: the Life and Work of Karl Polanyi'. In Dialectical Anthropology 17: 141-166.
- Hansen, M. H. 1993. 'The Polis as a Citizen-State'. In id. (ed.). 7-29.
- Hansen, M. H. 1997. 'The Polis as an Urban Centre. The Literary and Epigraphical Evidence'. In id. (ed.). 9-86.
- Hansen, M. H. 1998. Polis and City-State. An Ancient Concept and Its Modern Equivalent (The Royal Danish Academy of Sciences and Letters, Meddelelser 76). Copenhagen.
- Hansen, M. H. 2008. 'Analyzing Cities'. In Marcus and Sabloff (eds.). 67-76.
- Hansen, M. H. (ed.). 1993. The Ancient Greek City-State (The Royal Danish Academy of Sciences and Letters, Meddelelser 67). Copenhagen.

Hansen, M. H. (ed.). 1997. The Polis as an Urban Centre and as a Political Community (The Royal Danish Academy of Sciences and Letters, Meddelesler 75). Copenhagen.

Hansen, M. H. (ed.). 2000. A Comparative Study of Thirty City-State Cultures. Copenhagen.

Hansen, M. H. (ed.). 2002. A Comparative Study of Six City-State Cultures (The Royal Danish Academy of Sciences and Letters, Skrifter 27). Copenhagen.

Hansen, M. H. (ed.). 2005. *The Imaginary Polis* (The Royal Danish Academy of Sciences and Letters, Meddelelser 91). Copenhagen.

Hansen, M. H. (ed.). 2006. Polis. An Introduction to the Ancient Greek City-State. Oxford.

Harper, P. O., J. Aruz, and F. Tallon (eds.). 1992. The Royal City of Susa. New York.

Harris, D. R. (ed.). 1994. The Archaeology of V. Gordon Childe. Chicago.

Harris, E. C. 1979. Principles of Archaeological Stratigraphy. London

Harris, M. 1968. The Rise of Anthropological Theory. New York

Harris, R. 1963. 'The Organization and Administration of the Cloister in Ancient Babylonia'. In *JESHO* 6: 121–157.

Harris, R. 1975. Ancient Sippar: A Demographic Study of an Old Babylonian City (PIHANS 36). Istanbul.

Hassan, F. 1978. 'Demographic Archaeology'. In *Advances in Archaeological Method and Theory* 1. 49–103.

Hassan, F. 1979. 'Demography and Archaeology'. In ARA 8: 137-160.

Hassan, F. 1981. Demographic Archaeology. New York.

Hassan, F. 1993. 'Town and Village in Ancient Egypt: Ecology, Society, and Urbanization'. In Shaw *et al.* (eds.). 551–569.

Hassan, F. 1999. Population Dynamics. In Barker (ed.). 672-713.

Hauser, S. R. 2001. 'Not Out of Babylon? The Development of Ancient Near-Eastern Studies in Germany and Its Current Significance'. In Abusch *et al.* (eds.). 211–237.

Hausleiter, A., S. Kerner, and B. Müller-Neuhof (eds.). 2002. *Material Culture and Mental Spheres*. Internationales Symposium für H. J. Nissen (AOAT 293). Münster.

Hawkes, J. 1982. Mortimer Wheeler: Adventurer in Archaeology. London.

Hayden, B. 1994. 'Village Approaches to Complex Societies'. In Schwartz and Falconer (eds.). 198–206.

Hegel, G. W. F. 1837. Vorlesungen über die Philosophie der Geschichte. Berlin. (Eng. trans. The Philosophy of History. 1967. New York.)

Heichelheim, F. 1938. Wirtschaftsgeschichte des Altertums. Leiden

Heimpel, W. 1990. 'Ein zweiter Schritt zur Rehabilitisierung der Rolle des Tigris in Sumer'. In ZA 80: 204–213.

Heinrich, E. 1950. 'Moderne arabische Gehöfte am unteren Euphrat und ihre Beziehungen zum "Babylonischen Hofhaus". In MDOG 82: 19–46.

Heinrich, E. 1972-75. 'Haus. B. Archäologisch', in RIA IV: 176-220.

Heinrich, E. 1982. *Die Tempel und Heiligtümer im alten Mesopotamien. Typologie, Morphologie und Geschichte* (Deutsches Archäologisches Institut, Denkmäler antiker Architektur 14). Berlin.

Heinrich, E. 1984. *Die Paläste im alten Mesopotamien* (Deutsches Archäologisches Institut, Denkmäler antiker Architektur 15). Berlin.

Heinrich, E. and W. Andrae. 1931. Fara. Berlin.

Heinrich, E. and U. Seidl. 1967. 'Grundrisszeichnungen aus dem Alten Orient'. In MDOG 98:

Heinz, M. 1997a. Der Stadtplan als Spiegel der Gesellschaft. Siedlungsstrukturen in Mesopotamien als Indikator für Formen wirtschaftlicher und gesellschaftlicher Organisation. Berlin.

- Heinz, M. 1997b. 'Räumliche Ordnung und Stadtkonzepte bronzezeitlicher Siedlungen am Mittleren Euphrat'. In Wilhelm (ed.). 289-305.
- Heinz, M. 2008. Die Repräsentation der Macht und die Macht der Repräsentation in Zeiten des politischen Unbruchs. Rebellion in Mesopotamia. München.
- Heinz, M. and M. H. Feldman (eds.). 2007. Representations of Political Power. Case Histories from Times of Change and Dissolving Order in the Ancient Near East. Winona Lake IN.
- Helms, S.W. 1981. Jawa: Lost City in the Black Desert. London.
- Helms, S.W. 1984. 'Land Behind Damascus: Urbanism during the 4th Millennium in Syria-Palestine'. In T. Khalidi (ed.), Land Tenure and Social Transformation in the Middle East. Beirut. 15-31.
- Heltzer, M. 1976. The Rural Community in Ancient Ugarit. Wiesbaden.
- Hempel, C. 1966. Philosophy of Natural Science. Englewood Cliffs NJ.
- Henrickson, E. F. 1981. 'Non Religious Residential Settlement Patterning in the Late Early Dynastic of the Diyala Region'. In Mesopotamia 16: 43-140.
- Henrickson, E. F. 1982. 'Functional Analysis of Elite Residences in the Late Early Dynastic of the Diyala Region'. In Mesopotamia 17: 5-33.
- Henrickson, E. F. 1992. 'Early Everyday Economics: Distribution of Trash and Interpretation of Activity Patterns in an Ancient Village'. In BCSMS 24: 33-40.
- Henrickson, E. F. and I. Thuesen (eds.). Upon this Foundation The 'Ubaid Reconsidered. Copenhagen.
- Herder, J. G. 1784-91. Ideen zur Philosophie der Geschichte der Menschheit. Leipzig.
- Herr, L.G. 1988. 'Tripartite Pillared Buildings and the Market Place in Iron Age Palestine'. In BASOR 272: 47-67.
- Herzfeld, E. 1930. 'Bericht über die Ausgrabungen von Pasargadae 1928'. In Archäologische Mitteilungen aus Iran 1. 4-16.
- Herzfeld, E. 1935. Archaeological History of Iran. London.
- Herzog, Z. 1978. 'Israelite City Planning'. In Expedition 10: 38-43.
- Herzog, Z. 1986. Das Stadttor in Israel und in den Nachbarländern. Mainz.
- Herzog, Z. 1997. Archaeology of the City. Urban Planning in Ancient Israel and Its Social Implications. Tel Aviv.
- Heuzey, L. 1884-1912. Découvertes en Chaldée, par E. de Sarzec I-II. Paris.
- Heuzey, L. 1894. 'Mission de M. de Sarzec en Chaldée. Huitième campagne de fouilles'. In RA 3: 65-68.
- Higgs, E. S. (ed.). 1972. Papers in Economic Prehistory. Cambridge UK.
- Higgs, E. S. (ed.). 1975. Palaeoeconomy. Cambridge UK.
- Higgs, E. S. and M. R. Jarman. 1975. 'Palaeoeconomy'. In Higgs (ed.). 1-7.
- Higgs, E. S. and C. Vita-Finzi. 1972. 'Prehistoric Economies: A Territorial Approach'. In Higgs (ed.). 27-36.
- Hill, H. D., Th. Jacobsen, and P. Delougaz. 1990. Old Babylonian Public Buildings in the Diyala Region (OIP 98). Chicago.
- Hill, J. N. 1977. 'Systems Theory and the Explanation of Change'. In id. (ed.), Explanation in Prehistoric Change. Albuquerque NM. 59-103.
- Hilprecht, H. V. 1903. Explorations in Bible Lands during the 19th Century. Philadelphia.
- Hobsbawm, E. and T. Ranger (eds.). 1983. The Invention of Tradition. Cambridge UK.
- Hodder, I. 1978a. 'Some Effects of Distance on Patterns of Human Interaction'. In id. (ed.). 155-178.
- Hodder, I. 1978b. Social Organization and Human Interactions: The Development of Some Tentative Hypotheses in Terms of Material Culture. In id. (ed.). 199-269.

- Hodder, I. 1982. The Present Past: An Introduction to Anthropology for Archaeologists. London.
- Hodder, I. 1986. Reading the Past. Cambridge UK
- Hodder, I. 1989. 'Post-Modernism, Post-Structuralism and Post-Processual Archaeology'. In id. (ed.), The Meaning of Things. Material Culture and Symbolic Expression (OWA 6). Boston. 64–78.
- Hodder, I. 1992. *Theory and Practice in Archaeology*. London–New York.
- Hodder, I. 2006. The Leopard's Tale. Revealing the Mysteries of Çatalhüyük. New York.
- Hodder, I. and C. Orton. 1976. Spatial Analysis in Archaeology. Cambridge UK.
- Hodges, R. 1987. 'Spatial Models, Anthropology and Archaeology'. In Wagstaff (ed.). 118-133.
- Hole, F. 1978. 'Pastoral Nomadism in Western Iran'. In R. A. Gould (ed.), *Explorations in Ethnoarchaeology*. Albuquerque. 127–167.
- Hole, F. 1979. 'Rediscovering the Past in the Present: Ethnoarchaeology in Luristan'. In Kramer (ed.). 192–218.
- Hole, F. 1980. 'Archaeological Survey in Southwest Asia'. In PO 6: 21-44.
- Hole, F. 1994. 'Environmental Instabilities and Urban Origins'. In Stein and Rothman (eds.). 121–151.
- Hole, F. 1995. 'Assessing the Past Through Anthropological Archaeology'. In Sasson (ed.). IV. 2715–2727.
- Holladay, J. S. 1986. 'The Stables of Ancient Israel'. In L. T. Geraty and L. G. Herr (eds.), The Archaeology of Jordan and Other Studies Presented to S. H. Horn. Berrien Springs MI. 103-165.
- Holloway, S. W. (ed.). 2006. Orientalism, Assyriology and the Bible. Sheffield.
- Hommel, F. 1885. *Geschichte Babyloniens und Assyriens* (Allgemeine Geschichte in Einzeldarstellungen I.2). Berlin.
- Hommel, F. 1904. Grundriss der Geographie und Geschichte des Alten Orients. I: Ethnologie des Alten Orients: Babylonian und Chaldäa. München.
- Honour, H. 1968. Neo-Classicism. Harmondsworth.
- Horden, P. and N. Purcell. 2000. The Corrupting Sea: A Study of Mediterranean History. Oxford.
- Howell, G. 2007. Gertrude Bell, Queen of the Desert, Shaper of Nations. New York.
- Hritz, C. 2004. 'The Hidden Landscape of Southern Mesopotamia'. In Akkadica 125: 93-106.
- Hritz, C. and T. J. Wilkinson. 2006. 'Using Shuttle Radar Topography to Map Ancient Water Channels in Mesopotamia'. In *An* 80: 415–424.
- Hruška, B. 1983. 'Asiatische Produktionsweise und die Keilschriftforschung'. In *ArOr* 51: 268-275
- Hruška, B. 1989. 'Ur. Die Entstehung eines altmesopotamischen Stadtstaates'. In *AoF* 16: 36–41.
- Hudson, M. 1996a. 'Privatization: A Survey of the Unresolved Controversies'. In *id.* and Levine (eds.) 1–32.
- Hudson, M. 1996b. 'The Dynamics of Privatization, from the Bronze Age to the Present'. In *id.* and Levine (eds.). 33–72.
- Hudson, M. 1999. 'From Sacred Enclave to Temple to City'. In id. and Levine (eds.). 117-164.
- Hudson, M. 2004. 'The Role of Accounting in Civilization's Economic Takeoff'. In *id.* and Wunsch (eds.). 1–22.
- Hudson, M. 2005. 'Review of Warburton 2003'. In JESHO 48: 118-122.
- Hudson, M. and B. A. Levine (eds.). 1996. *Privatization in the Ancient Near East and Classical World*. Cambridge MA.

- Hudson, M. and B. A. Levine (eds.). 1999. Urbanization and Land Ownership in the Ancient Near East. Cambridge MA.
- Hudson, M. and M. van de Mieroop (eds.). 2002. Debt and Economic Renewal in the Ancient Near East. Bethesda MD.
- Hudson, M. and C. Wunsch (eds.). 2004. Creating Economic Order: Record Keeping, Standardization, and the Development of Accounting in the Ancient Near East. Bethesda MD.
- Humbert, J. M. 1989. L'égyptomanie dans l'art occidental. Paris.
- Humphreys, S. C. 1966. 'History, Economics, and Anthropology: the Work of Karl Polanyi'. In History and Theory 8: 176-181.
- Hunt, E. and R. C. Hunt. 1978. 'Irrigation, Conflict, and Politics: A Mexican Case'. In Cohen and Service (eds.). 69-123.
- Hunt, R. C. 1987. 'The Role of Bureaucracy in the Provisioning of Cities: A Framework for Analysis of the Ancient Near East'. In Gibson and Briggs (eds.). 161-192.
- Huot, J.-L. 1970. 'Des villes existent-elles, en Orient, dès l'époque néolithique?' In AnnESC 25: 1091-1101.
- Huot, J.-L. 1982. 'La naissance de l'État. L'exemple mésopotamien'. In Archéologie du Levant. Recueil R. Saidah. Lyon. 95-106.
- Huot, J.-L. 1990a. 'Les fausses "villes néolithiques". In id. et al. 19-26.
- Huot, J.-L. 1990b. 'La ville sumérienne: une cité-état'. In id. et al. 43-73.
- Huot, J.-L. 1990c. 'Les villes mésopotamiennes, demeures des dieux'. In id. et al. 183-201.
- Huot, J.-L. 1994. Les premiers villageois de Mésopotamie. Du village à la ville. Paris.
- Huot, J.-L. (ed.). 1988. La Ville-Neuve, une idée de l'Antiquité? Paris.
- Huot, J.-L., A. Rougeulle, and J. Suire. 1989. 'La structure urbaine de Larsa. Une approche provisoire'. In J.-L. Huot (ed.), Larsa: travaux de 1985 (Editions Recherche sur les Civilisations 83). Paris. 19-52.
- Huot, J.-L., J. P. Thalmann, and D. Valbelle. 1990. Naissance des cites. Paris.
- Hurowitz, V. A. 1992. I Have Built You an Exalted House (JSOT Suppl. 115). Sheffield.
- Invernizzi, A. 2000. 'Discovering Babylon with Pietro Della Valle'. In Matthiae et al. (eds.). 643-649.
- Invernizzi, A. 2002. 'Alla ricerca della torre di Babele con i primi viaggiatori'. In L. Fantini Terzi (ed.), Andata e ritorno dall'antico Oriente. Milano. 9-30.
- Invernizzi, A. 2005. Il Genio Vagante. Viaggiatori alla scoperta dell'antico Oriente (sec. XII-XVIII). Alessandria.
- Invernizzi, A. 2008. 'El testimonio de Ambrogio Bembo y Joseph Guillaume Grelot sobre los restos arqueológicos iranios'. In J. M. Codoba et al. (eds.), Proceedings of the 5th ICAANE. Madrid. 205-220.
- Irwin, R. 2006. For Lust of Knowing. The Orientalists and Their Enemies. London
- Jacob, E. 1977. 'Appréciation positive et négative de la ville dans les anciennes traditions d'Israël'. In Ktèma 2: 17-23.
- Jacobs, J. 1969. The Economy of Cities. New York.
- Jacobsen, Th. 1939. 'The Assumed Conflict between Sumerians and Semites in Early Mesopotamian History'. In JAOS 59: 485-495 (republished in id. 1970. 187-192).
- Jacobsen, Th. 1943. 'Primitive Democracy in Ancient Mesopotamia'. In JNES 2: 159-172 (republished in id. 1970. 157-170).
- Jacobsen, Th. 1957. 'Early Political Development in Mesopotamia'. In ZA 52: 91-140 (republished in id. 1970. 132-156).

- Jacobsen, Th. 1958. 'Summary Report by the Diyala Basin Archaeological Project June 1, 1957 to June 1, 1958'. In *Sumer* 14: 79–89.
- Jacobsen, Th. 1960a. 'Mesopotamia up to the Assyrian Period. Political Institutions, Literature, and Religion'. In Kraeling and Adams (eds.). 62–70.
- Jacobsen, Th. 1960b. 'The Waters of Ur'. In *Iraq* 22: 174–185 (republished in *id.* 1970. 231–243).
- Jacobsen, Th. 1969. 'A Survey of the Girsu (Tello) Region'. In Sumer 25: 103-109.
- Jacobsen, Th. 1970. Toward the Image of Tammuz and other essays on Mesopotamian History and Culture (Harvard Semitic Series 21). Cambridge MA.
- Jacobsen, Th. 1982. Salinity and Irrigation Agriculture in Antiquity (Bibliotheca Mesopotamica 14). Malibu.
- Jacobsen, Th. and R. McC. Adams. 1958. 'Salt and Silt in Ancient Mesopotamian Agriculture'. In Science 128: 1251–1258.
- Jacobsen, Th. and S. Lloyd. 1935. Sennacherib's Aqueduct at Jerwan (OIP 24). Chicago.
- Jacubiek, K. 2003. The Development of Defence System of Eastern Anatolia (the Armenian Upland) from the Beginning of the Kingdom of Urartu to the End of Antiquity. Warszawa.
- Jahn, B. 2005. Altbabylonische Wohnhäuser. Eine Gegenüberstellung philologischer und archäologischer Quellen (Orient-Archäologie 16). Rahden Westf.
- Jankovska, N. B. 1969a. 'Communal Self-Government and the King of the State of Arrapha'. In *JESHO* 12: 233–282.
- Jankovska, N. B. 1969b. 'Extended Family Commune and Civil Self-Government in Arrapkha'. In Diakonoff (ed.). 235–252.
- Jankovska, N. B. 1986, 'The Role of the Extended Family in the Economic Life of the Kingdom of Arraphe'. In *Oikumene* 5: 33–42.
- Janssen, C. 1995. Babil, the City of Witchcraft and Wine. The Name and Fame of Babylon in Medieval Arabic Geographical Texts (Mesopotamian History and Environment, Memoirs 2). Ghent.
- Janssen, J. J. 1975a. 'Prolegomena to the Study of Egypt's Economic History During the New Kingdom'. In *Studien zur Altägyptischen Kultur* 3: 127–185.
- Janssen, J. J. 1975b. Commodity Prices from the Ramessid Period: An Economic Study of the Village of the Necropolis Workers. Leiden.
- Janssen, J. J. 1978. 'The Early State in Ancient Egypt'. In Claessen and Skalník (eds.). 213–233.
- Janssen, J. J. 1979. 'The Role of the Temple in the Egyptian Economy during the New Kingdom'. In Lipinski (ed.). 505–515.
- Janssen, J. J. 1983. 'El Amarna as a Residential City'. In BO 40: 273-288.
- Jarman, M. R., C. Vita Finzi, and E. S. Higgs. 1972. 'Site Catchment Analysis in Archaeology'. In Ucko, Trigger, and Dimbleby (eds.). 61–66.
- Jarrige, J. F. 1973. 'La fin de la civilisation harappéenne'. In PO 1: 263-287.
- Jarrige, J. F. 1988. 'Les cités oubliées de l'Indus'. Paris.
- Jas, R. M. (ed.). 2000. Rainfall and Agriculture in Northern Mesopotamia (PIHANS 88). Leiden-Istanbul.
- Jawad, A. J. 1965. The Advent of the Era of Townships in Northern Mesopotamia. Leiden.
- Joannès, F. 1990. 'Pouvoirs locaux et organisation du territoire en Babylonie achéménide'. In *Transeuphratène* 3: 173–189.
- Joannès, F. 1994. 'Construisons Dour-Sharoukin!' In AA.VV. 12-19.
- Joffe, A. H. 1993. Settlement and Society in the Early Bronze I and II, Southern Levant. Sheffield.

- Joffe, A. H. 1998. 'Disembedded Capitals in Western Asian Perspective'. In Comparative Studies in Society and History 40: 549-580.
- Joffe, A. H. 2002. 'The Rise of Secondary States in the Iron Age Levant'. In JESHO 45: 425-467.
- Johnson, A. W. and T. Earle. 1987. The Evolution of Human Societies. From Foraging to Agrarian States. Stanford CA.
- Johnson, G. A. 1972. 'A Test of the Utility of Central Place Theory in Archaeology'. In Ucko, Tringham, and Dimbleby (eds.). 769-786.
- Johnson, G. A. 1973. Local Exchange and Early State Development in Southwestern Iran (Anthropological Papers 51). Ann Arbor MI.
- Johnson, G. A. 1975. 'Locational Analysis and the Investigation of Uruk Local Exchange Systems'. In Sabloff and Lamberg-Karlowsky (eds.). 285-339.
- Johnson, G. A. 1977. 'Aspects of Regional Analysis in Archaeology'. In ARA 6: 479-508.
- Johnson, G. A. 1980a. 'Spatial Organization of Early Uruk Settlement Systems'. In Barrelet (ed.), 233-263.
- Johnson, G. A. 1980b. 'Rank-Size Convexity and System Integration: A View from Archaeology'. In Economic Geography 56: 234-247.
- Johnson, G. A. 1981. 'Monitoring Complex System Integration and Boundary Phenomena with Settlement Size Data'. In van der Leeuw (ed.). 144-188.
- Johnson, G. A. 1987. 'The Changing Organization of Uruk Administration on the Susiana Plain'. In F. Hole (ed.), The Archaeology of Western Iran. Settlement and Society from Prehistory to the Islamic Conquest. Washington DC. 107-139
- Johnson, G. A. 1988–89. 'Late Uruk in the Greater Mesopotamia: Expansion or Collapse?' In Origini 14: 595-613.
- Jones, F. 1855. 'Topography of Nineveh'. In Journal of the Royal Asiatic Society 15: 297-397.
- Jones, T. 1969. The Sumerian Problem. New York.
- Jordan, J. 1930. Erster vorläufiger Bericht über die... in Uruk-Watka unternommenen Ausgrabungen. Berlin.
- Jursa, M. 1995. Die Landwirtschaft in Sippar in neubabylonischer Zeit (AfO, Beiheft 25). Wien-Horn.
- Jursa, M. 2004. 'Grundzüge der Wirtschaftsformen Babyloniens im ersten Jahrtausend v. Chr.' In Rollinger and Ulf (eds.). 115-136.
- Jursa, M. 2007. 'The Babylonian Economy in the First Millennium BC'. In Leick (ed.) 2007. 224-235.
- Kafka, F. 1961. Parables and Paradoxes. Schocken edn. New York.
- Kaniewski, D. et al. 2010. 'Late Second-Early First Millennium BC Abrupt Climate Changes in Coastal Syria and Their Possible Significance for the History of the Eastern Mediterranean'. In Quaternary Research 74: 207-215.
- Kappel, W. 1974. 'Irrigation Development and Population Pressure'. In Downing and Gibson (eds.). 159-167.
- Katz, D. 1987. 'Gilgamesh and Akka: Was Uruk Ruled by Two Assemblies?'. In RA 81: 105-114. Keller, W. 1955. Und die Bibel hat doch Recht. Düsseldorf.
- Kemp, B. J. 1972a. 'Temple and Town in Ancient Egypt'. In Ucko, Tringham, and Dimbleby (eds.). 657-680.
- Kemp, B. J. 1972b. 'Fortified Towns in Nubia'. In Ucko, Tringham, and Dimbleby (eds.). 651-
- Kemp, B. J. 1977a. 'The Early Development of Towns in Egypt'. In An 51: 185-200.

- Kemp, B. J. 1977b. 'The City of el-Amarna as a Source for the Study of Urban Society in Ancient Egypt'. In *World Archaeology* 9: 123–139.
- Kemp, B. J. 1981. 'The Character of the South Suburb at Tell el-'Amarna'. In MDOG 113: 81–97.
- Kemp, B. J. 1983. 'Old Kingdom, Middle Kingdom and Second Intermediate Period'. In B. G. Trigger, B. J. Kemp, D. O'Connor, and A. B. Lloyd. Ancient Egypt. A Social History. Cambridge UK. 71–182
- Kemp, B. J. 1987. 'The Amarna Workmen's Village in Retrospect'. In JEA 73: 21-50.
- Kemp, B. J. 1989. Ancient Egypt. Anatomy of a Civilization. London-New York
- Kemp, B. J. 2000. 'Bricks and Metaphor'. In Cambridge Archaeological Journal 10: 335-346.
- Kempinski, A. 1978. The Rise of an Urban Culture. The Urbanization of Palestine in the Early Bronze Age. Jerusalem.
- Kempinski, A. and R. Reich (eds.). 1992. The Architecture of Ancient Israel. Jerusalem.
- Kennedy, D. 1997. 'Aerial Archaeology in Jordan: Air Photography and the Jordanian Southern Hawran'. In Studies in the History and Archaeology of Jordan 6: 77–86.
- Kennedy, D. 1998. 'Declassified Satellite Photographs and Archaeology in the Middle East: Case Studies from Turkey'. In *An* 72: 553–561.
- Kennedy, H. 1985. 'From Polis to Madina. Urban Change in Late Antique and Early Islamic Syria'. In P&P 106: 3–27.
- Kenoyer, J. A. 1998. Ancient Cities of the Indus Valley Civilization. Oxford-Karachi.
- Kenoyer, J. A. 2008. 'Indus Urbanism: New Perspectives on Its Origins and Character'. In Marcus and Sabloff (eds.). 183–208.
- Kenyon, K. 1939. 'Excavation Methods in Palestine'. In PEQ 1939: 29-40.
- Kenyon, K. 1952. Beginning in Archaeology. London.
- Kenyon, K. 1956. 'Jericho and its Setting in Near-Eastern History'. In An 30: 184-197.
- Kenyon, K. 1957a. Digging up Jericho. London.
- Kenyon, K. 1957b. 'Reply to Professor Braidwood'. In An 31: 82-84.
- Kenyon, K. 1960. Archaeology in the Holy Land. London (5th edition 1979).
- Kenyon, K. 1966. Amorites and Canaanites. Oxford.
- Kepinski-Lecomte, Ch. 1996. 'Spatial Occupation of a New Town Haradum'. In Veenhof (ed.). 191–196.
- Kepinski-Lecomte, Ch. (ed.). 1992. *Haradum, I. Une ville nouvelle sur le Moyen Euphrate* (Éditions Recherche sur les Civilisations, Mémoire 92). Paris.
- Ker Porter, R. 1821–22. Travels in Georgia, Persia, Armenia, Ancient Babylonia etc. I–II. London.
- Khoury, Ph. and J. Kostiner (eds.). 1990. *Tribes and State Formation in the Middle East*. Berkeley CA.
- Kirleis, W. and M. Herles. 2007. 'Climatic Change as a Reason for Assyro-Aramaean Conflicts? Pollen Evidence for Drought at the End of the 2<sup>nd</sup> Millennium BC'. In SAAB 16: 7–37.
- Kirsten, E. 1956. Die griechische Polis als historisch-geographisches Problem des Mittelmeersraumes. Bonn.
- Kleiss, W. 1976. 'Urartäische Architektur'. In H.-J. Kellner (ed.), *Urartu. Ein wiederentdeckter Rivale Assyriens*. München. 28–44.
- Kleiss, W. 1980. 'Zur Entwicklung der achaemenidischem Palastarchitektur'. In *Iranica Antiqua* 15: 199–211.
- Kleiss, W. 1988. 'Aspekte urartäischer Architektur'. In Iranica Antiqua 23: 181–215.
- Kleiss, W. 1989. Die Entwicklung von Palasten und palastartigen Wohnbauten in Iran. Wien 1989.

- Kleiss, W. (ed.). 1979-88. Bastam I-II (Teheraner Forschungen IV-V). Berlin.
- Klengel, H. 1975. 'Zur ökonomischen Funktion der hethitischen Tempel'. In SMEA 16: 181-200.
- Klengel, H. 1982. 'Die östliche Neustadt Babylons in Texten altbabylonischer Zeit'. In Dandamayev et al. (eds.). 169-173.
- Klengel, H. 1986. 'The Economy of the Hittite Household (É)'. In Oikumene 5: 23-32.
- Klengel, H. 1990. 'Hattuša: Residence and Cult-Centre'. In Aerts and Klengel (eds.). 45-50.
- Klengel, H. (ed.). 1971. Beiträge zur sozialen Stuktur des alten Vorderasien. Berlin.
- Klengel, H. and J. Renger (eds.) 1999. Landwirtschaft im Alten Orient (RAI 41 = BBVO 18). Berlin.
- Klengel-Brandt, E. 1982. Der Turm von Babylon. Leipzig.
- Klengel-Brandt, E. 1987. 'Zur Stadt im alten Mesopotamien'. In Das Altertum 33. 16-24.
- Klíma, J. 1978. 'La communauté rurale dans la Babylonie ancienne'. In ArOr 46: 23-35.
- Knapp, A. B. 1986. 'Production, Exchange, and Socio-Political Complexity on Bronze Age Cyprus'. In Oxford Journal of Archaeology 5: 35-60.
- Knapp, A. B. 1988. 'Copper Production and Eastern Mediterranean Trade: The Rise of Complex Society in Cyprus'. In Gledhill, Bender, and Larsen (eds.). 149-169.
- Knapp, A. B. 1996. 'Archaeology without Gravity: Postmodernism and the Past'. In Journal of Archaeological Method and Theory 3: 127–158.
- Knapp, A. B. (ed.). 1992. Archaeology, Annales, and Ethnohistory. Cambridge UK.
- Kohl, Ph. L. 1984. Central Asia. Palaeolithic Beginnings to the Iron Age. Paris.
- Kohl, Ph. L. 1987a. 'The Use and Abuse of World Systems Theory: The Case of the Pristine West Asian State'. In M. B. Schiffer (ed.), Advances in Archaeological Method and Theory Vol. 11. San Diego-New York. 1-36; republished in C. C. Lamberg-Karlowsky (ed.), Archaeological Thought in America. Cambridge UK 1989. 218-240.
- Kohl, Ph. L. 1987b. 'The Ancient Economy, Transferable Economies and the Bronze Age World-System: A View from the Northeastern Frontier of the Ancient Near East'. In Rowlands, Larsen, and Kristiansen (eds.). 13-24.
- Kohl, Ph. L. 2009. The Making of Bronze Age Eurasia. Cambridge UK.
- Kohl, Ph. L. and C. Fawcett. 1995. 'Archaeology in the Service of the State: Theoretical Considerations'. In id. and ead. (eds.). 3-18.
- Kohl, Ph. L. and C. Fawcett (eds.). 1995. Nationalism, Politics, and the Practice of Archaeology. Cambridge UK.
- Kohlmeyer, K. 1981. "Wovon man nicht sprechen kann". Grenzen der Interpretation von bei Oberflächenbegehungen gewonnenen archäologischen Informationen'. In MDOG 113: 53-79.
- Kohlmeyer, K. 1996. 'Houses in Habuba Kabira-South. Spatial Organization and Planning of Late Uruk Residential Architecture'. In Veenhof (ed.). 89-103.
- Kolb, F. 1984. Die Stadt im Altertum. München.
- Koldewey, R. 1901. 'Ausgrabungen in Tell Amran-ibn-Ali'. In MDOG 7: 15-25.
- Koldewey, R. 1911. Die Tempel von Babylon und Borsippa (WVDOG 15). Leipzig.
- Koldewey, R. 1913. Das wieder erstehende Babylon (SDOG 6). Leipzig (reprinted Zürich 1981).
- Koldewey, R. 1918a. Das Ischtar-Tor in Babylon (WVDOG 32). Leipzig.
- Koldewey, R. 1918b. 'Der babylonische Turm nach der Tontafel des Anubelschunu'. In MDOG 59: 1-38.
- Koldewey, R. 1925. Heitere und ernste Briefe aus einem deutschen Archäologenleben, herausgegeben von K. Schuchhardt. Berlin.

