

# ラーフィダーン

第 XX 卷                      1999

シリア、ハッサケ市近郊タバノ遺跡の発掘調査：  
1997年度調査概報（英文）                      大沼克彦・沼本宏俊・岡田保良

古代都市ターベトウの統治者に関する新情報（英文）                      ステファン M. マウル

オーマン王国マスカット市の RH6 貝塚遺跡の  
発掘調査（1986-1988）（英文）                      パオロ ビアジ

古アッシリア時代の交易路について（英文）                      小口裕通

オウシーアA区出土のテラコッタ製品：  
その1 テラコッタ製飾り板とモデル（英文）                      小口和美

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Kokushikan University, Tōkyō

ISSN 0285-4406

Published by the Institute for Cultural Studies of Ancient Iraq  
Kokushikan University, 844 Hirohakama, Machida, Tōkyō, 195-8550 Japan

Printed in Japan  
by Letterpress Co. Ltd., Hiroshima



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## EXCAVATION AT TELL TABAN, HASSAKE, SYRIA: REPORT OF THE 1997 SEASON OF WORK

Katsuhiko OHNUMA\*, Hirotoshi NUMOTO\*\*  
and Yasuyoshi OKADA\*\*\*

### I. Introduction

Archaeological excavations in Mesopotamia and its surrounding regions are playing important roles in the historical research of West Asia. Ever since 1969, the staff members of the Institute for Cultural Studies of Ancient Iraq, Kokushikan University have been conducting excavations at many sites in the country of Iraq under the direction of Hideo Fujii, now *professor emeritus* of Kokushikan University. The series of Iraqi sites where we have worked to this day comprise the site complex of at-Tar Caves located along the escarpment running between the Iraqi Western Desert and the Kerbala Plateau in the western suburbs of the city of Kerbala, the sites Gubba, Songor and Hamediyāt in the Himrin Basin 100 km north-east of Baghdad, the sites Abu Thor, Rayyash and 'Usiyeh in Haditha 230 km west-north-west of Baghdad, the sites Jigān, Fisna, Der Hall, Musharifa, Thuwajj and Jessary in Eski-Mosul 50 km north of the city of Mosul, the early Christian monastery composed of Ain Sha'ia ruins and Dukakin Caves along the escarpment looking over the Iraqi Western Desert in the north-western suburbs of the city of Najaf, and the site Kish, 17 km east of the ancient city of Babylon.

In Eski-Mosul near the Iraqi-Syrian border, in particular, we unveiled numbers of cultural layers at the sites mentioned above, dated to the Pre-Pottery Neolithic (*circa* 9000 B.C.) through the Islamic periods. By post-excavational studies of the findings from these layers, we are now clarifying the contents of cultural contacts which took place between North Iraq and the north-eastern part of Syria.

From a strategical viewpoint to clarify unknown aspects of the Mesopotamian history, two of the present authors (K. O. and H. N.) made a one week archaeological survey in September of 1996 in the *Salvage* area along the Middle Khabur in the suburbs of the city of Hassake (Fig. 1), some 500 km north-east of Damascus, the capital city of the Syrian Arab Republic. The area which we surveyed was fairly soon to submerge under water by the construction of the Hassake Dam, and we urgently chose the site Tell Taban (36°20'N / 40°47'E) (Fig. 2), located 19 km S-S-E of Hassake, as the object of our excavation in the following year 1997. The choice of this huge site for excavation resulted from expectation that the works there should yield new data, definitely widening and deepening our knowledge of ancient Mesopotamia, accumulated through archaeological works in Iraq, particularly in Eski-Mosul.

And in 1997, the archaeological mission from Kokushikan University organized by the present authors (director: K. O.) initiated the excavational works at Tell Taban on 1st October, and completed the field works on 5th December. Mr. Oorham Nano joined the mission, representing the Directorate General of Antiquities and Museums of the Syrian Arab Republic.

In the 1997 field season, we completed the work consisting of 1) measuring of Tell Taban and topographical survey of its close neighbourhood, 2) research of lithic artifacts distributed at the base of the tell, 3) excavation inside the trench, 23 m long and 4 m wide, which we established on the west-side slope of the tell, and 4) measuring, drawing, photographing, and list-making of the objects unearthed from the trench.

Before and during our works at Tell Taban, we received a great deal of useful suggestions from

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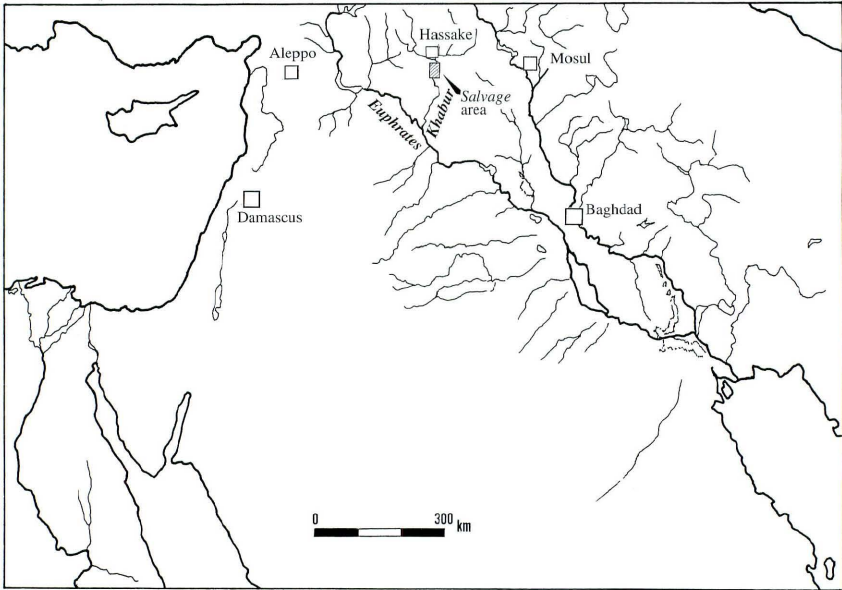


Fig. 1 Map showing the location of the Hassake Salvage area

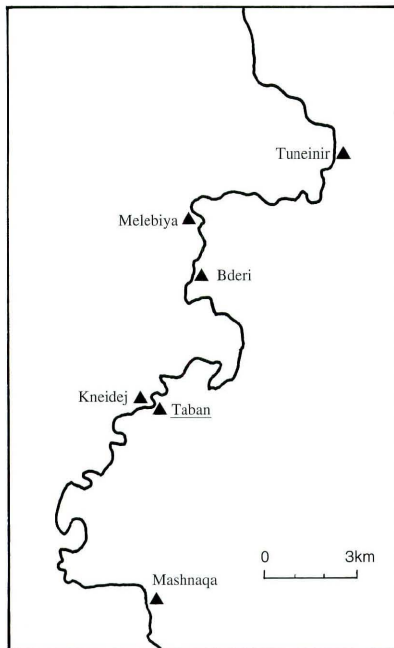


Fig. 2 Map showing the locations of Tell Taban and other sites in the Hassake Salvage area



Professor Dr. Sultan Muhesen, Director General of the Directorate General of Antiquities and Museums, the Syrian Arab Republic; we express our sincerest gratitude to him for his kind help. Our thanks are due to Mr. Abdul Masih Bagdoo, Head of the Department of Antiquities in Hassake, who kindly gave us invaluable help in every respect of our daily works, and to Mr. Edward Youkhanna, our car driver, who was always with us toward the completion of the field works. We specially express our deepest thanks to Professor Dr. Stefan M. Maul of the Seminar für Sprachen und Kulturen des Vorderen Orients, Ruprecht-Karls-Universität Heidelberg for his co-operation to our research activity; he kindly translated the inscription pieces from Tell Taban, and warmly provided us with his interpretative article on these pieces which is presented in this volume of *al-Rāfidān*. We thank Professor Dr. Hartmut Kühne of the Seminar für Vorderasiatische Altertumskunde, Freie Universität Berlin and Professor Dr. Wolfgang Röllig of the Altorientalisches Seminar, Eberhard-Karls-Universität Tübingen; they were so kind as to provide us with wide-range of information on the history and material cultures of the Middle and Lower Khabur. We also thank Professor Dr. Markus Wäfler of the Institut für Vorderasiatische Archäologie und Altorientalische Sprachen, Universität Bern for his kind information on the history and material cultures of the Upper and Middle Khabur. All of the works at Tell Taban in the 1997 field season were carried out under the budget of Kokushikan University with a grant-in-aid for 1997 from the Science Research Promotion Fund of the Japan Private School Promotion Foundation; we heartily express our gratitude to them for their warm co-operation.

In the preliminary report presented here which describes the results we obtained in the 1997 field season, Katsuhiko Ohnuma is responsible for the wording and illustrations of Sections I, III and VI, Yasuyoshi Okada is for those of Section II, and Hirotochi Numoto is for those of Sections IV and V.

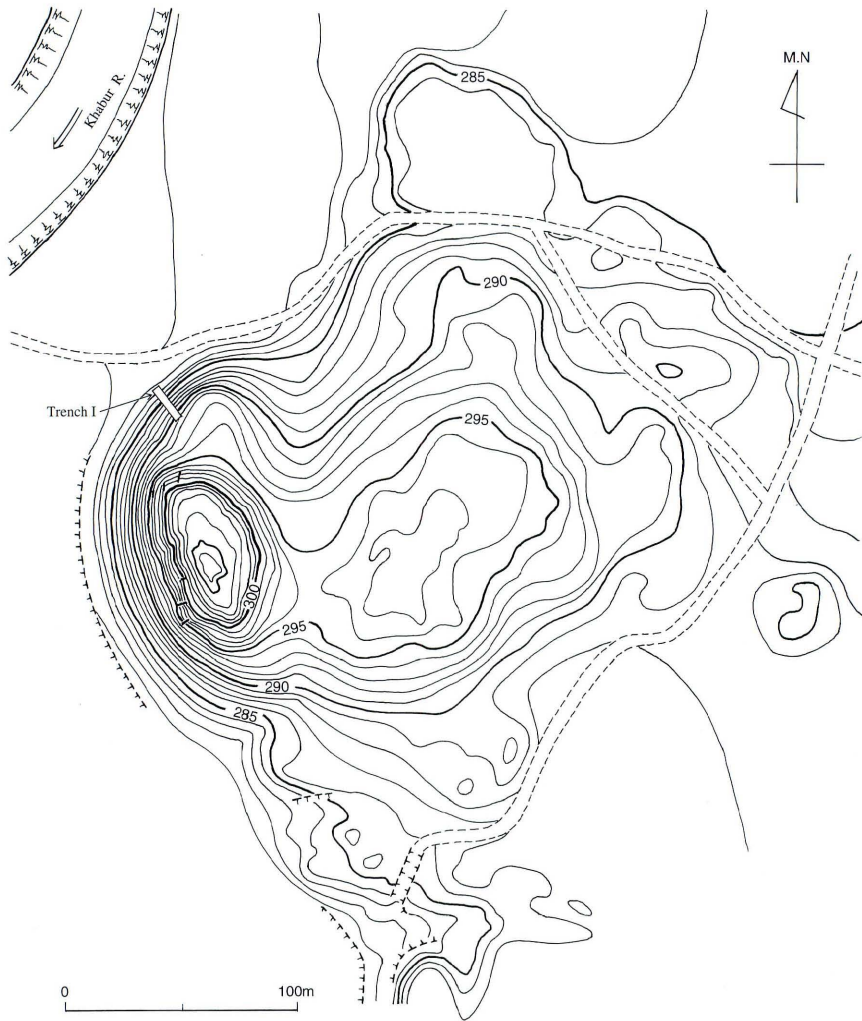
## II. Tell Taban and its surroundings

In this season, we made two kinds of maps: one presenting contour lines with 1 m intervals to show the topography of the tell (Fig. 3), and the other showing the area called Taban, including villages, roads and notable water courses as well as the River Khabur (Fig. 4). The contour map was originally made on site in the scale of 1 : 500, and the area map of 1 : 5000.

1) Topography of Tell Taban: Tell Taban is situated on the left bank of the River Khabur, along the edge of the river terrace with a vertical gap of some 5 m, covering the area of 350 m in the north-south direction and 330 m in the east-west. The westernmost portion of the tell is raised so steeply, some 26 m high from the surrounding field, enough for us to imagine that there once stood a citadel-like structure. There is a triangle point fixed previously on the top of this raised part. We utilized the point as a bench mark throughout this season. In a trust-worthy atlas published so far, it is marked with the absolute height of 1004 feet, equivalent with a neglectable difference to 306 m above sea level. Accordingly, the height of the tell-foot is 280 m, and the river-bed is some 5 more m below, that is, lying at about 275 m. Along the skirts of the tell, artificial accumulation can be hardly distinguished from natural deposit in part.

