THE OXFORD HISTORY OF

THE ANCIENT NEAR EAST

From the End of the Third Millennium BC to the Fall of Babylon

VOLUME II

Edited by KAREN RADNER, NADINE MOELLER *and* D. T. POTTS

The Oxford History of the Ancient Near East

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Preface

THIS IS THE second volume of the *Oxford History of the Ancient Near East*, which covers Egypt and Nubia, the Levant, Anatolia, Mesopotamia, and Iran from the turn of the third to the second millennium BC and through the first half of that millennium, broadly corresponding to the Middle Bronze Age. The first volume (published in August 2020) closed with the end of the Old Kingdom in Egypt and of the Akkad state in Mesopotamia, and as we stated in its preface, future generations of scholars will hopefully establish whether we should have included Egypt's First Intermediate Period and/or the kingdom of the Third Dynasty of Ur in that volume. Their discussion opens the present volume, after a chapter devoted to the absolute chronology of the first half of the second millennium BC and the possibilities, problems, and priorities inherent in the different sources, including historical data, archaeological finds, and stratigraphies, and radiocarbon-dated, organic materials that need to be correlated and synchronized across a vast geographical region from the Nile to Iran.

In Egypt, the Middle Kingdom constituted a long-lived, and relatively well-documented, state that greatly influenced the neighboring regions in Nubia and the Levant. Further east, the political organization of Mesopotamia and Syria after the disintegration of the kingdom of Ur can be described as a mosaic of medium-sized, small, and single-city states, with quickly changing alliances and several short-lived attempts to establish larger political units; the most successful project loomed large in Iran from which the *Sukkalmah* Dynasty's power at times reached as far as northern Syria. The availability of sources for this "warring state

period" is extremely uneven, with the events of some decades documented in great detail in certain places, while otherwise centuries can be sketched in rough outlines only. We therefore decided to organize this part of the volume geographically in four chapters, with a regional focus on southern Mesopotamia; on northern Mesopotamia and Syria; on the eastern Tigris region and Iran; and on Anatolia. The emergence of a kingdom centered on Babylon eventually led to a brief period of political unification under Hammurabi and his successors that came to an end with the "Fall of Babylon"; the relevant chapter covers also the rival southern state of the Sealand that outlived the kingdom of Babylon by centuries. The following Time Chart (pp. xi-xii) presents a concise overview of the chronological coverage of the volume, but note also the detailed chronological tables accompanying Chapters 11, 14, 16, and 18.

The cover of the present volume depicts, together with its modern impression on a strip of clay, an Old Syrian cylinder seal, which is today housed in the collection of the Morgan Library & Museum, New York (accession number 0967) and was acquired by Pierpont Morgan between 1885 and 1908. It shows the weather god standing on two mountains, facing a nude goddess. A suppliant goddess on the right, further female figures above, a tethered bull, and smaller symbols (bird, lion, celestial signs) add complexity to a scene that is typical of Old Syrian–style cylinder seals from the early second millennium BC. After the seal of the Old Kingdom ruler Sahura on the cover of the first volume of the *Oxford History of the Ancient Near East*, it is the second of the five cylinder seals from different parts of the Near East chosen to adorn the covers of the individual volumes in order to highlight the region's great cultural commonalities and divergences. The present seal epitomizes the universe of ideas, cultural practices, and diverse traditions that link the regions covered in this volume.

This book brings together another distinguished group of experts in the field, again a mix of established scholars and bright new talents from across the globe. We are very grateful to all of them for contributing the twelve chapters that make up this volume, covering the time "from the end of the third millennium BC to the fall of Babylon" and showcasing the very different approaches that the available sources necessitate, from

the analysis of hugely diverse groups of texts to the close study of material culture such as pottery and coffin styles. Draft manuscripts were received between August 2018 and August 2020.

In transcribing Egyptian proper nouns, we follow the conventions of *The Oxford History of Ancient Egypt*, edited by Ian Shaw (OUP 2004, rev. ed.). While we use hyphenation to separate the components of Sumerian personal names with two constituent elements (e.g., Ur-Namma) we do not do this for longer names (e.g., Ninšatapada instead of Nin-šata-pada). We follow normal practice in marking the individual words within Akkadian proper nouns (e.g., Dur-Yasmah-Addu, Rim-Sin). We also mark the individual words within Elamite and Amorite names (e.g., Tan-Ruhurater, Samsi-Addu). Whenever a person or place is widely known by a conventional spelling, we use that (e.g., Hammurabi instead of Hammu-rapi, Cutha instead of Kutiu). We do not use any long vowels in proper nouns, including modern Arabic and Farsi place names.

Our work on the *Oxford History of the Ancient Near East* was greatly facilitated by the fellowships awarded by the Center for Advanced Studies of LMU Munich (CAS^{LMU}) to Nadine Moeller and Dan Potts, which allowed us to come together in Munich in July 2016, 2017, and 2018, when the groundwork for this volume was laid. Much of the joint editorial work on the chapters of the second volume was achieved in our 2019 meetings in Chicago, Penjwin (Kurdish Autonomous Region of Iraq), and Pouillon (Chalosse region, France). However, the global COVID-19 (Sars-CoV-2) pandemic and resultant travel restrictions made it impossible for us to meet in 2020. Our close collaboration continued, thanks to our joint GoogleDrive folders and especially the WhatsApp group "OHANE Editors," which came to be our most important communication tool.

As ever, we are greatly indebted to our editor at Oxford University Press, Stefan Vranka, who accompanied and facilitated our work on this volume at every step. The index was prepared by Luiza Osorio Guimarães da Silva (Chicago), who was also instrumental in harmonizing proper nouns across chapters and volumes. At LMU Munich, we are grateful to Denise Bolton, who language-edited several chapters; to Thomas Seidler, who checked and consolidated the chapter bibliographies; and to Dr Andrea

Squitieri, who created the cartography for the individual chapters. We also thank Philipp Seyr (Liège) for harmonizing the Egyptian names and spellings across the volume. Their work was funded by the Alexander von Humboldt Foundation via the International Award for Research in Germany 2015 to Karen Radner. We are very grateful for their speed and attention to detail as well as their patience and good humor, especially in the often difficult times of 2020 when libraries and offices were closed.

Time Chart

	Egypt		*Mesopotamia*					*Iran*
			Syria		*Iraq*			
2150 BC	**First Intermediate Period (2160–2055)**			***Lagaš***				
	Ninth and Tenth Dynasties	**Eleventh Dynasty**		…			***Ur* (2110–2003)**	***Elam***
	Herakleopolis	***Thebes***		Gudea			Ur-Namma	***Sukkalmah* Dynasty**
	Khety (Nebkaura)	Mentuhotep I (fictious?)		…			Šulgi	***Ešnunna***	Ebarat I
	Khety (Wahkara)	Intef I (Sehertawy)			***Isin***	***Larsa***	Amar-Sin	**(c.2026–c.1760)**	Kindattu
	Khety (Meryibra)	Intef II (Wahankh)			**(2019–1794)**	**(2025–1763)**	Šu-Sin	…	Idattu I
	Merykara	Intef III (Nakhtnebtepnefer)		***Assur***	Išbi-Erra	Naplanum	Ibbi-Sin	Bilalama	Tan-Ruharater
2050 BC	**Middle Kingdom (2055–1650)**			…	Šu-ilišu	Yamsium		Išar-ramaši	Ebarat II
	Eleventh Dynasty (all of Egypt)			Irišum I (1972–1933)	Iddin-Dagan	Samium		Uṣur-awassu	
	Mentuhotep II (Nebhepetra)				Išme-Dagan	Zabaya		Azuzum	Šilhaha
	Mentuhotep III (Sankhkara)			…	Lipit-Eštar	Gungunum	***Babylon***	Ur-Ninmarki	
	Mentuhotep IV (Nebtawyra)				Ur-Ninurta	Abi-sare	**(1894–1595)**	Ur-Ningišzida	Pala-iššan
	Twelfth Dynasty				Bur-Sin	Sumu-El	Sumu-abum	Ipiq-Adad I	
	Amenemhat I (Sehetepibra)				Lipit-Enlil			Šarriya	Temti-Agum I
	Senusret I (Kheperkara)				Erra-imitti	Nur-Adad	Sumu-la-El	Warassa	
					Enlil-bani	Sin-iddinam		Belakum	

	Amenemhat II (Nubkaura)				Zambiya	Sin-iribam	Sabium	Ibal-pi-El I	Kuk-našur I (?)
	Senusret II (Khakheperra)		***Mari***		Iter-piša	Sin-iqišam		Ipiq-Adad II	…
	Senusret III (Khakaura)		Yagid-Lim		Ur-dukuga	Ṣilli-Adad	Apil-Sin	Naram-Sin	
	Amenemhat III (Nimaatra)	***Yamhad***	Yahdun-Lim	***Ekallatum*** Samsi-Addu (1833–1775)	Sin-magir	Warad-Sin	Sin-muballiṭ	…	Širuktuh (c. 1785)
	Amenemhat IV (Maakherura)	Sumu-epuh	Sumu-Yamam		Damiq-ilišu (1816–1794)	Rim-Sin I (1822–1763)	Hammurabi (1792–1750)	Daduša	
	Queen Sobekneferu							Ibal-pi-El II	Siwe-palar-huppak
1800 BC	**Thirteenth Dynasty (selection of kings, in chronological order)**	Yarim-Lim I	Zimri-Lim (1774–1761)					Ṣilli-Sin (1764–1760?)	Kudu-zuluš I (c. 1767–1765)
	Amenemhat Sobekhotep (Sekhemra-khuytawy)	Hammurabi I							Kuter-Nahhunte
	Ameny-Qemau								
	Sobekhotep II (Khaankhra)	Abba-El I					Samsu-iluna (1749–1712)	***Sealand*** **(c. 1720–c. 1480)**	Temti-Agum II
	Hor (Awibra)								Atta-mera-halki
	Wegaf (Khuytawyra)	Yarim-Lim II						Ili-ma-ilu	Tatta
	Khendjer (Userkara)						Abi-ešuh (1711–1684)		Kuk-našur II
	Sobekhotep III (Sekhemra-sewadjtawy)	Niqmi-epuh						Itti-ili-nibi	Kuter-Šilhaka
	Neferhotep I (Khasekhemra)								
	Sobekhotep IV (Khaneferra)	Irkabtum					Ammi-ditana (1683–1647)	Dam(i)q-ilišu	Temti-raptaš
	Ay (Merneferra)								Kudu-zuluš II
		Hammurabi II						Iškibal	Sirtuh
1650 BC		…					Ammi-ṣaduqa (1646–1626)	Šušši	Tan-uli
1600 BC		Hammurabi III					Samsu-ditana (1625–1595)		Temti-halki
								Gulkišar (c. 1595)	Kuk-našur III
		…						DIŠ+U-EN (?)	
								Pešgaladarameš	
								Ayadaragalama	
								Ekurduana	
1500 BC								Melamkura	
								Ea-gamil (c. 1480)	

The Contributors

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Assyrian colony period (Museum Tusculanum, 2011), and *Libraries before Alexandria* (Oxford University Press, 2019).

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Abbreviations

AAE	*Arabian Archaeology and Epigraphy*
AfO	*Archiv für Orientforschung*
AJA	*American Journal of Archaeology*
ÄL	*Ägypten & Levante*
AnSt	*Anatolian Studies*
AoF	*Altorientalische Forschungen*
ASAE	*Annales du Service des Antiquités de l'Égypte*
BaM	*Baghdader Mitteilungen*
BASOR	*Bulletin of the American Schools of Oriental Research*
BIFAO	*Bulletin de l'Institut Français d'Archéologie Orientale*
BiOr	*Bibliotheca Orientalis*
CAD	*The Assyrian Dictionary of the Oriental Institute of the University of Chicago*
CDLJ	*Cuneiform Digital Library Journal*
EA	*Egyptian Archaeology*
GM	*Göttinger Miszellen*
IEJ	*Israel Exploration Journal*
IrAnt	*Iranica Antiqua*
JA	*Journal Asiatique*
JAEI	*Journal of Ancient Egyptian Interconnections*
JANEH	*Journal of Ancient Near Eastern History*
JAOS	*Journal of the American Oriental Society*
JAR	*Journal of Archaeological Research*
JARCE	*Journal of the American Research Center in Egypt*
JAS	*Journal of Archaeological Science*
JCS	*Journal of Cuneiform Studies*

JEA	*Journal of Egyptian Archaeology*
JEH	*Journal of Egyptian History*
JEOL	*Jaarbericht "Ex Oriente Lux"*
JNES	*Journal of Near Eastern Studies*
JWP	*Journal of World Prehistory*
MARI	*Mari: Annales de recherches interdisciplinaires*
MDAIK	*Mitteilungen des Deutschen Archäologischen Instituts, Kairo*
MDOG	*Mitteilungen der Deutschen Orient-Gesellschaft*
NABU	*Nouvelles Assyriologiques Brèves et Utilitaires*
NEA	*Near Eastern Archaeology*
OJA	*Oxford Journal of Archaeology*
OLZ	*Orientalistische Literaturzeitung*
PEQ	*Palestine Exploration Quarterly*
QSR	*Quaternary Science Reviews*
RA	*Revue d'Assyriologie et d'archéologie orientale*
RdE	*Revue d'Égyptologie*
RlA	*Reallexikon der Assyriologie und Vorderasiatischen Archäologie*
SAK	*Studien zur altägyptischen Kultur*
SEL	*Studi Epigrafici e Linguistici sul Vicino Oriente Antico*
SMEA	*Studi Micenei ed Egeo Anatolici*
WdO	*Die Welt des Orients*
ZA	*Zeitschrift für Assyriologie und Vorderasiatische Archäologie*
ZAR	*Zeitschrift für Altorientalische und Biblische Rechtsgeschichte*
ZÄS	*Zeitschrift für Ägyptische Sprache und Altertumskunde*

11

Establishing an Absolute Chronology of the Middle Bronze Age

Felix Höflmayer

11.1. Chronological concepts: historical, archaeological, scientific chronologies

A sound chronological framework is the backbone of all history writing. Every historical argument stands or falls according to the relative or absolute chronology applied. The answer to the question *when* is the first prerequisite to raise questions about *how* and *why*.

For the ancient Near East in the Middle Bronze Age (ca. 2000–1500 BC; figure 11.1), three different methodological approaches to chronology are currently in use: historical (or political) chronologies for Egypt and Mesopotamia; archaeological (or relative) chronologies mainly for the Levant; and radiocarbon chronologies which have been generated for both historical chronologies and relative chronologies, but which are *independent* of both systems of dating.

Before the introduction of scientific dating methods, such as radiocarbon dating, scholars had to rely on other sources to construct a chronological framework that allowed an ordering of events relative to

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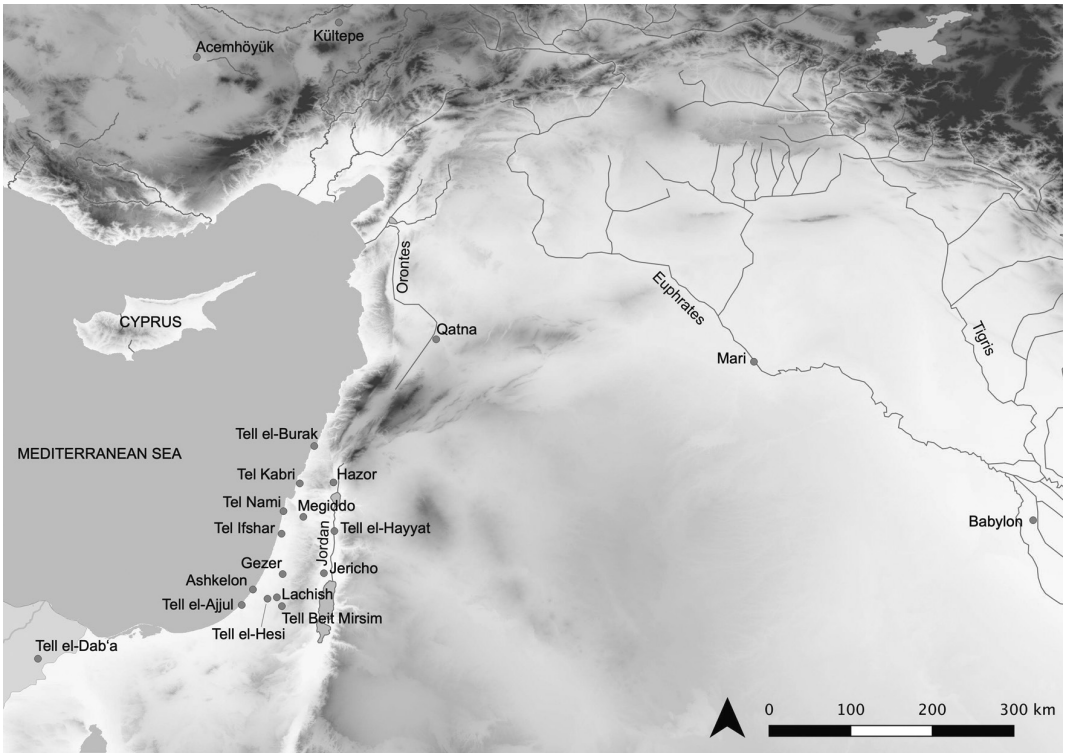

FIGURE 11.1. Sites mentioned in this chapter. Prepared by Andrea Squitieri (LMU Munich).

each other. Different chronological systems were established for different fields, e.g., Egypt, Mesopotamia, or the Levant, and the respective systems differed in the sources they used to construct their chronological framework, as well as in their results. In regions with an abundance of written sources and elaborate calendar systems, such as Egypt or Mesopotamia, our modern chronological models often followed and adapted ancient concepts for structuring time, such as the sequence of Egyptian kings and dynasties or the year-name or eponym lists of Mesopotamia. In regions where written sources were lacking, scholars based their chronological reconstructions on material culture, most often on the development of the shape and decoration of pottery, based on the stratigraphic sequences of so-called key-sites. Although these systems seem to be methodologically independent from each other, in fact several interdependencies exist between them, although these often lack systematic definition.