- Koldewey, R. 1931. *Die Königsburgen von Babylon. Teil 1: Die Südburg* (WVDOG 54/1). Leipzig.
- Koldewey, R. 1932. Die Königsburgen von Babylon. Teil 2: Die Hauptburg (WVDOG 54/2). Leipzig.
- Koliński, R. 2001: Mesopotamian dimātu of the Second Millennium BC (BAR Int. 1004).
  Oxford.
- Komoróczy, G. 1978. 'Landed Property in Ancient Mesopotamia and the Theory of the So-Called Asiatic Mode of Production'. In *Oikumene* 2: 9–26.
- Kostof, S. 1991. The City Shaped. Urban Patterns and Meanings through History. London–Boston.
- Kouchoukos, N. 2001. 'Satellite Images and Near-Eastern Landscapes'. In *Near-Eastern Archaeology* 64: 80–91.
- Kouchoukos, N. and T. Wilkinson. 2007. 'Landscape Archaeology in Mesopotamia: Past, Present, and Future'. In Stone (ed.). 1–18.
- Krader, L. 1975. The Asiatic Mode of Production. Assen.
- Kraeling, C. H. 1960. 'The Greek and Roman Orient'. In Kraeling and Adams (eds.). 190-205.
- Kraeling, C. H. and R. McC. Adams (eds.). 1960. City Invincible. A Symposium on Urbanization and Cultural Development in the Ancient Near East. Chicago.
- Krafeld-Daugherty, M. 1994. Wohnen im Alten Orient. Münster.
- Kramer, C. 1979a. 'Introduction'. In ead. (ed.). 1-20.
- Kramer, C. 1979b. 'An Archaeological View of a Contemporary Kurdish Village: Domestic Architecture, Household Size, and Wealth'. In *ead*. (ed.). 139–163.
- Kramer, C. 1980. 'Estimating Prehistoric Population: An Ethnoarchaeological Approach'. In Barrelet (ed.). 315–334.
- Kramer, C. 1982. Village Ethnoarchaeology. Rural Iran in Archaeological Perspective. New York-London.
- Kramer, C. 1983. 'Spatial Organization in Contemporary Southwest Asian Villages and Archaeological Sampling'. In Young, Smith, and Mortensen (eds.). 347–368.
- Kramer, C. 1994. 'Scale, Organization, and Function in Village and Town'. In Schwartz and Falconer (eds.). 207–212.
- Kramer, C. (ed.). 1979. Ethnoarchaeology. Implications of Ethnography for Archaeology. New York.
- Kramer, S. N. 1956. History Begins at Sumer. London (19812).
- Kratz, R. G. 1999. 'Babylon im Alten Testament'. In Renger (ed.). 477-490.
- Kraus, F. R. 1954. 'Le rôle des temples depuis la troisième dynastie d'Ur jusqu'à la première dynastie de Babylone'. In *CHM* 1(3): 518-545.
- Kraus, F. R. 1958. Ein Edikt des Königs Ammi-şaduqa von Babylon. Leiden.
- Kraus, F. R. 1979. 'Der 'Palast', Produzent und Unternehmer im Königreiche Babylon nach Hammurabi'. In Lipinski (ed.). 423–434.
- Kraus, F. R. 1984. Königliche Verfügungen in altbabylonischer Zeit. Leiden.
- Kraus, H.-J. 1956. Geschichte der historisch-kritischen Erforschung des Alten Testaments. Neukirchen
- Kuhn, E. 1878. Über die Entstehung der Städte der Alten: Komenverfassung und Synoikismos. Leipzig.
- Kühne, H. 2010. 'The Rural Hinterland of Dūr-Katlimmu'. In id. (ed.). 115-128.
- Kühne, H. 2011. 'Dūr-Katlimmu und die Steppe vor und nach 612 v. Chr.' In Renger (ed.).101–114.

Kühne, H. (ed.). 1991. Die Rezente Umwelt von Tall Schēh-hamad und Daten zur Umweltrekonstruktion der assyrischen Stadt Dür-Katlimmu, Berlin.

Kühne, H. (ed.). 2010. Dūr-Katlimmu 2008 and Beyond (Studia Chaburensia 1). Wiesbaden.

Kühne, H., R. Bernbeck, and K. Bartl (eds.). 1999. Fluchtpunkt Uruk. Archäologische Einheit aus methodischer Vielfalt. Schriften für H. J. Nissen. Rahden Westf.

Kuklick, B. 1996. Puritans in Babylon. The Ancient Near East and American Intellectual Life, 1880-1930. Princeton.

Kula, W. 1970. Teoria economica del sistema feudale. Proposta di un modello. Torino.

Lackenbacher, S. 1982. Le roi bâtisseur. Les récits de contruction assyriens des origines à Teglatphalasar III. Paris.

Lackenbacher, S. 1990. Le palais sans rival: le récit de contruction en Assyrie. Paris.

Lackenbacher, S. 2001. 'Fondations assyriennes'. In Azara et al. (eds.). 69-74.

Lafont, B. 1994. 'Fonder une ville'. In AA.VV. 20-23.

Lamberg-Karlovsky, C. C. 1976. 'The Economic World of Sumer'. In Schmandt and Besserat (ed.). 59-68.

Lamberg-Karlovsky, C. C. 1989. 'Mesopotamia, Central Asia and the Indus Valley: So the Kings were Killed'. In id. (ed.). 241-267.

Lamberg-Karlovsky, C. C. 1999. 'Household, Land Tenure, and Communications Systems in the 6<sup>th</sup>-4<sup>th</sup> Millennia of Greater Mesopotamia'. In Hudson and Levine (eds.). 167-202.

Lamberg-Karlovsky, C. C. (ed.). 1989. Archaeological Thought in America. Cambridge UK.

Lambert, W. G. 1960. Babylonian Wisdom Literature. Oxford.

Lapp, P. W. 1975. The Tale of the Tell. Archaeological Studies. Pittsburg PA.

Larsen, M. T. 1967. Old Assyrian Caravan Procedures. Istanbul.

Larsen, M. T. 1976. The Old Assyrian City State and Its Colonies. Copenhagen.

Larsen, M. T. 1987b. 'Orientalism and the Ancient Near East'. In Culture & History 2: 96-115.

Larsen, M. T. 1988. 'Introduction: Literacy and Social Complexity'. In Gledhill, Bender, and Larsen (eds.). 173-191.

Larsen, M. T. 1989. 'Orientalism and Near-Eastern Archaeology'. In D. Miller, M. Rowlands, and Ch. Tilly (eds.), Domination and Resistance (OWA 3). Boston. 229-239.

Larsen, M. T. 1992. 'Seeing Mesopotamia'. In Culture & History 11: 107-132.

Larsen, M. T. 1994. 'The Appropriation of the Near-Eastern Past: Contrasts and Contradictions'. In Scarcia Amoretti (ed.). 29-52.

Larsen, M. T. 1996. The Conquest of Assyria. Excavations in an Antique Land, 1840-1860. London-New York.

Larsen, M. T. 2009. 'Europe Confronts Assyrian Art'. In S. Yeomans (ed.), From Babylon to Baghdad. Ancient Iraq and the Modern West. Washington DC. 15-23.

Laslett, P. and R. Wall (eds.). 1972. Household and Family in Past Time. Cambridge UK.

Lawler, A. 2006. 'North versus South, Mesopotamian Style'. In Science 312: 1458-1463.

Layard, A. H. 1849. Nineveh and its Remains I-II. London.

Layard, A. H. 1849-53. The Monuments of Nineveh I-II. London.

Layard, A. H. 1851. Inscriptions in the Cuneiform Characters from Assyrian Monuments.

Layard, A. H. 1852. A Popular Account of Discoveries at Nineveh. London.

Layard, A. H. 1853. Discoveries in the Ruins of Nineveh and Babylon. London.

Lebeau, M. 1996. 'Les maisons de Melebiya. Approche fonctionnelle de l'habitat privé au IIIe millénaire av. notre ère en Haute Mésopotamie'. In Veenhof (ed.). 129-136.

Lebeau, M. (ed.). 1998. About Subartu. Studies Devoted to Upper Mesopotamia. 1: Landscape, Archaeology, Settlement (= Subartu 4/1). Turnhout.

- Leclant, J. 1956. 'Fouilles et travaux en Égypte, 1954-1955'. In Or 25: 251-252.
- Le Corbusier, 1925, Urbanisme, Paris,
- Leemans, W. F. 1946. 'Kidinnu: un symbole de droit divin babylonien'. In M. David *et al.* (eds.), *Symbolae ad jus et historiam antiquitatis pertinentes J. C. van Oven dedicatae*. Leiden. 36–61.
- Leemans, W. F. 1982. 'The Pattern of Settlement in the Babylonian Countryside'. In Dandamayev *et al.* (eds.). 245–248.
- Leemans, W. F. 1986. 'The Family in the Economic Life of the Old Babylonian Period'. In *Oikumene* 5: 15–22.
- Lefebvre, H. 1970a. La révolution urbaine. Paris.
- Lefebvre, H. 1972. Espace et politique. Le droit à la ville II. Paris.
- Lefebvre, H. 1974. La production de l'espace. Paris.
- Lefkowitz, M. R. and G. MacLean Rogers (eds.). 1996. Black Athena Revisited. Chapel Hill NC-London.
- Lehmann, G. 1999. 'Biblische Landeskunde oder kultur- und sozialgeographische Raumanalyse?' In Kühne, Bernbeck, and Bartl (eds.). 95–124.
- Lehmann-Haupt, C. F. 1907. Materialien zur älteren Geschichte Armeniens und Mesopotamiens. Berlin.
- Lehmann-Haupt, C. F. 1910-31. Armenien, einst und jetzt I-II/1-2. Berlin.
- Lehner, M. 2000. 'The Fractal House of Pharaoh: Ancient Egypt as a Complex Adaptive System, a Trial Formulation'. In T. A. Kohler and G. J. Gumerman (eds.), *Dynamics in Human and Primate Societies*. Oxford—New York.
- Leichty, E. 2011. The Royal Inscriptions of Esarhaddon, King of Assyria (680–669 BC). Winona Lake IN.
- Leick, G. 2001. Mesopotamia. The Invention of the City. London.
- Leick, G. (ed.). 2007. The Babylonian World. New York-London.
- Lemaire, A. 1981. 'Le pays d'Eden et le Bît-Adini. Aux origines d'un mythe'. In *Syria* 58: 313–330.
- Lenfant, P. 2004. Ctésias de Cnide. La Perse, l'Inde, autres fragments. Paris.
- Lenzen, H. 1941. Die Entwicklung der Zikurrat von ihren Anfängen bis zur Zeit der III. Dynastie von Ur (Ausgrabungen in Uruk-Warka 4). Leipzig.
- Lenzen, H. 1955. 'Bericht über die ... in Uruk-Warka unternommenen Ausgrabungen'. In *MDOG* 87: 26–68.
- Leontidou, L. 2009. 'Mediterranean Spatialities of Urbanism and Public Spaces as Agoras in European Cities'. In Diamantini and Martinotti. 107–125.
- Leriche, P. 2003. 'Le phénomène urbain dans l'Orient hellénistique'. In Reddé (ed.). 141–154.
- Levi, M. A. 1989. La città antica. Roma.
- Levine, L. D. 1986. 'Cities as Ideology: The Neo-Assyrian Centres of Ashur, Nimrud, and Nineveh'. In *BCSMS* 12: 1–7.
- Lévy, E. (ed.). 1987. Le système palatial en Orient, en Grèce et à Rome. Strasbourg.
- Levy, T. E. (ed.). 1998. The Archaeology of Society in the Holy Land. Second Edition. London-Washington DC.
- Lipinski, E. (ed.). 1979. State and Temple Economy in the Ancient Near East I-II (OLA 5-6). Leuven.
- Lipschits, O. and J. Blenkinsopp (eds.). *Judah and the Judeans in the Neo-Babylonian Period*. Winona Lake IN.
- Liverani, M. 1965. 'Il fuoruscitismo in Siria nella tarda età del bronzo'. In *Rivista Storica Italiana* 77: 315–336.

- Liverani, M. 1968. 'Variazioni climatiche e fluttuazioni demografiche nella storia siriana'. In OA 7: 77-89.
- Liverani, M. 1970. 'Per una considerazione storica del problema amorreo'. In OA 9: 5-27.
- Liverani, M. 1973. 'The Amorites'. In D. J. Wiseman (ed.), Peoples of Old Testament Times. Oxford. 100-133.
- Liverani, M. 1975. 'Communautés de village et palais royal dans la Syrie du Ilème millénaire'. In JESHO 18: 146-164.
- Liverani, M. 1976. 'Il modo di produzione'. In S. Moscati (ed.), L'alba della civiltà II. Torino.
- Liverani, M. 1979a. 'Economia delle fattorie palatine ugaritiche'. In Dialoghi di Archeologia NS 1-2: 57-72.
- Liverani, M. 1979b. 'Ras Shamra. II: Histoire'. In Supplément au Dictionnaire de la Bible IX. Paris 1979. 1295-1348.
- Liverani, M. 1982. 'Ville et campagne dans le royaume d'Ugarit. Essai d'analyse économique'. In Dandamayev et al. (eds.). 249-258.
- Liverani, M. 1984. 'Land Tenure and Inheritance in the Ancient Near East: The Interaction between "Palace" and "Family" Sectors'. In T. Khalidi (ed.), Land Tenure and Social Transformation in the Middle East. Beirut. 33-44.
- Liverani, M. 1986. L'origine delle città. Roma.
- Liverani, M. 1987a. 'La città vicino orientale antica'. In P. Rossi (ed.), Modelli di città. Torino. 57-85.
- Liverani, M. 1987b. 'The Collapse of the Near-Eastern Regional System at the End of the Bronze Age: The Case of Syria'. In Rowlands, Larsen, and Kristiansen (eds.). 66-73.
- Liverani, M. 1988. 'Il primo piano degli archivi di Ugarit'. In P. Xella (ed.), Caneanea Selecta. Festschrift für O. Loretz = Studi Epigrafici e Linguistici 5: 121–142.
- Liverani, M. 1988-89. 'La forma dei campi neo-sumerici'. In Origini 14: 289-327 = 'The Shape of the Neo-Sumerian Fields'. In Bulletin on Sumerian Agriculture 5. 1990. 147-186.
- Liverani, M. 1990. Prestige and Interest. International Relations in the Near East ca. 1600-1100 B.C. Padova.
- Liverani, M. 1993. 'Nelle pieghe del despotismo. Organismi rappresentativi nell'antico Oriente'. In SS 34: 7-33.
- Liverani, M. 1994. 'Voyage en Orient The Origins of Archaeological Surveying in the Near East'. In Scarcia Amoretti (ed.). 1-16.
- Liverani, M. 1995a. 'Ideologia delle nuove fondazioni urbane in età neo-assira'. In Mazzoni (ed.). 375-383.
- Liverani, M. 1995b. 'La fin d'Ougarit: Quand? Pourquoi? Comment?' In M. Yon, M. Sznycer, and P. Bordreuil (eds.), Le pays d'Ougarit autour de 1200 av. J.-C. Paris. 113-117.
- Liverani, M. 1995c. 'The Uruk Origins of Mesopotamian Administrative Conventions'. In Acta Sumerologica 17: 127-134.
- Liverani, M. 1996a. 'Reconstructing the Rural Landscape of the Ancient Near East'. In JESHO 39: 1-41.
- Liverani, M. 1996b. 2084: 'Ancient Propaganda and Historical Criticism'. In J. S. Cooper and G. M. Schwartz (eds.), The Study of the Ancient Near East in the Twenty-First Century. Winona Lake IN. 283-289.
- Liverani, M. 1996c. 'Agricoltura e irrigazione nell'Antico Oriente'. In V. Castronovo (ed.), Storia dell'economia mondiale I. Roma-Bari. 43-59.

- Liverani, M. 1997a. 'Ancient Near-Eastern Cities and Modern Ideologies'. In Wilhelm (ed.). 85–107.
- Liverani, M. 1997b. 'Lower Mesopotamian Fields: South vs. North'. In B. Pongratz-Leisten, H. Kühne, and P. Xella (eds.), *Ana šadi Labnani lu allik. Festschrift für W. Röllig*. Neukirchen. 219–227.
- Liverani, M. 1998a. Uruk, la prima città. Roma-Bari.
- Liverani, M. 1998b. 'Uruk: dalla rivoluzione urbana alla teoria dei sistemi'. In J. M. Córdoba Zoilo (ed.), *Homenaje al Prof. Dr. Horst Klengel* (= Isimu 1). Marid. 95–102.
- Liverani, M. 1998c. 'L'immagine dei Fenici nella storiografia occidentale'. In SS 39: 6-22.
- Liverani, M. 1999. 'The Role of the Village in Shaping the Ancient Near-Eastern Rural Landscape'. In Milano *et al.* (eds.). 37–47.
- Liverani, M. 2000. 'La scoperta del mattone. Muri e archivi nell'archeologia mesopotamica'. In VO 12: 1–17.
- Liverani, M. 2001. 'I Garamanti: ricerche in corso e nuove prospettive'. In SS 42: 769-783.
- Liverani, M. 2002. 'Stati etnici e città-stato'. In M. Molinos and A. Zifferero (eds.), *Primi popoli d'Europa*. Firenze. 33–48.
- Liverani, M. 2003. 'The Rise and Fall of Media'. In G. B. Lanfranchi (ed.), *Continuity of Empire* (?). Assyria, Media, Persia. Padova. 1–12.
- Liverani, M. 2005a. 'Imperialism'. In Pollock and Bernbeck (eds.). 223-243.
- Liverani, M. 2005b. 'The Near East: The Bronze Age'. In Morris and Manning (eds.). 47-57.
- Liverani, M. 2006. 'Imperialismo, colonizzazione e progresso tecnico: il caso del Sahara libico in età romana'. In *SS* 47: 1003–1057.
- Liverani, M. 2007. 'Cronologia e periodizzazione dei Garamanti. Acquisizioni e prospettive'. In *Athenaeum* 95: 633–662.
- Liverani, M. 2008a. 'La madre di tutte le catastrofi'. In SS 49: 277-292.
- Liverani, M. 2008b. 'A che serve la storia'. In Mundus 1: 48-52.
- Liverani, M. 2009. 'Exploring Collapse'. In SA 15: 15-22.
- Liverani, M. 2011a. 'From City-State to Empire, the Case of Assyria'. In J. P. Arnason and K. A. Raaflaub (eds.), *The Roman Empire in Context. Historical and Comparative Perspectives*. Chichester UK. 251–269.
- Liverani, M. 2011b. 'Accumulazione e circolazione. Ideali di comportamento economico nell'antico Oriente'. In E. Ascalone and L. Peyronel (eds.), *Studi italiani di metrologia ed economia del Vicino Oriente antico dedicati a N. Parise* (Studia Asiana 7). Roma. 93–103.
- Liverani, M. 2011c. 'The Pillared Hall of Neo-Hittite Melid: A New Link in the Development of an Architectural Type'. In C. Lippolis and S. de Martino (eds.), *Un impaziente desiderio di scorrere il mondo. Studi in onore di A. Invernizzi* (Mesopotamia Monografie 14). Firenze. 91–111.
- Liverani, M. 2012a. 'La diffusione dei popoli semitici. A un secolo dalla teoria di Leone Caetani'. In L. Caetani, *Studi di storia orientale*. Roma. xv-xlviii.
- Liverani, M. 2012b. 'From Melid through Bastam to Megiddo: Stables and Horses in Iron Age II'. In *Studies presented to M. Fales*. Wiesbaden. 443–458.
- Liverani, M. 2013. 'The Palace and the Assembly. Power and Citizenship in the Early Cities'. In P. Clark (ed.), *The Oxford Handbook of Cities in History*. Oxford.
- Liverani, M. 2014. 'Orienti e Occidenti'. In *Studi in memoria di Santo Mazzarino'* Atti del Convegno. Catania.
- Liverani, M. (ed.). 1993. Akkad, the First World Empire. Padova.
- Liverani, M. (ed.). 1995. Neo-Assyrian Geography (Quaderni di Geografia Storica 5). Roma.

- Lloyd, S. 1945. 'Priorities for Post-War Excavation'. In Sumer 1(2): 3-14.
- Lloyd, S. 1947. Foundations in the Dust. A Story of Mesopotamian Exploration. Oxford (I quote from the paperback edition. Harmondsworth 1955).
- Lloyd, S. 1963. Mounds of the Ancient Near East. Edinburgh.
- London, G. A. 1992. 'Tells: City Center or Home?' In Eretz-Israel 23: 71\*-79\*.
- Long, B. O. 1968. The Problem of Etiological Narrative in the Old Testament. Berlin.
- Long, B. O. 1997. Planting and Reaping Albright. Politics, Ideology, and Interpreting the Bible. University Park PA.
- Lönnqvist, M. 2008. 'Kathleen M. Kenyon 1906-1978. A Hundred Years after Her Birth. The Formative Years of a Female Archaeologist: From Socio-Politics to the Stratigraphical Method and the Radiocarbon Revolution in Archaeology'. In Córdoba et al. (eds.). 379-
- Loud, G. 1936. Khorsabad. Part I: Excavations in the Palace and at a City Gate (OIP 38).
- Loud, G. and C. B. Altman. 1938. Khorsabad. Part II: The Citadel and the Town (OIP 40). Chicago.
- Löw, U. 2003a. 'Die Plünderung der kulturellen Einrichtungen im Irak unter besonderer Berücksichtigung des Nationalmuseums in Bagdad'. In MDOG 135: 13-56.
- Löw, U. 2003b. 'Raubgrabungen im Irak'. In MDOG 135: 57-80.
- Lowenthal, D. 1985. The Past is a Foreign Country. Cambridge UK.
- Lubbock, J. 1865. Pre-Historic Times, as Illustrated by Ancient Remains and the Manners and Customs of Modern Savages. London.
- Lubbock, J. 1870. The Origins of Civilization and the Primitive Condition of Man. London.
- Lumsden, S. 2000. 'On Sennacherib's Nineveh'. In Matthiae et al. (eds.). 815-834.
- Lumsden, S. 2004. 'The Production of Space at Nineveh'. In Iraq 66: 187-197.
- Lundström, S. 2008. 'From Six to Seven Royal Tombs. The Documentation of the Deutsche Orient-Gesellschaft Excavation at Assur (1903-1914). Possibility and Limits of Its Reexamination'. In Córdoba et al. (eds.). 445-463.
- Lupton, A. 1996. Stability and Change. Socio-Political Development in North Mesopotamia and South-East Anatolia 4000-2700 B.C. (BAR Int. 627). Oxford.
- Lyon, J. D. 2000. 'Middle Assyrian Expansion and Settlement Development in the Syrian Jazira: The View from the Balikh Valley'. In Jas (ed.). 89-126.
- Lyonnet, B. 1998. 'Le peuplement de la Djéziré occidentale au début du 3e millénaire, villes circulaires et pastoralisme: questions et hypothèses'. In Lebeau (ed.). 179-193.
- Lyonnet, B. 2009. 'Who Lived in the Third Millennium Round Cities of Northern Syria?'. In J. Szuchman (ed.), Nomads, Tribes, and the State in the Ancient Near East (Oriental Institute Seminars 5). Chicago. 179-200.
- Machule, D. 1990. 'Tall Mumbāqa. Die spätbronzezeitliche Stadtanlage und die Häuser'. In P. Matthiae, M. van Loon, and H. Weiss (eds.), Resurrecting the Past. A Joint Tribute to A. Bounni (PIHANS 67). Leiden. 199-214.
- Machule, D. 1997. 'Wandel, Kontinuität und Bruch: Die historische Dimension der orientalischen Stadt in Spiegel aktueller Stadtforschung'. In Wilhelm (ed.). 45-66.
- Machule, D. 1998. 'Ein neuer Forschungansatz der Vorderasiatischen Archäologie?' In OLZ 93: 413-38.
- MacKenzie, J. M. 1995. Orientalism: History, Theory and the Arts. Manchester-New York.
- Mackay, E. J. H. 1938. Further Excavations at Mohenjo-Daro I-II. New Delhi.
- Maekawa, L. 1973-74. 'The Development of the é-MÍ in Lagash during Early Dynastic III'. In Mesopotamia 8-9: 77-144.

- Maekawa, L. 1999. 'The Temples and the Temple Personnel of Ur III Girsu-Lagash'. In Watanabe (ed.). 61–102.
- Magness-Gardiner, B. 1994. 'Urban-Rural Relations in Bronze Age Syria: Evidence from Alalah Level VII Palace Archives'. In Schwartz and Falconer (eds.). 37–47.
- Maine, H. S. 1861. Ancient Law. London.
- Maine, H. S. 1871. Village Communities in the East and West. London.
- Makkay, J. 1983. 'The Origins of the Temple Economy as Seen in the Light of Prehistoric Evidence'. In *Iraq* 45 (= RAI 29): 1–6.
- Malamat, A. 1963. 'Kingship and Council in Israel and Sumer: a Parallel'. In *JNES* 22: 247–253.
- Mallowan, M. E. L. 1936. 'Excavations at Tall Chagar Bazar'. In Iraq 3: 1-86.
- Mallowan, M. E. L. 1946. 'Excavations in the Balih Valley'. In Iraq 8: 111-159.
- Mallowan, M. E. L. 1960. 'Memories of Ur'. In Iraq 22: 1-19.
- Mallowan, M. E. L. 1964. 'Noah's Flood Reconsidered'. In Iraq 26: 62-82.
- Mallowan, M. E. L. 1966. Nimrud and Its Remains I-III. London.
- Malville, J. M. and L. M. Gujral (eds.). 2000. Ancient Cities, Sacred Skies: Cosmic Geometries and City Planning in Ancient India. New Delhi.
- Manzanilla, L. 1987. 'The Beginnings of Urban Society and the Formation of the State: Temple and Palace as Basic Institutions'. In ead. (ed.). 271–286.
- Manzanilla, L. 1997. 'Early Urban Societies. Challenges and Perspectives'. In ead. (ed.). 3-39.
- Manzanilla, L. (ed.). 1987. Studies in the Neolithic and Urban Revolutions: The V. Gordon Childe Colloquium Mexico, 1986 (BAR Int. 349). Oxford.
- Manzanilla, L. (ed.). 1997. Emergence and Change in Early Urban Societies. New York—London.
- Marchand, S. L. 1984. Imperialismus und Gleichgewicht: Deutschland, England und die orientalische Frage, 1871–1914. Munich.
- Marchand, S. L. 1996. Down from Olympus. Archaeology and Philellenism in Germany, 1750–1970. Princeton.
- Marcus, A. 1989. The Middle East on the Eve of Modernity: Aleppo in the Eighteenth Century. New York.
- Marcus, J. 1998. 'The Peaks and Valleys of Ancient States'. In Feinman and Marcus (eds.). 59–94.
- Marcus, J. and J. A. Sabloff. 2008a. 'Introduction'. In id. and id. (eds.). 3-26.
- Marcus, J. and J. A. Sabloff. 2008b. 'Cities and Urbanism: Central Themes and Future Directions'. In *id.* and *id.* (eds.). 323–336.
- Marcus, J. and J. A. Sabloff (eds.). 2008. The Ancient City. New Perspectives on Urbanism in the Old and New World. Santa Fé NM.
- Margueron, J.-C. 1974. 'Les palais de l'âge du bronze en Mésopotamie. Bilan de nos connaissances et problèmes'. In Garelli (ed.). 11–26.
- Margueron, J.-C. 1977. 'Un exemple d'urbanisme volontaire à l'époque du Bronze Récent en Syrie'. In Ktèma 2: 33-48.
- Margueron, J.-C. 1980. 'Remarques sur l'organisation de l'espace architectural en Mésopotamie'. In Barrelet (ed.). 157–169.
- Margueron, J.-C. 1982. Recherches sur les palais mésopotamiens de l'âge du Bronze I-II (BAH 107). Paris.
- Margueron, J.-C. 1984. 'Prolégomènes à une étude portant sur l'organisation de l'espace sacré en Orient'. In G. Roux (ed.), *Temples et sanctuaires*. Lyon. 23–36.

Margueron, J.-C. 1985. 'Y-a-t-il un tracé régulateur dans les palais mésopotamiens du Ile millénaire?' In Brommelaer (ed.), 29-45.

Margueron, J.-C. 1986a. 'Quelques principes méthodologiques pour une approche analytique de l'architetcture de l'Orient antique'. In CMAO 1: 261-285.

Margueron, J.-C. 1986b. 'L'apparition du palais au Proche-Orient'. In Lévy (ed.). 9-38.

Margueron, J.-C. 1987. 'Etat présent des recherches sur l'urbanisme de Mari'. In MARI 5: 483-498.

Margueron, J.-C. 1988. 'Mari et Emar: deux villes de la vallée de l'Euphrate à l'âge du Bronze'. In Huot (ed.). 37-60.

Margueron, J.-C. 1989. 'Les villages du Proche-Orient'. In Ktema 11: 95-158.

Margueron, J.-C. 1993. La Mesopotamia. Roma-Bari.

Margueron, J.-C. 1994. 'Fondations et refondations à l'âge du Bronze Récent au Proche Orient'. In Mazzoni (ed.). 3-28.

Margueron, J.-C. 1995a. 'Le palais de Sargon: réflections préliminaires à une étude architecturale'. In Caubet (ed.). 181-212.

Margueron, J.-C. 1995b. 'Le palais royal d'Ougarit. Premiers résultats d'une analyse systématique'. In Yon et al. (eds.). 183-202.

Margueron, J.-C. 1997. 'Les maisons syriennes du néolithique au premier millénaire. Quelques remarques sur la documentation et son interprétation'. In Castel et al. (eds.).

Margueron, J.-C. 1998. 'Aménagement du territoire et organisation de l'espace en Syrie du nord à l'âge du bronze: limites et possibilités d'une recherche'. In Fortin and Aurenche (eds.). 167-178.

Margueron, J.-C. 2000. 'Babylone: la première mégalopole?' In Nicolet (ed.). 452-481.

Margueron, J.-C. 2004. Mari. Métropole de l'Euphrate au IIIe et au début du IIe millénaire av. J.-C. Paris.

Margueron, J.-C. 2005. 'Notes d'archéologie et d'architecture orientales. 12. Du bitanu, de l'étage et des salles hypostyles dans les palais néo-assyriens'. In Syria 82: 93-138.

Marramao, G. 2003. Passaggio a Occidente. Torino.

Marshall, J. H. 1931. Mohenjo-daro and the Indus Civilization I-III. London.

Martin, H. P. 1988. Fara. Birmingham.

Martin, M. III and D. C. Snell. 2005. 'Democracy and Freedom'. In Snell (ed.). 397-407.

Martinotti, G. 1993. Metropoli. La nuova morfologia sociale della città. Bologna.

Martinotti, G. 2009, 'Urban Science Forward Look, An Introduction', In Diamantini and Martinotti. 23-63.

Martirosjan, A. A. 1974. Argištichinili. Jerewan (in Russian).

Marx, K. 1857-58. Formen die der kapitalistischen Produktion vorhergehen (1857-58). In Werke. Band 42. Berlin 1983.

Marx, K. 1867. Das Kapital I/1. In Werke. Band 23. Berlin 1968.

Marzahn, J. 1994. 'Zum sogenannten Stadtschloß-Grundriß von Babylon'. In AoF 21: 41-49.

Marzahn, J. 2002. 'Oikos und Tributwirtschaft - Wirtschaftsmodelle des Alten Orients in der Kritik', in Hausleiter et al. (eds.), 267-271.

Marzahn, J. 2008a. 'Von den Grabung zum Museum - Babylon wird sichtbar'. In id. and Schauerte (eds.). 91–98.

Marzahn, J. 2008b. 'Die deutschen Ausgrabungen in Babylon'. In id. and Schauerte (eds.). 67-78.

Marzahn, J. and B. Salje (eds.). 2003. Wiedererstehendes Assur. 100 Jahre deutsche Ausgrabungen in Assyrien. Mainz.

- Marzahn, J. and G. Schauerte (eds.). 2008. Babylon. Wahrheit, Ausstellung des Vorderasiatischen Museums, Katalog. Berlin.
- Matouš, L. 1969. 'Die Dorfgemeinde im alten Mesopotamien'. In Das Altertum 15: 3-9.
- Matthes, O. 1997. 'Zur Vorgeschichte der Deutschen Ausgrabungen in Assur 1898–1903/05'. In MDOG 129: 9–27.
- Matthes, O. 1998. 'Der Aufruf zur Gründung der Deutschen Orient-Gesellschaft vom November 1897'. In MDOG 130: 9–16.
- Matthes, O. 1999. 'Zur Vorgeschichte der deutschen Ausgrabungen in Babylon'. In Renger (ed.). 33–45.
- Matthes, O. 2011. 'Babylon-Assur: Assur-Babylon Zum Briefwechsel zwischen R. Koldewey und W. Andrae'. In Renger (ed.). 15-32.
- Matthews, R. 1987. 'Abu Salabikh, Surface Clearance: Main Mound'. In Iraq 49: 91-119.
- Matthews, R. 2003. The Archaeology of Mesopotamia. Theories and Approaches. London.
- Matthiae, P. 1977. Ebla, un impero ritrovato. Torino (new updated edns. 1989<sup>2</sup>, 1995<sup>3</sup>).
- Matthiae, P. 1991. 'Architettura e urbanistica di Ebla paleosiriana'. In PdP 46: 304-371.
- Matthiae, P. 1993. 'On this Side of the Euphrates. A Note on the Urban Origins in Inner Syria'. In Frangipane *et al.* (eds.). 523–530.
- Matthiae, P. 1994a. Il sovrano e l'opera. Arte e potere nella Mesopotamia antica. Roma-Bari.
- Matthiae, P. 1997. 'Typologies and Functions in the Palaces and Houses of Middle Bronze II Ebla'. In Castel *et al.* (eds.). 125–134.
- Matthiae, P. 1998. Ninive. Milano.
- Matthiae, P. 2008. Gli Archivi Reali di Ebla. La scoperta, i testi, il significato. Milano.
- Matthiae, P. 2009. 'Il tempio di Gerusalemme: la suggestione infinita di una rovina scomparsa'. In Barbanera (ed.). 416–430.
- Matthiae, P., A. Enea, L. Peyronel, and F. Pinnock (eds.). 2000. Proceedings of the First International Congress of the Archaeology of the Ancient Near East. Roma.
- Maul, S. 1997. 'Die altorientalische Hauptstadt'. In Wilhelm (ed.). 109-124.
- Mauss, M. 1922–23. 'Essai sur le don'. In *Année Sociologique* II/1, republished in *id.*, *Sociologie et anthropologie*. Paris 1950. 145–279.
- Mauss, M. 1998. I fondamenti di un'antropologia storica. Torino.
- May, G. G. and R. M. Engberg. 1935. Material Remains of the Megiddo Cult (OIP 32). Chicago.
- Mazower, M. 2002. 'Travellers and the Oriental city, c. 1840–1920'. In *Transactions of the Royal Historical Society* 12: 59–111.
- Mazzoni, S. 1997. 'The Gate and the City: Change and Continuity in Syro-Hittite Urban Ideology'. In Wilhelm (ed.). 307–338.
- Mazzoni, S. 2006. 'Réflexion sur l'espace architectural de la période syro-hittite'. In P. Butterlin, M. Lebeau, and P. Béatrice (eds.), Les espaces syro-mésopotamiens.

