

Tell Leilan

on the Habur Plains of Syria

Leilan photographed from the west. Seen from a distance the modern village, which is built on top of the Acropolis, probably looks much as the site did in antiquity.

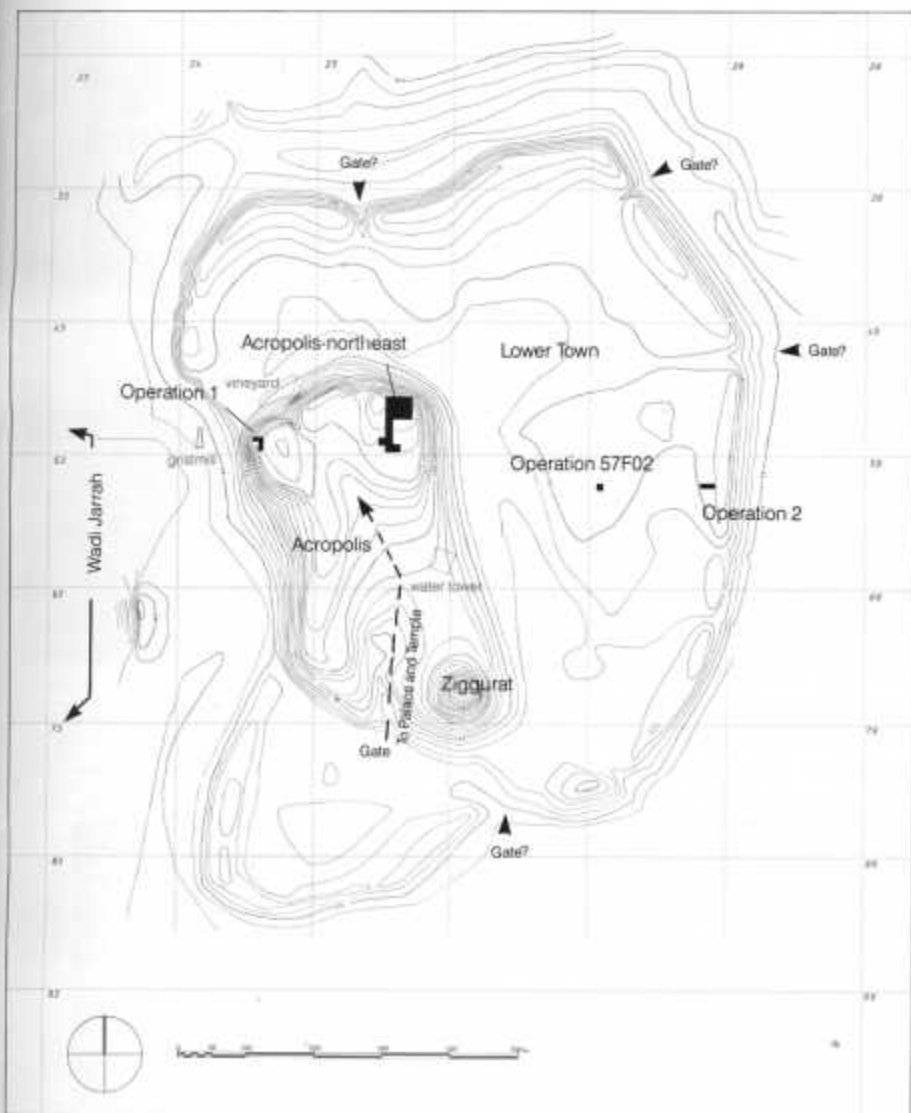
BY HARVEY WEISS

Tell Leilan is certainly one of the more imposing sites in northern Mesopotamia. Situated on the left bank of the Wadi Jarrah, in the heart of the fertile Habur Plains of northeastern Syria, the massive extant walls rise more than 15 meters above the level of the plain, and enclose an area of some 90 hectares (900,000 square meters), making it one of the largest ancient sites in northern Mesopotamia, even larger than Ebla (56 hectares), Ashur (50 hectares), and

Tell Brak (43 hectares). The gates of the city were on the north, south, and east, while on the west the ancient river probably provided a protective shoulder. The site is dominated by a 15-hectare Acropolis, which probably featured large public buildings in its northern section and a "ziggurat" to the south.

In 1978, with the cooperation of the Directorate-General of Antiquities in Damascus, Yale University began its work at Tell Leilan with a topographic survey of the

site. In association with the Metropolitan Museum of Art in New York, three full seasons of excavation (1979, 1980, and 1982) have since been conducted. These excavations have tested four areas of the site. The Acropolis-northeast has been the focus of horizontal excavations, while three stratigraphic soundings have also been undertaken: Operation 1, a 4.5-meter-wide step trench, now almost 16 meters deep, which goes down the northwest slope of the Acropolis; a small sounding



Topographical map of Tell Leilan showing areas of excavation as of the 1982 season.

(designated 57F02) in the Lower Town; and Operation 2, a small sounding at the City Wall.

In the first part of this paper I shall briefly present some results of the excavation of the Acropolis-northeast, and then discuss what these suggest for our understanding of the site during the early second millennium B.C. In the second part I shall summarize what we have learned in the three soundings, and consider what this may tell us about northern Mesopotamia in the third millennium B.C.

Tell Leilan in the Second Millennium B.C.: Excavations on the Acropolis-northeast

Three seasons of excavation on the Leilan Acropolis now provide new data for the significance of Leilan, its ancient name, and its role on the Habur Plains of the early second millennium B.C. The topography of the Acropolis suggests that large public buildings are situated within the northeast quadrant. For the purposes of establishing the chronology of settlement within the site and its Acropolis, as well as testing loci that

might provide evidence for the site's historical role, this area has become one of the central research loci of the Tell Leilan Project.

Initial explorations in 1979, barely scratching its surface, allayed all previous fears that the Leilan Acropolis was capped by a Roman-period fortress. At 50 centimeters down, the trained excavator is able to articulate the tops of massive, sun-dried mudbrick walls erected some 4,000 years ago. Three building levels of such collapsed structures have now been identified within our excavations on the Acropolis-northeast.

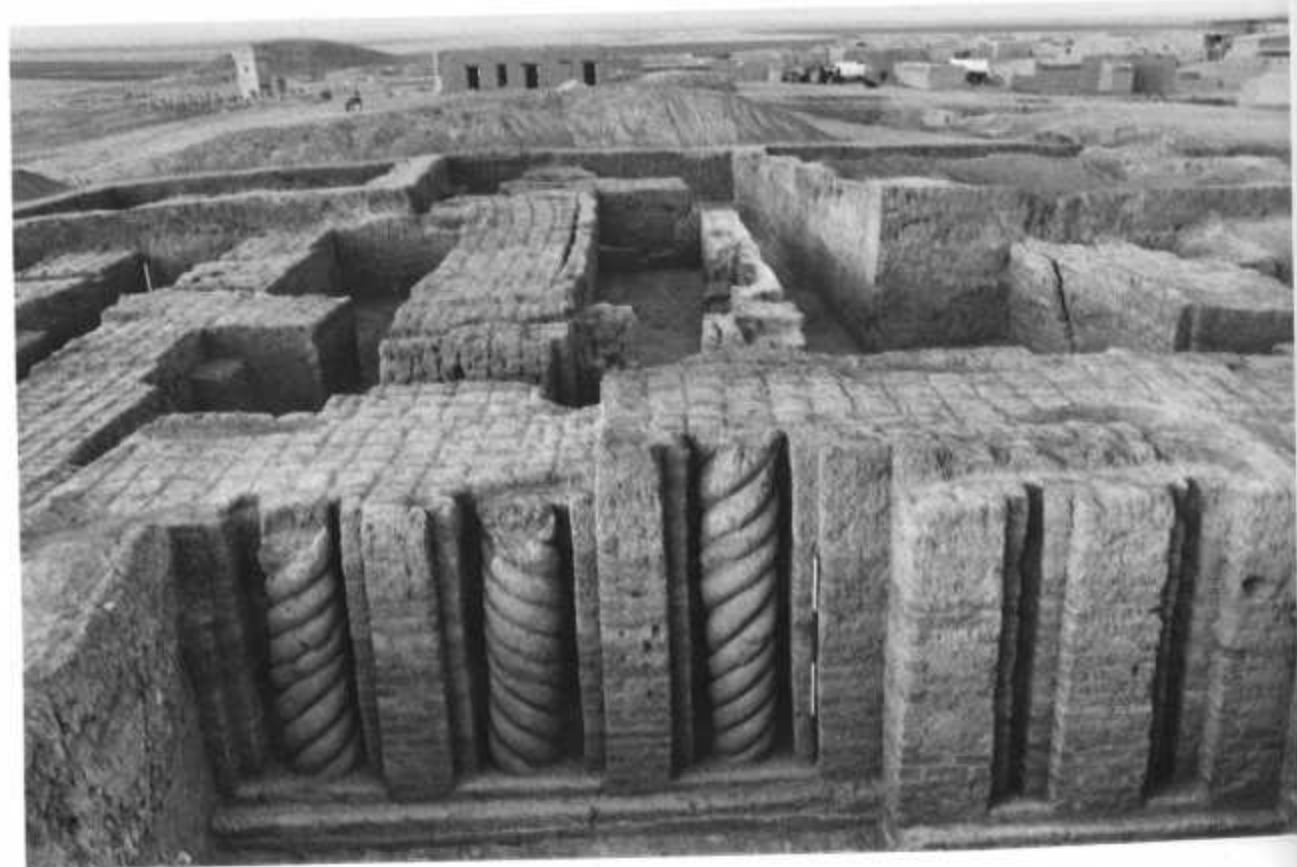
Building Level I. Immediately under the surface, Building Level I comprises the remains of a mudbrick platform or paving, now only a few courses high in some places. This surface and its brickwork were set against the collapsed southern facade of an earlier building level, Building Level II (see stratigraphic section). Later surfaces related to the Building-Level-I brick platform have also been identified elsewhere within the collapsed walls of Building Level II, and associated with these surfaces are potsherds of the "Habur ware" variety that is securely dated to the nineteenth century B.C. These same kinds of ceramics also comprise the assemblages of Building Level II and Building Level III. This then is the terminal occupation on the Acropolis, perhaps representing scrappy, insubstantial habitations, possibly of squatters or temporary settlers who were seeking shelter within the ruins of large, recently collapsed buildings. These ruins are now known to be the remains of a major second-millennium-B.C. temple.

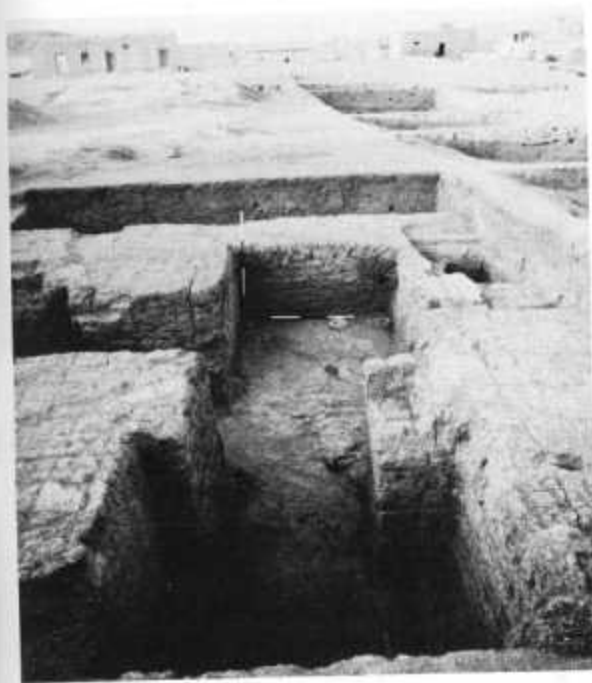
Building Level II. Thirteen hundred square meters of the Building-Level-II temple have now been retrieved, with an equivalent area probably remaining to be excavated. The northern facade of the temple presented an imposing configuration of niches and engaged columns arranged in panels, alternately spiral and plain-

continued on page 12



The north facade of the Building-Level-II temple on the Acropolis-northeast extends for more than 50 meters and is decorated with an impressive series of niches and engaged columns that are either plain-faced or spiral. The east side of the facade is shown above and the west side is below.





To date 1,300 square meters
of the Building-Level-II temple
have been retrieved.

Left: View of excavation area 45 P/Q12 of the Building-Level-II temple of the Acropolis-northeast taken from the north. *Below:* Plan of the temple from Building Level II of the Acropolis-northeast. The areas in darker color indicate secondary wall constructions of a slightly later date; these were done with a whiter, coarser, and more fragile mudbrick than was used in building the original walls.



Palm Trees and Spiral Columns

Dahil Abbas, a veteran workman from the Leilan village, excavates one of the Building-Level-II columns of the north facade of the temple on the Acropolis-northeast.



Sizes of Syro-Mesopotamian Sites During the Third and Early Second Millennia B.C.

Site	Ancient Area in Name	Hectares
Chuera		100
Taya		100
Leilan	Shubat Enlil?	90
Hamoukar		90
Khoshi		90
Hadhail		90
Mardikh	Ebla	56
Qal'at Sherqat	Ashur	50
Brak	Nilabshinu?	43
Meskene/Balis	Emar	37
Bi'a	Tuttul?	36
Touqan	Urshu?	28
Rimah	Karana?	28
Hammam et-Turkman	Zalpah?	25
Barri	Kahat	23
Billa	Shibaniba	15
Germayir		15
Chagar Bazar		13
Arbit		13
Ailun		12
Yorgan Tepe	Nuzi	4
Gawra		1

Other Mesopotamian Sites		
Site	Ancient Area in Name	Hectares
Mishrife	Qatna	100
Fara, ED III	Shuruppak	100
Hariri	Mari	54
Inghara, ED III	Kish	50
Mizyad, ED III	Agade?	48

Each year the dead and dying outer fronds (Arabic *sa'af*) are cut from the palm about a foot from its trunk . . . When the palm is about fourteen years old the woody and expanded base of the fronds (Arabic *karib*) are cut away close to the trunk of the palm. This operation generally kills any sucker buds from the tree (Dowson 1921: 26).