2) Surroundings: The surroundings of the tell were surveyed within the area of some  $3 \times 3$  km, to Tell Sur in the north, to Tell Dhahab in the south, to the Shaddadi road in the east, and to the River Khabur in the west (Fig. 4). According to villagers, the whole area is now called Taban, including the villages named al-Ghana and Hasowiyeh, both situated east to the tell. South to the tell and close to the river is another village, but already ruined and now completely uninhabited (Pl. 1-a). They call it Taban. All who had once lived in the Taban village, we hear, escaped about ten years ago for the provision against flood expected then by them. Most of them moved to the villages mentioned above. Even in the opposite bank some part is called Taban.

Tell Taban can be approached from the paved road in the east, through dirt roads in the al-Ghana village, as we daily reached it by car. From the opposite bank, where the road from Hassake to Deir ez-Zor lies conveniently close to the river, it is also accessible by a cabled boat called *sefine* (Pl. 1-b) by villagers,



**Fig. 3** Contour map of Tell Taban

across the river some 300 m upstream from the tell-foot.

To be noted, there are three main resources of water supply nowadays: the first from governmental water sellers, the second from the river, and the third from a spring called Ain Taban (Pl. 2-a) which is located near the Shaddadi road. According to villagers, the river water was plenty enough for irrigation until some decades ago, and clean enough for drinking. It now seems that water sellers provide water for living, and Ain Taban does for irrigation. Before introduction of pumping machine, water wheels, which they call *naura*, and raised watercourses, called *roufa*, may have taken its role. There can be found a ruined platform made of stone, which might have once been a foundation of *naura* (Pl. 2-b), in the river



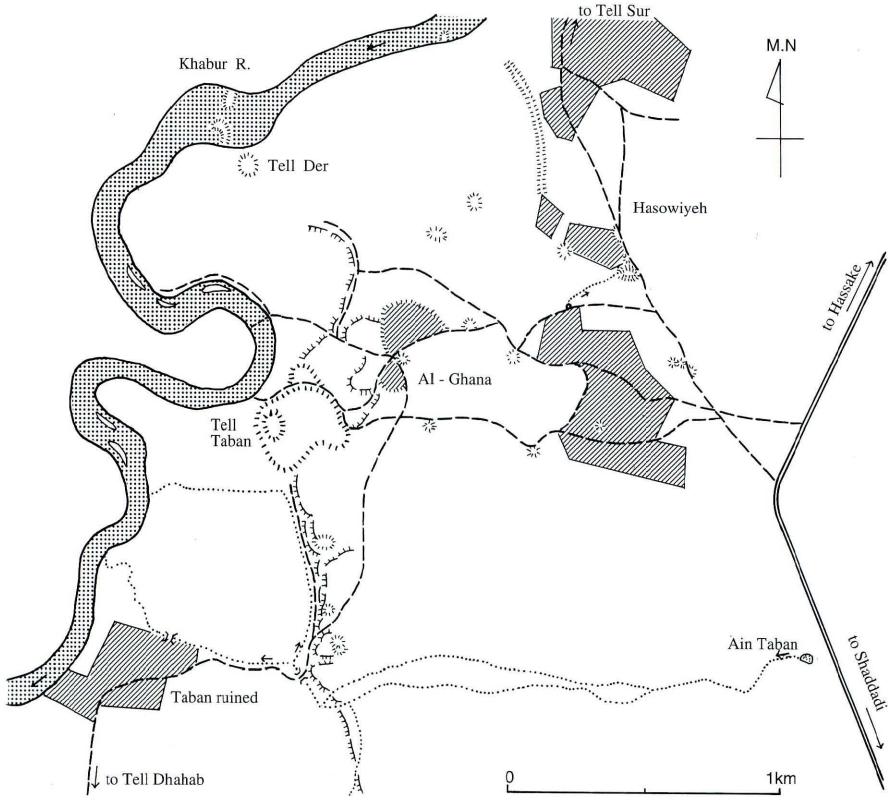


Fig. 4 Tell Taban and its surroundings

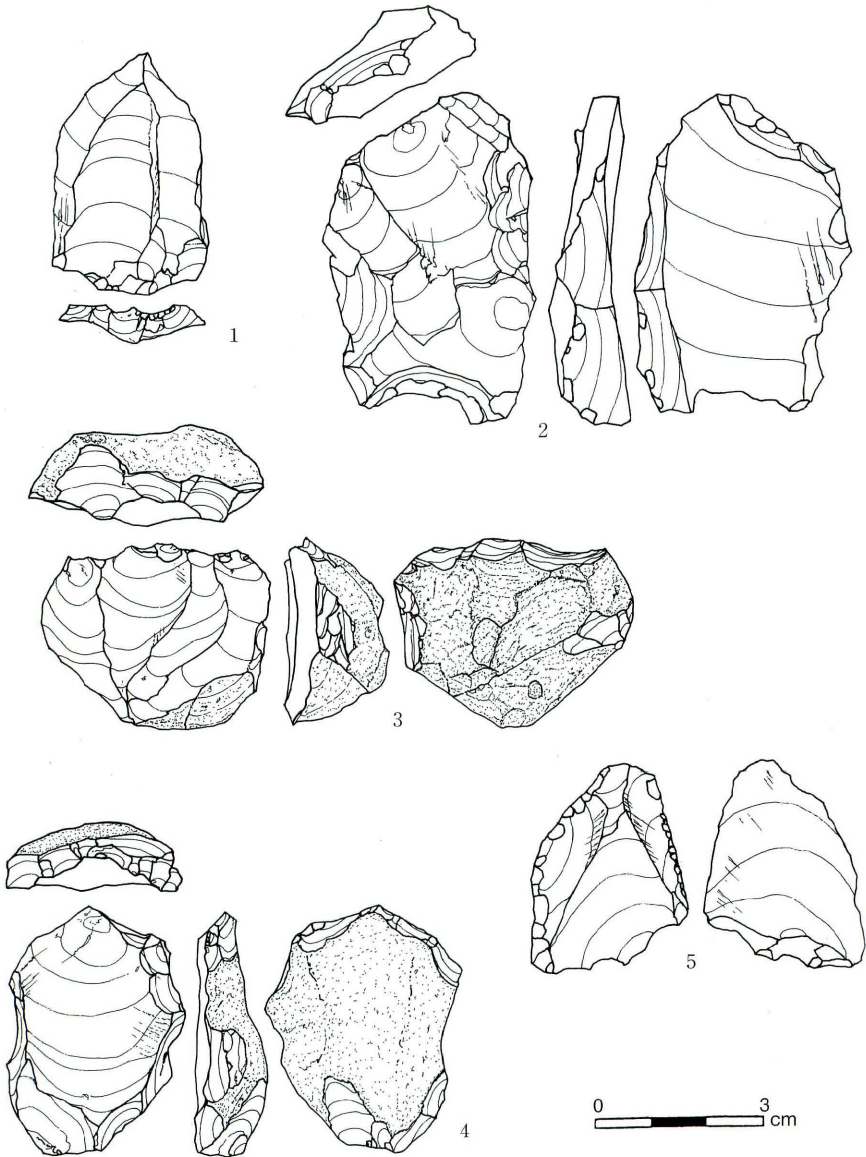
near a small tell named Tell Der. From the river-shore at this spot, the other ruined structure *roufa* extends toward the village of Hasowiyeh.

On the other hand, the source of Ain Taban is unknown. As some villagers suggest, however, it is highly probable that Ain Taban was not a self-springing fountain, but that it was a kind of well connected to a far-away real fountain through an underground tunnel, which we can call *qanat*. To be quite regrettable, this can easily be proved by the fact that not a little dirty oil, never seen in the vicinity but surely coming from a distance, is often found floating in the watercourse from the Ain.

### III. Lithic artifacts distributed at the base of the tell

Tell Taban was initially founded at the edge of the Pleistocene fluvial terrace of the Khabur, and the base of the tell is partially in contact with the remaining portion of this terrace. In this connection, we collected lithic artifacts at the base of the tell. No outcrops of raw material rocks are seen near by, and the flint pieces distributed at the base of the tell bear the features of pebble: rounded and small, in the size of adult's fist at the largest.

The collected artifacts exhibit so few traces of abrasion, caused by roling action, that it is unlikely that they were carried to this place by natural action from very far away. In spite of very rare abrasion, they are edge-damaged in some cases and patinated white to a considerably high degree.



**Fig. 5** Lithic artifacts from the base of Tell Taban

1. Levallois point; 2. Levallois flake core (on a flake from edge of Levallois core) with bottom part broken and striking platform damaged; 3. Levallois point core; 4. Levallois flake core; 5. Pseudo-Levallois point with butt broken and two edges heavily damaged



The collection consists of 34 artifacts (Fig. 5): 11 cores and 23 cortical and non-cortical flakes. All of these are made on flint pebbles, dark- or light-brown in colour. Six of the cores are of the Levallois categories. One of the flakes is a pseudo-Levallois point, and another is a Levallois point. In good accordance with the small size of the flint pebbles distributed around the tell, the artifacts themselves are also small; the smallest one, cortical flake, measures 24 mm in length, 22 mm in width, and 11 mm in thickness. Even the largest one, discoidal core, measures 66 mm in length, 65 mm in width, and 27 mm in thickness.

In the region near to Tell Taban, Middle Palaeolithic collections similar to ours are reported by Yoshihiro Nishiaki from open-air sites on higher wadi/river terraces or hill slopes in the Khabur Basin in the northern suburbs of Hassake, represented by the sites of *Menaake* and a wadi terrace *west of Tell Baqar*. Because many cores and cortical flakes were collected at these two sites and because very few tools were sampled there, Nishiaki categorized them as factory sites. He also related the two collections, characterized by Levallois products of the flake category, to the Levantine Mousterian modelled by Tabun Type C or B [Nishiaki 1992].

Middle Palaeolithic industries, characterized by the Levallois methods of flaking, similar to the collections from Tell Taban and the Khabur Basin mentioned above are quite common in the Levant in the west/west-south of Hassake. No such industries, however, have been so far reported in the Zagros regions in the east of the two rivers of Tigris and Euphrates, except for a single collection reported by Dorothy A. E. Garrod as early as the year of 1928 from *Tarjil* near Kirkuk in the southern border of Kurdistan, some 230 km north of Baghdad [Garrod 1928].

Although the collection from Tell Taban is not large enough in quantity to draw any positive conclusion from it, we can safely say for the time being, taking into consideration its techno-typological feature dominated by Levallois débitage products, that it had more or less relation to the Levantine Mousterian of the Type Tabun B, generally defined to have possessed Levallois products, particularly Levallois flakes and Levallois points (See Copeland [1975: 329–335] for the tripartite scheme of the Levantine Mousterian).

The Middle Palaeolithic collection from Tell Taban is the first discovery in the Hassake *Salvage* area. It is highly probable that similar Palaeolithic artifacts have been overlooked during excavations in the area. This discovery, therefore, is an important suggestion that the tells in the *Salvage* area, if founded on the Pleistocene fluvial terraces of the Khabur, might involve Palaeolithic artifacts.

#### IV. Excavation

The main purpose of the excavation at Tell Taban (Pls. 3–5) in this field season was to investigate cultural levels at this site to confirm its stratigraphy. Before we started the excavation, we set up a trench (Trench I) to work in, 23 m long and 4 m wide, on the western slope of the tell facing the Khabur (Pl. 6-a). The reason why we chose this part for the trench for excavation was that neither modern graves nor remarkable disturbance of soil were seen around it (Pl. 5-b).

The accumulation of surface layer plus drifted soil layers, mixed by Islamic and Hellenistic potsherds (Pl. 18-a), was extremely thick, measuring 1.5 to 2 m (Pl. 7-a,-b). After cleaning these layers completely, we started the excavation inside Trench I, and dug downwards gradually. Although we could not reach the natural ground, *Virgin soil*, inside Trench I, we confirmed in it cultural levels of the Hellenistic, New Assyrian, Middle Assyrian, and Mittani periods from the top downwards, which in total measure some 10 m in thickness. The stratigraphy composed of these levels is given below (Fig. 6).

