



Studia Chaburensia | Vol. 3

Seven Generations Since the Fall of Akkad

Edited by Harvey Weiss

Harrassowitz Verlag

Post-Akkadian Settlement Distribution in the Leilan Region Survey

The end of the Akkadian period, in the last half of the twenty-third century, is coincident with the beginning of a degradation of climatic conditions, recorded in more than 30 paleoclimate proxies from Tanzania in Africa to Rajasthan in India, which led to a ca. 30 % precipitation decrease and aridification across West Asia (Weiss et al. 1993; Staubwasser and Weiss 2006; Weiss 2010).

The imperialized urban center of Tell Leilan changed drastically during this period: both the Lower Town and the City Gate were abandoned and naturally filled with dust deposits (Weiss 1990; Ristvet, Guilderson and Weiss 2004), and on the Acropolis, The Unfinished Building, left incomplete, testifies to the suddenness of this event (Ristvet and Weiss 2000). Following this abandonment, four rooms and an open courtyard, comprising only 0.1 ha, were reoccupied above an area of the previous Akkadian Administrative Building, and are the only remains of Leilan IIc (post-Akkadian) occupation at the site (Weiss 2010; Weiss et al., this volume: 163). The post-Akkadian reoccupation at Tell Leilan was very brief, and at ca. 2200 cal. BC the settlement was abandoned until the arrival of Shamsi-Adad (Weiss et al., this volume: 163).

In general, the evidence of post-Akkadian occupation in the Leilan Region Survey mirrors the developments at the site of Tell Leilan, where a widespread, imperial territorial organization was followed by a limited number of short-lived occupations.

Post-Akkadian developments in the Upper Khabur basin

The periodization recently developed as part of the ARCANE project, recognizes the developments following the Akkadian Period (ca. 2350-2200 BC, EJZ 4 a-b phases) in phase EJZ 4c, early post-Akkadian or Terminal-Akkadian (2207-2147 cal BC), and phase EJZ 5, roughly contemporary with the Ur III period in Southern Mesopotamia (Lebeau 2011). Radiocarbon dates for the period following the Akkadian phase in the region, come only from Leilan and Brak, and they suggest a range from 2217 to 2147 cal BC; the lack of radiocarbon dates for the following EJZ 5 and OJ I phases, however, has presented a problem in establishing the end of the phase EJZ 4c (Ristvet 2011).

In the Upper Khabur region, excavated remains of the EJZ 4c phase show evidence for the shrinkage of all the major centers of the mid-late 3rd millennium BC. The dense lower towns founded in the mid 3rd millennium are everywhere abandoned, as at Tell Leilan (Weiss et al., 1993), Tell Brak (Colantoni, this volume: 45) and Hamoukar (Reichel, this volume: 279). In most cases occupation is represented by a single building on the main mound, as e.g., at Chagar Bazar II (McMahon and Quenet 2007), at Tell Arbid (Kolinski, this volume: 109) and at Leilan (Weiss et al., this volume: 163). No monumental architecture has so far been identi-

fied, but instead domestic dwellings are built on the same spot where public architecture was present in previous phases, like e.g., at Leilan IIc (Weiss et al., this volume: 163), or at Tell Mozan Area AA phase 4, above the erosion of the Palace (Buccellati and Kelly-Buccellati 2002; Orsi 2011). At Mohammed Diyab Phases MD XI b-c, X and IX, and at Tell Barri strata 36-35A, occupation is testified by alternating, probably short, phases with fragmentary remains of small scale architecture (Nicolle 2006; Nicolle, this volume: 129; Orsi 2011).

During the EJZ 4c phase, the production of new administrative devices is interrupted, but sealing practices were still in use, as shown e.g., at Tell Brak, area TC, where impressions from old seals were recovered on new ceramic types (McCarthy, this volume: 217; Emberling, this volume: 65). No cuneiform documentation, however, has been discovered yet for this period (Sallaberger 2011).

A generalized abandonment of permanent settlements across the whole Jezirah region follows this brief post-Akkadian phase. Continuity into the 2nd millennium, despite a further contraction, is attested only at Tell Mozan, and a probable sparse occupation is briefly present at Tell Barri, and possibly at Tell Arbid (Pfälzner this volume: 145; Orsi, this volume: 89; Orsi 2011; Kolinski, this volume: 109). As already indicated, none of these sites have radiocarbon dates related to the later post-Akkadian/pre-Khabur Ware period. Tell Mozan C7 was however recognized as, at least partially, contemporary with the Ur III period of southern Mesopotamia, on the basis of epigraphic analysis of the sealings from the “House of Pussam” (Dohmann Pfälzner and Pfälzner 2002; Sallaberger 2011). At Tell Barri the ceramic comparison of phase P with the assemblage of Mozan C7 also suggest an at least partially synchronous occupation.

The Leilan Region Survey project

Four seasons of survey were undertaken in the region surrounding Tell Leilan by a team directed by Prof. H. Weiss of Yale University. The data from the third millennium BC, from the different campaigns, have been published separately in the past (Weiss 1986; Ristvet and Weiss 2000; Weiss et al, 2002; Stein and Wattenmaker 2003; Ristvet 2005; Ristvet and Weiss 2005; Arrivabeni 2010). The data presented in this volume conjoin the previous survey results of the third millennium BC materials presented by L. Ristvet (Ristvet 2005), and the study of the 1995 survey materials undertaken by the present author (Arrivabeni 2010).

The LRS comprises an area 60 kms long and 30 kms wide, and its northern and southern limits are respectively the modern Turkish and Iraqi borders; the total surveyed area covers thus an area of ca. 1650 km². During the survey, sites were divided into collection units following the site's topographic contours with diagnostic sherds collected in each unit. Laser theodolite mapping of sites and their collection units has allowed estimation of site sizes for different periods of ceramically defined occupation.

Recognizing post-Akkadian occupation in the Leilan Region Survey

Post-Akkadian occupation across the Leilan Region Survey was identified on the basis of the recognition of specific ceramic diagnostic types. The corpus of diagnostic types used during the processing of the third millennium materials from the Leilan Region Survey, was created from stratified ceramic assemblage sequences of the Syrian and Iraqi Jezirah regions (Ristvet 2005; Arrivabeni 2010). The comprehensive re-analysis of the ceramic assemblage of the

Syrian Jezirah during the third millennium, recently carried out by the ARCANE project, has slightly adjusted some of these ceramic types.

In general, the whole second half of the third millennium in the Upper Khabur basin was characterized by a high level of standardization, and by a strong continuity in ceramic production. As the arrival of the Akkadian Empire did not bring along new southern ceramic types, it is not surprising that the phase immediately following the Akkadian withdrawal is characterized by ceramic tradition resilience. Despite the degree of continuity with the previous phase, it has, however, been observed that some ceramic types occur more frequently in the post-Akkadian/EJZ 4c phase (Rova 2011). In the subsequent EJZ 5 phase, southern Ur III-related pottery starts to appear alongside new, probably local, developments as observed at Tell Mozan Area C level 7, and Area A level 4 (Dohmann-Pfälzner – Pfälzner 2002; Orsi 2011; Schmidt 2012), and at Tell Barri (Orsi 2011).

Several issues still remain that affect the recognition of post-Akkadian ceramic types during survey. This is especially the case because of the conservatism of third millennium ceramic production. However, the problem is compounded greatly by the fact that we still lack large quantified ceramic assemblages that continuously span the second half of the third millennium BC. Developments and innovations through the successive ceramic periods are, therefore, still difficult to identify and to quantify.

Selected diagnostic types

To identify post-Akkadian occupations in the Leilan Region Survey a limited number of diagnostic types have been considered.

