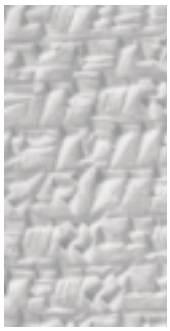


1
Introductory Concerns

1.1 What is the Ancient Near East?

The term "Near East" is not widely used today. It has survived in a scholarship rooted in the nineteenth century when it was used to identify the remains of the Ottoman empire on the eastern shores of the Mediterranean sea. Today we say Middle East to designate this geographical area, but the two terms do not exactly overlap, and ancient historians and archaeologists of the Middle East continue to speak of the Near East, as I will do in this book. Already this habit gives a certain vagueness to what constitutes the ancient history of this area of the world, and the geographical boundaries of the region can differ substantially from book to book. Some definitions, then, of what is intended here are in order.

In this survey of history, Near East designates the region from the Aegean coast of Turkey to central Iran, and from Northern Anatolia to the Red Sea. Egypt, whose history intersects with that of the Near East at many times, will be excluded, except when it extended its empire into Asia in the second half of the second millennium. These boundaries are deliberately somewhat indeterminate. This results from the fact that we study primarily the history of a set of core areas, whose reaches extended over shifting zones in different periods. Foremost among them is Mesopotamia, the area between the Tigris and Euphrates rivers, from which we have the most abundant documentation and whose history thus dominates any study of the Near East. For instance, at times Mesopotamian states reached into the Arabian peninsula. Consequently, that region became part of the Near East while hitherto it remained otherwise unknown. When some other states in central Anatolia, south-west Iran, and northern and western Syria expanded, they drew additional regions into the orbit of Near Eastern history. As historians, we rely on sources; their extent, both in geographical terms and in what facets of life they document, fluctuates

enormously over time. When they cover a region, they become part of the Near East; when they do not, histories have little to tell. The ancient history of the Near East can be likened to a dark room with isolated points of light, some brighter than others, provided by the sources. They shine especially clearly on certain places and periods, but leave much else concealed. It is the historian's task to try to make sense of the whole.

The chronological boundaries of ancient Near Eastern history are also ambiguous, and authors of different books on the subject use a variety of dates. Both the beginning and the end dates of this history are flexible. History is traditionally considered to rely on written sources, and the origins of writing in the Near East, around 3000 BC, can then be seen as the start of history. Yet script was just one of several innovations that had its roots in earlier times, and the earliest texts contain no "historical" information that we can understand beyond the fact that people had the ability to write. Thus, most histories of the Near East start in prehistory, oftentimes in the tenth millennium, describing in more or less detail the developments that took place before the historical period. During these seven millennia, so many important changes happened in the lifestyles of humans in the Near East that they deserve separate in-depth treatment, using archaeological and anthropological methodologies and sources different from historical ones. There is not enough room in this book, which intends to discuss the historical periods thoroughly, to do full justice to all prehistoric developments. Hence the chapters of this book will start with the "Uruk revolution" of the fourth millennium, while earlier developments will only be cursorily outlined in this introduction. It seems appropriate to begin a history of the Near East around 3000, as several prehistoric processes culminated simultaneously at this time, and writing appeared, dramatically changing the nature of our source material.

History rarely knows clear-cut endings. Even when states are definitively destroyed, they leave an impact, the duration of which depends on whether one looks at political, economic, cultural, or other aspects of history. But the historian has to end somewhere and the choice of when needs a rationale. Various dates are commonly used to end ancient Near Eastern history, most often either the fall of the last native Mesopotamian dynasty in 539 or the defeat of Persia by Alexander of Macedon in 331. I have chosen to take Alexander as the last figure of the political history of the ancient Near East, because while the changes he instituted were probably not momentous for most of the people at that time, our access to the historical data is transformed starting in his reign. The gradual shift from native to external classical sources necessitates a different historiographical approach. The arrival of Hellenism is a fitting borderline because the historian's understanding of the region changes significantly.

The years from around 3000 to 331 involve some twenty-seven centuries, which is a very long period. Few historical disciplines engage themselves with such lengths of time. We can compare it to what is covered in survey books of the whole of western civilization, which link Homeric Greece to the present day.

While we can see clearly distinct periods in that western evolution and appreciate the pivotal changes that took place over time, it is harder to do so for ancient Near Eastern history. Our distance from the Near East, both in time and in spirit, sometimes leads to a view that blurs distinctions and reduces everything to one large static mass. On the other hand, one can take a diametrically opposed view and fragment this history into short, coherent, and manageable segments. Discontinuity then becomes the focus. The latter attitude lies at the basis of what is usually presented as the periodization of Near Eastern history. A sequence of phases, mostly defined in dynastic terms based on events in Mesopotamia, is strung together as a historical continuum. Each phase experiences its cycle of rise, prosperity, and decline, as if it were a biological entity. In between fall the so-called Dark Ages, moments of historical silence.