  Dimensions de l'expérience humaine au Proche-Orient ancien. Volume d'hommage offert à J.-C. Margueron (= Subartu 17). Turnhout. 231–251.
- Mazzoni, S. (ed.). 1994. Nuove fondazioni nel Vicino Oriente antico: realtà e ideologia. Pisa.
- McCall, H. 1998. 'Rediscovery and Aftermath'. In S. Dalley (ed.). 183-213.
- McClellan, Th. L. 1984. 'Town Planning at Tell en-Nasbeh'. In ZDPV 100: 53-69.
- McClellan, Th. L. 1997. 'Houses and Households in North Syria'. In Castel et al. (eds.). 29-59.
- McClellan, Th. L. 2006. 'Early Fortifications: The Missing Walls of Jericho'. In *BaM* 37: 593–610.
- McClellan, Th. L., R. Graysin, and C. Ogleby. 2000. 'Bronze Age Water Harvesting in North Syria'. In Rouault and Wäfler (eds.). 137–155.

- McCormick, C. M. 2002. Palace and Temple. A Study of Architectural and Verbal Icons (Beihefte zur ZAW 313). Berlin-New York.
- McCorriston, J. 1997. 'The Fiber Revolution: Textile Extensification, Alienation, and Social Stratification in Ancient Mesopotamia'. In CA 38: 517-549.
- McCown, D. E., R. C. Haines, and D. P. Hansen. 1967. Nippur, I. Temple of Enlil, Scribal Quarter, and Sounding (OIP 78). Chicago.
- McCown, D. E., R. C. Haines, and R. D. Biggs. 1978. Nippur. II. The North Temple and Sounding E (OIP 97). Chicago.
- McGuire, R. 1983. 'Breaking down Cultural Complexity: Inequality and Heterogeneity'. In Advances in Archaeological Method and Theory 6: 91-142.
- McGuire, R. 2006. 'Marx, Childe, and Trigger'. In R. F. Williamson and M. S. Bisson (eds.), The Archaeology of Bruce Trigger. Montreal-Kingston.
- McIntosh, S. and R. J. McIntosh. 1993. 'Cities without Citadel: Understanding Urban Origins along the Middle Niger'. In Shaw et al. (eds.). 622-641.
- McKenzie, J. L. 1959. 'The Elders in the Old Testament'. In Biblica 40: 522-540.
- McMahon, A. (ed.). 2006. Nippur. V. The Early Dynastic to Akkadian Transition (OIP 129). Chicago.
- McNairn, B. 1980. The Method and Theory of V. Gordon Childe. Edinburgh.
- McNeill, W. H. 1963. The Rise of the West. A History of the Human Community. Chicago.
- Meadows, D. H., D. L. Meadows, J. Randers, and W. W. Behrens. 1972. The Limits to Growth. New York.
- Meadows, D. H. and D. L. Meadows (eds.). 1973. Toward Global Equilibrium. Cambridge MA.
- Meggars, B. (ed.). 1959. Evolution and Anthropology: A Centennial Appraisal. Washington DC.
- Meijer, D. J. W. 2004. 'A Scribal Quarter?' In Dercksen (ed.). 387-393.
- Melekechvili, G. A. 1969. 'Esclavage, féodalisme et mode de production asiatique'. In Garaudy (ed.). 357-278.
- Mellaart, J. 1967. Çatal Hüyük. A Neolithic Town in Anatolia. London.
- Meltzer, D., D. Fowler, and J. Sabloff (eds.). 1986. American Archaeology Past and Future. Washington-London.
- Melucco Vaccaro, A. 1989. Archeologia e restauro. Milano.
- Menant, J. 1888. Ninive et Babylone. Paris.
- Meskell, L. 1998. 'Archaeology Matters'. In id. (ed.). 1–12.
- Meskell, L. (ed.). 1998. Archaeology under Fire. Nationalism, Politics and Heritage in the Eastern Mediterranean and the Middle East. London-New York.
- Mesnil du Buisson, Comte du. 1927. Les ruines d'el-Mishrifé. Première campagne de fouilles à Qatna. Paris.
- Meyer, E. 1907. Geschichte des Altertums I/1. Stuttgart-Berlin (2nd edn.).
- Meyer, E. 1923. 'Fünfundzwanzig Jahre Deutsche Orient-Gesellschaft'. In MDOG 62: 1-25.
- Meyer, J.-W. 1996. 'Offene und geschlossene Siedlungen. Ein Beitrag zur
  - Siedlungsgeschichte und historische Topographie in Nordsyrien während der 3. und 2. Jts. v. Chr.'. In AoF 23: 132-170.
- Meyer, J.-W. 2006. 'Zur Frage der Urbanisierung von Tell Chuera'. In Butterlin et al. (eds.). 179-189.
- Micale, M. G. 2005. 'Immagini d'architettura. Struttura e forma dell'architettura mesopotamica attraverso le ricostruzioni moderne'. In CMAO 10: 121-166.
- Micale, M. G. 2007a. 'Riflessi d'architettura mesopotamica nei disegni e nelle ricostruzioni architettoniche di Assur e Babilonia: tra realtà archeologica e mito dell'architettura monumentale'. In Isimu 10: 117-140.

- Micale, M. G. 2007b. 'From Drawing to Vision: The Use of Mesopotamian Architecture through the Construction of Its Image'. In W. Börner and S. Uhrliz (eds.), *Cultural Heritage and New Technologies* (Archaeology and Computer, Workshop 11). Wien. 1–16.
- Micale, M. G. 2008a. 'Making Archaeology, Imagining Architecture: Patterns of Production and Diffusion of Two And Three-Dimensional Architectural Drawings in Near-Eastern Archaeology'. In W. Börner and S. Uhrliz (eds.), *Cultural Heritage and New Technologies* (Archaeology and Computer, Workshop 12). Wien. 1–19.
- Micale, M. G. 2008b. 'European Images of the Ancient Near East at the Beginnings of the Twentieth Century'. In M. Schlanger and J. Nordbladh (eds.), *Archives, Ancestors, Practices. Archaeology in the Light of Its History.* New York-Oxford. 191-203.
- Micale, M. G. 2008c. 'The Course of the Images. Remarks on the Architectural Reconstructions in the 19<sup>th</sup> and 20<sup>th</sup> Centuries: The Case of the Ziqqurrat'. In Córdoba *et al.* (eds.). II. 571–585.
- Micale, M. G. 2009. 'Quando il potere non ha futuro. Forme di ricerca e uso del passato presso le corti mesopotamiche'. In Barbanera (ed.). 380–399.
- Micale, M. G. 2010. 'Designing Architecture, Building Identities. The Discovery and Use of Mesopotamian Features in Modern Architecture between Orientalism and the Definition of Contemporary Identities'. In P. Matthiae *et al.* (eds.), *Proceedings of the 6<sup>th</sup> ICAANE* I. Wiesbaden. 93–112.
- Micale, M. G. 2011. Immagini dell'architettura nel rilievo storico neoassiro. La forma, i componenti e la funzione della rappresentazione architettonica tra percezione e riproduzione dello spazio (= CMAO 14). Roma.
- Micale, M. G. and D. Nadali. 2008. 'Layer by Layer... Of Digging and Drawing: the Genealogy of an Idea'. In Biggs, Myers, and Roth (eds.). 405–414.
- Michalowski, P. 1987. 'Charisma and Control: On Continuity and Change in Early Mesopotamian Bureaucratic Systems'. In Gibson and Biggs (eds.). 45–58.
- Miglus, P. A. 1982. 'Die Stadttore in Assur das Problem der Identifizierung'. In ZA 72: 266–279.
- Miglus, P. A. 1989. 'Untersuchungen zum alten Palast in Assur'. In MDOG 121: 93-133.
- Miglus, P. A. 1994. 'Das neuassyrische und das neubabylonische Wohnhaus. Die Frage nach dem Hof'. In ZA 84: 262–281.
- Miglus, P. A. 1996a. Das Wohngebiet von Assur I-II (WVDOG 93). Berlin.
- Miglus, P. A. 1996b. 'Die räumliche Organisation des altbabylonischen Hofhauses'. In Veenhof (ed.). 211–220.
- Miglus, P. A. 1997. 'Eine assyrische Stadt im Wandel: Einblicke in die Wohnarchitektur von Assur'. In Waetzoldt and Hauptmann (eds.). 317–324.
- Miglus, P. A. 1999. Städtische Wohnarchitektur in Babylonien und Assyrien (BaF 22). Mainz.
- Miglus, P. A. 2000. 'Altmesopotamische Stadtplanung zwischen Theorie und Wirklichkeit'. In ZA 90: 123–138.
- Miglus, P. A. et al. 2003-05. 'Palast. B. Archäologisch'. In RlA X: 233-276.
- Milano, L., S. De Martino, F. M. Fales, and G. B. Lanfranchi (eds.). 1999. *Landscapes. Territories, Frontiers and Horizons in the Ancient Near East* (RAI 44) I: Invited Lectures. Padova.
- Milano, L., S. De Martino, F. M. Fales, and G. B. Lanfranchi (eds.). 2000. *Landscapes. Territories, Frontiers and Horizons in the Ancient Near East* (RAI 44) II-III. Padova.
- Millar, F. 2006. 'Caravan Cities: The Roman Near East and Long-Distance Trade by Land'. In H. M. Cotton and G. M. Rogers (eds.), *The Greek World, the Jews, and the East*. Chapell Hill NC. 275–299.

- Millard, A. T. 1987. 'Cartography in the Ancient Near East'. In J. B. Harley and D. Woodward (eds.), The History of Cartography, Vol. 1: Cartography in Prehistoric, Ancient and Medieval Europe and the Mediterranean. Chicago-London. 107-116.
- Minkowski, H. 1983. 'Turris Babel. Mille anni di rappresentazioni'. In Rassegna 16: 8-88. Mitchell, T. 1988. Colonising Egypt. Berkeley-Los Angeles-Oxford.
- Mitchell, W. P. 1973. 'The Hydraulic Hypothesis: A Reappraisal'. In CA 14: 532-534.
- Modella, M., R. Osborne, and J. Shaw (eds.). 2009. The Archaeology of Water = WA 41/1.
- Mohl, J. 1845. Lettres de M. Botta sur ses découvertes à Khorsabad, près de Ninive. Paris (English translation M. Botta's Letters on the Discoveries at Nineveh. London 1850).
- Momigliano, A. 1970. 'La città antica di Fustel de Coulanges'. In Rivista Storica Italiana 72: 81–98 (also in Quinto contributo alla storia degli studi classici e del mondo antico. Roma 1975. 159-178).
- Momigliano, A. 1977. 'Max Weber and Eduard Meyer: Apropos of City and Country in Antiquity'. In Sesto contributo alla storia degli studi classici e del mondo antico. Roma 1980. 285-293.
- Moorey, P. R. S. 1964. 'The "Plano-Convex Building" at Kish and Early Mesopotamian Palaces'. In Iraq 26: 83-98.
- Moorey, P. R. S. 1976. 'The Late Prehistoric Administrative Building at Jamdat Nasr'. In Iraq 38: 95-106.
- Moorey, P. R. S. 1991. A Century of Biblical Archaeology. Louisville.
- Mora, C. 1977. 'Saggio per uno studio sulla popolazione urbana nell'Anatolia antica. I. Hattusa'. In SMEA 18: 227-241.
- Morgan, L. H. 1877. Ancient Society, or Researches in the Lines of Human Progress from Savagery, through Barbarism, to Civilization. New York.
- Morgan, C. and J. J. Coulton. 1997. 'The Polis as a Physical Entity'. In Hansen (ed.). 87-144.
- Mori, L. 2003. Reconstructing the Emar Landscape (Quaderni di Geografia Storica 6). Roma.
- Mori, L. 2007. 'Land and Land Use. The Middle Euphrates Valley'. In Leick (ed.). 39-53.
- Morris, A. E. J. 1994<sup>3</sup>. History of Urban Form: Before the Industrial Revolutions. New York.
- Morris, I. 1997. 'An Archaeology of Equalities? The Greek City-States'. In Nichols and Charlton (eds.). 91-105.
- Morris, I. 2005. 'Archaeology, Standard of Living, and Greek Economic History'. In Morris and Manning (eds.). 91–126.
- Morris, I. and Manning, J. G. 2005. 'Introduction'. In id. and id. (eds.). 1-44.
- Morris, I. and Manning, J. G. (eds.). 2005. The Ancient Economy. Evidence and Models. Stanford CA.
- Muller, B. 2000. 'Images d'architecture en deux et en trois dimensions au Proche-Orient ancien'. In Matthiae et al. (eds.). 1137-1170.
- Muller, B. 2002. Les maquettes architecturales du Proche-Orient ancien I-II (BAH 160). Paris.
- Müller, G. G. W. 1994. Studien zur Siedlungsgeographie und Bevölkerung des mittleren Osttigrisgebietes (Heidelberger Studien zum Alten Orient 7). Heidelberg.
- Müller, M. 1982. 'Gold, Silber und Blei als Wertmesser in Mesopotamien während der zweiten Hälfte des 2. Jahrtausends v.u. Z.'. In Dandamayev et al. (eds.). 269-277.
- Müller-Karpe, A. 1996. 'Untersuchungen in Kuşaklı 1995'. In MDOG 128: 69-94.
- Müller-Karpe, A. 2001. 'Untersuchungen in Kuşaklı 2000'. In MDOG 133: 225-249.
- Mumford, L. 1938. The Culture of Cities. San Diego-New York-London.
- Mumford, L. 1945. City Development: Studies in Disintegration and Renewal. New York.
- Mumford, L. 1960a. 'University City'. In Kraeling and Adams (eds.). 5-19.
- Mumford, L. 1960b. 'Concluding Address'. In Kraeling and Adams (eds.). 224-242.

- Mumford, L. 1961. The City in History. New York.
- Musil, A. 1907-08. Arabia Petraea I-III. Wien.
- Musil, A. 1926. The Northern Hegaz. New York.
- Musil, A. 1927a. The Middle Euphrates. New York.
- Musil, A. 1927b. Arabia Deserta. New York.
- Musil, A. 1928. Northern Nejd. A Topographical Itinerary. New York.
- Musson, C. R. and R. P. Whimster. 1992. 'Air Photography and the Study of Ancient Landscapes in Britain'. In Bernardi (ed.). 443–488.
- Musti, D. 2008. Lo scudo di Achille. Idee e forme di città nel mondo antico. Roma-Bari.
- Nadali, D. 2006. Percezione dello spazio e scansione del tempo. Studio della composizione narrativa del rilievo assiro di VII secolo a.C. (CMAO 12). Roma.
- Nadali, D. 2010-11. 'L'archeologia di Nabucco: l'Oriente antico in scena'. In *Studi Verdiani* 22: 73-87.
- Nadali, D. 2013. 'Invented Space: Discovering Near-Eastern Architecture through Imaginary Representations and Constructions'. In Feliu *et al.*, *Time and History in the Ancient Near East*. Winona Lake. 391–404.
- Nagel, W. 1978. 'Wo lagen die "Hängenden Garten" in Babylon?' In MDOG 110: 19-28.
- Nakassis, D., W. A. Parkinson, and M. L. Galaty. 2011. 'Redistributive Economies from a Theoretical and Cross-Cultural Perspective'. In *AJA* 115: 177–184.
- Naumann, R. 1957. Architektur Kleinasiens, von ihren Anfänge bis zum Ende der hethitischen Zeit. Tübingen (I cite from the revised and extended edition, 1971).
- Necipoğlu, G. (ed.). 1993. 'Pre-Modern Islamic Palaces'. In Ars Orientalis 23: 1-342.
- Nefzger, B. D. 2001. 'The Sociology of Preindustrial Cities'. In Grabbe and Haak (eds.). 159–171.
- Negbi, O. 2005. 'Urbanism in Late Bronze Age Cyprus: LC II in Retrospect'. In BASOR 337: 1–45.
- Nemet-Nejat, K. R. 1982. *Late Babylonian Field Plans in the British Museum* (Studia Pohl, Series Major 11). Roma.
- Nemet-Nejat, K. R. 1993. Cuneiform Mathematical Texts as a Reflection of Everyday Life in Mesopotamia (American Oriental Series 75). New Haven.
- Nesselrath, H.-G. 1999. 'Herodot und Babylon: Der Hauptort Mesopotamiens in den Augen eines Griechen des 5. Jh.s v. Chr.' In Renger (ed.). 189–206.
- Netting, R. McC., R. R. Wilk, and E. J. Arnould (eds.). 1984. *Households. Comparative and Historical Studies of the Domestic Group.* Berkeley CA.
- Neugebauer, O. and A. J. Sachs. 1945. *Mathematical Cuneiform Texts* (American Oriental Series 29). New Haven.
- Neumann, D. 1997. 'Der Turmbau zu Babel und das Hochhaus in 20. Jahrhundert'. In J. Ganzert (ed.), Der Turmbau zu Babel. Maβstab oder Anmaβung? Biberach. 70–89.
- Neumann, H. 1987a. *Handwerk in Mesopotamien* (Schriften zur Geschichte und Kultur des Alten Orients 19). Berlin.
- Neumann, H. 1987b. 'Staatliche Verwaltung und Privates Handwerk in der Ur III-Zeit: die Auftragstätigkeit der Schmiede von Girsu'. In Bongenaar (ed.). 119–133.
- Neumann, H. 1999. 'Reflections on the Relationships between State-Initiated Foreign Trade and Private Economic Activity in Mesopotamia towards the End of the Third Millennium BC'. In Dercksen (ed.). 43–53.
- Neumann, H. 2002. 'Die sogenannte Oikos-Ökonomie und das Problem der Privatwirtschaft im ausgehenden 3. Jahrtausend v. Chr. in Mesopotamien'. In Hausleiter *et al.* (eds.). 273–281.

- Neumann, J. and S. Parpola. 1987. 'Climatic Change and the Eleventh-Tenth Century Eclipse of Assyria and Babylonia'. In JNES 46: 161-182.
- Neve, P. 1982. Büyükkale. Die Bauwerke (Boğazköy-Hattuša 12). Berlin.
- Neve, P. 1993. Hattuša, Stadt der Götter und Tempel. Mainz.
- Neve, P. 1999. Die Oberstadt von Hattuša. Die Bauwerke. I: Die Bebauung im zentralen Tempelviertel (Boğazköy-Hattuša 16). Berlin.
- Neve, P. 2001. Die Oberstadt von Hattuša. Die Bauwerke. II: Die Bastion des Sphinxtores und die Tempelviertel am Königs- und Löwentor (Boğazköy-Hattuša 17). Berlin.
- Nichols, D. L. and Th. H. Charlton (eds.). 1997. The Archaeology of City-States. Cross Cultural Approaches. Washington DC.
- Nichols, J. J. and J. A. Weber. 2006. 'Amorites, Onagers, and Social Reorganization in Middle Bronze Age Syria'. In Schwartz and Nichols (eds.). 38-57.
- Nicolet, C. (ed.). 2000. Mégalopoles méditerranéennes. Paris.
- Nicolis, G. and I. Prigogine. 1989. Exploring Complexity. An Introduction. New York.
- Niedorf, Chr. 2008. Die mittelbabylonischen Rechtsurkunden aus Alalah (Schicht IV) (AOAT 352). Münster.
- Nielsen, I. (ed.). 2001. The Royal Palace Institution in the First Millennium BC. Regional Development and Cultural Interchange between East and West (Monographs of the Danish Institute at Athens 4). Athens.
- Nigro, L. 1995. Ricerche sull'architettura palaziale della Palestina nelle età del bronzo e del ferro (CMAO 5). Roma.
- Nigro, L. 2005. Tell es-Sultan/Gerico alle soglie della prima urbanizzazione. Roma.
- Nigro, L. 2010. Tell es-Sultan/Gerico in the Early Bronze II: the Rise of an Early Palestinian City. Roma.
- Nissen, H. J. 1982. 'Die Tempelstadt: Regierungsform der frühdynastischen Zeit in Babylonien?' In H. Klengel (ed.), Gesellschaft und Kultur im alten Vorderasien (Schriften zur Geschichte und Kultur des Alten Orients 15). Berlin. 195-200.
- Nissen, H. J. 1983. Grundzüge einer Geschichte der Frühzeit des Vorderen Orients. Darmstadt (updated and expanded English edn. The Early History of the Ancient Near East. Chicago 1988.
- Nissen, H. J. 1987. 'The Urban Revolution of Mesopotamia Reconsidered'. In Manzanilla (ed.). 287-294.
- Nissen, H. J. 1995. 'Kulturelle und politische Vernetzungen in Vorderen Orient des 4. und 3. vorchristlichen Jahrtausends'. In U. Finkbeiner, R. Dittmann, and H. Hauptmann (eds.), Beiträge zur Kulturgeschichte Vorderasiens. Festschrift für R. M. Boehmer. Mainz. 473-391.
- Nissen, H. J. 2001. 'Cultural and Political Networks in the Ancient Near East during the Fourth and Third Millennia B.C.'. In Rothman (ed.). 149-179.
- Nissen, H. J. 2002. 'Uruk: Key Site of the Period and Key Site of the Problem'. In Postgate (ed.). 1–16.
- Nissen, H. J. 2007. 'Archaeological Surveys and Mesopotamian History'. In Stone (ed.). 19-
- Nissen, H. J., P. Damerow, and R.-K. Englund. 1990. Frühe Schrift und Techniken der Wirtschaftsverwaltung im alten Vorderen Orient. Berlin (English trans. Archaic Bookkeeping. Chicago 1993).
- Nissinen, M. 2001. 'Cities as Lofty as Heaven: Arbela and Other Cities in Neo-Assyrian Prophecy'. In Grabbe and Haak (eds.). 172-209.

- North, D. C. 1977. 'Markets and Other Allocation Systems in History: the Challenge of Karl Polanyi'. In *Journal of European Economic History* 6: 703-716.
- North, D. C. 1981. Structure and Change in Economic History. New York.
- Novák, M. 1994. 'Eine Typologie der Wohnhäuser von Nuzi'. In BaM 25: 341-446.
- Novák, M. 1997. 'Die orientalische Residenzstadt. Funktion, Entwicklung und Form'. In Wilhelm (ed.). 169–197.
- Novák, M. 1999. Herrschaftsform und Stadtbaukunst (Schriften zur vorderasiatischen Archäologie 7). Saarbrücken.
- Novák, M. 2002. 'The Artificial Paradise: Programme and Ideology of the Royal Gardens'. In Parpola and Whiting (eds.). II. 443–460.
- Novák, M. 2004. 'From Ashur to Nineveh: The Assyrian Town Planning Program'. In *Iraq* 66: 177–185.
- Nützel, W. 2004. Einführung in die Geo-Archäologie des Vorderen Orients. Wiesbaden.
- Nylander, C. 1965–66. 'Remarks on the Urartian Acropolis at Zernaki Tepe'. In *Orientalia Suecana* 14–15: 141–154.
- Nylander, C. 1970. Ionians in Pasargadae. Studies in Old Persian Architecture. Uppsala.
- Oates, D. 1968. Studies in the Ancient History of Northern Iraq. London.
- Oates, D. and J. Oates. 1976. 'Early Irrigation Agriculture in Mesopotamia'. In G. de Sieveking, I. H. Longworth, and K. E. Wilson (eds.), *Problems of Economic and Social Archaeology*. London. 109–135.
- Oates, D. and J. Oates. 2001. Nimrud: An Assyrian Imperial City Revealed. London.
- Oates, J. 1979. Babylon. London.
- Oates, J. 1980. 'Land Use and Population in Prehistoric Mesopotamia'. In Barrelet (ed.). 303–314.
- Oates, J. 1993. 'Trade and Power in the Fifth and Fourth Millennium BC. New Evidence from Northern Mesopotamia'. In WA 24/3: 403-422.
- Oates, J., A. McMahon, Ph. Karsgaard, S. Al Quntar, and J. Ur. 2007. 'Early Mesopotamian Urbanism: A View from the North'. In *An* 81: 585–600.
- Ochsenschlager, E. L. 1999. 'Ethnoarchaeology and Archaeology: Rethinking the Past'. In Klengel and Renger (eds.). 65–76.
- O'Connor, D. B. 1972a. 'The Geography of Settlement in Ancient Egypt'. In Ucko, Tringham, and Dimbleby (eds.). 681–698.
- O'Connor, D. B. 1972b. 'A Regional Population in Egypt to circa 600 B.C.'. In Spooner (ed.). 78–100.
- O'Connor, D. B. 1989. 'City and Palace in New Kingdom Egypt'. In Cahiers de Recherche de l'Institut de Papyrologie et d'Egyptologie de Lille 11: 73-87.
- O'Connor, D. B. 1993. 'Urbanism in Bronze Age Egypt and Northeast Africa'. In Shaw *et al.* (eds.). 570–586.
- Oded, B. 2003. 'Where the "Myth of the Empty Land" is to be Found?' In Lipschits and Blenkinsopp (eds.). 55–74.
- Oganesjan, K. L. 1955. Karmir Blur, IV. Jerewan (in Russian).
- Oganesjan, K. L. 1961. Arin Berd, I, Architektura Erebuni. Jerewan (in Russian).
- Oganesjan, K. L. 1973. Erebooni. Jerewan (in English).
- O'Leary, B. 1989. The Asiatic Mode of Production: Oriental Despotism, Historical Materialism and Indian History. Oxford.
- Olender, M. 1989. Les langues du Paradis. Paris.
- Ooghe, B. 2007. 'The Rediscovery of Babylonia: European Travellers and the Development of Knowledge on Lower Mesopotamia, Sixteenth to Early Nineteenth Century'. In *Journal of the Royal Asiatic Society* 17: 131–152.

- Oppenheim, A. L. 1957. 'A Bird's-Eye View of Mesopotamian Economic History'. In Polanyi (ed.). 27-37.
- Oppenheim, A. L. 1960a. 'Assyriology Why and How'. In CA 1: 409-423.
- Oppenheim, A. L. 1960b. 'The City of Assur in 714 B.C.'. In JNES 19: 133-147.
- Oppenheim, A. L. 1964. Ancient Mesopotamia. Portrait of a Dead Civilization. Chicago.
- Oppenheim, A. L. 1967. 'A New Look at the Structure of Mesopotamian Society'. In JESHO 10: 1-26.
- Oppenheim, A. L. 1969. 'Mesopotamia Land of Many Cities'. In I. Lapidus (ed.), Middle Eastern Cities. A Symposium on Ancient, Islamic and Contemporary Middle Eastern *Urbanism*. Berkeley-Los Angeles. 3-18.
- Oppenheim, A. L. 1977. Ancient Mesopotamia. Portrait of a Dead Civilization. Revised Edition.
- Oppert, J. 1859-63. Expédition scientifique en Mésopotamie I-II. Paris.
- Oppert, J. s.d. 'Babylone et les Babyloniens'. In Encyclopédie du XIXe siècle, troisième edition. Paris. 646-647.
- Orthmann, W. 2008. 'Die Ausgrabungen der letzten 50 Jahre in Hattuša und die Geschichte der hethitischen Kunst'. In Wilhelm (ed.). 25-33.
- Osborne, R. 2005. 'Urban Sprawl: What is Urbanization and Why does it Matter?' In Osborne and Cunliffe (eds.). 1-16.
- Osborne, R. and B. Cunliffe. 2005. Mediterranean Urbanization 800-600 BC (Proceedings of the British Academy 126). Oxford.
- Otto, A. 2006. Alltag und Gesellschaft zur Spätbronzezeit. Eine Fallstudie aus Tall Bazi (Syrien) (Subartu 19). Turnhout.
- Otto, A. 2008. 'Organization of Late Bronze Age Cities in the Upper Syrian Euphrates Valley'. In Córdoba et al. (eds.). II. 715-731.
- Otto, E. 1995. 'Zivile Funktion des Stadttores in Palästina und Mesopotamien'. In M. Weippert and S. Timm (eds.), Meilstein. Festgabe für H. Donner. Wiesbaden. 188-197.
- Ozdoğan, M. and A. Ozdoğan. 1989. 'Çayönü. A Conspectus of Recent Work'. In PO 15: 65-
- Ozgüç, T. 1966–69. *Altintepe I–II*. Ankara (in Turkish).
- Ozgüç, T. 1978. Excavations at Maşat Höyük and Investigations in its Vicinity. Ankara.
- Ozgüç, T. 1982. Maşat Höyük II. A Hittite Center Northeast of Boğazköy. Ankara.
- Pallis, S. A. 1956. The Antiquities of Iraq. A Handbook of Assyriology. Copenhagen.
- Palmieri, A. 1985. 'Eastern Anatolia and Early Mesopotamian Urbanization: Remarks on Changing Relations'. In M. Liverani, A. Palmieri, and R. Peroni (eds.), Studi di paletnologia in onore di S. M. Puglisi. Roma. 191-213.
- Palumbo, G. 1990. The Early Bronze Age IV in the Southern Levant (CMAO 3). Roma.
- Panikkar, K. M. 1953. Asia and Western Dominance. A Survey of the Vasco Da Gama Epoch of Asian History. London.
- Papini, M. 2009. 'Etiam periere ruinae (Lucano, Bellum Civile IX 969). Le rovine nella cultura antica'. In Barbanera (ed.). 89-111.
- Papini, M. 2011. Città sepolte e rovine nel mondo greco e romano. Roma-Bari.
- Parapetti, R. 1979. 'Babylon: Town Planning Proposals'. In Sumer 35: 216-219.
- Parapetti, R. 1997. 'Attività del Centro Scavi di Torino'. In Ministero degli Affari Esteri, Missioni archeologiche italiane. Roma. 141-144.
- Parapetti, R. 2008. 'Babylon 1978-2008. A Chronicle of Events in the Ancient Site'. In Mesopotamia 43: 131-166.

- Park, R. 1915. 'The City: Suggestions for the Investigation of Human Behavior in the Urban Environment'. In *American Journal of Sociology*, republished in P. K. Hatt and A. J. Reiss (eds.), *Reader in Urban Sociology*. Glencoe IL 1951. 2–31.
- Park, R., E. W. Burgess, and R. D. McKenzie. 1925. The City. Chicago.
- Park, Th. K. 1992. 'Early Trends toward Class Stratification: Chaos, Common Property, and Flood Recession Agriculture'. In *AmAnthr* 94: 90–112.
- Parker, B. J. 2001. The Mechanics of Empire. The Northern Frontier of Assyria as a Case Study in Imperial Dynamics. Helsinki.
- Parkinson, W. A. and M. L. Galaty. 2007. 'Secondary States in Perspective: An Integrated Approach to State Formation in the Prehistoric Aegean'. In *AmAnthr* 109: 113–129.
- Parlebas, J. 1977. 'Les Egyptiens et la ville d'après les sources littéraires et archéologiques'. In *Ktèma* 2: 49-57.
- Parlebas, J. 1983. 'La notion de niout (localité) dans la pensée égyptienne antique'. In Bruschweiler (ed.). 199–207.
- Parpola, S. 1995. 'The Construction of Dur-Šarrukin in the Assyrian Royal Correspondence'. In Caubet (ed.). 47-77.
- Parpola, S. and R. M. Whiting (eds.). 2002. Sex and Gender in the Ancient Near East (RAI 47) I-II. Helsinki.
- Parrot, A. 1945. Mari, une ville perdue... Paris.
- Parrot, A. 1946. Archéologie mésopotamienne, I. Les étapes. Paris.
- Parrot, A. 1949. Ziggurats et tour de Babel. Paris.
- Parrot, A. 1953a. Archéologie mésopotamienne, II. Technique et problèmes. Paris.
- Parrot, A. 1953b. La tour de Babel (Cahiers d'archéologie biblique 2). Neuchâtel.
- Parrot, A. 1958. *Le Palais*. *Architecture* (Mission Archéologique de Mari 2.1 = BAH 68). Paris-Bevrouth.
- Parrot, A. 1970. Bible et archéologie. Neuchâtel.
- Parrot, A. 1974. Mari, capitale fabuleuse. Paris.
- Pasquali, G. 1972. 'Prefazione'. In N. D. Fustel de Coulanges, *La citta* antica. Firenze. xi-xxiv.
- Pasquinelli, C. (ed.). 2005. Occidentalismi. Roma.
- Pavan, M. 1977. Antichità classica e pensiero modern. Firenze.
- Paynter, R. 1982. Models of Spatial Inequality. Settlement Patterns in Historical Archaeology. New York.
- Paynter, R. 1989. 'The Archaeology of Equality and Inequality'. In ARA 18: 369-399.
- Paynter, R. and R. H. McGuire. 1991. 'The Archaeology of Inequality: Material Culture, Domination and Resistance'. In R. H. McGuire and R. Paynter (eds.), *The Archaeology of Inequality*. Oxford. 1–27.
- Pedde, B. 2000. 'Altorientalische Motive in den Illustrationen zum Alten Testament von Gustave Doré'. In R. Dittmann *et al.* (eds.), *Variatio Delectat. Iran und der Westen. Gedenkschrift für P. Calmeyer* (AOAT 272). Münster. 567–591.
- Pedde, B. 2008. 'The Assur-Project. *An* Old Excavation Newly Analysed'. In Córdoba (ed.). II. 743–752.
- Peel, J. D. Y. 2000. 'Yoruba as a City-State Culture'. In Hansen (ed.). 507-518.
- Perrot, G. 1886. 'Une civilisation retrouvée. Les Hétéens, leur écriture et leur art'. In Revue des Deux Mondes 76: 303-342.
- Perrot, G. and Ch. Chipiez. 1884. *Histoire de l'art dans l'antiquité. II: Chaldée et Assyrie*. Paris.
- Peters, J. P. 1897. Nippur or Explorations and Adventures on the Euphrates I–II. New York–London.