Type 1) *Elongated pots with out turned rim and wavy and horizontal combed incised decorations* (Pl. 1: 1-2). Combed-incised decoration appears during the EJZ 4 (a)-b phases, but the characteristic composition of alternating waving and horizontal bands on the upper body of tall open vessels, becomes more frequent in stratified assemblages during the EJZ 4c phase, and continues to be attested in the EJZ 5 phase. Stratified examples can be found at Tell Brak phases M-N (Oates, Oates and McDonald 2001, Fig. 405), at Chagar Bazar II (McMahon and Quenet 2007, Pl. 3.20), and to the east at Tell Taya VII (Reade 1968, Pl. LXXXV: 20), Nineveh level VI (McMahon 1998, fig. 9: 14) and at Tell Fisna level VIa (Numoto 1988, fig. 24: 198).

Type 2) *Combed impressed decorations* (Pl. 1: 3-5). This had been considered the most useful diagnostic type for the identification of early post-Akkadian occupation. In the post-Akkadian/EJZ 4c phase in the Syrian Jezirah, this decoration seems to be limited to jars, and dotted-impressed oblique bands are always in combination with combed horizontal bands; examples are attested in all sites with a post-Akkadian occupation, such e.g., at Leilan IIc (Ristvet and Quenet, this volume: 193, Fig. 9: 88) and at Chagar Bazar II (McMahon and Quenet 2007, Pl. 3.40: 185). However, although rare at some sites in the Syrian and Iraqi Jezirah, combed-impressed dotted bands on different vessel types, appear already during the Akkadian phase e.g., at Tell Beydar IV a-b (Gavagnin, pers. comm.), Brak phase M (late) (Oates, Oates and McDonald 2001, Fig. 403: 289, Fig. 404: 305; Fig. 406: 347 – 349), and Tell Taya IX (Arrivabeni, forthcoming).

Type 3) *Corrugated surfaces* (Pl. 1: 6-7). This decoration, or surface treatment, occurs on jars, wide-mouthed pots and large bowls. It is widely attested at Brak phase N (Oates, Oates and McDonald 2001, Fig. 425) and Chagar Bazar phase II (McMahon and Quenet 2007, Pl. 3.18).

- Type 4) *Vertical multi-ribbed wide necked jars* (Pl. 2: 1). This type first appeared in the early post-Akkadian/EJZ 4c phase, and remained in use, though evolving, until the second millennium. Stratified examples are observed at Chagar Bazar II (McMahon and Quenet 2007, Pl. 3.45: 207-208) and Tell Brak (Oates, Oates and McDonald 2001, Fig. 423: 753, 755, 758-759). Further east, in the Tigris basin, this type is present at Nineveh level VI, as well (McMahon 1998, fig. 9: 4-6).
- Type 5) *Relief zoomorphic appliqué* (Pl. 2: 3). This type of decoration appears frequently in stratified assemblages from the EJZ 4 phase, and it continues into the EJZ 5 phase and even into the 2nd millennium BC. Late examples can be observed e.g., at Tell Brak (Oates, Oates and McDonald 2001, Fig. 407).
- Type 6) *Bitumen painted decoration* (Pl. 2: 2) starts to be attested in the EJZ 4c phase and continues, apparently with increasing frequency, in the EJZ 5 phase. Examples are found at Tell Brak (Oates, Oates, and McDonald 2001: 165-166), Chagar Bazar II (Quenet and McMahon 2007, Pl. 3.35: 167) and at Tell Mozan area AA phase 4, and in C7 (Orsi 2011, tav. 151:79; tav. 156: 142-143; Pfälzner 2012, fig. 8: g).
- Type 7) *Fine shallow carinated bowls with flat base and vertical concave rim* (Pl. 2: 4-5). This is a characteristic Ur III type of the south, e.g., at Mari (Lebeau 1990, pl. I: 7-9), and in the Syrian Jezirah is attested at Tell Mozan phase C7 and area AA phase 4 (Schmidt 2012, fig. 1: 1; Orsi 2011, tav. 146, 205), and at Tell Barri phase P and phase O (Orsi 2011, tav. 205).
- Type 8) *Small carinated bowls with flat base and vertical or slightly inturned – occasionally recessed-beaded – rim* (Pl. 2: 6-7). This type is present only at Tell Mozan, area AA phase 4 and C7, and at Tell Barri in phase P (Orsi 2011, tav. 204).
- Type 9) *Large bowls with out-turned hammer-molded rim* (Pl. 2: 8). At Tell Mozan, this type is said to be attested already in the dwelling quarter from the Akkadian period, and continues in the later phases as well, as in area AA phase 4 (Orsi 2011). At Tell Barri it appears in phase P, and becomes more common in phase O, in the early second millennium (Orsi 2011).
- Type 10) *Tall, necked jars with deeply incised rims* (Pl. 2: 9). In the Syrian Jezirah this type is attested at Tell Mozan C7 (Schmidt 2012, fig. 2: 1) and at Tell Barri phase P (Orsi 2011, tav. 188); In the Iraqi Jezirah, one fragmentary example comes from Tell al-Rimah phase 2 (Postgate, Oates and Oates 1997: 170-171).

The identified ceramic sherds within the Leilan Region Survey, attributed to a phase contemporary with the Leilan IIc Period, were the basis for the construction of the settlements distribution's map of this phase (Fig. 1). Within the analyzed ceramic materials of the Leilan Region Survey, only Types 1-3 have been recognized, thus mirroring the stratified ceramic assemblage of Leilan Period IIc (see Ristvet and Quenet, this volume: 193). Both at Tell Leilan and in the surveyed regions, some of the post-Akkadian Types 4-6, documented at Tell Brak phase N or at Tell Chagar Bazar II are generally missing¹, and as well as the later types, Types 7-10, which are present at Tell Mozan and at Tell Barri. The absence of the types attested at Tell Brak and Tell Chagar Bazar might be due to cultural differences, but the possibility remains that the post-Akkadian occupation at those sites may have lasted longer than at Tell

1 At Tell Leilan, a fragmentary Type 5 sherd is present, although not associated with architectural features (see Schwartz 1988, Fig. 30: 2).

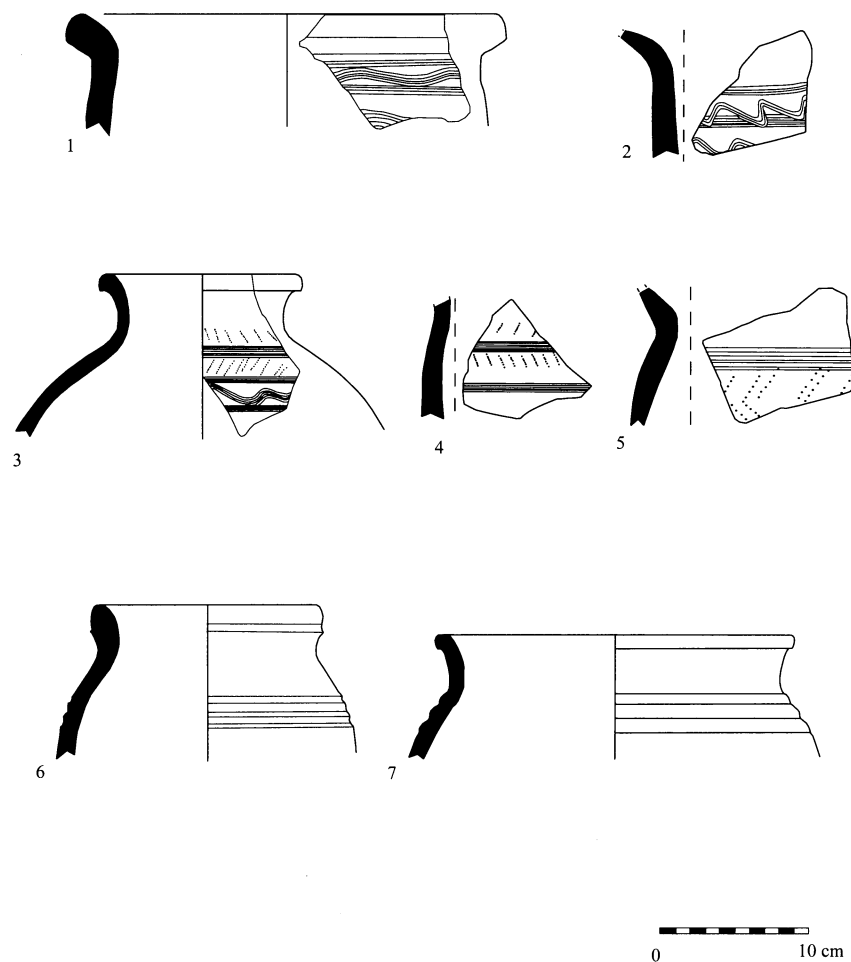


Plate 1: Leilan Period IIc ceramic types identified during survey.