The mudbrick columns of the two Leilan temples provide, so far, facade decoration using four different types of engaged or "half" columns: (1) a palm trunk column, with diamond-shaped frond scars, surrounded by braided columns (Building Level III); (2) a palm trunk column with petallike imbricated (overlapping) fronds (Building Level II, south facade); (3) columns of mudbrick spirals twisting in alternate directions (Building Level II, north facade); and (4) plain-faced columns either twisted (Building Level III) or straight (Building Level II).

What are palm-tree columns doing in northeasternmost Syria? Palm trees certainly are not at home in northern Mesopotamia. Indeed, they are rarely found further upstream than modern Abu Kemal, on the Euphrates near ancient Mari, at the border of Syria and Iraq. But they are and were at home in southern Mesopotamia, and apparently were an

architectural convention for the decoration of public building facades from at least as early as the Uruk period when the pillars and engaged columns of the Uruk temples were emblazoned with cone-mosaic designs imitating the trunks of palm trees (Buren 1945: 29; Brandes 1968). At Al-Ubaid, in the late Early Dynastic period, palm trunks were used as the cores for mosaic and sheathed columns (Hall and Woolley 1927: 100; Howard-Carter 1983: 65). Large mudbrick date-palm columns with diamond-shaped frond scars decorated the gateway into the so-called Bastion of Warad-Sin at Ur in the nineteenth century B.C. (Woolley 1936).

Contemporary Mari, however, provides the most contexts for palm-tree decoration within public buildings: three for palaces and one for a temple. A much discussed chamber within the Palace of Zimri-Lim, later occupied by Shamshi-Adad's son Yasmakh-Adad, was known as the

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"Date Palm Court" (Al-Khalesi 1978), while the famous "Investiture" wall paintings of the palace depict palm trees with fronds trimmed in the "diamond" fashion, like the mudbrick columns of Leilan Building Level III and the Bastion of Warad-Sin at Ur (Parrot 1958: plates 10-13). Less well known, but very intriguing, is the reference to a "Palm Tree" Palace in Shamshi-Adad's letter of reprimand to Yasmakh-Adad, quoted in the sidebar to the present article entitled "The Search for Shamshi-Adad's Capital City." (Might this be referring to yet another Mari palace?) A stone-column base from Mari cut in imitation of palm scales suggests that columns resembling palm-tree trunks would have been quite at home here (Parrot 1939: plate V, 2). And lastly, it did not escape the notice of André Parrot that the left side of the doorway into the Dagan Temple at Mari "semble avoir été décoré de troncs de palmiers" (Parrot 1938: 21).

In southern Mesopotamia, palm trees are also mentioned in association with the Shamash temple at Larsa, a major contemporary city on the Euphrates. Gungunum, king of Larsa from 1932 to 1906 b.c., went so far as to name a year "The year he brought two bronze date palms into the temple of Shamash" (Ungnad 1938: 155). The É.BABBAR Shamash temple at Larsa has, for several years, been under excavation by the Univer-

sity of Paris team directed by Professor J.-L. Huot, but bronze palms have not been retrieved. However, a set of beautifully constructed courtyards have been exposed. The interior walls of one of these, Courtyard I, were decorated with spiral columns very similar to the spiral columns used as exterior facade decoration in Leilan Building Level II (Calvet and others 1976; Huot and others 1983).

A very intriguing parallel for the use of columns, both palmlike and spiral, is available at the contemporary temple of Tell al-Rimah, just across the border near Tell Afar, Iraq. The Rimah temple features spiral columns similar to those of Leilan, as well as two kinds of palmlike columns, a "scale" pattern, and the diamond-shaped pattern. The petal-like imbricated pattern of Leilan Building Level II is not in evidence here, but may have been used in the still unexcavated portions of the temple. Two carved stone blocks depicting deities standing between palm trees have recently been published from the excavations at Tell al-Rimah (Howard-Carter 1983). One of these presents a goddess standing between palm trees with fronds trimmed with "compass-like scale patterns." A second block features a bullman between palms with trunks decorated "with a herring-bone pattern" (Howard-Carter 1983: 67, plate IIIA). The "herring-bone pattern" here precisely replicates

the spiral pattern presented by the spiral columns at Rimah. Indeed, the spiral columns at Rimah, Leilan, and Larsa, accompanying other palm tree columns, probably also represented palm trees whose frond imbrications could be perceived and represented as diagonal cuts along the palm trunk. In southern Mesopotamia the annual fertilization of the female palm resulted in a bounty of dates and date by-products. Hence, the palm tree was a symbol of agricultural fertility, even in northern Mesopotamia.

On the treeless Habur Plains, and across northern Mesopotamia, the mudbrick palmlike spiral columns of Leilan and Rimah probably reflect, as well, the practical use of palm timbers in building construction. As Shamshi-Adad himself wrote to Yasmakh-Adad:

The palms, cypresses and myrtles that have been brought from the town of Qatanum lie at present in the town of Subrum. Send Mashiya and a few officials with him to Subrum, where they shall divide the palms, cypresses, and myrtles into three lots. Send one-third of the palms, cypresses, and myrtles to Ekallatum, one third to Nineveh, and one third to Shubat Enlil. . . . That which you send to Shubat Enlil is to be transported by ship to the town of Sagaratum, then from Sagaratum to Qattunan. From Qattunan let the men of Qattunan take it in wagons, and let them bring it to Shubat Enlil (ARMI 7: 4-31).



A small portion of the southern facade of the Building Level II temple has thus far been excavated. Like the northern facade it was decorated with niches and engaged columns but was not as well preserved. One mudbrick column was clearly sculpted to resemble the trunk of a "dressed" palm tree.

facade arrangements, across a distance of more than 50 meters. The western portion of this facade apparently extends across a massive mudbrick platform, still only partially excavated, that seems to antedate the construction of the temple, and against which it was built.

Portions of this facade still stand to heights of 3 meters; to judge from the thickness of its walls, the facade may have stood as high as 6 or 7 meters in antiquity. Looming over the plain, more than 20 meters below, this array of mudbrick architectural power would have imposed itself as a formidable vision upon the merchants and mule caravanners trekking along the great east-west "trans-Mesopotamian" trade route that passes alongside Tell Leilan.

On the Acropolis interior, and looking southward toward the ziggurat, the southern facade of this temple also featured niches and engaged columns. Only 9 meters of this facade have been excavated so

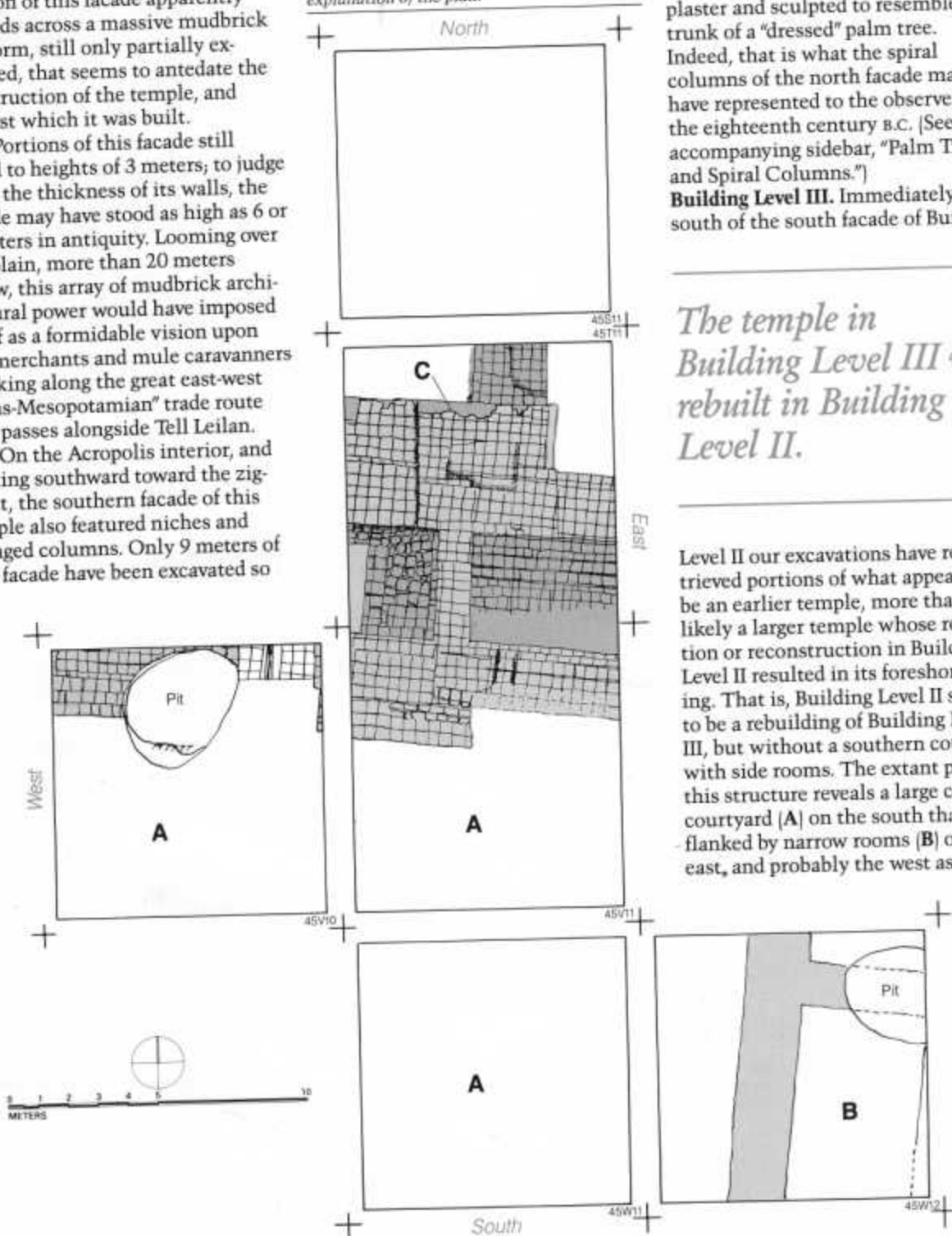
During the 1979 season an earlier temple was found, Building Level III of the Acropolis-northeast. See accompanying text for an explanation of the plan.

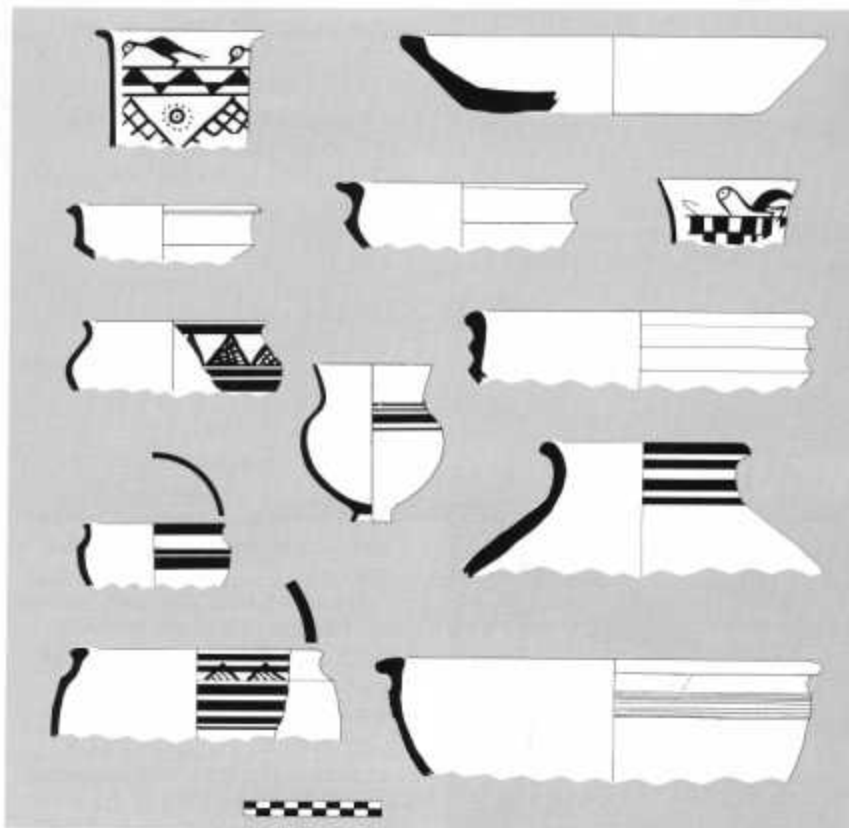
far, but the niches here surround the badly eroded surface of a mudbrick column coated with thick mud-plaster and sculpted to resemble the trunk of a "dressed" palm tree. Indeed, that is what the spiral columns of the north facade may have represented to the observer in the eighteenth century B.C. (See the accompanying sidebar, "Palm Trees and Spiral Columns.")

Building Level III. Immediately south of the south facade of Building

The temple in Building Level III was rebuilt in Building Level II.

Level II our excavations have retrieved portions of what appears to be an earlier temple, more than likely a larger temple whose restoration or reconstruction in Building Level II resulted in its foreshortening. That is, Building Level II seems to be a rebuilding of Building Level III, but without a southern courtyard with side rooms. The extant plan of this structure reveals a large central courtyard (A) on the south that is flanked by narrow rooms (B) on the east, and probably the west as well.





Examples of Habur ware dating to the nineteenth century B.C. from Building Levels II and III of the Acropolis-northeast.