- Petrie, W. M. Flinders. 1891. Tell el Hesy (Lachish). London.
- Petrie, W. M. Flinders. 1892. 'The Story of a "Tell". In Palestine Exploration Fund, The City and the Land, Lectures 1982. London (I cite from the 3rd edn., 1894). 183-207.
- Petrie, W. M. Flinders. 1900. Ten Years' Digging in Egypt 1881-1891. Oxford.
- Petrie, W. M. Flinders. 1904. Methods and Aims in Archaeology. London-New York.
- Petrie, W. M. Flinders. 1918. Eastern Exploration, Past and Future. London.
- Petrie, W. M. Flinders. 2003. Seventy Years in Archaeology. London.
- Pettinato, G. 1994. 'Il bicameralismo a Sumer: un topos letterario assunto a realtà storica'. In RANL 5: 47-85.
- Pezzoli-Olgiati, D. 2002. Immagini urbane. Interpretazioni religiose della città antica. Freiburg-Göttingen.
- Pfälzner, P. 1996. 'Activity Areas and the Social Organization of Third Millennium B. C. Households'. In Veenhof (ed.). 117-127.
- Pfälzner, P. 1997a. 'Die Erklärung städtischen Wandels'. In Wilhelm (ed.). 73-84.
- Pfälzner, P. 1997b. 'Wandel und Kontinuität im Urbanisierungsprozess des 3. Jtsds. V. Chr. in Nordmesopotamien'. in Wilhelm (ed.). 239-265.
- Pfälzner, P. 2001. Haus und Haushalt. Wohnformen des dritten Jahrtausends vor Christus in Nordmesopotamien (Damaszener Forschungen 9). Mainz.
- Pfälzner, P. and A. Wissing. 2004. 'Urbanismus in der Unterstadt von Urkeš'. in MDOG 136:
- Philip, G. 2002. 'Contact between the 'Uruk' World and the Levant during the Fourth Millennium BC: Evidence and Interpretation'. In Postgate (ed.). 207-235.
- Philip, G., D. Donoghue, and A. Beck. 2002. 'CORONA Satellite Photography; an Archaeological Application from the Middle East'. In An 76: 109-118.
- Piccinato, G. 1974. La costruzione dell'urbanistica. Germania 1871-1914. Roma.
- Pick, P. W. 1975. 'German Railway Constructions in the Middle East'. In J. L. Wallach (ed.), Germany and the Middle East, 1819-1918. Tel Aviv. 72-84.
- Picozzi, N. G. (ed.). 2010. Sculture antiche e dall'antico. Palazzo Colonna, Appartamenti. Roma.
- Pierotti, P. 1972. Urbanistica. Storia e prassi. Firenze.
- Pillet, M. 1917. 'L'expédition scientifique et artistique de Mésopotamie et de Médie (1851-1855)'. In RA 14: 97-120.
- Pillet, M. 1918. 'L'expédition scientifique et artistique de Mésopotamie et de Médie (1851-1855)'. In RA 15: 145-154, 196-207.
- Pillet, M. 1919. 'L'expédition scientifique et artistique de Mésopotamie et de Médie. Deuxième partie'. In RA 16: 37-46.
- Pillet, M. 1962. Un pionnier de l'assyriologie, Victor Place (Cahiers de la Société Asiatique 16). Paris.
- Pinelli, A. 2010. Souvenir. L'industria dell'antico e il Grand Tour a Roma. Roma-Bari.
- Pinnock, F. 1994. 'Elements of Urbanization in Inner Syria in the Late Bronze Age'. In Mazzoni (ed.). 187-212.
- Pinnock, F. 2001. 'The Urban Landscape of Old Syrian Ebla'. In JCS 53: 13-33.
- Pinnock, F. 2007. 'Byblos and Ebla in the 3<sup>rd</sup> Millennium BC: Two Urban Patterns in Comparison'. In L. Nigro (ed.), Byblos and Jericho in the Early Bronze I. Roma. 109-133.
- Piotrovskij, B. B. 1950-55. Karmir-blur I-III. Jerewan (in russo).
- Piotrovskij, B. B. 1959. Vanskoe Cartsvo (Urartu). Moskva (in Russian; Italian. transl. Il regno di Van (Urartu). Roma 1966).
- Pirenne, H. 1925. Medieval Cities. Their Origins and the Revival of Trade. Princeton.

- Pirenne, H. 1939. Les villes et les institutions urbaines. Paris.
- Place, V. 1867-70. Ninive et l'Assyrie I-III. Paris.
- Plog, F. T. 1974. The Study of Prehistoric Change. London-New York.
- Plog, S., F. T. Plog, and W. Wait. 1978. 'Decision Making in Modern Surveys'. In *Advances in Archaeological Method and Theory* 1: 383–421.
- Poidebard, A. 1934. La trace de Rome dans le désert de Syrie I-II (BAH 18). Paris.
- Polanyi, K. 1944. The Great Transformation. New York.
- Polanyi, K. 1960a. 'On the Comparative Treatment of Economic Institutions in Antiquity'. In Kraeling and Adams (eds.). 329–349, republished as Chap. 13 of Polanyi 1968.
- Polanyi, K. 1960b. 'The Semantics of Money Use'. In *Explorations* 1957, republished as Chap. 8 of Polanyi 1968.
- Polanyi, K. 1963. 'Ports of Trade in Early Societies'. In *Journal of Economic History* 23: 30-45, republished as Chap. 10 of Polanyi 1968.
- Polanyi, K. 1968. Primitive, Archaic and Modern Economies, edited by G. Dalton. London.
- Polanyi, K. 1977. The Livelihood of Man, edited by H. W. Pearson. New York.
- Polanyi, K. (ed.). 1957. Trade and Market in Early Empires. Glencoe IL.
- Pollock, S. 1987. 'Abu Salabikh, the Uruk Mound 1985-6'. In Iraq 49: 121-141.
- Pollock, S. 1990. 'Archaeological Investigations on the Uruk Mound, Abu Salabikh'. In *Iraq* 52: 85–93.
- Pollock, S. 1991. 'Investigations on the Uruk Mound, Abu Salabikh 1990'. In Iraq 53: 50-68.
- Pollock, S. 2001. 'The Uruk Period in Southern Mesopotamia'. In Rothman (ed.) 181-231.
- Pollock, S. 2005. 'Archaeology Goes to War at the Newsstand'. In Pollock and Bernbeck (eds.). 78–96.
- Pollock, S. and R. Bernbeck (eds.). 2005. Archaeologists of the Middle East. Critical Perspectives. Oxford.
- Porter B. N. 2000. 'For the Astonishment of All Enemies: Assyrian Propaganda and Its Audience in the Reigns of Ashurnasirpal II and Esarhaddon'. In BCSMS 35: 7–18.
- Possehl, G. L. 1998. 'Sociocultural Complexity without the State. The Indus Civilization'. In Feinman and Marcus (eds.). 261–291.
- Possehl, G. L. 2002. The Indus Civilization. Walnut Creek CA.
- Postgate, J. N. 1972. 'The Role of the Temple in the Mesopotamian Secular Community'. In Ucko, Tringham, and Dimbleby (eds.). 811–826.
- Postgate, J. N. 1982. 'Abu Salabikh'. In Curtis (ed.). 48-61.
- Postgate, J. N. 1983. *The West Mound Surface Clearance* (Abu Salabikh Excavations 1). London.
- Postgate, J. N. 1987. 'Scratching the Surface at Abu Salabikh: Urban Archaeology Sumerian Style'. In *BCSMS* 14: 21–29.
- Postgate, J. N. 1990a. 'Excavations at Abu Salabikh, 1988-89'. In Iraq 52: 95-106.
- Postgate, J. N. 1990b. 'Archaeology and the Texts Bridging the Gap'. In ZA 80: 228-240.
- Postgate, J. N. 1992. Early Mesopotamia. Society and Economy at the Dawn of History. London-New York.
- Postgate, J. N. 1992–93. 'A Sumerian City: Town and Country in the 3<sup>rd</sup> Millennium BC'. In *SA* 6–7: 409–435.
- Postgate, J. N. 1994. 'How Many Sumerians per Hectare? Probing the Anatomy of an Early City'. In Cambridge Archaeological Journal 4: 47–65.
- Postgate, J. N. 2003. Learning the Lesson of the Future: Trade in Prehistory through a Historian's Lens'. In *BO* 60: 6–25.

- Postgate, J. N. (ed.). 2002. Artefacts of Complexity. Tracking the Uruk in the Near East (Iraq Archaeological Reports 5). Warminster.
- Postgate, J. N. and M. A. Powell (eds.). 1984-95. Bulletin on Sumerian Agriculture I-VIII. Cambridge UK.
- Postgate, J. N. et al. 2003-05. 'Palast. A. Philologisch'. In RlA X: 195-233.
- Potts, D. T. 1984. 'On Salt and Salt Gathering'. In JESHO 27: 225-271.
- Potts, D. T. 1990. The Arabian Gulf in Antiquity I. Oxford.
- Potts, D. T. 1998. 'The Gulf Arab States and their Archaeology'. In Meskell (ed.). 189-199.
- Pournelle, J. R. 2003. 'The Littoral Foundations of the Uruk State: Using Satellite Photography toward a New Understanding of 5th/4th Millennium BCE Landscapes in the Warka Survey Area'. In D. Gheorghiou (ed.), Chalcolithic and Early Bronze Age Hydrostrategies (BAR Int. 1123). Oxford. 5-24.
- Pournelle, J. R. 2007. 'KLM to CORONA: a Bird's-Eye View of Cultural Ecology and Early Mesopotamian Urbanism'. In Stone (ed.). 29-62.
- Powell, M. 1977. 'Sumerian Merchants and the Problem of Profit'. In Iraq 39: 23-29.
- Powell, M. 1978. 'Götter, Könige und Kapitalisten in Mesopotamien des 3. Jahrtausends v.u. Z.'. In Oikumene 2: 127-144.
- Powell, M. 1985. 'Salt, Seed, and Yields in Sumerian Agriculture. A Critique of the Theory of Progressive Salinization'. In ZA 75: 7-38.
- Powell, M. 1986. 'Economy of the Extended Family According to Sumerian Sources'. In Oikumene 5: 9-14.
- Powell, M. 1990. 'Identification and Interpretation of Long Term Price Fluctuations in Babylonia: More on the History of Money in Mesopotamia'. In AoF 17: 76-99.
- Powell, M. 1996. 'Money in Mesopotamia'. In JESHO 39: 224-242.
- Powell, M. 1999. 'Monies, Motives and Methods in Babylonian Economics'. In Dercksen (ed.).
- Prato, G. L. 2010. 'La Torre di Babele e la comunicazione interrotta'. In id., Identità e memoria nell'Israele antico. Brescia. 76-87.
- Preusser, C. 1954. Die Wohnhäuser in Assur (WVDOG 64). Berlin.
- Preusser, C. 1955. Die Paläste in Assur (WVDOG 65). Berlin.
- Price, B. 1978. 'Secondary State Formation: an Explanatory Model'. In Cohen and Service (eds.). 161-186.
- Price, T. D. 1981. 'Complexity in Non-Complex Societies'. In van der Leeuw (ed.). 54-97.
- Price, T. D. and J. A. Brown. 1985. 'Aspects of Hunter-Gatherer Complexity'. In id. and id. (eds.), Prehistoric Hunter-Gatherers. The Emergence of Cultural Complexity. Orlando FL. 3-20.
- Prontera, F. 1994. 'Sull'immagine della grande città nella geografia greca'. In Mélanges de l'École Française de Rome 106: 845-858.
- Prontera, F. 2000. 'Vision de la grande ville'. In Nicolet (ed.). 24-31.
- Pucci, G. 1993. Il passato prossimo. La scienza dell'antichità alle origini della cultura moderna. Roma.
- Pucci, M. 2008. Functional Analysis of Space in Syro-Hittite Architecture (BAR Int. 1738).
- Puchstein, O. 1907. 'Vorläufige Nachrichten über die Ausgrabungen in Boghaz-köi im Sommer 1907. 2. Die Bauten von Boghaz-köi'. In MDOG 35: 59-71.
- Puchstein, O. 1912. Boghasköi. Die Bauwerke (WVDOG 19). Leipzig.
- Quaroni, L. 1967. La torre di Babele. Padova.

Raaflaub, K. 2004. 'Zwischen Ost und West: Phönizische Einflüsse auf die griechische Polisbildung?' In R. Rollinger and Ch. Ulf (eds.), *Griechische Archaik. Interne Entwicklungen – Externe Impulse*. Berlin. 271–289.

Radner, K. 1999. 'Traders in the Neo-Assyrian Period'. In Dercksen (ed.). 127-157.

Rahtz, S. P. Q. (ed.). 1988. Computer and Quantitative Methods in Archaeology I-II (BAR Int. 446 i-ii). Oxford.

Raikes, R. L. 1966. 'The Physical Evidence for Noah's Flood'. In Iraq 28: 52-63.

Ramazzotti, M. 1997. 'La fase Middle Uruk: studio tramite reti neurali artificiali su un orizzonte latente nella protostoria della Bassa Mesopotamia'. In CMAO 7: 497-522.

Ramazzotti, M. 1999. La Bassa Mesopotamia come laboratorio storico (= CMAO 8). Roma.

Ramazzotti, M. 2002. 'La rivoluzione urbana nella Mesopotamia meridionale'. In *RANL* 13: 641–752.

Ramazzotti, M. 2003. 'Modelli insediamentali alle soglie del Protodinastico in Mesopotamia meridionale, centrale e nord-orientale. Appunti per una critica alla formazione secondaria degli stati del III millennio a.C.' In CMAO 9: 15–72.

Rassam, H. 1897. Asshur and the Land of Nimrod. New York-Cincinnati.

Ratnagar, Sh. 2001. 'The Bronze Age: Unique Instance of a Pre-Industrial World System?' In CA 42: 351–379.

Ratnagar, Sh. 2004. Trading Encounters. From the Euphrates to the Indus in the Bronze Age. Oxford.

Rawlinson, G. 1858. The History of Herodotus. London.

Reade, J. 1973. 'Tell Taya (1972-73): Summary Report'. In Iraq 35: 155-187.

Reade, J. 1978. 'Studies in Assyrian Geography'. In RA 72: 47-72, 157-180.

Reade, J. 1979. 'Ideology and Propaganda in Assyrian Art'. In M. T. Larsen (ed.), *Power and Propaganda*. A Symposium on Ancient Empires (Mesopotamia 7). Copenhagen. 329–343.

Reade, J. 1980. 'The Architectural Context of the Assyrian Sculpture'. In BaM 11: 75-87.

Reade, J. 1982. 'Tell Taya'. In Curtis (ed.). 72-78.

Reade, J. 1986. 'Rassam's Excavations at Borsippa and Kutha, 1879-82'. In Iraq 48: 105-116.

Reade, J. 1998. 'Assyrian Illustrations of Nineveh'. In Iranica Antiqua 33: 81-94.

Reade, J. 1999. 'Early British Excavations at Babylon'. In Renger (ed.). 47-65.

Reade, J. 2008a. 'Disappearance and Rediscovery'. In Finkel and Seymour (eds.). 13-30.

Reade, J. 2008b. 'Nineteenth-century Exploration and Interpretation'. In Finkel and Seymour (eds.). 34–39.

Reade, J. 2008c. 'Early Travellers on the Wonders: Suggested Sites'. In Finkel and Seymour (eds.). 112–117.

Reculeau, H. 2009. 'L'implantation sédentaire dans la vallée de l'Euphrate à l'âge du bronze: un modèle centre/périphérie?' In J.-M. Durand and A. Jaquet (eds.), *Centre et périphérie. Approches nouvelles des Orientalistes*. Paris. 57–81.

Reculeau, H. 2011. Climate, Environment and Agriculture in Assyria (Studia Chaburensia 2). Wiesbaden.

Reddé, M. (ed.). 2003. La naissance de la ville dans l'antiquité. Paris.

Redfield, R. 1953. The Primitive World and Its Transformations. Ithaca NY.

Redford, D. B. 1997. 'The Ancient Egyptian 'City': Figment or Reality?' In Aufrecht *et al.* (eds.). 210–220.

Redman, C. L. 1978. The Rise of Civilization. San Francisco.

Redman, C. L. 1982. 'Archaeological Survey and the Study of Mesopotamian Urban Systems'. In *Journal of Field Archaeology* 9: 375–382.

- Redman, C. L. 1999. 'Environmental Degradation of the "Uruk Countryside"'. In Kühne, Bernbeck, and Bartl (eds.). 73-80.
- Redman, C. L. (ed.). 1973. Research and Theory in Current Archaeology. New York-London.
- Reilly, P. and S. Rahtz (eds.). 1992. Archaeology and the Information Age. A Global Perspective (One World Archaeology 21). London-New York.
- Reisner, G. A. 1924. Harvard Excavations at Samaria I. Cambridge MA 1924.
- Renan, E. 1855. Histoire générale et système comparé des langues sémitiques. Paris.
- Renan, E. 1864-74. Mission de Phénicie. Paris.
- Renfrew, C. 1978. 'Trajectory Discontinuity and Morphogenesis: The Implications of Catastrophe Theory for Archaeology'. In AmAnt 43: 203-222.
- Renfrew, C. 1979. 'Systems Collapse as Social Transformation: Catastrophe and Anastrophe in Early State Societies'. In id. and Cooke (eds.). 481-506.
- Renfrew, C. 1980. 'The Great Tradition versus the Great Divide: Archaeology as Anthropology?' In AJA 84: 287-298.
- Renfrew, C. 1981. 'The Simulator as Demiurge'. In Sabloff (ed.). 283-306.
- Renfrew, C. 2008. 'The City through Time and Space'. In Marcus and Sabloff (eds.). 29-51.
- Renfrew, C. (ed.). 1973. The Explanation of Culture Change: Models in Prehistory. London.
- Renfrew, C. and J. F. Cherry (eds.). 1986. Peer Polity Interaction and Socio-Political Change (New Directions in Archaeology [7]). Cambridge UK.
- Renfrew, C. and K. L. Cooke (eds.). 1979. Transformations: Mathematical Approaches to Culture Change. New York.
- Renfrew, C. and E. V. Level. 1979. 'Exploring Dominance. Predicting Polities from Centers'. In Renfrew and Cooke (eds.). 135-167.
- Renger, J. 1972. 'Flucht als soziales Problem in der altbabylonischen Gesellschaft'. In Edzard (ed.). 167-182.
- Renger, J. 1978. 'Wiedererstehendes Babylon 1978'. In MDOG 110: 29-41.
- Renger, J. 1979. 'Die Geschichte der Altorientalistik und der vorderasiatischen Archäologie in Berlin von 1875 bis 1945'. In W. Arenhövel and Ch. Schreiber (eds.), Berlin und die Antike. Berlin. 151-192.
- Renger, J. 1984. 'Patterns of Non-Institutional Trade and Non-Commercial Exchange in Ancient Mesopotamia at the Beginning of the Second Millennium B.C.' In Archi (ed.).
- Renger, J. 1990. 'Different Economic Spheres in the Urban Economy of Ancient Mesopotamia'. In Aerts and Klengel (eds.). 20-28.
- Renger, J. 1994. 'On Economic Structures in Ancient Mesopotamia'. In Or 63: 157-208.
- Renger, J. 1995. 'Institutional, Communal, and Individual Ownership or Possession of Arable Land in Ancient Mesopotamia from the End of the Fourth to the End of the First Millennium BC'. In Chicago-Kent Law Review 71/1: 269-319.
- Renger, J. 1996. 'Handwerk und Handwerker im Alten Mesopotamien'. In AoF 23: 211-231.
- Renger, J. 1999. 'Babylon: Focus mesopotamischer Geschichte, Wiege früher Gelehrsamkeit, Mythos in der Moderne'. In id. (ed.). 1-32.
- Renger, J. 2000. 'Das Palastgeschäft in der altbabylonischen Zeit'. In Bongenaar (ed.). 153-
- Renger, J. 2003. 'Das Assur-Projekt'. In Marzahn and Salje (eds.). 101–109.
- Renger, J. 2003-05. 'Palastwirtschaft'. In RIA X: 276-280.
- Renger, J. 2004. 'Wirtschaftsformen in Mesopotamien zwischen dem dritten und zweiten Jahrtausend v. Chr.' In J.-W. Meyer and W. Sommerfeld (eds.), 2000 v. Chr. Politische,

- wirtschaftliche und kulturelle Entwicklung im Zeichen einer Jahrtausendwende (Colloquium der Deutschen Orient-Gesellschaft 3). Berlin. 141–154.
- Renger, J. 2007. 'Economy of Ancient Mesopotamia. A General Outline'. In Leick (ed.). 187–197.
- Renger, J. 2011. 'Die Erforschung der Stadt durch die Deutschen Orient-Gesellschaft verworden mit den Wechselfällen deutscher Geschichte im 20. Jh.' In id. (ed.). 1–13.
- Renger, J. (ed.). 1999. Babylon: Focus mesopotamischer Geschichte, Wiege früher Gelehrsamkeit, Mythos in der Moderne (CDOG 2). Berlin.
- Renger, J. (ed.). 2011. Assur Gott, Stadt und Land (CDOG 5). Berlin.
- Reuther, O. 1910. Das Wohnhaus in Bagdad und anderen Städten des Irak. Berlin.
- Reuther, O. 1926. Die Innenstadt von Babylon (Merkes) (WVDOG 47, 1-2). Leipzig.
- Reviv, H. 1969. 'On Urban Representative Institutions and Self-Government in Syria-Palestine'. In *JESHO* 12: 283–297.
- Reviv, H. 1988. 'Kidinnu: Observations on Privileges of Mesopotamian Cities'. In *JESHO* 31: 286–298.
- Reviv, H. 1989. The Elders in Ancient Israel. Jerusalem.
- Reynolds, F. 2003. *The Babylonian Correspondence of Esarhaddon* (State Archives of Assyria 18). Helsinki.
- Rich, C. J. 1813. 'Memoir on the Ruins of Babylon'. In *Les Mines d'Orient* (Wien; republished London 1815).
- Rich, C. J. 1818. Second Memoir on Babylon. London.
- Rich, C. J. 1836. Narrative on a Residence in Koordistan and on the Site of Ancient Nineveh. London.
- Rich, C. J. 1839. Narrative of a Journey to the Site of Babylon ... edited by his Widow. London.
- Rich, J. and A. Wallace-Hadrill (eds.). 1991. City and Country in the Ancient World. London—New York.
- Richardson, S. 2007. 'The World of the Babylonian Countryside'. In Leick (ed.). 13-38.
- Richardson, S. 2012. 'Early Mesopotamia: The Presumptive State'. In P&P 215: 3-49.
- Ricke, H. 1932. Der Grundriss des Amarna-Wohnhauses (WVDOG 56). Leipzig.
- Ridgway, D. 1985. 'V. Gordon Childe a venticinque anni dalla morte'. In Liverani, Palmieri, and Peroni (eds.). 3–11.
- Rihll, T. E. and A. G. Wilson. 1991. 'Modelling Settlement Structures in Ancient Greece. New Approaches to the Polis'. In Rich and Wallace-Hadrill (eds.). 59–95.
- Roaf, M. 1995. 'Palaces and Temples in Ancient Mesopotamia'. In Sasson (ed.). I. 423-441.
- Robb, J. 2007. The Early Mediterranean Village. Cambridge UK.
- Robertson, J. F. 1984. 'The Internal Political and Economic Structure of Old Babylonian Nippur'. In JCS 36: 145–190.
- Robertson, J. F. 1992. 'The Temple Economy of Old Babylonian Nippur: the Evidence for Centralized Management'. In deJong Ellis (ed.). 177–188.
- Robertson, J. F. 1995. 'The Social and Economic Organization of Ancient Mesopotamian Temples'. In Sasson (ed.). I. 443-454.
- Robinson, E. and E. Smith. 1841–56. *Biblical Researches in Palestine and in Adjacent Regions* I–III. London–Boston.
- Roddy, N. 2008. 'Landscape of Shadows: The Image of City in the Hebrew Bible'. In R. Arav (ed.), Cities through the Looking Glass. Essays on the History and Archaeology of Biblical Urbanism. Winona Lake IN. 11–21.
- Rogerson, J. E. and J. Vincent. 2009. The City in Biblical Perspective. London.
- Röllig, W. 1975-76. 'Der altmesopotamische Markt'. In WO 8: 286-295.

- Rollinger, R. 1993. Herodots babylonischer Logos: eine kritische Untersuchung. Innsbruck.
- Rollinger, R. 2006. 'The Eastern Mediterranean and Beyond: The Relations between the Worlds of the 'Greek' and 'Non-Greek' Civilizations'. In K. H. Kinzl (ed.), A Companion to the Classical Greek World. Oxford. 197-226.
- Rollinger, R. 2011. 'Assur, Assyrien und die Klassische Überlieferung'. In Renger (ed.). 311-
- Rollinger, R. and Chr. Ulf (eds.). 2004. Commerce and Monetary Systems in the Ancient World: Means of Transmission and Cultural Interaction (Oriens et Occidens 6 = Melammu Symposia 5). Wiesbaden.
- Romano, M. 1993. L'estetica della città europea: forme e immagini. Torino.
- Romano, M. 2010. Ascesa e declino della città europea. Milano.
- Roncayolo, M. 1978. 'Città'. In Enciclopedia Einaudi 3. Torino. 3-84.
- Ronzevalle, S. 1914. 'Notes d'archéologie orientale, IX. Le camp retranché d'El- Mišrifé'. In Mélanges de la Faculté Orientale de Beyrouth: 109-126.
- Rosen, A. M. 1986. Cities of Clay. The Geoarchaeology of Tells. Chicago.
- Rosen, A. M. 1989. 'Environmental Change at the End of Early Bronze Age Palestine'. In de Miroschedji (ed.). 247-256.
- Rosen, S. A. 1997. 'Craft Specialization and the Rise of Secondary Urbanism. A View from the Southern Levant'. In Aufrecht et al. (eds.). 82-91.
- Rosenthal, F. 1958. Ibn Khaldûn. The Muqaddima. An Introduction to History. Translated by F. Rosenthal. I-III. Leiden.
- Ross, J. C. 2010. 'The Scribal Artifact. Technological Innovation in the Uruk Period'. In Steadman and Ross (eds.). 80-98.
- Rossi, M. 2011. 'Architettura e propaganda nel periodo del Ferro nel Vicino Oriente: riflessioni su Siria, Assiria e Mesopotamia'. In Dolce and Pellitteri (eds.). 53-97.
- Rossi, P. 2012. Il senso della storia. Dal Settecento al Duemila. Bologna.
- Rost, S. 2011. 'Irrigation Management in the Ur III-Period: A Reconsideration Based on a Case Study of the Maintenance of the íd-NINA-sè-DU Canal of the Province of Lagas'. In Selz (ed.). 211-269.
- Rostovtzeff, M. 1932. Caravan Cities. Oxford.
- Rostovtzeff, M. 1941. Social and Economic History of the Hellenistic World. Oxford.
- Rothenberg, J. 1977. Descensus ad terram. The Acquisition and Reception of the Elgin Marbles. New York.
- Rothman, M. 1994. 'Evolutionary Typologies and Cultural Complexity'. In Stein and Rothman (eds.). 1-10.
- Rothman, M. 2001. 'The Tigris Piedmont, Eastern Jazira, and Highland Western Iran in the Fourth Millennium BC'. In id. (ed.). 349-401.
- Rothman, M. 2002. 'Tepe Gawra: Chronology and Socio-Economic Change in the Foothills of Northern Iraq in the Era of State Formation'. In Postgate (ed.). 49-77.
- Rothman, M. 2007. 'The Archaeology of Early Administration Systems in Mesopotamia'. In Stone (ed.). 235-254.
- Rothman, M. (ed.). 1989. 'Out of the Heartland: The Evolution of Complexity in Peripheral Mesopotamia during the Uruk Period'. In PO 15: 279-290.
- Rothman, M. (ed.). 2001. Uruk Mesopotamia & Its Neighbors. Cross-Cultural Interactions in the Era of State Formation. Santa Fé NM-Oxford.
- Rouault, O. and M. Wäfler (eds.). 2000. La Djéziré et l'Euphrate syriens de la protohistoire à la fin di IIe millénaire av. J.-C. (= Subartu 7). Turnhout.

- Rouillard, P. et al. (eds.). 2005. Autour de Polanyi. Vocabulaire, théories et modalités des échanges. Paris.
- Routledge, C. 1997. 'Temple as the Center in Ancient Egyptian Urbanism'. In Aufrecht *et al.* (eds.). 221–235.
- Rowton, M. B. 1980. 'Pastoralism and Periphery in Evolutionary Perspective'. In Barrelet (ed.). 291–302.
- Rowlands, M. 1987. 'Centre and Periphery: A Review of a Concept'. In *id.*, Larsen, and Kristiansen (eds.). 1–11.
- Rowlands, M., M. T. Larsen, and K. Kristiansen (eds.). 1987. *Centre and Periphery in the Ancient World*. Cambridge UK.
- Running, L. G. and D. N. Freedman. 1975. William Foxwell Albright. A Twentieth-Century Genius. New York.
- Russell, J. M. 1991. Sennacherib's Palace without Rival at Nineveh. Chicago.
- Russell, J. M. 1998. 'The Program of the Palace of Assurnasirpal II at Nimrud: Issues in the Research and Presentation of Assyrian Art'. In *AJA* 102: 655-715.
- Ryckwert, J. 1976. The Idea of a Town. The Anthropology of Urban Forms in Rome, Italy and the Ancient World. Cambridge MA.
- Ryckwert, J. 2000. The Seduction of Place. The History and Future of the City. New York.
- Sabattini, M. and P. Santangelo. 1989. Storia della Cina. Roma-Bari.
- Sabloff, J. A. (ed.). 1981. Simulations in Archaeology. Albuquerque NM.
- Sabloff, J. A. and C. C. Lamberg-Karlovsky (eds.). 1975. *Ancient Civilization and Trade*. Albuquerque NM.
- Sachau, E. 1900. Am Euphrat und Tigris. Reisenotizen aus dem Winter 1897-1898. Leipzig.
- Saggio, A. 2010. Architettura e modernità. Dal Bauhaus alla rivoluzione informatica. Roma.
- Saggs, H. W. F. 1975. 'The "Aššur Charter". In Iraq 37: 11-20.
- Sahlins, M. D. 1965. 'On the Sociology of Primitive Exchange'. In M. Banton (ed.), *The Relevance of Models for Social Anthropology* (ASA Monographs 1). London-New York. 139–236. (republished in *id.*, Stone Age Economics. London. 1974. 185–275).
- Sahlins, M. D. and E. Service (eds.). 1973. Evolution and Culture. Ann Arbor MI.
- Said, E. W. 1978. Orientalism. New York.
- Said, E. W. 1993. Culture and Imperialism. New York.
- Sallaberger, W. 1997. 'Nippur als religiöses Zentrum Mesopotamiens in historischen Wandel'. In Wilhelm (ed.). 147–168.
- Sallaberger, W. 2007. 'The Palace and the Temple in Babylonia'. In Leick (ed.). 265-275.
- Salsano, A. 1974. 'Introduzione'. In Polanyi 1944, La Grande Trasformazione. Torino. vii-xxxi.
- Salvini, M. 1995. Geschichte und Kultur der Urartäer. Darmstadt.
- Salzano, E. 1990. Fondamenti di urbanistica. Roma-Bari (I cite from the 8th edn., 2010).
- Sams, G. K. 1994. 'Aspects of Early Phrygian Architecture at Gordion'. In A. Çilinigiroğlu and D. H. French (eds.), *Anatolian Iron Ages* 3. Ankara. 211–220.
- Sanders, J. A. (ed.). 1970. Near-Eastern Archaeology of the Twentieth Century. Essays in Honor of N. Glueck. Garden City NY.
- Sanders, W. T. and D. Webster. 1978. 'Unilinealism, Multilinealism and the Evolution of Complex Societies'. In C. L. Redman *et al.* (eds.), *Social Archaeology: Beyond Subsistance and Dating*. New York. 249–302.
- Sanlaville, P. 1989. 'Considérations sur l'évolution de la Basse Mésopotamie au cours des derniers millénaires'. In *PO* 15/2: 5–27.
- Saporetti, C. 2006. Sulle strade dell'Iraq. Un archeologo verso il monte del diluvio. Soveria Mannelli.