- 1) **Type 1:** Leilan (1), Ziggurat survey. Pale yellow; medium frequent chaff and lime pop temper. Incised punctuated (Ristvet 2005, Fig. A.2.6: 4). ARCANE JZ type 105 (see Rova 2011).
- 2) **Type 1:** Abu Farah γ 614 (60). Buff-whitish, vegetal and mineral-tempered. Sherd with wavy combed incised decoration.
- 3) **Type 2:** Abu Farah δ 361 (60). Pale yellow surface and pinkish core; rare small mineral inclusions. jar with big-beaded rim with incised and impressed combed decoration. ARCANE JZ type 114 (see Rova 2011).
- 4) **Type 2:** 'Aid main mound w 58 (90). Pale yellowish; rare mineral inclusions. Sherd with combed-incised and punctuated decoration.
- 5) **Type 2:** Khodr 3 (123). Pink; vegetal- and mineral-tempered fabric. Sherd with combed with combed-incised and punctuated decoration.
- 6) **Type 3:** Shair 134 (74). Pale buff, no visible inclusions. ARCANE JZ type 108 (see Rova 2011)
- 7) **Type 3:** Leilan T. 2-3 10 (1). Buff; high amount of small mineral inclusions.

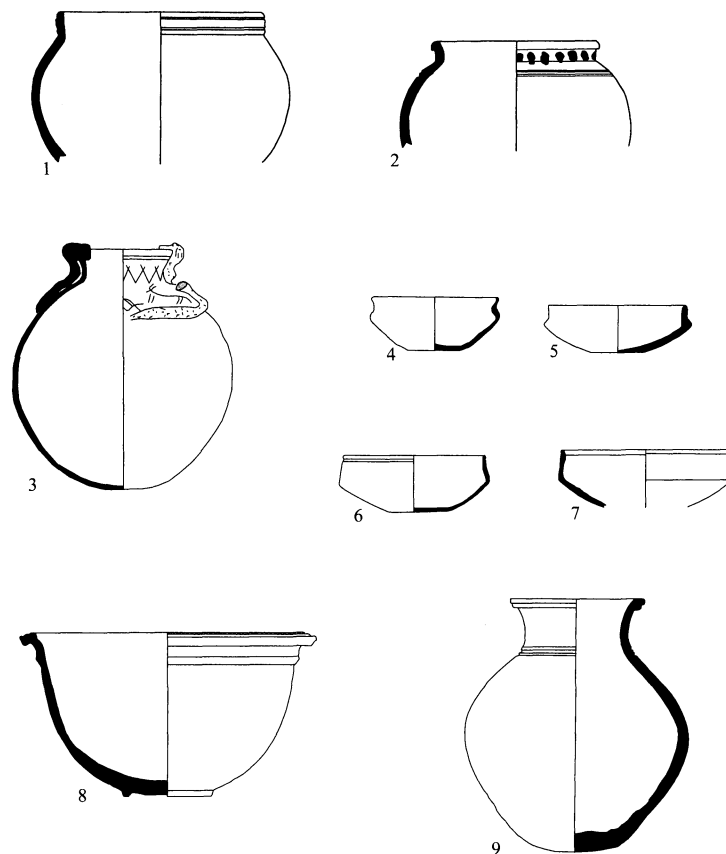


Plate 2: Selected EJZ 4c and EJZ 5 diagnostic types.

- 1) **Type 4:** Chagar Bazar II, Area D (McMahon and Quenet 2007: 84). ARCANE JZ type 107 (see Rova 2011).
- 2) **Type 6:** Chagar Bazar II, Area D (McMahon and Quenet 2007: 167). ARCANE JZ type 122 (see Rova 2011).
- 3) **Type 5:** Chagar Bazar II, Area D (McMahon and Quenet 2007: 129). ARCANE JZ type 111 (see Rova 2011).
- 4) **Type 7:** Tell Mozan (ARCANE JZ005_P003). ARCANE JZ type 117 (see Rova 2011).
- 5) **Type 7:** Tell Mozan (ARCANE JZ005_P005).
- 6) **Type 8:** Tell Mozan (ARCANE JZ005_P004). ARCANE JZ type 118 (see Rova 2011).
- 7) **Type 8:** Tell Mozan (ARCANE JZ005_P023).
- 8) **Type 9:** Tell Mozan (ARCANE JZ005_P030). ARCANE JZ type 119 (see Rova 2011).
- 9) **Type 10:** Tell Mozan (ARCANE JZ005_P011). ARCANE type 120 (see Rova 2011).

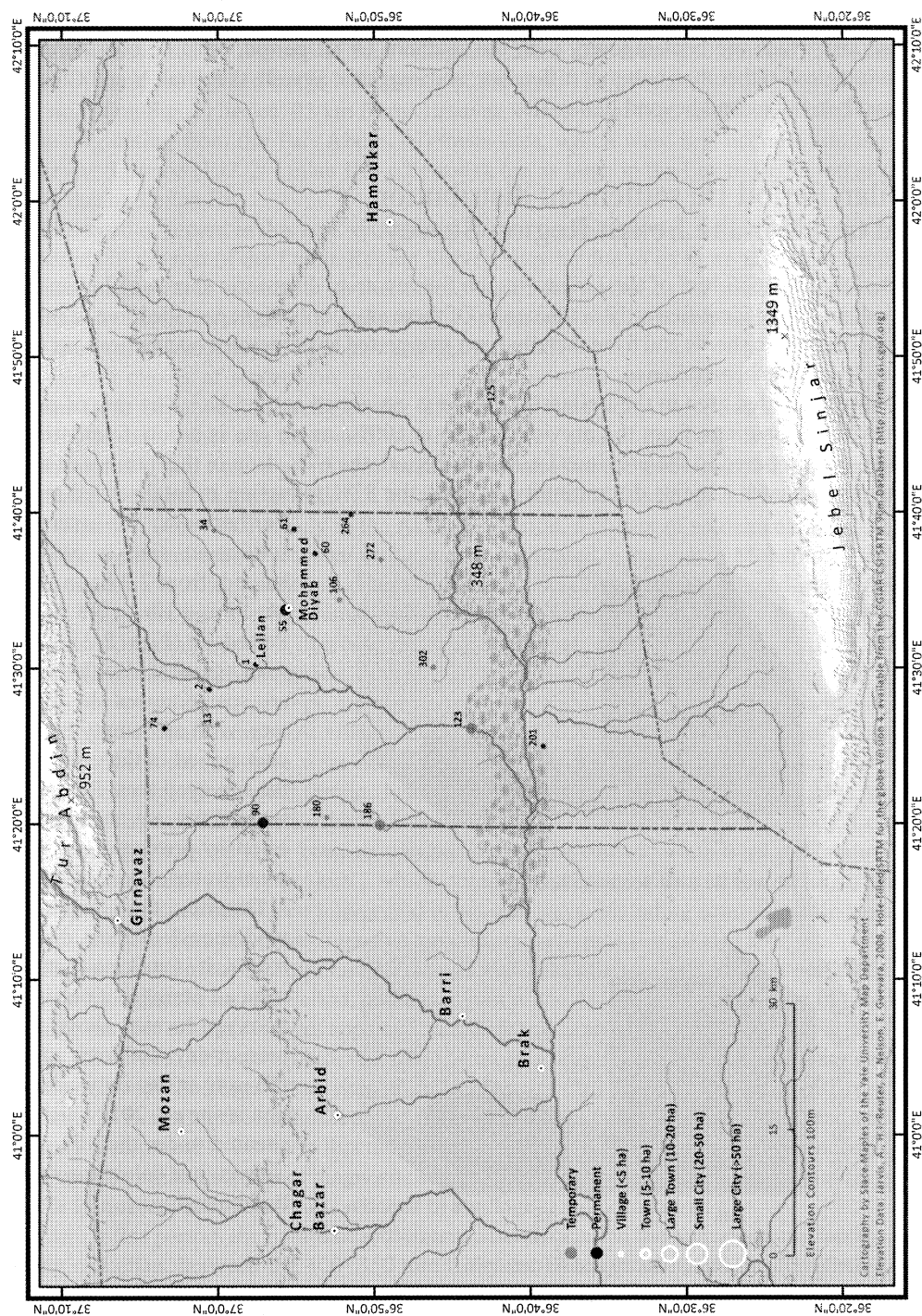


Fig. 1: Leilan Region Survey Period IIc settlement distribution.