- 1) Hellenistic level: Level 1, moat
- 2) New Assyrian levels: Levels 2 and 3, graves
- 3) Middle Assyrian levels: Levels 4 to 9
- 4) Mittani levels: Levels 10 to 13

## 1) Hellenistic level: Level 1, moat

In the area within the distance of 4 m from the upper end of Trench I, occupation level of the Hellenistic period, composed of sub-level floors of the Roman, Parthian and Seleucid periods, was found (Level 1 on the whole including the sub-levels). Unearthed below this was a moat, measuring 2 m in width and 2 m in depth, which had been dug into the underlying New and Middle Assyrian levels (Levels 2 to 4) (Pl. 9-a). The section of this moat is shaped like Letter U, and sandy and silty soils were accumulated alternately in its lower half (Pl. 8-a,-b). One bronze coin, glass sherds, (green-/blue-) glazed ware sherds, and fragments of impression-stamped pottery (Fig. 7 (Nos. 4–6), Pl. 18-b) were unearthed from this moat. The uppermost portion of the moat had been filled up with reddish brown soil, for the purpose of levelling, after it had been buried about 80 percent. Level 1 overlying this moat was accumulated on this reddish brown soil, and measures about 80 cm in overall thickness.

Because the moat was dug along the western edge of the tell, it is supposed that it surrounded the residential area to function as drainage in the Hellenistic periods. Judging from similarities between pot-sherds from the moat and Level 1, it is not likely that there was a big time gap between the moat and Level 1.

## 2) New Assyrian levels: Levels 2 and 3, graves

From Level 2, parts of a building with white mud-brick walls were unearthed (Building Level 1) (Pl. 12-a, -b). The remaining height of the wall is 1.8 m, and the mud-bricks of the wall are 38–40 × 38–40 cm in size. As the walls are associated with two occupation floors of Level 2, it is considered that the building was used through two periods. The most remarkable discovery from this building is a bronze figurine depicting ibex (Pl. 26). This figurine was unearthed from the southern part of the lower floor. The main axis of the wall is oriented to the north. The lowermost mud-bricks of the wall are founded on the blackish brown soil of Level 3, indicating that the walls were piled up from the surface of Level 3. Although this building is heavily damaged by the Hellenistic moat mentioned above, it is estimated that the rooms were 4.5 × 2 m in area. Because the walls are very thick, measuring about 1.5 m, and because buildings with white mud-brick walls have been only rarely discovered by excavations so far, it is supposed that this building had a special or official function.

Four graves in all were unearthed, of which three were pottery coffins. Two of the four graves were for adult burial (Graves 2 and 4), one for child (Grave 1), and one was for infant burial (Grave 3). Most parts of Graves 1 and 2 were destroyed by the Hellenistic moat mentioned above (Pl. 9-a), whereas Graves 3 and 4 were preserved undestroyed (Pl. 10-a). Grave 1 was a coffin shaped like half-cut bath-tub. The upper part of its outer surface has rope-like decoration (Pl. 9-b). A child skeleton was unearthed from its inside. Graves 2 and 4 were combination of two large jars (Pl. 10-b). These jars measure about 70–80 cm in the maximum diameter and 80–90 cm in height. The decoration of rope pattern is arranged on their lower part of rim. From Grave 4 at the east-south corner, two offerings with a pair of bowl and small jar were unearthed (Fig. 7 (Nos. 7–10), Pl. 19-a, -b, -c). Both of the two offering bowls were placed on the rim of the small jar as a lid. Grave 3 was a combination of a jar and a bowl (Fig. 8, Pls. 11-a, 19-d). An infant skeleton was unearthed from the inside of the jar (Pl. 11-b).

Graves 2, 3 and 4 were buried in the soil down into Level 4, while Grave 1 was buried down into Level 2 only. This suggests that the date of Grave 1 was slightly later than those of the other three. At any rate, all of these graves were buried after the construction of Level 2 building. However, in terms of the main axes of Graves 1, 2 and 4, oriented to the north in all instances, and the fact that they were buried along the walls of Level 2 building, it is most likely that there was not a big time gap between the graves and Level 2. In sum, all of these graves are supposed to have belonged to the New Assyrian period, on the basis of characteristics of the pottery coffins and the funeral goods. The similar graves had been unearthed from Tell Kneidej, located on the opposite bank of the Khabur, 3 km north of Tell Taban [Klengel-Brandt *et al.* 1996].



### 3) Middle Assyrian levels: Levels 4 to 9

Levels 4 to 7 were accumulated horizontally and well-stratified. Due to the limited area of excavation, however, we could not find any structure belonging to these levels.

In Level 8 (Building Level 2), a part of the large foundation of mud-brick wall extending to north was unearthed at the eastern area of the trench (Pl. 13-a). The thickness of the wall is more than 2 m, and the northern end of the wall was unearthed inside the trench. The bricks of the wall measure two kinds:  $36 \times 36$  cm and  $36 \times 18$  cm. The latter bricks were used for the outer elements of the wall. As the conditions of accumulation and natures of soils of Levels 7 and 8 are quite different, it seems that there existed a relatively long time gap between the two levels. Moreover, clear differences are seen in shapes of pottery between Level 8 and Levels 4 to 7. For example, most of the bottoms of goblets or beakers from Levels 4 to 7 are shaped nipple, while the bottoms with button shape or short foot shape are more frequently recognizable in Level 8 (Fig. 10 (Nos. 28–33)). The most remarkable discovery in Level 8 is two brick fragments with cuneiform letters (Pl. 25). A large quantity of pot-sherds and fragments of fine bronze objects were also unearthed.

In Level 9 (Building Level 3), a part of a huge foundation wall was unearthed immediately below Level 8 (Pl. 13-a). This wall measures more than 4 m in thickness. The details of the wall are not clear, for its north-western part had been fallen down. The most outstanding aspect of this wall is that the outer elements of its foundation part were made up of baked bricks, while the inner elements were of mud-bricks. One of the baked bricks, fixed at the north-eastern corner and measuring  $47 \times 47$  cm, retains reddish paint on its side (Pl. 13-b).

It is supposed that the walls of Levels 8 and 9 were constructed almost the same time, for the conditions of accumulation are almost the same, and the directions of the walls are identical. It is also supposed that these buildings had official function because they were big-scaled and had such unusual features as mentioned above.

At the lowest part (foot of the tell) in Trench I, a drifted layer, 2 to 3 m in thickness, was accumulated aslant below Islamic and Hellenistic drift layers (Pl. 14-a, -b). In terms of similarity of pottery, it is supposed that this drift layer was derived from the Middle Assyrian Levels 4 to 9. One fragment of cylinder inscription was found from this drift layer outside the wall mentioned below (Pl. 16-b).

Under the Middle Assyrian drift layer, stiff soils in colour of grey and dark red, most probably of destructed mud-brick wall below them, were accumulated. The foundation part of the mud-brick wall below the stiff soils measure about 2 m in thickness, and the mud-bricks of the wall measure  $38 \times 38$  cm,  $40 \times 40$  cm, and  $40 \times 20$  cm. This wall runs in the east-west direction, with its west end piled up like steps with the mud-bricks (Pl. 15-a, -b). Judging from its size and find-spot, it is supposed that the wall was a town-wall. Although the date of this wall is not very clear at present, it probably was constructed at the same time as the walls of Levels 8 and 9, for the dimension and quality of the mud-bricks are similar each other.

### 4) Mittani levels: Levels 10 to 13

Pot-sherds unearthed from Levels 10 to 13 bear the characteristic features of Mittani pottery (Fig. 11 (Nos. 41–50)). Due to the time limit of the 1997 field season, we only excavated in a small area for these levels. Accordingly, only a part of the side face of a white mud-brick wall belonging to the Mittani period was unearthed in Level 11. Level 13 was unearthed in the lower portion of the town-wall-like huge wall mentioned previously. This level yielded many sherds of Mittani/Nuzi pottery.

An outstanding fact recognized in pottery inventories of Levels 10 to 13 is that painted wares are more frequently seen in these levels than in the Middle Assyrian Levels 4 to 9.

Sherds of Metallic ware (Pl. 20-d) and decoration-applied Hassuna coarse ware (Pl. 20-c) were found from the surface layer and the drifted layers, but in Trench I we could not find any level associated with these sherds. Although in this season we could not reach the *Virgin soil* at the lowest part of

Trench I, it is possible to suppose that occupation levels of the 3rd millennium B.C. and of the Hassuna period exist somewhere below Level 13, if taking the found sherds of these periods into consideration.

## V. Findings

This section describes the findings such as pottery, baked-clay nail, cuneiform inscription and bronze figurine unearthed from Trench I in the 1997 field season.

### Pottery

A large number of pot-sherds were unearthed from the cultural levels totaling 13. Complete pottery specimens, however, are extremely rare, with several exceptions of funeral goods for the graves of the New Assyrian period. Details of representative specimens are presented in the <Catalogue of pottery specimens> below.

<Catalogue of pottery specimens> (Figs. 7–11)

— In Fig. 7 —

1. Rim of painted bowl (from the deposit of the moat): light brown paint (2.5YR5/9 in *Munsell Color System*) on the outer and inner surfaces; light reddish buff (2.5YR5/7) core; no visible temper; fine fabric; very hard; rim diam. 17 cm; 1/6 extant.
2. Painted rim sherd (from Level 1): dark brown paint (5YR3/4) on the inner and outer surfaces; light buff (7.5YR6/6) core; sparse fine sand temper; hard; rim diam. 16 cm; 1/5 extant.
3. Rim of jar with handle (from the deposit of the moat): greenish white (slip) (7.5Y9–8/2) on the outer surface; pinkish buff (7.5YR7/4) inner surface; dark pinkish buff (5YR5–4/4) core; temper of a large amount of fine sand; fabric of handle containing coarse quartz sand; rim diam. 15 cm; 1/5 extant.
4. Base of bowl (from the deposit of the moat) (the lower left specimen in Pl. 18-b): brown paint (2.5YR4/6) on the inner surface; pinkish buff (5YR6/5) outer surface and core; sparse, very fine sand temper; fine fabric; one palmet stamp impression remaining on the inner surface; the outer surface defaced; ring-base diam. 6 cm; 1/4 extant.
5. Body sherd with stamp impression (from Level 1) (the upper left specimen in Pl. 18-b): reddish buff (5YR6–5/6) outer surface; dark buff (7.5YR6–5/4) inner surface; dark brown (7.5YR5/2) core; the inner surface smoked; temper of a small amount of fine sand; containing gold colored mica; motif with lozenges filled with dots.
6. Shoulder of jar with stamp impression (from Level 1) (the right specimen in Pl. 18-b): creamy (slip) (2.5Y9/2) on the outer surface; pinkish buff (5YR6/6) inner surface and core; sparse fine sand temper; scraped on the lower part of the body; carbide sticking on the inner surface; motif of rows of lozenges filled with dots.
7. Small bowl (from Grave 4) (Pl. 19-a): reddish brown (10R6/5) and buff (5YR7/5) outer surface and core; buff (5YR7/5) inner surface; temper of a medium to large amount of vegetable (2–5 mm long) and a small amount of fine sand and chalky coarse sand; scraped on the lower part of the outer surface; ring-base made by scraping; rim diam. 11.6 cm; height 4.5 cm; complete; pair with the small jar (No. 9).
8. Painted small bowl (from Grave 4) (Pl. 19-b): reddish brown paint (5R4/6) on the outer surface; reddish buff (10R6–5/6) on the inner surface and buff (5YR6/5) core; temper of a medium to large amount of vegetable (2–5 mm long) and a small amount of fine sand and chalky coarse sand; scraped on the lower part of the outer surface; ring-base made by scraping; rim diam. 12 cm; height 4.9 cm; complete; pair with the small jar (No. 10).
9. Small jar (from Gave 4): greenish outer and inner surfaces (10Y8–7/3) and core (7.5Y7–6/4) core; temper of a large amount of fine sand and a small amount of vegetable (2–5 mm long); containing chalky coarse sand; fragile; wet-smoothed on the outer surface of the body after scraping; ring-base made by scraping; max. diam. 12.5 cm; height 17.3 cm; complete; distorted body lacking shape uniformity; pair with the small bowl (No. 7).
10. Small jar (from Gave 4) (Pl. 19-c): greenish white (7.5Y9/1) outer and inner surfaces; buff (7.5YR8–7/4) core; temper of a large amount of very fine sand and a small amount of vegetable (2–5 mm long); fragile; wet-smoothed on the outer surface of the body after scraping; ring-base made by scraping; max. diam. 14 cm; height 18 cm; complete; distorted body lacking shape uniformity; pair with the small bowl (No. 8).

