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THE EARLY SETTLEMENT OF SOUTHERN MESOPOTAMIA: A REVIEW OF RECENT HISTORICAL, GEOLOGICAL, AND ARCHAEOLOGICAL RESEARCH*

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The archaeological overview of the ancient Near East provided by Nissen in this volume covers the years 9000–2000 B.C. By necessity, the book briefly treats the Paleolithic and the Early Neolithic developments in the greater Near East; recent strides made in the fields of Paleolithic and Neolithic archaeology could not be detailed. The heart of the book focuses on two facets of human settlement in southern Mesopotamia between 5000–2000 B.C. The first relates to the evidence for the earliest settlements in the region. Recent work in geology, archaeology, and cuneiform studies suggests a close relationship between changing sea levels, shorelines, river channelization, and the key settlement strategies of the early urban city states. Particularly important may be the relationship to the larger Arabo-Persian gulf as a whole. The second facet involves the nature of settlement, the rise of urbanization and its impact on crafts/skills such as writing, the changes in kin-based society, the permutations of political change, ethnic contrasts, and the continued changes in long-distance trade strategies. Nissen's unique analysis of these two facets justifies including the volume in the ranks of distinguished historical treatments of the ancient Near East.

INTRODUCTION

This 1988 volume is an English translation of the original 1983 German edition. Seven millennia of the human story are compressed into 215 pages, a feat that calls for skillful summary and analysis and, by necessity, the omission or abbreviation of certain data. Nissen's terminology may require some explanation. The word "history" is somewhat misleading here, since prehistory occupies more than half of the allotted time frame and archaeological evidence—Nissen's expertise—is preeminent. Nissen is certainly right in stating that writing in Mesopotamia originally had little to do with history as we understand it and that the conceptualization of history in Sumer/Akkad did not begin until the ED III period, a full six to seven hundred years after the writing system was invented (pp. 2–4). This is a point of controversy for historians, many of whom are accustomed to dealing with history of the classical era, Europe, or America. Many regard the attempt to deal with early history as an exercise in futility or, at best, a

step-child of the real thing. Modern historians of Early Mesopotamia, Egypt, China, and the Maya find themselves delving into realms often uncharted by analysts of later historical data and utilizing data often ignored in later periods. Old Akkadian texts dealing with onions (Gelb 1965) would seem to have little in common with Truman's position on the Berlin airlift, Napoleon's tactics at Waterloo, or the origins of the Chou dynasty in China. If the nature of writing is accurately portrayed by Nissen, his reluctance to relate the prehistory of the region to the historical evidence is equally interesting. If eastern Arabia was known as Dilmun by 3200 B.C., the period of earliest writing, how should we interpret the Ubaid presence in the same region beginning ca. 5000 B.C.? If the Uruk texts talk of disbursement or income in kind with various urban institutions, how should we relate these institutions to those of the earlier preliterate periods, as well as the later Early Dynastic periods? If LUGAL in the ED III period is to be translated as 'king' and EN as 'priest', what are their meanings in earlier periods?

THE TERMINOLOGY

* A review-article of: *The Early History of the Ancient Near East: 9000–2000 B.C.* By HANS J. NISSEN. Translated by ELIZABETH LUTZEIER with KENNETH J. NORTHCOTT. Chicago: UNIVERSITY OF CHICAGO PRESS, 1988. Pp. xiv + 215. \$34.95.

Nissen avoids the terms "Sumer" and "Akkad" (p. xi) in favor of the more neutral Hellenistic term "Babylonia" or "Southern Mesopotamia." This is a

poor choice, for it conjures up the impression of a region dominated by Babylon, something that did not happen within the time-frame of this book. "Sumer" is derived from an Akkadian original. The native Sumerian terms for their country (KI.EN.GI or KALAM) and "Akkad" (URI) are political, ethnic, and geographical terms occurring perhaps as far back as the Uruk IV texts. The Ur III kings called themselves "Kings of Sumer (KI.EN.GI) and Akkad (URI)." The Sumerians called themselves "the black-headed ones" (SAG.GIG) (Halla 1971: 28).

THE PALEOLITHIC

Chapter 2 introduces the reader to the Paleolithic (pp. 15–16) with a photo and section taken from Shanidar. Admittedly the scope of the book precludes a discussion of the Paleolithic in detail, but, nevertheless, the reader should be made aware of the latest developments within the last decade and their impact on the Near East. Fundamental changes involve the debate on the fossil types thought to be present in the region 200,000 years ago, the nature of sites in the region, and, especially, the relationships of fossil hominids to industries (Stringer 1988; Gowlett 1987; Copeland 1989; Clark and Lindly 1989; Mellars and Tixier 1989; Bar-Yosef 1980; Trinkaus 1986). Similarly, the latest studies of the Epipaleolithic involve questions of domestication and the changing nature of human societies even within the rubric of foraging/hunting-gathering (Bar-Yosef 1981; Henry 1989).

Such fundamental changes in the field may have direct implications for the hitherto poorly studied western desert of Iraq and the tributaries leading to the Euphrates. Hints of the Paleolithic have been reported from southwest Iraq and more recently from the upper Euphrates (Roaf and Postgate 1981: 194). The significance of the huge depressions, such as Hawr Habbaniyah, Bahr al Milh, and Malihat ath Tharthar and their relationship to a fossil Euphrates system, is just now being realized (Voute 1957; Paepe 1971; Paepe and Baeteman 1978; Baeteman 1980).

THE NEOLITHIC AND PASTORAL NOMADISM

The Neolithic materials (chapter 2) are well described as they relate to settlement types, food production, and the lower Mesopotamian plain. However, recent advances in the study of western marginal area Neolithic sites should be mentioned here. Especially critical are the studies in the regions affecting Mesopotamia, such as Palmyra, the Kowm basin, Levantine

sites such as Abu Hureyra and Ain Ghazzal, and the results from the Haditha dam salvage operations on the upper Iraqi Euphrates (summaries Moore 1982, 1985; Roaf and Postgate 1981).

A study of these western Neolithic complexes, in turn, interrelates with the pastoral nomadic revolution occurring along with the PPNB expansion (Zarins 1989, 1990a, 1990b). This major development to the west of lower Mesopotamia is overlooked by Nissen (contra p. 2). The classical studies of the western Fertile Crescent have long assumed that the agricultural revolution had no effect on the interior of the Arabian peninsula (Mellaart 1975; Redman 1978; Nissen's map, fig. 14 [pp. 50–51]; Knapp 1988: map 2–3). The ideas that a symbiotic relationship existed between both regions and that the Fertile Crescent responded to challenges vis-à-vis the interior (Tosi 1986) have even less credence among researchers of the Fertile Crescent. However, failing to recognize the inherent nature and complexity of this development could have serious consequences in trying to establish the nature of settlement in the Mesopotamian alluvium. The work in eastern Jordan, Negev/Sinai, and north Arabia has suggested that by the PPNB/C major changes were taking place on the Hamada/Jezireh that involved, in a substantive way, the sedentary populations of the Levant and lower Mesopotamia. The evidence can be gleaned from subsistence strategies, long-distance trade networks, and rock art correlates (Betts and Helms 1987; Betts 1988a, 1988b; Bar-Yosef 1981; Garrard 1984; Kafafi 1986; Rollefson 1988; Tyraček and Amin 1981; Betts et al. 1990).

EARLY HISTORICAL MESOPOTAMIA

The heart of the book is chapters 4–6 (pp. 65–107), detailing the early historical development of Mesopotamia and its environs during the period 3200–2000 B.C. Our review can be divided into three subtopics: the physical environment, the nature of settlement, and the social fabric. Our basic approach is to correlate the more easily discernible patterns of Mesopotamian life from the "historical" periods with the earlier periods known only from archaeological data (Knapp 1988: 71).

The Physical Environment

The geomorphology of the alluvium remains poorly understood; thus, trying to sort out the nature of the early occupation of the region is problematic. It is doubtful that the Euphrates has existed in its current form since the early Holocene (ca. 8000 B.C.) (Paepe

1971: 19–20; Boerma 1983: 362). The now-fossil tributaries from the western Iraqi desert are usually associated with PPNC/PN materials, and the then-active systems debauched either into the central Euphrates itself or an ancestral course running through the Hawr Habbaniya/Abu Dibbis (Voûte 1957; Mitchell 1957: 569–71). Our review of the Ramadi-Karbala region (Zarins 1990b) suggests active stream flow once occurred west of the current river. All of the data taken together would point to the existence of several major channels in the early Holocene.

The location of the Gulf shoreline during the Holocene has also been vigorously re-examined in the last fifteen years. The initial consensus following work in the 19th century (summaries by de Morgan 1900; Wilson 1925; Lees and Falcon 1952; Larsen 1975) was that the early northern shoreline was considerably inland from its present position, perhaps as far as Hit/Samarra during a Pleistocene interglacial. During the fourth and third millennia B.C., Ur, Kisiga (Tell Lahm), and Eridu, the southernmost Sumerian cities, were thus seen as being directly on the sea coast, then located approximately 100 km north of the current shoreline (Fig. 2). The work during the last two decades within the Gulf itself suggests no easy solution in juggling such variables as eustatic sea level, hydrology output, climatic variation, and tectonic activity. Nissen's arguments through these chapters are crucial to his model for human settlement in the region, thus a review of the current work should be made here.