Leilan. In contrast, however, the absence of EJZ 5 types identified at Tell Mozan and Tell Barri, and which are contemporary with the southern Ur III period, must be considered a chronological, rather than cultural, difference, and suggests, as well, that Brak N and Chagar Bazar II do not extend beyond Leilan IIc.

Leilan Period IIc settlement distribution and trends in the Leilan Region Survey

Within the ca. 1650 km² of the Leilan Region Survey area, diagnostic sherds of Leilan IIc Period have been identified at 18 settlements. Of these sites, only eight provided five or more secure diagnostic sherds and have thereby been interpreted as permanent occupations, as opposed to more ephemeral ones.

The total settled area in the Leilan IIc Period is estimated at 68.5 ha². The rate of continuity in occupations from the previous phase is 100%, as no site is a new foundation. However, compared to the previous Leilan IIb Period, the 67% drop in the number of settlements indicates a major discontinuity, as does the 87% reduction in total settled area.

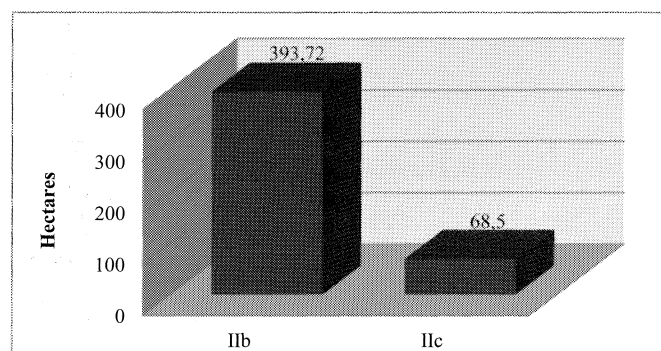


Fig. 2: Leilan IIb and IIc total occupied hectares.

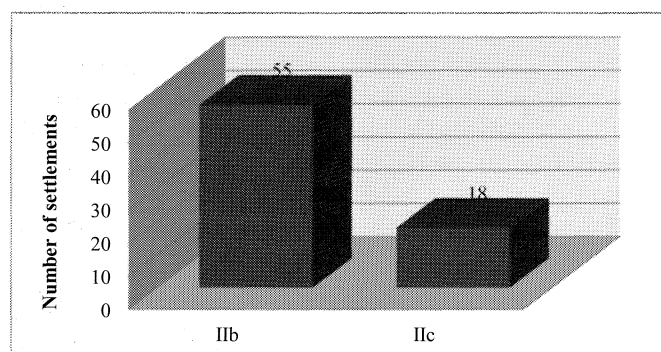


Fig. 3: Leilan IIb and IIc total occupied settlements.

Furthermore, the average settlement size is almost halved, from 7.2 ha in Leilan Period IIb to 3.8 ha in Period IIc (Figs. 2-3).

In general, settlements are sparse across the territory, with an “empty band” unoccupied in the center of the surveyed area. Remnant settlements are mostly located in proximity to seasonal water-courses.

Despite the apparent randomness of their distribution, it is striking that almost all permanent occupations are located above the present-day 400 mm rainfall isohyet; the only exception is site no. 201, which is situated under the 300 mm isohyet, just below the wadi Radd marsh.

2 The totals include also site no. 125, Hameid (Pd IIc size* estimation = 2 ha) though it is located slightly outside the survey limits to the east.

In the northernmost part of the surveyed area, the exception to the general site size reduction is represented by a group of four villages situated above the 450 mm rainfall isohyet; three of these are located in the NW corner of the area. The permanent village of Shair (4.5 ha, no. 74 on Fig. 1) lies ca. 23 km from Girnavaz in an area of high rainfall and wadi stream flow originating from the Tur 'Abdin. All these sites, which were first occupied during the Ninevite 5 period (EJZ 2/ Leilan IIIb-c Periods), are as large in the Leilan IIc period as they were during Leilan IIb.

The trend observed in this area above the 450 mm rainfall isohyet, which differs from that observed in the rest of the Leilan Region Survey, may be due to its more favorable environmental condition, in contrast with the increasing aridity further to the south, in spite of the climate deterioration which will lead to the disappearance of all settlements in the area during the later post-Akkadian/pre-Khabur ware/EJZ 5 period.

Another cluster of settlements is observable to the south-east of Tell Leilan; here, at ca. 7 kms from Leilan, and directly on the left bank of the Wadi Abbas, lies Tell Mohammed Diyab, the only other site excavated within the survey area. It has been suggested that Tell Mohammed Diyab was so prominent, because it controlled the resources of this eastern ecological sub-region characterized by a basalt plateau suited to mixed agriculture and pastoralism (Ristvet 2005: 46). Already in the Akkadian period, a cluster of settlements was located in a linear pattern, near to seasonal wadis, and concentrated to the east of Mohammed Diyab. This cluster was still present in Leilan IIc, although smaller and with reduced-size remnant sites. This area, suitable for animal-grazing and pastoralism, might have been important in the post-Akkadian period's decrease precipitation, when alternatives to specialized cereal agriculture became advantageous.

This new settlement strategy may be seen at Abu Kabira (no. 272 in Fig. 1, and Fig. 7), which was a small temporary village, during both the Akkadian and early post-Akkadian periods. Sherd scatters here were not located on the elevated site, but north-east of it, apparently on slightly elevated terrain. Just north of Abu Kabira, Abu Qadeir (no. 264), a permanent village of 3.3 ha, also shows a similar non-tell occupation in both periods. Low or non-mounded hamlets have been recognized during the mid- to -late third millennium, in the Tell Hamoukar survey project – which comprised an area with a radius of 5 km. These non-mounded sites have been interpreted in several ways, including semi-nomadic pastoral camps and sherd scatters from intensive agricultural activities (Ur 2004: 159).

The area south of the 350 mm rainfall isohyet was for the first time intensively occupied during the Akkadian/Leilan IIb Period, perhaps as part of the Akkadian reorganization of the area. A large number of small villages appeared, and large towns and small cities such as Farfara (no. 186), Khodr (no. 123) and Hansa (no. 201) grew, probably functioning as subsidiary centers connected with the larger urban sites of Tell Leilan and Tell Brak (Ristvet 2005; Ristvet this volume: 241). During the Leilan IIc phase, the villages of Akkadian date were abandoned, and the larger towns probably lost their function. Both Farfara and Khodr were sharply reduced in extent, and the limited number of diagnostic sherds suggests only ephemeral occupations (Fig. 8), while Hansa (no. 201, Fig. 9) was reduced to a village-sized occupation.

During this period, the nature of settlements also changed in the area along the Jarrah, just south of Leilan, between the 400-350 mm isohyets. This area had been densely settled beginning in Leilan IIa, and continuing during Leilan IIb. In Leilan IIc, however, it was almost entirely abandoned, with just two settlements characterized by only temporary occupations, Tell Ghazal (no. 180) and Tell Tuweil (no. 106), each less than 1 ha. in extent (Fig. 10).