— In Fig. 8 —

11. Ring-base bowl (used as the coffin for Grave 3) (Pl. 19-d): greenish white (10Y9.5/2) outer and inner surfaces; greenish core (10Y8/2–3); temper of a large amount of vegetable (2–5 mm long), a medium amount of fine sand, and a small amount of coarse sand; containing chalky particles; scraped on the lower part of the outer surface; both the everted part of the rim and the ring-base stuck; rim diam. 37.6 cm; base diam. 12.5 cm; height 17.7 cm; complete.



12. Jar with a hole in the bottom (used as the coffin for Grave 3): reddish brown (10R5–4/8) outer surface; light brown inner surface (2.5YR6/7) and core (10R5/6); temper of a medium amount of vegetable (5 mm long) and a large amount of fine sand, and sparse coarse sand; rim diam. 42 cm; height 51 cm; complete.

— In Fig. 9 —

13. Rim to shoulder of bottle (from Level 2a (1st floor)): greenish white (slip) (10Y9/2) on the outer surface; dark buff (10YR7–6/2) and light buff (5YR7/4–6) inner surface and core; temper of a large amount of vegetable (2–5 mm long) and a small amount of fine sand and coarse sand; complete rim; 1/4 of the shoulder extant.
14. Rim of jar (from Level 2a): greenish (7.5Y8/2) outer and inner surfaces and core; temper of a medium amount of vegetable (2–4 mm long) and sparse fine sand; rim diam. 11 cm; 2/5 extant.
15. Neck to body of jar with grooved lines (from Level 2b (2nd floor)): greenish (10Y9–8/2) outer and inner surfaces and core; temper of a large amount of vegetable (5 mm long) and a small amount of fine sand; soft; carbide sticking on the outer surface; exfoliated outer surface; 1/4 extant.
16. Neck to body of jar with grooved lines (from Level 2a): light buff (7.5YR7/4–6) outer and inner surfaces and core; temper of a large amount of very fine and fine sand; containing gold colored mica; 2/5 extant.
17. Rim of incised jar (from Level 2b): creamy white (slip) (2.5Y9/2) on the outer surface; light buff (5YR7–6/6) inner surface; blackish grey (N4–3/) core; temper of a medium amount of vegetable (2–5 mm long) and a large amount of very fine sand; wavy incision; defaced inner surface; rim diam. about 20 cm; 1/6 extant.
18. Rim to body of incised bowl (from Level 3): reddish brown (10R5/5) outer surface; greenish cream (7.5Y9–8/2) inner surface; buff (10YR8–7/4) core; temper of a small amount of vegetable (2–3 mm long) and a large amount of fine sand; defaced inner surface; soft; rim diam. about 30 cm.
19. Rim of incised large jar (from Level 2a): creamy white (10YR9/2) outer surface; greenish cream (2.5Y9–8/2) inner surface; light buff (7.5YR7/4) core; temper of a large amount of vegetable (2–5 mm long); rim diam. about 40 cm.
20. Rim of spouted jar (from Level 2b): greenish cream (slip) (5Y9–8/2) on the outer and inner surfaces; light buff (5YR7–6/8) and buff grey (10YR5–4/2) core; temper of a large amount of vegetable (2–5 mm long) and a small amount of fine sand; fabric of spout having much vegetable; spout remaining complete; rim diam. about 30 cm.
21. Base of jar with a hole (from Level 2b): reddish buff (2.5YR6–5/6) outer surface; light reddish buff (10R6–5/8) inner surface; light buff (2.5YR6/6–8) core; temper of a large amount of very fine and fine sand; scraped on the lowermost part of the inner surface; 1/3 extant.

— In Fig. 10 —

22. Rim of bowl (from Level 4): reddish buff (7.5YR8–7/4) outer and inner surfaces; blackish (N4/) core; temper of a small amount of vegetable (2–4 mm long) and fine sand; rim diam. about 21 cm; 1/8 extant.
23. Rim of bowl (from Level 6): reddish buff (2.5YR6–5/6) outer surface and core; greenish white (7.5Y9–8/2) inner surface; temper of a small amount of vegetable (2–5 mm long) and fine sand; rim diam. about 22 cm; 1/9 extant.
24. Rim of bowl (from Level 9): reddish buff (5YR6/6) outer and inner surfaces; buff (7.5YR6/6) core; temper of a small amount of vegetable (2–5 mm long) and fine sand; containing chalky particles; rim diam. about 20 cm; 1/3 extant.
25. Rim of bowl (from Level 8): dark buff (7.5YR6/4) outer and inner surfaces; dark brown (7.5YR5/3) core; temper of sparse vegetable (2–4 mm long) and fine sand; rim diam. about 22 cm; 1/5 extant.
26. Rim to shoulder of jar (from Level 8): creamy buff (2.5Y8/2–4) outer and inner surfaces and core; temper of a large amount of vegetable (5 mm long) and fine sand; carbide sticking on the outer and inner surfaces; 1/5 extant.
27. Base of jar (from Level 8): greenish buff (5Y8/4–6) outer surface; blackish (N2/) inner surface (stuck with carbide); buff (7.5YR7/4–6) core; temper of a large amount of vegetable (5–8 mm long) and a small amount of coarse sand; bottom shape lacking uniformity; 3/4 extant.
28. Nipple base sherd (from the Middle Assyrian drifted layer): greenish cream (5Y9–8/2) and reddish buff (5YR7/6) outer surface; buff (10YR7/2–4) inner surface; reddish buff (7.5YR7/4) core; temper of sparse, very fine sand and chalky coarse sand; complete bottom.
29. Nipple base sherd (from Level 6): greenish (10Y8/2) outer and inner surfaces and core; temper of sparse vegetable (2–3 mm long) and a large amount of very fine sand; nipple base made by scraping; complete bottom.
30. Base of goblet (from Level 8): greenish cream (5Y9/2–4) outer surface; greenish buff (2.5Y9/2–4) inner surface; creamy (10YR8/2–4) core; temper of a medium amount of vegetable (1–3 mm long) and fine sand; wet-smoothed on the lower part of the outer surface after scraping; complete bottom.
31. Nipple base of beaker (from Level 5): greenish white (7.5Y9–8/2) outer surface; greenish inner surface (7.5Y8–7/4) and core (5Y7/4–6); temper of a large amount of very fine sand and a medium amount of vegetable (2–5 mm long); wet-smoothed on the lower part of the outer surface after scraping; nipple base made by scraping; soft and fragile; complete bottom.

32. Button base of beaker (from Level 8): greenish white (7.5Y9–8/2) inner and outer surfaces; light buff (2.5YR7–6/6) core; temper of a medium to large amount of vegetable (2–4 mm long) and sparse fine and coarse sand; wet-smoothed on the outer surface after scraping; button base made by scraping; complete bottom.
33. Nipple base of large jar or beaker (from Level 8): greenish white (7.5Y9–8/2) outer and inner surfaces; light buff (5YR7/6) core; temper of a large amount of vegetable (2–8 mm long) and a small amount of fine and coarse sand; wet-smoothed on the outer surface after scraping; 1/2 extant.
34. Base of jar or bottle (from Level 8): creamy buff (2.5Y9–8/4) outer surface; buff (5YR7/4–6) inner surface; light buff (5YR7–6/6) core; temper of a medium amount of vegetable (2–5 mm long) and sparse coarse sand; carbide sticking on the outer surface; complete bottom.
35. Base of bottle (from Level 5): greenish white (7.5Y9/2) outer surface; creamy buff (10YR8/3) inner surface; pinkish buff (7.5YR8/4) core; temper of a medium amount of vegetable (2–4 mm long) and sparse fine sand; base diam. 3 cm; 1/1 extant.
36. Base of bottle (from Level 8): greenish white (7.5Y9–8/2) outer surface; creamy buff (10YR8–7/4) inner surface; pinkish buff (7.5YR7/4) core; temper of a medium amount of vegetable (2–4 mm long) and sparse coarse sand; base diam. 5.4 cm; 1/2 extant.

— In Fig. 11 —

37. Rim of large bowl (from Level 8): reddish buff (2.5YR7–6/6) outer and inner surfaces; buff (10YR6–5/4) and blackish (N2/) core; temper of a medium amount of vegetable (2–8 mm long) and a small amount of fine sand; rim diam. about 26–28 cm.
38. Base of jar with a hole (from Level 8): greenish (10Y9–8/2) outer and inner surfaces and greenish (10Y7/2) core; temper of a medium to large amount of vegetable (2–5 mm long) and a small amount of fine sand; ring-base made by sticking; exfoliated inner surface; 1/4 extant.
39. Base of jar (from Level 8): creamy (slip) (7.5YR8/4) on the outer surface; reddish buff (10R5/6–8) inner surface; dark buff (7.5YR6–5/4) core; temper of a medium amount of vegetable (2–5 mm long) and sparse fine sand; ring-base made by scraping; complete bottom.
40. Base of jar or bottle (from Level 9): reddish buff (2.5YR7–6/6) outer surface; dark buff (5YR6/4–6) inner surface and core; temper of a huge amount of vegetable (2–8 mm long); bottom shape lacking uniformity; roughly made; not made on wheel; 1/2 extant.
41. Nuzi ware: body of goblet (from the Middle Assyrian drifted layer) (Pl. 20-a): creamy slip (10YR8/3) on the outer surface; reddish buff (7.5YR7–6/4) inner surface and core; white painted design on brown painted band (5YR5/6); temper of a large amount of very fine sand; containing gold colored mica and chalky particles.
42. Rim of burnished bowl (from Level 13): grey (N6–5/) outer and inner surfaces; reddish buff (10YR8–7/4) core; temper of a middle amount of vegetable (2–5 mm long) and a small amount of fine sand; burnished on the outer and inner surfaces.
43. Rim of jar (from Level 11): greenish cream (5Y8/2) outer and inner surfaces and core; temper of a medium amount of vegetable (2–5 mm long); rim diam. 14 cm; 1/4 extant.
44. Rim of red burnished ware (from Level 10): reddish brown paint (7.5R3/7) on the outer surface and the upper half of the inner surface; light buff (7.5YR7/5) on the lower half of the inner surface; dark buff (10YR6/4) core; temper of a large amount of vegetable (2–5 mm long) and fine sand and sparse coarse sand; containing much chalky particles; burnished on the outer surface and the upper half of the inner surface; rim diam. about 19 cm; 1/7 extant.
45. Rim of open bowl (from Level 10): reddish buff (5YR6/6) outer and inner surfaces; blackish (N3–2/) core; temper of a large amount of vegetable (2–5 mm long) and fine sand; containing much chalky particles; rim diam. about 26–30 cm.
46. Rim to base of plate (from Level 11): creamy (2.5Y9/2) outer and inner surfaces; reddish (2.5YR6/5) and light buff (7.5YR8–7/4) core; temper of a medium amount of vegetable (2–4 mm long) and fine sand; containing chalky particles; scraped on the lowermost part of the body; rim diam. about 24–26 cm; 1/12 extant.
47. Rim of incised burnished bowl (from the Middle Assyrian drifted layer) (Pl. 20-b): grey ware; grey (N5–4/) outer and inner surfaces; blackish (N2/) core; temper of a small amount of vegetable (2–4 mm long); fine fabric; burnished (in horizontal way) on the outer and inner surfaces.
48. Shoulder of incised jar (from Level 12 (blackish ash layer)): reddish buff (5YR6/5) outer and inner surfaces; grey (N5/) core; temper of a medium amount of fine vegetable (1–3 mm long) and a large amount of fine sand; containing chalky particles; hard; wavy incised lines.
49. Shoulder of incised jar (from Level 13): greenish white (10Y9–8/2) outer and inner surfaces; buff (10YR7/4) core; temper of a small amount of vegetable (2–4 mm long) and fine sand; wavy incised lines.
50. Base of beaker (from Level 12): reddish buff (10R7–6/6) outer and inner surfaces and reddish buff (10R6/6) core; temper of a medium to large amount of fine sand; wet-smoothed on the outer surface after scraping; hard; complete bottom.

**Baked-clay nail (Pl. 21)**

This is a head part of a wall nail. It was found in the Middle Assyrian drift layer at the foot of the tell, which leads us to think that it was derived from Levels 4 to 9. The diameter of the head part is about 9 cm, and the remaining length is 4 cm. Taking into consideration that such an uncommon object was found in Trench I, it is highly probable that the structures unearthed from Levels 8 and 9 had functions that were not common to ordinary people.