Detail of the northern facade of the Building-Level-III temple on the Acropolis-northeast. An engaged, mudbrick column that is sculpted to resemble the trunk of a palm tree is the focal point of this section of the facade. (Its location is indicated by the letter "C" on the accompanying plan.)



Left-edge fragment of an inscribed stele in a fine-grained black stone. With parts of three lines of Old Babylonian-style "monumental" script, this fragment, which is obviously only a small portion of a very large stone monument, was retrieved within wall-collapse strata of room 3 of the Building-Level-II temple.

The northern face of the east-west wall that closes the northern rooms was decorated with stepped niches symmetrically set against a central, engaged mudbrick column (C). The face of this column was heavily coated with mudplaster, and then sculpted to resemble the trunk of a palm tree. (See sidebar.) The floors that are set against this facade were relaid three times; their extension to the north underlies the slightly later constructions of Building Level II (see the stratigraphic section).

Second-millennium-temple artifacts. The floors of the Building-Level-II temple were littered with thousands of potsherds, as well as animal bones and carbonized wheat, barley, and other seeds—the refuse of daily cooking and eating, from which we hope to reconstruct not only the range of comestibles consumed within the temple but also the crops and agricultural practices that characterized the Habur Plains during the second millennium B.C.

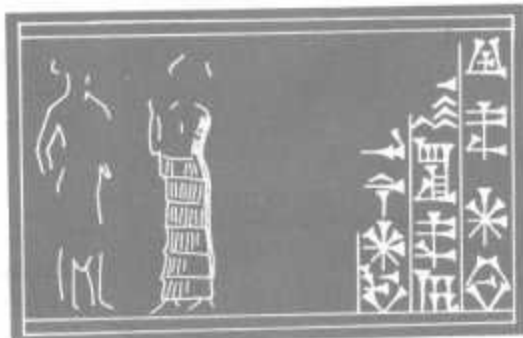
Cuneiform tablets were also retrieved within several rooms; most are economic documents, recording the receipt of various commodities

Cities, by definition, are functional centers serving a dependent hinterland. When cities first emerged in southern Mesopotamia, a means of recording the transactions that maintained this new social and economic system became a necessity. The transactions were complex and involved a multitude of groups, individuals, and institutions: cities and villages, classes of administrators and laborers, and officials regulating and recording the transfer of goods and services. Two devices evolved and were regularly employed to facilitate these exchanges. One was writing, and the second was cylinder sealing. Writing was, of course, used to record the details of transactions; but some means was needed to insure the veracity of the inscription, or in cases where only the goods were to be transported or received, the integrity of the shipment. Ancient Near Eastern officials, therefore, sealed tablets as well as containers and even storerooms with cylinders bearing their names and titles, much the way post offices stamp telegrams, or customs officials bind and seal international shipments.

Above: Cylinder seal impression (L82-105) found on the floor in the southern part of room 13 of the Building-Level-II temple. Its inscription reads, "Suri-Adad, son of Zidriya, servant of Shamshi-Adad."

Middle: Thirteen cylinder seal impressions found in the Building-Level-II temple bore the second Šuri-Adad inscription: "Adad . . . canal inspector of the god . . . and the god . . . Šuri-Adad, the . . ." Seven were found on the floor of room 12 (L80-176, -180, -186, -190, -191, -194, and -195); three were found on the floor of room 13 (L82-118, -119, and -120); and three were discovered in the secondary blockage between rooms 8 and 12 (L82-123, -126, -127). The scene depicted on this seal is a standard, Old Babylonian representation of the "god with mace" in front of the "suppliant goddess."

Below: Also scattered among the rubbish of room 8 were 227 seal impressions in various stages of preservation bearing this inscription: "Bêli-emuqi, servant of Khaya-abum, servant of the god Adad." The standard Old Babylonian-style glyptic design, the "god with mace" and "suppliant goddess," is here supplemented with a "winged-lamassu" demon standing behind the goddess. A crescent-star and a monkey are used as filler between the god and goddess.



important for the temple economy. Systematic sieving of the temple floors also made it possible to retrieve numerous inscribed cylinder seal impressions. From the southern part of room 13, one seal impression bears the inscription of

Suri-Adad, son of Zidriya, servant of Shamshi-Adad,

thereby conclusively proving the occupation and use of this temple during Shamshi-Adad's reign. Seven impressions of another seal of (the same!) "Suri-Adad" were also found on the floor of room 12 and three more were found on the floor of room 13:

Adad . . . canal inspector of the god . . . and the god . . . Šuri-Adad, the . . .

But sometime, probably not too long after the initial use of these floors, three alterations were made to this building, each utilizing a characteristic mudbrick that was whiter, coarser, and more fragile than that of the structure's original walls. The relationship of the alterations to the temple's original walls can be observed in the plan of Building Level II, where the alterations are indicated in dark shading. A portion of room 12 was walled off to become a doorless room 13, with a north-facing window; the long central cella, which probably had a mudbrick altar set squarely in front of its northern wall, would have then ceased to serve as the carefully planned focus of cultic activity. The floor of room 13 is the last living surface in this room. This floor passes under the enclosure wall; a similar situation obtains to the west of the enclosure in room 12. The face of the eastern wall of room 13 extends below this last floor. The two sets of rooms 15-16 and 8-9, which are essentially parallel arrangements, each had one of their two entrances sealed with a curtain wall.

Removing the secondary blockage of the doorway between rooms 8 and 12, three additional clay seal



Above: Two impressions from a cylinder seal (L82-74 and -75) were found among the organic rubbish of room 8 in the Building-Level-II temple. Their inscription reads as follows: "Apil-ilishu, son of Ali-banishu, servant of Turum-natki." These cylinder seal impressions are derived from a cylinder seal with an apparently unique design. A "hero" holds the tails of a cow and a lion. Other "heroes" appear to jump over the backs of these animals. On each side of a mythological bird, in the lower register, there is a guilloche. Some parallels for this seal's designs occur in contemporary Anatolia and in southern Mesopotamia during the third millennium *b.c.*
Below: This macrophotograph of a jar stopper (measuring approximately 40 millimeters wide) found in room 8 shows the seal impression of "Apil-ilishu, son of Ali-banishu, servant of Turum-natki."



impressions of the second Šuri-Adad inscription were retrieved from the interstices of the brickwork. These were probably lying on the floor when a mason swept them up to fill cracks in his sloppy construction of the secondary wall. After the construction of this wall, a deposit of ash and trash built up against it upon the floor of room 8. Within this organic rubbish 229 additional seal impressions were tossed as jars of commodities were opened. Two of these bore the inscription of:

Apil-ilishu, son of Ali-banishu, servant of Turum-natki, while 227 (complete and fragmentary) bore the inscription of:

Bēli-emuqi, servant of Khaya-abum, servant of the god Adad.

Comparison with other temples.

The Building-Level-II temple at Tell Leilan, apart from its historically fascinating floor debris, remains an artifact, an expression of personal and social styles identifiable in space and time. As such, it is worthy of comparison to other, similar, monumental architecture, even though its plan is not yet complete. We have speculated that the original plan of the temple will be available in Building Level III, with Building Level II only representing a partial rebuild of that temple. If this suggestion proves correct, the Leilan temple may have been one of the largest constructed during this period, for it would then be approximately 6,000 square meters, or about twice the size of the Sin-Shamash temple at Ashur and the temple at Tell al-Rimah, and the equal of the Ischali temple and the Ashur Temple at Ashur. This, however, is not too surprising because there does seem to be a gross correlation between the size of a city and the size of its public buildings.

A "langraum"-temple? The specific plan of this building is, however, rather surprising. (Note that the isometric plan of the Building-Level-II temple does not include the building's secondary wall construc-



Two Leilan village workmen sieve floor debris of the Building-Level-II temple with millimeter screens. Supervising the work is Farouk Ismail, then a graduate student and now a professor of ancient Near Eastern languages at the University of Aleppo.

Excavation is not for the faint of heart. There is a daring kind of brinkmanship, a continuous tension, between the need to excavate and remove, and the need to preserve and isolate, while the clock ticks away, workmen stand by waiting, and precious research funds dwindle. In a building such as the Leilan temple, massive brick collapse is first removed, and wall faces of mudplaster are then carefully picked with hand tools so as not to "create" walls but to define them against the matrix of virtually identical mudbrick collapse.

Following wall faces down to their floors can be nerve-racking. There is the ever-present danger of missing the floor, following the wall-face down to its subfloor foundations or to an earlier floor, and thereby mixing the stratigraphic deposition that provides the temporal framework for archaeological reconstruction. Delicately tracing with handpicks the "break" between collapse and wall-face down to the first centimeter-sized patch of "break," which indicates the stamped, sometimes lightly plastered floor, is an anxiety-filled process. There is no second chance. Unique among research disciplines, archaeology destroys part of its data, the archaeological context, as that data is retrieved and then removed in the excavation of still earlier deposits.

When floors are located, student supervisors and pickmen call out for fine one-millimeter screens. The floor deposits provide the crucial evidence for activities that can be securely dated, as opposed to postoccupation collapse deposits. Sieving assures uniform retrieval: No artifacts, however small, will be passed over as the debris resting immediately upon the floor surfaces is cleared.

tions.) Here it is possible to see the almost symmetric arrangement of side rooms (rooms 4, 5, 8, 14, 15, and 16) around a long central cella (room 12), which itself is, apparently, preceded by a wide antecella (room 10), only fragmentarily defined in the areas excavated to date. With the addition of the secondary blockage walls, access to the cella would have been impossible except through the antecella and, presumably, a doorway to the south through the south facade. Have we then a "langraum", or long-room, temple, the classic Assyrian temple-form of the first millennium B.C., which always features the lineal arrangement of "doorway" - "wide-room" antecella - "long-room" cella? If the Building-Level-II temple at Leilan is "langraum" it may be the earliest temple of this type.

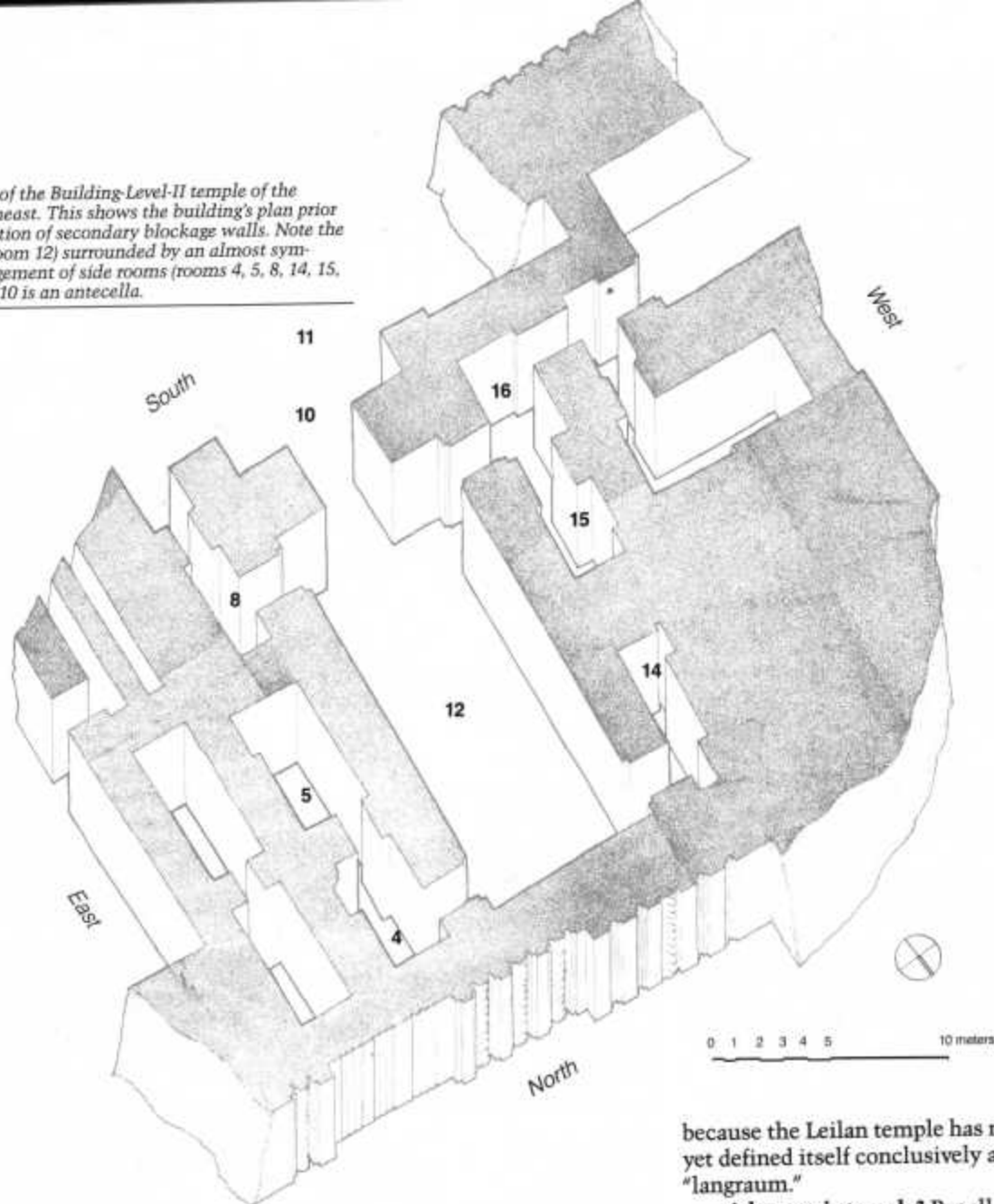
Some archaeologists have argued that "langraum"-temples do appear in the early second millennium B.C. at Ischali and Tell Harmal (Strommenger 1962: 416; Amiet

1980: 535; J. Oates 1979: 79). These temples, however, do not really have the room arrangement characteristic of "langraum"-temples, and seem to be examples of the period's characteristic "Babylonian" temple with a "breitraum" ("wide-room") cella (Hrouda 1971: 152; Heinrich 1982: 189). The earliest "langraum" known at present is that of the Sin-Shamash temple at the Assyrian capital of Ashur, constructed by Ashur-nirari I in the sixteenth century B.C. The next oldest is the famous Innin Temple of Karaindash at Warka, which dates to the fifteenth century B.C. (Heinrich 1982).