I shall take an intermediate stance here. While continuities should not be overemphasized, some basic patterns of Near Eastern history are visible. In political terms, for example, the Near East was a region of fragmented power with relatively short-lived periods of centralization under rulers or dynasties (usually Mesopotamian) whose territorial reach became increasingly wider. While I shall maintain the traditional subdivisions into dynastic periods, I shall group them into larger units. This book is thus divided into the ages of city-states, territorial states, and empires, each with their moments of greatness and disruption (if we equate power with greatness). The city-state was the primary political element from 3000 to approximately 1600, territorial states dominated the scene from that point on to the early first millennium, and empires characterized later ancient Near Eastern history. Mesopotamian states usually demonstrate these stages of development most conclusively, but it is clear that they also occurred elsewhere in the Near East.

In the end, the availability and extent of the sources define the ancient Near East as a historical subject and subdivide its history. Extensive written and archaeological documentation is available in certain places at certain times, and those regions and moments form the core of the subject. The cultures of Mesopotamia dominate in this respect. They were often the leading civilizations of their time, and their histories had an impact over the entire Near East. When they influenced or controlled non-Mesopotamian regions, those areas became included in Near Eastern history; when they did not, we often lose track of what happened outside Mesopotamia. In the last three decades, it has become increasingly apparent that other regions of the Near East experienced developments independent of Mesopotamia and that all cultural innovations cannot be credited to that area. Still, it remains impossible to write continuous histories of those regions without reliance on a Mesopotamia-centered model. Mesopotamia provides the geographical and chronological unity to Near Eastern historiography. Its use of an age-old script, its continuation of religious practices, and its cultural continuity from the third to the first millennia allow us to look at its long history as a unified whole. The study of the other cultures in the region is mostly pegged to that of Mesopotamian culture, but we should not ignore their contributions to the history of the Near East.

Box 1.1 *Dating Near Eastern history*

Following the practice of the large majority of histories, this book uses absolute dates to indicate when events took place. These dates are set within the artificial construct of the Christian or Common Era, and since the entirety of ancient Near Eastern history took place before the start of that era, all are B(efore) C(hrist) or B(efore) C(ommon) E(ra), the higher numbers preceding the lower ones. That is merely a convention to enable us to comprehend the sequence of events and their distance in time, even if the era has an ideological basis without relevance to the ancient Near East. All dates in this book thus have to be read as BC.

I have also stated these dates absolutely, giving a false impression of certainty. The absolute chronology of Near Eastern history is a vexing and controversial problem. The Mesopotamians were very good at providing sequences of rulers, for example, but the difficulty for us is to establish a firm point in time to which they can be attached. The tools employed derive from multiple disciplines (e.g., astronomy, archaeology, philology) and the scholarly debates are very technical. Since they are so complex, I will not discuss them here but only indicate the system I have used. First-millennium chronology is secure because of several reliable data, including the record of a solar eclipse that took place on June 15, 763, and allows us to anchor a long sequence of Assyrian eponyms (see chapter 6). The absolute chronology of the second millennium and before is uncertain, however. Scholars have reconstructed a reliable relative sequence, primarily based on Mesopotamian lists of kings, but that sequence cannot be absolutely dated with certainty. Different systems are in use and one called "Middle Chronology" has been the most popular, although it has often been justifiably attacked. It dates the reign of King Hammurabi of Babylon from 1792 to 1750. I have taken over this system without comment, or even a belief that it is superior to alternatives, because it is the most commonly used, which should make it easier for readers to consult other scholarship.