**Cuneiform inscription (Pls. 22–25)**

The most remarkable discovery in this field season consists of two fragments of baked-clay cylinder cuneiform inscription and two fragments of baked bricks with cuneiform letters (See Professor Stefan M. Maul's translation and interpretation (pp. 49–55 of this volume) of these inscription pieces).

One of the inscription pieces (CI-1: Professor Maul's Cylinder fragment A in this volume) is a middle part fragment (Pls. 22, 23) and the other (CI-2: Professor Maul's Cylinder fragment B in this volume) is a middle to end part fragment (Pl. 24), both of which are well baked. The middle part fragment (CI-1) was found in the drift layer mixed with much debris of white mud-bricks, at the distance of 10.5 m from the upper end of the trench. Its remaining length is 7 cm, and the width (diameter) is 6.7 cm. Its remaining section is semi-circular. Trace of a hole, 1 cm in diameter, remains at its center (Pl. 23). The middle to end part fragment (CI-2), on the other hand, was found in the Middle Assyrian drift layer at the foot of the tell, at the distance of 15.4 m from the upper end of the trench. The length of this fragment is 9.5 cm, and the width is 4.7 cm. Its end face is flattened, and retains some 1/3 of the original face. It seems that the diameter of the original end face was slightly smaller than the middle part. This fragment also has the trace of a hole at its center.

Two fragments of baked bricks with cuneiform letters were unearthed from Level 8 (Pl. 25). They measure 18 × 15 cm (Professor Maul's Brick fragment 1 in this volume) and 14 × 12 cm (Professor Maul's Brick fragment 2 in this volume) respectively, and are 6 to 7 cm in thickness. Judging from the size of other baked bricks unearthed in this season, it is supposed that the original bricks of these fragments were as big as 36 × 36 cm. On both fragments, cuneiform letters bigger than those on the cylinder inscription are inscribed in the space, about 6 cm wide, between two incised horizontal lines.

**Bronze figurine (Pl. 26)**

A bronze figurine depicting ibex was found on the lower floor of the white mud-brick building of the New Assyrian Level 2. It is 5.5 cm long and 1.5 cm wide as is seen from above, and is made elaborately; details of this animal such as horns, eyes, nose and beard are expressed clearly. The hole made at the pedestal part through the body center measures 8 mm in diameter. The most characteristic feature of this figurine is that its back is tied with bell-reminiscent flower-like ornaments, each of which measures about 1 cm in diameter. From these features, this figurine is supposed to have been a finial of sword or stick. The discovery of this elaborately-made figurine does suggest that the white mud-brick building had a certain unique function.

**VI. Concluding remarks**

The excavation at Tell Taban in the 1997 field season proved the validity of our expectation that this site was to yield important information to the history of the Middle Khabor. Pieces of cylinder inscription unearthed, in particular, have provided us with important data for unknown aspects of the history of the area in the Middle Assyrian period. According to Professor Maul, these inscription pieces describe the name of the person, Aššur-Kettī-Lēšer, who called himself the king of the land of Mari under the reign of the Middle Assyrian king Tiglatpilešar I (reign: 1114 ~ 1076 B.C.) and who constructed a palace-like public building at Tell Taban. The name of an ancient town, Tābētu, is also described.

Cylinder inscription by Aššur-Kettī-Lēšer identical to that from Tell Taban had been unearthed from Tell Bderi, located 6 km north of Tell Taban, during the excavations conducted from 1985 onwards



by the German archaeological mission from Freie Universität Berlin directed by Hartmut Kühne [Pfälzner 1986/1987].

Research and excavations by the German mission in the Middle and Lower Khabur had revealed much of the history of this region. And particularly in connection with Tell Taban, they had already estimated that in the Hassake area in the Middle Assyrian period there existed two towns called Dūr-Aššur-Kettī-Lēšer and Ṭābētu, both of which were constructed by Aššur-Kettī-Lēšer, the former being identifiable with Tell Bderi and the latter with Tell Taban [Röllig and Kühne 1977/1978: 127; Maul 1992].

Accordingly, the inscription pieces from Tell Taban have validated the location of Ṭābētu so-far estimated by the German scholars, and have presented new data which certainly contribute to the research of the Middle Assyrian history of the Middle Khabur.

With regard to the overall result of the works at Tell Taban in the 1997 field season, not all of our aims before excavation could be achieved under a limited schedule within two months. For example, we did not reach the *Virgin soil*, and could not tell how Tell Taban was founded initially. In this regard, we are planning to clarify the whole archaeological sequence at this site, from the *Virgin soil* upwards, through excavations to continue hereafter. The goal of our works after analyzing the sequence is to bring more information for unknown aspects in the history of the Khabur region, North Mesopotamia.

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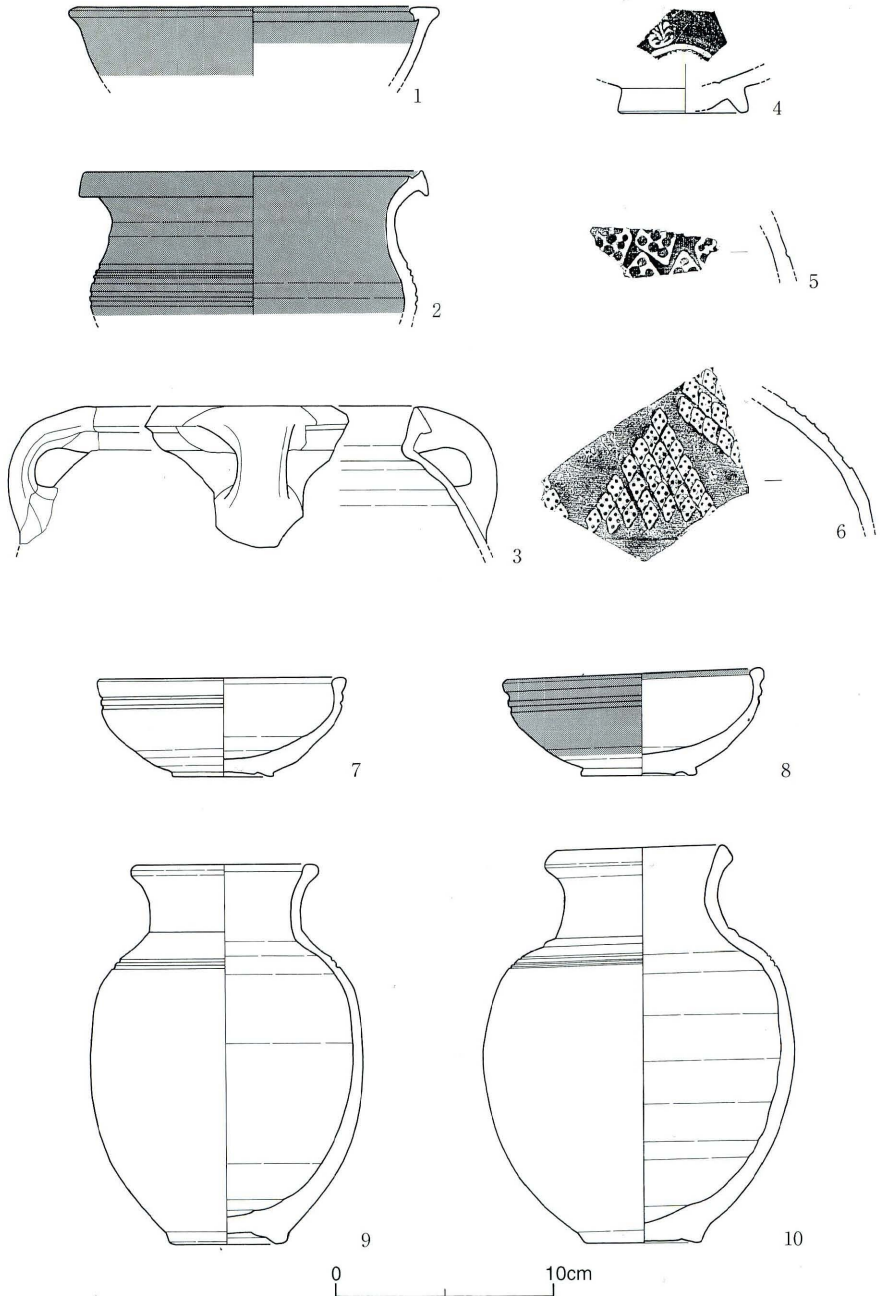
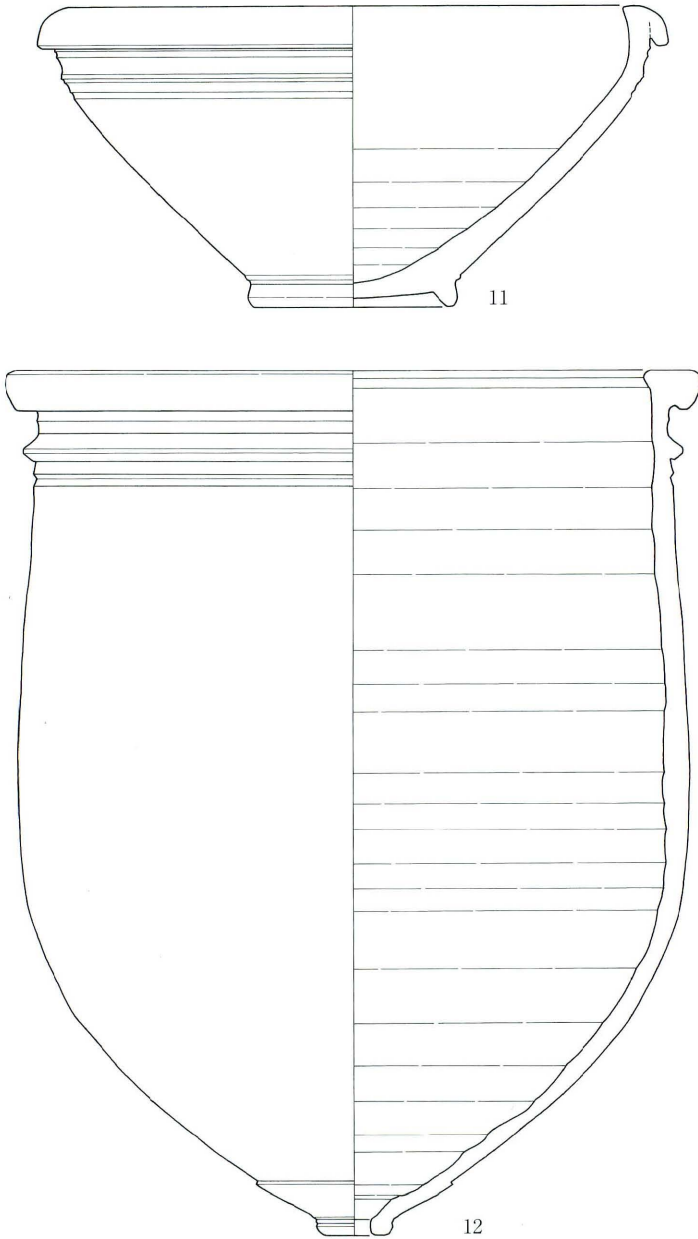


Fig. 7 Pottery from Level 1 (Nos. 2, 5, 6), the moat (Nos. 1, 3, 4) and Grave 4 (Nos. 7-10)