Lees and Falcon (1952) were the first to challenge the idea of a receding gulf shoreline during the last 10,000 years and presented evidence that any deltaic advance from the active rivers was offset by local subsidence and that the current seashore has been, in effect, in place since the Pleistocene. The detailed work of the German Meteor Expedition to the Gulf in the mid-1960s, however, challenged many of the assumptions held both by earlier scholars and Lees and Falcon. For example, there was no evidence of discernible tectonic action (Sarnthein 1972: 263). The collected evidence from the expedition clearly pointed to the Gulf being dry land as recently as 14,000 B.C., with a delta forming in the Straits of Hormuz (Seibold and Ulrich 1970; summary Nützel 1975). Additional evidence that this condition existed comes from the northern part of the Gulf where drowned river valleys and ridges and troughs interpreted as drowned dunes have been found (Seibold and Vollbrecht 1969: [esp.] fig. 9; Sarnthein 1972: fig. 9 and fig. 11). A progressive infilling began in stages recognized by bench marks within the Gulf (Sarnthein 1972: fig. 10; Nützel 1975: fig. 1; Seibold, Diester et al. 1973: 77–80; Kassler

1973: 22–27). By 5000 B.C. sea-level was at -10 m present-day m.s.l. (Larsen and Evans 1978: 232), and the sea-coast was approximately 100–150 km from its present-day position (Nützel 1975) (Fig. 5). Larsen suggests in his analysis that at least two distinct river channels could be identified at the head of the current Gulf buttressing this idea (Fig. 1). Analysis of cores from the northern portion of Bubiyan Island revealed the presence of fresh water lakes dated to ca. 6500 B.C. (El-Moslimany 1983: 142, 144, and table 5), also suggesting that a complex system of lakes and streams existed in this region at the time. Between 5000 and 2000 B.C. sea level may have risen as much as 3 m above m.s.l. in an event described as the Flandrian Transgression or Hammar Transgression (Fig. 4). In other words, a 150–180 km marine progression inland may have occurred (Larsen 1975: 47, 53, 57; Kassler 1973: 27; Nützel 1975: 106–8; Larsen and Evans 1978: 232, 236) with the modern shoreline returning in stages between 2000 and 1000 B.C. The evidence for this marine transgression rests principally on the recovery of a “marine” fauna found in boreholes in the delta region (Naqib 1967: 14, 47–48) and how one chooses to interpret tidal estuarine vs. marine embayments and the nature of the ecology of the region (MacFayden and Vita-Finzi 1978: 298). However, this transgression has also been recognized in Kuwait (al-Asfour 1982: 149–50), Qatar (Vita-Finzi 1978: 14–16; Perthuisot 1980: 20–31), Abu Dhabi (Bush 1973: 396, 403), Bahrain (Sanlaville and Paskoff 1986: 18; and fig. 5), along the Saudi Arabian coast (Felber et al. 1978: 56–57 and table 7; summary Larsen 1983: 174–76), the Upper U.A.E. (Potts 1989: 270), Oman (Larsen 1985: 47 and fig. 38; Biagi et al. 1984: 48), and the southern Tihama of the Red Sea area (Zarins et al. 1984: 68; Tosi 1985) (Fig. 5).

Three distinct lines of evidence favor the current ideas of Gulf expansion and contraction during the period 5000–2000 B.C. While the discovery of the Ubaid culture in the Gulf clearly indicated that Ubaid ceramics came directly from the southern Sumerian centers such as Ur or Eridu (Oates, Davidson et al. 1977; Oates 1978), the material found belongs to the Ubaid 2–4 periods dating from ca. 5000–3800 B.C. The earliest Ubaid 1 materials (identified at Eridu) have not yet been reported. An explanation of this record may lie in examining the coast-line phenomenon detailed above. At 6000–5000 B.C. the Gulf coast-line was at -10 m (see above), thus Ubaid 1 sites would be found in areas now inundated (Durante and Tosi 1977). By 5000–4000 B.C., as part of the Flandrian Transgression, Ubaid 2–4 sites would lie at higher levels on now well-defined sabkhas. (For

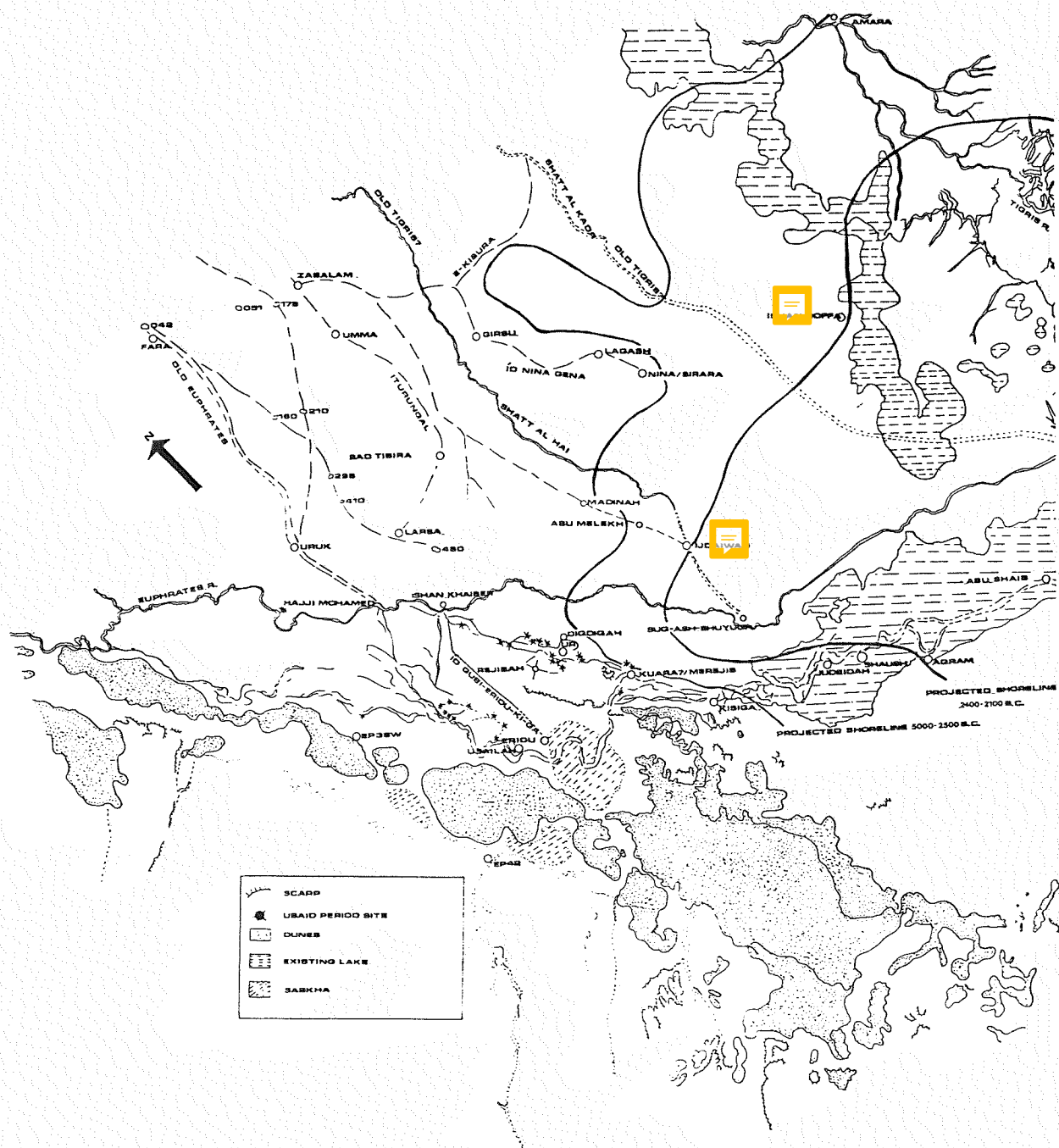
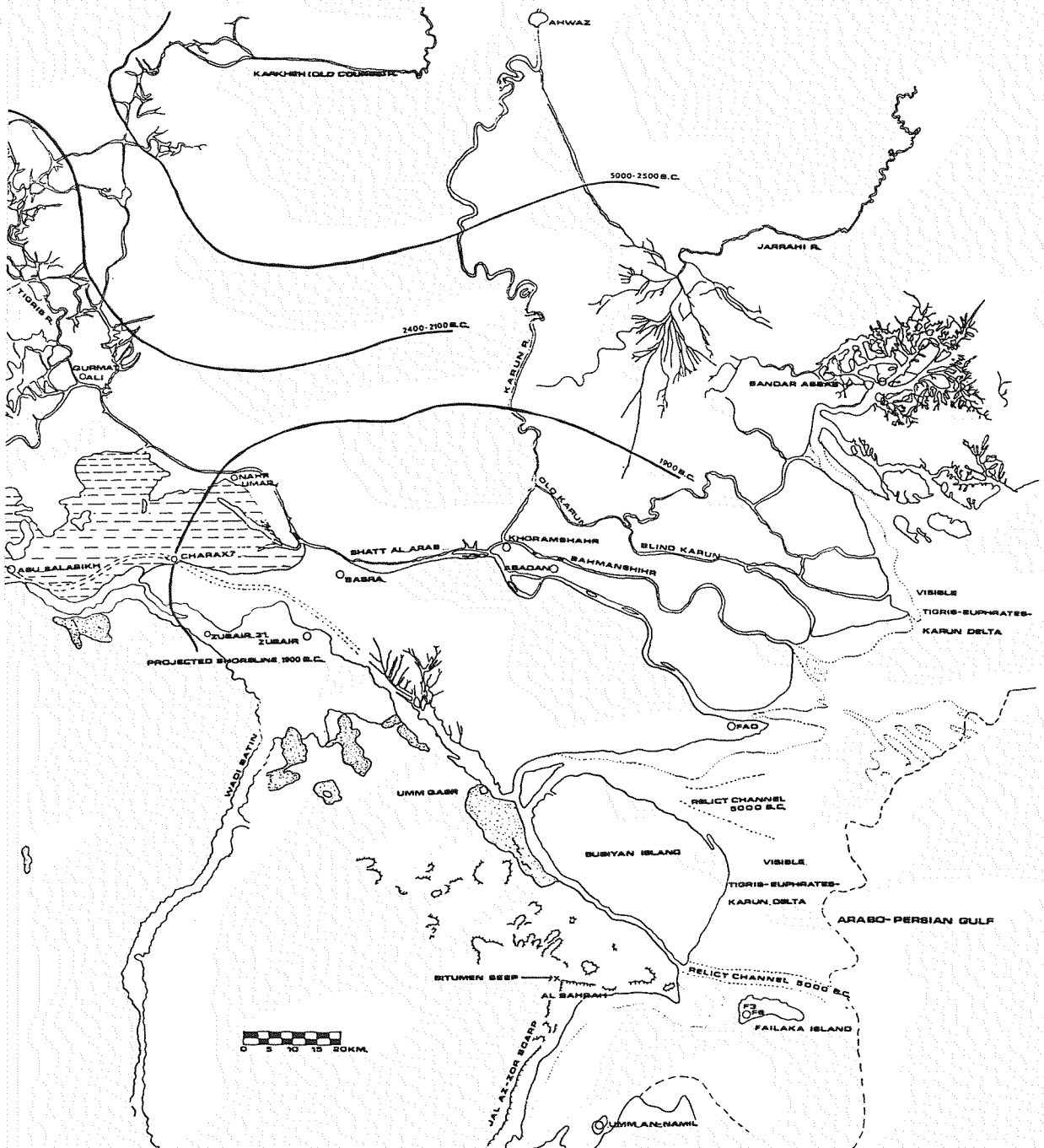


Fig. 1. The Southern Mesopotamian Delta Region Incorporating Geological, Archaeological, and Linguistic Data from



the Periods 8000–1900 B.C. (Based on the British Quarter-Inch 1940 Series).

sabkha studies, Johnson et al. 1978: 86; Smith 1978: 73; Roaf 1976: fig. 6; Masry 1974: 129–42).