As long as a scholar's research questions remain within the limits of a given society or field employing a single chronological system, the subject of absolute dates is of marginal interest, if the relative sequence of events can be reconstructed to a satisfying degree of certainty. As soon as a research question touches upon interregional developments, a single chronological system might not suffice to order events and developments temporally, requiring one to find other means of structuring time and events related to different chronological systems. In particular, the analysis of long-term developments, such as questions of urbanization, the rise and fall of complex societies, migration, and/or the spread of technology and knowledge throughout the ancient Near East and beyond, makes an overarching absolute chronology necessary to track changes and to distinguish between cause and effect in human history. In order to relate events within (and the development of) different regions, such as Egypt, the Levant, Mesopotamia, and Anatolia, to each other, one needs to relatively synchronize the different chronological systems in use by establishing chronological links based on imported objects or dated textual references to identifiable historical events in other cultures. Using absolute calendrical dates derived from various sources (mostly from datable texts on astronomical observations) proved to

be challenging before the advent of radiocarbon dating, as there were often several competing chronological models available based on the same set of evidence (e.g., the High, Middle, and Low Chronologies for Mesopotamia). Nevertheless, for a long time, absolute dates seemed to be less important than the relative synchronization of different chronological systems. Philip Betancourt, who published extensively on the subject of the Santorini eruption in the mid-second millennium BC and its relationship with Egyptian chronology, correctly pointed out that

> the problem is that the discovery of the absolute dates is not as important as the question of the relative chronology. For historical conclusions, moving an event a hundred years forward or back in time is not as important at our present level of knowledge as understanding its relevance to other events from approximately the same time.[1]

It was only with the advent of radiocarbon dating that a direct link between an organic object and a calendrical date could be established. Only then was the same yardstick employed to measure time in all regions and throughout all periods.

Chronology has been one of the most contested fields of research in ancient Near Eastern studies. The three seminal volumes *High, Middle, or Low*, edited by Paul Aström and published in 1987 and 1989, summarized the diverging chronologies of Mesopotamia, Egypt, the Middle Bronze Age of the Levant, Cyprus, the Aegean, and Anatolia that had been created by historians up to the late 1980s.[2] Later, the project "Synchronization of Civilizations in the Eastern Mediterranean in the Second Millennium BC" (SCIEM-2000), hosted by the Austrian Academy of Sciences and funded by the Austrian Research Fund, aimed to provide a synchronized chronology of the Middle and Late Bronze

1. Betancourt 1998: 295.

2. Åström 1987a; 1987b; 1989.

Ages for the entire eastern Mediterranean.[3] Although no final consensus could be reached, a substantial amount of new data enriched the chronological discussion and provided new arguments for consideration. Both of these projects aimed at synchronizing historical (political) and relative (archaeological) chronological systems with each other.

In this chapter, we will outline the different chronological systems relevant to the Middle Bronze Age ancient Near East, i.e., the historical chronology of Egypt during the Middle Kingdom and the Second Intermediate Period, the Middle Bronze Age phases of the Levant, and the different chronological options for the historical chronology of Mesopotamia. Then we will summarize prior chronological synchronizations for the ancient Near East. Finally, we will outline the method, potential, and limitations of radiocarbon dating for this period and produce an absolute, radiocarbon-based chronological framework for the entire Middle Bronze Age ancient Near East.

11.1.1. The Egyptian historical chronology

The Egyptian historical chronology is one of the most important chronological reference systems for the ancient Near East and the eastern Mediterranean.[4] Our current chronological system for Dynastic Egypt is, in itself, an interpretation of a complicated network of interlocking, mostly written, data. The basic system of grouping the reigns of multiple kings into thirty dynasties derives from the late Egyptian priest Manetho, who most likely compiled his major work *Aegyptiaca* in the third century BC.[5] Although this work has not been preserved, substantial quotations from it can be found in the works of other Greek and Roman authors, including Flavius Josephus, Sextus Julius Africanus, Eusebius of Caesarea, and Georgios Syncellus. Manetho's chronological system is surprisingly similar to contemporary sources, such as the Turin Canon; both refer

3. Bietak 2000; 2003; Bietak and Czerny 2007.

4. Beckerath 1997; Kitchen 2000; Hornung et al. 2006a.

5. Waddell 1940; Helck 1956; Hornung et al. 2006b.

to individual kings, both attribute a certain reign-length to them, and both form dynasties of several groups of individual kings.[6] Therefore, it is likely that Manetho both had access to firsthand sources and was able to verify his dates with contemporary sources (or, if not, to explain why certain parts of his chronology were corrupted).[7] Other contemporary sources such as king lists, dated monuments (mentioning a king's name and the respective year of reign), and genealogical data[8] helped to corroborate and to refine this chronological system.

It is important to stress that this chronological system is a *political* one. Time is structured by a sequence of individual reigns of kings (and then grouped into dynasties). This is similar to how we order time (in certain contexts) when we speak about "the Obama administration" or "the Trump administration."

The Egyptian historical chronology is, a priori, a floating chronology; it needs additional information to be placed absolutely in calendrical time. One important method for establishing absolute dates is the system of dead-reckoning, i.e., adding up the highest accounted individual regnal years from a point in time for which an absolute calendrical date has been agreed upon. One of these fixed dates in the field of Egyptology is the Persian conquest of Egypt under King Cambyses in 525 BC.[9] Of course, adding up the highest accounted regnal years is often hampered by fragmentary, or sometimes ambivalent, sources, which are particularly common in the so-called Intermediate Periods. One also has to take into account potential co-regencies between certain pharaohs.[10]

Another method for establishing absolute calendrical dates (often used in conjunction with dead-reckoning) is astrochronology, i.e., the calculation of absolute dates for astronomical observations mentioned in datable written sources. Especially for the Middle Kingdom, the

6. Gardiner 1959; Helck 1992; Ryholt 1997; 2004; Allen 2010.

7. Gundacker 2015; Hornung et al. 2006b.

8. Bennett 2002; Jansen-Winkeln 2006; Bierbrier 2006; Bennett 2006.

9. Depuydt 1996.

10. Kitchen 2000; 2007.

prediction of a Sothic rise mentioned in Papyrus Berlin 10012 is of key importance, and it has been used for establishing the chronology of the Middle Kingdom in absolute calendrical time.[11] Lunar dates have also been used to calculate the chronology of the Middle Kingdom, and Rolf Krauss and other colleagues have used this method to arrive at a chronological reconstruction that is significantly lower than the traditional Middle Kingdom chronology.[12]

The Middle Kingdom and the Second Intermediate Period (from the Twelfth to the Seventeenth Dynasties) is the period of Egyptian history relevant to the Middle Bronze Age of the ancient Near East.[13] While the attribution of individual kings to certain dynasties is generally established, the meaning of the terms "Middle Kingdom" and "Second Intermediate Period" vary. Some scholars regard only the Twelfth Dynasty as the Middle Kingdom; others include also the Thirteenth Dynasty. Open discussions also continue about the sequence of kings in the Second Intermediate Period (in particular regarding the position of the Hyksos king Khyan in the sequence of Fifteenth Dynasty rulers) or about potential overlap between certain dynasties (e.g., whether the end of the Thirteenth Dynasty overlaps with the beginning of the Fifteenth Dynasty).[14]

For the scope of this chapter, it is not necessary to outline in detail the different historical arguments for one or another chronological model of Middle Kingdom and Second Intermediate Period Egypt. It is important to stress that (a) the historical chronology of Egypt is a *political* one and is therefore, a priori, *independent* of the development of material culture in Egypt; and (b) before the application of radiocarbon dating and Bayesian analysis, absolute calendrical dates for the Egyptian Middle Kingdom and Second Intermediate Period derived from an interpretation of astronomical observations, resulting in a High and a Low Middle Kingdom Chronology (table 11.1).

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11. Borchardt 1899; Luft 1992.

12. Krauss 1985; 2003; 2006.

13. Franke 1988a; 1988b; Schneider 2008.

14. Forstner-Müller and Moeller 2018.

Table 11.1. Different chronological models for the Egyptian historical chronology of the Middle Kingdom

Dynasties	Kings	Low Chronology (after Hornung, Krauss, and Warburton)	High Chronology (after Kitchen)	High Chronology (after von Beckerath)
Twelfth Dynasty	Amenemhat I	1939–1910	1973–1944	1976–1947
	Senusret I	1920–1875	1953–1908	1956–1911/10
	Amenemhat II	1878–1843	1911–1876	1914–1879/76
	Senusret II	1845–1837	1878–1872	1882–1872
	Senusret III	1837–1819	1872–1853	1872–1853/52
	Amenemhat III	1772–1764	1853–1808	1853–1806/05
	Amenemhat IV	1763–1760	1808–1799	1807/06–1798/97
	Sobekneferu	1763–1760	1799–1795	1798/97–1794/93
Thirteenth Dynasty		1759–1630	1795–1638	1794/93–1648/45
Fifteenth Dynasty (Hyksos)		?–1530	1638–1540	1648/45–1539/36
Start of Eighteenth Dynasty		1539	1540	1550

11.1.2. The Mesopotamian historical chronology

Within the chronological systems of the ancient Near East, the Mesopotamian system of historical chronology was not only in use in the land between the Euphrates and Tigris rivers, but was also partly employed within Syria and eastern Anatolia. For chronological discussions of the central and southern Levant, the Mesopotamian chronology has only rarely been taken into account. However, for the absolute chronology of the Middle Bronze Age Levant (and Egypt), absolute calendrical dates for the First Dynasty of Babylon (i.e., the Hammurabi dynasty; see chapter 18 in this volume), which ended approximately around the mid-second millennium BC, are indeed of interest. As with Egyptian historical chronology, our chronological system for First Dynasty Mesopotamia is essentially a *political* one, based on the interpretation of texts such as king lists, eponym lists, dated monuments, and royal inscriptions. This floating political chronology is, in itself, fairly well established and the internal order of political events is generally not disputed.[15]

Absolute evidence for dating the First Babylonian Dynasty is found, as in Egyptian historical chronology, in written sources containing astronomical observations, especially the Venus tablets of Ammi-ṣaduqa.[16] Astronomical calculations initially led to three competing chronological models, the so-called High, Middle, and Low Chronologies (HC, MC, and LC).

While the High Chronology, advocated by Peter Huber, placed the fall of Babylon (and the end of the First Dynasty of Babylon and the so-called Old Babylonian period) at 1651 BC, the more conventionally used Middle Chronology dated the same event to 1595 BC, and the Low Chronology to 1531 BC.[17] These three chronological models of the First Dynasty of Babylon already have a 120-year difference between them. Two additional chronological systems, suggesting even later dates, were published in the last two decades and complement the current

15. Pruzsinszky 2009.

16. Huber et al. 1982; Huber 2000.

17. Pruzsinszky 2009.

discussions around absolute dates for the First Dynasty of Babylon. The so-called New Chronology, advocated by Hermann Gasche, dates the fall of Babylon to 1499 BC and, more recently, Joachim Mebert suggested a date of 1522 BC.[18] Therefore, it is possible to date the same historical event (the fall of Babylon) across a span of more than 150 years, based on different interpretations of written sources and their respective astronomical calculations. After many discussions in the field, most scholars adopted the Middle Chronology. However, as Regine Pruzsinszky pointed out, this happened "for reasons of 'convenience,' not because the middle chronology has been 'proven.' "[19]

The so-called Revised Eponym List of Assyria (REL) is of crucial importance for linking the relative chronology of the Middle Bronze Age of the Levant (and subsequently Egypt) with the competing chronological models for the First Dynasty of Babylon (for details, cf. section 11.4). The REL is basically an annual timescale based on textual sources from Assur and the Mari Eponym Chronicles.[20] As with any politically based chronological framework, the REL is a priori floating in time. Relative years are designated by the prefix REL and a running number that ranges from REL 1 to REL 255. One can order political events relatively in time (based on the eponyms), but for evidence for absolute calendrical dating one needs to synchronize this floating chronology with other systems to establish absolute dates. In fact, it has been possible to synchronize the REL with the Babylonian chronology, as the northern Mesopotamian ruler Samsi-Addu (= "Šamši-Adad I" in the Assyrian King List; REL 165–197) died in the 18th year of Hammurabi.[21] Therefore, the death of Samsi-Addu in REL 197 could be dated either to 1830 BC (High Chronology), 1774 BC (Middle Chronology), 1710 BC (Low Chronology), 1701 BC (Mebert's chronology), or 1678 BC (New Chronology) (table 11.2).

18. Gasche et al. 1998; Mebert 2010.

19. Pruzsinszky 2009: 17.

20. Barjamovic et al. 2012.

21. Charpin and Ziegler 2003.

Table 11.2. Dates for selected reigns according to different models for the Mesopotamian historical chronology

	New Chronology	Mebert Chronology	Low Chronology	Middle Chronology	High Chronology
End of Babylon (First Dynasty)	1499	1522	1531	1595	1651
Reign of Ammi-ṣaduqa	1550–1530	1573–1553	1582–1562	1646–1626	1702–1682
Death of Samsi-Addu (REL 197)	1678	1701	1710	1774	1830
Reign of Hammurabi	1696–1654	1719–1677	1728–1686	1792–1750	1848–1806

11.1.3. The relative chronology of the Middle Bronze Age in the Levant

The relative chronological model for the Levant, and specifically for the southern Levant, differs significantly from both the Egyptian as well as the Mesopotamian historical chronologies. Relative chronological systems are mainly based on the development of material culture, the appearance and disappearance of so-called *fossils directeurs* which are regarded as characteristic for certain chronological periods. In societies without written historical sources (as with the Middle Bronze Age Levant), this typological method, originally developed for prehistoric Europe by Oscar Montelius,[22] remains the only possible method for structuring time. Ideally, the development of material culture can be reconstructed based on sites with long, overlapping stratigraphic sequences.