0 20cm

**Fig. 8** Pottery used as coffin for Grave 3

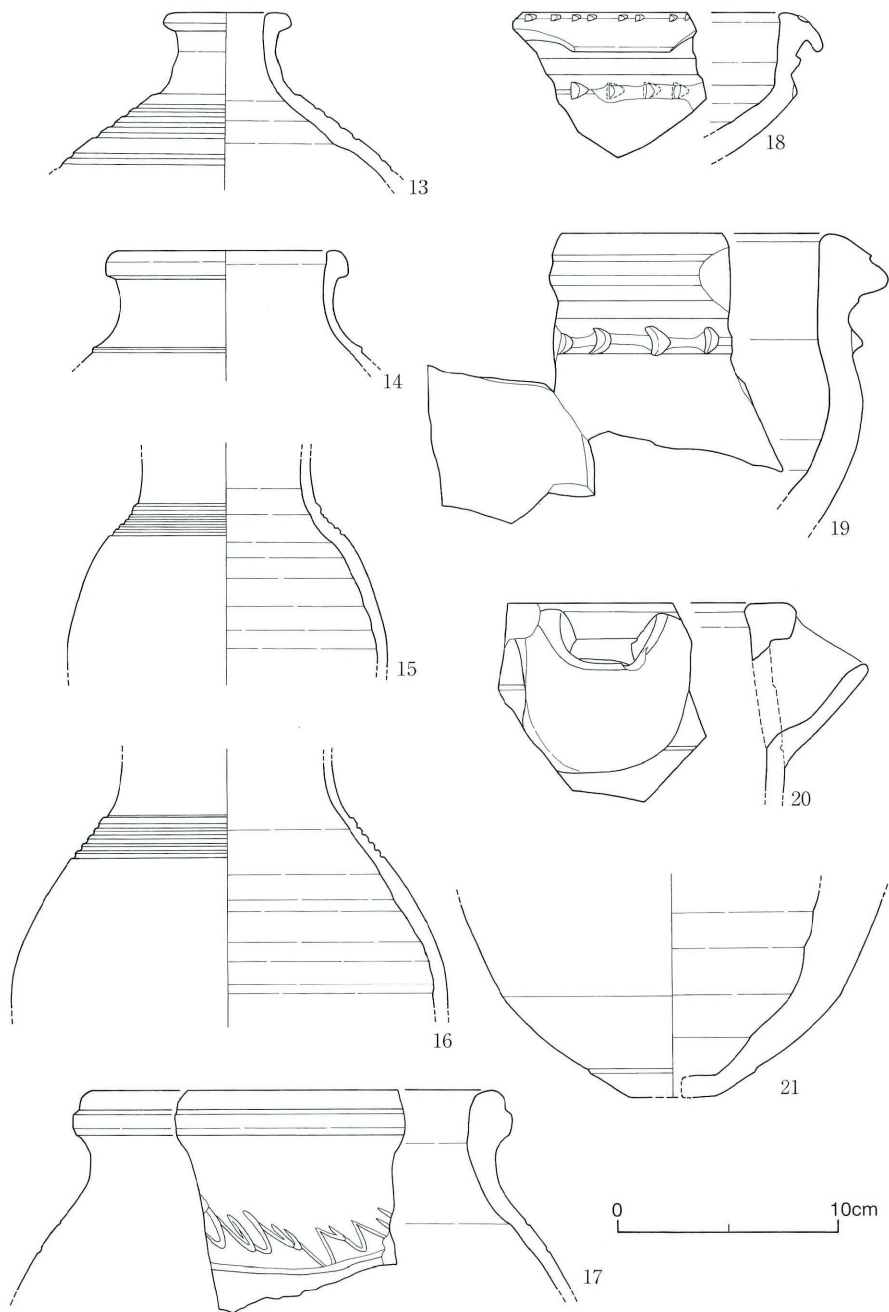


Fig. 9 Pottery from Levels 2 and 3

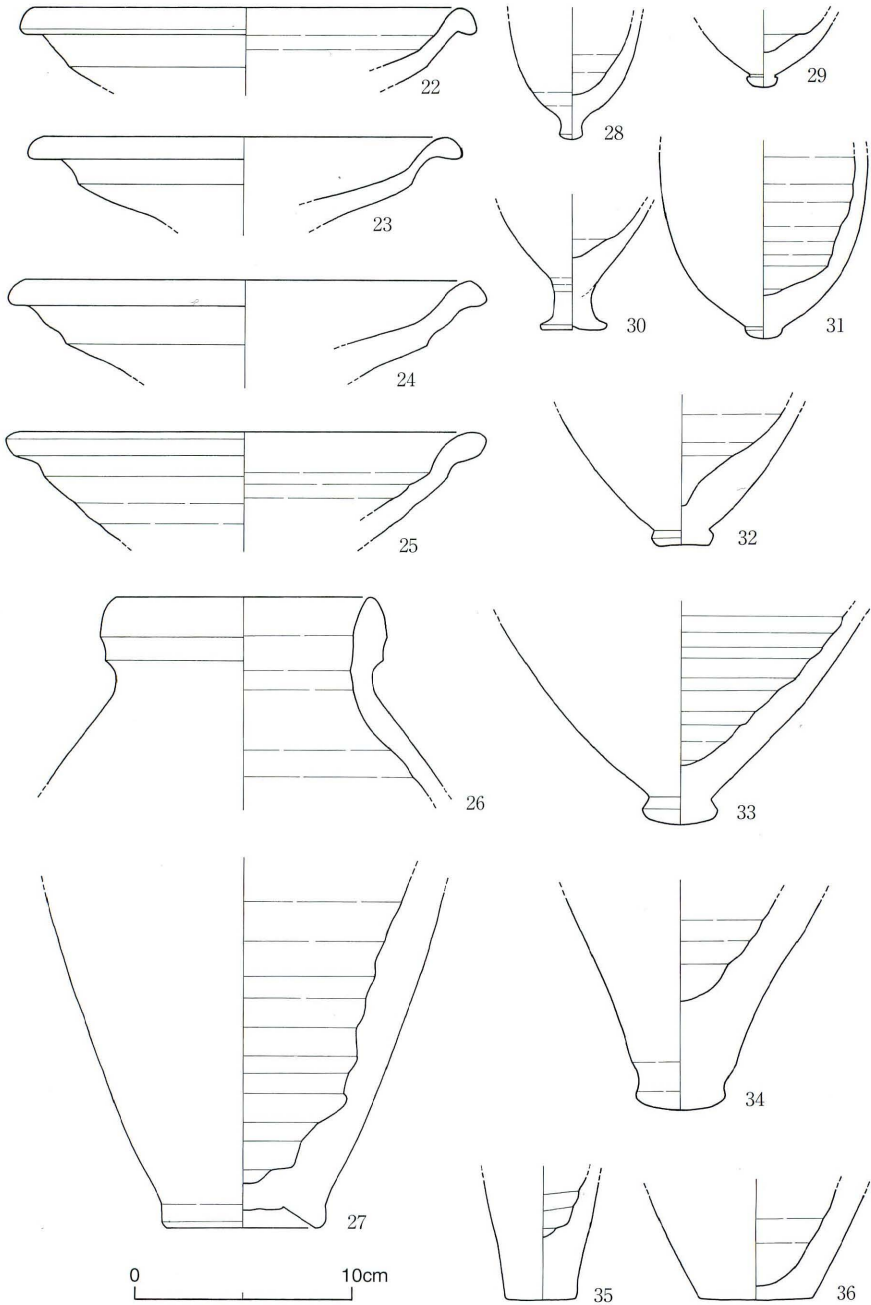
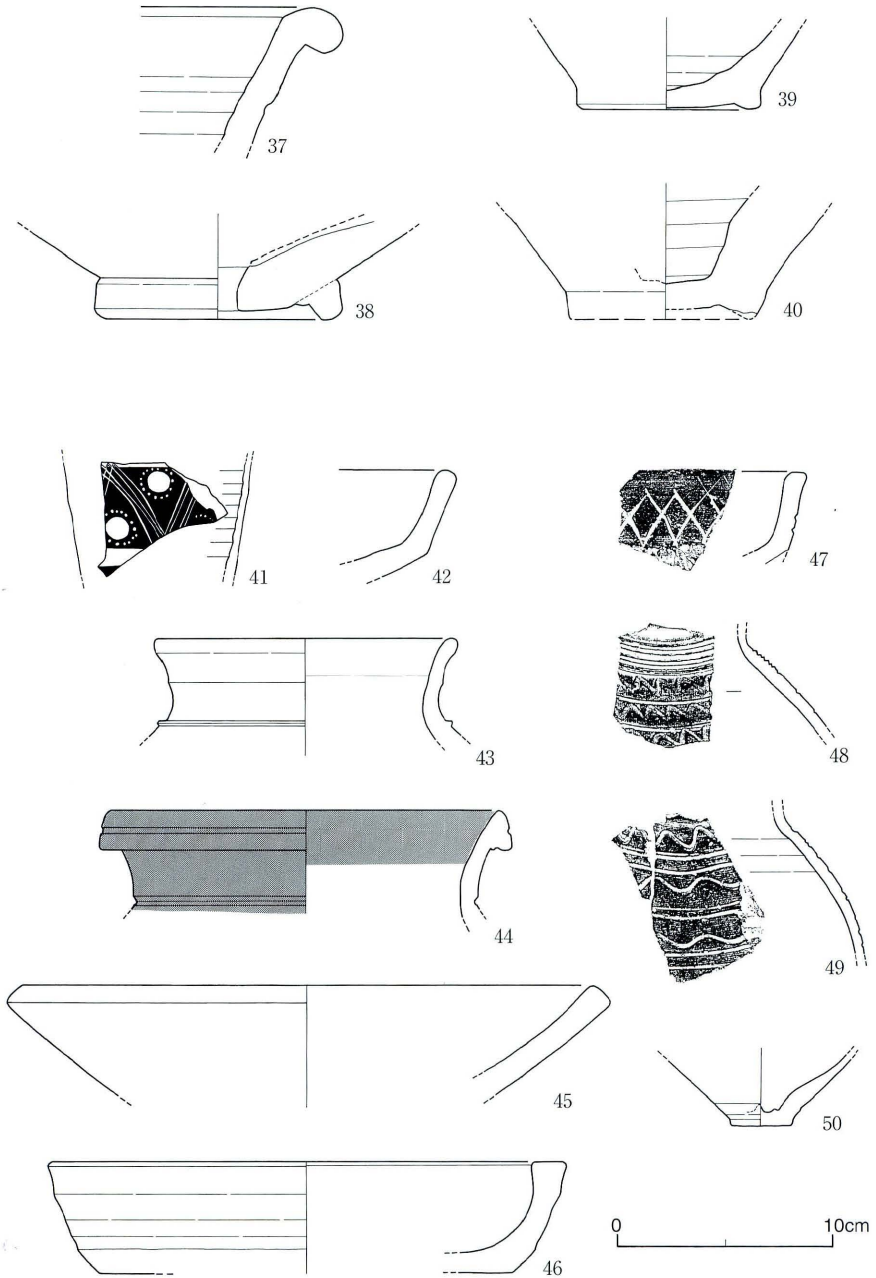


Fig. 10 Pottery from Levels 4 to 9

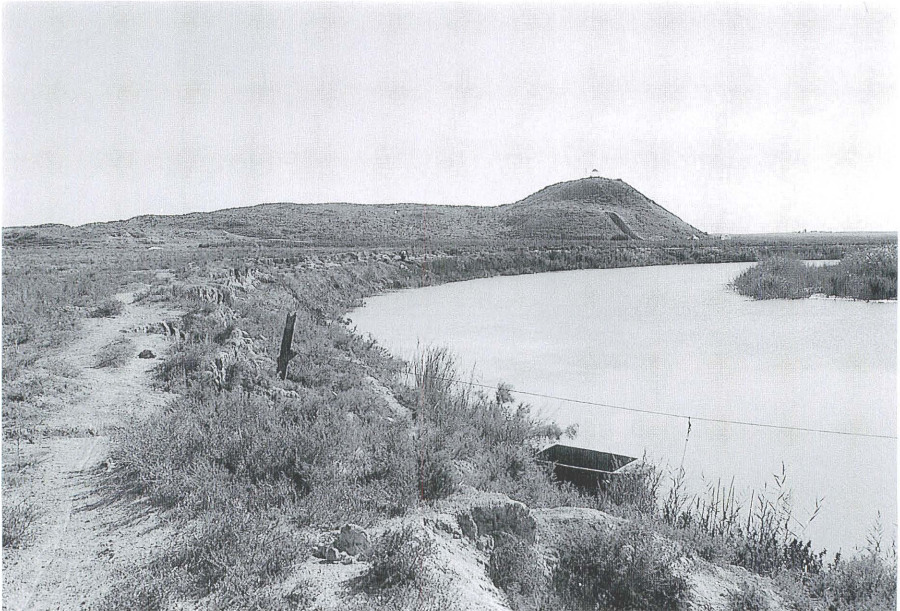




**Fig. 11** Pottery from Levels 8 and 9 (Nos. 37–40), Levels 10 to 13 (Nos. 42–46, 48–50) and Middle Assyrian drifted layer (Nos. 41, 47)