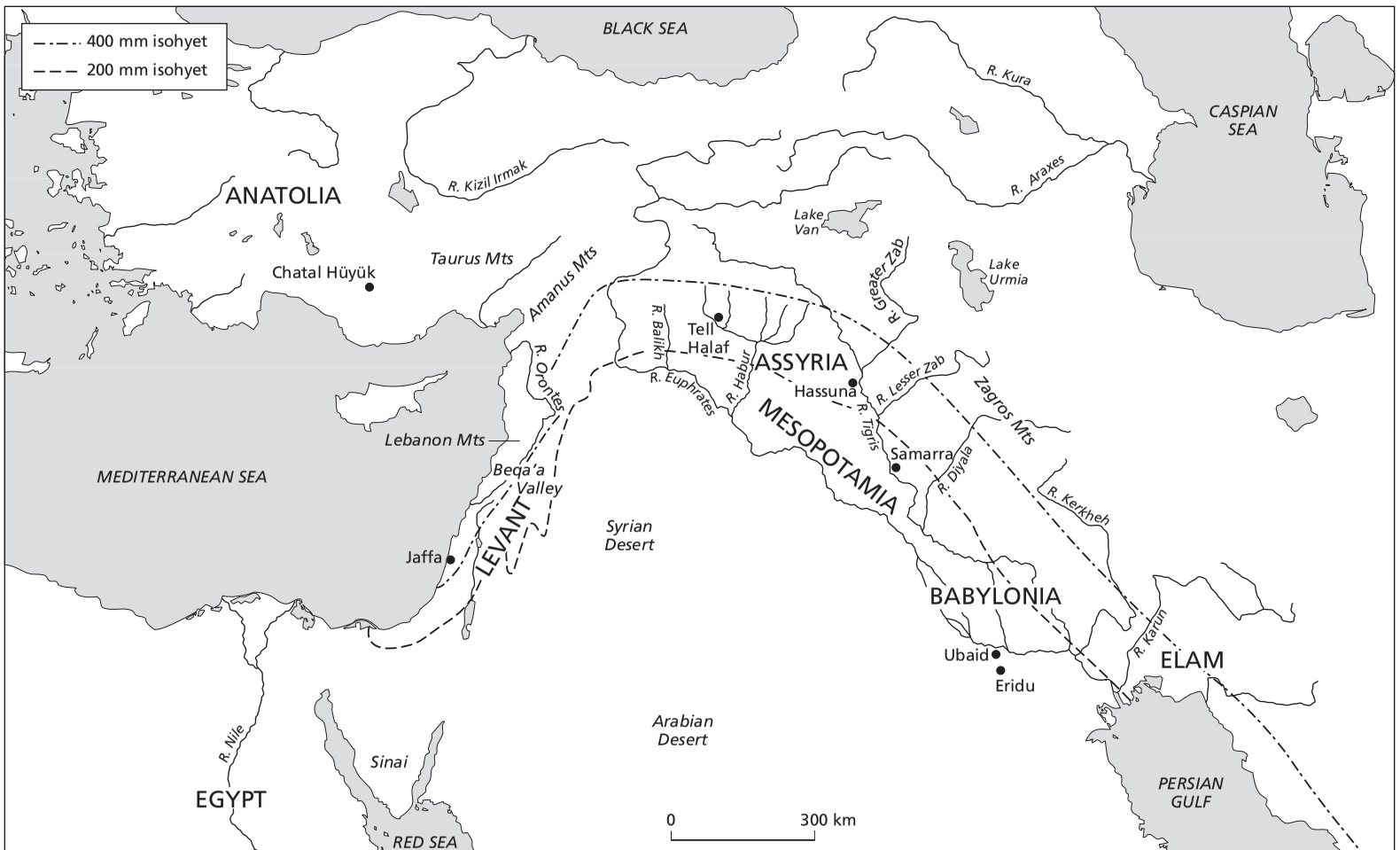
1.2 The Sources

As pointed out above, the availability of sources determines the confines of ancient Near Eastern history. Fortunately, these sources are incredibly abundant and varied in nature for the whole of this long history. Texts, the primary source for the historian, have survived in the hundreds of thousands. From early on, kings carved inscriptions on stone monuments, many of which were among the first archaeological finds made in Mesopotamia. More important, however, was the clay tablet, the medium of writing that developed in southern Mesopotamia and was adopted by all Near Eastern cultures. It has amazing durability in the dry soil of the region, and texts from the mundane receipt of a single sheep to literary works such as the Epic of Gilgamesh are plentiful. The survival of numerous documents of daily use distinguishes the ancient Near

East from other ancient cultures. In Egypt, Greece, and Rome, similar things were written, but on parchment and papyrus, materials that have survived in unusual conditions only. The writings from the ancient Near East are rich not only in number but also in what they cover: the economy, royal building activity, military campaigns, government business, literature, science, and many other aspects of life are abundantly documented.

Archaeological material has become increasingly important as one of the historian's tools. Not only do excavations allow us to determine that the Hittites were present in northern Syria in the fourteenth century, for instance, but they also permit us to study the material conditions of their lives there. The Near East is covered with artificial mounds that were formed over the centuries by the debris of human occupation. Those are called *tell* in Arabic, *tepe* in Persian, and *hüyük* in Turkish, terms we find in the names of most archaeological sites. The possibilities for archaeological excavation in the Near East are so great that we have only scratched the surface so far, despite 150 years of work. Major cities such as Uruk, Babylon, Nineveh, Hattusa, and so on, have been explored over many years and have yielded enormous numbers of buildings, monuments, objects, and texts. But when one compares what has been uncovered with what remains hidden, it is clear that this is only a beginning. There remain thousands of unexplored sites, not all of which can be systematically investigated. Since numerous dams, roads, and agricultural developments are constantly being built and threaten to annihilate ancient sites, the selection of what is excavated is often determined by rescue efforts.