During the early twentieth century, many different chronological terminologies were in use for excavations in the Levant. Flinders Petrie differentiated between an Amorite, a Phoenician, and a Jewish period in his excavation of Tell el-Hesi; Stewart Macalister divided the stratigraphy of Gezer into Pre-, First, Second, Third, and Fourth Semitic Periods; and Ernst Sellin and Carl Watzinger subdivided their sequence in Jericho into prehistoric, Canaanite, Israelite, and Jewish phases.[23] In 1922, the leading archaeologists of the southern Levant met in Jerusalem and agreed upon a new terminology, which, with some modification, is still in use today.[24] William Foxwell Albright was one of the first to apply this new chronological terminology to his excavations at Tell Beit Mirsim.[25]

Our current relative chronological model for the Levant discriminates between an Early, a Middle, and a Late Bronze Age, followed by Iron Age phases. Relative archaeological terms for the Middle Bronze Age are unfortunately somewhat confusing (table 11.3). Today, we usually

22. Montelius 1903.

23. Petrie 1891; Macalister 1912; Sellin and Watzinger 1913.

24. Garstang et al. 1922.

25. Albright 1930–1931; 1931–1932; 1936–1937.

Table 11.3. Different terminologies for the relative chronology of the Middle Bronze Age

<table>
<tr><td colspan="4">Early Bronze Age I–III</td></tr>
<tr><td>Middle Bronze Age I</td><td colspan="3">Early Bronze Age IV / Intermediate Bronze Age</td></tr>
<tr><td>Middle Bronze Age IIA</td><td>Middle Bronze Age IIA</td><td>Middle Bronze Age I</td><td>Middle Bronze Age I</td></tr>
<tr><td rowspan="2">Middle Bronze Age IIB</td><td>Middle Bronze Age IIB</td><td rowspan="2">Middle Bronze Age II</td><td>Middle Bronze Age II</td></tr>
<tr><td>Middle Bronze Age IIC</td><td>Middle Bronze Age III</td></tr>
<tr><td colspan="4">Late Bronze Age</td></tr>
</table>

employ the terms Middle Bronze Age I, II, and III, but at the same time, Middle Bronze Age IIA, IIB, and IIC are also in use (MB I = MB IIA; MB II = MB IIB; MB III = MB IIC). Some scholars prefer a bipartite structure as opposed to the tripartite version more commonly in use (Middle Bronze Age I and II or Middle Bronze Age IIA and IIB), in which case Middle Bronze Age II incorporates both Middle Bronze Age II and III (IIB and IIC, respectively). The reason for this confusing terminology goes back to William Foxwell Albright, who named the non-urbanized interlude between the first cities of the Early Bronze Age and the second urbanization of the Middle Bronze Age the "Middle Bronze Age I." This period was later referred to either as the "Early Bronze Age IV" or the "Intermediate Bronze Age." Consequently, what we today regard as the first phase of the Middle Bronze Age ended up being referred to as the "Middle Bronze Age IIA." Later, scholars adopted the more logical sequence of Middle Bronze I, II, and III, which we also employ in this chapter.[26]

26. Cohen 2002.

The relative chronological framework for the Middle Bronze Age Levant (see chapter 21 in this volume) is based on the development of material culture, most notably pottery, as observed on key sites in the Levant with adequate stratigraphic sequences.[27] It must be stressed that this system is mainly based on stratigraphic sequences from the southern Levant (modern Israel, the Palestinian Territories, and Jordan), due to much more intensive excavation and publication in this region during the last century. Because of this, the Middle Bronze Age sequence is a floating chronology. The terms Middle Bronze Age I, II, and III are applied to a certain package of material culture, and absolute dates for these phases (and synchronization with the Egyptian and/or Mesopotamian chronologies) may only be inferred via links to chronological systems that have other means of applying absolute calendrical dates.

11.2. Previous synchronistic models for the Middle Bronze Age

Several synchronistic models for the Middle Bronze Age ancient Near East were proposed prior to the systematic application of radiocarbon dating. Discussion surrounding these focused mainly on the synchronization (and subsequent absolute dating) of the Middle Bronze Age with the historical chronology of Egypt. Although the relative Middle Bronze Age chronology can be linked to Mesopotamia via Hazor and the Mari letters (see later discussion in this section), this connection has not been utilized to reconstruct absolute dates for the southern Levant, as

> any attempt at a direct synchronism with Mesopotamia [. . .] is bedeviled by the uncertainty among Assyriologists as to the most likely dates for the Old Babylonian period.[28]

27. Sharon 2014.

28. Dever 1992: 11.

Nevertheless, proponents of a Low Middle Bronze Age Chronology have attempted to link the Levantine chronological system with Mesopotamia, advocating for Mebert's chronology or the New Chronology.[29] In this section, we will summarize the traditional models for synchronizing the Middle Bronze Age Levant with Egypt (based on Dever and Weinstein) and contrast these with the Low Chronology proposed by Manfred Bietak (and others), who tried to establish a coherent chronology for the ancient Near East from Egypt to Mesopotamia, based on what critics view as insufficient evidence.

The Traditional Chronology has occasionally been based only on very general chronological associations with Egypt. The beginning of the Middle Bronze Age was traditionally dated to around 2000 BC, but this date was based on the assumption that the de-urbanized Early Bronze IV (or Intermediate Bronze Age) coincided with Egypt's First Intermediate Period, and that therefore Middle Bronze Age I should start at about the same time as the Egyptian Twelfth Dynasty.[30] The transition from Middle Bronze I to Middle Bronze II was placed at ca. 1800/1750 BC and thought to coincide with the transition from the Egyptian Twelfth to the Thirteenth Dynasty—a "convenient starting point."[31] Other scholars opted for a slightly later beginning, around 1725 BC, already in the early Thirteenth Dynasty.[32] The start of Middle Bronze III was traditionally dated to ca. 1650 BC and this period was thought to be

> exactly equivalent to the climax of the Hyksos or Asiatic occupation of Egypt and the rise of Semitic rulers to power under Dynasty 15.[33]

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29. Ben-Tor 2004; Bietak 2013.

30. Dever 1992: 2.

31. Dever 1992: 10.

32. Weinstein 1992: 38.

33. Dever 1992: 12.

The end of the Middle Bronze Age and the beginning of the Late Bronze Age has been equated "with the Egyptian campaigns in Asia that were the apparent cause of at least partial destruction of nearly every site,"[34] beginning under Kamose and Ahmose, but lasting into the early Eighteenth Dynasty. The widespread destruction that marked the end of the Middle Bronze Age at many sites in the southern Levant was thus synchronized with the so-called expulsion of the Hyksos from Egypt and its aftermath.

It becomes clear that the traditional synchronization with the historical chronology of Egypt (making it the source for any absolute dates applied to relative chronological phases in the Levant) was not so much based on any detailed archaeological observation or correspondence between material cultures, but rather on historical assumptions that were accepted as given. Middle Bronze I would be equated with the Twelfth Dynasty, Middle Bronze II with the Thirteenth Dynasty, and Middle Bronze III with the Fifteenth Dynasty (the Hyksos Period). The start of the Late Bronze Age would coincide with the expulsion of the Hyksos and assumed military raids directly afterwards.[35]

In the 1980s and 1990s, Manfred Bietak proposed a new, earlier chronology for the Middle Bronze Age. He based his dates largely on the Austrian excavations at Tell el-Dabʿa (ancient Avaris) in the eastern Nile delta.[36] This site was well integrated within the eastern Mediterranean exchange networks and, in addition to local Egyptian material culture, significant quantities of originally imported, and then locally produced, Levantine Middle Bronze Age pottery, as well as Cypriot material, were unearthed. This made possible a chronological synchronization between the stratigraphic phases at Tell el-Dabʿa and the relative chronologies of the Levant, Cyprus, and the Aegean. Bietak based his synchronization on the first appearance of widely circulated pottery types:

34. Dever 1992: 13.

35. Dever 1992; Mumford 2014.

36. Bietak 1975; 1991b; 1996; 2013.

> Especially significant was the repetitive pattern of the first appearances of Kamares ware and Middle and Late Cypriot wares in the stratigraphy of a series of sites [. . .]. This enabled the export of the Egyptian chronology to the Levant and Cyprus by establishing timelines.[37]

While the chronological synchronization between the Tell el-Dabʿa stratigraphy and the relative chronology of the Levant was based on material culture, according to the excavator the site's stratigraphy itself was dated in accordance with so-called datum-lines—secure links between the stratigraphic phases and Egyptian historical chronology.[38]

The Low Chronology dated the start of the Middle Bronze Age to ca. 1900 BC, based on the depictions of socket spearheads and a duckbill axe in the tomb of Khnumhotep II at Beni Hasan, datable to the 6th year of Senusret II. Earlier tombs at the same site still showed the fenestrated axes usually associated with Early Bronze IV (or Intermediate Bronze Age).[39] The transition from Middle Bronze I to Middle Bronze II was thought to be equivalent to Stratum F at Tell el-Dabʿa. While the preceding Stratum G/1–3 was still characterized by Middle Bronze I pottery and bronzes, in Stratum F, the earliest Middle Bronze II pottery and bronzes appear, while some Middle Bronze I material became obsolete. The following Stratum E/3, however, showed clear Middle Bronze II material culture. Stratum F was dated into the mid- to late Thirteenth Dynasty, to ca. 1710–1680 BC.[40] The transition from Middle Bronze II to Middle Bronze III was thought to coincide with early Stratum D/3 at Tell el-Dabʿa, falling into the mid-Fifteenth Dynasty or around ca. 1590 BC.[41] The end of the Middle and the beginning of the Late Bronze Age was linked to the first appearance of Cypriot White Slip I and Base Ring I

37. Bietak 2013: 81.

38. Bietak 2013; Höflmayer 2015: 268–269.

39. Bietak 2002: 40; Weinstein 1992: 33–34.

40. Bietak 1991a; 2013.

41. Bietak 1991a; 2013.

wares in Tell el-Dabʿa Stratum C/3, dated to ca. 1500/1450 BC. The start of the Late Bronze Age was thus equated with the early Eighteenth Dynasty down to the Thutmosid period.[42]

While the Traditional Chronology of the Middle Bronze Levant employed a very schematic synchronization based on general historical assumptions, the Low Chronology was based on the development of material culture within a single site, Tell el-Dabʿa (figure 11.2).

Sources for absolute dates were only available via dating the archaeological strata of Tell el-Dabʿa according to the Egyptian historical chronology. Tell el-Dabʿa thus served as the hinge (and the only hinge) between the historical chronology of Egypt and the Levantine relative chronological phases. Every problem within Egyptian historical chronology, or with the dating of the stratigraphic sequence at Tell el-Dabʿa, would therefore also be imposed on the relative chronology of the Middle Bronze Age Levant (figure 11.3).

The Low Chronology for the Middle Bronze Age southern Levant was also linked to Mesopotamia via Middle Bronze Age Hazor and the Mari letters.[43] Although Hazor is located in modern-day Israel, and is therefore treated as part of the southern Levant, its actual material culture finds closer parallels further north, and it should therefore be regarded as "the southernmost extension of the Syro-Mesopotamian world."[44] Hazor was well integrated into the Syro-Mesopotamian trade network and had commercial relations with Qatna, east of the Orontes, and Mari, on the west bank of the middle Euphrates (see chapter 15 in this volume). So far, more than fifteen cuneiform documents have been unearthed at Hazor, at least eight of them dating to the Middle Bronze Age and one of them containing an Old Babylonian letter mentioning Mari and Ekallatum.[45] On the other hand, Hazor is also mentioned several times in the Mari

42. Bietak 2013.

43. Ben-Tor 2004; Bietak 2013.

44. Maeir 2000: 38.

45. Horowitz and Wasserman 2000; Horowitz et al. 2018; Horowitz 2013.

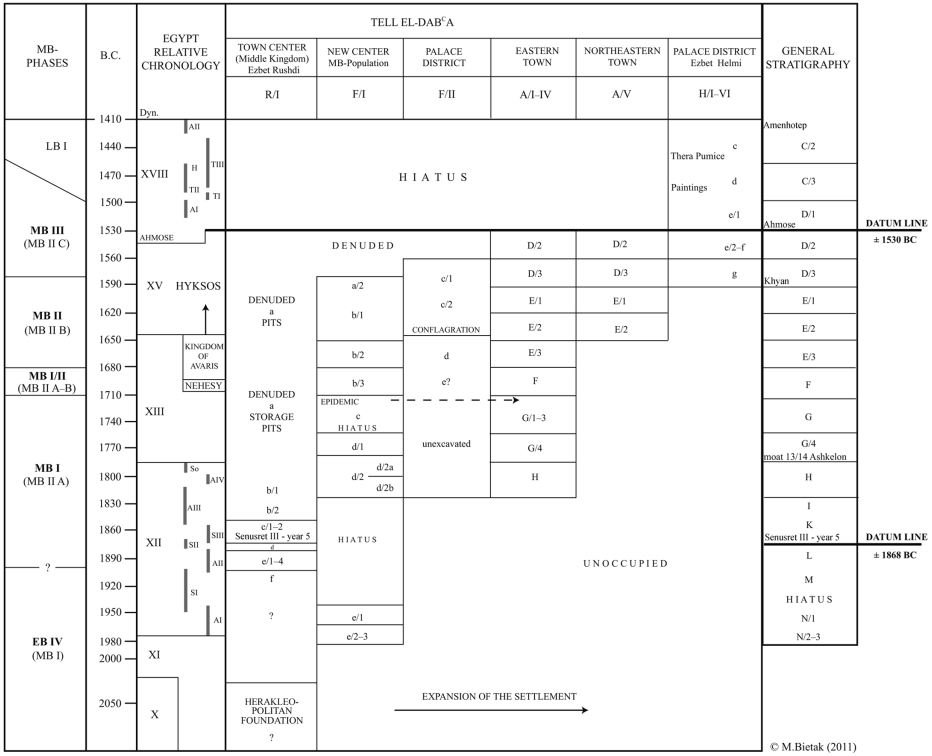

FIGURE 11.2. Stratigraphical table for Tell el-Dabʿa. After Bietak 2013: fig. 8.1.

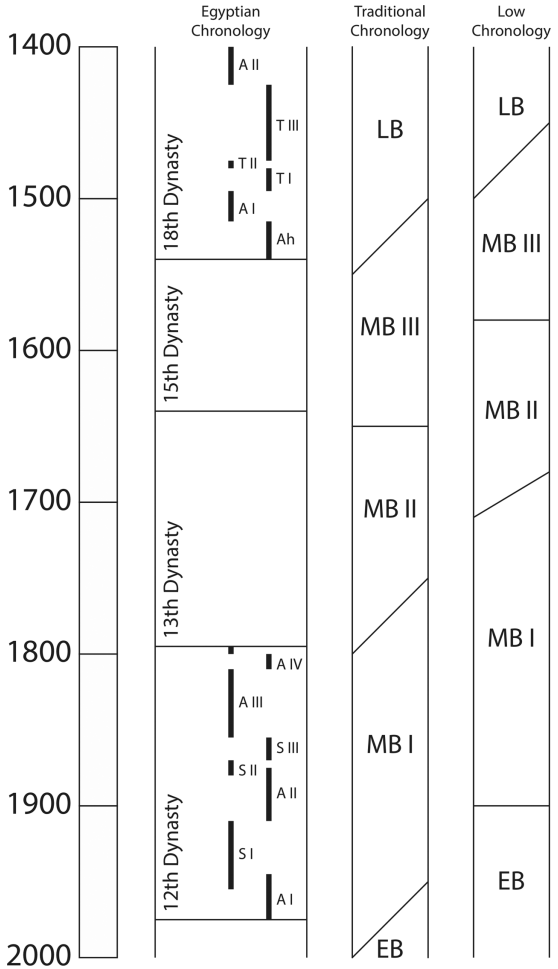

FIGURE 11.3. Historical chronology of Egypt (after Kitchen), the Traditional Chronology of the Levant (after Dever), and the Low Chronology of the Levant (after Bietak). Prepared by Felix Höflmayer.

correspondence; it is the southernmost site represented in this archive.[46] Since Mari was destroyed in the 32nd year of Hammurabi (HC: 1816; MC: 1760; LC: 1696; MebC: 1687; NC: 1664), the correspondence with Hazor must have taken place before this time.

The Hazor of the Mari correspondence was identified with Stratum XVI on the acropolis and Stratum 3 in the lower city ("Greater Hazor"), both datable to the Middle Bronze II period.[47] During Middle Bronze I, no significant settlement existed at the site, and initial fortifications were only erected during Stratum XVII of the acropolis and Stratum 4 of the lower city at the transitional Middle Bronze I/II period. Therefore, the transition from Middle Bronze I to Middle Bronze II must have happened before the fall of Mari in the 32nd year of Hammurabi.[48]

A detailed analysis of the development of the material culture at Hazor and Tell el-Dabʿa provided the possibility for stratigraphic synchronization. According to the excavators of these sites, Amnon Ben-Tor and Manfred Bietak, Hazor Stratum XVII of the acropolis and Stratum 4 of the lower city should be regarded as contemporary with Tell el-Dabʿa Stratum F, both datable to the transitional Middle Bronze Age I/II period.[49] Stratum F was dated to the mid/late-Thirteenth Dynasty (ca. 1710–1680 BC) and thus, Ben-Tor dated the rise of "Greater Hazor" to ca. 1700/1690 BC at the earliest. Since the rise of "Greater Hazor" provided a *terminus post quem* for the fall of Mari in the 32nd year of Hammurabi, both Bietak and Ben-Tor discarded the High Chronology (fall of Mari: 1816 BC) and the Middle Chronology (fall of Mari: 1760 BC). Although the Low Chronology (fall of Mari: 1696 BC) falls closer to the presumed rise of "Greater Hazor" around 1700 BC, both Bietak and Ben-Tor regarded either Mebert's chronology (fall of Mari: 1687 BC) or the New Chronology (fall of Mari: 1664 BC) as the only possible chronological matches with Mesopotamia.[50]

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46. Bonechi 1992.