In terms of southern Mesopotamia itself, how far did the Flandrian Transgression penetrate, and did Eridu, Ur, and cities of the Lagash state lie on the Gulf coastline? In his 1975 study, Larsen suggests a marine transgression as far as the Hor al Hammar (1975: 53 and fig. 2), past Zubair but not to Amara. In the 1978 version, Larsen and Evans suggest that the marine transgression may have gone beyond the Hor al Hammar (1978: 236 and fig. 2) perhaps to Amara (Fig. 3). If this is so, then perhaps a marine coastline may have existed in the Eridu/Ur vicinity beginning about 5000 B.C. Unfortunately, we have no detailed geomorphological studies of the Ur/Eridu region, and the archaeological surveys and excavations will have to suffice as a test of this geological hypothesis.

A map of the Eridu region (Fig. 1) quickly tells us that in spite of being located in a low-lying depression southwest of Ur, an eight-meter scarp of the Upper Fars formation (the Hazim) runs well to the north and south (Naqib 1967: 45), possibly blocking any marine infilling into the depression. A survey of the Ubaid period in the region reveals that only four sites were occupied during the Ubaid 1 period, including Ur and Eridu (Wright 1981: 323). While a marsh/riverine environment was exploited at Usaila (EP 104) west of Eridu, there is no basis for suggesting that either of these two sites lay on a river channel or seashore. By late Ubaid times (Ubaid 3–4), it is clear that Ur lies on a major Euphrates channel (Wright 1981: fig. 17), and a series of sites northwest of Eridu could be interpreted as forming a possible southern channel. Unfortunately, no sites have been found to link Eridu eastward to Merejib (EP 29), and again we cannot be sure that a river link existed between Eridu and the Ur-Merejib channel (Fig. 1). Eridu itself may have had close access to the sea since fish deposited in temples VIII–VI (Safar, Mustafa and Lloyd 1981: 101–, 104, 107) and the Hut Sounding (ibid., 249) datable to the Late Ubaid period have been defined as marine (Wright 1981: 324; Oates et al. 1977: 234) or as sea-perch from brackish tidal waters (Lloyd 1978: 16). An actual southern channel of the Euphrates running through or by Eridu in fact is not shown on Wright's maps until the Isin-Larsa period (Wright 1981: figs. 20–21) and was in intermittent use through the Parthian period (Wright 1981: passim to 334; Adams 1981: figs. 6 and 28). To the east, both Tello and Al Hiba were first occupied in the Ubaid period (Parrot 1948: 35–40; Hansen 1970: 244), but their location in relation to the coastline is unknown since no geomorphological studies have been carried out in the region. Parrot maintained that Girsu

(Tello) was on a major waterway some 20 km from the sea (Parrot 1948: 14).

The question of the early seashore in the Eridu region may also be examined from the viewpoint of the Hazim. During the Ubaid period, Wright does not indicate its presence (1981: fig. 17); it appears only on the Late Uruk/Jemdet Nasr period map (ibid., fig. 18). Wright had earlier suggested that perhaps it appeared as a late tectonic feature on the plain postdating the Ubaid period (Flannery and Wright 1966: 61). A tectonic map of the plain fails to support this contention (Naqib 1967: fig. 1), but more recent work on sections of the Bahram Anticline in Kuwait may provide some supporting evidence. There, marine terraces, presumably formed during the Flandrian Transgression, show warping and tilting. The relevant terraces range from a maximum elevation of +14.43 m to a minimum of +5.99 m. Associated C14 dates range from 2620 to 1610 B.C. (uncorrected) (Al Asfour 1982: 135, 139, 150, 158–59). Unfortunately, C14 dates on shell without correcting factors may be suspect and the terraces may be much older than indicated.

The final relevant line of evidence comes from Sumerian literature compiled principally in the early second millennium B.C. However, one must be careful in evaluating the data, since it is difficult to decide whether the texts are describing a current early second millennium B.C. condition or a remembrance of earlier situations. One needs to remember that the heyday of Eridu occurred before the advent of writing. Consequently, our contemporary historical knowledge of Eridu from the fourth and third millennia remains slim. The town has yielded no Archaic Period texts or any later texts of an economic nature. Eridu is apparently not mentioned in the Jemdet Nasr period *Archaic City List* from Uruk (Green 1978; Green and Nissen 1987) or from the later ED IIIa version (Biggs 1974: no. 21). In addition, little is known of the town from contemporary economic texts from Sumer or elsewhere (for a summary, Safar, Mustafa and Lloyd 1981: 34, and fig. 108; Green 1975).

From the literary texts the clear and constant link is between the term ABZU and the shrine/city of Eridu. They may be used almost interchangeably (Green 1975: 154). In most cases, ABZU/apsu may be translated as "an expanse of water" (ibid., p. 163), but of what type is not clear. Most likely it was not a swamp, and the only life living in it were mythological fish-like creatures. Does the term refer to the sea? The characteristics suggest a large, deep expanse of water, but some have suggested it meant subterranean aquifer waters (summary Green 1975: 164–67; Safar, Mustafa and Lloyd 1981: 33–34) or a Hor al Hammar-type body of water in the vicinity of Eridu. Associated

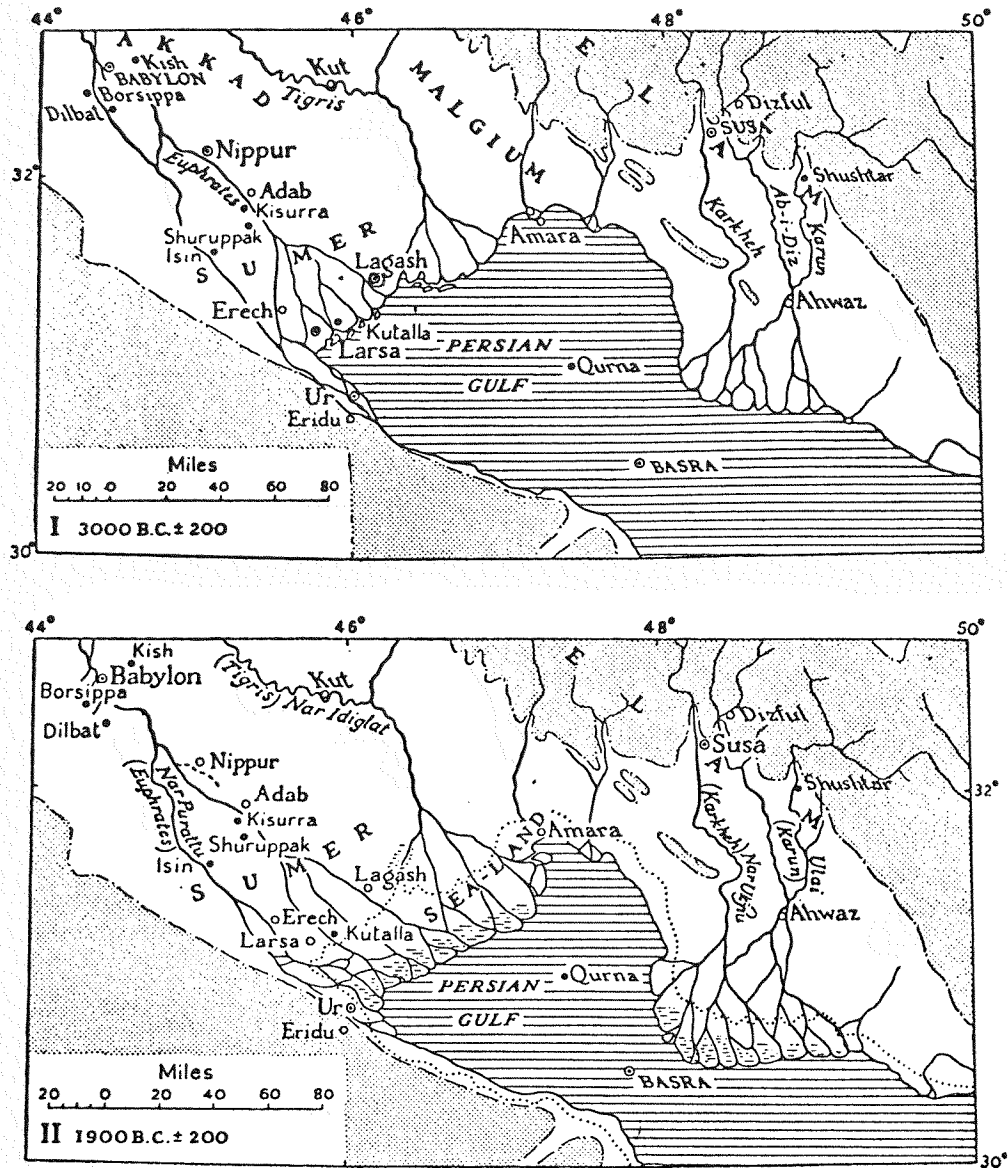


Fig. 2. Reconstructed Arabo-Persian Gulf Shoreline (after De Morgan 1900).

springs are mentioned in the literary accounts as well as seepages of bitumen (Green 1975: 167–68). The ceremonial boats journeying from Eridu to Uruk are mentioned as being caulked with bitumen. Thus, the translation of ABZU as ‘marine sea’ or ‘freshwater lake’ is still debated (Green 1975: 164, 172–73). Additionally, the Sumerian temple hymn dedicated to Asarluhi, the chief deity of Kuara, mentions that town’s intimate

relationship to the ABZU as well (Sjøberg and Bergmann 1969: 25). Many have suggested that Kuara is to be found in the vicinity of Eridu, and, like the latter, was essentially a prehistoric settlement (Jacobsen 1939: 70, n. 5; Green 1975: 10; Wilcke 1972). The town may be identified with Wright’s survey site Merejib (EP 29).