a. General view of ruined village of Taban



b. *Sefine* and Tell Taban



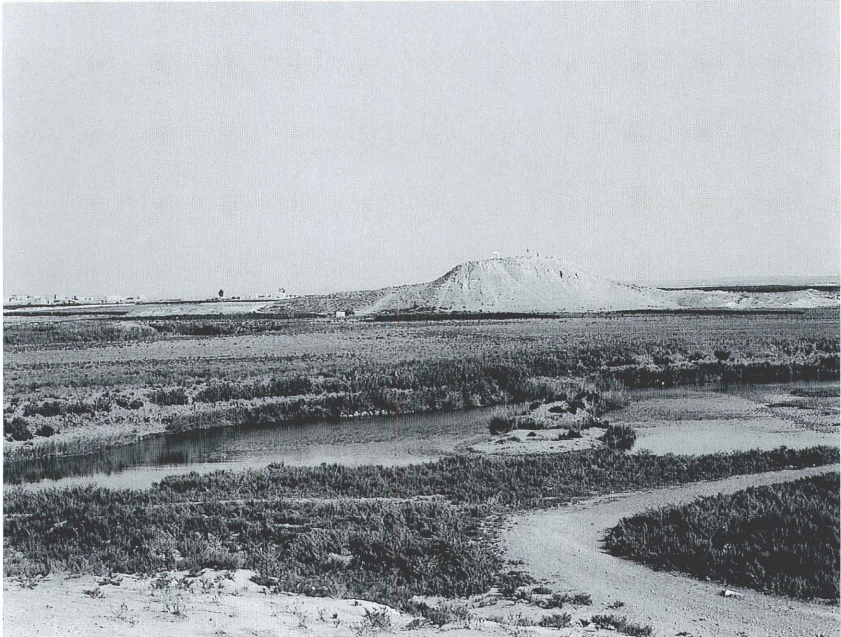


a. General view of Ain Taban

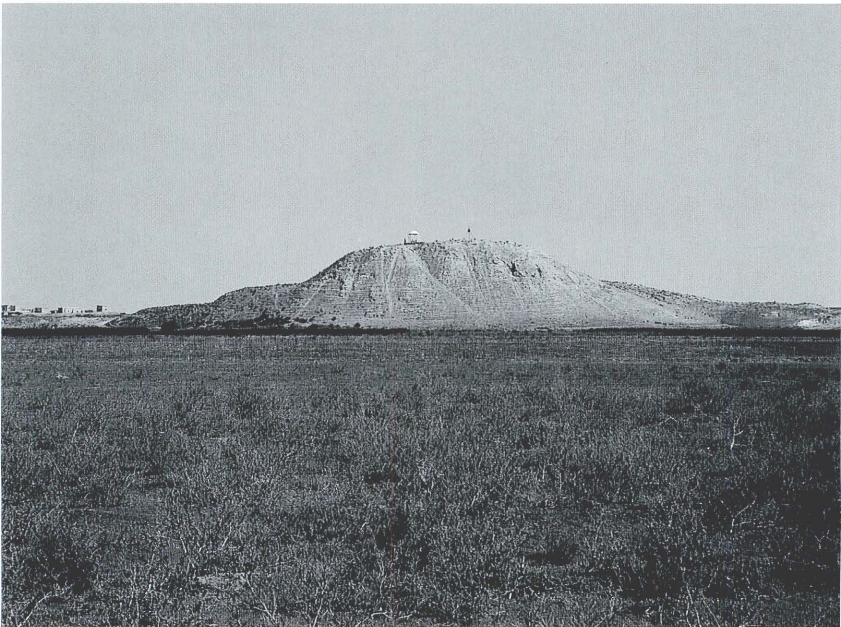


b. Remains of *naura*



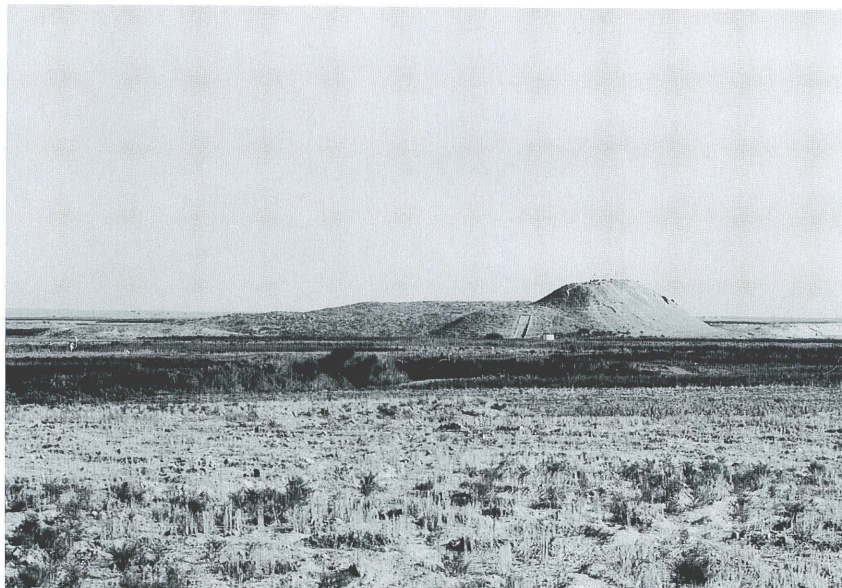


a. General view of Tell Taban from the west

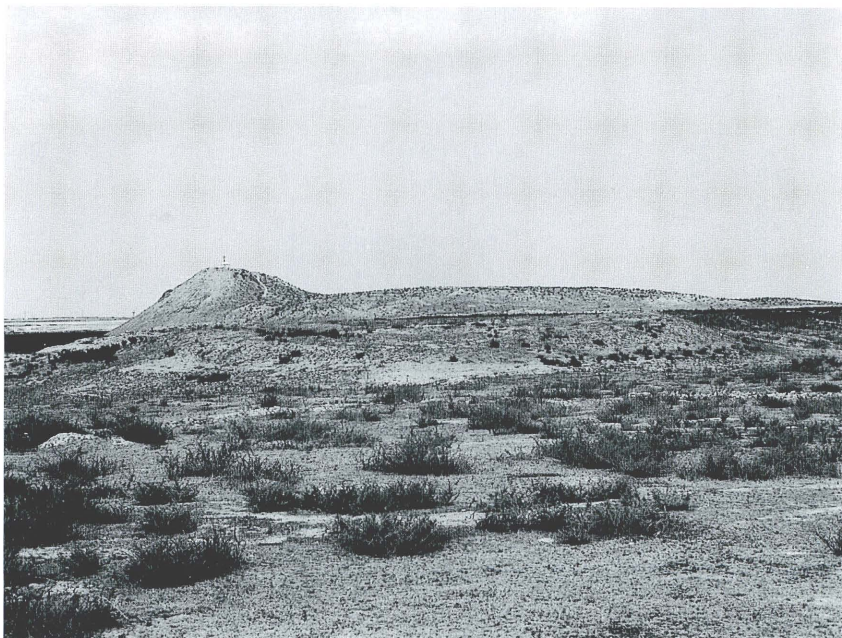


b. General view of Tell Taban from the south-west





a. General view of Tell Taban from the north-west



b. General view of Tell Taban from the south





a. Closer view of Tell Taban from the west



b. Tell Taban seen from the north-west before excavation





a. Trench I with the surface soil removed

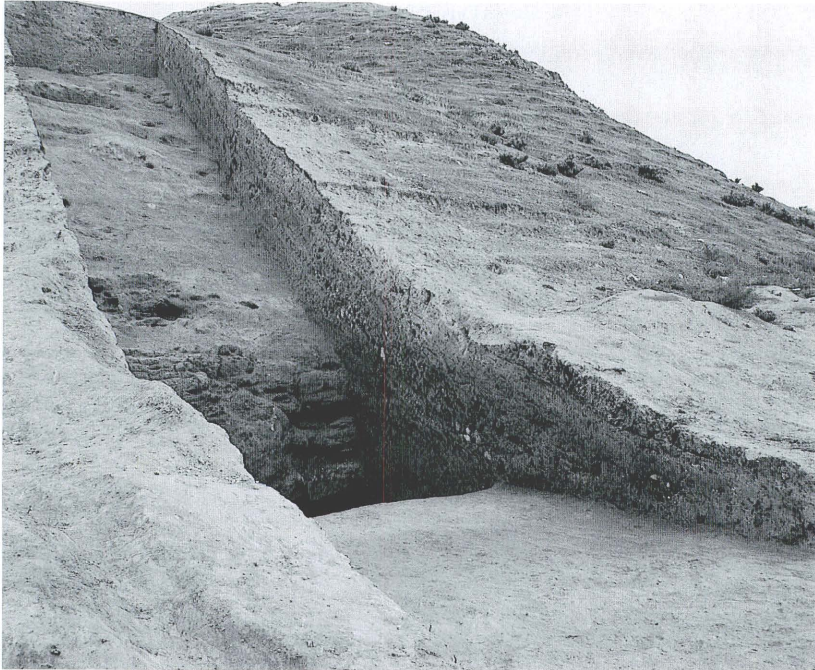


b. Drifted mud-bricks





a. Drifted layer seen in the N-E Section



b. Drifted layer seen in the S-W Section





a. S-W Section of the moat



b. N-E Section of the moat



a. Moat and Graves 1 and 2 seen from the south



b. Grave-1





a. Graves 3 and 4



b. Grave 4



a. Grave 3



b. Infant burial (Grave 3)





a. White mud-brick building of Level 2 seen from the west



b. White mud-brick building of Level 2 seen from the north



a. Mud-brick walls of Levels 8 and 9



b. Baked bricks of Level 9





a. Middle Assyrian drifted layer seen in the N-E Section at the foot of the tell



b. Middle Assyrian drifted layer seen in the S-W Section at the foot of the tell



a. Town-wall-like mud-brick wall



b. Town-wall-like mud-brick wall seen from the east





a. Trench I after excavation



b. Bottom part of Trench I after excavation



a. Trench I after excavation seen from the foot of the tell

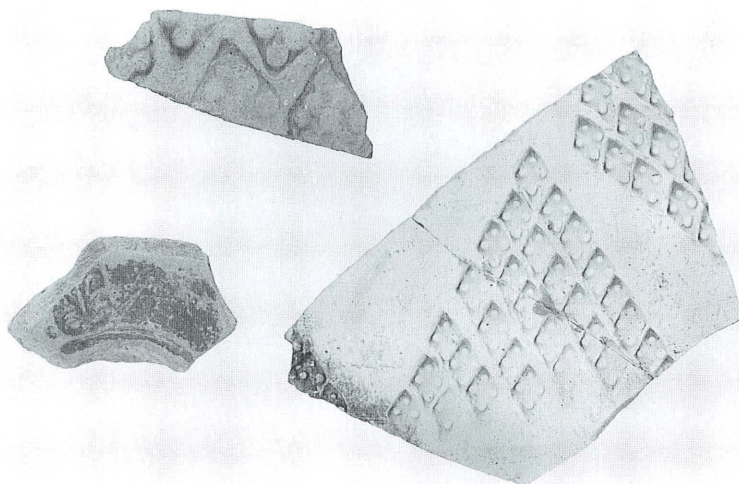


b. General view of Trench I after excavation





a. Islamic glazed sherds



b. Hellenistic sherds with stamp impressions

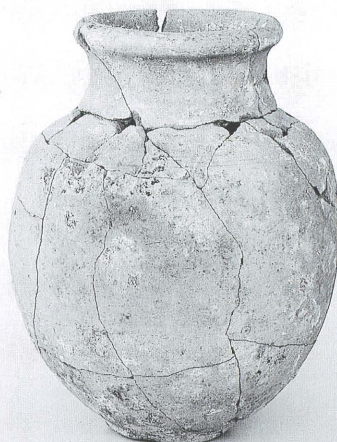




a. Small bowl from Grave 4



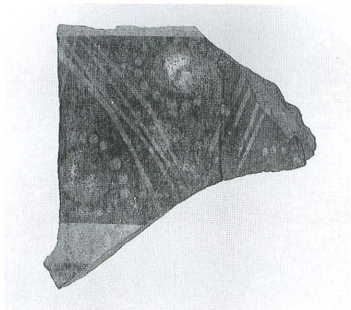
b. Small bowl from Grave 4



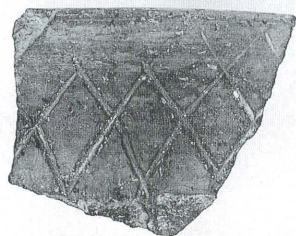
c. Small jar from Grave 4



d. Bowl used as coffin for Grave 3



a. Sherd of Nuzi ware



b. Sherd of incised Mittani ware

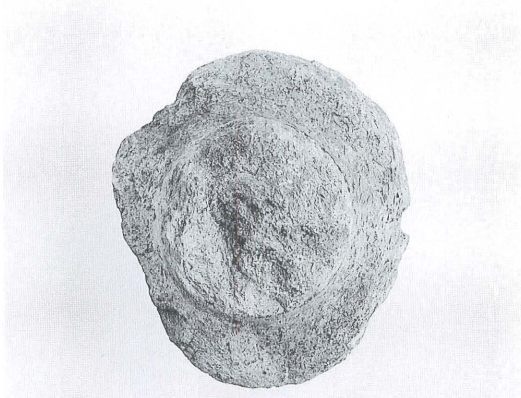
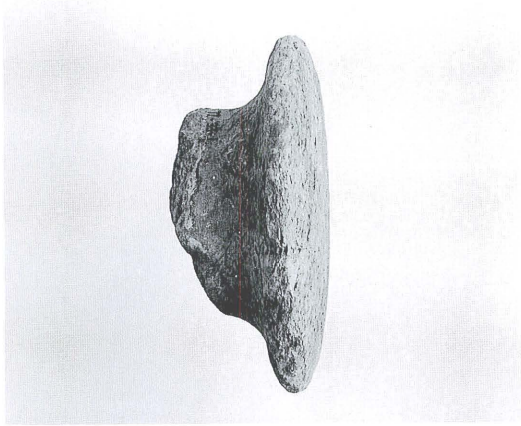