47. Ben-Tor 2004.

48. Ben-Tor 2004; Bietak 2013.

49. Ben-Tor 2004; Bietak 2013.

50. Ben-Tor 2004; Bietak 2013.

Prior to the systematic application of radiocarbon dating and Bayesian analysis, analysis of the historical and archaeological sources for the Middle Bronze Age Levant resulted in two competing models: the Traditional Chronology, based on general historical assumptions regarding synchronization with Egypt; and the Low Chronology, based on the stratigraphic sequence of a single site, Tell el-Dabʿa. While the authors favoring the Traditional Chronology did not opt for any particular one of the competing chronological models for Mesopotamia, the authors favoring the Low Chronology only regarded Mebert's chronology or the New Chronology as viable options.

11.3. Radiocarbon dating and dendrochronology

Although the method of radiocarbon dating had been developed by the mid-twentieth century AD and was initially applied in Egyptian and Near Eastern archaeology, archaeologists in these fields were reluctant to apply this method with any consistency. Only in recent decades has a more systematic approach to the application of radiocarbon dating (coupled with Bayesian analysis) been followed in the fields of ancient Near Eastern studies.

The method of radiocarbon dating has been described in detail in many papers and handbooks. For the scope of this chapter, we will focus on a brief overview in order to facilitate understanding of current issues in the field.[51]

The element carbon (C) exists in three different isotopes: ^{12}C and ^{13}C, which are both stable, and ^{14}C (radiocarbon), which is radioactive and decays according to a known half-life of approximately 5,730 years. Radiocarbon is produced in the upper atmosphere when atmospheric nitrogen (^{14}N) is bombarded by thermal neutrons. The resulting isotope, ^{14}C, quickly oxidizes into $^{14}CO_2$ (carbon dioxide). It then diffuses into the atmosphere and is absorbed by plants through photosynthesis, finally entering animals (including humans) via the ingestion of plants. As long

51. Bowman 1995; Bronk Ramsey 2008; Taylor and Bar-Yosef 2014; Kutschera 2018.

as any organism is alive, it is part of the global carbon cycle of acquiring "fresh" ^{14}C to constantly replace decaying radiocarbon. Once an organism ceases to acquire carbon and exits the global carbon cycle (i.e., dies), no more radiocarbon is absorbed, while the already existing ^{14}C continues to decay (the ^{12}C level in the organism remains constant). The lower the proportion of ^{14}C to ^{12}C is found in a given organic sample, the older it is, as more time has elapsed from the point when the sample stopped exchanging carbon with the environment.[52]

Unfortunately, the production of radiocarbon in the upper atmosphere has not been constant over time. Changes in the influx of cosmic rays, variations in the Earth's magnetic field, and other factors caused significant variations in the production of radiocarbon, resulting in varying ratios of $^{12}C/^{14}C$ in the atmosphere and consequently also in living organisms. In order to accommodate these variations, the respective atmospheric carbon isotope ratios of any given calendar year must be calculated, which has been done by measuring the carbon isotopic ratios in tree-ring sequences of known age. These measurements allow the radiocarbon date of a given organic sample to be calibrated, i.e., the radiocarbon age of a given sample is compared to the record of isotopic carbon ratios in tree-ring sequences of known age in order to determine the true calendar age of the sample.[53] These calibration curves are updated on a regular basis, which also can lead to shifts in calibrated dates from time to time. While most studies that are referenced in this chapter employed the calibration curve published in 2013 (IntCal13),[54] the recent publication of the new calibration curve (IntCal20) brought significant changes, especially for the mid-second millennium BC.[55] In the following, it will be noted where calibrated results employing IntCal20 differ from results employing IntCal13, and to what extent they affect Middle Bronze Age chronologies and synchronisms.

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52. Bronk Ramsey 2008.

53. Stuiver and Suess 1966.

54. Reimer et al. 2013.

55. Reimer et al. 2020.

Due to the measuring process in the laboratory and the shape of the calibration curve, radiocarbon dates are expressed as probability distributions on the absolute calendrical timeline, sometimes ranging over a century or more. It is also important to stress that a radiocarbon date does not, per se, date the archaeological context it was found in, but only the point in time when the sample ceased to exchange carbon with its environment (i.e., its death). Depending on the context and the type of sample, the radiocarbon date can be regarded as a *terminus post quem* (e.g., charcoal from timber) or an approximate *terminus ad quem* (e.g., charred seeds found inside a storage jar from a destruction horizon).

Although the probability distribution of any individually calibrated radiocarbon date can span over a century or more, additional information can be employed to increase the precision of a given date or set of dates. Bayesian analysis of radiocarbon dates allows the consideration of additional information, such as the sequence of dates based on archaeological stratigraphy or other historical information. Such information is termed *prior information* as it is derived from sources other than, and prior to, radiocarbon dating in the laboratory.[56] Based on this prior information and the respective radiocarbon measurements, a *posterior probability* for each individual sample and any additional events in the model can be calculated. A Bayesian model is nothing else than the combination of archaeological (or historical) evidence and radiocarbon measurements, resulting in much more precise models than would be possible with single calibrated radiocarbon dates.

To develop an integrated radiocarbon-backed chronological model for the Middle Bronze Age ancient Near East, three different lines of evidence, often complementing each other, must be reviewed:

(1) Radiocarbon dates for Middle Kingdom Egypt;
(2) Radiocarbon dates for Middle Bronze Age archaeological sites in Egypt and the Levant;

56. Buck et al. 1991; Weninger et al. 2006; Bronk Ramsey 2009.

(3) Radiocarbon dates linkable to the REL and the Mesopotamian chronology.

11.3.1. Middle Kingdom Egypt and the Second Intermediate Period

The nature and characteristics of the Egyptian historical chronology have been outlined earlier, as well as absolute dating assessments based on various lines of evidence. In 2010, Christopher Bronk Ramsey, Michael W. Dee, and other colleagues published an important paper in the journal *Science*, which demonstrated that radiocarbon dating and Bayesian analysis, in fact, agreed with historic estimates for absolute dates established for Dynastic Egypt.[57] For their project, over 200 new measurements were conducted on short-lived material that were associated with archaeological contexts that could be dated in historical terms, such as botanical remains from kings' tombs.[58] Three individual Bayesian models were constructed for the Old, Middle, and New Kingdoms, using the known succession of kings and their respective reign-lengths (plus additional error) as prior information.

Based on their models, the Twelfth Dynasty should be dated approximately between ca. 1980 and ca. 1770 BC (1st year of Amenemhat I between 1991 and 1973 BC; 1st year of Wegaf between 1785 and 1758 BC, both at 68 percent probability).[59] The Second Intermediate Period (Thirteenth to Seventeenth Dynasties) was not modeled in detail due to lack of suitable samples and inherent problems in our understanding of the sequence and reign-lengths of individual kings (the new discussion around the placement of the Hyksos king Khyan in the sequence of Fifteenth Dynasty rulers and around a potential contemporaneity of the Thirteenth and the Fifteenth Dynasty might serve as an example for still

57. Bronk Ramsey et al. 2010; Shortland and Bronk Ramsey 2013.

58. Brock and Dee 2013.

59. Bronk Ramsey et al. 2010; Dee 2013a.

open questions in this period of Egyptian history).[60] These dates agree with estimates proposed by Kenneth Kitchen and Jürgen von Beckerath[61] and are slightly higher than the Low Middle Kingdom Chronology proposed by Erik Hornung, Rolf Krauss, and David A. Warburton and initially based on Krauss's interpretation of the lunar data.[62]

Additionally, the beginning of the New Kingdom (and therefore the end of the Second Intermediate Period) has been found to agree with historical estimates. According to their models, the New Kingdom started in the mid-sixteenth century BC (1st year of Ahmose between 1566 and 1552 BC at 68 percent probability).[63] Slightly higher dates for the beginning of the New Kingdom were calculated when employing longer reign lengths for certain Eighteenth Dynasty pharaohs, resulting in a date between 1578 and 1569 BC at 68 percent probability.[64]

11.3.2. Middle Bronze Age sites in Egypt and the Levant

In recent years, several radiocarbon sequences for Middle Bronze Age sites have been published.[65] Sites included (south to north): Tell el-Dabʿa (Egypt),[66] Tell el-Ajjul (Gaza strip),[67] Ashkelon (Israel),[68] Tel Lachish (Israel),[69] Jericho (Palestine),[70] Tell el-Hayyat

60. Moeller and Marouard 2011; Forstner-Müller and Moeller 2018.

61. Beckerath 1997; Kitchen 2000.

62. Hornung et al. 2006a; Krauss 1985; 2006.

63. Bronk Ramsey et al. 2010; Dee 2013b.

64. Manning 2014.

65. Höflmayer 2015; 2017.

66. Kutschera et al. 2012.

67. Fischer 2009.

68. Bruins and van der Plicht 2017.

69. Preliminary Late Bronze Age dates were published by Webster et al. 2019. For an assessment of the end of the Middle Bronze Age, see Webster 2020.

70. Bruins and van der Plicht 1995.

(Jordan),[71] Tel Ifshar (Israel),[72] Tel Nami (Israel),[73] Megiddo (Israel),[74] Tel Kabri (Israel),[75] and Tell el-Burak (Lebanon).[76] In the following, we will discuss the sites that provided key contributions to the new radiocarbon chronology of the Middle Bronze Age.

While the site of Tell el-Dabʿa served as a primary argument for the Low Chronology of the Middle Bronze Age Levant and was used to argue in favor of Mebert's chronology and the New Chronology of Mesopotamia, it also played a crucial role in a new assessment of Middle Bronze Age chronology based on radiocarbon data. In 2012, Walter Kutschera, Manfred Bietak, and other colleagues published the radiocarbon sequence for Tell el-Dabʿa, one of the most extensive sequences for a Bronze Age site in the eastern Mediterranean.[77] Their results at Tell el-Dabʿa seriously challenged both the excavator's historical/archaeological dates for the individual strata, as well as the entire Middle Bronze Age Low Chronology for which Tell el-Dabʿa served as a cornerstone. On average, the radiocarbon dates were about 120 years higher (older) than the dates proposed by the excavator. The excavator, Manfred Bietak, claimed that a so-far-unknown effect must have affected the samples and/or the dates and rejected their validity outright,[78] but other scholars have pointed out several weaknesses in the construction of the Tell

71. Falconer and Fall 2017; Fall et al. 2021.

72. Marcus 2013; Höflmayer 2017.

73. Radiocarbon dates for Tel Nami were reported in a preliminary way by Marcus 2003; Bronk Ramsey et al. 2002; Hedges et al. 1997. While there is no final publication of the site or the radiocarbon dates, see Höflmayer 2021 for a discussion of these dates based on the published information.

74. Toffolo et al. 2014; Martin et al. 2020.

75. Höflmayer et al. 2016b.

76. Höflmayer et al. 2016a.

77. Kutschera et al. 2012.

78. Bietak 2013.

el-Dabʿa chronology, especially in the links between the stratigraphic phases and the Egyptian historical chronology.[79]

Radiocarbon dates for the beginning of the Middle Bronze Age are currently only available at Tell el-Hayyat in the Jordan valley. Here, Phase 6 was dated to the Early Bronze IV (or Intermediate Bronze Age) and Phase 5 to the Middle Bronze I.[80] Radiocarbon dates for this transition suggest a date around ca. 1900 BC, or a little bit earlier.[81]

Dates for the transition from Middle Bronze Age I to Middle Bronze Age II come from several sites, such as Tell el-Dabʿa, Tel Ifshar, Tell el-Hayyat, and Tell el-Burak.

In Tell el-Dabʿa, the transition from Middle Bronze I to Middle Bronze II is equated with Stratum F. According to the radiocarbon model published for Tell el-Dabʿa, Stratum F begins in the mid-nineteenth century and ends around 1800 BC.[82]

In Tel Ifshar on the Sharon Plain, a Middle Bronze Age settlement with a detailed stratigraphic sequence, has been excavated. Phases A to G could be dated to the Middle Bronze Age I, while Phase H was dated to the transition from Middle Bronze I to Middle Bronze II.[83] A substantial set of radiocarbon dates from short-lived samples from secure contexts, such as containers, granaries, or floor levels, has been published.[84] An Egyptian Marl A3 jar, found in Phase C and datable to the first half of the Twelfth Dynasty, can be used as an additional constraint.[85] The transition from Middle Bronze I to Middle Bronze II (Phase H) could be dated to the mid/late-nineteenth century BC using the Egyptian import as additional chronological evidence, or to the mid- to late nineteenth or

79. Manning et al. 2014; Höflmayer 2015.

80. Falconer and Fall 2006.

81. Falconer and Fall 2017; Fall et al. 2021.

82. Kutschera et al. 2012.

83. Marcus et al. 2008a; Marcus 2013.

84. Marcus 2013; Höflmayer 2017.

85. Marcus et al. 2008b.

early eighteenth century BC by not including the Egyptian import as a chronological marker.[86]

At Tell el-Hayyat in the Jordan valley, the transition from Middle Bronze I to Middle Bronze II, falls into Phase 3.[87] According to the model published by Fall and colleagues, Phase 3 dates to the early to mid-eighteenth century BC (similarly to Stratum F at Tell el-Dabʿa).[88]

In Tell el-Burak, a small site in coastal Lebanon, a monumental mudbrick structure datable to the late Middle Bronze I or Middle Bronze I/II transitional phase has been excavated.[89] Radiocarbon samples mostly come from its fill layers and also include charcoal samples, but carefully constructed Bayesian models that use charcoal dates only as a *terminus post quem* result in a nineteenth or early eighteenth century BC date for the end of this building.[90]

Radiocarbon dates for the Middle Bronze I/II transition are thus consistently higher than dates proposed by the Traditional (1800/1750 BC) or Low (ca. 1700 BC) Chronologies and point to a date sometime in the second half of the nineteenth century BC (ca. 1850/1800 BC).[91]

Radiocarbon data for the transition from Middle Bronze II to Middle Bronze III are less abundant than for the Middle Bronze I/II transition. Nevertheless, several sites provide evidence for this transition as well, such as Tell el-Dabʿa, Tel Kabri, and Tell el-Hayyat in the Jordan valley.

In Tell el-Dabʿa, the transition from Middle Bronze II to Middle Bronze III equates to the beginning of Stratum D/3. According to the radiocarbon model published by Walter Kutschera, Manfred Bietak,

86. Höflmayer 2017.

87. Falconer and Fall 2006; 2017.

88. Falconer and Fall 2017; Fall et al. 2021.

89. Kamlah and Sader 2019.

90. Höflmayer et al. 2016a; Höflmayer 2017.

91. Höflmayer 2017.

and others, the transition from Stratum E/1 to Stratum D/3 falls to the second half of the eighteenth century BC, most likely around 1700 BC.[92]

At Tell el-Hayyat, the transition from Middle Bronze II to Middle Bronze III occurred during Phase 2.[93] Based on their radiocarbon model, Phase 2 starts at some point in the first half of the eighteenth century BC and ends somewhere in the second half, or around 1700 BC.[94] A date for the Middle Bronze II/III transition sometime in the eighteenth century BC seems to be likely, although it must be pointed out that the younger phases at Tell el-Hayyat are represented by only a few radiocarbon dates. Additional measurements may therefore change this current assessment.[95]

In Tel Kabri in the Upper Galilee, a Middle Bronze Age palace has been excavated, which was in use approximately until the end of the Middle Bronze II period.[96] Radiocarbon samples, mainly short-lived, but also a few charcoal samples, were available for Phases V (transitional Middle Bronze I/II) through Phase III (late Middle Bronze II), but these are clustered mostly within Phase III—the point when the palace ended.[97] Radiocarbon dating suggests a date around 1700 BC for the end of the palace in Phase III and thus for Middle Bronze Age II.[98]

Radiocarbon dates for the Middle Bronze II/III transition are therefore also consistently higher than dates suggested by the Traditional (ca. 1650 BC) or the Low (ca. 1590 BC) Chronologies and give ca. 1700 BC as the transition date from Middle Bronze II to Middle Bronze III.