We should not underestimate the importance of the vicissitudes of archaeological exploration in determining our outlook on Near Eastern history. Modern political developments in the region play a crucial role in which areas are investigated. Imperial competition between Great Britain and France in the mid-nineteenth century led their representatives to focus on the massive sites in northern Iraq, the region of Assyria. There were found the most impressive monuments to be displayed in national museums, which led to the early interest in Assyrian history. Only later in the century, when concerns about origins peaked, was the south of Iraq systematically explored, in search of the earlier Sumerians. More recently, western archaeologists were invited to Iran by the Shah, who sought to establish close ties to the west. Their research, which led to significant revisions of the history of the region, was suddenly terminated by the revolution of 1979. The Gulf War of 1991 and the subsequent ostracism of Iraq, as well as continued bombing campaigns, further drastically reduced access to the Near East. Archaeologists sought new terrain, and many turned to northern Syria and southern Turkey. It is no surprise that the finds from these regions force us to rethink their impact on ancient Near Eastern history. The most important repercussion of these changes has been the shift away from Mesopotamia to what used to be called the periphery. Syria, Anatolia, and western Iran are much better known than before, and the documentation of cultural evolutions there has forced us to reconsider the primacy and dominance of Mesopotamia in many aspects of history.



Map 1.1 The Ancient Near East

A final point needs to be made about the distribution of sources. In the ancient Near East, there is a direct correlation between political centralization of power, economic development, the construction of monumental architecture, and the increased production of written documents of all types. Thus the sources, both archaeological and textual, accentuate moments of political strength. History is by nature a positivistic science (meaning that we discuss what is preserved), and necessarily focuses on those moments for which the sources are most plentiful. In between are what we call the "Dark Ages." The historian observes and interprets points of light, discontinuous in time and regional coverage. While the distant past is usually less well documented than the more recent one, the ancient Near East presents an exception to that rule. Although uneven, the coverage of our documentation is almost continuous for the three millennia of its history, and at times there is an abundance of sources. What is available for twenty-first century Babylonia, for example, surpasses in number and scope the written documentation from many later periods in history. The ancient Near East provides the first cultures in human history in which true and detailed historical research can take place.

1.3 Geography

The Near East is a vast landmass situated at the intersection of three continents: Africa, Asia, and Europe. Three tectonic plates meet there and their movements determine the geology of the region. The Arabian plate presses to the north underneath the Iranian plate, pushing it upwards, and is itself forced down. Where the two plates meet, there is a long depression stretching from the Mediterranean sea to the Persian Gulf in which the Tigris and Euphrates rivers flow, turning a desert into highly fertile land wherever their waters reach. The African and Arabian plates meet at the western edge of the Near East and are separated by the Great Rift, which runs parallel to the Mediterranean coast and creates a narrow valley lined by the Amanus and Lebanon mountains. There is little room for coastal settlement except in the south, where the plain widens. The north and the east of the Near East are also dominated by high mountain ranges, the Taurus and Zagros, which contain the sources of all rivers in the region. The south of the region is a huge flat landmass, containing the Syrian and Arabian deserts. These become more mountainous the further south one goes and are almost entirely deprived of water.

Geological phenomena, earthquakes and volcanic eruptions, as well as the effects of wind, rain, and water have created a highly diverse area. Quite in contrast to the popular view of the Middle East as a flat monotonous expanse, the variation in natural environment is enormous. This is true not only for the varied wider regions (coastal areas, deserts, alluvia, etc.), but also on a local scale, where great ecological variations exist in distinct micro-environments. Two examples demonstrate this. Babylonia, the area between the Persian Gulf and modern-day Baghdad, may seem an area with little diversity, relying on

irrigation by the Euphrates and Tigris rivers for its survival. The two rivers run through a narrow plain that is extremely flat: it rises less than 30 meters above sea level some 500 kilometers inland. But very different geographical zones are contained within that stretch. In the north is a desert plateau where agriculture is only possible in the narrow river valleys. Somewhat downstream the rivers enter the alluvium, but still have clearly defined channels. South of the city of Babylon, however, they break up into numerous branches which run almost on top of the land, and their courses shift constantly. Finally, south of the ancient cities of Ur and Lagash, the region becomes completely marshy, and agriculture is impossible.[1] Several ecological zones are present in close proximity to one another. The far north is uninhabitable, the northern plain allows an irrigation agriculture of square low fields over large areas, while the southern plain requires elongated fields lined with furrows. The south had access to varied resources from the marshes: fish, reeds, and so on; the north relied more on animal husbandry. Great differences are thus visible in the area we summarily call Babylonia.