Sassen, S. 1991. The Global City: New York, London, Tokyo. Princeton.

Sassen, S. 1994. Cities in a World Economy. Thousand Oaks.

Sasson, J. M. (ed.). Civilizations of the Ancient Near East I-IV. New York 1995.

Sauvage, M. 1994. 'La ville-forteresse de Khorsabad'. In AA.VV. 46-51.

Sauvage, M. 1998. La brique et sa mise en oeuvre en Mésopotamie. Paris.

Sauvaget, J. 1934. 'Le plan de Laodicée-sur-Mer'. In Bulletin d'Etudes Orientales 4: 81-116.

Sauvaget, J. 1941. Alep. Paris.

Sauvaget, J. 1949. 'Le plan antique de Damas'. In Syria 26: 314-358.

Savage, S. H. and S. E. Falconer. 2003. 'Spatial and Statistical Inference of Late Bronze Age Polities in the Southern Levant'. In BASOR 330: 31-45.

Sawer, M. 1977. Marxism and the Question of the Asiatic Mode of Production. The Hague.

Sayce, A. H. 1888. The Hittites. The Story of a Forgotten Empire. London (I cite from the 4th edn. 1925).

Sayce, A. H. 1893. The Higher Criticism and the Verdict of the Monuments. London.

Sayce, A. H. 1907. The Archaeology and the Cuneiform Inscriptions. London.

Scafi, A. 2007. Il paradiso in terra. Mappe del giardino dell'Eden. Torino-Milano.

Scarcia Amoretti, B. (ed.). 1994. The East and the Meaning of History. Roma.

Schaeffer, Cl. 1955. 'Exposé préliminaire'. In J. Nougayrol, Le Palais Royal d'Ugarit III. Paris.

Schaeffer, Cl. (ed.). 1962. Ugaritica IV. Paris.

Schenkel, W. 1974. 'Die Einführung der künstlichen Felderbewässerung im alten Ägypten'. In Göttinger Miszellen 11: 41-46.

Schenkel, W. 1978. Die Bewässerungsrevolution im alten Ägypten. Mainz.

Schiering, W. 1969. 'Zur Geschichte der Archäologie'. In U. Hausmann (ed.), Allgemeine Grundlagen der Archäologie. München. 1-25.

Schiffer, M. B., A. P. Sullivan, and T. C. Klinger. 1978. 'The Design of Archaeological Surveys'. In WA 10: 1-28.

Schipper, F. 2004. 'Tempel, Paläste und Städte aus Lehm. Weltkulturerbe im Irak nach 20 Jahren Krieg und Embargo'. In id. (ed.). 179-212.

Schipper, F. (ed.). 2004. Zwischen Euphrat und Tigris österreichische Forschungen zum Alten Orient (Wiener Offene Orientalistik 3). Wien.

Schirmer, W. 1999. 'Tells und Tallandschaften im Alten Orient'. In Klengel and Renger (eds.). 17-24.

Schloen, J. D. 2001. The House of the Father as Fact and Symbol. Patrimonialism in Ugarit and the Ancient Near East. Winona Lake IN.

Schloen, J. D. 2003. 'The Iron Age States as a State of Mind: A Response'. In Clark and Matthews (eds.). 283-292.

Schmandt-Besserat, D. (ed.). 1976. The Legacy of Sumer (Bibliotheca Mesopotamica 4). Malibu CA.

Schmid, H. 1992. 'Zur inneren Organisation früher mesopotamischer Palastbauten'. In B. Hrouda, S. Kroll, and P. Z. Spanos (eds.), Von Uruk nach Tuttul. Eine Festschrift für E. Strommenger (Münchener Vorderasiatische Studien 12). München-Wien. 185-192.

Schmid, H. 1995. Der Tempelturm Etemenanki in Babylon (BaF 17). Mainz.

Schmid, H. 1999. 'Vorderasiatische Archäologie und Bauforschung'. In Kühne, Bernbeck, and Bartl (eds.). 184-190.

Schmidt, E. F. 1931. Anatolia through the Ages. Discoveries at the Alishar Mound 1927-29 (OIC 11). Chicago.

Schmidt, E. F. 1953-70. Persepolis I-III (OIP 68-70). Chicago.

Schmidt, J. 1964. 'Strassen in altorientalischen Wohngebieten'. In BaM 3: 125-147.

Schmied, W. (ed.). 1960. Kein Troja ohne Homer. Nürnberg.

Schnapp, A. 1993. La conquête du passé. Aux origines de l'archéologie. Paris.

Schnapp, A. and K. Kristiansen. 1999. 'Discovering the Past'. In Barker (ed.). 3-47.

Schneider, A. 1920. Die sumerische Tempelstadt. Die Anfänge der Kulturwirtschaft. Essen.

Schneider, W. 1960. Überall ist Babylon: die Stadt als Schicksal des Menschen von Ur bis Utopia. Düsseldorf.

Schöllgen, G. 1984. Imperialismus und Gleichgewicht. Deutschland, England und die orientalische Frage 1871–1914. München.

Schrader, E. 1878. Keilinschriften und Geschichtsforschung. Giessen.

Schrader, E. 1883. Die Keilinschriften und das Alte Testament. Giessen.

Schulz, F. E. 1840. 'Mémoire sur le lac de Van et ses environs'. In JA 9: 257-323.

Schwartz, G. M. 1994. 'Rural Economic Specialization and Early Urbanization in the Khabur Valley, Syria'. In *id.* and Falconer (eds.). 19–36.

Schwartz, G. M. 2001. 'Syria and the Uruk Expansion'. In Rothman (ed.). 233-264.

Schwartz, G. M. and S. E. Falconer. 1994. 'Rural Approaches to Social Complexity'. In *id.* and *id.* (eds.). 1–9.

Schwartz, G. M. and S. E. Falconer (eds.). 1994. *Archaeological Views from the Countryside. Village Communities in Early Complex Societies*. Washington DC.

Schwartz, G. M. and J. J. Nichols (eds.). 2006. *After Collapse. The Regeneration of Complex Societies*. Tucson AZ.

Scollar. I. 1978. 'Computer Image Processing for Archaeological Air Photographs'. In WA 10: 71–87.

Secchi, B. 2000. Prima lezione di urbanistica. Roma-Bari.

Seeden, H. 1996. 'Western Archaeology and the History of Archaeological Sites'. In Scarcia Amoretti (ed.). 53–72.

Seeher, J. 2001. 'Die Zerstörung der Stadt Hattuša'. In G. Wilhelm (ed.), Akten der IV. Internationalen Kongresses für Hethitologie. Wiesbaden. 623–634.

Seeher, J. 2006. 'Ḥattuša – Tuthalija-Stadt? Argumente für eine Revision der Chronologie der hethitischen Hauptstadt'. In Th. van den Hout (ed.), *The Life and Times of Ḥattušili III and Tudhaliya IV* (PIHANS 103). Leiden. 131–146.

Seeher, J. 2008. 'Abschied von Gewusstem. Die Ausgrabungen in Ḥattuša am Beginn des 21. Jahrhunderts'. In Wilhelm (ed.). 1–13.

Selz, G. J. (ed.). 2011. *The Empirical Dimension of Ancient Near-Eastern Studies* (Wiener Offene Orientalistik 6). Wien-Berlin.

Sen, A. 1999. Development as Freedom. Oxford.

Sen, A. 2000. Freedom and Globalization. Oxford.

Serangeli, F. 1978. 'Le liste di censo di Alalah IV'. In VO 1: 99-131.

Sereni, E. 1955. Comunità rurali nell'Italia antica. Roma.

Seri, A. 2005. Local Power in OB Mesopotamia. London.

Service, E. 1962. Primitive Social Organization. New York (I cite from the 2<sup>nd</sup> edn., 1971).

Service, E. 1975. Origins of the State and Civilization. The Process of Cultural Evolution. New York.

Sevin, V. 1997. 'Van/Zernaki Tepe: On the Urartian Grid Plan once again'. In *Anatolica* 23: 173–180.

Seymour, M. 2008a. 'Robert Koldewey and the Babylon Excavation'. In Finkel and Seymour (eds.). 41–45.

Seymour, M. 2008b. 'Classical Accounts'. In Finkel and Seymour (eds.). 104-109.

- Seymour, M. 2008c. 'The Hanging Gardens and the Walls of Babylon in Art and Culture'. In Finkel and Seymour (eds.). 118-123.
- Seymour, M. 2008d. 'The Tower of Babel in Art'. In Finkel and Seymour (eds.). 118-123.
- Seymour, M. 2008e. [The Fall of Babylon.] 'Representations in Art'. In Finkel and Seymour (eds.). 172-178.
- Seymour. 2008f. 'Babylon in Contemporary Art and Culture'. In Finkel and Seymour (eds.). 203-212.
- Shane, O. C. and M. Küçük. 1998. 'The World's First City'. In Archaeology 51/2: 43-47.
- Shaw, T., P. Sinclair, B. Andah, and A. Okpoko (eds.). 1993. The Archaeology of Africa (OWA 20). London-New York.
- Shay, T. 1988. 'A Cycle of Development and Decline in the Early Phases of Civilization in Palestine: An Analysis of the Intermediate Bronze Period (2200-2000 BC)'. In Gledhill, Bender, and Larsen (eds.). 113-120.
- Shennan, S. J. (ed.). 1989. Archaeological Approaches to Cultural Identity (OWA 10). Boston.
- Shepperson, M. 2009. 'Planning for the Sun: Urban Forms as a Mesopotamian Rensponse to the Sun'. In WA 41/3: 363-378.
- Sherratt, A. 1981. 'Plough and Pastoralism: Aspects of the Secondary Products Revolution'. In I. Hodder, G. Isaac, and N. Hammond (eds.), Pattern of the Past. Studies in Honour of David Clarke. Cambridge UK. 261–305.
- Sherratt, A. 1983. 'The Secondary Exploitation of Animals in the Old World', in WA 15/1: 90-104.
- Sherratt, A. 1989. 'V. Gordon Childe: Archaeology and Intellectual History'. In P&P 125: 151-
- Shiloh, Y. 1970. 'The Four-Room House. Its Situation and Function in the Israelite City'. In IEJ 20: 180-190.
- Shiloh, Y. 1978. 'Elements in the Development of Town Planning in the Israelite City'. In IEJ 28: 36-51.
- Shiloh, Y. 1980. 'The Population of Iron Age Palestine in the Light of a Sample Analysis of Urban Plans, Areas, and Population Density'. In BASOR 239: 25-35.
- Shiloh, Y. 1987. 'The Casemate Wall, the Four Room House, and Early Planning in the Israelite City'. In BASOR 268: 3-15.
- Shipley, G. 2005. 'Little Boxes on the Hillside: Greek Town Planning, Hippodamos, and Polis Ideology'. In Hansen (ed.). 335-403.
- Sica, P. 1970. L'immagine della città da Sparta a Las Vegas. Bari.
- Siebler, M. 1990. Troia-Homer-Schliemann. Mythos und Wahrheit. Mainz.
- Sievertsen, U. 2002. 'Private Space, Public Space and Connected Architectural Developments throughout the Early Periods of Mesopotamian History'. In AoF 29: 307–329.
- Silberman, N. A. 1982. Digging for God and Country. Explorations in the Holy Land, 1799-1917. New York-London.
- Silberman, N. A. 1991. 'Desolation and Restoration: The Impact of a Biblical Concept on Near-Eastern Archaeology'. In Biblical Archaeologist 54: 76-87.
- Silberman, N. A. 1998. 'Power, Politics and the Past: The Social Construction of Antiquity in the Holy Land'. In Lévy (ed.). 9-23.
- Silver, M. 1983. 'Karl Polanyi and Markets in the Ancient Near East: The Challenge of the Evidence'. In Journal of Economic History 53: 795-829.
- Silver, M. 1985. Economic Structures of the Ancient Near East. London-Sydney.
- Silver, M. 2004. 'Modern Ancients'. In Rollinger and Ulf (eds.). 65-87.
- Silver, M. 2006. 'Public, Palace and Profit in the Ancient Near East'. In Akkadica 127: 5-12.

- Simmel, G. 1903. Die Großstadt. Dresden.
- Sjoberg, G. 1960. The Preindustrial City. Past and Present. New York.
- Sjoberg, G. 1965. 'The Origin and Evolution of Cities'. In Scientific American Sept.
- Slotsky, A. L. 1997. The Bourse of Babylon. Market Quotations in the Astronomical Diaries of Babylonia. Bethesda MD.
- Slotsky, A. L. and R. Wallenfels. 2009. *Tallies and Trends. The Late Babylonian Commodity Price Lists*. Bethesda MD.
- Smelser, N. J. 1959. 'A Comparative View of Exchange Systems'. In *Economic Development and Cultural Change* 8(2): 173–182.
- Smith, A. 1986. The Ethnic Origins of Nations. Oxford.
- Smith, C. A. 1976. 'Exchange Systems and the Spatial Distribution of Elites'. In *ead*. (ed.), *Regional Analysis*. London. 309–374.
- Smith, H. S. 1972. 'Society and Settlement in Ancient Egypt'. In Ucko, Tringham, and Dimbleby (eds.). 705–719.
- Smith, M. E. 2009. 'V. Gordon Childe and the Urban Revolution: A Historical Perpective on a Revolution in Urban Studies'. In *TPR* 80: 3–29.
- Smith, P. E. L. 1972. 'Land-use, Settlement Patterns and Subsistence Agriculture: A Demographic Perspective'. In Ucko, Tringham, and Dimbleby (eds.). 409–425.
- Smith, P. E. L. and T. Cuyler Young. 1972. 'The Evolution of Early Agriculture and Culture in Greater Mesopotamia: A Trial Model'. In Spooner (ed.). 1–59.
- Smith, P. E. L. and T. Cuyler Young. 1983. 'The Force of Numbers: Population Pressure in the Central Western Zagros 12,000–4500 B.C.' In Young, Smith, and Mortensen (eds.). 141–161.
- Snell, D. C. 1977. 'The Activities of Some Merchants of Umma'. In Iraq 39: 45-50.
- Snell, D. C. 1982. Ledgers and Prices. Early Mesopotamian Merchant Accounts (Yale Near-Eastern Researches 8). New Haven-London.
- Snell, D. C. 1991. 'Marketless Trading in our Time'. In JESHO 34: 129-141.
- Snell, D. C. 2001. Flight and Freedom in the Ancient Near East. Leiden.
- Snell, D. C. (ed.). 2005. A Companion to the Ancient Near East. Oxford.
- Sobrero, A. M. 1992. Antropologia della città. Roma.
- Sofri, G. 1969. Il modo di produzione asiatico. Torino.
- Soja, E. 1999. Postmetropolis. Critical Studies of Cities and Regions. Oxford.
- Soja, E. 2009. 'Putting Cities First'. In Diamantini and Martinotti. 93-105.
- Sombart, W. 1902. Der moderne Kapitalismus I. München.
- Sombart, W. 1907. 'Der Begriff des Stadt und das Wesen der Städtebildung'. In Archiv für Sozialwissenschaft und Sozialpolitik 25: 1–9.
- Sommerfeld, W. 2011. 'Assur in der Moderne Zerstörung und Gefährdung des kulturellen Erbes durch Kriegswirren, Raub und Bauprojekte'. In Renger (ed.). 77–85.
- Spencer, C. 1990. 'On the Tempo and Mode of State Formation: Neoevolutionism Reconsidered'. In *Journal of Anthropological Archaeology* 9: 1–30.
- Spooner, B. (ed.). 1972. Population Growth: Anthropological Implications. Cambridge MA.
- Stadelmann, R. 1981. 'La ville de pyramide à l'Ancien Empire égyptien'. In *Revue d'Egyptologie* 33: 67–77.
- Starzmann, M. Th. 2008. 'Use of Space at Shuruppak: Households on Display'. In Córdoba *et al.* (eds.). 203–219.
- Staubwasser, M. and H. Weiss. 2006. 'Holocene Climate and Cultural Evolution in Late Prehistoric Early Historic West Asia'. In *Quaternary Research* 66/3: 372–387.

- Steadman, Sh. R. 2000. 'Spatial Patterning and Social Complexity on Prehistoric Near-Eastern "Tell" Sites: Models for Mounds'. In Journal of Anthropological Archaeology 19: 164-199.
- Steadman, Sh. R. 2005. 'Reliquaries on the Landscape: Mounds as Matrices of Human Cognition'. In Pollock and Bernbeck (eds.). 286-307.
- Steadman, Sh. R. and J. C. Ross (eds.). 2010. Agency and Identity in the Ancient Near East. New Paths Forward. London.
- Steele, C. 2005. 'Who Has not Eaten Cherries with the Devil? Archaeology under Challenge'. In Pollock and Bernbeck (eds.). 45-65.
- Stein, G. J. 1998. 'Heterogeneity, Power, and Political Economy: Some Current Research Issues in the Archaeology of Old World Complex Societies'. In Journal of Archaeological Research 6: 1-44.
- Stein, G. J. 1999. Rethinking World-Systems: Diasporas, Colonies, and Interaction in Uruk Mesopotamia. Tucson.
- Stein, G. J. 2001. 'Indigenous Social Complexity at Hacinebi (Turkey) and the Organization of Uruk Colonial Contact'. In Rothman (ed.). 265-305.
- Stein, G. J. 2002a. 'The Uruk Expansion in Anatolia: A Mesopotamian Colony and Its Indigenous Host Community at Hacinebi, Turkey'. In Postgate (ed.). 149-171.
- Stein, G. J. 2002b. 'From Passive Periphery to Active Agents: Emerging Perspectives in the Archaeology of Interregional Interaction'. In AmAnthr 104: 903-916.
- Stein, G. J. 2004. 'Structural Parameters and Sociocultural Factors in the Economic Organization of North Mesopotamian Urbanism in the Third Millennium B.C.' In Feinman and Nicholas (eds.). 61-78.
- Stein, G. J. (ed.). 1999. 'The Uruk Expansion: Northern Perspectives from Hacinebi, Hassek Höyük and Gawra' = PO 25/1.
- Stein, G. J. and M. Rothman (eds.). 1994. Chiefdoms and Early States in the Near East: The Organizational Dynamics of Complexity (Monographs in WA 18). Madison WI.
- Steinkeller, P. 1987. 'The Administration and Economic Organization of the Ur III State: The Core and the Periphery'. In Gibson and Biggs (eds.). 19-41.
- Steinkeller, P. 1993. 'Early Political Development in Mesopotamia and the Origins of the Sargonic Empire'. In Liverani (ed.). 107-129.
- Steinkeller, P. 1996. 'The Organization of Crafts in Third Millennium Babylonia: The Case of Potters'. In AoF 23: 232-256.
- Steinkeller, P. 1999. 'Land-Tenure Conditions in Third-Millennium Babylonia: The Problem of Regional Variation'. In Hudson and Levine (eds.). 289-329.
- Steinkeller, P. 2001. 'New Light on the Hydrology and Topography of Southern Babylonia in the Third Millennium'. In ZA 91: 22-84.
- Steinkeller, P. 2004. 'Toward a Definition of Private Economic Activity in Third Millennium Babylonia'. In Rollinger and Ulf (eds.). 91-111.
- Steinkeller, P. 2007. 'City and Countryside in Third Millennium Southern Babylonia'. In Stone (ed.). 185-211.
- Stephani, M. 1991. 'Zur topographischen Aufnahme und Geländedarstellung von Assur'. In MDOG 123: 115-122.
- Steward, J. H. 1955. Theory of Culture Change. The Methodology of Multilinear Evolution.
- Steward, J. H. (ed.). 1955. Irrigation Civilizations: A Comparative Study. Washington DC.
- Stoddart, S. 1999. Urbanization and State Formation. In Barker (ed.). 988-949.
- Stol, M. 1982. 'State and Private Business in the Land of Larsa'. In JCS 34: 127-230.

- Stol, M. 2004. 'Wirtschaft und Gesellschaft in altbabylonischer Zeit'. In D. Charpin, D. O. Edzard, and M. Stol, *Die altbabylonische Zeit* (OBO 160/4). Teil 3. 641–975.
- Stone, E. 1981. 'Texts, Architecture and Ethnographic Analogy: Patterns of Residence in Old Babylonian Nippur'. in *Iraq* 43: 19–33.
- Stone, E. 1987. Nippur Neighborhoods (SAOC 44). Chicago.
- Stone, E. 1991. 'The Spatial Organization of Mesopotamian Cities'. In *Aula Orientalis* 9: 235–242.
- Stone, E. 1994. 'The Anatomy of a Mesopotamian City: The Mashkan-shapir Project'. In BCSMS 27: 15–24.
- Stone, E. 1995. 'The Development of Cities in Ancient Mesopotamia'. In Sasson (ed.). I. 235–248.
- Stone, E. 1997. 'City States and their Centers: the Mesopotamian Example'. In Nichols and Charlton (eds.). 15–26.
- Stone, E. 1999. 'The Constraints of State and Urban Form in Ancient Mesopotamia'. In Hudson and Levine (eds.). 203–228.
- Stone, E. 2005. 'Mesopotamian Cities and Countryside'. In D. Snell (ed.), *A Companion to the Ancient Near East*. Malden MA. 141–145.
- Stone, E. 2007. 'The Mesopotamian Urban Experience'. In ead. (ed.). 213-234.
- Stone, E. 2008. 'A Tale of Two Cities: Lowland Mesopotamia and Highland Anatolia'. In Marcus and Sabloff (eds.). 141–164.
- Stone, E. (ed.). 2007. Settlement and Society: Essays Dedicated to Robert McCormick Adams. Los Angeles-Chicago.
- Stone, E. and P. Zimansky. 2004a. *The Anatomy of a Mesopotamian City. Survey and Soundings at Mashkan-shapir*. Winona Lake IN.
- Strommenger, E. 1980. Habuba Kabira. Eine Stadt vor 5000 Jahren. Mainz.
- Stronach, D. 1967. 'Urartian and Achaemenian Tower Temples'. In JNES 26: 278-288.
- Stronach, D. 1978. Pasargadae. Oxford.
- Stronach, D. 1985a. 'The Apadana: a Signature of the Line of Darius I'. In J.-L. Huot, M. Yon, and Y. Calvet (eds.), *De l'Indus aux Balkans. Recueil J. Deshayes*. Paris. 433–445.
- Stronach, D. 1985b. 'Tepe Nush-i Jan: the Median Settlement'. In *The Cambridge History of Iran* II. Cambridge UK. 832–837.
- Stronach, D. and M. Roaf. 2007. Nush-i Jan, I. The Major Buildings of the Median Settlement. London-Leuven.
- Struve, V. V. 1933. 'The Problem of the Genesis, Development and Disintegration of the Slave Societies in the Ancient Orient'. In Diakonoff (ed.). 1969. 17–69.
- Stubwasser, M. and H. Weiss. 2006. 'Holocene Climate and Cultural Evolution in Late Prehistoric Early Historic West Asia'. In *Quaternary Research* 66: 372–387.
- Studevent-Hickman, B. 2008. 'Quantitative Aspects of Land Tenure in Ur III Babylonia'. In P. Michalowski (ed.), *On the Third Dynasty of Ur. Studies in Honor of M. Sigrist* (JCS, Supplemental Series 1). Boston. 193–199.
- Summers, G. D. 2007. 'Public Spaces and Large Halls at Kerkenes'. In A. Çilingiroğlu and A. Sagona (eds.), *Anatolian Iron Ages* 6. Leuven. 245–263.
- Summers, G. D., F. Summers, and S. Branting. 2004. 'Megarons and Associated Structures at Kerkenes Dağ: an Interim Report'. In *Anatolia Antiqua* 12: 7–41.
- Sumner, W. M. 1979. 'Estimating Population by Analogy'. In Kramer (ed.). 164-174.
- Suter, C. E. 2000. *Gudea's Temple Building: the Representation of an Early Mesopotamian Ruler in Text and Image* (Cuneiform Monographs 17). Groningen.

Suter, C. E. 2001. 'Gudea of Lagas': The Sumerian Temple Builder par excellence. The Rites in the Construction of a Temple in Late 3<sup>rd</sup> Millennium B.C.' In Azara et al. (eds.). 81–90.

Sweet, L. 1960. Tell Toquan. A Syrian Village. Ann Arbor MI.

Sweet, R. 'Writing as a Factor in the Rise of Urbanism'. In Aufrecht et al. (eds.). 35-49.

Szlechter, E. 1970. 'Les assemblées an Mésopotamie ancienne'. In Liber Memorialis G. de Lagarde. Louvain-Paris. 3-21.

Taagepera, R. 1968. 'Growth Curves of Empires'. In General Systems 13: 171-175.

Tainter, J. A. 1988. The Collapse of Complex Societies. Cambridge UK.

Tainter, J. A. 1999. 'Post-Collapse Societies'. In Barker (ed.). 988-1039.

Tate, G. 1997. 'Les villes syriennes aux époques hellénistique, romaine e byzantine'. In Wilhelm (ed.). 350-358.

Tchalenko, G. 1953. Villages antiques de la Syrie du Nord I-III. Paris.

Ternon, Y. 2005. Empire ottoman: le déclin, la chute, l'effacement. Paris.

Texier, Ch. 1852. Description de l'Arménie, la Perse, et la Mésopotamie I-II. Paris.

Texier, Ch. 1839-42. Description de l'Asie Mineure I-III. Paris.

Thalmann, J.-P. 1990a. 'Naissance et déclin des villes dans la Palestine du bronze ancien'. In Huot et al. 81-98.

Thalmann, J.-P. 1990b. 'Fragilité des structures urbaines'. In Huot et al. 167-178.

Thom, R. 1972. Stabilité structurelle et morphogénèse. New York.

Thompson, R. Campbell and R. W. Hutchinson. 1929. A Century of Exploration at Nineveh. London.

Thompson, R. Campbell and M. E. L. Mallowan. 1933. 'The British Museum Excavations at Nineveh, 1931–32'. In Liverpool Annals of Archaeology and Anthropology 20: 71–186.

Thuesen, I. 2000. 'The City-State in Ancient Western Syria'. In Hansen (ed.). 55-66.

Tokei, F. 1979. Essays on the Asiatic Mode of Production. Budapest.

Tönnies, F. 1887. Gemeinschaft und Gesellschaft. Berlin.

Tosi, M. 1973. 'Early Urban Evolution and Settlement Patterns in the Indo-Iranian Borderland'. In Renfrew (ed.). 429-446.

Tosi, M. 1973-76. 'The Northeastern Frontier of the Ancient Near East'. In Mesopotamia 8-9: 21-76.

Tosi, M. 1977. 'The Archaeological Evidence for Protostate Stuctures in Eastern Iran and Central Asia at the End of the Third Millennium B.C.' In Deshayes (ed.). 45-66.

Tourovetz, A. 1989. 'De l'espace libre à la rue. Origine, processus de formation et conception de la voie de circulation en Mésopotamie'. In L. de Meyer and E. Haenrich (eds.), Archaeologia Iranica et Orientalis. Miscellanea in honorem L. van den Berghe. Gent. 49-66.

Toynbee, A. 1970. Cities on the Move. London-New York.

Tracy, J. D. (ed.). 2000. City Walls: The Urban Enceinte in Global Perspective. New York.

Trigger, B. G. 1972. 'Determinants of Urban Growth in Pre-Industrial Societies'. In Ucko, Tringham, and Dimbleby (eds.). 575-599.

Trigger, B. G. 1980. Gordon Childe: Revolutions in Archaeology. London.

Trigger, B. G. 1984a. 'Alternative Archaeologies: Nationalist, Colonialist, Imperialist'. In Man 19: 355-370.

Trigger, B. G. 1984b. 'Childe and Soviet Archaeology'. In Australian Archaeology 18: 1–16.

Trigger, B. G. 1986. 'The Role of Technology in V. Gordon Childe's Archaeology'. In Norwegian Archaeological Review 19: 1-14.

Trigger, B. G. 1987. 'V. Gordon Childe: A Marxist Archaeologist'. In Manzanilla (ed.). 1-8.

Trigger, B. G. 1989. A History of Archaeological Thought. Cambridge UK.

- Trigger, B. G. 1993. Early Civilizations. Ancient Egypt in Context. Cairo.
- Trigger, B. G. 2008. 'Early Cities: Craft Workers, Kings, and Controlling the Supernatural'. In Marcus and Sabloff (eds.). 53–66.
- Trumpener, U. 1975. 'German Officers in the Ottoman Empire'. In J. L. Wallach (ed.), *Germany and the Middle East*, 1819–1918. Tel Aviv. 30–43.
- Tunca, Ö. 1986. 'Remarques sur l'architecture des temenos d'Uruk et d'Ur à la période de la IIIe dynastie d'Ur'. In *BaM* 17: 255–292.
- Turner, G. 1970a. 'Tell Nebi Yūnus: the ekal māšarti of Nineveh'. In Iraq 32: 68-85.
- Turner, G. 1970b. 'The State Apartments of Late Assyrian Palaces'. In Iraq 32: 177-213.
- Tylor, E. B. 1865. Researches into the Early History of Mankind. London.
- Tyumenev, A. I. 1956. 'The State Economy of Ancient Sumer'. In Diakonoff (ed.). 1969. 70-87.
- Ucko, P. J. and R. Layton (eds.). 1999. *The Archaeology and Anthropology of Landscape*. London.
- Ucko, P. J., R. Tringham, and G. W. Dimbleby (eds.). 1972. Man, Settlement and Urbanism. London.
- Uehlinger, Ch. 1990. Weltreich und eine Rede. Eine neue Deutung der sogenannten Turmbauerzählung (Gen 11, 1–9) (OBO 101). Freiburg–Göttingen.
- Unger, E. 1929. Das Stadtbild von Assur (Der Alte Orient 27/3). Leipzig.
- Unger, E. 1930. 'Zur Topographie von Babylon nach der keilinschriftlichen Überlieferung'. In Wetzel 1930. 84–109.
- Unger, E. 1931. Babylon, die heilige Stadt nach der Beschreibung der Babylonier. Berlin-Leipzig.
- Uphill, E. 1972. 'The Concept of the Egyptian Palace as a "Ruling Machine". In Ucko, Tringham, and Dimbleby (eds.). 721–734.
- Uphill, E. 1988. Egyptian Towns and Cities. Aylesbury UK.
- Ur, J. 2002a. 'Surface Collection and Offsite Studies at Tell Hamoukar, 1999'. In *Iraq* 64: 15–43.
- Ur, J. 2002b. 'Settlement and Landscape in Northern Mesopotamia: The Tell Hamoukar Survey 2000–2001'. In *Akkadica* 123: 57–88.
- Ur, J. 2003. 'CORONA Satellite Photography and Ancient Road Networks: A Northern Mesopotamian Case Study'. In *An* 76: 109-118.
- Ur, J. 2005. 'Sennacherib's Northern Assyrian Canals: New Inisghts from Satellite Imagery and Aerial Photography'. In *Iraq* 67/1: 317–345.
- Ur, J., P. Karsgaard, and J. Oates. 2007. 'Early Urban Development in the Near East'. In Science 317: 11–88.
- Valbelle, D. 1990. 'L'Egypte pharaonique'. In Huot et al. 255-321.
- Vallet, R. 1996. 'Habuba Kebira (Syrie) ou la naissance de l'urbanisme'. In PO 22/2: 45-76.
- Vallet, R. 1997. 'Habuba Kébira sud, approche morphologique de l'habitat'. In Castel *et al.* (eds.). 105–119.
- Vallet, R. 1998. 'L'urbanisme colonial urukien, l'exemple de Djebel Aruda'. In Lebeau (ed.). 53–87.
- van Beek, G. W. 1982. 'A Population Estimate for Marib: A Contemporary Tell Village in North Yemen'. In *BASOR* 248: 61–68.
- van Binsbergen, W. (ed.). 1997. *Black Athena: Ten Years after* (Talanta, Proceedings of the Dutch Archaeological and Historical Society 28–29). Leiden.
- van de Mieroop, M. 1992a. Society and Enterprise in Old Babylonian Ur (BBVO 12). Berlin.
- van de Mieroop, M. 1992b. 'Old Babylonian Ur: Portrait of an Ancient Mesopotamian City'. In JANES 21: 119–130.