The end of the Middle Bronze Age and the beginning of the Late Bronze Age is more complicated to grasp from a radiocarbon point of

92. Kutschera et al. 2012; Höflmayer 2017.

93. Falconer and Fall 2006.

94. Falconer and Fall 2017.

95. Höflmayer 2017.

96. Kempinski 2002; Yasur-Landau et al. 2018; Yasur-Landau and Cline 2020.

97. Höflmayer et al. 2016b.

98. Höflmayer et al. 2016b; Höflmayer 2017.

view. Radiocarbon dates exist for Tell el-Dabʿa and Tell el-Ajjul; dates for the late Middle Bronze III period exist at Jericho, Tell el-Hayyat, and Tel Lachish. Circumstantial evidence can also be mentioned for the Minoan eruption of Santorini.

At Tell el-Dabʿa, the beginning of the Late Bronze Age is connected to the first appearance of White Slip I and Base Ring I wares in Stratum C/3.[99] According to the radiocarbon model published by Walter Kutschera, Manfred Bietak, and others, Strata C/3–2 fall to the late seventeenth century BC,[100] but employing the new calibration curve IntCal20, the same strata date to around 1600 BC or the early to mid-sixteenth century BC. It should be noted here that Stratum C/2 also produced pumice that can be traced to the Minoan eruption of Santorini (see later discussion in this section).[101]

At Tell el-Ajjul, Horizons 7–6 are dated to the Middle Bronze III, Horizon 5 to a transitional Middle Bronze/Late Bronze phase, and Horizons 4–3 solely to the Late Bronze Age I. Horizon 5 produced the first imports of Cypriot White Slip I and Base Ring I wares and the presence of pumice from the Minoan Santorini eruption.[102] Unfortunately, only a few radiocarbon dates are available for this site, and the results are ambiguous. Based on the dates published, the Late Bronze Age started sometime in the sixteenth century BC,[103] but when employing the new calibration curve IntCal20, Horizons 6, 5, and 4–3 all fall into the second half of the sixteenth century BC. At Tell el-Ajjul, the start of the Late Bronze Age now dates to the mid- to late sixteenth century BC, which would be well in agreement with the Traditional Chronology.

The stratigraphic sequence at Tell el-Hayyat ends with Phase 1, which is dated to the Middle Bronze III.[104] There is no Late Bronze Age phase

99. Bietak 2013.

100. Kutschera et al. 2012; Höflmayer 2017.

101. Sterba et al. 2009.

102. Fischer 2004.

103. Fischer 2009; Höflmayer 2017.

104. Falconer and Fall 2006.

at the site. The end of Phase 1 falls, according to the published radiocarbon dates, in the seventeenth century BC or maybe as early as the late eighteenth century BC.[105] However, as the younger phases at Tell el-Hayyat are not well represented, and since it is not entirely clear whether the ultimate end of Middle Bronze III is present at the site, one should regard this date with caution.[106]

For Jericho, in the 1990s Hendrik Bruins and Johannes van der Plicht published a set of radiocarbon dates for the end of the Middle Bronze Age based on Kathleen Kenyon's excavations.[107] These dates were recently recalibrated and fall at around 1600 BC;[108] when employing the new IntCal20 calibration curve, an end-date sometime during the sixteenth century BC would also be possible.

New dates for the late Middle Bronze III are also available from Tel Lachish. Here, Stratum P-4 and P-3 were dated to the late Middle Bronze III.[109] New radiocarbon dates for both of these phases fall into the early to mid-sixteenth century BC,[110] and when employing IntCal20, even later, into the late sixteenth century BC.

Circumstantial evidence from Santorini can also be mentioned. It is generally agreed that the appearance of White Slip I and Base Ring I is a key marker for the start of the Late Bronze Age in the Levant. White Slip I pottery was already present before the volcano of Santorini erupted in the mid-second millennium BC.[111] Radiocarbon dates for the eruption of Santorini fall consistently to the late seventeenth century BC, but employing the new IntCal20 calibration curve, also a date in the early sixteenth century BC would be possible (and are, therefore,

105. Falconer and Fall 2017; Höflmayer 2017; Fall et al. 2021.

106. Höflmayer 2017.

107. Bruins and van der Plicht 1995.

108. Höflmayer 2017.

109. Ussishkin 2004.

110. For the dates from Tel Lachish, see Webster 2020.

111. Merrillees 2001.

in agreement with radiocarbon dates for Strata C/3-2 at Tell el-Dabʿa, where White Slip I, Base Ring I, and Minoan pumice have also been found).[112]

Radiocarbon dates for the start of the Late Bronze Age seem to be rather ambiguous. Several sites point to ca. 1600 BC for the beginning of the Late Bronze Age (such as Tell el-Dabʿa or Santorini); other sites, such as Tel Lachish, have late Middle Bronze III phases still in the sixteenth century BC. Currently, it seems reasonable to allow a longer time span for the transition from the Middle to the Late Bronze Age and to suggest the period between 1600 and 1550 BC for the end of the Middle Bronze Age in the Levant. Future radiocarbon dates, however, may yet change this picture.

11.3.3. Revised Eponym List (REL)

Radiocarbon evidence from two sites in Anatolia, Kültepe and Acemhöyük, allow absolute calendrical dating of the REL and thus also for the Babylonian chronology.[113]

At Kültepe (see chapter 17 in this volume), the transition from Lower Town Level II to IB can be dated to between REL 138 and 142, based on the documents found in the respective phases.[114] Shortly before, around REL 125, the Waršama palace was erected to replace the Old Palace; it can be dated to ca. REL 80–110. From the Waršama palace, several samples of juniper were retrieved that still contained bark and were thus regarded as suitable samples for dating the felling of the trees and the construction of the palace.[115] According to the results, the erection of the Waršama palace fell within the period between 1855 and 1839 BC (95.4 percent probability). The only chronology that agrees with this result is the Middle Chronology, which places REL 125 to 1846 BC.

112. Manning et al. 2014; 2020.

113. Manning et al. 2016; 2017; 2020.

114. Barjamovic et al. 2012.

115. Manning et al. 2016.

Employing the High Chronology (REL 125 at 1902 BC), REL 125 would fall about half a century before the palace was actually erected; using the Low Chronology (1782 BC), Mebert's chronology (1773 BC), or the New Chronology (1750 BC), construction would have been significantly later than the radiocarbon dates for the outer tree rings and would move REL 80–110 of the Old Palace to after the construction of the Waršama Palace.

At Acemhöyük, the so-called Sarikaya Palace is also datable in terms of the REL, as a large number of bullae of the northern Mesopotamian ruler Samsi-Addu were found here. Samsi-Addu is datable to between REL 165 and 197. Additionally, other documents with dates from the REL 190s have been found in the Sarikaya Palace. A number of juniper samples, some of them containing bark, were retrieved from the Sarikaya Palace and provided information on the felling of the trees and the subsequent palace construction.[116] Based on these results, the earliest use of the Sarikaya Palace associated with Samsi-Addu can be dated to the early eighteenth century BC (1797–1781 BC at 95.4 percent probability). This result is also only compatible with the Middle Chronology, which would date the death of Samsi-Addu (REL 197) in the 18th year of Hammurabi to 1774 BC.[117] A High Chronology date of 1830 BC for the end of Samsi-Addu in REL 197 can be ruled out, as the palace would then have been erected a generation after Samsi-Addu's death. The Low Chronology (1710 BC), Mebert's chronology (1701 BC), and the New Chronology (1678 BC) are also unlikely, as according to these chronologies, the palace would have been erected between 80 and more than 100 years after Samsi-Addu's death, without any earlier (in terms of REL) documents being present in the palace.

Therefore, the radiocarbon data for both Acemhöyük and Kültepe are not only internally consistent, but also allow us to place the previously floating REL absolutely in time, and, through synchronization

116. Manning et al. 2016.

117. Manning et al. 2016; 2017.

with the Babylonian chronology, a decision between the competing chronological systems of Mesopotamia can be made favoring the Middle Chronology.

11.4. An integrated chronological model for the Middle Bronze Age Near East

Radiocarbon testing around the eastern Mediterranean provides consistent results for historical and archaeological chronological models from Egypt to Mesopotamia. Internal, relative synchronizations suggested by various scholars, such as between the Tell el-Dabʿa stratigraphic phases and the relative chronological periods in the Levant, or between the Levant and Mesopotamia, can be substantiated. The High Middle Kingdom Chronology for Egypt and the Middle Chronology for Mesopotamia also agree with the results of radiocarbon dating. Radiocarbon dates for the archaeological (relative) chronology of the Levant, however, produced results that are marginally higher than the Traditional Chronology (which was based on very general historical assumptions) and significantly higher than the Low Chronology (based on the single site of Tell el-Dabʿa with its disputed links to the Egyptian historical chronology).

According to radiocarbon data, the Egyptian Middle Kingdom began shortly after 2000 BC. Shortly after that, at some point in the twentieth century BC and no later than 1900 BC, the Middle Bronze I period in the Levant seems to have also begun. The transition from Middle Bronze I to Middle Bronze II occurred sometime in the nineteenth century (around 1800 BC at latest) contemporary with the mid- to late Twelfth Dynasty in Egypt. This transition also provides a *terminus post quem* for the fall of Mari in the 32nd year of Hammurabi, as Middle Bronze II Hazor is mentioned in the Mari letters. Based on the radiocarbon dates for Acemhöyük and Kültepe, it is possible to rule out the High, Low, and New Chronologies, as well as Mebert's chronology, for Mesopotamia, so that the end of Mari (and the 32nd year of Hammurabi) falls to 1760 BC. In Egypt, the Thirteenth Dynasty started also around that time, within the first half of the eighteenth

century BC. The transition from Middle Bronze II to Middle Bronze III most likely happened around 1700 BC; the equivalent point in time in historic Egyptian terminology remains elusive for now, as the discussion regarding an overlap between the Thirteenth and Fifteenth Dynasties has not been ultimately settled. It seems likely, however, that this is also (at least roughly) the time period of the Hyksos ruler Khyan in Egypt. According to the latest radiocarbon results, the transition from the Middle to the Late Bronze Age may have spanned half a century, or perhaps even more. It would have started around (or shortly before) 1600 BC, although at some sites, strata dated to the beginning of the Late Bronze Age produced radiocarbon dates as late as the mid- to late sixteenth century BC. The transition from the Middle to the Late Bronze Age thus should be seen as more of a process than a single event. It seems to have started at some places earlier than the start of the New Kingdom in Egypt (and the so-called expulsion of the Hyksos; see chapter 23 in volume 3) around 1570 BC at the earliest, or (more conservatively) around 1550 BC. At some sites, the final phases of the Middle Bronze Age continued until the mid- to late sixteenth century BC, already contemporary with the early Egyptian New Kingdom.

Recent decades of radiocarbon dating and Bayesian analysis have succeeded in establishing a coherent scientific absolute calendrical chronology for the Middle Bronze Age Near East (figure 11.4). While the Egyptian High Middle Kingdom Chronology and the Middle Chronology for Mesopotamia have been corroborated by radiocarbon dating, both the Traditional and the Low Chronologies for the Middle Bronze Age Levant have not been likewise substantiated. Undoubtedly, future work will ultimately shift some of the transitions outlined here, as well as their synchronizations with other cultures of the ancient Near East. But it is hoped that this radiocarbon-backed chronological system may serve as a starting point for future endeavors in refining both historical and archaeological chronologies throughout the ancient Near East.

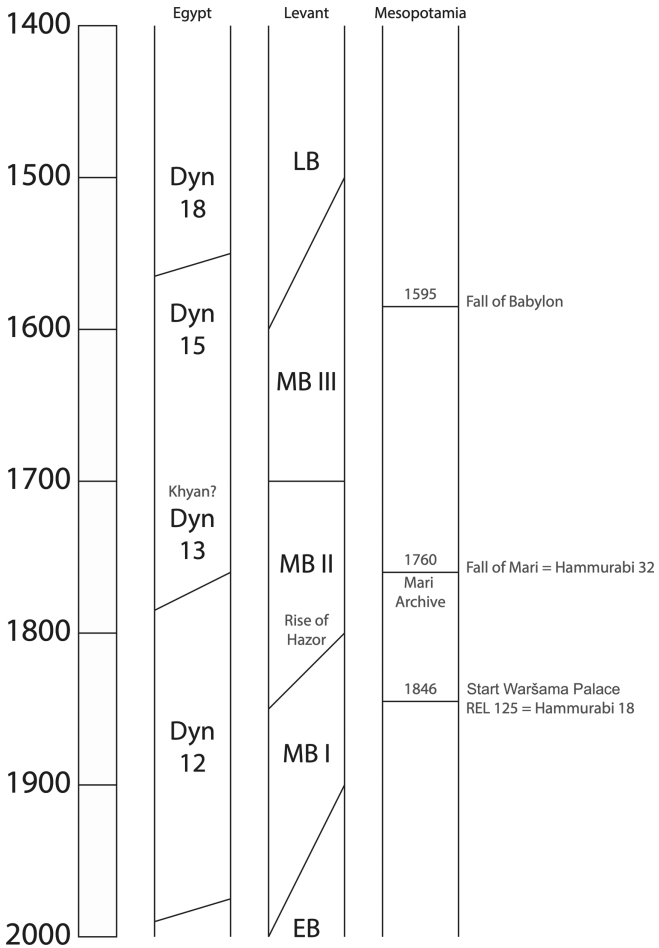

FIGURE 11.4. A radiocarbon-backed synchronized chronological framework for Egypt and the Levant, as well as some key events for Mesopotamia. Prepared by Felix Höflmayer.

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12

Egypt in the First Intermediate Period

Juan Carlos Moreno García

12.1. Introduction

When scholars of the late nineteenth and early twentieth centuries AD developed the reconstruction of the pharaonic past, two types of periods—"Kingdoms" and "Intermediate Periods"—were thought to have shaped Egyptian history, and this theory was generally accepted until recently.[1] The former were characterized as times in which power was centralized and exercised without restriction by powerful kings (pharaohs), when decisions were made within a well-delimited, hierarchical structure of authority epitomized by different levels of scribes, dignitaries, and members of the royal court, and when the careful management and distribution of the kingdom's resources guaranteed abundance for everybody. The "Intermediate Periods," on the other hand, stood for exactly the opposite: times of political division, economic crisis, intense fragmentation of power ("regionalization"), and the collapse of administrative hierarchies together with the ability of kings and local rulers

1. The chapter was language-edited by Denise Bolton and Karen Radner.

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to levy taxes. Such interpretations should be understood in the light of the cultural concerns and popular historiographical themes of the period when they were formulated (history conceived as a succession of cycles of rise and downfall of states and empires, evolution of social organisms, etc.).

These influences are still present in current approaches to the history of these epochs. The powerful imagery derived from the available textual sources, their apparent internal logic, as well as the support they seemed to find in art history (as works of art produced in Egypt's Intermediate Periods are deemed to look poor and "primitive"; cf. figure 12.1), led to a seemingly self-evident narrative shaped by a sort of "historical common sense" that obscures the historical reality of the periods in question. They have been systematically interpreted as periods of chaos, misery,

FIGURE 12.1. Funerary stele of Nemtiui, overseer of fields of the Great House, probably from Akhmim. The inscription is a good example for the use of non-standard hieroglyphs. IN 1875. Roemer und Pelizaeus Museum, Hildesheim. Photo by Einsamer Schütze, via Wikimedia Commons (https://commons.wikimedia.org/w/index.php?curid=3466336), Creative Commons Attribution-ShareAlike 3.0 Generic (CC BY-SA 3.0) license.

and corruption of the "natural" social order, an approach for which the scarcity of written and archaeological sources for these periods held to some extent a certain appeal.[2]

The label "First Intermediate Period" (figures 12.2 a–c) is perhaps the most successful example of the persuasiveness of these prejudices, as they have severely distorted our interpretation of the end of the Old Kingdom and the historical developments that took place in the century and a half or so that followed.[3] The written sources from this period are relatively sparse, and their precise dating is problematic at best. They mostly derive from provincial rulers rather than from royal chancelleries, their geographical distribution is quite uneven (relatively abundant in southern Egypt and much rarer in the north), and the historical information they contain is limited. These circumstances are hardly encouraging and prompted modern researchers to turn to later literary texts and art historical sources to compensate for the dearth of contemporary textual data, and they found ample confirmation that the period following the Old Kingdom was dire and chaotic. Later literary texts that supposedly describe the events that occurred during the First Intermediate Period portray a world where the traditional order had been entirely subverted, where warfare dominated the relations between the local rulers who had replaced the unified monarchy of the Old Kingdom pharaohs, and where foreigners moved and settled wherever they pleased throughout the Nile valley, while the idea of a return to normality, with a single monarch again ruling all of Egypt, nourished the hopes of a population tired of fragmented power, war, and famine. As for art, its primitive, almost naive aspect, coupled with the use of unskilled writing on many monuments, only confirmed that the heights of artistic quality and excellence in craftsmanship prevalent in the Old Kingdom under the patronage of its kings were now lost.