In the mountains of the Lebanon there was an even greater variety of natural environments. The Beqa'a valley in the rift between the Lebanon and Anti-Lebanon ranges is some 100 kilometers long by 25 kilometers wide. On a map this small area looks uniform, but there are numerous local differences in its ecology. The high mountains cause plenty of rainfall on the western side; the area to the east is consequently dry. Springs, while numerous, are unevenly dispersed through the region and the Orontes river is not a good source for irrigation water. Hence, wetlands alternate with very dry areas, zones of intensive horticulture with zones where only animal herders can survive. The valley is thus a collection of what has been called micro-ecologies, each enabling different lifestyles.[2]

Within the vast area of the Near East, we have to recognize great variability in natural environments. However, there are certain basic characteristics with important repercussions for the livelihood of the inhabitants. Agriculture, the prerequisite for the permanent settlement of populations, is difficult. Rainfall is scarce almost everywhere because the high mountains in the west leave large parts of the Near East in the rain shadow. Agriculture that relies on rain, so-called dry farming, requires at least 200 mm of water annually. The 200 mm isohyet, that is, the line that connects those points of equal rainfall, runs through the Near East in a great arch from the southern Levant to the Persian Gulf. The mountains and foothills receive more rain, the plains less to almost none at all. But the line on the map is misleading: annual variability is great and there is a large marginal zone which at times receives sufficient rain, at times does not. Rainfed agriculture is only guaranteed when one reaches the 400 mm isohyet. The effect on human settlement is drastic. South of the 400 mm isohyet, agriculture is possible only if rivers are available to provide irrigation water. The Tigris and Euphrates rivers afford a lifeline to the Mesopotamian plain where rainfall is scarce and erratic. These two rivers and their tributaries, the Balikh, Habur, Greater and Lesser Zab, Diyala, Kerkheh, and Karun,

originate in the mountains of Turkey and Iran where rainfall and snow feed them. As perennial rivers, their water can be tapped to irrigate the crops with careful management and using techniques that will be discussed later in this chapter.

Long periods of drought could easily have occurred in the timespan we study here, however. While we can assume that over the last 10,000 years the climate in the Near East has not substantially changed, it is certain that even marginal variations could have had serious consequences for the inhabitants. The question arises as to whether the so-called Dark Ages resulted from a drying of the climate which made rainfed agriculture impossible in zones usually relying on it, and which lowered the rivers to such an extent that irrigated areas were substantially reduced. Or should we focus on human factors in trying to explain such periods? So far, insufficient data on the ancient climate are available to serve as a historical explanation for the drastic political and economic changes we observe.

A second important characteristic of the geography of the Near East involves the question of boundaries. These are created by mountains, seas, and deserts, which could all be crossed, although in limited places and with special technology only. The Zagros and Taurus mountains were massive barriers to the states of Mesopotamia, and could only be entered through the river valleys. Military expansion was thus always restricted there, even by such mighty powers as Assyria. The mountain ranges in the Levant left a narrow corridor only for movement from northern Syria to Egypt, and control of individual valleys denied passage between the two. Mountains were also the habitat of many uncontrollable groups that often tried to enter the states we will study. To the dwellers of the plains, the mountains must have presented a fearful and inhospitable sight.

Seas form a very different kind of boundary, the Mediterranean and the Persian Gulf being the most important. They do create a border, but once crossed, they provide access to regions at great distances. Thus the Persian Gulf, and the span of marshes at its head, form the southern border of Mesopotamia, but from the fifth millennium on, inhabitants of Mesopotamia sailed in primitive crafts to regions along the Gulf coasts. In the late fourth millennium sailors may have reached Egypt that way, and in the third and early second millennia direct seaborne contacts with the Indus valley were common. The Mediterranean was a different prospect. Only a few harbors existed along its coast, none south of Jaffa. By the late third millennium, however, Aegean sailors had ships that could reach the Syro-Palestinian coast, and in the second half of the second millennium, shipping throughout the eastern Mediterranean was common. Around 1200, technological innovations on boats enabled people from Syro-Palestinian harbors to sail long distances, and the entire Mediterranean came within their reach. First-millennium Phoenicians established colonies as far west as Spain and the Atlantic coast of north Africa.

More formidable as a border was the great desert stretching between Mesopotamia and the Levant. For millennia, people from Mesopotamia could

only make their way along the Tigris or Euphrates river valleys and cross the northern Syrian steppe to reach the Mediterranean. With the domestication of the camel around the year 1000, direct passage became possible, although infrequent. Even when small companies of people could cross directly through it, the lack of water still forced armies to take the age-old roundabout route through the Levant and northern Syria to get from Egypt to Mesopotamia. The desert, like the mountains, was home to groups feared and hated by the settled people, nomads whose lifestyles were despised and who were impossible to rule. Even if the desert could be crossed, the states of the Near East could not control them.