If the Leilan temple is of the "langraum"-type it is no longer necessary to hypothesize extra-Mesopotamian, possibly "Kassite," origins for this temple-type as was argued in the past (Martiny 1936; Jaritz 1960; Matthiae 1975). Concurrently, however, the Leilan temple raises new questions: Why is this temple-form appearing at Leilan at this time, and what are its origins?

One hypothesis that might now be entertained is that the "Assyrian langraum" temple-plan actually was a Shamshi-Adad, or Shamshi-Adad-period, innovation subsequently adopted or copied by later Assyrian royalty. In much the same way that Shamshi-Adad mimicked the royal titlature of the Akkadian dynasts, so later Assyrian monarchs perpetuated many Shamshi-Adad innovations. Two outstanding examples of this are his name, which was subsequently adopted by four other Assyrian kings, and his Ashur inscriptions, whose style and dialect were imitated by Middle Assyrian kings in their royal annals (Laessle 1963: 95). Is the "langraum"-temple then an innovation of Shamshi-Adad? If this were the case, we would expect the temple constructed by Shamshi-Adad at Ashur to be "langraum." Unfortunately, the excavation of this structure does not allow us to make definitive statements about the temple's plan in the

Isometric plan of the Building-Level-II temple of the Acropolis-northeast. This shows the building's plan prior to the construction of secondary blockage walls. Note the central cella (room 12) surrounded by an almost symmetrical arrangement of side rooms (rooms 4, 5, 8, 14, 15, and 16). Room 10 is an antecella.



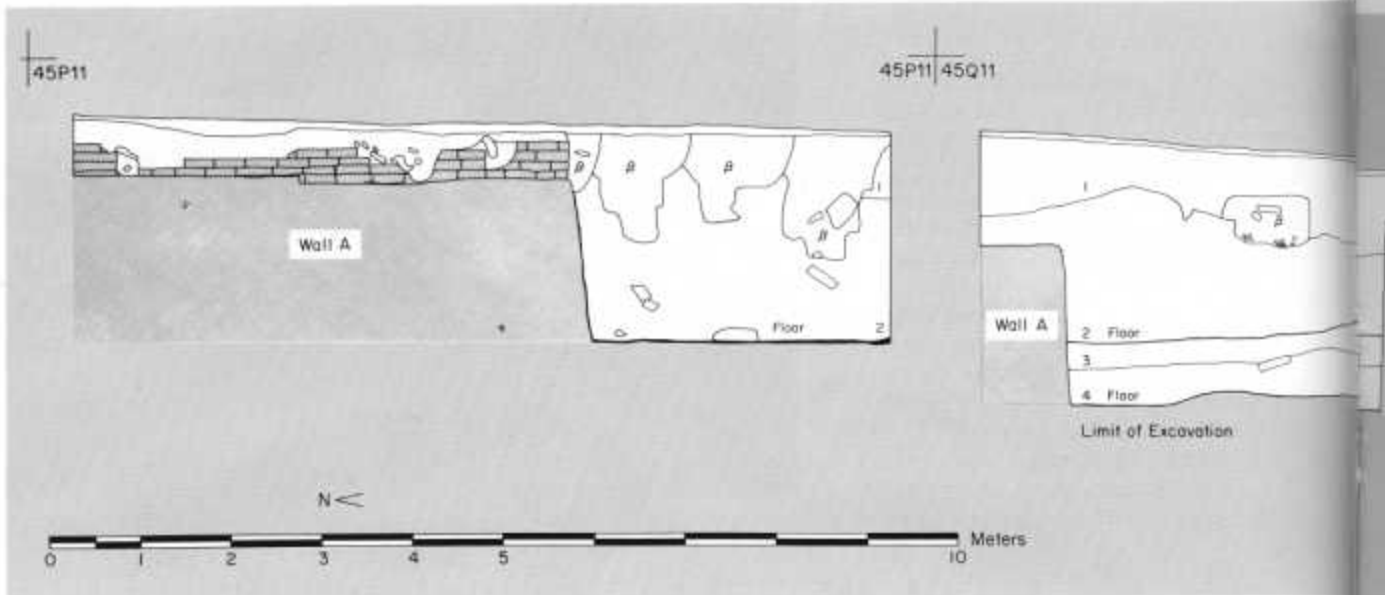
days of Shamshi-Adad but, as Anton Moortgat noted, the foundations of this structure leave open the possibility that the temple's cella was originally "langraum" (Moortgat 1969: 76). Very intriguing, as well, are the engaged columns that once decorated the exterior of this temple (Haller 1955: 33, figure 8; Heinrich 1982: 198-99). We do not know how they were decorated. They might have been spirals or have been

decorated with one of the other palm-frond motifs.

For the moment, however, we must refrain from absolute statements about origins and explanations, for definitive evidence is not available—nor, in the archaeological world, is it ever likely to be. The typology of temple-plans seems to allow for the categorization of the Building-Level-II temple, but only in so far as it has been excavated until now. This last caveat is necessary

because the Leilan temple has not yet defined itself conclusively as "langraum."

A bent-axis temple? Recall the note above concerning the disposition of the temple doorway. We have assumed that the main doorway into the temple lies directly in line with the doorway into the long cella because when the secondary blockage was in place there would have been no other access into the building. At present, therefore, we anticipate finding a magnificent doorway along the facade where we have already located a palm-tree column. And if the doorway is not there?



The stratigraphic section of Building Levels I, II, and III on the Acropolis-northeast is shown above and is continued on the following pages. The entire section documents sixty meters of stratigraphy across the Acropolis. Note Building Level II in squares 45P11, 45Q11, and 45R11 and the foundation trench for the south facade of Building Level II identified as stratum 4 in square 45R11. The exterior surface for Building Level II is identified in square 45R11 as floor-stratum 2. Building Level I, the low platform and paving that was set against the ruins of Building Level II, is also visible in 45R11 above floor 2.

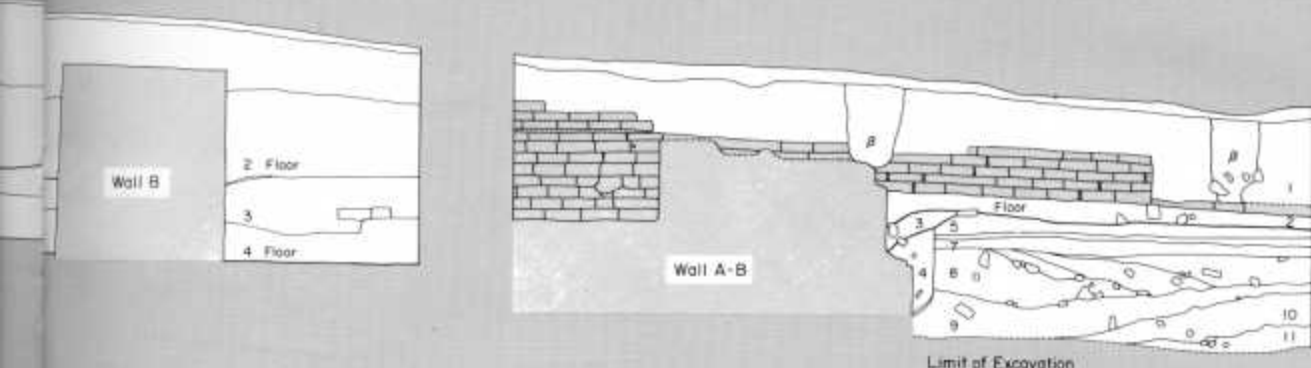
Another characteristic of the Leilan temple's decoration is the use of "reveals," or doorjamb insets, to accent important passageways. On the isometric plan of the temple, a "cookie-crumble trail" of reveals defines first the corners of the long cella, and then leads the worshipper out, not through the hypothesized "langraum"-type doorway, but to the west, along a bent axis, or "knichachse," past two side rooms and then into room 19, at which our excavation has halted. Quite simply, an important route has here been defined that, in spite of its eventual blockage, once featured prominently in the traffic pattern of the building. If our next excavation season shows that there was no doorway out of the building directly in front of the long cella, this reveal-decorated "bent-axis" route must have provided access to the cella. Such a "bent-axis" type temple-plan takes us back to the Diyala excavations of the Oriental Institute at Khafajah where the famous Sin temple sequence for the Early Dynastic period is dominated by "bent-axis" temples.

These temples mark a clear disjuncture with those of preceding periods in the south; their existence in the Diyala, east of the Tigris, has led some archaeologists to see the type as an "osttigridische Erfindung" to be associated with the third-millennium-b.c. Hurrians of north Mesopotamia and north Syria (Lenzen 1955: 17; Hrouda 1984: 65). Far from being a Shamshi-Adad-period innovation, then, the Building-Level-II temple plan may harken back to the still earlier, third-millennium, urban roots of Tell Leilan (see the section below on Tell Leilan in the third-millennium b.c.).

Tell Leilan and Shubat Enlil. Does the deposition of seal impressions of Šuri-Adad, Turum-natki, and Khaya-abum within the Building-Level-II temple allow us to equate Tell Leilan with Shubat Enlil through the documentation for the city's last days? (See the accompanying sidebar, "The Search for Shamshi-Adad's Capital City.") Such a suggestion would be bold, if not rash. The deposition of seal impressions inscribed "Šuri-Adad servant of Shamshi-Adad" cer-

tainly, however, occurred prior to those of Turum-natki and Khaya-abum, and these rulers only figure in the Mari documentation for Shubat Enlil after the death of Shamshi-Adad.

To be sure, we have no Tell Leilan documentation as yet for Kunnam the Elamite and Atamrum of Andariq, the other rulers of the city. Nor do the impressions of "Šuri-Adad, servant of Shamshi-Adad" by themselves require that Tell Leilan be considered the seat of Shamshi-Adad's power, for such seal impressions are known from other sites across the Habur Plains and northern Iraq such as Chagar Bazar, Tell Taya, and Tell al-Rimah, and even Achemhüyük on the Anatolian plateau (Loretz 1969: no. 23; Postgate 1973: 173-75; Hawkins 1976; Özguç 1980: 99). There remains, too, the conundrum of 227 seal impressions and fragments inscribed "Khaya-abum of Apum." In most circumstances such would be taken as prima facie evidence for identifying Tell Leilan with Apum, a city near Shubat Enlil that also has yet to be



identified on the Habur Plains.

At this time, it seems safe to answer our questions only with additional questions. In consideration of Tell Leilan's location, size, morphology, and terminal occupational history, if the site is not Shubat Enlil, what is it? Apum? But Apum is not known to have existed in the third millennium B.C., which is when our excavations indicate that Tell Leilan first became a large city (see the second half of this paper). Similarly, Shubat Enlil is not known as a city name prior to the reign of Shamshi-Adad. If Tell Leilan is Shubat Enlil, what was its name in the third millennium?

In the early second millennium B.C. Tell Leilan was clearly one center of regional power on the Habur Plains. The sequence of Acropolis building levels, their artifacts and inscriptions, and their debris, litter, and collapse provide an arena for historical investigation, just as they dramatically draw attention to the actions of individual personalities who represented the contending interests of villages, cities, regions, and empires in the early second millennium.

Whether Tell Leilan was Shubat Enlil, or another documented large city such as Apum, remains to be

determined and adds another, if tangential, problem for resolution. Sites such as Tell Leilan do not draw their inherent archaeological significance from their correlation with historically documented settlements. On the contrary, it is the settlement itself that is of signifi-

In 1800 B.C. Tell Leilan was a center of power on the Habur Plains.

cance because of the role that it played within a region. A useful example of this name-site relationship is Tell Mardikh (ancient Ebla). Prior to the recovery of the third-millennium-B.C. palace at Mardikh, Ebla was simply one of several west Syrian toponyms known from southern Mesopotamian documents to have been destroyed or conquered by Sargon and Naram Sin. The archaeological recovery of Tell Mardikh, however, now informs us of Ebla's role in Syrian history.