During both the Leilan IIb and IIc periods, most settlements were villages smaller than five hectares. In the Akkadian period, however, the total amount of area occupied by settlements smaller than 10 has. was only 33%, while in the early Post-Akkadian/Leilan IIc Period 80% of the area was occupied by settlements smaller than 10 or even 5 has. (Figs. 4-5).

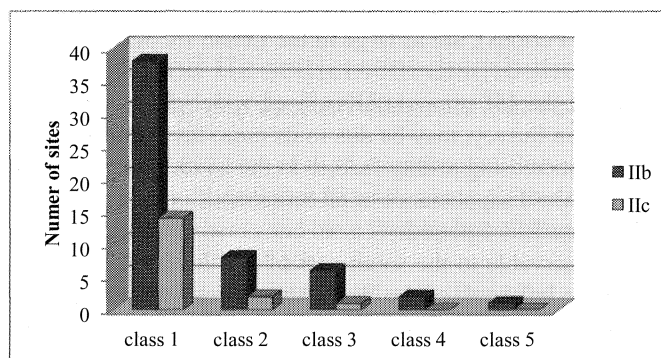


Fig. 4: Total of sites occupied per each class during Leilan IIb and IIc periods. In accordance with the distribution maps, class 1 corresponds to villages smaller than 5 ha, while class 5 indicates cities larger than 50 ha.

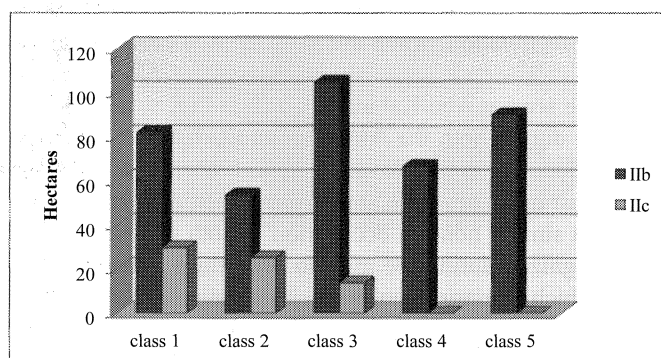


Fig. 5: Total of hectares occupied per each class during Leilan IIb and IIc periods.

There were no urban sites, larger than 15 hectares, during Leilan IIc. Tell Leilan, the largest site of the region in previous periods, was a village of 0.1 ha. The largest site recognized in the surveyed region is Tell Mohammed Diyab; the re-analysis of the excavated remains, shows that the post-Akkadian re-occupation at the site was characterized by a sequence of probably short-lived, phases with modest architecture, indefinite occupation and finally by a settlement characterized by pisé architecture (Weiss, this volume: 1).

During the Leilan IIc period, other settlements interpreted as towns are 'Aid (no. 90), Farfara (no. 186) and Khodr (no. 123). 'Aid, located at ca. 15 km from Tell Leilan, was an important center linked with the developments of Tell Leilan from at least the beginning of the third millennium; it

was probably an urban imperialized center during the Leilan IIb period, and with the withdrawal of the Akkadian Empire its size diminished by half (Fig. 11).

In general, during the Leilan IIc period we see the destruction of a settlement system which had been harnessed, probably since at least the middle of the third millennium to produce agricultural surplus, perhaps reaching its apogee during the immediately preceding period (Ristvet, this volume: 241). The remaining settlements in the Leilan Region Survey are located in favorable ecological areas, where higher precipitation regimes may have buffered for a certain time the increasing aridity. These sites, moreover, might have been organized for production strategies based more on pastoralism than on cereal agriculture.

At least from the mid-third millennium sheep and goat herding had presumably played an important role in northern Mesopotamia (Gelb 1986; Stein 2004). In view of its location, Tell Mohammed Diyab may have had this function within the Leilan Region Survey (Ristvet 2005). A pastoral component was certainly present in Syro-Mesopotamia in the west, as at Ebla, whose wealth was based primarily on non-agricultural resources, and Beydar during the EJZ 3 phase (Gelb 1986; Milano 1995; Sallaberger and Ur 2004). Of course, the lack of written documentation for the Post-Akkadian period, means that we have no account of pastoralism during this period and must rely on material culture for agro-pastoral information. The remains of Tell Taya level V could be symptomatic, as the stratigraphy suggests that a mound of 1 ha was utilized by pastoralists at the very end of the third millennium, prior to Tell Taya level IV/Khabur ware (Reade 1968; Reade 1973: 169). It seems likely, that in the Leilan region, settlements that were already organized for pastoral production strategies, may have been able to sustain themselves, even with the collapse of urbanism and aridification. However, even this strategy was short-lived, as the complete absence of EJZ 5 diagnostic ceramics indicates that the post-Akkadian period lasted less than a century (Weiss et al this volume: 163).

Conclusion

This reanalysis of all the post-Akkadian period data within the Leilan Region Survey does not change the general picture presented in earlier publications (Ristvet 2005; Weiss et al., 2002; Ristvet and Weiss 2005; Arrivabeni 2010). This comprehensive investigation sheds additional light upon the transformations at the end of the 3rd millennium BC and the beginning of the 2nd millennium BC.

With the collapse of urbanism and political complexity, Leilan region populations may have adapted to the regional aridification through nomadization, as apparently at Tell Taya. Populations may also have adopted habitat-tracking strategies that lead to the abandonment of the entire Leilan Region Survey area.

In the early second millennium, during the Leilan I period, the Leilan Region Survey indicates a steep increase in the number of occupied settlements and their density (Fig. 6) (Ristvet 2005; Weiss and Ristvet 2005; Ristvet 2012). This resettlement probably occurred together with an amelioration of climate conditions and precipitation increase at 3.9 ka BP, although rainfall did not reach the levels of the mid-third millennium (Ristvet and Weiss 2005; Staubwasser and Weiss 2006; Weiss 2010).

The Leilan Region Survey data, showing a high rate of abandonments and reductions, might reflect thus the large-scale situation observable across the Khabur Plains, where at ca. 2200 BC all the major settlements, show sudden signals of drastic changes, followed in almost all cases by abandonments only decades later.