This permeability of boundaries not only allowed Near Easterners to move outward, but also enabled outsiders to enter the region. The Near East's position at the juncture of three continents is unique in the world. Populations from Africa, Europe, and Asia have moved into the region from early prehistory till today, causing interaction, exchange of technologies, and increasing pressures on the natural resources. This may explain why so many "revolutions" in the lifestyles of humans have taken place there: the emergence of modern humans, of farming, of cities, and of the first empires. It is certain that population movements took place during ancient Near Eastern history, but to study them is difficult. While we can say with confidence that the Mongol and Turkish tribesmen who invaded Iran and Iraq in the thirteenth century AD came from inner Asia, we are not so certain about the origins of the Hittites, for instance. Perhaps, as speakers of an Indo-European language, they indeed came from a region north of India and arrived in Anatolia in the early second millennium, as many historians used to think. But the presumed Indo-European homeland north of India could be a pure phantom, and speakers of Indo-European languages could just as easily have resided in Anatolia from prehistory on, only entering the historical record in the early second millennium. The same is true for so many populations – Sumerians, Hurrians, Sea Peoples, Israelites, and so on – who once were thought to have invaded parts of the Near East. To reprise the earlier metaphor, the Near East is this one area of light in a world of prehistoric darkness. People suddenly appear in its spotlight. It may be impossible to establish whether such people came from far away or nearby – or if they had always been in the region where they first appear in the documentation.

1.4 Prehistoric Developments

We must undertake the study of the long cultural evolution of prehistory from a perspective that takes the entire Near East into account. Despite the great ecological diversity in the region, we see simultaneous developments in several places. These were inspired by indigenous forces, not imported from the outside. The absolute chronology of events is still uncertain and debated, but we have a good idea about overall trends. Especially with the beginning of the

Neolithic period around 9000, important cultural developments occurred that established the setting for the later historical Near Eastern civilizations.

The most crucial technological development was agriculture, which enabled the existence of societies in year-round settlements. This evolution took place over several millennia and involved the domestication of plants, primarily cereals, and of animals. The archaeological sites where we see these changes occur are usually located at the borders of different ecological zones, whose occupants took advantage of varied plant resources and hunted different animals. The ecological variety of the Near East described above may in fact have been one of the reasons why agriculture evolved there so early. People became so used to having access to a variety of food resources that they sought to guarantee the supply by interfering in the natural growing cycles of preferred crops and animals.

For millennia, humankind had lived by gathering its food from local resources, and moving when these were exhausted. The hunting of wild animals probably complemented a diet that relied primarily on wild cereals, fruits, legumes, fish, shellfish, and whatever else the environment provided. Small groups were forced to move around seeking shelter in caves and the like. Their lifestyle should not necessarily be considered as harsh and difficult. Ethnographic studies have determined that the life of early farmers was more arduous than that of hunter-gatherers, especially in the resource-rich area of the Near East, where food could be readily collected without much effort. The question of why people moved toward agriculture thus remains difficult to answer. Settled life in larger communities may simply have been more socially appealing. Also, many of these changes in the interaction between humans and their natural environment may have been unintentional, their effects only noticed gradually after many seasons.

Direct control of the food supply via cereal agriculture was achieved through a series of probably unconscious steps from the eleventh to seventh millennia as humans became more practiced at sowing, husbandry, harvesting, and storage. Wild cereals have two characteristics that cause problems for human consumers – they have weak stems so that their seeds easily disperse and fall to the ground before they are harvested. Also, it is hard to get at their seeds, which are covered with strong husks in order to prevent premature germination. When harvesting, people would gather more seeds that had not fallen to the ground from plants with stronger stems, and such plants would be promoted once seeds were sown. More consciously, people may have selected grains with thinner husks for sowing, hence propagating such species. Over many centuries, through selection and cross-breeding with wild grasses, the einkorn and emmer wheats that grow wild in the Near East mutated to develop into the modern bread and club wheats.

Selective hunting of wild animals also replaced previous indiscriminate killing. Wild herds were culled to procure a proper age and gender balance, and were protected from natural predators. Sheep and goats became the most common domesticates, and among them preference was given to breeds that provided

the most resources, such as sheep with thick wool coats. Over time, humans became responsible for all aspects of the animals' existence, whose behavior had now totally diverged from that of their wild progenitors and whose physical attributes had become very different as well.

Thus there was not a sudden change from hunting-gathering to farming, but rather a slow process during which people increased their reliance on resources they managed directly, but still supplemented their diets by hunting wild animals. It is clear that the process was not irreversible. Sometimes populations had to return to a hunter-gatherer existence or increase their intake of wild resources when the domesticated supply did not meet their needs. We have to keep in mind that both lifestyles existed in the same geographical area: agriculture developed where wild resources were abundant.