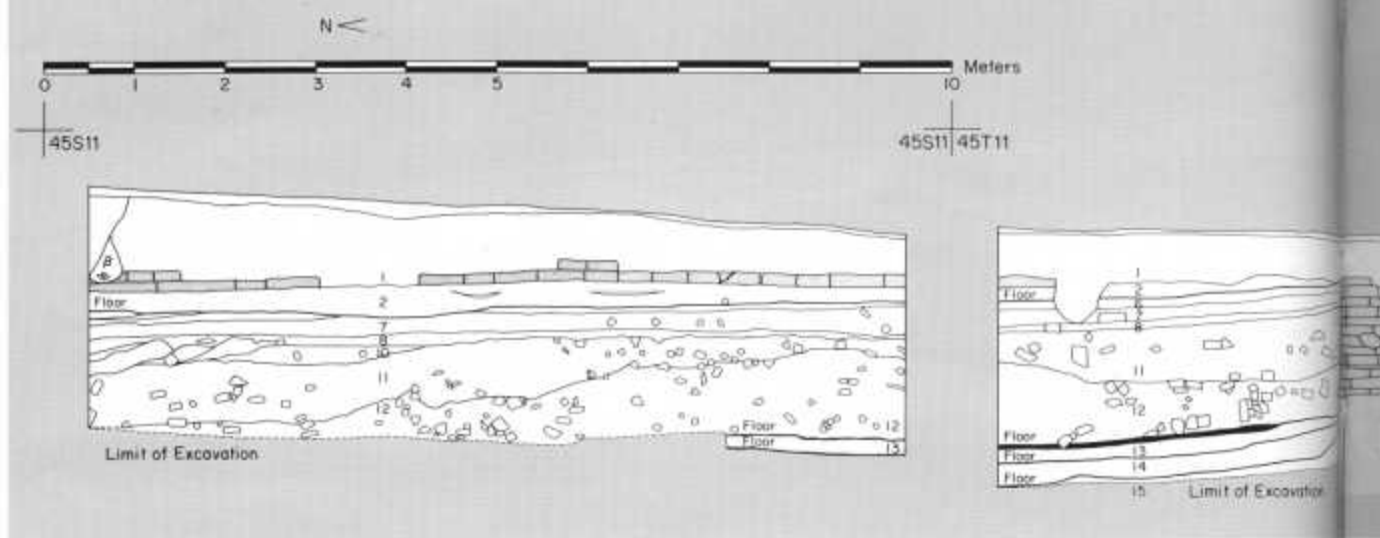
Similarly, Leilan's size and geographical position inform us of its general role within the region. His-

torical references to a city named Shubat Enlil inform us of that city's significance in the region. If the two kinds of evidence pertain to each other a series of well-established historical problems can be defined. If they do not, an entirely new set of problems may emerge.

Regardless, therefore, of Tell Leilan's name in the second millennium B.C., the details of its historical and regional role remain to be examined. The imperial and local dramas of the early second millennium on the Habur Plains were not without precedent, however. Nor was it simply fortune that situated this very large second-millennium occupation at Tell Leilan.

Tell Leilan in the Third Millennium B.C.: Soundings at the Acropolis-northwest, Lower Town, and City Wall

In order to establish a framework for problem-specific investigations of the site, a preliminary series of three, deep stratigraphic soundings were undertaken in 1980. These soundings—designated Operation 1, Operation 57F02, and Operation 2—retrieved the ceramics associated with each stratum of occupation, as well as radiocarbon samples and floral and botanical remains that



Squares 45S11 and 45T11 show the continuation of Building-Level-I paving. Underneath the paving in 45S11 and 45T11 the continuation of floor-stratum 2 of Building Level II can also be seen. Underneath that, however, are several strata of brickly wall collapse derived from wall A in 45T11. Below those strata of wall collapse, numbered 6 through 12, the last of three Period-III floors can be seen. These plastered floors abut the plastered face of wall A. The extension of Building Level III to the south can be seen in the remainder of 45T11 and 45V11.

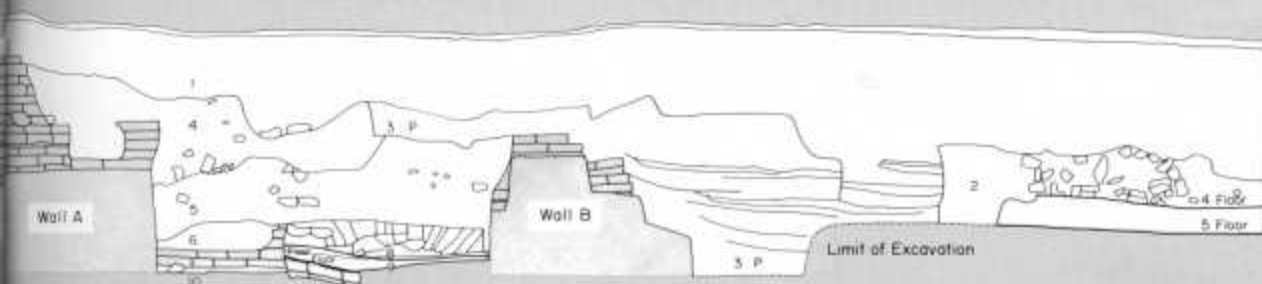
Relative Chronology

B.C.	Northwestern Syria	Habur Plains	Northern Iraq	Southern Iraq
1600	Old Syrian Period (Mardikh IIIA-B)	Leilan I (B.L. I-III...?)	Old Assyrian	Old Babylonian
1900	Late Protosyrian (Mardikh IIB2)	Leilan IIb	Taya VI	Isin-Larsa Ur III Guti
2500	Mature Protosyrian (Mardikh IIB1)	Leilan IIa	Taya IX	Akkadian Early Dynastic III
3200	Early Protosyrian (Mardikh IIA) (Amuq H)	Leilan IIIc Leilan IIIb Leilan IIIa	Ninevite V	Early Dynastic II Early Dynastic I
3500	Amuq G (Mardikh I)	Leilan IV	Late Uruk	Late Uruk
4100	Amuq F	Leilan V	Early Uruk	Early Uruk
5000	Amuq E	Leilan VIa Leilan VIb	Late Northern Ubaid Early Northern Ubaid	Ubaid 4 Ubaid 3
5500	Amuq D	Halaf	Halaf	Ubaid 2 Ubaid 1

allow for the initial occupational sketch of the site as far back as the fifth millennium B.C. (For the precise locations of the soundings, see the topographical map at the beginning of this paper.)

The stratigraphic sequence of ceramics has now been statistically analyzed, and allows us to characterize each occupation floor by the presence or absence of specific kinds of pottery and, still more importantly, the relative frequency of each pottery-type within the sample for each stratum. This kind of quantitative analysis, a prerequisite for eventually establishing smaller periodizations and linking occupations at different loci to each other, also makes possible an "objective" lumping of strata to form ceramic periods. Judging from the relative frequency of ceramic types, strata more similar to each other than to other strata can be statistically defined as a ceramic "period."

Sets of radiocarbon samples retrieved from these soundings have augmented the periodization available from the ceramic analyses. In a



region as sparsely explored as the Habur Plains, these radiocarbon samples mark the beginning of the resolution of fundamental chronological problems, including some that have still not been resolved in adjacent regions where archaeologists have worked for many years. To facilitate the resolution of some basic chronological problems, we have attempted to process a large number of samples from individual contexts, thereby providing for the reduction, through weighted averaging, of the standard deviation that accompanies each determination.

The first stratigraphic sounding at Leilan, which we have called Operation 1, was actually started briefly in 1979 but became a major research effort in 1980 (see Schwartz 1982).

This sounding is now 16 meters deep and presently has reached to the Ubaid period (see the stratigraphic section of the Acropolis-northwest; see also the Tell Leilan ceramic periodizations). Virgin soil, probably under several strata of Halaf-period settlements, is likely to be another 10 meters below. Above the Ubaid-period strata (period VI), which comprise the remains of domestic structures, are several strata with similar ceramic shapes

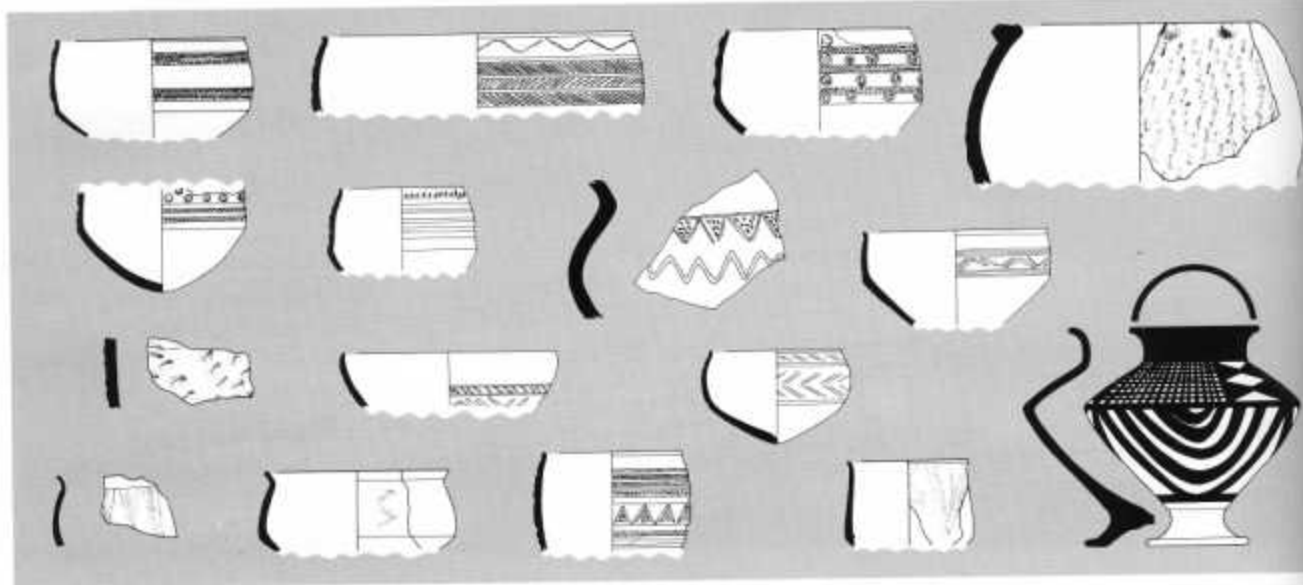
but few painted vessels (period V). These may be contemporary with the "Early Uruk" period in the south. Four distinct strata then follow with sherds from beveled-rim bowls that characterize the "Late Uruk" period in southern Mesopotamia. Immediately following these are some 25 strata (period III) with painted and incised "Ninevite V" ceramics and residential remains.

This sequence of Ninevite-V-period strata is perhaps the longest yet retrieved. It appears to span the enigmatic gap between the northern equivalents of the south's Uruk period and the Early Dynastic III period (Schwartz 1982; Weiss 1981-1982; 1983). Startling, however, is the occupational history that can be reconstructed from the stratigraphic evidence of Operation 1 and from additional tests on the Lower Town (Operation 57F02) and at the City Wall (Operation 2). Cumulatively these tests indicate that at the end of the Leilan III/Ninevite V period and at the beginning of the Leilan II period a major transformation of settlement occurred on the Habur Plains.

Operation 2, we thought, might prove that the City Wall was first built in the time of Shamshi-Adad. Who else would have been able to

muster and control the labor required for the construction of a mudbrick wall 3.5 kilometers long, at least 15 meters thick, and at least 15 meters high? In the last days of the 1980 excavation season, however, it was with considerable shock that we found ourselves against the City Wall excavating surfaces much earlier than those littered with "Habur ware" and tramped upon in the days of Shamshi-Adad. These earlier surfaces and City Wall construction phases are characterized by ceramics of the period that we designate Leilan II, or the "Leilan" period, because it is the period when the site emerged to regional prominence. The ceramics associated with the first interior floors set against this wall, visible in the section drawing of Operation 2, are illustrated here. Operation 57F02 revealed precisely the same ceramic-stratigraphic phenomenon: The first Lower Town occupation, set on virgin soil, was associated with the early Period-II ceramics.

Through the Leilan III/Ninevite V period, therefore, settlement at Leilan had not extended beyond the area of the 15-hectare Acropolis, and conceivably was still smaller. Suddenly, however, at a time when Ninevite V ceramics had passed



from use and Leilan II ceramics had just begun to be used, the settlement expanded sixfold, from 15 to 90 hectares, and the enormous City Wall was constructed.

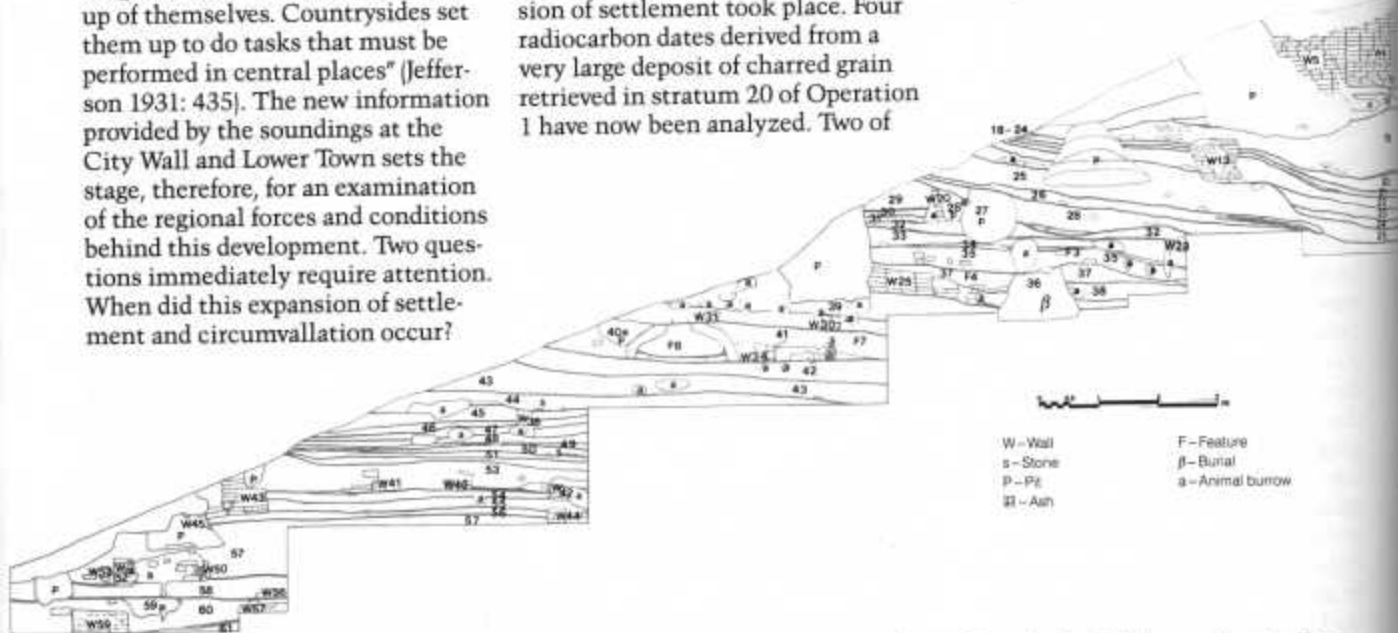
This kind of alteration in settlement is unlikely to have been a unique event. As geographers have long observed, "Cities do not grow up of themselves. Countrysides set them up to do tasks that must be performed in central places" (Jefferson 1931: 435). The new information provided by the soundings at the City Wall and Lower Town sets the stage, therefore, for an examination of the regional forces and conditions behind this development. Two questions immediately require attention. When did this expansion of settlement and circumvallation occur?