Taken as a whole, the following reconstruction can be suggested. The Eridu Depression, like others found

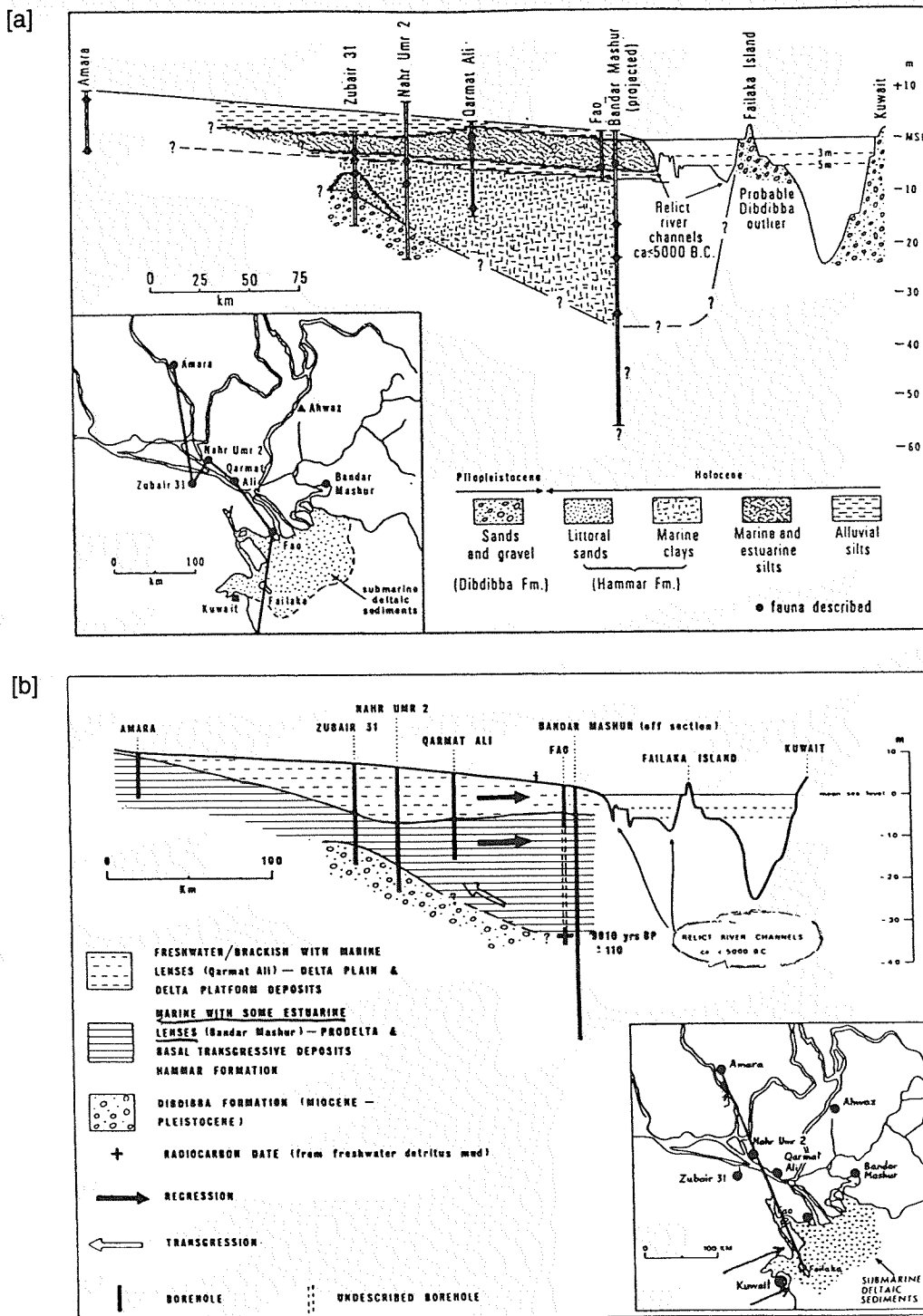


Fig. 3. Two Subsurface Profile Reconstructions of the Mesopotamian Delta Region.

(a = Larsen 1975: 54, fig. 2; b = Larsen and Evans 1978: 237, fig. 2)

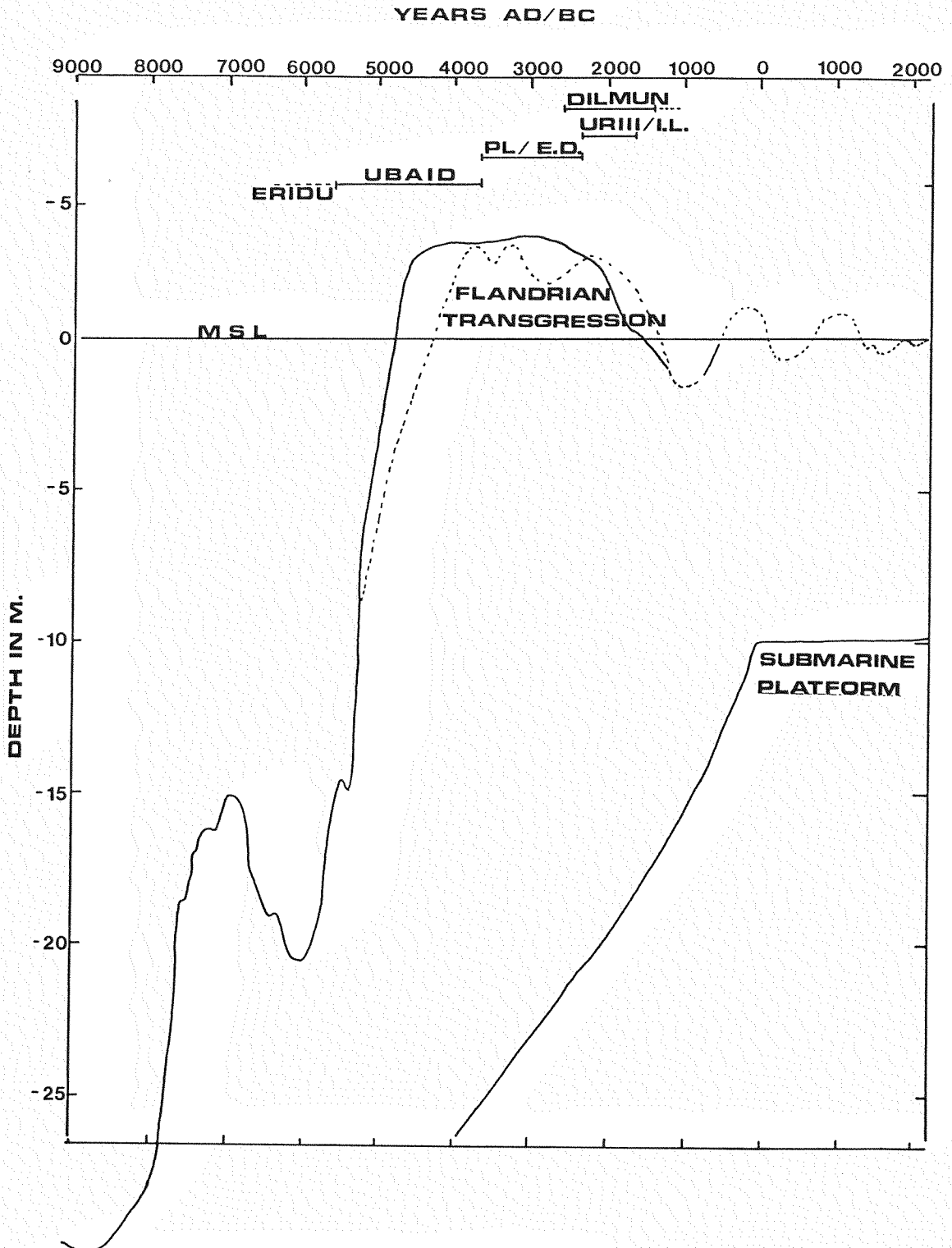


Fig. 4. Arabo-Persian Gulf Sea-level Fluctuations 9000–1000 B.C.

(Based on Kassler 1973: fig. 9; Asfour 1982: fig. 7.1; Larsen, per. com.; Sanlaville and Passkof 1986: 23; Sarnthein 1971: fig. 20; Nützel 1975: fig. 1; Felber et al. 1978: table 7)

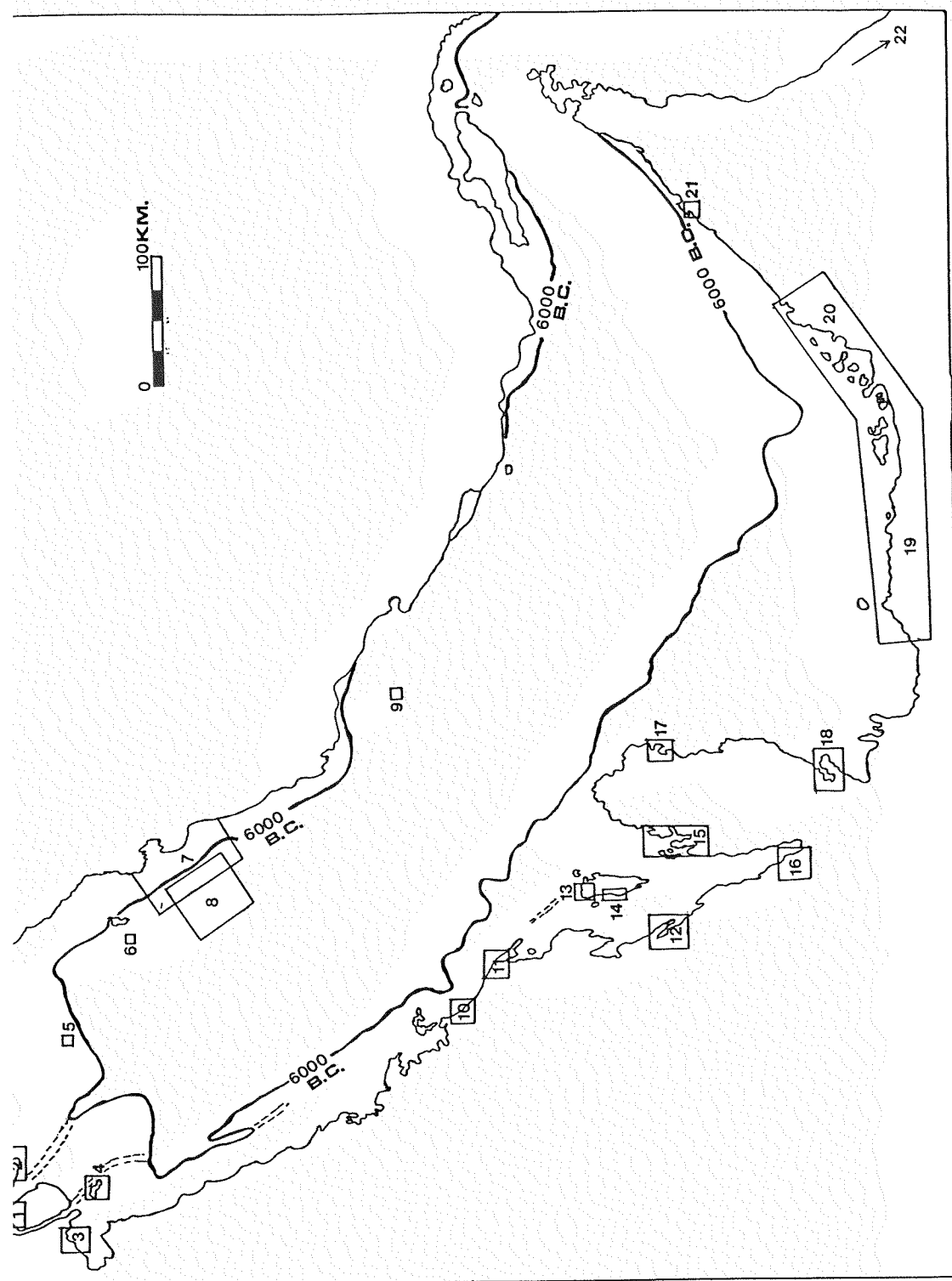


Fig. 5. Arabo-Persian Gulf Early-Mid Holocene Marine and Sabkha Studies and the Projected 6000 B.C. Shoreline.