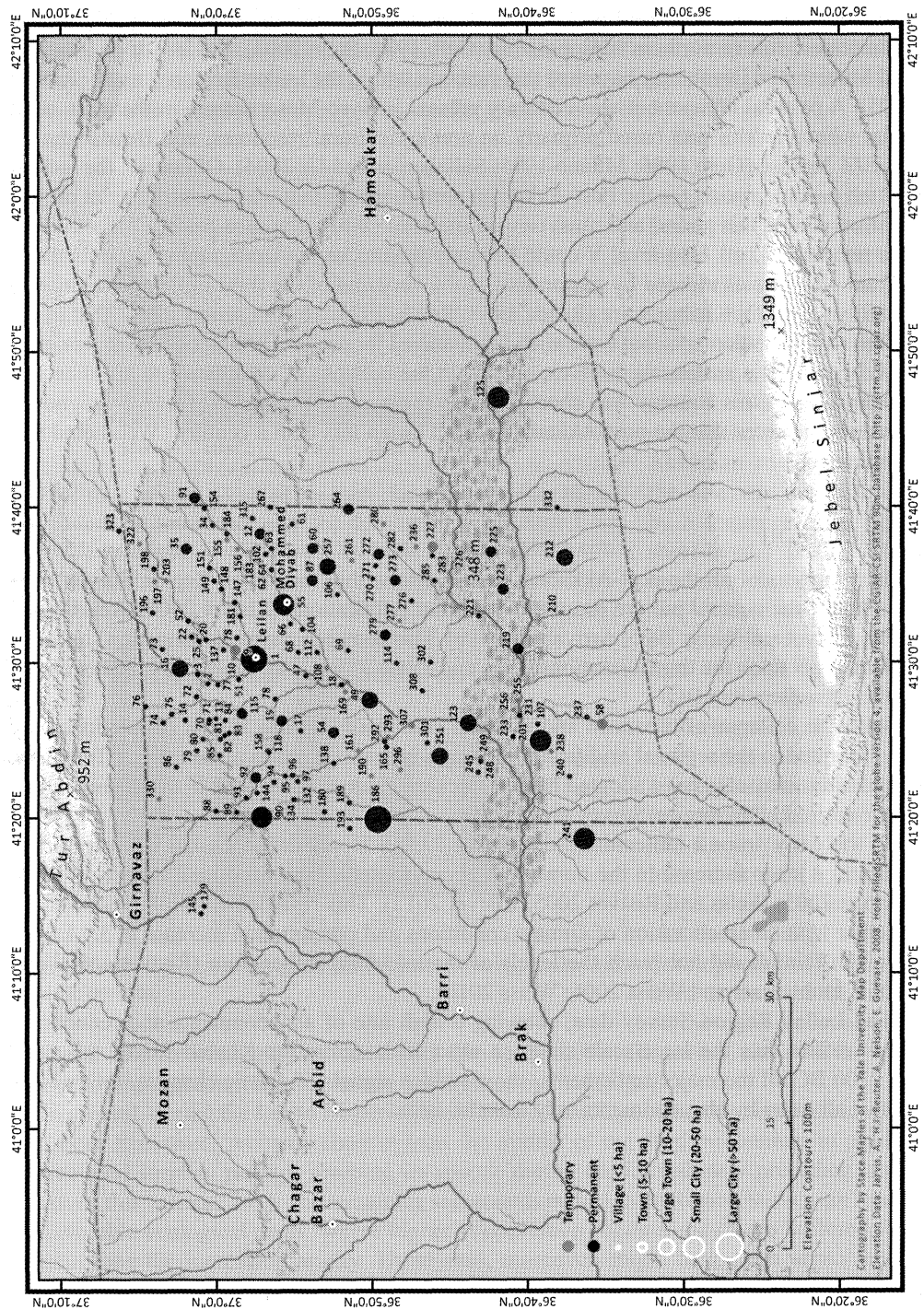


Fig. 6: Leilan Region Survey Period I.

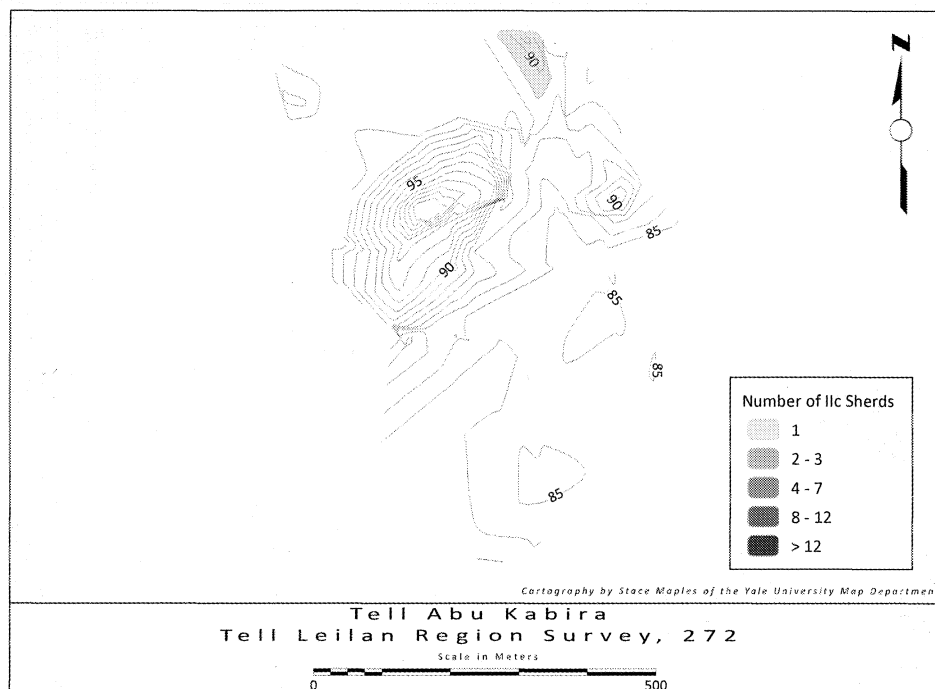


Fig. 7: Abu Kabira (272) Period IIc sherd distribution map.

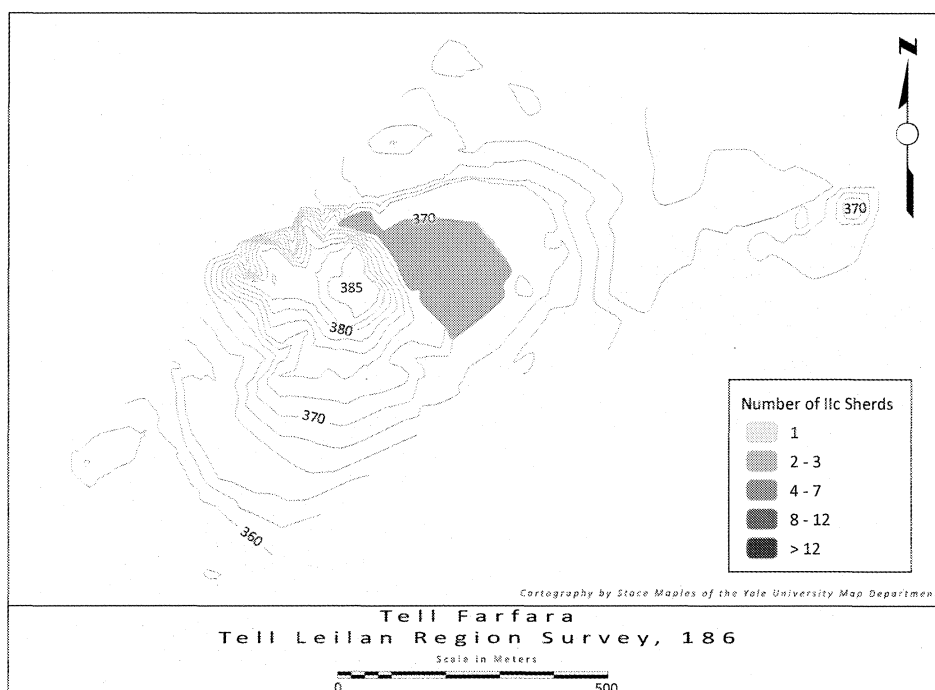


Fig. 8: Farfara (186) Period IIc sherd distribution map.



Fig. 9: Hansa (201) Period IIC sherd distribution map.

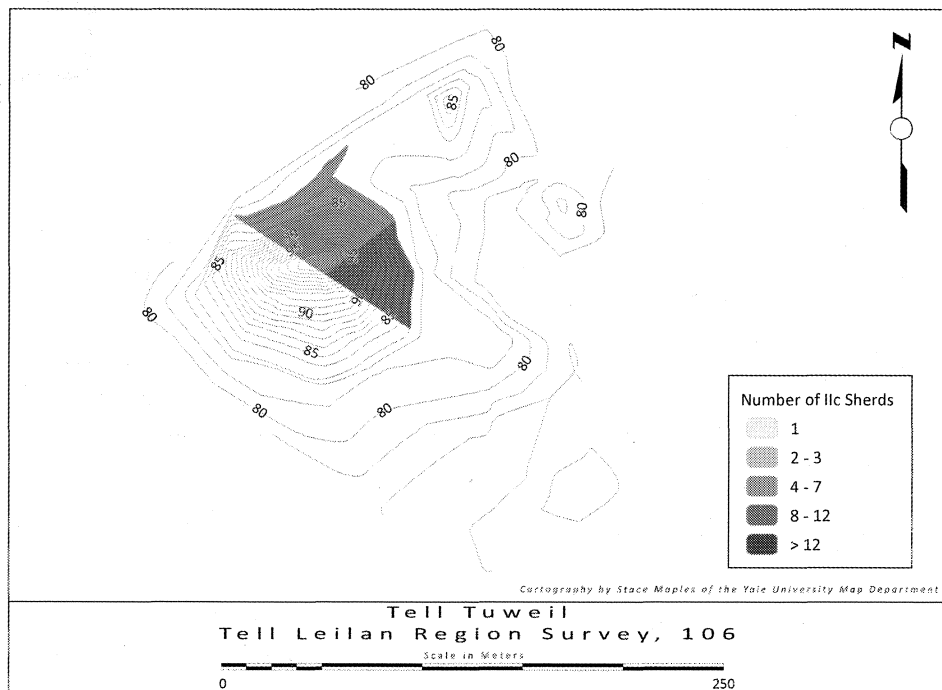


Fig. 10: Tuweil (106) Period IIC sherd distribution map.