What other developments, historical, demographic, or economic, might have occurred at this same period?

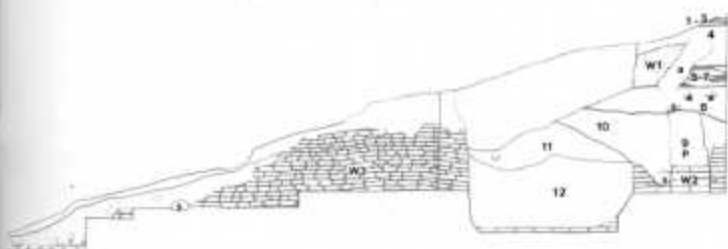
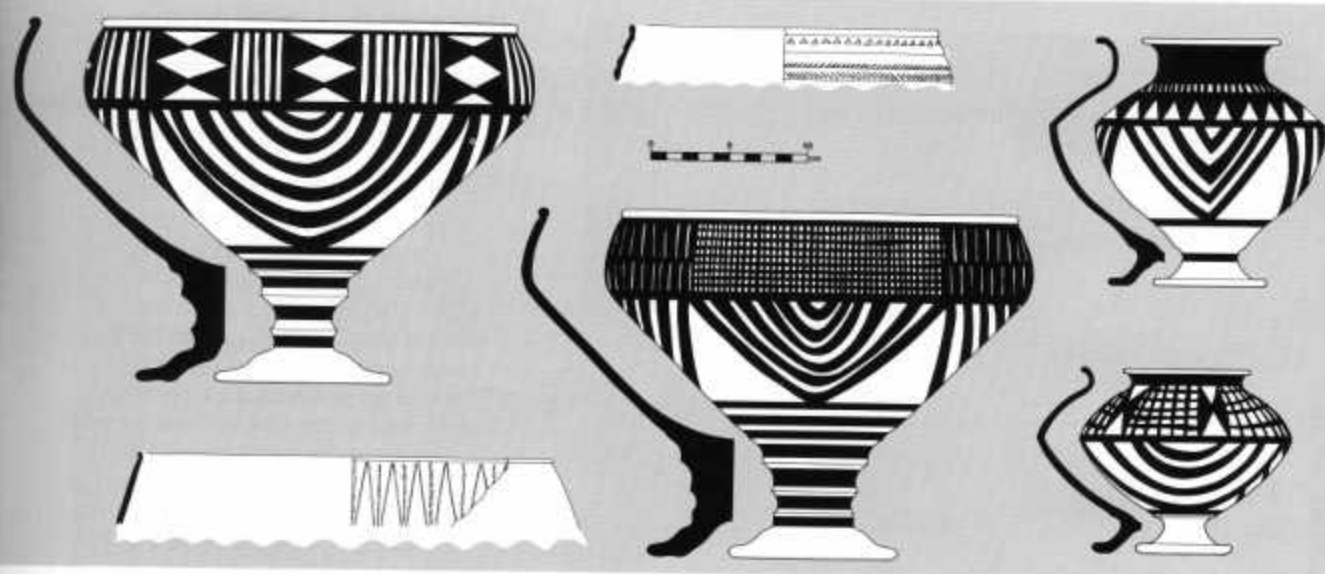
When did the expansion of the city occur? Two sets of data allow us to begin to clarify the relative and absolute date for the construction of the City Wall, when the rapid expansion of settlement took place. Four radiocarbon dates derived from a very large deposit of charred grain retrieved in stratum 20 of Operation 1 have now been analyzed. Two of

these samples were sent to a laboratory in Florida and two were sent to a laboratory in Tokyo; the dates determined by these laboratories are indicated in the chart of Leilan radiocarbon dates.

Because these dates are derived from one large sample, they can be averaged in a fashion that allows us



Operation 1, north section, Acropolis-northwest. Operation 1, which is now 16 meters deep, was the first stratigraphic sounding made at Leilan. At present the lowest excavated strata date to the Ubaid period.

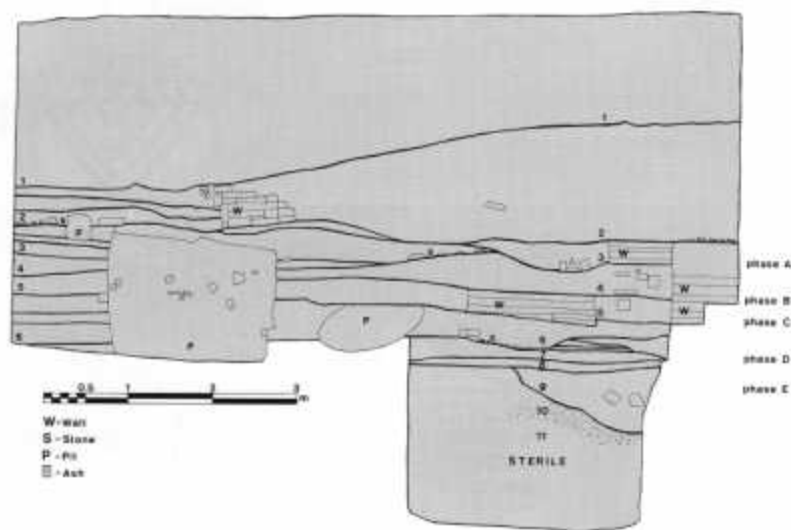


Examples of Leilan III (Ninevite V) pottery from Tell Leilan Operation 1. Incised ware (rim and body sherds) and painted ware (complete vessels). The date of these intricate and very beautiful ceramic vessels has been a mystery for decades. The retrieval of twenty-five successive strata characterized by such ceramics within Operation 1 now permits us to date them to the period immediately preceding the circumvallation of Tell Leilan and immediately after the Late Uruk period in northern Mesopotamia. Reproduced from Glenn M. Schwartz, *From Prehistory to History on the Habur Plains* (1982).

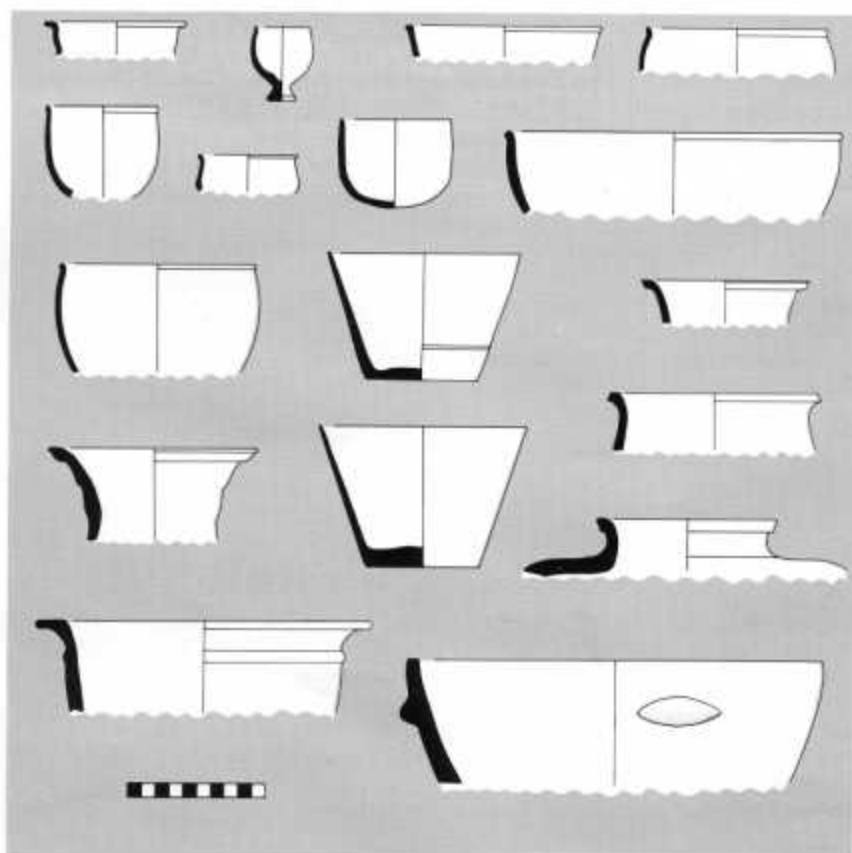
Tell Leilan Radiocarbon Samples

Lab. Number	Provenience	Context	Material	before present	B.C. \pm 2s
UM-1816	L80 45Q12 10 C-14 no. 1	Acropolis-northeast Building Level II	wood	3895 \pm 80	2760-2143
N-3900	L79 45V10 22 C-14 no. 5	Acropolis-northeast Building Level III	wood	3330 \pm 80	1885-1415
N-3901	L79 45T11 16 C-14 no. 8	Acropolis-northeast Building Level III	contaminated	rejected	
N-3902	L79 45T11 8 C-14 no. 3	Acropolis-northeast Building Level III	contaminated	rejected	
UM-3101	L79 45V10 13 C-14 no. 2	Acropolis-northeast Building Level III	contaminated	rejected	
UM-1818	L80 Op 2 67 C-14 no. 2	"City Wall" phase E	wood	4320 \pm 90	3355-2665
UM-3098	L80 Op 1 41 C-14 no. 9	Op 1 stratum 19	grain	2870 \pm 130	1410-790
N-3896	L79 Op 1 26 C-14 no. 2	Op 1 stratum 19	wood	4980 \pm 80	3935-3565
N-3897	L79 Op 1 40 C-14 no. 5	Op 1 stratum 20	grain	3970 \pm 85	2865-2190
N-3898	L79 Op 1 40 C-14 no. 6	Op 1 stratum 20	grain	4070 \pm 70	2885-2415
UM-1777	L79 Op 1 40 C-14 no. 6	Op 1 stratum 20	grain	4090 \pm 70	2895-2420
UM-3099	L80 Op 1 40 C-14 no. 2	Op 1 stratum 20	grain	4060 \pm 60	2880-2410
A-2899	L79 Op 1 45 C-14 no. 7	Op 1 stratum 34	grain	4210 \pm 85	3150-2555
UM-1814	L80 Op 1 94 C-14 no. 6	Op 1 stratum 34	grain	4890 \pm 70	3875-3395
UM-1815	L80 Op 1 96 C-14 no. 7	Op 1 stratum 35	grain + wood	4625 \pm 85	3655-3055
UM-18131	L80 Op 1A 6 C-14 no. 6	Op 1 stratum 38	grain	4735 \pm 110	3783-3193
UM-1812	L80 Op 1A 40 C-14 no. 6	Op 1 stratum 44	grain	4705 \pm 85	3775-3173
UM-1817	L80 Op 1C 35 C-14 no. 1	Op 1 stratum 58	grain + wood	6580 \pm 100	5785-5240

Notes: The "s" in right-hand column signifies standard deviation. Numbers N-3897, N-3898, UM-1777, and UM-3099 were the samples sent to laboratories in Florida and Tokyo for analysis, two samples being sent to each place.



Above: North stratigraphic section of Operation 2. Strata 1 and 2 are surfaces littered with Habur ware, while strata 3 through 8 are characterized by Period-II ceramics. The foundation trench for the City Wall is stratum 9. **Below:** Representative wheel-made pottery of Leilan Period II (circa 2500–2000 B.C.) from strata 3 through 8 in Operation 2.



to reduce the standard deviation (the plus/minus figure that accompanies a radiocarbon "date"). This weighted average date is 2673 B.C. \pm 70, which means that the date of the original sample (short-lived grain) is 85 percent certain to fall within 2755 and 2595 B.C. This date for stratum 20 in Operation 1 provides us with a *terminus post quem* (that is, the point after which) for the construction of the City Wall (Weiss 1983). But it seems clear that the extant surface upon which the City Wall now rests in Operation 1 was not the last surface deposited there. This area had been scraped and levelled prior to the City Wall's construction. How many intervening strata were removed cannot now be known. Probably, however, strata with ceramics similar to those now retrieved at Tell Mohammad Arab, across the border near Eski Mosul in Iraq, are to be situated between the last pre-wall strata and the construction of the wall in Operation 1 (Weiss 1985b). The date of the City Wall's construction, therefore, might be around 2500 B.C.

A second set of dating evidence is comprised of the ceramics associated with the construction and first use of the City Wall (see the section drawing for Operation 2, north section, and the illustration of representative pottery). It is now quite certain that these ceramics are the same as those recently retrieved at Tell Brak.