Only very recently, archaeological research, a reassessment of both inscriptions and literary texts, and a better knowledge of the

2. Moreno García 2015b; 2016.

3. Mazé 2016.

international contexts at the end of the third millennium BC have caused researchers to question many of the previous assumptions, and this has led to more balanced interpretations of the First Intermediate Period. Far from being a period of crisis, it emerged as a time of innovation and of adjustments to the balance of power between rulers and subjects—a time when trade thrived, urban life flourished, and private economic activities expanded. This also prompted a reassessment of the Old Kingdom, particularly in its final two centuries, as its politics and

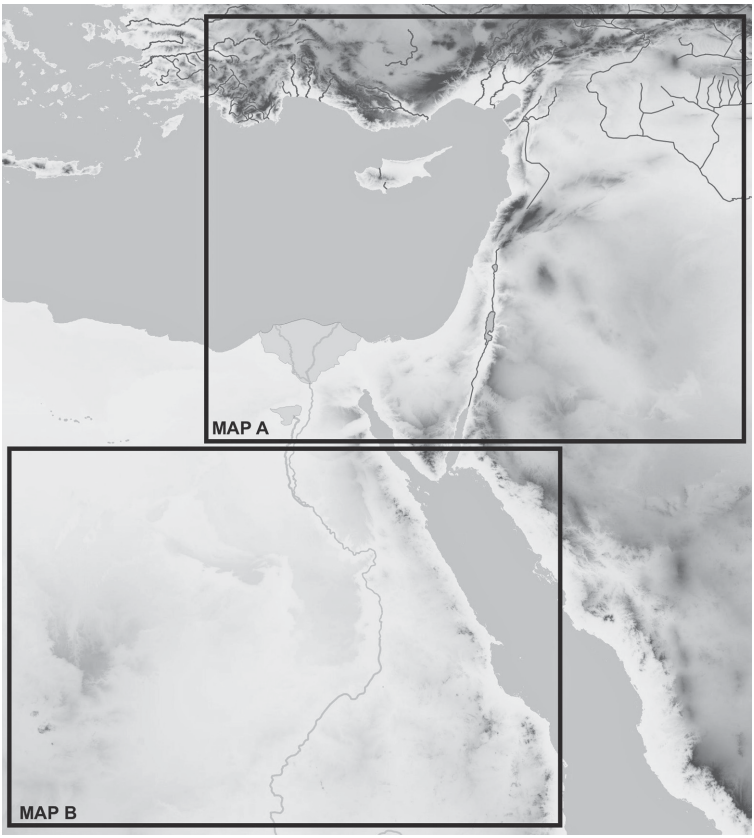

FIGURE 12.2A. Sites mentioned in this chapter. Prepared by Andrea Squitieri (LMU Munich).

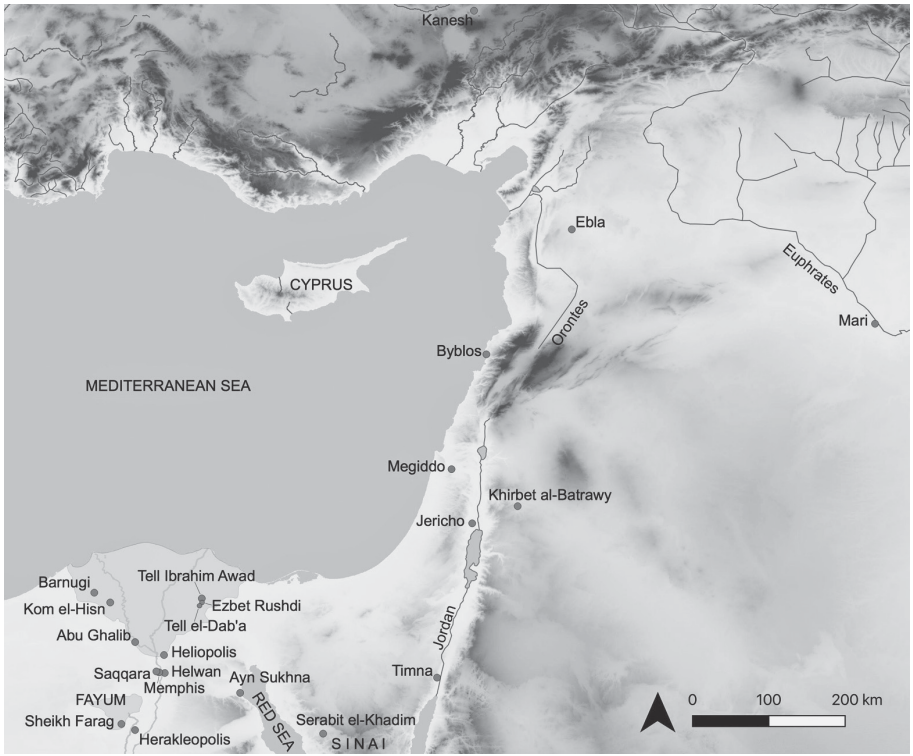

FIGURE 12.2B. Detail map A.

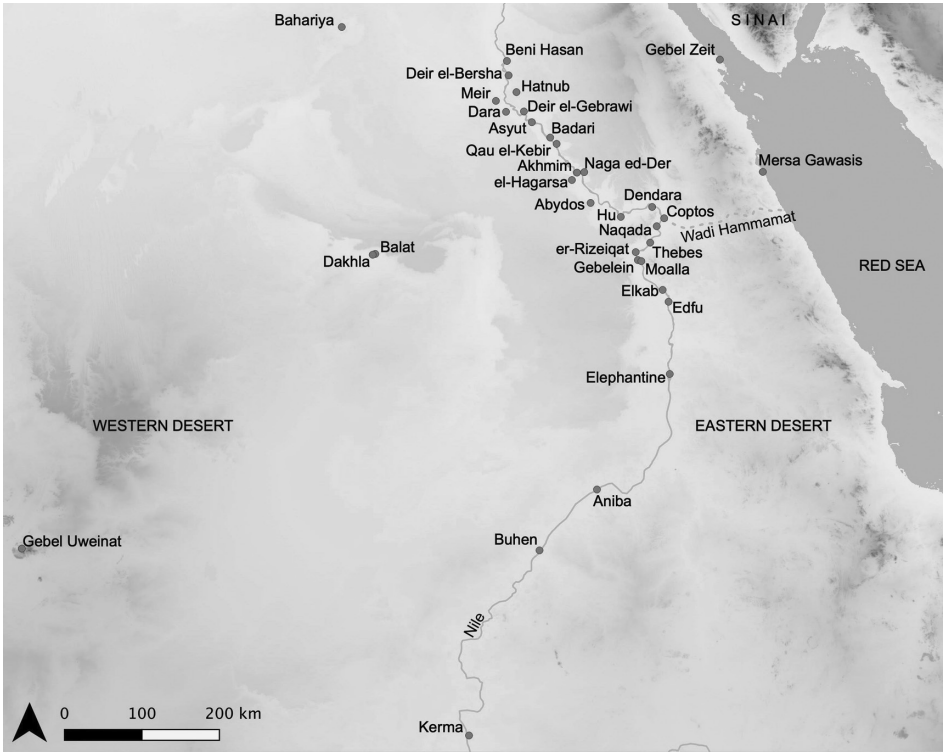

FIGURE 12.2C. Detail map B.

attempts to control lucrative trade routes might better explain its collapse than merely blaming the climatic changes around 2200 BC,[4] alleged foreign invasions, or the sudden rise of provincial rulers who during the previous eight centuries had accepted the monarchy's authority (or at least not openly challenged it). Of course, many questions still remain unsolved, but they challenge researchers to approach and analyze the sources from new perspectives and to revisit assumptions that have been taken for granted even when supported only by surprisingly scarce and ambiguous evidence, and these questions also promote archaeological research in order to fill the many gaps of the written documentation. While simplistic "common sense" approaches to this period, typically concerned with a catastrophic event and the inevitable "collapse" that would result from it, are still popular, one of the effects of this historiographic renewal is that there is room for approaches that question the very nature, foundation, and scope of the Old Kingdom monarchy, as well as the dynamics underlying the balance of power that had sustained it.[5]

Powerful imagery is usually associated with the Egyptian monarchy and state, both in pharaonic culture and in modern Egyptological thought. This imagery promotes a view that sees the "natural" political condition of ancient Egypt as that of a united state under the rule of a single monarch, pharaoh himself (or very occasionally, herself), and that any other configuration of power is rejected as anomalous, with the (re)unification of Egypt at any cost attributed as their primary goal to rulers in periods of political fragmentation. The echoes of European nationalism, with the key concept that nation, state, and people are interchangeable, as prevailed in the late nineteenth century AD when the basic outlines of Egyptian history were reconstructed, are easily discernible behind interpretations that recreate ancient Egypt as

4. Bunbury 2010; Bárta 2015.

5. As demonstrated by the studies of, e.g., Müller-Wollermann 1986; Gestermann 1987; Seidlmayer 1987, 2000; Moeller 2005; Morris 2006; 2019; Morenz 2009; Römer 2011; Bussmann 2014; Willems 2014; Moreno García 2015b; 2016; 2018a; Schneider 2017; Bárta 2019.

a sort of nation-state *avant la lettre*.[6] But the implications of the easy acceptance of this idea have been profound, as it has caused researchers to largely ignore the importance of politics in Egyptian history, as if a pharaoh-to-be could simply and without discussion impose authority across Egypt; as if negotiations between competing authorities, alternative configurations of power, and political arrangements were simply oddities in a country that was meant to form a single political entity under the authority of a single ruler; or as if geopolitics and the influence of foreign actors pursuing their own interests and priorities could simply be ignored, particularly when such actors are based in less politically and culturally "developed" areas such as Nubia or the southern Levant.

There is no doubt that when regional rulers succeeded in reunifying Egypt they tried to legitimize their authority, and to embellish their pedigree, by stressing royal continuity and cultural traditions and by promoting the return to the "classic" models, thus rejecting the previous situation as abnormal.[7] However, there is equally no doubt that their ability to claim the crown of Egypt and to consolidate power required them to satisfy the interests of many political actors, including members of other branches of the royal family. We must stress that unification was just one possible configuration of power, and not an ineluctable pathway toward "normality"; when Egypt was unified it was because the kings and the other political actors had found a satisfactory compromise

6. The influence of nineteenth-century European historiography on the basic interpretation of ancient Egypt's past and the organization of the pharaonic state cannot be overstated, as the choice of themes and approaches inspired by distinctive "national" schools of historical thought (e.g., French or German) still shape modern interpretations. Medieval historiography provides a useful comparison, as since the nineteenth century, French and German historiography markedly differ in their basic assessment of the post-Carolingian world. The French school emphasizes the emergence of "territorial" powers and the disintegration of the Carolingian institutional order, while the German school sees this period as one of continuity, as power was based not on territorial domination but on interpersonal relationships between kings and aristocrats; cf. Bührer-Thierry, Patzold, and Schneider 2018.

7. Redford 1986: 259–275.

for their respective interests and agendas.[8] On the other hand, the monarchy collapsed when the king was no longer able to maintain his role as the primary mediator between all factions and when the interests of the monarchy could no longer be aligned with those of the state's other political powers, at court and in the provinces.[9] The end of the Old Kingdom and the events that followed might be best understood from this perspective.

12.2. A period of change

The last two centuries of the third millennium BC witnessed deep changes in the organization of power and in the very foundations of the political entities that then existed in the Nile valley. The preceding centuries were characterized by the centralization of authority under a single ruler, in particular under the Sixth Dynasty (cf. chapters 5 and 7 in volume 1). This took place in parallel to Mesopotamia under the Akkad Dynasty (cf. chapters 9 and 10 in volume 1) but in contrast to Nubia (cf. chapter 6), where no similar consolidation of power seems to have occurred.

12.2.1. Geographies of power and the circulation of wealth

In stark contrast to the centralized rule of the Sixth Dynasty kings, we now see dramatic changes in the exercise of power as Egypt entered a period of political division, crisis of the monarchy, military confrontations between provincial warlords, and finally the emergence of two rival kingdoms: Thebes in the south and Herakleopolis in the north. Conversely, Nubia and its wider region, which had formerly been divided into various smaller polities such as Yam, Setjau, and Irtjet that were ruled by "governors," now saw the consolidation

8. Moreno García 2018a.

9. Baines and Yoffee 1998.

of a large kingdom encompassing the area between the Second and Fourth Nile Cataracts and that later was known as "Kush," with its center at Kerma, just south of the Third Cataract.[10] If we look toward Mesopotamia, we find that the kingdom of Ur (cf. chapter 13 in this volume) that eventually succeeded the Akkad state only directly governed southern Iraq, with no permanent control over regions in Syria or Elam. The fragmentation of the large political entities that had dominated Egypt and Western Asia in the second half of the third millennium BC took place in the context of deep-rooted changes that affected regions extending far beyond the borders of the Nile valley to include not only Western Asia and the Mediterranean but also Central Asia and the lands bordering the northern coastline of the Indian Ocean.[11]

During this period, the emergence of new powers in Iran (Anšan and Šimaški) altered the long-distance routes that provided copper and other goods to Mesopotamia through Marhaši (a region east of Elam) and Makkan (Oman). As a result, Makkan lost its monopoly on the copper trade with Mesopotamia, while the trade economy of Dilmun (Bahrain) boomed. Strong relationships with the Harappan area, which encompassed the Indus valley and Gujarat, were of vital importance to Dilmun's socioeconomic development, which was now able to obtain copper not only from Oman but also from central and south-central Iran, Rajasthan, and Gujarat.[12] Tin arrived in Mesopotamia, Syria, and Anatolia from Central Asia at a time marked by a flourishing of bronze metallurgy and technical innovations in the Middle East[13] and the emergence of Cyprus as another major source of high-quality copper.[14] Contact between Egypt and the Aegean, especially Crete, intensified during this

10. For a useful summary, see Emberling 2014.

11. Warburton 2007; 2011; 2013; Wilkinson 2014.

12. Laursen 2009; Højlund 2013.

13. Lyonnet 2005; Wilkinson 2014.

14. Muhly and Kassianidou 2012: 128.

time:[15] given the characteristic counterclockwise currents in the Eastern Mediterranean, navigation between these two areas was easier through the western parts of the Nile delta, a region that flourished only after the end of the Old Kingdom. Our picture would be incomplete without stressing that beyond metal, high-quality manufactured goods such as textiles were popular merchandise of the long-distance trade, or without considering the role of pastoral populations as crucial agents in the circulation of commodities, ideas, and new metallurgical techniques over vast areas.[16]

The fact that the pharaohs of the Sixth Dynasty controlled Egypt while the contemporary kings of Akkad ruled over Mesopotamia, Elam, and parts of Syria meant that safety and ease of travel in the extensive areas under their combined authority greatly facilitated the circulation of commodities. The archives of Ebla (cf. chapter 8 in volume 1) mention a commercial partner called Dugurasu, which is likely to be identified with Egypt.[17] With the city of Byblos acting as intermediary, Dugurasu exported elephant tusks, linen, and gold and imported tin, lapis lazuli, and textiles. Iny, a dignitary who led several maritime commercial missions to Byblos and other locations in the Levant, reports that he brought silver, lead (or tin?), some kind of oil, and lapis lazuli, as well as Asiatic (*aamu*) men and women into Egypt during the reigns of Pepy I, Merenra, and Pepy II.[18] The Old Kingdom's influence was not restricted to Byblos, but can also be detected at Megiddo, Jericho, Ebla, and Khirbet al-Batrawy (in western Jordan).[19] This is likely related to the import of copper, not only from Sinai but also from Wadi Faynan and (probably)

15. Wiener 2013; Morero and Prévalet 2015.

16. Kepinski 2007; Gernez 2011.

17. Biga 2010; Biga and Roccati 2012; Biga and Steinkeller 2021; for a different view, see Archi 2016. Cf. also Matthiae 2017; Pinnock 2018.