Agriculture enabled an increase in continuous settlement by people. The various archaeological cultures we can distinguish between the years 9000 and 5000 demonstrate a greater permanence of residence, larger communities, and an increased usage of domesticated over wild resources. The house is the attribute of sedentary life that is best distinguished in the archaeological record. In the Levant, houses were built of stone or with stone foundations; elsewhere in the Near East their walls were of piled mud, and later of mudbrick. The settlements became increasingly large, which demonstrates the ability to provide food for greater numbers of people. A shift from round to rectangular houses took place in the ninth millennium, showing the cohabitation of larger groups of people with some type of social hierarchy and a specialization in room use. In the earliest villages of the ninth millennium, people used clay storage bins to keep wild and domesticated cereals, but in the eighth millennium they developed fired pottery. Although perhaps not a major technological breakthrough, since it was merely an extension of earlier storage practices and work with clay, it was useful for cooking and enabled people to store goods safely. Coincidentally, pottery provides the archaeologist with an extremely useful tool for dating excavated remains, in part because it was a constantly developing technology (see box 1.2).

By 7000, completely agricultural villages existed throughout the Near East, all of them located in areas with sufficient rainfall for farming. In Anatolia and the Levant, there was an abandonment or contraction of earlier sites and a return to less complex societies. The focus of subsequent cultural developments shifted at this time to the east, especially the region below the dry-farming area, namely the plains of Mesopotamia. Shortly after 7000, farming communities developed in areas of northern Mesopotamia with insufficient rainfall, consequently relying on irrigation. The technology of leading water from rivers and basins to crops had already been used much earlier in areas such as the Levant, but with the move of settlements into arid zones, irrigation became essential and better organized. Unlike the Nile in Egypt, which provides water in the late summer just when it is needed to prepare wet fields for planting seeds, the Tigris and Euphrates rivers rise in the late spring when almost full-grown plants can be damaged by too much water. The rivers in Mesopotamia

Box 1.2 *The use of pottery in archaeological research*

Ceramic remains are an important tool for the archaeologist. Pottery is ubiquitous in the archaeological record, the shards are almost indestructible, and styles of decoration as well as pot shapes change relatively rapidly over time, indicating the tastes of distinct groups of people. Just as in our day the shape and decoration of soda bottles develop over time and we can date a photograph by the shape of the bottle in a person's hand, so the changing styles of pottery in antiquity can be used as a way of dating sites and the archaeological levels within them. Consequently, prehistoric cultures are often named for the type of pottery that represents them: Hassuna, Samarra, Ubaid, and so on, whose pottery styles were first identified in the sites with those names (see figure 1.1). When several ceramic assemblages are found in a stratigraphic sequence, we can establish their relative chronology. All *tell*s of the Near East are covered with potsherds that represent the periods of occupation. Thus even without excavation, the archaeologist can determine when a site was inhabited on the basis of pottery remains.

are at their lowest when the sowing season arrives. A system of canals and storage basins had to be developed to control the water and allow it to enter the fields only when needed. The system did not have to be elaborate and could be managed by small communities, but still there had to be an awareness of the cycles of the rivers and the crops, and planning and organization were required to irrigate using the Mesopotamian rivers.

Small irrigation systems were created first in the foothills of the Zagros, and probably also at the edge of the marshes in southern Babylonia. Before the technology could be extended into southern Mesopotamia, however, it had to be further developed. The extreme flatness of the plain readily exposed fields to floods, especially from the Euphrates, which has almost no valley at all. The river, with its many branches and human-created canals, had to be carefully managed. Any time it overflowed, a natural levee developed from the deposit of silt left behind by the water losing its speed. While these could be reinforced artificially and turned into dikes, sedimentation between them often led to riverbeds being higher than the fields around them. There was no natural drainage of water deposited in the fields, and the high temperatures in the region led to evaporation and a high level of salt in the soil, arresting the growth of plants. Moreover, the water table rose after irrigation, damaging roots when it came too near the surface. Over the millennia, inhabitants of southern Mesopotamia developed the technology to irrigate increasingly larger areas, but it is important to remember that the practice started on a small scale, using the many branches of the Euphrates. Between 6000 and 5500, permanent settlement in the lower Mesopotamian plain became common and remained a constant feature.