Tell Brak is a large, 43-hectare site, located 51 kilometers southwest of Leilan, alongside the Jagh-jagh River, another of the effluents of the Habur that join together near Hasseke to form the "triangle," as the Habur Plains are sometimes called. Brak was first excavated by Sir Max Mallowan in 1936 and 1937, and until recently those excavations have served as the major guide to the archaeology of the Habur Plains. Sir Max was fortunate in the time that he spent at Brak to uncover a very large mudbrick fortress, almost one

Chronological Relationships

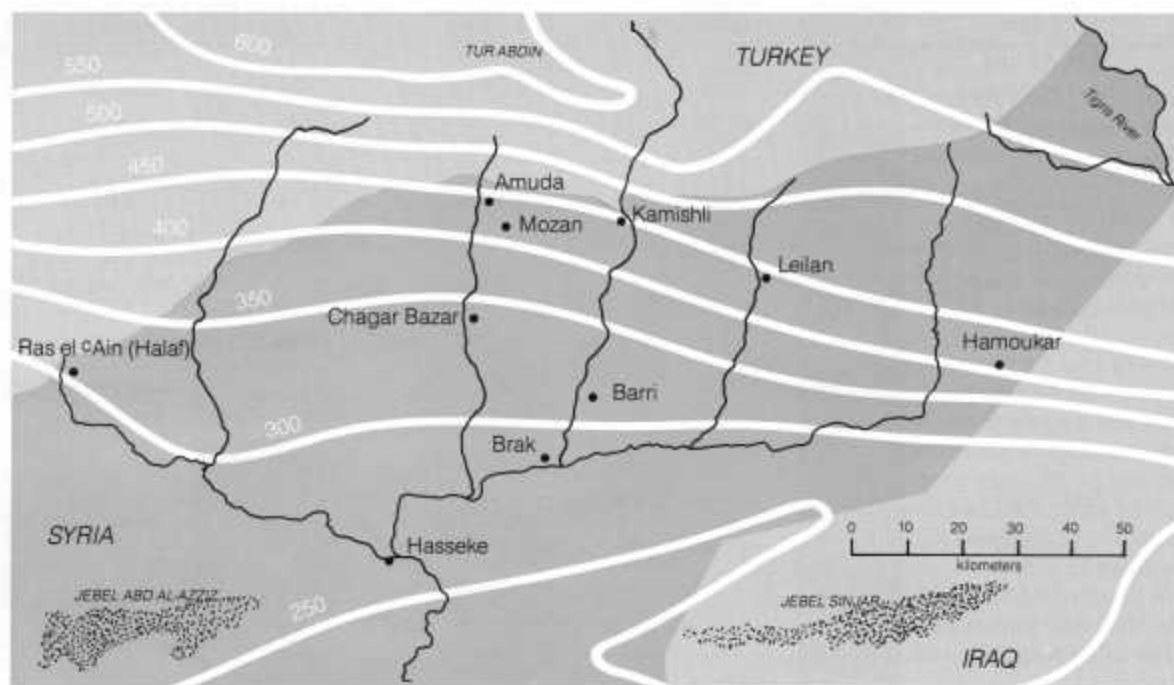
circa B.C.	Tell Brak	Leilan Period	Tell Leilan				Tell Taya	circa B.C.
	CH, ST, and Other Soundings		Op. 1	Acropolis- northeast	57F02	Op. 2	Acropolis	
1800	Habur ware	I	1-12	B.L. 1-III	1-3	1-2	III-IV	1800
1900								1900
2000	1 "Ur III"		?	?	?	?	V-VI	2000
2100	2 "interregnum"		13		4	3	VII	2100
2200	3-4 Late Agade	II	14				destruction	2200
2300	5 reconstruction		15				VIII	2300
2400	destruction, levelling						destruction	2400
2500	6 "late ED III" building		city wall		16	9 city wall	IX	2500
2600		gap ^a			virgin soil	virgin soil		2600
2700								2700
2800	[levelling]	IIIc	16-20				Ninevite V	2800
2900							[surface]	2900
3000		IIIb	21-34					3000
3100								3100
3200	Ninevite V	IIIa	35-40					3200
3300								3300
3400	Late Uruk	IV	41-44					3400
3500								3500
3600								3600
3700			45					3700
3800	Early Uruk	V						3800
3900								3900
4000			52					4000
4100								4100
4200			52a					4200
4300		VIb						4300
4400			57					4400
4500								4500
4600			58					4600
4700		VIa						4700
4800	Ubaid		61					4800
4900			.					4900
5000			.					5000
5100			.					5100
5200			.					5200
5300			.					5300
5400	Halaf		.					5400
5500			.					5500

^aPerhaps the same as levels M through R at Mohammad Arab.

hectare in size, with bricks bearing the stamped inscription of Naram-Sin, Sargon's imperial grandson. Within the partially excavated fill of the fortress, Mallowan also retrieved a fragmentary votive inscription bearing the name of Rimush, Sargon's son. It is possible, therefore, that the fortress was even constructed prior to Naram-Sin. This imposing structure has been taken

as unequivocal evidence for Sargonic control of the Habur Plains (Mallowan 1947). More recently, David Oates, successor to Mallowan at Tell Brak, has retrieved portions of a large building adjacent to, but stratigraphically below, the Naram-Sin fortress, and he assigned it to the "late Early Dynastic" period. The excavators also suggest that this structure "had some official-politi-

cal or military—character, and was not simply an indigenous phase in the continuous occupation of the city as a whole" (Oates 1982a: 67). This building was, in turn, destroyed, and then rebuilt, prior to the foundation of the Naram-Sin fortress. It is entirely possible, therefore, that this building was destroyed by Sargon (Oates 1982b: 197). The ceramic assemblage associated with



Map of the Habur Plains, with modern isohyets (lines that connect points of equal rainfall) drawn in. Figures are in millimeters.

this building is remarkably similar to the early Leilan-period-II ceramic assemblage, the assemblage associated with the sixfold expansion of Leilan and the construction of the City Wall (J. Oates 1982; Weiss 1983).

A pre-Naram-Sin date, and possibly pre-Sargon date for the City Wall at Tell Leilan is, therefore, now suggested by the Leilan radiocarbon dates, the relative ceramic chronology of Leilan ceramics and Mohammad Arab ceramics, and the building sequence at Tell Brak. If correct, this date may alter considerably our understanding of the origins of cities and civilization in Syria and Mesopotamia.

Subir in the late third millennium B.C. After its probable date, the most significant feature of Leilan's circumvallation, and the most important feature for understanding its genesis, is the observation that Leilan

was not unique. Surface collections made by the Tell Leilan Project in 1979 at Tell Hamoukar, 46 kilometers southeast, indicate that this 90-hectare settlement was also occupied during the early Leilan II period, and in fact was already a very large settlement in late Uruk times. Similarly, surface collections at Tell Mozan, 43 kilometers northwest of Tell Leilan, indicate that this site too, was probably a large early Leilan-II settlement, which continued to be occupied in Leilan-I times. Hence the circumvallation of—that is, the City Wall construction around—Leilan allows it to be understood as a regional phenomenon, within a specific portion of the Habur Plains: the extremely fertile area of the plains that receives more than 400 millimeters of rainfall per annum. Similar sites appear across the border in Iraq, south of the Jebel Sinjar and near Tell Afar.

Another site in the region, Tell Brak, appears to be a different kind of settlement, however. Tell Brak might be understood as one of a class of settlements, occurring in a variety of historical and geographical contexts, sometimes labelled "gateway cities." Such settlements characteristically control the entrance into a region, command the connections between that region and the "outside world," and are often located eccentrically at one end of the region, sometimes at the border between regions defined by different kinds of agricultural production (Burghardt 1971). These characteristics fit the geographical, climatic, and cultural situation of Tell Brak, as we know it, quite well. Brak is located at the southern extremity of the Habur Plains, quite distant from its most productive centers. A glance at the map displaying mean annual rainfall on the Habur Plains shows that Brak

receives only 289 millimeters of rainfall per annum, just enough rain to generate a dry-farming (that is, farming that depends on rainfall and doesn't utilize irrigation) cereal crop. This location is markedly distinguished from that of the three large-walled settlements (Tell Leilan, Tell Mozan, and Tell Hamoukar) that are each much larger than Brak, and situated almost equidistant from each other within the dry-farming belt at points that apparently maximize access to cultivable flatland.

Locationally, Brak controls the entrance into the Habur Plains provided by the Habur River itself as it passes through the "gates" of the Jebel Abd al-Azziz and the Jebel Sinjar. This situates Brak directly between the area of high-rainfall dry farming that characterizes the area of gently rolling plains around Leilan, Mozan, and Hamoukar and the irrigation-dependent regions of the south. The cultural inventory of Tell Brak in the late prehistoric and early historic periods may also be understood in terms of the settlement's "gateway" status, since it seems to have many elements of southern culture, while also apparently preserving indigenous elements foreign to southern Mesopotamia (Amiet 1983: 51).

The Habur Plains, entered through Tell Brak, were known to the third-millennium dynasts of southern Mesopotamia as the land of Subir. Later, in the second and first millennia B.C., the region was called Subartu, and came to include much of northern Mesopotamia (Gelb 1944; Edzard, Farber, and Sollberger 1977: 146-47). Beginning in the late Early Dynastic period and continuing through the Sargonic period, southern Mesopotamian rulers repeatedly claim to have conquered or subjugated Subir, a claim that until now has lacked historical meaning. But the evidence for large third-millennium-B.C. cities on the Habur Plains changes our evaluation of these sources. Cities such as

The Search for Shamshi-Adad's Capital City

Rising from still unidentified roots, perhaps among recently sedentarized Amorite-speaking peoples from the Habur Plains, Shamshi-Adad (whose name means "My sun is the god Adad") briefly transformed the political and economic landscape of northern Mesopotamia in the last years of the nineteenth century B.C., just prior to the accession of Hammurabi in Babylon. In an unexplained flash of historical stardom, Shamshi-Adad managed to subjugate the towns and cities of the northern plains and extend his imperial hold across all of northern Mesopotamia from the Zagros Mountains to the Euphrates River. Quickly seizing control of the upper Tigris River area, including Ashur itself, he deposed local dynasties at nodal control points (Ekallatum on the Tigris and Mari on the Euphrates), and then installed a son at each city as ruler.

Shamshi-Adad then established a new capital at a place that he called Shubat Enlil ("The Residence of Enlil"). Thereafter, dynastic alliances were created with distant city rulers, tribute and gifts were extracted from subject kings, long-distance trade relationships were reestablished across Mesopotamia and into Anatolia, and a hierarchy of regional control, descending from Shamshi-Adad, was extended across the northern dry-farming plains. No city ruler could successfully challenge the armed forces of Shamshi-Adad within this region during his reign of less than thirty-five

years (1813-1782 B.C.).

In spite of his apparent administrative and organizational capabilities and the strength of armed forces loyal to him for still unknown reasons, the disintegrative and centrifugal forces that characterized the plains of northeastern Syria and northern Iraq eventually proved too fractious for the bonds that tied Shamshi-Adad's empire. The difficulties included independent and widely spaced cities with extensive tracts of cultivated plains, large seasonally migrant forces of pastoral nomads moving between the irrigated tracts along the Euphrates and the rain-fed Habur Plains, and persistent challenges from the centralized powers of southern Mesopotamia. Particularly vulnerable were the outposts of the empire, such as Mari, where the incompetence of Shamshi-Adad's son, Yasmakh-Adad, only made matters worse. In the ancient Near East, as in more recent Europe, diplomacy was sealed by marriage. Yasmakh-Adad's personal affairs, however, seem to have made it difficult for Shamshi-Adad to preserve his imperial alliances. Hence this letter from Shamshi-Adad to Yasmakh-Adad:

Did not the former kings . . . establish their spouses in the palace? Yakhdun-Lim, (however), honored his consorts, placed his wife to the side, and moved her into the desert. Perhaps, in the same way, you are planning to place the daughter of Ishi-Adad (the king of Qatna) in the

desert. Her father will be gravely disturbed by this. This is not good! There are many rooms in the "Palm Tree" Palace. Let them choose a room for her there, and let her stay in that room. Do not make her dwell in the desert. (AO.2548 in Sasson 1973: 76)

While the Mari archives relate the details of imperial rule across the northern landscape, we still have yet to understand the origins of Shamshi-Adad's rule, its development, and its eventual crash. The crash, however, was dramatic and conclusive. The death of Shamshi-Adad was a major Mesopotamian event even celebrated as the name of the year after which it occurred. (For a discussion of the Mesopotamian calendar, particularly that of Mari, see Sasson 1984: 249-50).

The Last Days of Shubat Enlil

In the tumultuous two decades that followed the death of Shamshi-Adad, the princes and kings of the city-states on the Habur Plains ransacked and pillaged Shubat Enlil and fought with each other over its spoils. Some of these postmortem activities can be followed quite clearly in the graphic, detailed documentation provided by numerous letters within the Mari palace archives and two letters from the palace at Tell al-Rimah. The chart shown here is one ordering of the available documentation, and although it cannot presume to be totally accurate, it allows us to follow some of the movement of armies back and forth across the Habur Plains for almost two decades.

After the death of Shamshi-Adad one of his sons, Ishme-Dagan, was able to briefly preserve the northern empire and hold off armies from the southeast, from along the Diyala River (Eshnunna) and southwestern Iran (Elam). But Ishme-Dagan was shortly defeated, and the northern capital of Shubat Enlil was seized by a former Shamshi-Adad officer. Turum-natki, the ruler of an unmentioned but probably close-by city, allied himself with the forces of Zimri-Lim who had regained the Mari throne and decided to establish his own order on the fertile Habur Plains (see A on the chart). Zimri-Lim's vassal, Yassi-Dagan, now

controlled Shubat Enlil, but a threat from Qarni-Lim was already perceived (B).

Qarni-Lim, ruler of the nearby town of Andariq, apparently beat Zimri-Lim to Shubat Enlil, and was able to plunder the grain of the city (C). Qarni-Lim then joined forces with the "man of Eshnunna," and established himself at the city of Apum with Turum-natki. According to this document the son of Turum-natki was then appointed ruler of Shubat Enlil, but the document was one of the earliest retrieved from the excavations at Mari and was never fully published (D).