- van de Mieroop, M. 1995. 'The City in Ancient Mesopotamia'. In Terceira Margem 3: 97-103.
- van de Mieroop, M. 1997. The Ancient Mesopotamian City. Oxford.
- van de Mieroop, M. 1999a. 'Thoughts on Urban Real Estate in Ancient Mesopotamia'. In Hudson and Levine (eds.). 253-287.
- van de Mieroop, M. 1999b. 'The Government of an Ancient Mesopotamian City'. In Watanabe (ed.). 139-161.
- van de Mieroop, M. 2004. 'Economic Theories and the Ancient Near East'. In Rollinger and Ulf (eds.). 54-64.
- van der Leeuw, S. E. 1981. 'Information Flows, Flow Structures and the Explanation of Change in Human Institutions'. In id. (ed.). 229-329.
- van der Leeuw, S. E. (ed.). 1981. Archaeological Approaches to the Study of Complexity. Amsterdam.
- van der Spek, R. J. 1987. 'The Babylonian City'. In A. Kuhrt and S. M. Sherwin-White (eds.), Hellenism in the East: The Interaction of Greek and non-Greek Civilisations from Syria to Central Asia after Alexander. London. 57-74.
- van Driel, G. 1990. 'Old Babylonian Nippur'. In BO 47: 559-577.
- van Driel, G. 1994. 'Private or Not-So Private: Nippur Ur III Files'. In Gasche et al. (eds.). 181-
- van Driel, G. 1999a. 'Agricultural Entrepreneurs in Mesopotamia'. In Klengel and Renger (eds.). 213-223.
- van Driel, G. 1999b. 'Capital Formation and Investment in an Institutional Context in Ancient Mesopotamia'. In Dercksen (ed.). 25-42.
- van Driel, G. 2000a. 'Institutional and Non-Institutional Economy in Ancient Mesopotamia'. In Bongenaar (ed.). 5-23.
- van Driel, G. 2000b. 'The Mesopotamian North: Land Use, an Attempt'. In Jas (ed.). 265-299.
- van Driel, G. 2001. 'On Villages'. In W. H. van Soldt et al. (eds.), Veenhof Anniversary Volume. Leiden. 103-118.
- van Driel, G. 2002. Elusive Silver. In Search of a Role for a Market in an Agrarian Environment. Aspects of Mesopotamia's Society (PIHANS 95). Leiden-Istanbul.
- van Ess, M. 2001. Uruk. Architektur. II. Von der Akkad bis zur mittelbabylonischen Zeit. Teil 1: Das Eanna-Heiligtum zur Ur III- und altbabylonischen Zeit (Ausgrabungen in Uruk-Warka, Endberichte 15.1). Mainz.
- van Ess, M. and E. Weber-Nöldeke. 2008. Dr. Arnold Nöldeke, Briefe aus Uruk-Warka 1931-1939. Wiesbaden.
- van Liere, W. J. 1963. 'Capitals and Citadels of Bronze-Iron Age Syria'. In Annales Archéologiques de Syrie 13: 109-122.
- van Liere, W. J. and J. Lauffray. 1954-55. 'Nouvelle prospection archéologique dans la Haute Jerireh syrienne'. In Annales Archéologiques de Syrie 4-5: 129-147.
- van Soldt, W. H. 1986. 'The Palace Archives at Ugarit'. In Veenhof (ed.). 196-204.
- van Soldt, W. H. 1991. Studies in the Akkadian of Ugarit (AOAT 40). Neukirchen-Vluyn.
- van Soldt, W. H. 2000. 'Private Archives at Ugarit'. In Bongenaar (ed.). 229-245.
- Veenhof, K. R. 1972. Aspects of Old Assyrian Trade and Its Terminology. Leiden.
- Veenhof, K. R. 1988. 'Prices and Trade. The Old Assyrian Evidence'. In AoF 15: 243-263.
- Veenhof, K. R. 1999. 'Silver and Credit in Old Assyrian Trade'. In Dercksen (ed.). 55-83.
- Veenhof, K. R. (ed.). 1996. Houses and Households in Ancient Mesopotamia (RAI 40, PIHANS 78). Leiden.
- Vercoutter, J. 1983. 'Que savons-nous de la ville égyptienne?' In Bruschweiler (ed.). 133-136.

- Verderame, L. 2011. 'L'immagine della città nella letteratura sumerica'. In Dolce and Pellitteri (eds.). 99–126.
- Verhoeven, K. 1998. 'Geomorphological Research in the Mesopotamian Flood Plain'. In Gasche and Tanret (eds.). 159–245.
- Verhoeven, K. and L. Daels. 1994. 'Remote Sensing and Geographical Information Systems (GIS) for Archaeological Research (Applied in Mesopotamia)'. In Gasche *et al.* (eds.). 519–539.
- Verhoeven, M. 1999. An Archaeological Ethnography of a Neolithic Community. Space, Place and Social Relations in the Burnt Village at Tell Sabi Abyad, Syria (PIHANS 83). Leiden–Istanbul.
- Verhoeven, M. 2005. 'Ethnoarchaeology, Analogy, and Ancient Societies'. In Pollock and Bernbeck (eds.). 251–270.
- Vernay-Nouri, A. 2008. 'Babylone dans les traditions arabes'. In André-Salvini (ed.). 390–391.
- Viano, M. 2010. 'Community and Individuals at Emar'. In AoF 37: 132-152.
- Vicari, J. 1985. 'Les ziggurats de Tchogha-Zanbil (Dur-Untash) et de Babylone'. In Brommelaer (ed.). 47–57.
- Vicari, J. 2000. La Tour de Babel. Paris.
- Vidale, M. 2007. 'La Rivoluzione Urbana e la specializzazione artigianale in Eurasia a 50 anni dalla morte di V. G. Childe'. In *Rivista di Scienze Preistoriche* 56: 399–416.
- Vidale, M. 2010. A Oriente di Sumer. Archeologia dei primi stati euroasiatici 4000–2000 a.C. Roma.
- Virilio, P. 1984. L'espace critique. Paris.
- Vita-Finzi, C. and E. S. Higgs. 1970. 'Prehistoric Economy in the Mount Carmel Area of Palestine: Site Catchment Analysis'. In *Proceedings of the Prehistoric Society* 36: 1–37.
- Vitali, M. (ed.) 1990. Romolo Liverani scenografo. Faenza.
- Voigt, M. M. 1994. 'Excavations at Gordion 1988–89: the Yassiköyük Stratigraphic Sequence'. In A. Çiringiloğlu and D. H. French (eds.), *Anatolian Iron Ages* 3. London. 265–293.
- Volney, C. F. 1787. Voyage en Egypte et en Syrie. Paris (I cite from the 5th edn., 1822).
- Volney, C. F. 1791. Les ruines, ou Méditation sur les révolutions des empires. Paris (I cite from the 2<sup>nd</sup> edn., 1792).
- von Dassow, E. 2008. State and Society in the Late Bronze Age. Alalah under the Mitanni Empire (Studies on the Civilization and Culture of Nuzi and the Hurrians 17). Bethesda MD.
- von der Osten, H. H. 1927. Explorations in Hittite Asia Minor (OIC 2). Chicago.
- von der Osten, H. H. 1929. Explorations in Hittite Asia Minor, 1927-28 (OIC 6). Chicago.
- von der Osten, H. H. 1930. Explorations in Hittite Asia Minor, 1929 (OIC 8). Chicago.
- von der Osten, H. H. 1933. Discoveries in Anatolia 1930-31 (OIC 14). Chicago.
- von Grunebaum, G. E. 1955. 'Die islamische Stadt'. In Saeculum 6: 138-153.
- von Maurer, G. 1854. Einleitung zur Geschichte der Mark-, Hof-, Dorf- und Stadtverfassung und der öffentlichen Gewalt. München.
- von Oppenheim, M. 1930. Der Tell Halaf. Berlin.
- von Schuler, E. 1968. 'Siebzig Jahre Deutsche Orient-Gesellschaft'. In MDOG 100: 6-22.
- von Thünen, J. H. 1875<sup>3</sup>. *Der isolierte Staat in Beziehung auf Landwirtschaft und Nationalökonomie*. Hamburg (the 1<sup>st</sup> edn. is 1826).
- Waetzoldt, H. 1996. 'Privathäuser. Ihre Grösse, Einrichtung und die Zahl der Bewohner'. In Veenhof (ed.). 145–152.

- Waetzoldt, H. and H. Hauptmann (eds.). 1997. Assyrien im Wandel der Zeiten (Heidelberger Studien zum Alten Orient 6 = RAI 39). Heidelberg.
- Wagstaff, J. M. 1985. The Evolution of Middle Eastern Landscapes. London.
- Wagstaff, J. M. 1987. 'The New Archaeology and Geography' .In id. (ed.). 26-36.
- Wagstaff, J. M. (ed.). 1987. Landscape and Culture. Geographical and Archaeological Perspectives. Oxford.
- Wailes, B. (ed.). 1996. Craft Specialization and Social Evolution: In Memory of V. Gordon Childe (University Museum Monographs 93). Philadelphia.
- Waldrop, M. M. 1992. Complexity: The Emerging Science at the Edge of Order and Chaos. New York.
- Wallach, J. 1996. Desert Queen. The Extraordinary Life of Gertrude Bell. New York.
- Wallerstein, I. 1974-80-89. The Modern World-System I-III. New York.
- Wallerstein, I. 1991. 'World System versus World-Systems: A Critique'. In Critique of Anthropology 11: 189-194.
- Walters, S. D. 1970. Waters for Larsa. An Old Babylonian Archive dealing with Irrigation (Yale Near-Eastern Research 4). New Haven-London.
- Walther, J. 1889. Les découvertes de Ninive et de Babylone au point de vue biblique. Lausanne.
- Warburton, D. A. 2003. Macroeconomics from the Beginning: The General Theory, Ancient Markets, and the Rate of Interest. Neuchâtel.
- Ward, W. A. and M. Sharp Joukowsky (eds.). 1992. The Crisis Years: the 12th Century B.C. Dubuque 10.
- Ward-Perkins, B. 2005. The Fall of Rome and the End of Civilization. Oxford.
- Wartke, R.-B. 2003. 'Assur in Berlin. Die Präsentation der Ausgrabungsfunde aus Assur im Kontext der Geschichte des Vorderasiatischen Museums'. In Marzahn and Saljie (eds.). 67-77.
- Wartke, R.-B. (ed.). 2008. Auf dem Weg nach Babylon. Robert Koldewey Ein Archäologeneleben. Mainz.
- Watanabe, K. (ed.) 1999. Priest and Officials in the Ancient Near East. Heidelberg.
- Waterfield, G. 1963. Layard of Nineveh. London.
- Waters, M. R. 1992. Principles of Geoarchaeology. A North American Perspective. Tucson AZ.
- Watson, J. D. 2003. DNA. The Secret of Life. New York.
- Watson, P. J. 1979. Archaeological Ethnography in Western Iran. Tucson.
- Watson, P. J. 1980. 'The Theory and Practice of Ethnoarchaeology with Special Reference to the Near East'. In PO 6: 55-64.
- Watson, P. J., S. A. LeBlanc, and Ch. L. Redman. 1984. Archaeological Explanation. The Scientific Method in Archaeology. New York.
- Watson, P. J., S. A. LeBlanc, and Ch. L. Redman (eds.). 1971. Explanation in Archaeology. An Explicit Scientific Approach. New York.
- Wattenmaker, P. 1987. 'Town and Village Economies in an Early State Society'. In PO 13/2: 113-127.
- Wattenmaker, P. 1998. Household and State in Upper Mesopotamia. Specialized Economy and the Social Uses of Goods in an Early Complex Society. Washington DC.
- Webber, M. 1964. Explorations into Urban Structure. Philadelphia.
- Weber, M. 1897. 'Agrarverhältnisse im Altertum'. In Handwörterbuch der Staatswissenschaften II. Jena.
- Weber, M. 1909. 'Agrargeschichte, I: Agrarverhältnisse im Altertum'. In J. Conrad et al. (eds.), Handwörterbuch der Staatswissenschaften, Jena (republished in Gesammelte Aufsätze zur Sozial- und Wirtschaftsgeschichte. Tübingen. 1924. 1-288).

- Weber, M. 1921. 'Die Stadt'. In Archiv für Sozialwissenschaft und Sozialpolitik 47: 621-772.
- Weber, M. 1922. Wirtschaft und Gesellschaft. Tübingen (1st edn., edited by Marianne Weber).
- Weber, M. 1956. Wirtschaft und Gesellschaft. Tübingen (2<sup>nd</sup> edn. edited by J. Wickelmann).
- Weisberg, D. B. 1967. Guild Structure and Political Allegiance in Early Achaemenid Mesopotamia (Yale Near-Eastern Researches 1). New Haven-London.
- Weiss, H. 1983. 'Excavations at Tell Leilan and the Origins of North Mesopotamian Cities in the Third Millennium B.C.' In *PO* 9(2): 39–52.
- Weiss, H. 2000. 'Causality and Chance: Late Third Millennium Collapse in Southwest Asia'. In Rouault and Wäfler (eds.). 207–217.
- Weiss, H. (ed.). 1986. The Origins of Cities in Dry-Farming Syria and Mesopotamia in the Third Millennium B.C. Guilford CT.
- Weiss, H. and M.-A. Courty. 1993a. 'The Genesis and Collapse of the Akkadian Empire'. In Liverani (ed.). 131–155.
- Weiss, H. and T. Cuyler Young. 1975. 'The Merchants of Susa: Godin V and Plateau-Lowland Relations in the Late Fourth Millennium B.C.' In *Iran* 13: 1–18.
- Weiss, H. *et al.* 1993b. 'The Genesis and Collapse of Third Millennium North Mesopotamian Civilization'. In *Science* 261: 995–1004.
- Weissbach, Fr. H. 1904. Das Stadtbild von Babylon (Der Alte Orient V/4). Leipzig.
- Wenke, R. J. 1981. 'Explaining the Evolution of Cultural Complexity: A Review'. In M. B. Schiffer (ed.), *Advances in Archaeological Method and Theory*. Vol. 4. New York–London. 79–127.
- Westenholz, A. 1993. 'The World View of Sargonic Officials. Differences in Mentality between Sumerians and Akkadians'. In Liverani (ed.). 1993. 157–169.
- Wetzel, F. 1930. Die Stadtmauern von Babylon (WVDOG 48). Leipzig.
- Wetzel, F. and F. H. Weissbach. 1938. Das Hauptheiligtum des Marduk in Babylon, Esagila und Etemenanki (WVDOG 59). Leipzig.
- Wheatley, P. 1961. The Pivot of the Four Quarters. Edinburgh (2<sup>nd</sup> edn. Chicago 1971).
- Wheatley, P. 1969. City as Symbol. Essay on the Arrangement and Perception of Urban Space in the Traditional World. London.
- Wheatley, P. 1972. 'The Concept of Urbanism'. In Ucko, Tringham, and Dimbleby (eds.). 600–637.
- Wheeler, M. 1953. The Indus Civilization. Cambridge UK.
- Wheeler, M. 1954. Archaeology from the Earth. Harmondsworth.
- Wheeler, M. 1956. 'The First Towns?' In An 30: 132-136, 225.
- White, L. 1959a. The Evolution of Culture. New York.
- White, L. 1959b. 'The Concept of Evolution in Cultural Anthropology'. In B. Meggars (ed.). 106–125.
- Whitehouse, R. 1977. The First Cities. Oxford.
- Wiggerman, F. A. M. 2000. 'Agriculture in the Northern Balikh Valley. The Case of Middle Assyrian Tell Sabi Abyad'. In Jas (ed.). 171–231.
- Wilde, O. 1930. Plays, Prose Writings and Poems. London 1930.
- Wilhelm, G. (ed.). 1997. Die Orientalische Stadt: Kontinuität, Wandel, Bruch. Saarbrücken.
- Wilhelm, G. (ed.). 1998. Zwischen Tigris und Nil. Mainz.
- Wilhelm, G. (ed.). 2008. Ḥattuša-Boğazköy. Das Hethiterreich im Spannungsfeld des Alten Orients (CDOG 6). Wiesbaden.
- Wilkinson, T. J. 1990a. Town and Country in Southeastern Anatolia. I. Settlement and Land Use at Kurban Höyük (OIP 109). Chicago.

- Wilkinson, T. J. 1990b. 'The Development of Settlement in the North Jazira between the 7th and the 1st Millennia BC'. In Iraq 52: 49-62.
- Wilkinson, T. J. 1990c. 'Early Channels and Landscape Development around Abu Salabikh, a Preliminary Report'. In Iraq 52: 75-83.
- Wilkinson, T. J. 1994. 'The Structure and Dynamics of Dry-Farming States in Upper Mesopotamia'. In CA 35: 483-520.
- Wilkinson, T. J. 1995. 'Late-Assyrian Settlement Geography in Upper Mesopotamia'. In Liverani (ed.). 139-160.
- Wilkinson, T. J. 1998. 'Settlement and Irrigation in the Balikh Valley, Syria, from the 3<sup>rd</sup> to the 1st Millennium BC'. In Lebeau (ed.), 151-170.
- Wilkinson, T. J. 2001. 'Archaeological Survey in the Tell Beydar Region, Syria 1997'. In K. van Lerberghe and G. Voet (eds.), Tell Beydar: Environmental and Technical Studies (Subartu 6). Turnhout. 1-37.
- Wilkinson, T. J. 2003. Archaeological Landscapes of the Near East. Tucson AZ.
- Wilkinson, T. J., E. Barbanes, J. Ur, and M. Altaweel. 2005. 'Landscape and Settlement in the Neo-Assyrian Empire'. In BASOR 340: 23-56.
- Wilkinson, T. J. and J. Casana. 2005. 'Settlement and Landscapes in the Amuq Region'. In A. Yener (ed.), The Amuq Valley Regional Project. Vol.1: Surveys in the Plain of Antioch and Orontes Delta, Turkey, 1995-2002 (OIP 131). Chicago. 25-65.
- Wilkinson, T. J., J. H. Christiansen, J. Ur, M. Widell, and M. Altaweel. 2007. 'Urbanization within a Dynamic Environment: Modeling Bronze Age Communities in Upper Mesopotamia'. In AmAnthr 109: 52-69.
- Wilkinson, T. J. and D. J. Tucker. 1995. Settlement Development in the North Jezira, Iraq. A Study of the Archaeological Landscape. Warminster.
- Willey, G. R. 1953. Prehistoric Settlement Patterns in the Viru Valley, Peru. Washington DC.
- Willis, T. M. 2001. The Elders of the City. A Study of the Elders-Laws in Deuteronomy (SBL Monograph Series 55). Atlanta GA.
- Wilson, J. A. 1951. The Culture of Ancient Egypt. Chicago.
- Wilson, J. A. 1960. 'Civilization without Cities'. In Kraeling and Adams (eds.). 124-136.
- Wilson, J. A. 1970. 'James Henry Breasted The Idea of an Oriental Institute'. In Sanders
- Wilson, K. L. (ed.). 2012. Bismaya: Recovering the Lost City of Adab (OIP 138). Chicago.
- Winckler, H. 1892. Geschichte Babyloniens und Assyriens (Völker und Staaten des alten Orients 1). Leipzig.
- Winckler, H. 1907. 'Vorläufige Nachrichten über die Ausgrabungen in Boghaz-köi im Sommer 1907. 1. Die Tontafelfunde'. In MDOG 35: 1-59.
- Winter, I. J. 1981. 'Royal Rhetoric and the Development of Historical Narrative in Neo-Assyrian Reliefs'. In Studies in Visual Communication 7: 2-38.
- Winter, I. J. 1993. 'Seat of Kingship / A Wonder to Behold: The Palace as Construct in the Ancient Near East'. In Ars Orientalis 23: 27-55.
- Wirth, E. 1975. 'Die Orientalische Stadt. Ein Überblick aufgrund jüngeren Forschungen zur materiellen Kultur'. In Saeculum 26: 45-94.
- Wirth, E. 1991. 'Zur Konzeption der orientalisch-islamischen Stadt. Privatheit im islamischen Orient versus Öffentlichkeit in Antike und Okzident'. In Die Welt des Islam 31: 50-92.
- Wirth, E. 1997. 'Kontinuität und Wandel der orientalische Stadt'. In Wilhelm (ed.). 1-44.
- Wirth, L. 1938. 'Urbanism as a Way of Life'. In American Journal of Sociology 44: 1-24 (republished in P. K. Hatt and A. J. Reiss [eds.], Reader in Urban Sociology. Glencoe IL. 1951. 32-49)

- Wiseman, D. J. 1985. *Nebuchadnezzar and Babylon* (The Schweich Lectures of the British Academy. 1983). Oxford.
- Wittfogel, K. A. 1955. 'Developmental Aspects of Hydraulic Societies'. In J. H. Steward (ed.), Irrigation Civilizations: A Comparative Study, Washington, reprinted in S. Streuver (ed.), Prehistoric Agriculture. New York 1971. 557–571.
- Wittfogel, K. A. 1957. Oriental Despotism. A Comparative Study of Total Power. New Haven.

Wittgenstein, L. 1953. Philosophische Untersuchungen. Oxford.

Wittgenstein, L. 1977. Vermischte Bemerkungen. Frankfurt.

Wolf, C. U. 1947. 'Traces of Primitive Democracy in Ancient Israel'. In JNES 6: 98-108.

Wolf, E. R. 1982. Europe and the People without History. Berkeley.

Wolpert, S. 1977. A New History of India. Oxford

Wood, R. 1753. The Ruins of Palmyra. London.

Woodcock, A. and M. Davis. 1978. Catastrophe Theory. Harmondsworth.

Woodward, Ch. 2001. In Ruins. London.

Woolley, C. L. 1929. *Ur of the Chaldees. A Record of Seven Years of Excavation*. Harmondsworth (I cite from the revised edition 1950).

Woolley, C. L. 1934. Ur Excavations. II. The Royal Cemetery. Oxford.

Woolley, C. L. 1939. Ur Excavations. V. The Ziggurat and Its Surroundings. Oxford.

Woolley, C. L. 1955. Ur Excavations. IV. The Early Periods. London-Philadelphia.

Woolley, C. L. 1956. 'The First Towns?' In An 30: 224-225.

Woolley, C. L. 1957. 'The Urbanization of Society' (= The Scientific and Cultural History of Mankind. vol I, part 2: The Foundations of Civilization). In CHM 4(1): 236–272.

Woolley, C. L. 1965. *Ur Excavations. VIII. The Kassite Period and the Period of the Assyrian Kings*. London.

Woolley, C. L. 1974. Ur Excavations. VI. The Buildings of the Third Dynasty. Philadelphia.

Woolley, C. L. and M. Mallowan. 1962. Ur Excavations. IX: The Neo-Babylonian and Persian Periods. London.

Woolley, C. L. and M. Mallowan. 1976. Ur Excavations. VII: The Old Babylonian Period. London.

Worsaae, J. J. A. 1843. Danmarks Oldtid. Copenhagen.

Wright, G. A. 1971. 'Origins of Food Production in Southwestern Asia: A Survey of Ideas'. In CA 12: 447–477.

Wright, G. E. 1970. 'The Phenomenon of American Archaeology in the Near East'. In Sanders (ed.). 3–40.

Wright, G. E. 1974. 'The Tell; Basic Unit for Reconstructing Complex Societies in the Near East'. In C. B. Moore (ed.), *Reconstructing Complex Societies (BASOR* Suppl. 20). Cambridge MA. 123–130.

Wright, G. R. H. 1984. 'The Monumental City Gate in Palestine and Its Foundations'. In ZA 74: 267–289.

Wright, H. E., Jr. 1993. 'Environmental Determinism in Near-Eastern Prehistory'. In CA 34: 458-469.

Wright, H. T. 1969. *The Administration of Rural Production in an Early Mesopotamian Town* (Anthropological Papers 38). Ann Arbor.

Wright, H. T. 1977. 'Recent Research on the Origin of the State'. In ARA 6: 379-397.

Wright, H. T. 1978. 'Toward an Explanation of the Origin of the State'. In Cohen and Service (eds.). 49–68.

Wright, H. T. 1981. 'The Southern Margins of Sumer; Archaeological Survey of the Area of Ur and Eridu'. In Adams 1981. 95–360.

- Wright, H. T. 1998. 'Uruk States in Southwestern Iran'. In Feinman and Marcus (eds.). 173-197.
- Wright, H. T. 2001. 'Cultural Action in the Uruk World'. In Rothman (ed.). 123-147.
- Wright, H. T. and G. A. Johnson. 1977. 'Population, Exchange, and Early State Formation in Southwestern Iran'. In AmAnthr 77: 267-289.
- Wright, H. T., N. Miller, and R. Redding. 1980. 'Time and Process in an Uruk Rural Center'. In Barrelet (ed.). 265-284.
- Wullen, M. and G. Schauerte (eds.). 2008. Babylon. Mythos. Ausstellung des Vorderasiatischen Museums, Katalog. Berlin.
- Wunder, H. 1987. 'Peasant Communities in Medieval and Early Modern Germany'. In Les communautés rurales V (= Recueils de la Société Jean Bodin 44). Paris. 9-52.
- Wunsch, C. 2000. 'Neubabylonische Geschäftsleute und ihre Beziehungen zu Palast- und Tempelverwaltung: das Beispiel der Familie Igibi'. In Bongenaar (ed.). 95-118.
- Xella, P. 1994. 'La città divina. Cultura urbana e politeismo nel Vicino Oriente antico'. In Cardini (ed.). 1-42.
- Yahya, A. H. 2005. 'Archaeology and Nationalism in the Holy Land'. In Pollock and Bernbeck (eds.). 66-77.
- Yoffee, N. 1977. The Economic Role of the Crown in the Old Babylonian Period (Bibliotheca Mesopotamica 5). Malibu CA.
- Yoffee, N. 1997. 'The Obvious and the Chimerical: City-States in Archaeological Perspective'. In Charlton and Nichols (eds.). 255-264.
- Yoffee, N. 1979. 'The Decline and Rise of Mesopotamian Civilization: An Ethnoarchaeological Perspective on the Evolution of Social Complexity'. In AmAnt 44: 5-35.
- Yoffee, N. 1981. Explaining Trade in Ancient Western Asia (Monographs on the Ancient Near East II/2). Malibu CA.
- Yoffee, N. 1993. 'Too Many Chiefs? (or, Safe the Texts for the '90s)'. In id. and A. Sherrat (eds.), Archaeological Theory: Who Sets the Agenda? Cambridge UK. 60-78.
- Yoffee, N. 1995. 'Political Economy in Early Mesopotamian States'. In ARA 24: 281-311.
- Yoffee, N. 1997. 'Robert McCormick Adams: an Archaeological Biography'. In AmAnt 62(3): 399-413.
- Yoffee, N. 2005. Myths of the Archaic State: Evolution of the Earliest Cities, States and Civilizations. Cambridge UK.
- Yoffee, N. ans G. L. Cowgill. 1988. The Collapse of Ancient States and Civilizations. Tucson AZ.
- Yon, M. 1984. 'Sanctuaires d'Ougarit'. In G. Roux (ed.), Temples et sanctuaires. Lyon. 37-50.
- Yon, M. 1992. 'Ugarit: The Urban Habitat. The Present State of the Archaeological Picture'. In BASOR 286: 29-34.
- Yon, M. (ed.). 1987. Le centre de la ville (Ras Shamra-Ougarit 3). Paris.
- Yon, M. and O. Callot. 1997. 'L'habitat à Ougarit à la fin du bronze récent'. In Castel et al. (eds.). 15-28.
- Yon, M., P. Lombard, and M. Renisio. 1987. 'L'organisation de l'habitat: les maisons A, B et E'. In M. Yon (ed.). 11-128.
- Yon, M., M. Sznycer, and P. Bordreuil (eds.). 1995. Le pays d'Ougarit autour de 1200 av. J.-C. (Ras Shamra-Ougarit 11). Paris.
- Young, T. Cuyler. 1966. 'Thoughts on the Architecture of Hasanlu IV'. In Iranica Antiqua 6:
- Young, T. Cuyler. 1969. Excavations at Godin Tepe. First Progress Report. Toronto.

- Young, T. Cuyler. 1972. 'Population Densities and Early Mesopotamian Urbanism'. In Ucko *et al.* (eds.). 827–842.
- Young, T. Cuyler. 1986. 'The Origin of the Mesopotamian City'. In BCSMS 11: 3-9.
- Young, T. Cuyler. 1994. 'Architectural Developments in Iron Age Western Iran'. In *BCSMS* 27: 25–32.
- Young, T. Cuyler. 2002. 'Syria and Iran: Further Thoughts on the Architecture of Hasanlu'. In al-Gailani Werr et al. (eds.), Of Pots and Plans. Papers on the Archaeology and History of Mesopotamia and Syria presented to D. Oates. London. 386–398.
- Young, T. Cuyler and L. Levine. 1974. Excavations of the Godin Project. Second Progress Report. Toronto.
- Young, T. Cuyler, Ph. E. L. Smith, and P. Mortensen (eds.). The Hilly Flanks and beyond.

  Essays on the Prehistory of Western Asia Presented to Robert J. Braidwood (SAOC 36).

  Chicago.
- Zabłocka, J. 1974. 'Palast und König. Ein Beitrag zu den neuassyrischen Eigentumsverhältnissen'. In *AoF* 1: 91–113.
- Zabłocka, J. 1978. 'Zum Problem der neuassyrischen Dorfgemeinde'. In *Studia Historiae Economicae* 13: 61–72.
- Zabłocka, J. 1986. 'Der Haushalt der neuassyrischen Familie'. In Oikumene 5: 43-50.
- Zaccagnini, C. 1979. The Rural Landscape of the Land of Arraphe (Quaderni di Geografia Storica 1). Roma.
- Zaccagnini, C. 1981. 'Modo di produzione asiatico e Vicino Oriente antico'. In *Dialoghi di Archeologia* NS 3: 3-65.
- Zaccagnini, C. 1989-90. 'Markt'. In RIA VII: 421-426.
- Zamora, J. A. 1997. Sobre el modo de produccion asiatico en Ugarit. Madrid.
- Zawadzki, S. 1984. 'Herodotus' Assyrian History'. In Eos 72: 253-267.
- Zeeb, F. 2001. Die Palastwirtschaft in Altsyrien nach den spätaltbabylonischen Getreidelieferlisten aus Alalaḫ (Schicht VII). Münster.
- Zeeman, E. C. 1976. 'Catastrophe Theory'. In Scientific American 234(4): 65-83.
- Zettler, R. L. 1987. 'Enlil's City, Nippur, at the End of the Third Millennium BC'. In BCSMS 14: 7–19.
- Zettler, R. L. 1992. The Ur III Temple of Inanna at Nippur (BBVO 11). Berlin.
- Zettler, R. L. (ed.), 1993. Nippur. III. Kassite Buildings in Area WC-1 (OIP 111). Chicago.
- Zipf, G. K. 1949. Human Behavior and the Principle of Least Effort. Reading MA.
- Zorn, J. R. 1994. 'Estimating the Population Size of Ancient Settlements: Methods, Problems, Solutions, and a Case Study'. In *BASOR* 295: 31–48.

## Index

Note: The abbreviations ANE and NE have been used for Ancient Near East and Near East: square brackets refer to chapter sections. The index was prepared by Ailsa Campbell.