KEY: 1= Al Moslimany 1983, 1990; 2= Wilson 1925, Lees and Falcon 1952, Larsen 1975; 3= Al-Asfour 1982; 4= Fatiaka Archaeological studies, see Højlund 1986, Kjoerum 1983, Salles 1984; 5= Sarnthein 1972; 6= Ibid.; 7= Melgoun 1973; 8= Sarnthein 1972; 9= Sarnthein 1973; 10 and 11= Felber et al. 1978; 12= Taylor and Illing 1969; 13 and 14= Larsen 1975, Sanlaville and Paskoff 1986; 15= Taylor and Illing 1969, Perthuisot 1980, Vita-Finzi 1978; 16= Taylor and Illing 1969, Felber et al. 1978; 17= Vita-Finzi 1978; 18= Perthuisot 1978, 1980; 19= Evans et al. 1969; 20= Bush 1973; 21= Potts 1989, 1990; 22= Larsen 1986.

in the Arabian desert to the west, was the locale of a fresh-water lake, active during the Pleistocene and early Holocene (see already King 1910: 35; Wirth 1958: fig. 1; not a Euphrates channel, cf. Wright 1969: 25; 1981: 326; for the Arabian evidence, see Zarins 1990a). The earliest settlements, Eridu and Usaila, were on the shores of this lake. My brief examination of the region in 1971 suggested an inland sabkha characterized by the presence of extensive shell litter and eroding black, marsh-like deposits (see also Campbell Thompson 1920: 124; Wright 1981: 323). To the southwest of Eridu, EP 42, on the other side of the dunes, is not a Middle Paleolithic site (Wright 1966), but a Late Neolithic-Chalcolithic one, typical of lithics found throughout the northern Arabian Desert (Adams, Parr et al. 1977: pl. 14; Parr, Zarins et al. 1978: pls. 40–45 passim) and thus contemporary to the occupation of Eridu. The entire Ubaid-Early/Middle Uruk sequence of occupation at Eridu can be seen as exploiting the lake resources. Following the Early/Middle Uruk period, ca. 3700–3400 B.C. the lake area was entirely abandoned, presumably due to aridity, and became sabkha (Jacobsen 1957: 98; Green 1975: 19–20).

The site, however, became a shrine or pilgrimage center tied to the Ur Euphrates river channel by a large offtake canal near Ishan Khaiber running through Rejibah (Wright 1981: 326–27 and fig. 18). This evidence can be supported both by buildings in the Eridu vicinity (Safar, Mustafa, and Lloyd 1981: 273–304) and royal inscriptions mentioning Eridu. The north mound residence was shown to have Late Uruk antecedents (levels XV–VI) and a large scale formal layout for the ED I–III periods. Correspondingly, Elili of Ur (ED IIIa), and Entemena and Urukagina of Girsu (ED IIIb) mention work on the *apsu* in Eridu (Sollberger and Kupper 1971: 44, 66, 80). Ur-Nammu and Amar-Sin of the Ur III period have left brick inscriptions at Eridu itself (Safar, Mustafa and Lloyd 1981: 228–29). Numerous Isin and Larsa kings (1953–1763 B.C.) are associated with the site (see below), most likely in light of the rejuvenated river system in the area (for the later ritual Sumerian accounts, see Green 1975; Jacobsen 1960: 180–83).

The presence of a major lake, perhaps fed by western tributaries as well as the Euphrates overflow, does not preclude the proximity of a marine shoreline. I would suggest that the Hazim was in place and that the cliffs represented an effective deterrent to a major marine transgression into the Eridu lake basin. However, the shoreline was near Ur, and followed a northward extension to the proximity of ancient Girsu and Amara as suggested by Larsen and others. Marine shells have been found in Eridu Ubaid deposits (Camp-

bell Thompson 1920: 124; cf. a *Conus* sp. bead of marine origin, Safar, Mustafa and Lloyd 1981: fig. 117/ no. 27).

Literary texts mentioned above emphasize the connection between the Eridu waters and bitumen. While seepages within the middle Euphrates system are well known (e.g., Hit [Naqib 1967: 1], Abu Gir [Marschner and Wright 1978: fig. 1]) further to the south no sources are mentioned (*ibid.*, fig. 1). Conceivably, seepages could have been present along a past shoreline, in the area of the Rumaila oilfields or even within the Hazim scarp in the Eridu vicinity (Naqib 1967: 26, 43, 45; first millennium B.C. clay vessels found at Nahr Umar were bitumen-lined, Roux 1960: 22). Perhaps sources further to the south were exploited that necessitated a sea voyage. Seeps are reported from at least three localities in Kuwait (Milton 1967: 1–2, 7). Possible sources may be present in Bahrain and eastern Saudi Arabia and have been reported from Oman (Cleuziou and Tosi 1989: 44, n. 11).

Certainly during the Ubaid and Uruk periods bitumen was exploited at Eridu. Ubaid implements were found inset in bitumen, and a small animal head was modelled in bitumen (Safar, Mustafa and Lloyd 1981: figs. 116/10 and 117/25–26). At Ur, clay female figurines of the Ubaid period often had an application of bitumen on the head (UE IV 1956, pls. 20–22). In the Uruk period at Eridu, mortar walls were bonded with bitumen (Safar, Mustafa and Lloyd 1981: 81) and stone cones were set into bitumen for wall decoration (*ibid.*, figs. 118–19). Bitumen has been found at Ur in various contexts following the Ubaid period and from ED I context at Sakheri Sughir (Marschner and Wright 1978: 154, 160). The material continued to be associated with the Gulf and southern Sumer (for Iranian examples and sources, Marschner and Wright 1978: fig. 1). It is well attested from the early second millennium B.C. levels on Failaka (Calvet 1984: 57, n. 7). The use of bitumen for basketry and as a ceramic wash is well known through the third and early second millennium B.C. in east Arabia and Bahrain (Zarins et al. 1984: 36, with references). Further to the south, bitumen artifacts are known from Qurum, RH5 in Oman (Cleuziou and Tosi 1989: 30 and fig. 4) and at Ras al Junayz, where it was used in caulking sea-going boats (Bacquart and Cleuziou 1987: 51–55; Cleuziou and Tosi 1988).

In sum, the evidence from the Eridu depression suggests that initial occupation was along a lacustrine shoreline and that by 5000 B.C. the initial Flandrian Transgression the sea was in the vicinity of Ur. By the middle of the fourth millennium B.C., dessication had set in and caused the abandonment of the site. This

should be seen as part of the larger dessication of the Arabian peninsula (e.g., Schulz and Whitney 1986).

When the sea level began to recede is unclear; geologists suggest a retreat in stages covering a thousand years (between 4000 or 3000–2000 B.C., Bush 1973: 396, 403; Larsen 1975: 53). Nissen suggests that as sea level began lowering after 3500 B.C. other changes caused a massive improvement in human settlement on the plain (pp. 55–56). By the JN/ED I period (fig. 24, p. 73), water began to be restricted to a few major courses, and the marsh-like scene began to change. By ED II times, the lowering sea level and decreased volume of river water caused irrigation stress and population consolidation (pp. 129–32).

The textual evidence from the ED III period, principally from Girsu, however, intimates that the earlier marsh-like environment at the head of the Gulf had now been merely pushed southward. The Lagash state Sumerian fishermen were aware of the unique ecological setting of the southern alluvium and exploited all of the niches available. Fresh water or sweet water fishermen (šu-ḥa a-dūg-ga) exploited backslope levees (šu-ḥa gán or šu-ḥa gán-gú-edin-na; Fö 64, VAT 4808, Riftin 2, VAT 4836), large canals or the Euphrates (šu-ḥa íd-maḥ; DP 292), small canals (šu-ḥa e; VAT 4769, 4696, Fö 64), and submerged irrigated fields (šu-ḥa šu-lum-ma). Šu-ḥa a-šeš (BIN VIII/361, Fö 25) is usually translated as 'fisherman of bitter or brackish waters' perhaps in estuarine conditions. The usual translation of šu-ḥa a-DUN-a (DP 304, VAT 4626) is 'bank or pool fisherman' or perhaps 'coastal fisherman'. The final category is šu-ḥa a-ab-ba (Fö 24; at Fara the term is Šu-ḥa ab, Lambert 1954: 188 and n. 696) usually translated as 'fisherman of the sea' or 'marine fisherman' (Deimel 1931: 98; Salonen 1970; Bauer 1967: *passim*; an Oakk text from Girsu mentions ku₆-ab-ba "marine fish" Donbaz and Foster 1982: no. 36).

Girsu (Tello) is over 300 km from the present shoreline. Did the Gulf extend to the vicinity of the site around 2400 B.C., or did the term a-ab-ba refer to a large body of open water such as the current Hor al Hammar? (Adams 1981: 15, 31). Our answer depends upon the geography of the Lagash state in the third millennium B.C. The evidence suggests that during the Early Dynastic period Nina/Sirara, a major town, may have functioned as a seaport. According to Gadd, Urukagina states that the town was located near or on the sea (1971: 130). The relevant inscriptional lines in Urukagina's Reforms Text reads: ^dNanše íd-nina-ki du íd ki-ág-gá-ni al mu-na-dù kun-bi ab-šà-ga mu-na-ni-lá, 'For Nanše, the canal going to Nina, the canal which she loves, he dug. Its end (reservoir?) he

extended to the midst of the sea' (Ukg 4–5 obv II/9–15; Sollberger 1965: 50; cf. Deimel 1920: 7; Kramer 1963: 317). In a zà-mì hymn of ED IIIa date from Abū Šalabikh, Nina/Sirara is mentioned in connection with the sea (Biggs 1974: 54). Perhaps, southwest of Nina/Sirara, another city, Eninkimar, may have been another seaport. Mentioned prominently in the ED period (Gregoire 1962: xviii, 134; Biggs 1974: 49 line 165; Bauer 1972: 449; Edzard, Farber, Sollberger 1977: 48, 61), it may have been somewhat north and inland of the later Guabba. Abu Melekh or Madinah on the boundary canal may be the tentative sites for this port (Jacobsen 1969: 104–5, 109; see Fig. 1).