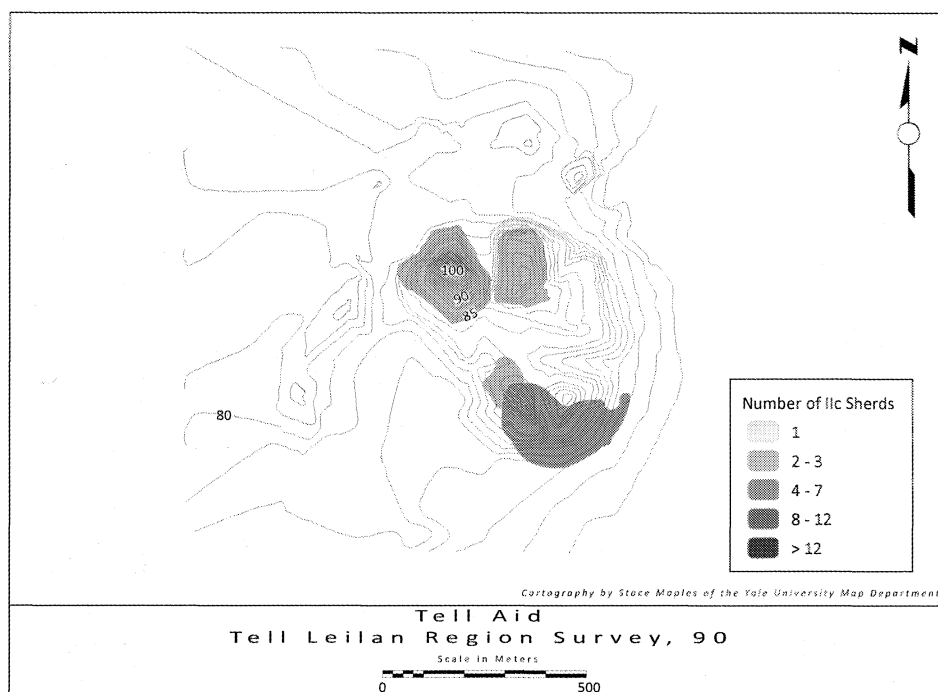


Fig. 11: 'Aid (90) Period Ilc sherd distribution map.

Bibliography

- Arrivabeni, M.
2010 Early Bronze Age Settlement in the Tell Leilan Region: a Report on the Ceramic Material of the 1995 Survey. *Kaskal* 7: 1-49.
- Buccellati, G. and M. Kelly-Buccellati
2002 Die Große Schnittstelle. Bericht über die 14. Kampagne in Tall Mozan/Urkeš: Ausgrabungen im Gebiet AA, Juni-October 2001. *Mitteilungen der Deutschen Orient-Gesellschaft zu Berlin* 134: 103-130.
- Dohmann-Pfälzner, H. and P. Pfälzner
2002 Ausgrabungen der Deutschen Orient-Gesellschaft in der zentraler Oberstadt von Tall Mozan/Urkeš. Bericht über die in Kooperation mit dem IIMAS durchgeführte Kampagne 2001. *Mitteilungen der Deutschen Orient-Gesellschaft zu Berlin* 134: 149-192.
- Gavagnin, K.
2012 *La ceramica del III millennio di Tell Beydar (campagne 1992 – 2002)*. Unpublished Ph.D. Università di Torino.
- Gelb, I.J.
1986 Ebla and Lagash: Environmental Contrast. In H. Weiss (ed.), *The origins of Cities and Dry-Farming Syria and Mesopotamia in the Third Millennium B.C.* Guilford: Four Quarters: 157-167.

- Lebeau, M.
 1990 La Ceramique du Tombeau IVR2_SE.T7 Chantier A, Palais Oriental. *MARI* 6: 375-384.
 2011 Conclusion. In M. Lebeau (ed.), *ARCANE: Associated Regional Chronologies for the Ancient Near East and the Eastern Mediterranean, Vol 1: Jezirah*. Brepols: 343-380.
- McMahon, A.
 1998 The Kuyunjik Gully Sounding, Nineveh, 1989 and 1990 Seasons. *Al-Rāfidān* 19: 1-32.
- McMahon, A. and P. Quenet
 2007 A Late Third Millennium BC Pottery Assemblage from Chagar Bazar (Area D, Phase II). In Ö. Tunca, A. McMahon, A.-M. Baghdo (eds.), *Chagar Bazar (Syrie) II: Les vestiges post-akkadiens du chantier D et études diverses*. Leuven: Peeters: 69-242.
- Milano, L.
 1995 Ebla: A Third-Millennium City-State in Ancient Syria. In J.M. Sasson (ed.), *CANE*, II, New York: 1219-1230.
- Nicolle, C.
 2006 *Tell Mohammed Diyab 3: Travaux de 1992-2000 sur les buttes A et B. Etudes et Recherche sur les Civilizations*.
- Numoto, H.
 1988 Excavations at Tell Fisna. *Al-Rāfidān* 9: 1-72.
- Oates, D., J. Oates, and H. McDonald
 2001 *Excavations at Tell Brak, Vol. 2: Nagar in the third millennium BC*. Cambridge: McDonald Institute Monographs.
- Orsi, V.
 2011 *Crisi e rigenerazione nella valle dell'alto Khabur (Siria): la produzione ceramica nel passaggio dal Bronzo Antico al Bronzo Medio, Vol. 1-2*. Firenze University Press.
- Pfäelzner, P.
 2012 The question of Desurbanisation versus Reurbanisation in the Syrian Jezirah in the Late Third and Early Second Millennium BC. In N. Laneri, P. Pfälzner, and S. Valentini (eds.), *Looking North: The Socioeconomic Dynamics of Northern Mesopotamian and Anatolian Regions during the Late Third and Early Second Millennium BC*. Wiesbaden: Harrassowitz Verlag: 51-80.
- Postgate, C., D. Oates, and J. Oates
 1997 *The Excavations at Tell al-Rimah: The Pottery*. British School of Archaeology in Iraq, England.
- Ristvet, L.
 2005 *Settlement, Economy and Society in the Tell Leilan Region, Syria, 3000 – 1000 BC*. Ph.D. dissertation. University of Cambridge.[pdf.]. Available at < http://leilan.yale.edu/pubs/files/Ristvet_Diss.pdf>
 2011 Radiocarbon. In M. Lebeau (ed.), *ARCANE: Associated Regional Chronologies for the Ancient Near East and the Eastern Mediterranean, Vol 1: Jezirah*. Brepols: 301-326.

Ristvet, L.

- 2012 Resettling Apum: Tribalism and Tribal States in the Tell Leilan Region, Syria. In N. Laneri, P. Pfälzner and S. Valentini (eds.), *Looking North: the Socioeconomic Dynamics of Northern Mesopotamian and Anatolian Regions during the Late Third and Early Second Millennium BC*. Wiesbaden: Harrassowitz Verlag: 37-50.