Abu Salabikh: urban quarter revealed without excavation, 356 academic rivalry: German/British in late 19<sup>th</sup> c., 66–7

Achaemenid period and fifth urbanization: 208

Adams, Robert (b. 1926): on irrigation and urbanization, 152; and City Invincible symposium, 159-64; on Childe and Polanyi, 161-2; and cases of primary urbanization, 162, 202; concepts adopted by, 163; Akkad and Diyala Basin; 187-192; role of irrigation, 190; role of salinization on urban collapse, 190-1; surveys in Khuzistan and Uruk area 191; summarizing tables of cycles of urbanization, 205-6; use of neogeographical models at Nippur, 255-6; visualization of settlement phenomenon, 256; provision of 'databank', 258; demographic estimates, 336, and need for updating, 339; on urbanization and demographic growth, 339; application of Artificial Neural Networks to surveys of, 362-3

aerial photography: introduction to ANE archaeology, 109; in the Diyala, 189 Aeschylus: and eastern despotism, 9 agricultural over-exploitation: new system-

agricultural over-exploitation: new systematic treatment of, as example of 'new model' of collapse, 326; and effect on historical landscape, 334

Akkad period and second urbanization: 206-7

Akkad: planned by Sargon, 231; Belgian 1980s and 90s mission at, 258 Alalakh: 269; demographic estimate of, 338 Aleppo, Hotel Baron: 1960s archaeological missions in, 312

Algaze, Guillermo (b. 1954): and application of 'world-system' to Uruk, 305–6; and counter-argument, 307–9

al-Istakhri: and Babylon, 25 Allbright, William F. (1891–1971): and Palestine excavations, 83

al-Rawda: as example of round city, 239; ground plan of obtained through geomagnetism, 361

America: entry into ANE archaeological field, 50; schools of oriental research, founding of, 81; neo-archaeology, and ethno-archaeological approach, 245; survey on Upper Tigris and non-use of neo-geographic models, 259

'Amuq: Braidwood's first mission to, 117
Anatolia: 87-8; see also Boğazköi; and 2<sup>nd</sup>
urbanization, 207; Phrygian centres
identified in, 317; omitted in search for
Turkish national identity, 350

ancient texts: reconstruction of ANE cities from, 78; and domestic architecture in Brusasco, 247; as counterbalance to ethno-archaeology, 247–8; recognition of value of to surveys, 258; of Uruk IV, and construction of administrative world, 308; and notices of famines, 301; used from 1980 in environmental reconstruction, 335; data from used in demographic estimates, 337–8; scholastic calculations of irrigation in, 342; autonomy of Babylonian citizens in, 368–9

Andrae, Walter (1875–1956): new excavation techniques at Fara, 61–3; excavation of Assur, 62; ethical principles of excavation, 64; innovative nature of urban reconstruction, 65; reconstructions of Assyrian cities, 68–76; stage set for Sardanapalus, 69; relationship to Bauhaus movement, 71; unaffected by tradition, 74; on shape of city, spherical vs. cubic, 241; reconstructive drawings of, misused in modern pseudorestorations, 347–8

antiquities, ANE: country inventories of, 109–10

'Aqar Quf: ziqqurat of identified with Tower of Babel, 7; anachronistic partial restoration of ziqqurat of, 348

Arab geographers: knowledge of Babylon, 25 Arabian peninsula: study of settlements in, 228

archaeology of the landscape: 259-60 archaeology, new: see neo-archaeology archaeology: beginnings of, 10-11; first prehistoric archaeologists, 32; and use of architects, 62-3; ethical principles of, 64; first manual of science for, 186; American anthropological, critique of, 198; see also ethno-archaeology; see also excavation techniques

archaeo-zoology: see natural sciences architecture in archaeology: of unfired brick, revival of interest in, French school, 270–77, German school 277–82

Aristotle: on Babylon, 8; on Phoenician city, 291

Armenia: rock inscriptions at Van, 87; excavation of cities of Urartu, 87; Lehmann-Haupt expedition to, 112; Urartian centres identified in, 317, and excavation of Bastam, 319, n 358; ruins of systematically destroyed, 350

Arslantepe: and proto-urbanization, 210, 316 Artificial Neural Networks: questionable results of, 363

Asiatic mode of production: 142-3; territorial system of forgotten in 'rediscovery' of the village, 265 'Asiatic values': 1990s debate on, 369 assembly of citizens: in the Sumerian city,

128-9, 139, 267

Assur: Andrae's post-war drawn reconstruction, 74; Unger's analysis of 'topographical' texts, 77; and articulation of Mesopotamian city, 198; formal analysis of dwellings in by Miglus, 280

Assurbanipal, library of: recovery, 53
Assyria: identified with evil of Ottoman
Empire, 9; earliest excavation
contemporaneous with formative

scientific period, 11; European appropriation of antiquities of, 28–9; European reception of sculptures of, 43

Assyrian capitals: excavation of, 25–7; impossibility of mid-19<sup>th</sup> c. visualization from archaeology, 32; first generation of excavators, 32–6; public reaction to discovery of, 43; classical and biblical descriptions of, 44–5; urban mosaic ignored in mid-19<sup>th</sup> c., 45–6; described by Marx, 46; greater realism in reconstruction, 71–3

Assyriologists: new interest in city in its territorial context, 262–3; and perception of the palace, 283, 285

Augé, Marc: 5, 288

Aurenche, Olivier: combining ethnoarchaeology and architecture, 275; alternative to temples at Uruk, and criticism of, 288

Babel, Tower of: biblical myth, 1–2;
European travellers in search of, 6;
identified with 'Aqar Quf and Birs
Nimrud, 7; power of imagery of, 7–8;
architectural visualizations from the
13<sup>th</sup> c. onwards, 12–16; in urban setting
of Babylon, 13–14; traditional portrayal
unchanged by excavation, 17–18; Kafka,
49–50

Babil: identified with Babylon by Arab geographers, 25

Babylon, 'Greater', myth of: 46-48; dismissed by archaeologists, 48; survival of, 48-9

Babylon: in biblical tradition, 2–3;
descriptions in classical authors, 9;
identified with evil of Ottoman Empire,
9; portrayed by Flemish painters, 13–
14; identified as Tell Babil, 15; 1913
reconstruction remaining true to
classical tradition, 17; portrayed by
Doré, 19; location of, 24–5; and Arab
geographers, 25; described by
Cattaneo, 40–1; unexcavated before
Koldewey, 51; soundings by Rassam,
53; German concessions for excavation,
68; Andrae's post-war drawn

- reconstruction, 74; Unger's analysis of 'topographical' texts, 77; study of urban design of by George, 233; autonomy of citizens of, 368–9
- Badawy, Alexander (1913–1986): exclusion of Mesopotamia when discussing orthogonal city, 238
- Baghdad, Museum of: founding of, 108; damaged in war against Saddam Hussein, 353; sacking of, 366
- Bairoch, Paul (1930–1999): 1<sup>st</sup> urbanization and acceptance of Childe's position, 216
- Banks, Edgar James (1866–1945): and visit to Fara, 61
- Bastam: see Armenia
- Battini, Laura: on domestic architecture, on defects of anthropological and neogeographical models, 276-7
- Bauhaus movement: and visualization of cities, 71-2; and Andrae, 72
- Baynes, Thomas Mann (1794–1876): portrayal of Nineveh; 19, 35
- Beer-Sheva: as example of roundish city, 239; as typical of South Levant basic settlement system, 321
- Bell, Gertrude (1868–1926): and law of protection for archaeological finds in Iraq, 108; and poverty of remains in Palestine, 111
- Benjamin of Tudela (1130–1173): and Nineveh. 23
- Benozzo Gozzoli (1412–1497): visualization of building of Tower of Babel, 11
- Berlin museum: ANE section, 68
- Bernal, Martin: *Black Athena* and lack of critical method, 366
- Bietak, Manfred (b. 1940): on Egyptian cities, 218, 222
- Birs Nimrud: *ziqqurat* of identified with Tower of Babel, 7; soundings at (Borsippa), 53
- Boas, Franz (1858–1942): influence on study of cities, 159, 171
- Boğazköi: identification of as Hittite capital, 88; priority given to philology in, 88-9; first urban excavation of, 89; town planning approach of Neve and Seeher,

- 281-2; post-war excavations and higher level of urbanization, 317; demographic estimate of, 338
- Borsippa: see Birs Nimrud
- Boserup, Ester (1910–1999): technological innovation and demographic factor, 339–41
- Botero, Giovanni da (1544–1617): and description of city, 169
- Botta, Paul-Emile (1802–1870): Assyrian excavations in period context, 11; and Assyrian discoveries, 23; and appropriation of Assyrian sculptures, 27; excavation of Khorsabad, 34–6; on inferiority of Assyrian art and architecture, 44
- Bottéro, Jean (1914-2007): on censorship of inscriptions, 268
- Boucher de Perthes, Jacques (1788-1868): and foundation of prehistoric stratigraphy, 32
- Boysan-Dietrich, Nilüfer: ancient Hittite texts on unfired brick architecture, 247
- Braidwood, Robert (1907–2003): and 1936 project on plain of Antioch, 112–3; Jarmo project and evidence-based reconstruction of ANE village, 183–7; comparison with Childe, 183; Çayönü project, 184; objection to Jericho as 'most ancient city', 213
- Breasted, James Henry (1865–1935): and foundation of Oriental Institute of Chicago, 125
- Briant, Pierre (b. 1940): on Wittfogel, 153
  brick, unfired: vs. stone, 5; unsuitability of
  for traditional images of ANE cities, 21;
  not identified in 'messy' excavations,
  34; and problems of excavating
  Babylon, 50–1; ease of destruction of,
  63; German excavation of by trenches,
  63–4; the 'discovery of bricks', 66; new
  understanding of building techniques,
  72; use of ancient Hittite texts for
  terminology of, 247; vs. stone
  architecture, re-evaluation of, 270
- British Museum: and Assyrian sculptures, 30, 43

- Brueghel, Pieter (1525–1569): and Tower of Babel. 13
- Brusasco, Paolo: ancient texts and domestic architecture, 247; criticized by Battini, 276-7
- Buccellati, Giorgio (b. 1937): distinction between city and nation, work forgotten in state-city debate, 293
- Bücher, Karl (1847–1930): on origin of economy, ignorance of ANE, 98; and primitivist vs. modernist debate, 155
- Buckingham, James Silk (1786–1855): and images of Persepolis, 12; 'Great Nineveh' and 'Great Babylon', 46
- Bulletin on Sumerian Agriculture: and environmental reconstruction, 335
- Burckhardt, Jakob: on Layard, 31; on Phoenician cities, 41–2; on eastern cities, 46; Basle lectures, 93; on annihilation, 324
- Butterlin, Pascal: on northern expansion of Uruk, 309
- Butzer, Karl (b. 1934): and recognition of Wittfogel, 152; and effect of human intervention on historical landscape, 334
- Byron (Lord) (1788–1824): on ANE ruins vs. classical Greek, 6; and Greek war of independence, 9; mention of Rich and Babylon, 24
- Callot, Olivier: urban analysis at Ugarit, 275 Calvino, Italo (1923–1985): and city of Argia, 54; 'the city of my quest', 367
- Campbell Thompson, Reginald (1876–1941): architectural surveys at Nineveh, 65
- canal networks; revealed by aerial photography, 110; reconstructed from SRTM data, 363
- Cardascia, Guillaume (1914–2006): existence of ANE city 'guilds' denied, 297
- Castel, Corinne: ethno-archaeology and ancient texts, 247; new spatial approach of, 276; work criticized by Miglus, 279
- Castells, Manuel (b. 1942): 1<sup>st</sup> urbanization and acceptance of Childe's position, 216

- Çatal Hüyük: and Mellaart's claim as 'first city', 214-5
- catastrophe, theory of: 326-7; and 1980s preference for climatic factors, 331; see also collapse
- 'cathedral in the desert': European view of Mesopotamian landscape, 93; compatability of Deimel's model with, 107; effect of *ex novo* restorations, 348
- Cattaneo, Carlo (1801–1869): on eastern cities, 40
- Çayönü project: 184-5
- centre-periphery model: emergence in 1980s, influenced by 'world system',
- Chaga Mami: irrigation canals c. 5000 BC discovered by Oates, 190
- Chamonard, Joseph (1866–1936): and protection of antiquities in Syria, 109
- Charpin, Dominique: and Wittfogel's model, 153; dialogue on ethno-archaeology and the ancient texts, 247
- Chicago Oriental Institute: foundation of, 125; in Anatolia, and on plain of Antioch, 112; in the Diyala, 116; and *City Invincible* symposium, 159–64
- Childe, V. Gordon (1892-1957): evolutionary stages and archaeology, 159-64; Frankfort's debt to, 127; position on diffusionism vs. evolutionism, 131; visit to Soviet Union and Marxist influence on, 132; urban revolution and ten criteria for, 133-8; dismissed by neoarchaeologists, 136; accepted by town planners, 136; not invited to City Invincible symposium, 160; Mumford's debt to, 167; and Sjoberg, 167; ten criteria cited by Service as nonessential, 173; Skara Brae excavation, 183; comparison with Braidwood, 184-5; and primary urbanization, 202; 'revolutionary' vision too extreme, 210; objection to Jericho as 'most ancient city', 213; dismissal of ten criteria as 'ritual activities' by Hudson, 299; reality of revolutions of, 343; revolutions of diluted by modern scholars, 370; and beauty of urban revolution model, 371

cities: growth and decline of, 323 cities, ancient: visibility of in classical world vs. non-visibility in ANE, 4; and beginnings of historiography, 10-11; pre-18th c. visualization of, 11; visualization based on archaeological evidence, 31; concept of applied only to Graeco-Roman, 37; and model of Greek polis, 38-9, 41; 'entering inside', 54-5; images of, 55; classification of settlements as, 135-6; hydraulic, 148-153; redistributive; 154-9; and reciprocity, 155; effect of recent urban trends on study of, 379-822

cities, ANE: in ruins because of divine curse, 1-2; Renaissance vision of, 10; images of influenced by Egypt and Persepolis, 11-12; importance of destruction in paintings of, 20-21; Sumerian, visualization of, 54; of unfired brick, 54; superimposed, 56; first reconstruction of urban settlement, 65; plans of incised on tablets, 77; classical image of, 80; leading role in Weber, 100-01; Frankfort's model of, 126-7; evidence for communal bodies and Jacobsen's position, 140-2; beginnings of sociological study in, 159; and importance of City Invincible symposium, 165-6; start of diachronic study of, 176; 1970s and 80s stereotypes of, 176; Rostovtzeff on, 177; 20th c. scholars and myth of the 'empty country', 177-8; place of citizens in, 193; Mesopotamian, new foundations, 231-2; Mesopotamian, summary of by Stone, 277; Mesopotamian, streets of in Schmidt, 278; Sumerian, as temple-city, 287; postmodern defragmentation of, 287; role of trade in origin of, 1970s debate, 297; and 1990s neo-liberalist paradigm, 297-9; application of neo-Marxist 'modes of production' to, 302; Mesopotamian, division into Upper and Lower following excavations in Syrian Jezira, 315; number of inhabitants in, 335-6; variegated reality of, 367; autonomy of citizens of Babylon, 368-

9; dismantled places in, post-modern interest, 381; place vs non-place, 381-2 cities, Islamic: and the ANE city in Wirth, 179-81; used for comparison in

demographic estimates, 336

cities, modern: Chicago sociological study of, 159; 20th c. megalopolis of Gottmann, 379

cities, mythical: in ruins as result of divine curse, 1-2; of Nimrud and Dahhak, 25

cities, Phoenician: analogies with Greek poleis in Burckhardt, 41-2; opposed to Assyria in Renan, 42; in Aristotle, 291

City Invincible, symposium: 159-64

city, concept of: vs.village, 92-3, 134; the first city, 95; definitions by Mumford, Sjoberg, Wirth, Bairoc, 168-9; and description by Giovanni da Botero (1589), 169; and western values?, 368

city, shape of: in Indus Valley, 226; designed vs grown 'historically', 230; in Mesopotamian new foundations, 231; orthogonal grid, 237-8; round vs rectangular, 239; semiological approach of Mirko Novák, 241-2

city-state: in Weber, 101-2; application world-wide, 291-2; city-state or statecity 291-5; extended modern use of, 291; Hansen's project on, with little on ANE, 193-5

clandestines: removal of cuneiform tablets from Sumerian sites, 52

classical world: antiquarian interest in, 3-4 Clastres, Pierre (1934–1977): new approach to palace, 283-4

climate change: effects denied by Braidwood, 185; effect on cycles of urbanization, 205, 207, 209

climate: urbanization and temporal coincidences, 330-1

climatology, new: and 1980s historical consideration of influence on society, 331-2; historiographic success of, 333-4

Club di Roma: 1972 commission of 'The limits to growth' report, 325

Cole, Thomas (1801-1848): pictorial tradition of urban colonnades, 19-20

- collapse: of ANE 'civilizations', studies of, 328; vertical, of Assyrian Empire, 329; need for both climatic and socioeconomic/political factors, 333
- colonialism: myth of 'empty land' and appropriation of NE, 28
- colonies: of 1<sup>st</sup> urbanization, 206; of Uruk in Algaze's 'world system', 305–6; of Uruk, uncertainties over, 307
- communal bodies: threads of analysis in 1970s and 80s, 337; see also assembly of citizens
- 'complexity', discussed, 266; over-generalized use of, 370
- computer technology: in ANE urban archaeology, 250; and vastly increased analysis of societal structures, 324–5; and virtual excavation, 358–9; see also simulations
- Coppa, Mario (1923–1999): adoption of Childe's 'surplus' in urbanization, 216
- CORONA: see satellite imaging
- corvée: ANE use of demonstrated by Tyumenev, 144
- Courois, Jacques (1931–1991): on Ugarit, 274 Crimean War: and effect on excavations, 26, 50
- Crumley, Carole: on 'heterarchy', 371 cuneiform: British and French decipherment of, 66; see also tablets, cuneiform
- dams, modern building of: and effect on archaeology, 191–2; and increased excavation of minor sites, 265
- Darwin, Charles (1809–1882): theories contemporary with earliest Assyrian excavations, 11
- data, spatial: archiving and organization of by GIS, 362
- Davies, M: and Wittfogel's theory, 153
- de Miroschedji, Pierre (b. 1944): cycles of urbanization, 209; proto-urbanization in the Levant. 210
- de Sarzec, Ernest (1832-1901): at Tello, 52
- de Seta, Cesare (b. 1941): capital and dominant cities, 257-8
- della Francesca, Piero (1415–1492): visualization of ancient cities, 11

- della Valle, Pietro (1586–1652): travel to Babylon, drawings of *tell*, 15
- Degas, Edgar (1834–1917): portrayal of Semiramis building Babylon, 20
- Deimel, Anton (1865-1954): studies on Lagash, 105; Frankfort's debt to, 127
- demographic factor: in Adams' surveys, 191; processes and estimates in NE archaeology, 337–8; and technological innovation in Boserup, 339–40
- despotism, Near-Eastern: in Herodotus, 9; and anti-values, 9–10; in Marx's Asiatic mode, 143; and link to hydraulic civilizations, 149
- Deutsche Palästina-Verein: founding of, 81 development projects: and results for archaeology, 188; and removal of areas from archaeological research, 353-4; see also dams, modern building of
- DGPS (Differential Global Positioning System): 362
- Dholavira: see Indus Valley

of Babylon, 13;

- Diakonoff, Igor (1915–1999): and land division, 144; and feudal mode of production, 146; position compared to Gelb's, 147
- diffusionism: vs. evolutionism, 131
  Diodorus: Ctesias' description of Babylon, 8,
  44-5; spread of text influencing images
- Diyala, the: 1920s excavations in, 116; Chicago Diyala project, 187–91; neogeographic 'test' in, 252
- Doré, Gustave (1832–1883): and fantasies in paintings of Babylon and Nineveh, 19
- Dörpfeld, Wilhelm (1853–1940): concept of superimposed cities, 56
- Durkheim, Emile (1858–1917): 'complex' city vs. 'simple' village, 92–3; influence on Childe, 134
- Dur-Kurigalzu: as example of new foundation and urban design, 233; see also 'Aqar Ouf
- Dur-Sharrukin: urban design of Sargon II, 233; see also Khorsabad
- Dur-Untash: as example of new foundation and urban design, 233

dwelling houses: clay models of, 80; of Assur, formal analysis by Miglus, 279– 80; count of, used in demographic estimates, 337; lack of advance in analysis of socio-economic aspects of, 378

East vs West: final analysis, 366-6
Ebla: excavation and discovery of archives
of, 312

Ecole Biblique: in Jerusalem, 81 economic history: and ignorance of ANE discoveries, 96-8: 'primitivist' position vs. 'modernist'; 98, 100-01, 104

Egypt: as source for images of the east, 11–12; as land of the dead, 40; pre-1960s negative approach to cities in, 217; normal urbanization, and modern discussions of, 218–9; funerary complexes and cities, 219; workmen's villages, 219; urbanization of compared with Mesopotamian, 228; totalizing restoration of Theban temple of Hatshepsut, 346

el-Amarna: and conceptual revision of Egyptian urbanization, 217–8; and the Egyptian 'palace' city, 221–2

Emar: excavation by Margueron, 273

Enciclopedia Einaudi: on urbanization, total
absence of ANE, 216

Engels, Friedrich (1820–1895): influenced by Morgan, ignorance of Mesopotamian discoveries, 98

Enlightenment, the: and growth of interest in antiquities, 3

entrepreneurship: and mixed system, 301–2 environment: factors of, and differing effect on urbanization, 229; modern changes in, and push to study the past, 334

Esarhaddon: and ruins of cities, 4; palace of and shrine of prophet Jonah, 243-4

ethno-archaeology: limitations of for city,
246; normal procedure from 1980s,
246; and the ancient texts, 247;
limitations of, 248; use of excavation of
tell from 1960s, 245; defects of
highlighted by Battini, 277; parameters
used in demographic estimates, 336

ethno-Assyriology: 'questioning' of ancient inhabitants, 247

ethnography: combined with archaeology and ancient texts, 247

Euro-centrism: as antiquity's 'spiritual heirs', 27–8; public attitude of to Iraqi legacy, 353; renewed claim as spiritual heirs, 365

evolutionism: 94-5; vs. diffusionism, 131 excavation techniques: early soundings, 15, 23; 'messy' excavation by shafts and tunnels, 33-5, 50; innovations by Layard, 37; French 'mining' and loss of materials, 52; stratigraphy, 56-7; pottery survey, 57-8; German method of trenches and grid of horizontal reference at Fara, 63; Andrae's ethical principles, 64; French and industrial exploitation, 65; stratigraphy in Palestine, 84; stratigraphy at Tell el Hesi, 111; sherd-sampling for distribution maps (Braidwood), 113; deficiences of German method, 113; by squares, 114-6; and abandonment of, 117; French, and contempt for innovations, 117; German at Uruk, 118-9; 'salvage' operations 188, 191; introduction of surveying instruments, 188; adoption of ethno-archaeology, 245; and use of volunteers in face of prohibitive costs, 354; extensive surveys and targeted soundings, 355; 'virtual' excavation, 358

extended family: vs. individual in land ownership, 147

Falkenstein, Adam (1906–1966): and topographical documentation of Uruk, 77–8; on the Sumerian city, 105; cautious on Sumerian 'democracy', 141 Fara: German excavations at, 61

Fergusson, James (1808–1886): reconstruction of Nineveh and Nimrud,

Finet, André (1922-2007): on democracy in Mesopotamia, 268; symposium on opposition to 'great organizations', 283-4

- Finkbeiner, Uwe (b. 1942): survey of Uruk, 259
- Finley, Moses (Sir) (1912–1986): role of trade in origin of ANE city denied, 296–7
- first urbanization: see urbanization, first First World War (1914–1918): and inter-
- ruption to excavations, 73; increased study of epigraphic material, 76–7
- Fischer von Erlach, Johann (1656–1723): portrayal of Tower of Babel with view of Babylon, 14
- Flandin Eugène (1809–1889): and plans of Khorsabad, 35
- Flannery, Kent (b. 1934): in response to Wheeler, 37; on settlement norms, 255; use of new technologies and models, 327; 'Rank Revolution' of, diluting Childe, 370
- Flemish painters of Babylon: 14-16 Flood, myth of: and capture of public interest by Woolley, 121
- floods, alluvial: and link to ancient urbanization, 148
- forecasts, historical: unpredictability of, 323 Forest, Jean-Daniel (1948–2011): temple as a
- 'non-place', 287-8; criticism of, 288
  Foster, Benjamin R.: downscaling of temple
  by, 286
- Frangipane, Marcella (b. 1948): protourbanization at Arslantepe, 210; on mountain centres as 'citadels without cities', 316
- Frank, Gunder (1929–2005): on primary and secondary urbanization, 203, 209; on 'world-system', 304
- Frankfort, Henri (1897–1954): and the Diyala project, 126–7; and primary urbanization, 201–2; demographic estimates, 336
- Frenea, Robert (b. 1932): 152
- Fried, Morton (1923–1968): socio-political forms of organization and theory of 'ranked society', 172; and demographic factor. 339
- Fustel de Coulanges, Numa (1830–1889): disregard of Assyrian cities, 38–40; criticized by Pasquali, 38; and postprocessual origin of urbanization, 383

- Gandy, Joseph (1771–1843): and visionary pictures of London collapse, 326
- Garamantes: and collapse of secondary urbanization, 204
- Gelb, Ignace (1907–1985): and oikos, 147; position compared to Diakonoff's, 147– 8; comparison of Ebla to pre-sargonic Lagash, 313; on the oikos, 373
- geo-magnetism: see geophysical prospecting
- geo-morphology: in neo-archaeology, 250 geophysical prospecting: 360-1
- George, A R: and urban design of Babylon, 234
- Germany: and ANE philology, 66; rivalry with Britain and France, and colonialism, 67; and alliance with Ottoman Empire, 67; Near-Eastern railway projects, 67; Kaiser's visit to Istanbul and Jerusalem, 68; archaeologists, and approach to ethno-archaeology and ancient texts, 248; and formal approach to ANE architecture, 277–82; mission in Syria at Tell Chuera, 312; core samplings of sea bottoms in Persian Gulf, 332
- Gezer: British excavations at, 84 Gibbon, Edward (1737–1794): and fall of empires, 6
- Gibson, McGuire: on Wittfogel, 152; on soil impoverishment through over-exploitation, 190; survey in Kish, 191; influence of Oppenheim model of city on, 197; use of co-ordinated strategy of archaeology, ethnography, ancient texts, 247–8; and traditional methodoloy in Nippur survey, 255; city developing from 'temple-manor', 287
- Gilgamesh and Agga: and double assembly at Uruk, 141
- Gilgamesh: description of Uruk in, 335 GIS (Geographical Information System): 362 globalization: and reactions to, 369
- Glotz, Gustave (1862–1935): disregard of Assyrian cities, 38
- Glueck, Nelson (1900–1971): 112 God: and lack of interest in terrestrial
- progress, 331 gravity model: 251

'great organizations': in Oppenheim, 193; role diminished in post-modern studies, 376

Great War: see First World War
Greater Berlin competition, 1910: 64
Greek poleis: vs. Persian Empire, 9
Grotefend, Georg Friedrich (1775–1853):
early decipherment of Persian cuneiform marginalized, 66

Guzana: as example of new foundation and urban design, 233-4

Habuba Kebira: and 'birth of urbanism', 232 Hacilar II: as example of square city, 239 Hammond, Mason (1903–2002): on eastern cities, 44

Hansen, Mogens Herman (b. 1940): ambitious project on city-state, 293-5; trivialization of terms, 294; scant attention to ANE, 294-5; concentration on Greek *polis*, 295

Harappa: see Indus Valley

Harris, Rivkah (b. 1928): work on Sippar texts, first systematic study of Mesopotamian city, 196

Harrower, Michael J: irrigation and urbanization, 153

Hassan, Fekhri (b. 1943): counter-argument to 'world-system' in first urbanization, 309

Hegel: on liberty and the city, 40; on Nineveh and Babylon, 46–7; phases of world history and Mesopotamia, 94–5

Heichelheim, Fritz (1901–1968): and 'primitive accumulation', 158; anachronistic use of, 298

Heinrich, Ernst (1899–1984): on ANE architecture, 278

Heinz, Marlies (b. 1956): German scholars' critical judgement of, 279–80

Heisenberg, Werner (1901–1976): and 'uncertainty principle', 322

Helms, Svend: and proto-urbanization of Jawa, 210

Henrickson, Elizabeth: and ethnoarchaeological methods, 247

Herder, Johann Gottfried (1744–1803): on ANE, 4

Herodotus: description of Babylon, 8, 44; on eastern despotism, 9; spread of text influencing images of Babylon, 13; and image of ANE city, 74

Herzog, Ze'ev (b. 1941): outline of urbanization in Israel, 209

Heterarchy: 371-2

Hilprecht, Hermann (1859–1925): and architectural surveys at Nippur, 65

historiography: positivist vs idealist on climatic factor, 331

Hittites: see Boğazköi, 87-8

hollow ways: identified by Wilkinson, 261 Hudson, Michael (b. 1939): neo-liberalist colloquia on 'privatization', 298–9; massive anachronisms and weakness in dismissal of Childe's criteria, 299

hydraulic society: Wittfogel's definition of, 149-50; see also irrigation

Ibn Hawkal: and Babylon, 25
Ibn Khaldun: and mythical 'Iram, 1
ideologies, 'end of': 269
IKONOS: see satellite imaging
Indian Mutiny: and effect on excavations,
26, 50

Indian village: as model for village economy, 91; as basis for Marx's 'Asiatic mode of production', 143

Indus Valley: post-colonial evidence of metropoleis, 223-6; comparison to Mesopotamia, 229-30

Iran: ancient ruins in, 85–6; impractability for archaeology, 311; traditional Islamic attitude of Khomeini revolution, 350–1

Iraq: ceding its central archaeological role from 1980s, 311

irrigation: and role in urbanization, 152–3; and formation of states, 258; in first urbanization, 342

Islam: contempt for pre-Islamic heritage, 27, 350, 365-6

Islamic Spring: and effect of political instability on archaeological missions, 353

Israel, Kingdom of: destruction by Assyria in biblical tradition, 2; ancient city takes shape in, 84–5; communal bodies in, 268–9

- Israel: 1980s studies of town planning in 1st and 2<sup>nd</sup> Iron Ages, 320-1; creation of national identity in, 351
- Jacobs, Jane (1916–2006): and flagrant disregard of evidence, 169–70, 215
- Jacobsen, Thorkild (1904–1993): 138–142; Frankfort's debt to, 127; theory of 'primitive democracy, 139–40; preference for literary texts, 141; and myth of the 'empty country', 177–8; and Diyala project, 188

Jarmo project: 184-7

Jawa: and proto-urbanization, 210

Jemdet Nasr: questionable results from Artificial Neural Networks, 363

- Jericho: moral explanation of destruction, 5; misleading excavation conclusions, 83– 4; in competition for 'most ancient city', 211-4
- Jerusalem: destruction by Babylonia in biblical tradition, 2; difficulties of excavation or textual criticism, 81
- Johnson, Gregory: and neo-geographic 'game' on Diyala settlements, 252; 'manifesto' of new trends, 254-5; practical application of neo-geographic instruments, 255; on Uruk colonies, 307; counter-argument to Uruk 'world system', 308-9

Josephus: description of Babylon, 9

- Kafka, Franz (1883–1924): on Tower of Babel, 49–50
- Kalkhu: urban design of Assurnasirpal II, 233-4; see also Nimrud
- Kar-Kukulti-Ninulta: as example of new foundation and urban design, 233
- Katz, Dina: on *Gilgamesh and Agga*, 141–2 Kemp, Barry (b. 1940): and Egyptian urbanization. 218
- Kenyon, Kathleen (Dame) (1906–1978): excavation by squares in Palestine, 115; excavation of Jericho and claim for 'most ancient city', 213–4
- Ker Porter, Robert (Sir) (1777–1842): and images of Persepolis, 12; 'Great Nineveh' and 'Great Babylon', 46

- Khadatu: as example of new foundation and urban design, 233
- Khafaja: Forest on temples of, 287–8 Kharadum: as example of new foundation and urban design, 232–3

Khattusha: see Boğazköi

- Khorsabad: palace complex excavated, 25; plans of, 35; contributions by Margueron, 273
- Kircher, Athanasius (1602–1680): and Tower of Babel, 14; publication of Pietro della Valle's drawings of Tell Babil, 15
- Kohl, Philip (b. 1946): merits and limitations of Wallerstein's world system, 303-4; and One World Archaeology, 351
- Koldewey, Robert (1855–1925): discovery of ziqqurat of Babylon, 7; 1913 excavation of 'Tower' and reconstruction of Babylon, 17; new excavation techniques at Fara and Babylon, 61–3; innovative nature of urban reconstruction, 65; and Koldewey-Gesellschaft, 74; debt to traditional descriptions, 74; reconstructive drawings of, misused in modern pseudo-restorations, 348
- Kostof, Spiro (1936–1991): criteria for urbanization compared to Childe's, 137–8; on urban grid, 238; and 'territorial' interest, 263
- Kraeling, Carl (1897–1966): and *City Invincible* symposium, 160
- Kramer, Samuel (1897–1990): on Sumerian democracy, 141
- Kraus, Fritz Rudolf (1910–1991): on palace and Yoffee's use of 'goods of the crown', 283
- Kula, Witold (1916–1988): analysis of Polish feudal estate and relevance to ANE, 269, 342
- Kuniholm, Peter: and evidence of arid years, 333
- Kurds: ignored in Turkish national identity, 350
- Kuşaklı: reconstruction of urban fabric of by geo-magnetism, 361
- Kuyunjik: Botta's disappointment in, 25

- Lagash: 51; Deimel's studies on, 105-6; administration, 153
- Lamberg-Karlovsky, Carl: on Wittfogel, 152; and Wallerstein's world system, 304
- LANDSAT: see satellite imaging
- Landsberger, Benno (1890–1968): criticism of choice of Diyala, 188
- languages, ANE: decipherment of, 53-4; Assyrian and German philologists, 67; Hittite, decipherment of, 88
- languages, modern: monoglotism and adverse effects, 248, 277, 358, 372, 373
- Larsa: and 'irrigation office', cited as hydraulic society, 153; excavation by Margueron, 273
- Larsen, Mogens Trolle: on Polanyi, 157 Lauffray, Jean (1909–2002): stereoscopic imaging of Syrian Jezira, 111
- Layard, Austen Henry (Sir) (1817–1894): on monumental ruins vs. shapeless *tell*, 6; Assyrian excavation in period context, 11; and Assyrian discoveries, 23; letter from *qadi* of Kuyunjik, 27; and appropriation of Assyrian sculptures, 29; popular publications, 30, 47–8; excavation methods at Nimrud and Nineveh, 32–6; incomplete ground plans, 35; innovations, 37; on impossibility of excavating Babylon, 51
- Le Corbusier (1887-1965): retains traditional shape and extent of Babylon, 48
- Leemans, W. F.: and denial of ANE rural communities, 145–6; and existence of villages, 267
- Lefebvre, Henri (1901–1991): and 'space' in architecture, 271
- Lehmann-Haupt, Carl (1861–1938): expedition to Armenia, 112
- Leibniz, Wilhelm (1646–1716): and Monads as putative models for neo-archaeologists, 330
- Liverani, Romolo (1809–1872): stage set for *Nabucco*, 21
- Loftus, William (1820–1858): early soundings at Uruk, 51
- Louvre: and Assyrian sculptures, 30 Lumsden, Steve: and 'Lefebvrian' approach, 271–2

- Luxor: mosque above, 244 Lyell, Charles (1797–1875): and formative period of geology, 11
- Makkay, Janos (b. 1933): on temple providing social surplus, 287
- Man, settlement and urbanism, 1970 symposium: ANE absent in, and other lacunae, 175
- mandated government of Near East: 107-8; stability under, 352
- Mannaean sites: attention to citadels and town planning of, 317-8
- Margueron, Jean-Claude (b. 1934): and revival of architecture, 270-4; methodological principles of, 272; on Bronze Age Mesopotamian palaces, 272; and reconstruction of Mari, 273; omission of German school contributions, 277
- Mari: as example of new foundation and urban design, 232-3
- Mari, palace of: excavation by Parrot, 117-8; delay in publication, 124; reconstruction by Margueron, 273
- market-place: not identified in Mesopotamian city, 303
- Markus, Joyce: cycles of state-formation, 209
- Martin, John (1789–1854): and paintings of Near-Eastern urban complex, 18–20; Babylon plan reproduced by Fergusson and Mann Baynes, 35
- Marx, Karl (1818–1883): on Layard, 31; description of Assyrian cities, 46; and the Indian village, 91; and Asiatic mode of production, 142
- Marxist attitudes to Wittfogel: 149-50 Mas'udi: and Babylon, 25
- Mashkan-shapir: 'virtual' excavation by Stone, 358
- Matthiae, Paolo (b. 1940): Roman school and the revival of architecture, 276; excavation of Tell Mardikh (Ebla), 312
- Mauss, Marcel (1872–1950): on ANE cities, 38; and 'gift exchange', 154–5
- Mazzarino, Santo (1916–1987): on Greek city-state and eastern state-city, 42, 291