By Ur III times, the lowest water levels were reached (Nissen, p. 194). Adams suggests that a major cycle of wind erosion took place around that time (1981: 31). Had the sea receded to a much lower level? The Eridu Lamentation Hymn suggests that the canal or marshes in the vicinity had dried up by early I/L times (Green 1978: 159–60). From Dīdīqah, near Ur, several cone inscriptions of Ur-Nammu state that he re-established a registry place on goods brought by sea merchants coming from Oman (Magan). This place was by the shore of the sea (gaba a-ab-ba-ka). The reestablishment suggests a moving away from an earlier location. Since the cones came from near Ur, perhaps the sea was still not too distant during this period (Jacobsen 1960: 184–85). In addition, in the Ur III period, Ur texts mention salt-water fishermen and marine fish (UET III 1294, 1297, 1302, and 1314). One text specifically refers to 'fishermen of the seashore' (šu-ḥa gú-ab-ba, UET III 292).

The Lagash evidence suggests that the sea was receding. Beginning with the Oakk and Ur III periods the principal seaport for the state was the newly founded Guabba (literally 'seashore'; mentioned in Oakk texts attributed to Rimush and later, Donbaz and Foster 1982: no. 5, 63, Foster 1982: 51, 150, Nik. II 27, and common in Ur III texts, Edzard and Farber 1974: 63–65; Gregoire 1962: 46, 48). The location of the seaport is uncertain since no survey of the region has been conducted in detail. Falkenstein (1966: 28–29) and Diakonov (1969: 527) have suggested that it was perhaps located either on a lagoon of the Gulf or a series of marshes/lakes north of the seashore. The Sumerian temple hymns collated in the Oakk period, describe Guabba as "a house which extends over the midst of the sea" (Sjoberg and Bergmann 1969: 33). The phrase is almost identical to that used to describe Eridu. Ur III texts (ITT V 6946) suggest that the sea had indeed receded since it took 18 days' rations to go from the sea (a-ab-ba-ta) to Guabba. From Guabba to

Šilluṣ-Dagan an extra 12 days were required. ITT III 5084 (AS 9) states that five towing days were necessary to go from Guabba to Girsu, which, at 10 km per day, would put Guabba roughly 50 km from Girsu. Diakonov suggested that Guabba was 50 km south of Girsu (1969: 527), and Falkenstein placed it in a triangular position in opposition to Girsu and Nina (1966: 40). Heimpel, in a survey of the marshes, proposed that the town was 50 km east of Girsu, perhaps identified with an Islamic tell—Ishan Hoffa (Heimpel 1976: 528) (Fig. 1). This would place Guabba perhaps in the vicinity of an old Tigris bed (summary Foster 1982: 162 n. 18). We would propose that Guabba be linked with modern Ijdaiwah to the southeast of Girsu, where appropriate age remains have been found (Jacobsen 1969: 105; cf. Edzard and Farber 1974: map 2). This reconstruction separating Eninkimar and Guabba would help explain the Ur texts of Ur III date, which mention Eninkimar and never Guabba (UET III 260, 1518, 1519, 1546, 1672; Gregoire 1962: 130–32; Jacobsen 1953: 178, 181; Wilcke links Guabba and Eninkimar in the Ur III period, 1972: 47 n. 23a).

Another rather astonishing fact, however, begins to emerge. A major southern channel of the Euphrates appears around 2000 B.C. passing by what once was Eridu (Safar, Mustafa and Lloyd 1981: 32 and fig. 2). No natural water source had been reported in the region since mid-Uruk times. Presumably the channel appears well upstream of Ur from Uruk (or from modern Samawa, cf. Adams 1981: fig. 6). This channel, possibly following an old Pleistocene bed, was established and maintained from the Isin-Larsa period through Parthian times. In contrast, the Ur branch became a minor stream and was used with difficulty (Wright 1981: 330–36, figs. 21–24). What was the stimulus for this change? Wright provides no answer, but we notice that a major change in dynastic succession took place at this time, created in large part by Amorite invaders (Zarins 1986: 234–45). The “destruction” of Eridu in the I/L period in the Eridu Lament is attributed to the Elamites and Subareans, and the author speaks of Eridu as a living city in the same sense as Ur and Nippur (Green 1978: 137). But the city had long only served as a cultic center. The Isin-Larsa invaders and their heirs from Ishme-Dagan to Rim-Sin turned out to be the chief patrons! Water may have been diverted for the Eridu channel, since it was more important for people inhabiting the southern desert, the “sealands,” and those creating new commercial ties with Dilmun. Should Site 34 and “a continuous network of settlements south and west of Ur” be seen as part of the Amorite Isin-Larsa and OB dynasties (Wright 1981:

330–31)? In effect, Ur shared central political and religious duties with a growing power emanating from the marshes and the southern Eridu basin.

During the Ur III period, the receding coastline, discussed above, can be followed along this southern channel. A reconnaissance of the region southwest of Tell Lahm turns up a number of sites that may have had their origin in the late Ur III period (Oates 1960: 50; Adams 1981: 347, n. 7) and follow a projected channel through the southern Hor al Hammar. These sites include Judeideh (Campbell Thompson 1920: 143), Shaush (Roux 1960: 29), Tell Aqram (ibid.), Abu Shaib (ibid., 28–29), and Abū Ṣalābikh (ibid., 24–28). Wilson suggested a number of years ago that this old southern channel (edin-Eridu, ʾid-ku-ga or ʾid-gu-bi-eridu-ki-ga, Green 1975: 8–9) flowed through Zubair, the Khor Zubair/Abdullah, and created a delta now seen as Warba and Bubiyan Islands (Wilson 1925: 226; Buringh 1957: 36; Roux 1960: fig. 1; Milton 1967: 4). Alternatively, the channel may have turned northeastward and formed a small delta near Qurmat Ali. The proposed path for this channel is supported by the earliest occupation of Failaka Island, perhaps ancient Agarum (Glassner 1984: 48), which, due to the lowering of the water level, now emerges during the late Ur III period directly south of Bubiyan (cf. Larsen 1975: fig. 2) (Fig. 3). Projecting the elevation necessary for the island to be exposed (+2 m above m.s.l.), places the seashore somewhere between Fao and Qurmat Ali (Fig. 1). In addition, excavations on Failaka clearly point to an occupational history only beginning with the Isin-Larsa period (Højlund 1986: fig. 62; 1989: fig. 7; Kjoerum 1983: 154; Calvet 1984; Calvet and Pic 1986; Salles 1984; Glassner 1984). Of special interest is the fact that an Ur III presentation seal found at Abu Salabikh (Roux 1960: 24) can be matched at Failaka (Kjoerum 1983: 154–55 and nos. 368–69). This would suggest that Failaka lay under water or was uninhabitable until the end of the third millennium B.C. Recent work in Umm al-Qaiwain supports the receding shoreline idea. At Tell Abraq, researchers have identified the “Middle Holocene” shoreline dated to the sixth-fourth millennia B.C. as well as a receding later third millennium B.C. coast (Potts 1990: 17). Thus, during the subsequent second millennium B.C., the coastline was largely affected by shifting channels and sediment delta-building. By the first millennium B.C. and later, the shoreline could have been in the areas proposed by De Morgan in 1900 (see Larsen 1975: 44 and fig. 1), Roux (1960: 31), Adams (1981: 15) and Wilson (1925: *passim*). To what extent future shoreline changes will be subject to varied influences poses a challenge to future research.

The Nature of Settlement

Nissen's ideas concerning the early settlements in lower Mesopotamia during this period are excellent (pp. 59–60), particularly as they relate to the development of stratified society (see below). An interesting question relates to the location of Eridu, its earliest settlement and relationship to Ubaid sites in Kuwait (Umm an Namil and Ras al Sabya) or those submerged under the Gulf head. Concerning the area west of the Euphrates, sites of this early period should be found on the tributaries of the southern Euphrates leading to Akkad, not Sumer (Zarins 1990b). In chapter 4, Nissen logically and succinctly describes how towns and cities may have originated with the concomitant increase in urban populations. He convincingly pieces together multiple variables to define the appearance of "civilization" (pp. 65–71). Nissen is in favor of the "late" arrival of the Sumerians (p. 69). The gradual but inexorable changes in the countryside also profoundly changed the nature of settlement. As sea level fell and water volume decreased, the productive land required less natural irrigation (pp. 69, 74) and fewer people. This, in turn, led to consolidation and population concentration in towns. By the ED II period, 90% of the population lived in cities, and small scale communities ceased to exist. The creation of highly stratified urban societies coincided with competing city states, as seen by the creation of urban forcefields, competing buffer strips, and borderlands (pp. 129–32).

The Mesopotamian plain also became increasingly diversified as well. Nissen suggests that the plain was divided into two parts: northern and southern Babylonia. The northern part was characterized by more river channelization and the Euphrates there was slow moving with little latitude to develop (Paepe and Baeteman 1978: 46–55). In contrast, the southern part of the plain was less restrictive and much wider. There, the plain is criss-crossed by a braiding Euphrates. Thus, it is apparent that in this northern alluvium, sites are fewer, more linear in pattern, and less dense, suggesting a distinctly different usage of the plain than in the south (Adams 1972: 182–83, 1981: 155). Historically the northern part was labelled URI (Akkad) and the south Sumer (Jacobsen 1957: 93). The distinctive ecological differences led to historical differences in political outlook, ecological adaptation, and land usage (Zarins 1990b; Steinkeller [in press]).

The Social Fabric

1. *Writing.* Nissen handles the artifacts of civilization (writing, cylinder seals, large-scale artwork, and

monumental architecture) exceedingly well (pp. 74–107), providing the student with basic interpretations and insightful commentary. Several points need to be stressed here. The nature of Mesopotamian history is peculiar, to say the least. From the time writing was invented (the Late Uruk period) to its use as real history (the ED IIIb period), a substantial period of time elapsed (p. 155). What was written down and how it should be read (and interpreted) was also subject to the caprice of circumstance (p. 138). However, with the introduction of writing, regardless of how little we understand the communicated messages, new information was being added to the previously exclusively archaeological data. In handling the material involving profession lists and "ration" texts, Nissen perhaps is too conservative (pp. 80ff.). With the accessibility of ZATU (Green and Nissen 1987) and future volumes in press, more may be made of the texts themselves (e.g., animal husbandry texts, Green 1980; or simply historiography, Green 1981). For students of early Mesopotamian history, the early texts not only create problems of interpretation, their difficulty usually means they remain untransliterated and untranslated as well. (See fig. 31 [Nissen, p. 81] and MSL XII:3–23 for the ED Standard Professions List.)