Figure 1.1 Samarra period decorated bowl from Tell al-Sawwan, Iraq: Courtesy Columbia University, Department of Art History and Archaeology

Chart 1.1 Chronology of the prehistory of the Near East

date BC	*Levant*	*Anatolia*	*N. Mesopotamia*	*S. Mesopotamia*
9000				
	Proto-Neolithic (PPN A)			
8500				
	Aceramic Neolithic (PPN B–C)			
7000				
	Pottery Neolithic		Proto-Hassuna	
6500				
	Amuq B		Hassuna/Samarra	
6000		Chatal Hüyük		
	Halaf	Halaf	Halaf	Early Ubaid
5500				
5000				
4500	Ubaid	Ubaid	Ubaid	Late Ubaid
4000				Early Uruk
	Chalcolithic			
3500			Uruk	Late Uruk

Primarily on the basis of pottery styles, a sequence of cultures is delineated by archaeologists in the period from 7000 to 3800: Proto-Hassuna and Hassuna in the rainfed areas of northern Mesopotamia in the seventh millennium, and Samarra in the irrigated zone of the north in the late seventh millennium. The west of the Near East was characterized at the time by a less-developed culture identified as Amuq B. The sixth millennium saw a massive expansion of the north Mesopotamian Halaf culture that ranged over the entire rainfed zone abutting the Mesopotamian plain and extended into the Levant. Areas previously occupied by the Samarran culture have not yielded archaeological remains, but southern Mesopotamia became permanently settled by people using a cultural assemblage we call Ubaid. Around 4500, this Ubaid culture replaced the Halaf in the north and in the Zagros mountains.

The most remarkable aspects of these cultures are their wide geographical spread and their long-distance contacts. Keeping in mind the fact that these were small communities without any organization beyond the village level, the spread of a cultural assemblage such as that of Halaf from the central Zagros to the Mediterranean coast is astonishing. There are limited remains and local differences are blurred, but aspects of Halaf's material remains are quite specific, such as the unique layout of its houses which stands out as a marker of this culture. At the same time, we observe that luxury materials were obtained from very distant regions. For instance, obsidian was only naturally available in central Anatolia, but it is found in sites throughout the Near East. The success of Chatal Hüyük, a large site in central Anatolia that existed from ca. 6500 to 5500, is often thought to have resulted from its trade in this volcanic stone. Less prestigious goods were obtained in distant regions as well. Ubaid pottery produced in southern Mesopotamia was found along the Persian Gulf as far south as Oman, and scholars have interpreted this as the remains of fishing and pearl-diving expeditions.

Another characteristic of these early cultures is their longevity. The Halaf culture lasted almost a millennium and was gradually infiltrated by that of the southern Ubaid. The latter's durability over almost two millennia, and the high degree of cultural continuity it demonstrates, are startling. These factors seem to suggest that once communities had settled in lower Mesopotamia, they retained a stable and local development. They preserved the same material culture throughout their existence, only gradually becoming more extensive and complex.

Primary among the social developments were the rise of a hierarchy and the centralization of powers and functions, a result of the growth in size of communities. There are fundamental differences visible between the north and the south of Mesopotamia in this respect. In the southern Ubaid culture, some members of the communities had a distinct status, as indicated by the larger size and the particular layout of the buildings they inhabited or supervised. The power of these newly developed elites seems to have derived from control over agricultural resources. Among the families forming communities, one would emerge to supervise the storage of harvests in a central location. This is already visible in the south, whereas the contemporary Halaf culture in the

north exhibits a high degree of social homogeneity. When the Ubaid culture spread into Halaf territory after 5500, social differentiation arrived there as well. The new elites are visible to us in their claim to rare and exotic foreign goods. Possibly they were immigrants from the south who imposed a type of political authority over the weaker local families and controlled long-distance trade. Only late in the Ubaid period did they start to exercise the type of local agricultural dominance visible earlier in the south.

The physical focus of these centralized functions seems to have been a building that may already be called a temple. Starting in the mid-sixth millennium, the site of Eridu in the far south of the region shows a sequence of increasingly larger buildings on the same spot, culminating in a great temple of the late third millennium. Projecting the function of early historical temples back in time, it is likely that from the early Ubaid period onward, this building functioned both as a centralized place of worship and as a center for the collection and distribution of agricultural goods. In some of Eridu's archaeological levels, masses of fish bones have been found, which seem to be the remains of offerings made to the deity of the temple. A social organization beyond the individual household was thus developing within communities, with all families of the settlement contributing to the temple cult. There also developed a hierarchy of settlements in the far south of Mesopotamia, a few measuring 10 to 15 hectares surrounded by smaller ones that were usually only 0.5 to 2 hectares in size. This demonstrates that individual communities became integrated into a wider cooperative territorial organization.

The prehistoric evolutions summarily sketched here demonstrate that many of the cultural aspects of later Near Eastern history developed over long periods. A culmination of these processes occurred in the fourth millennium, when the coalescence of several innovations led to the establishment of Mesopotamian civilization. These events will be discussed in more detail in the next chapter.

NOTES

1 P. Sanlaville, "Considérations sur l'évolution de la basse Mésopotamie au cours des derniers millénaires," *Paléorient* 15/2 (1989), pp. 7–9.

2 Peregrine Horden and Nicholas Purcell, *The Corrupting Sea: A Study of Mediterranean History* (Oxford: Blackwell, 2000), pp. 54–9.