18. Marcolin and Espinel 2011.

19. Adams 2017; Nigro 2014; Nigro, Montanari, Mura, Yasine, and Rinaldi 2018; Scandone-Matthiae 2003.

Timna through the Gulf of Aqaba and the Jordan valley,[20] thus bypassing Palestine and its nomadic populations. The Abusir papyri and later documents also mention "Asiatic copper," a term that apparently designated a different, more expensive type of copper. Precious and semi-precious stones (some of them from Egypt), minerals, and other goods traversed routes via the Red Sea, the Gulf of Aqaba, and the Arabian peninsula to reach Jordan, Palestine, and Syria.[21] This may explain why Old Kingdom Egypt launched several campaigns against the unruly nomadic population that lived in the southern Levant, why during this very same period nomadic populations in the Negev area extracted and transported copper toward Canaan and Egypt,[22] and why Egyptian prestige objects have been recovered at Ebla and Byblos (cf. chapter 6 in volume 1).

Trade considerations may also explain why Egypt tried to bypass the areas of the Nile controlled by Nubia (especially after the abandonment of the fortress of Buhen), most likely in an attempt to reach those regions that produced coveted commodities directly by sea or by desert routes. The maritime expeditions to Punt, the creation of a logistics center at Balat in the oasis of Dakhla, the early evidence of an Egyptian presence at the Red Sea harbor of Mersa Gawasis, and the importance of control over "gateways" and tribute from abroad, evoked in the inscriptions of many provincial officials, particularly at Coptos, Thebes, and Elephantine during the late Sixth Dynasty, all indicate a strong interest in promoting trade and in controlling the flow of wealth across northeastern Africa (cf. chapter 6). The royal decrees of Coptos testify that gold, copper, and other precious objects were taxed by Egyptian officials, and the involvement of officials from Elephantine in trade missions to Punt and Byblos, as well as the rise of Thebes, all point to an intensification of exchange activities through the Red Sea.[23]

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20. Sowada 2009: 187; Nigro 2014.

21. Nigro 2014.

22. Jirásková 2011; Finkelstein, Adams, Dunseth, and Shahack-Gross 2018.

23. Moreno García 2019b; 2021.

It is probably too simplistic to consider foreign trade to be the one crucial factor in the events that unfolded during the Sixth Dynasty and that culminated in the collapse of the unified monarchy, but neither should its importance be underestimated. The recent discovery of pottery from the southern Red Sea region at the harbor of Ayn Sukhna suggests that the port's scope of activity was not limited to the Sinai and its copper and malachite ores, but extended into regions situated farther south. The late Old Kingdom materials at the Red Sea harbor at Mersa Gawasis are quite probably related to the rise of Thebes and Coptos to political prominence during this period. The discovery of temples built in a Levantine architectural style at Tell Ibrahim Awad in eastern Lower Egypt may indicate the presence of a community of Asiatics, perhaps involved in maritime and land trade operations in the service of the Egyptian crown.[24] According to all this evidence, Old Kingdom Egypt was deeply enmeshed in exchange networks in which Byblos, Ebla, Punt, and some Nubian political entities were essential partners.

The role of Byblos as an intermediary in trade between Egypt and other areas of the Near East sheds light on two matters that are otherwise inexplicable. On the one hand, Byblos' role explains why the lowest exchange ratio between silver and gold in Western Asia is attested at Ebla and Mari, where it oscillated between 6:1 and 2:1, quite close to the ratio of 2:1 prevailing in Egypt. On the other hand, it can account for the fact that the weight unit of 9.1–9.4 g became common in Egypt only at a relatively late date from the middle of the second millennium BC onward, while it had already been in use for more than a millennium in many regions of the eastern Mediterranean, especially in Syria.[25] As a major supplier of gold and exotic items, Egypt's position in the Eurasian economic sphere depended on its capacity to preserve its role as the indispensable intermediary and provider of gold and highly coveted goods, mainly obtained from Nubia and the southern reaches of the Red Sea.[26]

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24. Bietak 2003; 2010.

25. Rahmstorf 2017: 194.

26. Warburton 2007; Moreno García 2017.

It is also possible that, as occurred in later periods, less prestigious items such as leather, natron, cereals, linen, and more were also part of this traffic.[27]

Support for the Old Kingdom's trade operations was provided by a logistical network of harbors, and production and administrative centers, with the institutions called *hut* being the most important among them. Their purpose was to produce and store foodstuffs and other goods for distribution to caravans and expeditions. This is stated clearly in a passage of the tomb inscription of Harkhuf, a caravan leader from Elephantine:

> Orders have been brought to the governor(s) of the new agricultural domains, the companion(s), and the overseer(s) of priests commanding that supplies be furnished from what is under the charge of each of them from every *hut* belonging to a processing centre and from every temple, with no exemption.[28]

The role played by the *hut*-centers in provisioning the king's agents is also exemplified by the inscriptions from Hatnub, which refer to the equipment delivered by the local *hut* to the teams of workers sent to the quarries, the organization of the expeditions by an overseer of a *hut*, and the close relationship between the *hut* and the agricultural estates of the crown.[29] An inscription from Dendara provides another example when Seneni, the overseer of a *hut*, claimed that he had delivered grain to the personnel of a *hut* in his position as "keeper of the provisions (*iri aqu*) of every day."[30] An inscription from Elephantine, dated to about 2000 BC, mentions deliveries of cereals, dates, and cattle from the overseer of a *hut* to several dignitaries, including a messenger who arrived in Elephantine on a mission for the king. Finally, an administrative document from the early second millennium BC enumerates

27. Moreno García 2016.

28. Strudwick 2005: 333.

29. Moreno García 2007; 2013.

30. Fischer 1968: 209–213.

FIGURE 12.3. A wooden model of a textile workshop, from the tomb of Meketra in Thebes. Egyptian Museum, Cairo. Photo by Soutekh67, via Wikimedia Commons (https://commons.wikimedia.org/w/index.php?curid=32561917), Creative Commons Attribution-Share Alike 3.0 Generic (CC BY-SA 3.0) license.

various kinds of textiles delivered to an official: he received them from a warehouse, from a work camp (*kheneret*), and from a locality or royal center called *hut-Khety* "*hut* of [king] Khety." *Hut*-centers were crucial nodes in the geography of the Old Kingdom's tax system. They were established in almost every province and served as agricultural centers with their own fields, cattle, and workers. *Hut*-centers were also involved in the production of textiles (figure 12.3). They functioned as local warehouses where agricultural and manufactured products such as sandals, textiles, and ropes were stored for delivery to royal agents. Together with temples, the *hut* formed a network of royally controlled centers that enabled the collection of taxes and the mobilization of workforces along the Nile valley and placed these resources at the disposal of the crown.[31]

31. Moreno García 2007; 2013.

Because of the trade routes that crossed Upper Egypt both by land and along the Nile, this region became increasingly important for the Old Kingdom, and new structures were implemented in the area's administrative organization. One key development was the creation of the position of "overseer of Upper Egypt," who supervised and coordinated the activities of the officials of the crown in this region—a post often held by the vizier. Among the many duties of the overseer of Upper Egypt was the compilation of lists of people obliged to perform compulsory work for the king, the levying of transport duties, the procurement of metals, the organization of new agricultural domains, and record keeping. Weni is perhaps the best-known overseer of Upper Egypt, and he describes his responsibilities in these terms in his autobiographical tomb inscription:

> I acted for him [i.e., the king] as overseer of Upper Egypt in a satisfactory manner so that no one there did any harm to his fellow, I was doing every task, assessing everything due to the [royal] Residence in this Upper Egypt twice, every regular corvée due to the [royal] Residence in this Upper Egypt twice, carrying out my official duties so as to make my reputation in this Upper Egypt.[32]

The overseer of Upper Egypt also controlled foreign imports. In his autobiographical tomb inscription, Iny states that after the successful completion of a trade mission, he traveled to the court, together with the overseer of Upper Egypt, in order to inspect the produce (*inu*) he had brought from abroad.[33]

Additionally, local potentates were elevated to official positions and entrusted with administrative and managerial duties, mostly relating to temples and *hut*-centers. These potentates imitated the lavish lifestyle typical of the royal court and the palatial elites. They maintained huge retinues consisting of family members, followers, and subordinates, while their decorated tombs, and the luxurious goods buried within, reveal

32. Strudwick 2005: 355–356.

33. Marcolin and Diego Espinel 2011: 574.

that their collaboration with the monarchy was concomitant with the reinvestment of a substantial portion of the crown's revenue produced and circulating across Egypt in the provinces they ruled. The political consequences are obvious. In the long term, such localized accumulations of both wealth and political power posed a threat to the centralized state, including the emergence of local political agendas and alliances that did not necessarily align with those of the distant sovereign.

The end of the Old Kingdom did not interrupt the trade networks that had flourished previously. On the contrary, there is increasing evidence that these networks continued to operate during the First Intermediate Period and that at least in some cases, trade was controlled by nomadic population groups and non-institutional actors. In other words, international trade did not depend on expeditions and trade missions organized by the crown, and the existence of the Old Kingdom state was not essential for the continuation of trade contacts abroad. Perhaps the most important change was the development of a trade route that connected the Eastern Mediterranean with Nubia through the western delta, the Fayum region, and an area in Middle Egypt that included Asyut, Deir el-Bersha, and Beni Hasan.[34]

In the western delta, Kom el-Hisn emerged as an important center with clear evidence of foreign influence, in particular the presence of "warrior tombs." These graves are similar to Levantine burials, with battle axes, knives, and daggers, from the late third and early second millennium BC. The tombs also contain a remarkable abundance of jewelry, especially necklaces made of gold, silver, lapis lazuli, and semi-precious stones, objects made of gold sheets, amulets, and scarabs.[35] Lapis lazuli, gold, turquoise, and semi-precious stones were also discovered in tombs at Barnugi, an important center for the production of natron in the western Nile delta that flourished during this period.

In the Fayum region, where the city of Herakleopolis was located and which constituted the core of the Herakleopolitan kingdom of the

34. Moreno García 2016; 2017.

35. Wenke, Redding, and Cagle 2016: 348–350.

First Intermediate Period, Asiatic weapons were found.[36] The inscription of an official who lived around 2000 BC stresses that Herakleopolis was indeed a "great gateway" and that it played a role as a control point for goods arriving from abroad.[37] Myrrh and aromatic plants appear to have been extremely important among these commodities, as Herakleopolitan kings created separate administrative units to deal with them: a dignitary buried at Herakleopolis held the title of "great one of the department of myrrh," while another, Hetepwadjet, was "measurer of the department of unguents."[38] It is possible that copper arriving from Anatolia and the Aegean also played an important role in the trade. Contact between Egypt and Crete developed at this time, and geochemical analysis of sediments from Alexandria has revealed metal imports from Anatolia, Cyprus, and the Aegean into the western delta during the third millennium BC, in sharp contrast to the eastern delta, which imported copper from the Levant.[39] The use of Aegean-style textile motifs in the decoration of early second millennium tombs in Asyut and Meir in Middle Egypt may indicate the importance of textiles in the trade contacts between Egypt and the Aegean at that time.[40]

Upper Egypt was not excluded from the lucrative trade routes that passed through the Nile valley at the time. An inscription from Coptos shows that a local chief donated an astonishing number of precious items to the local temple, including forty gold and copper vessels, gold and silver pieces, lapis lazuli and turquoise, thirty-six collars decorated with lapis lazuli, and substantial quantities of incense and myrrh.[41] Sennedjesu, an official from Dendara, claimed that

36. Moreno García 2017: 113.

37. Lichtheim 1988: 50; Moreno García 2019b.

38. Willems 2007: 95.

39. Véron 2013.

40. Moreno García 2017: 120; 2019a: 63–64.

41. Strudwick 2005: 125.

> [I surpassed everyone who was and] who will exist therein in people, Lower Egyptian grain and emmer, gold, copper, clothing, oil, [honey], . . . [cattle], goats, cargo ships and everything.[42]

Trade between Egypt and Nubia continued to flourish after the end of the Old Kingdom. The flow of large vessels (most likely filled with foodstuffs) from Egypt into Nubia increased during the First Intermediate Period,[43] while the inscription of Setka of Elephantine refers to his role as a provider of precious African goods to the Herakleopolitan kingdom: he imported myrrh from Byblos, gold and copper from Punt, and incense from Nubia (Yam) as well as ebony, ivory, and exotic animals from other locations and shipped all these goods northward to Herakleopolis.[44] Egyptian jewelry found in tombs at Aniba, located about 230 km south of Elephantine in Lower Nubia, is proof for the profitability of contacts with Egypt, either by trading or serving as a mercenary.[45] Finally, the recent discovery of First Intermediate Period Egyptian pottery at the Delta of Gash and at Mahal Teglinos in northeastern Sudan suggests that Egyptian materials arrived not only through the Nile valley, but also via the Eastern Desert and the Red Sea coast, thus crossing Nubia.[46] Nubia appears to have been well placed in the network of trade routes leading to Punt, the Red Sea, and the Mediterranean (cf. chapter 20). The presence of Nubian warriors at the service of Egyptian provincial warlords during the First Intermediate Period is probably a sign of the involvement of Nubian rulers in Egyptian affairs, for example as supporters of commercial partners based at Elephantine (where Nubian pottery is well attested), Asyut (the arrival point of caravans linking Nubia to the Nile valley through the oases of the Western Desert), and elsewhere.

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42. Fischer 1968: 160.

43. Hafsaas-Tsakos 2010: 390–392.

44. Edel 2008: 1743–1744; cf. also the existence of a land route from Gebel Tingar (west of Elephantine) to Punt; see Darnell 2004: 27.

45. Hafsaas-Tsakos 2005: 140.

46. Manzo 2017: 50–51.

Limited as the available evidence is, it reveals nevertheless that precious metals and valuable imports such as lapis lazuli, myrrh, and ivory continued to arrive in Egypt in the First Intermediate Period. Together with other items that are largely invisible in the archaeological record (such as grain, fish, textiles, or metals), such merchandise fueled trade networks which benefited not only the elite but also wider parts of the population, judging from the precious items found in the tombs of ordinary people.[47] This may explain why control over "gateways" and foreign tribute became a major concern for localities well placed at strategic crossroads; why these localities became major political centers during the First Intermediate Period; and why they were not exclusively in the hands of Egyptian actors. Nubian and Asiatic populations were also active players and became involved in the politics and internal affairs of Egypt in the very late third millennium BC.[48]

12.2.2. Social transformations

The end of the centralized Egyptian state brought with it the decline of an institution that had played a major role in the organization of the Old Kingdom's territory: the *hut*, which provided the logistics for the circulation of goods and people along the Nile. This process was a gradual one, and the written sources of the First Intermediate Period still mention the *hut* as part of the political and administrative landscape. The kings of Herakleopolis in the north and Thebes in the south, as well as members of their families, continued to create *hut*-centers and to appoint *hut* overseers in areas that were administratively reorganized, such as Tell el-Dabʿa and Dendara, respectively. Even the "Teaching for Merykara," a literary composition set in the Herakleopolitan kingdom, still refers to the foundation of *hut* in border areas in order to protect and organize them. However, by the early second millennium BC there is a noticeable lack of objects inscribed by or belonging to *hut* overseers, and only "fossilized"

47. Dubiel 2012b.

48. Moreno García 2019b.

formulae used in monumental inscriptions and in literary texts still refer to these centers as a significant element in the Egyptian landscape.

It was during this period that another type of settlement emerges in the epigraphic record. For the first time, the term *demi* ("harbor") appears as a constitutive element in place names and as focal points of territorial organization and of social identity.[49] As a distinctive element of urban economic activity in the form of a market and exchange center, the term *demi* gradually became a synonym for "town; city." A *demi* could become a major target in military operations between competing regional powers, as recorded in the fragmentary autobiographical inscription from the tomb of Iti-ibi of Asyut.[50] In other instances, a *demi* was considered a kind of refuge: "a pleasant harbor for his clan" (*demi nedjem en wehytef*).[51] Not surprisingly, as harbors and quays were also marketplaces, terms such as *demi* ("city") and *meryt* ("quay") became synonymous with "market" in some cases. Thus Sarenput I, governor of the caravan and harbor city of Elephantine around 1950 BC, included control over river trade, harbors, markets, and foreign commodities arriving into Egypt among his duties. He was

> "overseer of all tribute at the entrance of the foreign countries in the form of royal ornaments, to whom the tribute of the *Medja*-country was brought as contribution of the rulers of the foreign countries," as well as "one who rejoices over the quay/marketplace, the overseer of the great ships of the Royal Domain, who supplies the Double Treasury, the superior of the harbors in the province of Elephantine (so that) what navigates and what moors was under his authority."[52]

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49. The description of the transport of a colossal statue ended with its arrival at the harbor [*demi*] of a locality [*nut*]: Sethe 1935: 48; cf. also "Coffin Texts," Spell III 257: *waret tu net nutiu* ("this neighborhood of the citizens").