The ruler of Eshnunna (Ibal-pi-El) then apparently turned his attention towards Zimri-Lim. The latter sought the help of yet another ruler, Khatnu-rapi of Karana, who recaptured Shubat Enlil from the king of Eshnunna, pillaged the city a second time, and walked off with his booty without sharing any with Zimri-Lim (E and F). From Tell al-Rimah, a small kingdom east of the Jebel Sinjar in northern Iraq, the following letter records the jealous exchanges among the looters of the fallen capital:

Speak to Khatnu-rapi: thus Bunu-Ishtar your brother. "You are bringing out Zimri-Lim's share from the spoil that you are taking from Shubat Enlil, but why are you still keeping his share? Will he just look on?" (Dalley and others 1976: number 5)

A temporary coalition of otherwise contending forces (Eshnunna and Elam at the southeast and Ishme-Dagan at Ashur) then attempted to defeat Zimri-Lim's ally, Razama (G).

At some later point, Zimri-Lim regained control of Shubat Enlil and installed an Elamite by the name of Kunnam (or Kunnama), as the city's governor. At the same time Zimri-Lim had apparently already organized a tiered system of control, such that Kunnam was actually liable to the king of Apum, Khaya-abum, who in turn was liable to Zimri-Lim. Railing against this vassalage, Kunnam protested to Zimri-Lim for status equal to that enjoyed by Khaya-abum (H and I).

Shortly thereafter yet another local ruler gained control of Shubat Enlil, Atamrum, who succeeded Qarni-Lim as the ruler of Andariq (J

through N). A military officer and emissary of Atamrum (Lawala-Addu) eventually took charge of Shubat Enlil and from this base proceeded with 3,000 soldiers to attack Khaya-abum of Apum, Zimri-Lim's vassal in the Habur (O). Thereafter, there is no record of Shubat Enlil. In time, it was forgotten.

Where is Shubat Enlil?

It was only with the recovery of the Mari archives centuries later that the existence of Shubat Enlil was once again known and scholars began suggesting sites as candidates for the ancient capital. The distinguished Assyriologist Francois Thureau-Dangin with Georges Dossin, the future doyen of Mari studies, proposed that Shubat Enlil was simply another name used in the Mari texts for the city of Ashur (Thureau-Dangin 1937). Although this identification had its long-term, vocal supporters, such as Julius Lewy (1953), it was challenged early on by the redoubtable Benno Landsberger, who suggested that the site of Chagar Bazar is ancient Shubat Enlil (Landsberger and Balkan 1950); Landsberger was followed in this by Albrecht Goetze of Yale University (Goetze 1953). The issue was one of several, substantive as well as personal, which divided the leading Assyriologists of the time.

Chagar Bazar. Before the outbreak of the Second World War, Max Mallowan, who had been Sir Leonard Woolley's assistant at Ur, was forced to abandon the territory that is now Iraq in the face of the political and cultural inroads that German political agents were cutting within Iraqi official circles. (Up to that time British agents literally controlled archaeology in Iraq.) Still wishing, however, to pursue his archaeological research, Mallowan retreated across the border onto the Habur Plains in the French mandate of Syria and proceeded to undertake his now famous excavations at Tell Brak and Chagar Bazar (Mallowan 1947). His colleague C. J. Gadd from the

In addition to those cited in the chart, the following sources were consulted in preparing this information: Anbar 1978 and 1981; Sasson 1973; and Sauten 1971.

Shubat Enlil After the Death of Shamshi-Adad

Date/Chronology	Documentation of Shubat Enlil
1781 B.C. Death of Shamshi-Adad	Shamshi-Adad's son Ishme-Dagan boasts to his brother Yasmakh-Adad that he holds Elam and Eshnunna. [ARM IV.20]
1772 B.C. Zimri-Lim year 1	A. Zimri-Lim orders Turum-natki of [?] city and Khaya-Šumu of Ilansura to join forces with Sima-ila-khanem of Numkha to liberate Shubat Enlil from Samiya, (renegade?) servant of Shamshi-Adad, who holds the city [?]. Zimri-Lim has ordered spies into the city but they have not returned. [ARM X.5]
	B. Yassi-Dagan holds Shubat Enlil for Zimri-Lim but Qarni-Lim of Andariq is "rumored to be passing through to Shubat Enlil." [ARM II.130]
	C. Qarni-Lim of Andariq plunders the grain of Shubat Enlil. [ARM XIV.109]
	D. Qarni-Lim and the "man of Eshnunna" (Ibal-pi-El?) are in Shubat Enlil. Qarni-Lim and Turum-natki are entrenched at Apum. Turum-natki's son is appointed the ruler of Shubat Enlil (?). (Jean 1938)
	E. Ibal-pi-El of Eshnunna moves from Shubat Enlil towards Zimri-Lim's territory at Mari. Zimri-Lim requests help from Khatnu-rapi of Karana. (Dalley and others 1976, Rimah letter 2)
	F. Khatnu-rapi retakes Shubat Enlil from Ibal-pi-El, takes booty remaining from the first pillage by Ibal-pi-El and Qarni-Lim, and doesn't share with Zimri-Lim. (Dalley and others 1976, Rimah letter 5)
	G. Eshnunna, Elam, and Ishme-Dagan join forces to defeat Razama. [ARM VI.27, II.25]
	H. (Elamites take control of Shubat Enlil.)
	I. Kunnam, the "man of Elam," writes to his lord Zimri-Lim: "Khaya-abum (of Apum) is the 'son' of Zimri-Lim, but I, I am not his [Khaya-abum's] 'son.' I want to meet with my 'father.'" [ARM XIV.102]
	J. Atamrum of Andariq plots to raid Zimri-Lim's territory when Zimri-Lim marches to help Razama. [ARM VI.51]
	K. Atamrum wants to enter Shubat Enlil, but Kunnama won't leave. [ARM XIV.101]
	L. "The city is the city of the <i>sukkal</i> (Kunnama?)." [ARM XIV.104]
	M.? Shubram is the <i>shāpitum</i> -official of Shubat Enlil under Zimri-Lim. [ARM II.109 and X.84]
	N. Atamrum controls Shubat Enlil. His <i>Qutu</i> -troops are within the city. [ARM II.41, Rouault 1970: 48, 77]
1762 B.C. Atamrum, last regnal year	O. Lawala-Addu, the <i>rabi-amurrim</i> -commander (and emissary of Atamrum), leads 3,000 troops from Shubat Enlil to attack Khaya-abum. [ARM II.135]
1760 B.C. Hammurabi conquers Mari	

British Museum published a preliminary analysis of the cuneiform tablets retrieved from both sites shortly after the conclusion of the excavations (Gadd 1940). Gadd's report included mention of a document recording grain shipments to Shubat Enlil. Hence Landsberger's proposal that Chagar Bazar is Shubat Enlil, a notion that persists to this day (Kupper 1973: 45). Scant attention was paid to Sidney Smith, the eminent British Assyriologist, who observed that other place-names as well occur among the documents mentioning Shubat Enlil, thus making it unlikely that it is the ancient name of Chagar Bazar (Smith 1956: 36). In his memoirs, published only a few years before his death, even Mallowan felt obliged to emphasize the obvious with regard to the Chagar Bazar identification:

But in my opinion this [identification] is wrong, because one tablet records the dispatch of supplies to Shubat Enlil—not received by it, and moreover our site seems insufficiently massive and important and not strategically placed for the Assyrian capital which probably lies somewhere in the district not far off. (Mallowan 1979: 122)

Tell Leilan. It was the Assyriologist Margarete Falkner who picked up Emil Forrer's, and ultimately Max Freiherr von Oppenheim's and Hormuzd Rassam's, mention of Tell Leilan (see accompanying sidebar on "Rediscovering Tell Leilan") and first connected the site with the missing capital of Shubat Enlil (Falkner 1957: 37). At almost the same time Barthel Hrouda, who was then a young archaeologist working with Anton Moortgat of Berlin and who was able to assess the significance of surface archaeological observations, also suggested that Leilan could be the missing capital (Hrouda 1958). When new documentary evidence was brought forward with the cuneiform "itineraries," they too were found to present routes that matched the available archaeological facts suggesting the identification of Tell Leilan with Shubat Enlil (Hallo 1964).

Tell Brak. Over the years other suggestions for the location of Shubat Enlil have been made. Tell Brak—a tall, imposing site of 43 hectares, whose an-



In 1978 the Yale expedition began its work at Tell Leilan by surveying the site. In the foreground of this photograph, taken from the west, Mark Kross of the surveying team is seen working. The Leilan Acropolis is visible in the background.



This "Hurrian" foundation peg with a cast bronze lion served as a temple foundation deposit for Tish-atal of Urkish. The date of the lion, and its "sister" in the Louvre, has been much debated but certainly falls within the last quarter of the third millennium B.C. It is 11.7 centimeters high and 7.9 centimeters wide. Courtesy of the Metropolitan Museum of Art, Purchase, Joseph Pulitzer Bequest, 1948, 48.180.

academic world its provenience was said, by its dealer, to be the site of Amuda, west of Kamishli (van Liere 1957). The site of Amuda has been identified with Urkish in the archaeological literature ever since. Two surveys of the site by the Tell Leilan project, however, have failed to retrieve sherds of Leilan periods III, II, or I, although nearby Tell Mozan, now being excavated by M. Buccellati seems to have each of these. Still a regional center in Zimri-Lim's struggle for control of the Habur Plains after Shamshi-Adad's death, Urkish was located just three caravan stops west of Shubat Enlil (Sasson 1973: 74; Hallo 1964: 65).

Assyriologists have reasoned that the "royal titlature" of the Hurrian rulers, referring to the cities of Urkish and Nawar, "groups two cities distant from each other in order to designate the entirety of the land of" Subir (Sollberger and Kupper 1971: 128). Dependent, therefore, upon where one locates Nawar, the land of Subir controlled by late-third-millennium Hurrians may have been quite extensive (Hallo 1978: 17). It remains unlikely, however, that Nawar could be as distant

from Urkish as the Jebel Hamrin or the Zagros Mountains, and a location upon the Habur Plains is probable (ARM 2: 57).

Historical geographical problems will always plague ancient Near Eastern research to lesser or greater degrees. Very substantial gains seem close by, however, in a region that until recently, and in spite of years of research, was virtually unknown. But another, and perhaps more substantial, contribution remains to be made by archaeological research on the Habur Plains for the genesis of third-millennium urbanism here, and its trajectory through the early part of the second millennium, remains to be delineated and analyzed.

Postwar archaeological research is now entering its second research phase on the plains of Syria and Mesopotamia with research horizons considerably more extensive than those of its predecessors. The dry-farming plains of northwestern Syria, extending from the Amanus range south to Aleppo, Tell Mardikh, Hama, Homs, and Qatna, present themselves as one region of high rainfall and high agricultural production with its own developmental history coming into conflict with the irrigation-agriculture southern regions around Mari and Sumer in the late third millennium. Similarly, the Habur Plains, long known from third-millennium documents recording the conquests of southern dynasts, and famous as the most productive cereal agriculture region in Syria and Mesopotamia, apparently also experienced sudden urbanization in the third millennium. The inevitable conflict with southern forces, however, may have curtailed this development, as it did in the northwest. The cuneiform record for late-third-millennium developments in this region is sadly laconic, and the extensive archaeological exploration of such settlements is just beginning at Tell Leilan and other sites.

The renewed attempt by the forces represented by Shamshi-Adad to centralize control of the Habur Plains may indicate that the region's productive strengths and organizational potentialities were not diminished, continued to emerge and dominate the plains at permissible junctures, and again threatened the irrigation-agriculture centers of the south. This may explain why Shubat Enlil was no longer occupied and "Shamshi-Adad" was just a name on little pieces of mud when Hammurabi returned to Babylon from his last campaigns against Subartu.

Conclusion

Archaeological and historical documents are by their very nature partisan sources that must be evaluated in the light of our own intellectual biases, as well as the biases of the sources themselves. It has long been recognized that the history of Mesopotamia that we have been retrieving, recording, and interpreting is mostly the history of southern Mesopotamia observed through excavations at southern sites. At Tell Leilan, however, we have before us another source for the early history of the ancient Near East: an important city in the heartland of Subartu, the "other Mesopotamia."

For the years ahead, the Tell Leilan project has now set the stage for the investigation of a formidable array of historical problems: the origins of cities and civilizations on the Habur Plains, the ancient history of Sumer's rival Subir, the interaction between pastoral nomads and city-based powers, and the history of Shubat Enlil and Shamshi-Adad's northern empire. Archaeology, perhaps the only discipline to presume to study the long-term history of human societies, will be put to the test.

Acknowledgments

The Tell Leilan Project's field epigraphers, Dr. B. R. Foster (Yale University), Dr. Daniel Snell (Uni-

versity of Oklahoma) and Dr. Robert Whiting (University of Chicago), copied the seal impression inscriptions from Leilan 1979, 1980, and 1982. Ms. Lorraine Ferguson (Yale University) chief draftsman for Leilan 1979 and 1980, drew the ceramics presented here. Dr. Nancy Leinwand drew the seal impression designs from field drawings and macrophotographs. The Tell Leilan Project, sponsored by Yale University and the Metropolitan Museum of Art, has also been supported by grants from the National Science Foundation, the National Endowment for the Humanities and the Hagop Kevorkian Foundation, and the generosity of Barbara Clay Debevoise, Betty Starr Cummin, Roger and Barbara Brown, Jonathan Rosen, and Daniel Foster.

Note

Parts of this article are revised and expanded from two articles by the author that appeared in the *Yale Alumni Magazine and Journal* (Weiss 1981 and 1984). These are used with permission of the editors. This article also includes materials presented in Weiss 1985a, b. All excavation photographs are by the author.

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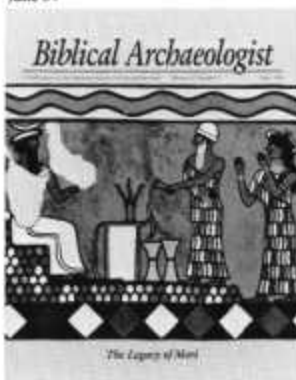
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