2. *The Extended Household.* An attraction of studying Mesopotamia is the opportunity to examine the nature of change, from a small-scale Neolithic society to a complex, urban one. How did those changes come about, and when did they happen? When did centralized administrations begin to support and encourage stratification (Lamberg-Karlovsky 1986a: 195)? Did Mesopotamian city states have antecedent chiefdoms (Zagarell n.d.)? What kind of "residential complexes" were the Eanna Precinct Buildings (Nissen, p. 98; fig. 38)?

The nature of Mesopotamian society during the period 3200–2500 B.C. when writing was introduced remains particularly elusive and debatable. Nissen describes rigidly structured economic units without defining them (p. 83). Based principally on the large body of ED IIIb texts discovered at Tello (Girsu) in the last century, Deimel (1931), Schneider (1920), and others (Falkenstein 1954; Knapp 1988: 69) have described a redistribution system dominated by the temple (Templewirtschaft) or state (Staatswirtschaft). A counter viewpoint was initiated by Diakonov (1954) and Gelb (1969), who suggested that a "private economy" was at work as well. Examination of the evidence proceeds along textual and archaeological lines. Nissen's explanation of the beveled-rim bowl phenomenon (pp. 83–85) (cf. Beale 1978) suggests that the "ration" system so characteristic of the later historical periods may

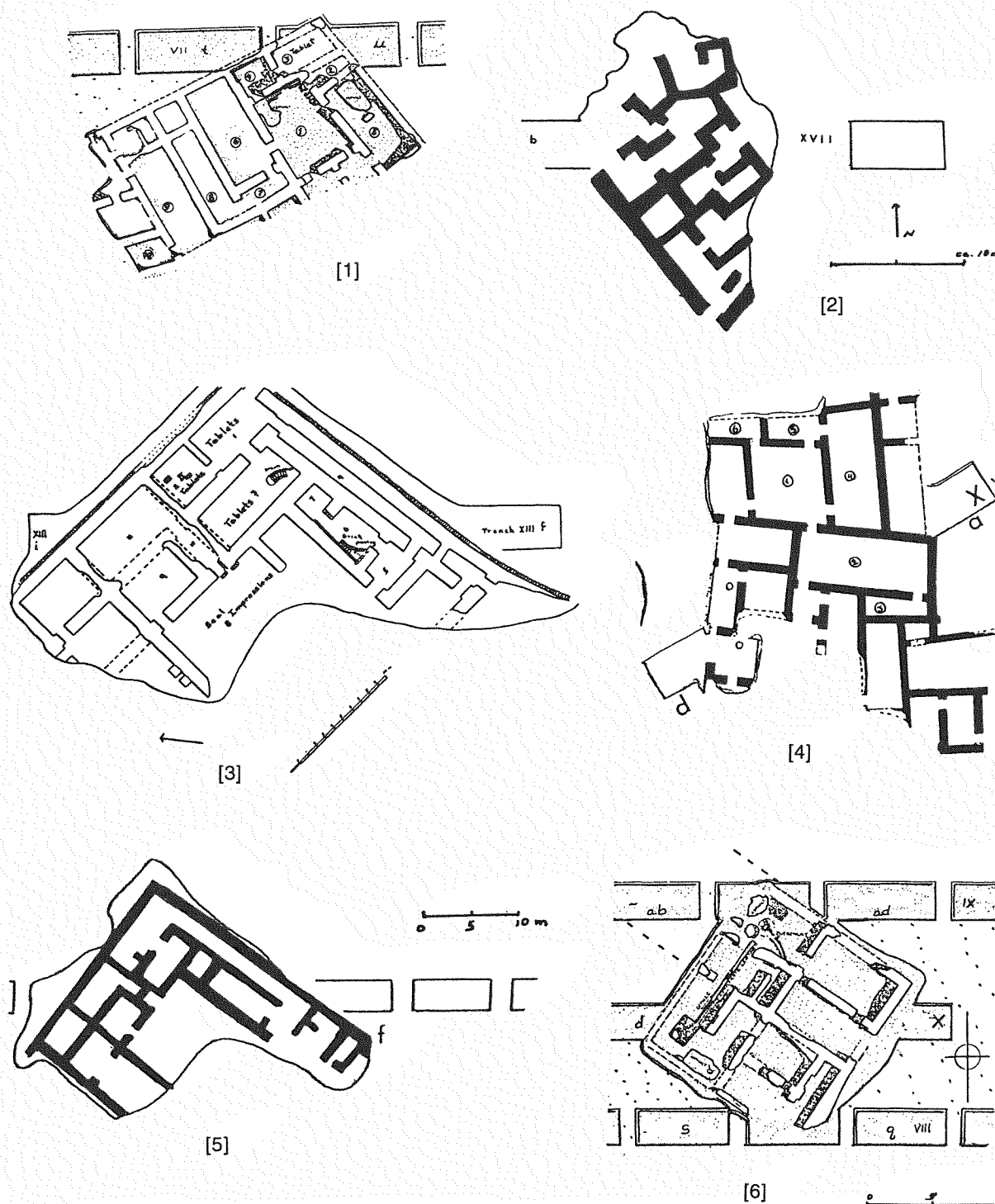


Fig. 6. ED IIIa Architectural Structures Associated with Provenanced Tablets from Fara (Ancient Shuruppak).

1. Martin 1988: 162, fig. 25; 2. *ibid.*, 163, fig. 27; 3. *ibid.*, 162, fig. 24; 4. *ibid.*, p. 161, fig. 23; 5. *ibid.*, 161, fig. 22; 6. *ibid.*, 162, fig. 26.

have originated in the Uruk period. The Late Uruk texts themselves mention "allotment of sustenance, lists of sacrifices, keeping of animal herds" (p. 89). ED I-II texts from Nippur are labelled as dealing with "various commodities with personal names" (Buccellati and Biggs 1969: 5). The Ur Archaic texts, our largest corpus of the ED I/II period (Burrows 1935), consist of "allotments" or "deposits" associated with personal names, titles, or place names. These materials were "probably distributed by a central institution of some kind" (Wright 1969: 105-6).

By far the best (and most frustrating) evidence comes from Shuruppak (Fara). Here, in Martin's reanalysis, structures such as the "Tablet House" (Martin 1975: 178-79; 1988: 86-101) (Fig. 6) are labelled "households," which controlled other people of uncertain political/economic status. The nature of these estates *vis à vis* formal political control of the town (temple vs. palace) remains to be analyzed in detail (Martin 1988: 127, 118-19; 1975: 175), and the question has been debated over many years. The importance of extended kinship groups has also been debated (p. 94). Martin's work is the first to use philological analysis and archaeological data for a fourth or third millennium B.C. site. (For OB period studies, see Harris 1975; Stone 1987; Luby 1990). However, the ancient land-sale documents (dubbed "kudurrus" by Gelb) shed considerable light on the nature of society (at least in Akkad) during the early periods of writing and help reinterpret other historical documentation. Their main characteristic is the sale of kin-based land to powerful individuals. The majority of the texts belong to the ED II-III periods but many go back to the origin of writing (e.g., the Blau Monument and the Walters Tablet). The texts make it clear that a hierarchical pattern was followed for the "sellers." In other words, "kinship/corporate, extended family units," perhaps part of a large, multi-storied kin group of the conical-clan type, were selling off agricultural holdings. (A typical text from Fara of the ED III period, unlabelled as such, is fig. 54 [Nissen, p. 138]; see *SRU* no. 6). The most outstanding and famous sale belongs to the OAKk period. In the Obelisk of Maništušu, eight pieces of land totalling almost 10,000 acres are purchased by Maništušu from numerous, clear sets of ranked-kinship groups. (For the latest interpretation, see Glassner 1986: 103-9; Gelb et al. 1990). Why was this land sold? Zagarell notes that these documents are a sign that all is not well (1986: 416). Nissen indirectly has provided the answer in his investigation of the changing nature of the Mesopotamian countryside (see above). He states that the land around the cities could be highly productive and tilled by few people (p. 69)

and that through time an increasingly smaller area was naturally irrigated (p. 74). Pressure on city states to diversify and support a large dependent population led to the abandonment of the countryside and possibly the creation of the household ration system (pp. 129-32). Thus, the kudurru sales reflect this sale of land and migration to urban centers.

These agnate households (Lamberg-Karlovsky 1986b) or territorial communities were prevalent in the Ubaid-Uruk periods, but by the ED period were beginning to lose their hold, based on the rise of an urban elite. The well-known political analyses of Jacobsen involving the interaction of elders, councils, and leaders of the council (Jacobsen 1957; Nissen pp. 94-95) and the so-called Kingir league may well fit into this social picture. Finally, the debate over social stratification and the nature of labor, ranked kin, and autonomous ownership goes hand-in-hand with the debate over the early meaning of the terms 'big man' (LUGAL) 'priest' (SANGA) and 'priest ruler' (EN) as well as 'mayor/governor' (ENSI and ENSI GAR). The evolution in meaning for these terms may mirror a transition from kin-based chiefdoms to state monarchies within the period 4000-2500 B.C. (Earle 1987: 287-88; Knapp 1988: 70-71; Zagarell n.d.). The table below (p. 71) may well mirror such a change. Note the shift from names traditionally associated with temples and temple personnel from the earliest periods to interpretations, by the OB period, as to the nature of religious versus secular power. A case in point may be the title LÚ+GAL, 'king'. Its initial occurrence in the Jemdet Nasr period (Green and Nissen 1987: 240 no. 334) may have had the meaning 'war leader' (Jacobsen 1957: 103-4 n. 19) with separate households (é-gal) (ibid., 113). The term also meant 'owner' as in 'owner of fields' (lugal gán) (SRU 117) or 'owner of houses' (lugal é-a-ke₄-ne) (SRU 33). This term referred to no ordinary owner but a powerful kin leader who had control over considerable real estate. Thus, in the Enhegal case (SRU 114), he is seen as both owner and 'king' of Girsu. The title had come to define secular political power probably by the ED II period, displacing earlier temple titles (Jacobsen 1957: 125 n. 74). Incorporating Nissen's ideas on severe ecological change and the socio-political origins of cities in Sumer, we see the lugal landowner/war leader able to concentrate resources, people, and wealth to his advantage—outstripping both the temple and kin groups in the region.