Ristvet, L., T. Guilderson, and H. Weiss

- 2004 The Dynamics of State Development and Imperialization at Third Millennium Tell Leilan, Syria. *Orient-Express* 21.2. [pdf.] Available at: <<http://leilan.yale.edu/pubs/files/2004OrientExpress2.pdf>>

Ristvet, L. and H. Weiss

- 2000 Imperial Responses to Environmental Dynamics at Late Third Millennium Tell Leilan. *Orient-Express* 2000.4: 94-99.
- 2005 The Habur Region in the Late Third and Early Second Millennium B.C. In W. Orthmann (ed.), *The History and Archaeology of Syria, Volume 1*. [pdf.] Available at: <<http://leilan.yale.edu/pubs/files/RistvetWeiss2005HAS1.pdf>>

Reade, J.

- 1968 Tell Taya (1967): Summary Report. *Iraq* 30.2: 234-264.
- 1973 Tell Taya (1972-3): Summary Report. *Iraq* 35.2: 155-187.

Rova, E.

- 2011 Ceramic. In M. Lebeau (ed.), *ARCANE: Associated Regional Chronologies for the Ancient Near East and the Eastern Mediterranean, Vol 1: Jezirah*. Brepols: 49-127.

Sallaberger, W.

- 2011 History and Philology. In M. Lebeau (ed.), *ARCANE: Associated Regional Chronologies for the Ancient Near East and the Eastern Mediterranean, Vol 1: Jezirah*. Brepols: 327-342.

Sallaberger, W. and J. Ur

- 2004 Tell Beydar/Nabada in its Regional Setting. In L. Milano et al. (eds.), *Third Millennium Cuneiform Texts from Tell Beydar (Seasons 1996-2002)*. Subartu 12: 51-71.

Schmidt, C.

- 2012 The Late Third and Early Second Millennium Pottery Tradition in the Syrian Jazirah and Beyond. In N. Laneri, P. Pfälzner and S. Valentini (eds.), *Looking North: the Socioeconomic Dynamics of Northern Mesopotamian and Anatolian Regions during the Late Third and Early Second Millennium BC*. Wiesbaden: Harrassowitz Verlag: 163-174.

Schwartz, G.M.

- 1988 *A Ceramic Chronology from Tell Leilan: Operation 1* (Yale Tell Leilan Research 1). New Haven: Yale University Press.

Stein, G. J.

- 2004 Structural Parameters and Sociocultural Factors in the Economic Organization of North Mesopotamian Urbanism in the Third Millennium BC. In G.M. Feinman and L.M. Nicholas (eds.), *Archaeological Perspectives on Political Economies*. Salt Lake City: 61-78.

Early Bronze Age Hamoukar: “Akkadian” – and Beyond?

With this paper we are presenting, quite literally, a peripheral view on the manifestations of Akkadian control in northern Syria and of its subsequent collapse. During the mid-third millennium BC Hamoukar, located in the northeastern corner of modern-day Syria, was one of the largest cities in the Upper Khabur valley. Some time thereafter, however, the city was ransacked and abandoned. While the absence of textual sources and of C¹⁴ data from primary contexts makes it impossible to date this destruction, a comparison of the ceramic and glyptic materials with data from other key sites suggests a late- to post-Akkadian date for its final occupation level. As will be shown in the following discussion, however, the peculiarities in our datasets may reflect some of the local dynamics that shaped the transition from an “Akkadian” to a “post-Akkadian” world along the northeastern perimeter of the Upper Khabur.

Archaeological evidence: Hamoukar’s Lower Town

As described in previous reports, Hamoukar’s main mound is roughly square, covering just over 100 hectares (Gibson et al. 2002a, 2002b). Occupation on its high mound, which is situated along the northern edge of the site, extending over some 16 hectares and reaching a height of 16 meters above plain level, can be traced back to the earlier part of Late Chalcolithic 3. By the Early Bronze Age this city expanded into three directions (east, west, south), forming a lower town of some 90 hectares. Stratigraphic soundings in this area, undertaken in 2008 and 2010, have established three distinct occupation phases: late Ninevite 5 / EJ 2 (Phase 1); post-Ninevite 5 / EJ 3 (Phase 2); “Akkadian” or “post-Akkadian” / EJ (Phase 3).¹ The date of Phase 3, notably its end, will be addressed in this paper.

Architectural remains dating to Phase 3 have been reached in several parts of the mound (Areas C, E, H, L), but most of the available data pertaining to the city’s destruction came from Area C in the northeast and Area H on the eastern edge of the lower town (Figure 1). While the principal buildings in both areas complement each other functionally they also share certain formal and substantive affinities, as will be shown below.

1. Area C

a) architecture

Excavations in Area C between 1999-2001 and 2006-2010 uncovered approximately 350 m² of Phase 3 architecture. These remains represent the remains of two buildings – hereafter

¹ Our use of the “Early Jazirah” chronology follows Lebeau et al. 2011. The settlement history at Hamoukar during the Early Bronze Age will be discussed in Grossman, n.d.

- Stein, G.J. and P. Wattenmaker
 2003 Settlements Trends and the Emergence of Social Complexity in the Leilan Region of the Habur Plains (Syria) from the Fourth to the Third Millennium B.C. In E. Rova and H. Weiss (eds.), *The Origins of North Mesopotamian Civilization: Ninevite 5 Chronology, Economy, Society*. Subartu 9. Brepols: Turnhout: 361-386.
- Staubwasser, M. and H. Weiss
 2006 Holocene Climate and Cultural Evolution in Late Prehistoric-Early Historic West Asia. *Quaternary Research* 66: 372-387.
- Ur, J.
 2004 *Urbanism and Society in the Third Millennium Upper Khabur Basin*. Ph.D. University of Chicago.
- Weiss, H.
 1986 The Origins of Tell Leilan and the Conquest of Space in Third Millennium Mesopotamia. In H. Weiss (ed.), *The Origins of Cities in Dry-Farming Syria and Mesopotamia in the Third Millennium B.C.* Guilford: Four Quarters: 71-108.
 1990 Tell Leilan 1989: New Data for Mid-Third Millennium Urbanization and State Formation. *Mitteilungen der Deutschen Orient-Gesellschaft zu Berlin* 122: 193-218.
 2010 Altered Trajectories: the Intermediate Bronze Age in Syria and Lebanon 2200 – 1900 BCE. In: A. Killebrew and M. Steiner (eds.), *The Oxford Handbook of the Archaeology of the Levant*. Oxford University Press. [pdf.] Available at: <http://leilan.yale.edu/pubs/files/weiss_2010_altered_trajectories.pdf>
- Weiss, H., M.-A. Courty, W. Wetterstrom, F. Guichard, L. Senior, R. Meadow, and A. Curnow
 1993 The Genesis and Collapse of Third Millennium North Mesopotamian Civilization. *Science* 261: 995-1004.
- Weiss, H., F. deLillis, D. deMoulins, J. Eidem, T. Guilderson, U. Kasten, T. Larsen, L. Mori, L. Ristvet, E. Rova, and W. Wetterstrom
 2002 Revising the Contours of History at Tell Leilan. *Annales Archeologiques Arabes Syriennes, Cinquantenaire*, Vol. 45: 59-74.

For the past twenty years, the Khabur Plains of northeast Syria have been a testing ground for the Akkadian collapse c. 2200 BC and remnant post-Akkadian occupations. On May 2, 2012, a workshop for the presentation and discussion of the latest archaeological data was convened in Warsaw, at the 8th International Congress for the Archaeology of the Ancient Near East. The fifteen research papers from that conference present the analyses and perspectives from eight excavated sites, Arbid, Barri, Chagar Bazar, Brak, Mohammed Diyab, Leilan, Mozan, and Hamoukar, and two regional surveys. The new data include the Tell Leilan high-resolution radiocarbon chronology for the Akkadian collapse, an Akkadian palace built within the shell of a destroyed pre-Akkadian palace, The Unfinished Buildings at Tell Leilan and Tell Mohammed Diyab, the terminal occupations at Tell Brak, Chagar Bazar, Hamoukar, Arbid, Mohammed Diyab and Leilan, quantified regional settlement distributions across the Akkadian collapse, measured paleobotanical data for imperial Akkadian and remnant post-Akkadian agriculture, and documentation for the collapse of the imperial Akkadian administration.