50. Brunner 1937: 18.

51. Anthes 1928: 28–31; Willems 2007: 43.

52. Obsomer 1995: 482.

As the old network of *hut*-centers was never re-established once the united monarchy of Egypt was restored around 2050 BC, it seems that *demi* ("harbor; city") replaced the *hut* as the focal point for storing and collecting taxes. In other words, settlements that had developed organically replaced centers founded by the crown, in what appears to have been a tendency toward a more autonomous organization of settlements born out of the circulation of goods and commodities in the Nile valley. Recent archaeological research confirms that cities thrived during the First Intermediate Period. This was the case in Abydos, which contains houses with identifiable storage facilities that do not appear to be elite dwellings and should probably be seen as "middle-class" residences.[53] In some of the buildings and their silos, seal impressions have been found that indicate domestic administrative activities. At the site of Elephantine, excavations have provided evidence for regular streets set at right angles to each other, as well as for the practice of sealing, especially at the governor's palace.[54] The surface area of Edfu and Dendara (figure 12.4) doubled during this period, while cities in the Fayum (Herakleopolis Magna) and Middle Egypt (Asyut and Deir el-Bersha) also flourished, as did settlements in the western Nile delta such as Kom el-Hisn, Barnugi, and Abu Ghalib; the latter two were apparently linked to "industrial" activities and a trade route that connected the Mediterranean to Middle Egypt through the western branch of the Nile.[55]

The First Intermediate Period seems to be an era when trade, economic prosperity, and urbanism went hand in hand. This was a time in which cities became ideologically relevant as a source of legitimation and identity, while the crisis of the monarchy deprived the king of this role. Thus, many inscriptions prominently mention the city's approval of an official's actions (e.g., "one beloved by his city," "one beloved by all his city"). The topos of protecting or enriching one's town figured prominently in the epigraphic record of this period, and similar expressions

53. Adams 2007.

54. von Pilgrim 1996; 2001.

55. Bagh 2002; 2004; Moeller 2016: 219–248; Moreno García 2017: 113.

FIGURE 12.4. Dendara is an example of the urban growth experienced by some cities during the First Intermediate Period. Aerial view of the extramural First Intermediate Period and early Middle Kingdom settlement area of Dendara; in the background, the temple of Hathor. Photo by Gregory Marouard.

continued to be later used in the inscriptions of the elite, especially in the provinces.[56] It is noteworthy that even ritual texts from the early second millennium BC recognize this situation when they describe the households of deceased people: they list not only the dead, their relatives, and their immediate social network, but also "citizens" (*nutiu*) and "people from the harbor/city" (*demiu*).[57] The "citizens" also figure prominently in biographical inscriptions of the First Intermediate Period, for example in Asyut.[58] Given the troubled political context of this period, the support of local armies and fellow citizens was crucial for the political

56. Moreno García 1997: 46–52.

57. "Coffin Texts," Spells II 151; 152; 154; 155; III 52, 91, 114, 257.

58. El-Khadragy 2008: 223; Edel 1984: 99, fig. 15.

ambitions of local potentates and warlords. Many contemporary inscriptions therefore mention the approval of one's actions by one's immediate social surroundings, such as the province or the city. City audiences were thus considered significant for the purposes of ideology and legitimacy, and they even entered the narratives of the literature of the Middle Kingdom, for instance in the "Teaching for Merykara": this text depicts demagogues and agitators who disturb the peace of cities through their speeches and who drive urban population groups to rebellion.[59] In the same vein, new expressions developed from the very concept of city, such as "townsman" (lit. "man of the city")[60] and "officer of the city troops" (lit. "the living one of the city").[61] This second term also points to the growing importance of towns and townsmen as the providers of military support to provincial leaders. Already from the Old Kingdom onward, the concept of the "local god" (lit. "city god") had begun to play a prominent role in forging individual and collective identities.[62] Thus, Neferiu from Dendara claimed that "it was (the god) Ique(r) who accomplished it for me: I being aggrandized beyond the great men and officials of all my town,"[63] while another official stated that "I nourished my brothers and sisters with my own property, (this) being what (the god) Onuris accomplished for me."[64]

It is likely that the use of urban troops during the troubled times that followed the Old Kingdom implied some kind of recognition (and approval?) of the urban population, as indicated by the testimony of the graffiti from Hatnub or the tomb autobiographies from Asyut, especially when the novel topos of the autonomous individual (*nedjes*, "the modest/humble one") is emphasized: the ability to earn his living, to build up a personal patrimony independent of the king or the administration and

59. Parkinson 1997: 217–218.

60. Quirke 1991.

61. Berlev 1971.

62. Moreno García 1997: 46–52.

63. Fischer 1968: 207.

64. Fischer 1968: 209.

to transfer it to his descendants.[65] Thus, although an official called Khety declared that he had been endowed by the king with an estate ("I was one bright of face, who gave gifts out of the possessions of the estate which the Majesty of my lord gave me"),[66] other officials, on the contrary, stress that part of their fortune came from their patrimonial wealth, as in the case of Intef, son of Myt:

> I acquired bulls, goats, cloths, ornaments (from the) treasury and grain, part thereof I obtained by my own effort (and another part) from what pharaoh Mentuhotep (II) made for me because he loved me.[67]

When people began to present themselves as *nedjes* on their monuments during the First Intermediate Period, the concept was based on two closely related qualities: the private acquisition of substantial wealth; and the autonomy of one's own actions ("to act by my own arm"). An excellent example is provided by the stele of Heqaib, an official who lived in the area of Thebes during the First Intermediate Period:

> I was an excellent *nedjes* speaking with his mouth and acting with his arm, who makes his town keep at a distance from him. I was a noble one in Thebes, a great pillar in the southern district. I surpassed every peer of mine in this city in respect of riches of every kind. So people said, when I was acting by my (own) arm: "[He is] one that is free from robbing another." I provided this whole city with Upper Egyptian barley for many (?) years, not to speak of the [. . .]. I gave bread to the hungry and clothes to the naked. I did not calumniate the great ones and I gave ease to the *nedjes*. I gave a loan of corn (?) to Upper Egypt and Upper Egyptian barley to this northern district. I also gave oil to the province of Elkab after

65. Moreno García 1997: 31–58; Franke 1998.

66. Landgráfová 2011: 54–58.

67. Landgráfová 2011: 32–34.

> my town had been satisfied. I made a ship of forty (cubits) [i.e., about 20 m] and a barque, for transporting cattle and for ferrying him who had no boat in the season of inundation. I appointed a herdsman to (my) cattle and (further) herdsmen to (my) goats and to (my) asses. My people were more numerous and my precious goods were greater in number than those of any peer of mine. I was a (real) master of my heart in times of turmoil, while everybody else was shutting his door. When the ruler counted my cattle, he found that my possessions had increased. As for everyone who had to deal with me, I caused him to bend his arm.[68]

This inscription provides several clues about the desired qualities of a *nedjes*. First of all, he was to be a person who was proud of acting for himself, according to his own initiatives, needs, and expectations, and not merely as the agent of someone else (including the king). Second, he was to be capable of accumulating substantial wealth thanks to his own actions, unmatched by his peers. Finally, his prosperity and good sense were to benefit his neighbors and fellow citizens as well, especially in periods of turmoil and famine. It should be stressed that people who described themselves in this way were far from simple commoners, despite their claims to the contrary. In fact, their titles quite often reveal that they were officials. Nonetheless, it is clear that people of a certain status were eager to embrace new ideas that celebrated social and economic autonomy, as if they were ordinary people rather than officials and members of the elite. In fact, when inscriptions from this period evoke society as a whole, they use expressions formed by pairing the terms *aa* "the great one" and *nedjes* "the modest one": for example, "I made what the great ones loved and the modest ones praised."[69]

Evidence from Middle Egyptian provincial cemeteries such as Qau el-Kebir and Badari confirms that ordinary people had access to precious goods, including gold beads and other jewelry. Stamp seals are frequently

68. Polotski 1930; Morenz 2006.

69. Moreno García 1997: 32–33.

found with burials of women and children and show that they used these as ornaments in this period, whereas men's use of stamp seals as personal adornment is much less frequently attested. Seals were required in order to control property and to authenticate commercial transactions; although some authors claim that the growing number of seal owners does not reflect increasing wealth in rural populations,[70] I would argue for the opposite scenario. Not only have we found that ordinary people had access to gold items (thus revealing considerable wealth in their hands),[71] but there are two further arguments. First, seals and sealings started to be routinely employed in everyday legal transactions such as the purchase of land or houses or the hiring of specialized priests,[72] and the increased sealing practice left its mark in contemporary ritual texts, as references to sealing were much more frequent in the late third and early second millennium BC corpus of "Coffin Texts" than in the earlier Old Kingdom "Pyramid Texts."[73] Second, women began using the title of *nebet per* ("mistress of the house") during the First Intermediate Period. This title refers to an adult woman who either independently managed a household (with or without a male head) or who was otherwise engaged in business enterprises.[74] This is the most frequently attested female title, particularly on scarab seals, and several "mistresses of the house" possessed their own steles. The analysis of women's seals from Middle Egyptian cemeteries reveals traces of wear and usage, demonstrating that they were not created exclusively for funerary purposes.[75] This indicates that seals and sealings were widely used in society, not only by administrative officials and people of high status, but also by ordinary men and women. In turn, this suggests the existence of a wide scope of

70. Discussion: Seidlmayer 1987: 201–204; Dubiel 2012b: 70–72.

71. Seidlmayer 2007: 45–47; Dubiel 2012a.

72. Moreno García 2000: 125–126; Picardo 2015: 265–274.

73. "Pyramid Texts": Spell 214; "Coffin Texts": Spells 131, 134, 135, 137, 142, 398, 657, 992, 1080, and 1117.

74. Stefanović and Satzinger 2015.

75. Dubiel 2012b.

legal and economic transactions in which formal agreements and methods of authentication (i.e., sealing) were required.

The evidence from seals, contracts, houses,[76] and funerary equipment provides support for the hypothesis that following the decline of the Old Kingdom monarchy, conditions were favorable for the emergence of a "middle class" of economically autonomous and relatively affluent individuals, whose values influenced both contemporary scribal culture and the terminology which officials used to present themselves in their inscriptions. By the end of the third millennium BC, when a reunified Egypt was once again ruled by a single centralized monarchy, this "middle class" had become a substantial component of Egyptian society; its very existence highlights that simply returning to the social conditions of the Old Kingdom, when such a "middle class" apparently did not exist, would have been impossible. A new social and economic reality had emerged during the First Intermediate Period, and the centralized state had to cope with it.[77]

Our final thought in the present section concerns the role of the nomadic populations who had entered the Nile valley and left their mark on the settlement structure.[78] It is not by chance that starting from the very late third millennium BC, the development of extensive pastoralism in Egypt was concomitant with the emergence of new terms such as *menmenet* ("cattle on the move") and *wehyt* ("village clan; tribe"), particularly in Middle Egypt, a region frequented by Libyan herders. Also the Fayum area was traversed by foreign populations whose distinctive settlement forms are in some cases preserved in references to enclosures, called *wenet* in texts from the early second millennium BC and *seger* in texts from the Ramesside period. In the local economy of Middle Egypt, Asiatics, Libyans, and perhaps also populations of Nubian origin appear to have been notable actors, as nomadic herding, transhumance, and specialized uses of space that focused on pastoralism flourished in this region

76. Moeller 2016: 219–246.

77. Richards 2005; Vermeulen 2016; Mazé 2017.

78. Moreno García 2017.

at the turn of the third millennium BC; the reference to "cattle of *Retenu*" in the tombs of Meir and Deir el-Bersha and a late Old Kingdom burial of a Nubian woman close to Deir el-Bersha provide further evidence for the involvement of foreigners in the Middle Egyptian cattle economy. The inclusion of Libyans in the execration texts of the Middle Kingdom may be due to their prominent role in cattle husbandry and in the supply of desert minerals.[79]

12.3. Political conflict

One of the most striking aspects of the First Intermediate Period is that the exceptionally long and stable political order, which had prevailed for a thousand years, vanished. During this time, the monarchy seemed unable to fulfill its traditional role as the mediator between different factions and in particular as the keeper of the balance of power between its own interests and those of the members of the court and the regional rulers. It is quite significant that locally emerging potentates did not compete to establish themselves as pharaohs in Memphis but instead preferred to follow their own political agendas within their regional setting. Therefore, it appears that the monarchy had ultimately failed to harmonize regional interests with those of the crown.

That the monarchy proved unable to subdue rebels who controlled only tiny territories and limited agricultural resources in Upper Egypt (Coptos; Thebes) provides a salient clue about the realities of royal power in the preceding decades. There are two different sets of sources: the autobiographical inscription of Weni of Abydos and the royal decrees from the temple of the god Min at Coptos;[80] both suggest that the provincial administrative structure in Upper Egypt was rather loose, far from an alleged world of "provincial governors" acting as local deputies of the king, with well-defined duties and administrative tasks (although this conceptual framework is still frequently found

79. Moreno García 2018b: 164.

80. Strudwick 2005: 352–357 and 105–124, respectively.

in modern studies).[81] The passage in Weni's autobiography describing the mobilization of soldiers and resources for an expedition into the Levant shows that overseers of temples, leaders of royal production centers (*hut*, *ges-per*), "chiefs," leaders of foreigners, Nubians, and others participated in the war effort, while the royal decrees of Coptos mention many offices and officials involved in the management of the workforce. It is striking that the "great chiefs" of provinces are conspicuously absent from these texts and that the mobilization of resources took the form of contributions provided by a mix of local potentates, temples, royal centers, and other authorities under the administrative control of the overseer of Upper Egypt. When the first rebellions against the monarchy erupted at Coptos and Thebes, it was a local leader, Ankhtifi of Moalla, who was entrusted with the mission of suppressing the insurrection; although Ankhtifi was subservient to an overseer of Upper Egypt residing at Thinis (who is mentioned somewhat contemptuously in Ankhtifi's inscription), he apparently used his own local resources to stop the rebellion.[82]

12.3.1. Power dynamics and the rise of local identity

The last decades of the Old Kingdom do not exhibit any evidence for political or economic disruption. As it is far from clear whether the so-called 4.2 kiloyear megadrought had an impact on life in Egypt, the causal relationship between this event and the societal collapse at the end of the Old Kingdom, as has been repeatedly postulated in recent years,[83] needs to be seriously called into question. In fact, the urban centers of Egypt both thrived and declined over centuries, and it is likely that these transformations related more to settlement changes, the expansion of

81. Moreno García 2013b.

82. Vandier 1950: 187.

83. Hassan 1997.

nomadic lifestyles, and the diffusion of new techniques, especially in metallurgy and in textile production.[84]

The collapse of the Old Kingdom monarchy seems to have been the result of a fairly smooth process in which the pharaohs lost control over provinces that began to act independently. The final decades of the Old Kingdom monarchy show no trace of disruption to Egypt's overall administrative organization and tax system.[85] A number of royal decrees found at Coptos demonstrate that the king was still founding agricultural domains for the local temple, that his authority was recognized there, and that local officials worked on his behalf, following his instructions regarding the extraction and transportation of blocks of stone. A letter found at Elephantine reveals that corrupt officials were still subject to the king's justice,[86] while Nenu of el-Hagarsa, elder son of Meryaa, claimed in the tomb of his father that he had buried him, embalmed him with unguents from the (royal) residence and with high-quality linen provided by the "House of Life," thus demonstrating that deliveries of precious goods were still markers of the king's favor and that these goods still were circulated between the capital and the provinces.[87]

What is more, provincial officials continued to use titles that celebrated their role as priests and officiants (*khenti-she*) in the funerary complexes of the pharaohs in the Memphite area. Furthermore, Ankhi, a royal official active in the twenty-third or twenty-second century BC, still could claim control over the entire country's production, as he was "overseer of every meal of the king that heaven gives and earth creates," "overseer of every meal of the king in all his places," and "overseer of the production of every desert," as well as "overseer of all vegetation."[88] Ankhi was no exception, as several contemporary officials boasted about similar administrative and fiscal responsibilities, often using metaphorical titles

84. Meller, Risch, Jung, and Arz 2015; Höflmayer 2017.

85. Moreno García 2013a: 146–151; 2015; 2021.

86. Strudwick 2005: 178–179.

87. Kanawati and McFarlane 1995: 33.

88. Altenmüller 2012.