3. *The Gulf and Beyond.* The expansion of Mesopotamian society is documented by archaeological and historical data in virtually all directions from Sumer. Nissen discusses the relationship to the Susiana plain

Changes in Selected Sumerian Socio-political Terms
as Expressed in the *Standard Professions List*

<i>ED List A</i> [attested from Uruk IV levels]	<i>ED List B</i> [Fara only]	<i>ED List E</i> [AbS and Gasur]	<i>Proto-Lú</i> [OB in date]	<i>Lú = ša</i> [canonical from OB]
1. ŠITA.GIŠ.NÁM (1)	1. Sanga	1. PA.TE.SI	1. lú	1. lú=šá-a
2. NÁM:ĤÚB		2. sanga	2. lugal	25. ši-ta ŠITA= šar-ru
3. NÁM:DI		4. ugula	4. sukkal	26. eš-da ŠITA.GIŠ.KU = šar-ru
4. NÁM:NÁM		6. nu-banda ₃	5. sukkal-maĥ	41. lugal = sar-ru
5. NÁM.URU		7. ĜIR.NITA ₂	11. sukkal-ensi ₂	87. sukkal = suk-ka-lum
14. GAL:ŠITA		9. sukkal-gal	12. sukkal-sanga	110. gal-ukkin=mu- ² -i-ru
16. GAL-UKKIN		10. gal-ukkin	14. gal-ukkin-na	117. gal-zu-ukkin-na=
18. GAL:SUKKAL		12. sag-uru	15. gal-zu-ukkin-na	rab pu-uĥ-ru
(from MSL XII)				

(pp. 107–15) and to the north (pp. 115–24), but it is difficult to decide whether the foreign locales reflect “completely independent local development” influenced by Sumer (p. 120) or were built by “people . . . coming . . . directly from the southern lowland plains” (p. 121). Recent work in Lower Egypt at Buto recovered stone cones and beveled-rim bowls indicative of the Late Uruk presence even in Egypt (von der Way 1987, 1988). Nissen touches on the developments in the Gulf only in passing (pp. 126–27) but we now know that steatite vessels (Arabia, Oman, Iran), copper (Magan), turtle shells, marine shells (coastal Oman), and quarried stone were traded from a wide variety of venues to Sumer during the periods involved (e.g., Weisgerber 1980, 1983, 1984; Cleuziou and Tosi 1986, 1987, 1988; Zarins 1978; Kohl, Harbottle, Sayre 1979). It is of interest to note that the island of Failaka apparently represents the northernmost extension of the Gulf culture (Salles 1984: 9–19) and that Ubaid sites in the United Arab Emirates such as Jazirat al-Hamra, site 69 in Umm al Qawain, Hamriyah in Sharjah, and a site in Ajman, as well as the stratified tell at Abraq (Potts 1989), represent considerably larger earlier Mesopotamian influence in the further Gulf than previously thought (Henricksen and Thuesen 1989). The vigorous ED I expansion into eastern Saudi Arabia (Zarins 1989; Piesinger 1978) is well documented; its influence may have extended as far as Oman.

4. *Sumer vs. Akkad.* Most students of history see a major break in southern Mesopotamian history with the advent of Sargon and the creation of an “Akkadian” state generally in opposition to the earlier “Sumerians.” In early scholarship this analysis, on occasion, took unfortunate turns (summary by Jacobsen 1939a).

Nissen’s first mention of the Semitic presence in Mesopotamia (pp. 138–39) comes in a discussion of ED III names and class strata. His passing reference to “non-settled people” (p. 142) occurs in the context of city-state competition (Jacobsen 1957: 109 n. 36; Edzard 1965: 63–67). Nissen’s contextual development of Sumer vs. Akkad (his northern vs. southern Babylonia) hinges on geomorphological grounds (pp. 144–45). The “King of Kish” title accurately mirrors the control of Akkad by these powerful rulers from the capital at Kish. Archaeologically and historically, their power developed in the Jamdat Nasr period and culminated in the ED I–II periods (Mallowan 1965: 79–80; Zarins 1990b). This can be shown by the tribal term TIDNUM used in the Ur III period (p. 196) for a group of Semitic pastoralists called generally MAR.TU. In the ED IIb period, the term is used by Eannatum in an uncertain context. In the Archaic Texts from Uruk, we now see that TIDNUM may have been the older name for the MAR.TU as a whole, occurring in the Jamdat Nasr period. Of additional interest we should note that Nissen sees Kish as the “capital of northern Babylonia” (p. 145). Did the south have no capital, or did Nippur serve as a cultic one? Of course, one could argue that the distinction between Sumer and Akkad (Sumerians and Akkadians) probably goes back to the Ubaid period, if not beyond. With the discoveries at Ebla (mentioned by Nissen, pp. 158–61), and the ED levels at Mari tied to Abu Salabikh, a much larger Semitic influence sphere is now seen (Biggs 1967, 1981; Gelb 1981, 1987, 1989), one which dramatically influenced Sumerian writing and literacy. For example, the use and spread of the Semitic calendar suggests a greater influence earlier than generally realized (Pettinato 1977).

Our understanding of the Sargonic period in southern Mesopotamia is hampered in part by the mystery of Agade's location (p. 167; cf. Weiss 1975). (For a study of Akkadian-period texts from a Sumerian town, the so-called mu-iti texts, see Foster 1982; however, the vast bulk of OAKK texts published in autograph copy or briefly listed in catalogues remain unstudied.) For the succeeding Ur III period, in spite of the voluminous Drehem texts, numerous problems remain, many of which are centered on the nature of Sumerian bureaucracy and administration. The break-up of the Ur III dynasty (5 rulers in 109 years) must be seen within the larger context of the EB IV disintegration throughout the Middle East (Dever 1987). The well-known Ibbi-Sin letters concerning the MAR.TU (Jacobsen 1953a) give us a rather clear picture of the general turmoil in the region at the time. The recently published late Ur III and early Isin-Larsa letters from Tell Asmar admirably help fill in the picture (Whiting 1987: 23-29).

THE TEXT AS HISTORY

For whom was this book written? The dust-jacket claims that it provides a much-needed overview. How does this text then differ from Hallo 1971, Whitehouse 1977, Postgate 1977, Knapp 1988, Redman 1978; Roux

1964, Saggs 1962, Hawkes and Woolley 1964, Kramer 1963, Mallowan 1971, and Gadd 1971, to mention a few? It seems clear that the main value of the book is the presentation of Nissen's ideas on the subject matter, not a mere historical recitation. One weakness, then, is adequate documentation. This is surely the result of editorial policy. It says nothing about the scholarship of the author, who is undoubtedly aware of virtually all of the points raised in this review. Students of the field are familiar with these ideas and know which are Nissen's and which are not; introductory students and general readers would not. The earlier *Fischer Weltgeschichte* (1965) and Knapp's 1988 text are very similar, with few cross references. On the other hand, the CAH, which is much more voluminous, has an extremely cumbersome referencing system. Hallo's work (1971) perhaps may be a happy medium. Nissen's caution in interpreting data may have been influenced by Oppenheim's overly pessimistic evaluation of the organizational and religious aspects of Mesopotamian society. The lasting value of the text reviewed here is Nissen's ability to take the material with which he is most comfortable and add fresh insights and data without needing to justify every point. Our goal here has been to present some of this background information.

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COMPARATIVE DICTIONARY OF THE ETHIOPIC LANGUAGE*

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About one hundred twenty years after the publication of Dillmann's monumental Ethiopic Lexicon, Leslau's *Comparative Dictionary* marks a vigorous revival of Ge'ez studies. The new dictionary is planned to supplement Dillmann by indicating the pronunciation of each word, by including all the words listed in Ethiopian scholarly literature—in the addenda to Dillmann and in various glossaries—or other vocables collected from texts. Its most remarkable aspect is the comparative and etymological data, in which Leslau's dictionary is one of the richest available for any Semitic language. In the present review, the book is examined as to its arrangement and editing, lexicographical sources, method of transcription, the information it offers on matters of grammar and usage, and some points of detail.

THE APPEARANCE OF LESLAU'S new comprehensive dictionary of the Ethiopic language is an historic event in the fields of Ethiopian studies, Semitic and Hamito-Semitic linguistics, and the study of African languages. Even so, a hundred and twenty-two years after the publication of Dillmann's monumental *Lexicon*, the new *Comparative Dictionary of Ge'ez* has not come to replace the old classic, but to supplement it: Dillmann's remains the authoritative lexicon¹ where the textual evidence for each vocable is profusely referred to and amply quoted, the only way of distinguishing authentic Ge'ez words that are common in the old Ethiopic Scriptures and can be assumed to belong to the period when the language was still alive from sporadic transcriptions of foreign expressions, occasional borrowings, glosses of unknown usage, pseudo-Ge'ez forms derived from Neo-Ethiopian languages and simple mistakes. But Dillmann had hardly any information to offer concerning the pronunciation of Ge'ez; the fact that his *Lexicon* does not mark gemination is especially disadvantageous. And, as is well known, Dillmann's etymological suggestions are, in spite of his great efforts, completely unreliable. Leslau's *Comparative*

Dictionary is therefore planned, first and foremost, to indicate as accurately as possible the pronunciation of each word, and to provide for each entry a full list of cognates and parallels with etymological comments.

Two other innovations of the new *Comparative Dictionary* are of no minor importance: (1) Leslau has decided to include all the words listed in the Ethiopian verb-lists, *sawāsaw* and scholarly compilations, besides supplementing Dillmann with vocables collected from S. Grébaut, various glossaries and texts. (2) Leslau's dictionary is written in English. Even scholars well versed in Latin would find (even more than a century ago) great advantage in expressing in a modern language "quelques idées mal à l'aise sous leur costume latin,"² and Dillmann himself felt, when he came to write his Ethiopic grammar, that to write it in Latin would be "restricting and cramping" (hemmend und beengend) and to read it would be painful.³ All the more so in our time; for many students the fact that Leslau's is the first Ethiopic dictionary written in English⁴ outweighs all its other qualities, especially as the Latin translations in Dillmann's *Lexicon* and in the glossary to his *Chrestomathia aethiopica* are often cumbersome. For those who need just a handy Ethiopic-English dictionary for practical use, a concise

* This is a review article of: *Comparative Dictionary of Ge'ez (Classical Ethiopic): Ge'ez-English/English-Ge'ez with an Index of Semitic Roots*. By WOLF LESLAU. Wiesbaden: OTTO HARRASSOWITZ, 1987. Pp. xlix + 849. DM 248.

¹ Kidanä-Wäld Kəfle's *Mäṣṣafä säwasəw wä-gəss* (K or KWK in Leslau's dictionary), which will be preferred by students who read Amharic, is based directly on Dillmann's *Lexicon* (wherefrom it quotes most of the textual excerpts) with many additions.

² H. Derenbourg in *Journal Asiatique*, 6^{ème} série, t. 9 (1867): 426.

³ Dillmann, *Äthiopische Grammatik*, vii.

⁴ Beside the negligible list in Mercer's *Ethiopic Grammar* (1920), 104–16, the only Ge'ez-English vocabulary available is the Glossary in Th. O. Lambdin, *Introduction to Classical Ethiopic (Ge'ez)* (1987), 381–449.