- McCorriston, Joy: 'Fiber Revolution' of, diluting Childe, 370
- McNeill, William (b. 1917): and absorption of Childe. 137
- Medes: and collapse of secondary urbanization, 203-4
- Median sites: town planning of, 287-8 *megaron*: of Phrygian centres, 318-9
- Megiddo: German excavations at, 84; 3-dimensional house reconstructions of, 123
- Melid: see Arslantepe
- Mellaart, James (1925–2012): and claim for Çatal Hüyük as 'first city, 214–5
- Merkes/Babylon: 64–5; Reuther's study of,
- Meskell, Lynn: and Near-Eastern national identity, 351-2
- Mesoamerica: ethno-archaeological methodology transferred to ANE, 245
- Mesopotamia, 'Greater': 311-2
- Mesopotamia, Lower: difficulties of working in, 51; Jacobsen's argument against ethnic conflict in, 138; abandoned by archaeologists from 1980s, 311
- Meyer, Eduard (1855–1930): Weber's debt to, 100
- Michalowski, Piotr: and patrimonial nature of ANE state, 375
- Miglus, Peter: formal approach to Mesopotamian house architecture, 279–80; severe criticism of Castel and Heinz, 279–80; on dwelling houses of Assur,
- Mignan, Robert (d. 1852): 'Great Nineveh' and 'Great Babylon', 46
- Mohenjo Daro: see Indus Valley
- Moortgat, Anton (1897–1977): excavation mission at Tell Chuera, 312
- Morgan, Lewis Henry (1818–1881): and divisions of human history, 96–7
- mountain centres: urban complexity but modest size, 316
- Mumford, Lewis (1895–1990): acceptance of Childe's urban revolution, 136; at *City Invincible* symposium, 161; critique of, 165–7; definition of city, 168; role of trade in origin of ANE city denied, 296

- museums, metropolitan: and appropriation of antiquities, 28-9
- Musil, Alois (1868–1944): 18<sup>th</sup> c. journeys to Arabia, 112
- Musil, Robert (1880–1942): and 'path of history', 322–3
- Musti, Domenico (1934–2010): disregard of Assyrian cities, 38
- Nadali, Davide: and 'Lefebvrian' approach,
- natural sciences: contribution to ANE archaeology, 186
- Near East: modern countries of, search for national identity, 349-51; and post-1960s closures to archaeological missions, 352-3
- nearest neighbour calculation: 251
- neighbourhoods, urban: interest in excavation of, 120; Woolley and street names of, 123
- neo-archaeology: the 'New Archeology' [sic] and contempt for non-English material, 248; merits and demerits of, 249–50; and application to surface surveys, 250; and Monads as theoretical models?, 330
- Neo-Babylonian period and fifth urbanization: 208
- neo-capitalism: and destruction of archaeological information, 191–2; development resulting in increased excavation of minor sites, 265; and destruction of archaeological areas, 353–4
- neo-capitalist approach: denial of temple's prehistoric centrality vs. Marxist position, 289
- neo-classicism: 3
- neo-evolutionism: on formation of states, 172-4; omissions, 175; critique by Yoffee, backwardness of, 176; and excess of continuity, 371
- neo-geography: methodologies first appearing in Adams, used at Uruk, 191; and influence on archaeology, 250; 'laws' of inappropriate to remote antiquity, 251; neo-geographical models in Near-

- Eastern archaeology, 251–3; limitations of normative character of, 252–3; reformulation of Thünen rings, 260; models increasingly used by Wilkinson, 260–1
- neo-liberalist approach: 1990s characterized by, 297, 299-300; paradigm on role of trade in ANE city, 297-301; challenge to ideological position by Renger, 300
- Neolithic revolution: 131; and choice of Jarmo, 184; and 'secondary' Neolithic phase, 184
- Neve, Peter (1929–2014): and new architectural direction of Boğazköi, 281 'new archeology': see neo-archaeology new climatology: see climatology, new Niebuhr, Barthold (1776–1831): on Nineveh,
- Niebuhr, Carsten (1733–1815): and images of Persepolis, 12
- Nigro, Lorenzo (b. 1967): analyses of 'space' and town planning approach, 276
- Nimrud: name unknown to public, 26; Layard's excavation of, 32-5
- Nineveh, 'Greater', myth of: 46-9; dismissed by archaeologists, 48; survival of, 48-9
- Nineveh: ruin of in biblical tradition, 2; description of in Jonah, 8; portrayed by Baynes, by Doré, 19; location of, 23; Layard's excavation of, 32–5; architectural surveys, 65; Sennacherib's new foundation and orthogonal urban grid, 236–7; and shrine of prophet Jonah, 243–4; rebuilding by Sennacherib, new treatment by Wilkinson *et al.*, 262; 'totalizing' restoration of walls of, 347
- Ninus: classical story of known to Renaissance Europe, 8
- Nippur: 51; ancient ground plan of; architectural surveys of, 65; excavation methods at, 116–7; Adams' use of neogeographical models at, 255–6; studies on temple of Inanna, 290
- Nissen, Hans (b. 1935): and decipherment of archaic Uruk tablets, 308–9
- nomadic incursions: and crises of urbanization, 207-8

- North, Douglass (1920–2015): and Polanyi, 159
- Novák, Mirko: semiological approach to shape of city, 241–2; typology of dwellings at Nuzi in German tradition, 280; in-depth analysis of palace cities, 284–5
- Oates, David (1926–2004) and Oates, Joan: discovery of irrigation canals c. 5000 BC, 190
- Oates, Joan: direction of Tell Brak and argument for 1<sup>st</sup> urbanization in North Mesopotamia, 315-6
- oikos: as basis of ancient economy, 99; appraisal by Weber, 100–01; in urban system in Pfälzner, 278–9; applied to minimal entities, 373; extended by Schloen to ANE historical periods, 374
- One World Archaeology: absence of Islamic world in. 351
- Opium War, Second: and effect on excavations, 26
- Oppenheim, Leo (1904–1974): on Polanyi, 157, 158; critique of, 194–7; breaking with tradition on structure of eastern city, 193–4; assembly of citizens, 193–4; role of trade in shaping the city, 194; launching of Sippar project, 195–6; and concept of citizenship, 199–200; on 'vanished' Egyptian cities, 217; role of trade in origin of ANE city denied, 296; 'mixed' vision of 'great organizations' and private sector, 301
- Oppert, Jules (1825–1905): and 'Great Babylon', 47–8
- Osborne, Robin (b. 1957): on unfashionable urbanization, 371
- Otto, Adelheid: ease of uncovering quarter of Tell Bazi, 358
- Ottoman Empire: see also Sublime Porte; as personification of anti-values, 4, 295; identified as 'empire of evil', 9; and Greek war of independence, 9; British and French influence in, 26; French and British commercial presence in the N.E., 66; alliance with Germany, 67; regula-

tions on archaeological finds, 108; and stability under, 352

palace city: and relationship with village in Late Bronze Age Syria, 270

palace: role of in ANE compared to Europe, 192–3; driving role in 2<sup>nd</sup> urbanization, 207; non-appearance in Indus Valley urbanization, 224–5, 229–30; farming estates of, and interconnection with villages, 269; crisis of, 282–5; 19<sup>th</sup> c. view of Assyrian palaces, 282; 'palace economy', 283; Akkadian and Sumerian terms for, and use of 'crown', 283; new approach to in Clastres, 283–4; new neo-liberalist trends vs traditional central place of, 284–5

palaeo-botany: see natural sciences palaeo-environmental analysis: in neoarchaeology, 250

Palestine Exploration Fund: founding of, 81
Palestine: moral explanations of destruction,
5; mid-19<sup>th</sup> c. interest in, 80–1;
beginnings of excavation in, 83;
difficulties in pre-classical dating, 110

Parrot, André (1901–1980): excavation at Mari and disdain for innovative methods, 117–8; excavation of Middle Bronze Age Mari, 273

Pasargadae: travellers to, 85–6; Oriental Institute of Chicago excavations at, 86; and Achaemenid palaces, 226

Pasquali, Giorgio (1885–1952): on Fustel de Coulanges, 38

patrimonial household model: 374 peer polity interaction: 294, 310

peripheries: and Marxist mechanism of underdevelopment, 305; in Algaze's application of world system to Uruk, 305; of Uruk, non-passive role, 309; mountain areas considered as such, 316

peripheries: see also centre-periphery model Perrot, Charles: retaining concept of 'Great Babylon', 48

Persepolis: as source for images of the east, 11; and Achaemenid palaces, 226; fears for, under Khomeini, 350-1 Persia: see Iran

Petachia of Ratisbon (late 12<sup>th</sup> – early 13<sup>th</sup> c.): and Nineveh, 23

Petrie, William Flinders (Sir) (1853–1942): and stratigraphy at Tell el Hesi, 56–7; and protection of archaeological finds, 108; dating from pottery sherds at Tell el-Hesi, 'without even dismounting', 111

Pettinato, Giovanni: see *Gilgamesh and Agga* 

Pfälzner, Peter (b. 1960): on transformations of ANE cities, 254; criticized by Battini, 277; on ANE house and *oikos*, 278; debt to French school, 279

philology: German conscientiousness in, 66-7

Pirenne, Henri (1862–1935): city in socioeconomic context, 170; Pirenne model applied to ANE, not accepted, 296

Pitt Rivers, Augustus (1827–1900): Flinders Petrie's debt to, 57

Place, Victor (1818–1875): at Khorsabad, 35 Polanyi, Karl (1886–1964): and the redistributive city, 154–8; and staple finance, 156; at *City Invincible* symposium, 158; theory of 'administered trade' and 1970s debate, 297

polis, Greek: as example of transfer of urban model between West and East, 367–7

Polish archaeologists: and totalizing restorations, 346-7

Pontifical Biblical Institute: founding of, 81 Postgate, Nicholas: influence of Oppenheim model of city, 197; and Abu Salabikh, 357-8; see also ethno-Assyriology

pottery: and pre-pottery Neolithic stages in Braidwood, 185; see also excavation techniques

Pournelle, Jennifer R: re-evaluation of role of irrigation in urbanization, 153

Powell, Marvin: and impact of salinization, 190-1; neo-liberalist theories of Mesopotamian economy, anachronisms in, 297-8; 1990s debate and Renger, 300; see also ethno-Assyriology

prehistory: 1830s classification of, 97 prices, in ANE: in Polanyi and critics, 158

primitive accumulation: and Heichelheim, 158

primitive democracy: vs. primitive communism, 139-40; see also Jacobsen

primitivist: emphasis in denial of temple character, 289

protection for archaeological finds: under British mandate in Iraq, 107–8; by French authorities in Syria, 108–9

Puchstein, Otto (1856–1911): and excavations at Boğazköi, 88–9

Quaroni, Ludovico: misconceptions of ANE cities, 238-9

radio-carbon dating: costs of, 355

RAF: and introduction of aerial photography to Near East, 109–10

Ramazzotti, Mario: and Artificial Neural Networks, 362-3

rank-size rule: 251-2

Rassam, Hormuzd (1826-1910): succeeding Layard, 35, 53

Rawlinson, George (1812–1902): retaining tradition of 'Great Babylon', 48

Rawlinson, Henry (Sir) (1810–1895): on

Assyrian sculpture, 43

Reade, Julian (b. 1938): and survey of Tell Taya, 356

reconstruction: urban, innovative by
Koldewey and Andrae, 64–5; of ANE
cities from texts, 78–9; three-dimensional by Frankfort mission in Diyala
project, 126; of Khafaja, 128; of ANE
village on firm archaeological base,
183; of Sippar, by Harris, 196–7;
influence of Oppenheim model, 197; of
settlement phenomena by Adams, 255–
6; of early environment, 335; ex novo
reconstruction ideology of Assyrian and
Babylonian kings, 349; as ideal models
vs reality, 365; see also restoration

Redfield, Robert (1897–1958): Childe's influence on, 137; neutralization of labels, 172

redistribution: in Oppenheim, 194
regional planning: and destruction of
archaeological information, 191–2;
see also neo-capitalism

Reisner, George (1867–1942): excavation methods, 56; advances in stratigraphy ignored by Wheeler, 115

remote sensing: 358-9

Renan, Ernest (1823–1892): and Phoenician opposition to Assyria, 42; and diachronic appearance of human race, 95; and comments on Palestine, 111

Renfrew, Colin (Lord Renfrew) (b. 1937): criteria for urbanization, 138; on settlement norms, 255; 'peer polity interaction' as alternative to world system, 310–11; use of new technologies and models, 327

Renger, Johannes: on Polanyi, 157, 158; defence of Polanyi's redistribution vision vs neo-liberalists, 300

restoration: 'historical' vs 'totalizing', 345-7; ex novo, 348-9; see also reconstruction

Reuther, Oskar (1880–1954): and architectural study of houses in modern Baghdad, 72

revolution, Neolithic: 97

revolution, urban: see also Childe; 97; criteria of, 133–8; accepted in authors of *City Invincible*, 164; denied by Service, 173; sequence of, in contest for first city, 210; in Barach and Coppa, 216; criteria dismissed as 'ritual activities' by Hudson, 299; and demographic factor, 339; becomes unfashionable, 370; in post-modernity, as a 'mental' fact, 383–4

Rich, Claudius (1787–1821): and plans of Nineveh and Babylon, 24; discouraged by scale of Babylon, 50–1

road systems, ancient: found through aerial photography, 110

Roberts, David (1796–1864): and monumental paintings of Egyptian themes, 12

Roman school of ANE architecture: 276; and textual evidence for environmental reconstruction, 335

Rossini: stage sets for *Semiramis*, 21

Rost, Stephanie: on decentralization and Lagash administration, 153

Rostovtzeff, Michael (1870–1952): on ANE cities and colonialism, 177

- Russian Assyriologists and orientalists: 143-5
- Ryckwert, Joseph (b. 1926): on concept of city, 39–40
- Saddam Hussein: and stimulus for 'totalizing' restorations, 347, 351
- Said, Edward (1935–2003): on European interpretation of the Orient, 49; positive contribution to demystifying Western claims, 366
- Sakheri Sughir: excavation by Wright, 264 salvage operations: 354
- Sama'al: Andrae's post-war drawn reconstruction, 74; as example of new foundation and urban design, 233
- Samaria: American excavation at, 84
- Santorre di Santarosa (1783–1825): and Greek war of independence, 9
- Sardanapale: poster for, 22
- Sardanapalus: classical story of known to Renaissance Europe, 8; in Strabo, 9
- satellite imaging: LANDSAT used by Adams at Nippur, 255; CORONA used by Wilkinson, 261; use in virtual excavations, 360
- savagery, barbarism and civilization: 97, 132 Sayce, Archibald Henry (1846–1933): identification of Boğazköi as Hittite capital, 88
- Schaeffer, Claude (1898–1982): and excavation of Ugarit, 118, 274
- Schenkel, Wolfgang (b. 1936): and Egyptian irrigation, 152
- Schinkel, Karl Friedrich (1781–1841): and stage set for *The Magic Flute*, 21
- Schliemann, Heinrich (1822–1890): and superimposed cities at Hissarlik, 55
- Schloen, David: and 'patrimonial household model, 374
- Schmidt, Jürgen: and analysis of streets of Mesopotamian cities, 278
- Schneider, Anna (dates unknown): first model of ANE city based on administrative documents, 105–7; Frankfort's debt to, 118
- Schneider, Wolf: 48

- Schwarz, Glen and Falconer, Steven: suppression of earlier studies on cityvillage interaction, 265
- scientific analyses: costs of, 355
- Sea Peoples: and crisis of 3<sup>rd</sup> urbanization, 208
- Seeher, Jürgen (b. 1953): and topographical and town planning emphasis at Boğazköi, 281–2
- Semiramis: classical story of known to Renaissance Europe, 8
- Sen, Amartya (b. 1933): and 'Asiatic values', 369
- Sennacherib: new foundation of Nineveh and orthogonal urban grid, 236-7
- Service, Elman (1915–1996): socio-political evolution, 172–3; and anachronistic weight given to modern Zulu state, 174
- settlement systems: study of, 89–91; ANE village, 90; in prehistoric Europe, 90; Indian, adopted by political theorists, 90–1; ANE, analysis of in Diyala Basin, 189; and hierarchies of, in Adam's methodology, 191; regression to hierarchies of in crisis of 1<sup>st</sup> urbanization, 206; limitations of neo-geographic 'norms', 252–3; hierarchies of in Johnson's neo-geographic approach, 255; in South Levant, 320–1
- settlements: Neolithic, labelled as 'cities' 211-2; new archaeological models of, 250; dislocation of and neo-scientific influence, 250-1; Mesopotamian history of correctly illustrated by Adams, 255-6; spatial distribution of, 362
- Shakr-I Sokhte: parabola of growth and decline, 329
- sherqati: workmen first trained by Andrae at Assur, 63
- Sherratt, Andrew (1946–2006): 'Secondary Products Revolution' of diluting Childe, 370
- Shuruppak: see Fara
- Silver, Morris (b. 1931): and criticism of Polanyi, 159; and debate on role of trade in origin of ANE city, 297
- simulation: computerized, valuable initiatives by Wilkinson, 363-4; computer

- graphics and visualization, 364; risks of fantasy in use for entertainment purposes, 364
- Sippar: 51, 53; drawbacks as a model, 196; importance of texts from, 196–7; Oppenheim and Harris' reconstruction of social organizations in, 196–7; studies on temple of Ebabbar, 290–1
- site-catchment analysis: application to prehistory, 260
- Sjoberg, Gideon (dates unknown): acceptance of Childe's theory, 136; theory of urbanization, 167; value to archaeologists, 168; definition of city, 168; on 'vanished' Egyptian cities, 217-8
- Skara Brae: Childe's excavation of, 183 Smith, Carol: and types of urbanization, 155 Sodom and Gomorrah: 5
- Solomon, stables of: misleading excavation conclusions, 83-4
- Soviet surveys in Central Asia: 188
- Soviet Union: as post-Great War anti-model of the East, 295
- space: importance and analysis of in French school, 271–2; Castel's spatial approach, 276
- SPOT: see satellite imaging
- stage sets of the ANE: 21; Andrae's for Sardanapalus, 69
- staple finance: and Polanyi, 158
- Stein, Gil (b. 1956): radical criticism of world system, 310; and summary of recent study of Mesopotamian city, 382
- Steinkeller, Piotr: study of contrast between Northern and Southern Mesopotamia, and weaknesses in, 313-4; and urbanrural continuum, 372
- stereoscopic imaging: use in NE archaeology, 110
- Steward, Julian (1902–1972): reception in USA compared to Wittfogel's, 151–2; and primary urbanization, 163; and 'cultural ecology', 171; irrigation as effect of political growth, 190
- Stol, Marten: influence of Oppenheim model of city, 197

- Stone, Elizabeth: work on Nippur and influence of Oppenheim model of city on, 197–8; on displacement of temples and palaces, 241–2; use of co-ordinated strategy of archaeology, ethnography, ancient texts, 247–8; criticized by Battini, 277; summary of Mesopotamian city, 277; and bizarre choice of Yoruba, 292; and virtual excavation of Maskanshapir, 358; on heterarchy, with startling absence of Babylon and other non-Anglo-American urban excavations, 372
- Strabo: on ANE city, 5; cities of Sardanapalus, 9; description of Babylon and Nineveh, 45
- stratigraphy: Reisner's advances in ignored by Wheeler, 115; Parrot unaware of Wheeler's stratigraphic revolution, 117; and zero stratum of *tell*, 243–4; see also excavation techniques
- streets: widened and straightened in refounding of Nineveh, 237; of Mesopotamia, in Schmidt, 278
- Stronach, David: excavation of Pasargadae, 86
- Struve, Vasili (1889–1965): and official Soviet position on Marx's Asiatic mode, 144
- Sublime Porte: see also Ottoman Empire; war with Muhammad Ali and effect on excavations, 26; recognition of France as protector of eastern Christianity, 68
- Sumerian definition of 'barbarians': 94 surplus: in Marxist theory influencing Childe, 132; as fundamental concept of urban revolution, 134-5
- Susa: 50
- Syria: 1960s migration of archaeological missions to, 311–12; in archaeological contrast to Mesopotamia, 312; Jezira, definite urban phase emerges in, 314–5
- systems, theory of: 323; shortcomings of new models 327; multi-faceted complexity, and background noise of, 371

- tablets, cuneiform: thrown away in 'messy' excavations, 35; huge quantities lost during excavations in Lower Mesopotamia, 52; and decipherment of Sumerian, 53; city and buildings plans on, 78; see also ancient texts
- Tacitus: description of Germanic village, 90
  Tainter, Joseph (b. 1949): on collapse of ANE
  and its organizational complexity, 329
- Tell Asmar: 3-dimensional house reconstructions, 123
- Tell Babil: Pietro della Valle's visit to, 15 Tell Bazi: quarter excavated by Otto, 358,
- Tell Brak: excavation directed by Joan Oates, 315-6
- Tell Chuera: as example of round city, 239; excavation directed by Moortgat, 312; ground plan obtained through geomagnetism, 361-2
- Tell el-Hesi: and stratigraphic excavation, 57-8; British excavation at, 84
- Tell el-Ubaid: Forest on temples of, 287-8
  Tell en-Nasbe: as example of roundish city,
  239; as typical of South Levant basic
  settlement system, 321
- Tell es-Sawwan: as example of square city, 239
- Tell Leilan: excavation by Weiss, 333
  Tell Mardikh: excavation directed by
  Matthiae, 312
- Tell Mumbaqa: as example of square city, 239
- Tell Sabi Abiad: excavation and analysis of, 264
- Tell Sheikh Hamed: mission at and environmental reconstruction, 335
- Tell Taanac: Austrian-German excavation at,
- Tell Taya: survey by Reade, 356
- tell: hiding NE cities, 4; etymology of, 4; in Palestine, poverty of epigraphic finds in, 83; difficulties in description, dating and settlement analysis, 110–11; identification procedures distorting results in Diyala, 189; zero stratum of, 243–5; cursory removal of zero stratum and modern villages, 243–4; major, of

- southern Mesopotamia, damaged in war against Saddam Hussein, 353
- Tello: 51, 52; backwardness in excavation techniques, 65-6
- temple: driving role in 1st urbanization, 206; farming estates of, and interconnection with villages, 269–70; as provider of surplus in Makkay, 287; role of downgraded by Diakonoff and Gelb, 286–7; called into doubt by Forest, 287–8; new theories for prehistoric periods, and criticism of, 288–9; recognition of central role in historical periods, 289–90
- temple-city: linked to hydraulic society, 149
  Tepe Sharafabad: excavation by Wright, 264
  Texier, Charles (1802–1871): Persepolis, 85;
- first description of Boğazköi, 88–9
- texts, ancient: see ancient texts
- theory of systems: see systems, theory of
- Thom, René (1923–2002): on concept of catastrophe, 326
- Thomas, Félix (1815–1875): reconstruction of Khorsabad, 35
- Thucydides: on stages of human society, 94
  Thuesen, Ingolf: cycles of urbanization, 209
  Til Barsip: as example of new foundation
  and urban design, 233
- Tönnies, Ferdinand (1855–1936): and Indian village structure, 91, 92
- topographical texts: of Assur and Babylon, 77; of Uruk, 77-8; modern treatment of, 79-80; modern recognition as celebratory texts, 80; see also ancient texts
- Tosi, Maurizio (b. 1944): and approach to world system, 304
- tourism, mass: and the 'totalizing' restoration, 345-7
- Tower of Babel: see Babel, Tower of
  Town Planning Review: articles on ANE
  commissioned by Frankfort, 127;
  publication of Childe's theory of urban
  revolution, 133
- town planning, historians of: uncritical acceptance among of Mellaart's claim of Çatal Hüyük as 'first city', 215; and those in agreement with paradigm of 1st urbanization, 215–6; reluctance of to

- acknowledge Mesopotamian origin of planned urban grid, 237-8
- town planning: and new foundation of Habuba Kebira, and other ANE examples, 232-4
- trade diaspora model: citations restricted to Anglo-American works, 373
- trade: long-distance, in Childe's criteria, 133; in Polanyi's theory, criticised by Assyriologists, 157–8; role of in shaping the city in Oppenheim, 194; 'administered', 1970s debate on, 297; role of in supporters of proto-historical world system, 306
- traditions, invented: for cultural identity, 349-5
- travellers to the Near East: and perplexity on tell, 5; and search for Tower of Babel, 7 trends, recent: 370-3; of post-modernity, 382-3
- tribal leadership: between 3<sup>rd</sup> and 4<sup>th</sup> urbanizations, 208
- Turkey: search for national identity, 350 Tyumenev, Alexander: and Asiatic mode, 144
- Ugarit, palace of: excavated by Schaeffer, 118; incomplete volumes on, 124; relationship between village and palace estate, 269-70; contributions by Margueron, under direction of Marguerite Yon, 274-5; urban analysis of by Callot, 275; destruction by violent migrations due to climatic factors, 333; demographic estimate of, 338
- Umma region: ownership of agricultural land in. 287
- Unger, Eckhard (1884–1966): analysis of cuneiform tablets and reconstruction of Babylon and Assur, 74, 77–8
- Ur: 50, 51; Woolley excavations of, 115-6, 121-2; named in Quaroni, 238-9
- urban excavations: urban fabric unexcavated in 19<sup>th</sup> and early 20<sup>th</sup> c., 90; abandonment of, 353; prohibitive costs of, 354
- urban grid: of Babylonia in classical authors reproduced in images, 13–14; at Habuba, 231–2; in Sennacherib's new foundation of Nineveh, 236–7; in

- planned ANE cities, 237; ANE origin of ignored by historians of town planning, 237–8; right-angled, and persistent prejudice against ANE origin, 238–9; shown in Schmidt, 278
- urban institutions: ANE vs. Hellenistic, 178-9 urban neighbourhoods: streets and shops in, 123; ease of identifying administrative areas in, 124
- urban revolution: see revolution, urban urban society: innovative phase of study opened by Adams, 163-4
- urbanization: origin, in Childe, 133; theoretical links to irrigation and despotism, 148-9; post-1960 sociologists and town planners on, 165-70; and irrigation, in Steward, 171; in Syrian Jezira, 314-5; and historians' preference for processes over events, 324; deconstructed, 370
- urbanization, ANE: in biblical and classical texts, 8–10; Adams' early interest in, 161; and irrigation, in Steward, 171; role of salinization on urban collapse, 190; Oppenheim negative on, 195; of Yemen, 228; of Mesopotamia compared to Egypt and Indus Valley, 228–9; and environmental factors, 229; new foundations of, 231–2; Adams' diagnostics of, 255–6; neo-geographic models used in Levant, 259
- urbanization, cycles of: through weight of urbanization, 205; climatic effects on, 205; Adams' tables of, 205–6; 1<sup>st</sup> to 5<sup>th</sup> urbanizations and crises of, 206–8; in Indus Valley, 223; in Central Asia, 226; see also urbanisation, first, etc.
- urbanization, first: Oppenheim's pessimism on, 195; of Uruk, 206; competition for, 211-5; Algaze's application of 'world system' to Uruk and arguments against, 305-9; and appearance of 'urban' mentality in Uruk IV, 308; and link with successive cycles, 331; influence on of climatic factors, 332; and demographic factor, 339; and irrigation, 342
- urbanization, primary and secondary: 134; rise of new paradigm, 201-2; structural

distinction between, 202-3; decline and collapse, 204

urbanization, primary: social structure of as postulated by Adams, 162-4; as postulated by Sjoberg, 167-8; and diffusionism, 201; based on irrigation and agricultural surplus, 342-3

urbanization, proto-: in the Levant, 210; and in Anatolia, at Arslantepe, 210

urbanization, third: collapse of and link to climatic factor, 333

urban-rural continuum: 263, 372-3

Uruk: assembly at, see *Gilgamesh and Agga*; and first urbanization, 206; survey by Uwe Finkbeiner, 259; Forest on temples of, 287–8; Algaze's application of 'world system' to, and arguments against, 305–9; colonies of, 305–6; archives of, imbalance in competences between prehistorians and Assyriologists, 307–8; Uruk IV texts and construction of administrative world, 308; late 1990s discussion of northern expansion, 309; described in *Gilgamesh*, 335; ignorance of in 21st c., 386

van de Mieroop: influence of Oppenheim model of city, 197

van der Spek, Bert: on Mesopotamian and Hellenistic cities, 178

van Heemskerck, Maarten (1498-1574): portayal of Tower of Babel, 16

van Liere, Willem: stereoscopic imaging of Syrian Jezira, 110

Van: and rock inscriptions, 87 Veenhof, Klaas: on Polanyi, 157

Vico, Gianbattista (1668–1744): on stages of human society, 94

village, ANE: not recognised in ANE studies, 93; evidence-based reconstruction of in Braidwood, 183-6; workmen's, in Egypt, 218; large, as labour reserve, 257; renewed excavation of in 1980s, 264; history of forgotten in American 'rediscovery', 265; communal bodies in, 267-8; and interconnection with farming estates of palace or temple,

269–70; modern used for comparison of demographic estimates, 336

villages: in Neolithic Europe, 90; Germanic, Tacitus' description of, 90; Neolithic and Chalcolithic described by Childe, 183; 'rediscovery' of in American anthropology, 265; American view of 'complexity' of, 266; see also settlement system

Volney, Constantin de (1757–1787): and *tell* in Syria, 5; dreams of averting catastrophe, 325

von der Osten, Hans Henning (1898–1960): in Anatolia, 112

von Thünen, Johann (1783–1850): Thünen rings of land use, reformulated in neogeography, 260

Waetzoldt, Hartmut: on houses of Ur III, 247 Wall of the Medes: 49

Wallerstein, Immanuel (b. 1930): world systems, urbanization, recessive periods in, 203; world system and ancient historians, 303-4

walls: of unfired brick, first identification of, 63; of large cities, discovered systematically, 64; increased height in reproductions, 76; in iconographic portrayal of enemy cities, 80; of Jericho, 83

Walters, Stanley D: citing Larsa as a hydraulic society, 153

Warsaw: totalizing restoration of, 346 Weber, Max (1864–1920): and attention to ANE city, 100–04; on the *oikos*, 373

Weiss, Harvey (b. 1945): and 2<sup>nd</sup> urbanization in Upper Mesopotamia, 333

West vs East: final analysis 366–7

Westmacott, Richard (Sir) (1775–1856): opinion of Assyrian sculptures, 42

Wheeler, Mortimer (Sir) (1890–1976): on archaeological 'sins' in Palestine, 37, 84; and excavation by squares, 114; support for Jericho as 'most ancient city', 213

Wilde, Oscar (1854–1900): on archaeological accuracy, 20–21

Wilhelm II of Germany (1859–1941): and town planning, 64; visits Ottoman Empire and Jerusalem, 68

Wilkinson, J. Gardner (1797-1875): on Assyrian vs. Egyptian art, 43

Wilkinson, Tony (1948–2014): and the 'hollow ways', 110; site-catchment analysis and increasing use of neogeographic models, 260–1; description of ANE landscape, 261–2; and developments in Syrian Jezira from 1994, 315; demographic surveys, 339; initiatives in computerized simulations, 363–4

Wilson, John (1899–1976): and negative approach to the Egyptian city, 216–7

Winckler, Hugo (1863–1913): and cuneiform tablets at Boğazköi, 88

Winter, Irene: school of, on palace as 'message of power', 285

Wirth, Eugen (1925–2012): Islamic and ANE cities, 179

Wittfogel, Karl (1896–1988): and hydraulic city, 149–152; Marxist attitudes to, 149–50; unawareness of archaeological evidence, 150; reception in USA, 151–2; re-evaluation by modern scholars, 153; Mumford's debt to, 167; hydraulic state as prototype of 'eastern' enemy, 258

Wittgenstein, Ludwig (1889–1951): metaphor of city, 54

Woolley, Leonard (Sir) (1880–1960): and excavation of Ur, 115–6; and capture of public interest, 121–2; and street names in Babylon, 123; objection to Jericho as 'most ancient city', 213

world system: and neo-liberalist insistence on, 299-300; Renfrew's 'peer polity interaction' as alternative to, 310

Worsaae, Jens (1821–1885): and beginnings of prehistoric archaeology, 32

Wright, Henry (b. 1943): village excavations of Sakheri Sughir and Tepe Sharafabad, 264; counter-argument to 'world system' in first urbanization, 309

XTENT model: 251

Yoffee, Norman (b. 1944): and critique of neo-evolutionism, 175; on 'goods of the crown' vs palace, 283; on northern expansion of Uruk, 310; 1988 study of collapse of ANE 'civilizations', 328

Yon, Marguerite: direction of Ugarit, individual studies on urban characteristics of, and invitation to Margueron, 274-5

Zagros: urban centres of Mannaeans and Medes identified post-World War II, 317-8

Zincirlı: see Sama'al

ziqqurat: of 'Aqar Quf and Birs Nimrud, 7; of Babylon, 7; at Ur, excavation of, 121; anachronistic partial restoration of 'Aqar Quf, 348