c. Sherd of decoration-applied Hassuna coarse ware

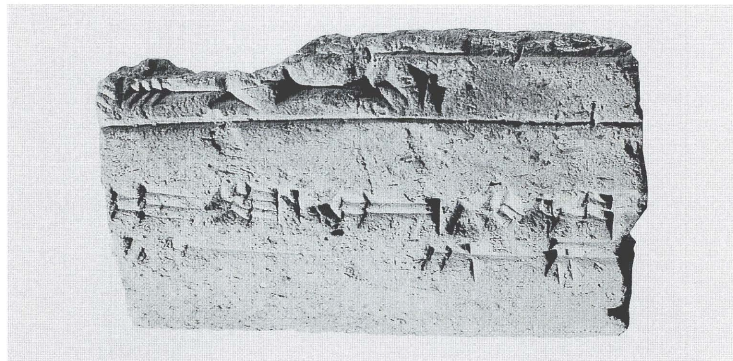


d. Sherds of Metallic wares



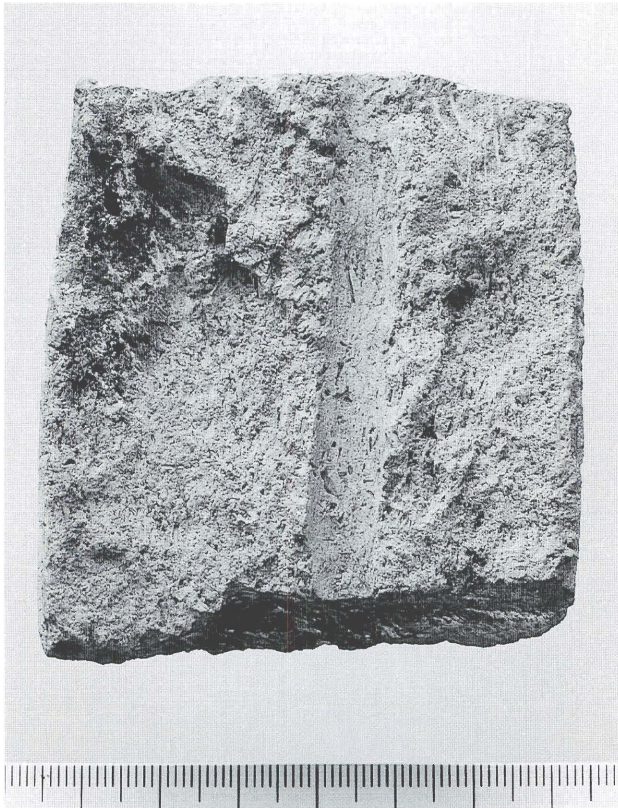


Head part of baked-clay wall nail

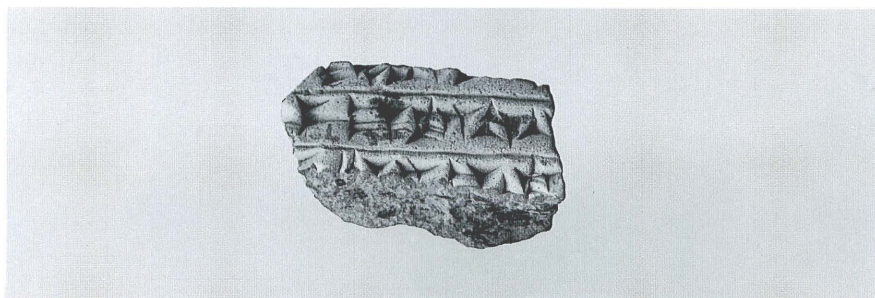
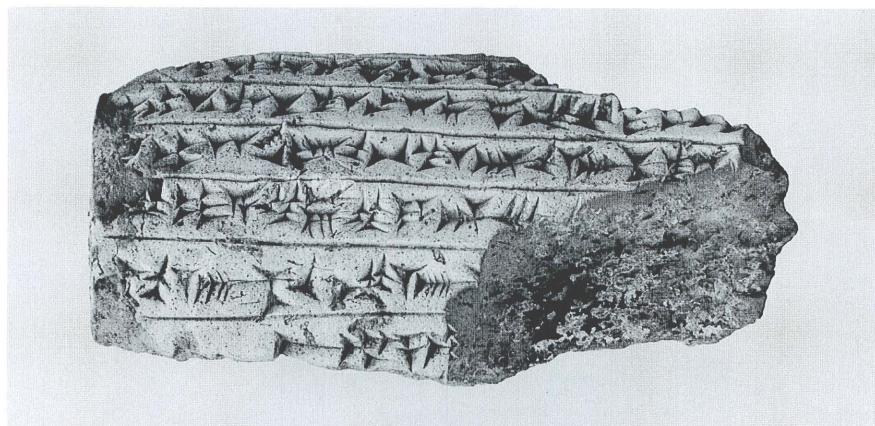


Cylinder inscription (CI-1)



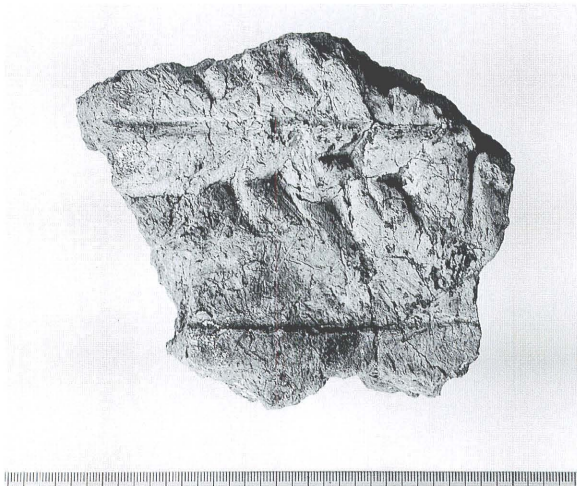


Remaining section and trace of hole of CI-1



Cylinder inscription (CI-2)





Fragments of baked bricks with cuneiform letters



Bronze figurine depicting ibex





## NEW INFORMATION ABOUT THE RULERS OF ṬĀBĒTU

Stefan M. MAUL\*

German excavations at Tall Bdēri, which is situated at Ḥabūr — approx. 25 km south of the Syrian province capital Ḥasaka — supplied new information about a dynasty of princes, who in the late Middle-Assyrian time had ruled over the town Ṭābētu and its immediate surroundings<sup>1)</sup>. Inscriptions found in Tall Bdēri indicated that a prince named Aššur-kettī-lēšer had initiated raids from Ṭābētu during the reign of the Assyrian king Tiglatpilešar I. (1114–1076 B.C.), and that on these raids, smaller towns and abandoned land settlements in the immediate neighbourhood of his residence were conquered and extended into fortresses. Although Aššur-kettī-lēšer like his predecessors proudly called himself ‘King of Māri’, he actually was under the supremacy of the kings of Assur.

In 1921, E. Forrer already suspected that the ruins of the old Ṭābētu were to be found under the rubble of the gigantic Tall Ṭābān<sup>2)</sup>. This identification was substantiated by discovered ceramic objects from the Middle- and New Assyrian time period<sup>3)</sup>. Aššur-kettī-lēšer’s inscriptions from Tall Bdēri also constituted substantial evidence. The information that Tall Bdēri, at that time Dūr-Aššur-kettī-lēšer, was situated ‘above Ṭābētu’<sup>4)</sup>, coincided with Forrer’s identification. Tall Bdēri is actually located approx. 6 km northerly air distance, i.e. upstream and ‘above’ Tall Ṭābān and like Tall Ṭābān on the left riverbank.

The most recent Japanese excavations in Tall Ṭābān provided the final evidence for Forrer’s identification. Inscriptions of Aššur-kettī-lēšer, which are going to be presented in the following, were also found in Tall Ṭābān.

The same as in Tall Bdēri, fragments of cylinder inscriptions of Aššur-kettī-lēšer were also discovered in Tall Ṭābān. In appearance, size and shape, the cylinders from Tall Ṭābān showed no differences to the already known cylinders of Aššur-kettī-lēšer<sup>5)</sup>. The same as these cylinders, they must have been written in the early 11<sup>th</sup> century B.C. during the reign of Tiglatpilešar I<sup>6)</sup>. The new fragments from Ṭābētu/Tall Ṭābān belong to two different cylinders. Due to the poor preservation of the existing fragments, it is unfortunately impossible to tell as to whether they represent the same or slightly differing inscriptions. It is likely, however, that with the discovery of additional cylinder fragments in subsequent excavation campaigns, we will gain new knowledge of the capital of the land of Māri as well as its king Aššur-kettī-lēšer and his activities.

One fragment, where the initial lines of the inscription of Aššur-kettī-lēšer were preserved (here fragment A: Fig. 1–1), was found in the relics of a Middle-Assyrian house in a stratigraphically unfortunately not fully cleared context. It is not guaranteed as to whether this fragment is part of the foundation document of the discovered house. If this is confirmed, then the relics of the house could have belonged to the palace of the ‘Kings of the land of Māri’.

Two fragments of another cylinder (here fragment B: Fig. 1–2) were discovered in connection with a thick Middle-Assyrian wall, which the excavators interpreted as town wall. These cylinder fragments

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1) Rf. S.M. Maul, *Die Inschriften von Tall Bdēri*. Die Ausgrabungen von Tall Bdēri Band 1. BBVO Texte Band 2, Berlin 1992.

2) E. Forrer, *Die Provinzeinteilung des assyrischen Reiches*, Leipzig 1921, p. 144.

3) Rf. to H. Kühne, *AfO* 26 (1978/79), p. 253f.

4) Rf. to S.M. Maul, *Die Inschriften von Tall Bdēri*, p. 22, line 2.

5) For more details, *ibid.* p. 15 and p. 36f.

6) Rf. to *ibid.* p. 34f.



belong probably to one of the foundation documents in remembrance of the building owner of the town wall.

Two fragments of inscribed bricks (Fig. 2) probably belong to a younger, but also Middle-Assyrian stratum. They possibly belong to a wall, which the grandchild of Aššur-kettī-lēšer had set up. If this assumption is confirmed, then the appertaining settlement stratum dates back to the middle of the 11<sup>th</sup> century B.C.

## I. The cylinder inscription(s) of Aššur-kettī-lēšer

### 1. Transcription:

- 1 [ekal Aššur-ke]tī-lēšer šar māt Māri mār Adad-bēl-g[abbe šar māt Māri mār Adad-bēl-apli šar māt Māri(m)ma]
- 2 [enūma(?) ina] abbā'ija šarrān[ī ma]herūte ... mamma lā ... ]
- 3 [ ] ..... [ ]
- 4 [ekalla(?) lā ip]uš dalāti ina b[ābā]tīša lā urette/ukīn<sup>?</sup> ]
- 5 [u Aššur-kettī]-lēšer šar māt Māri mār Adad-bēl-gab[be šar māt Māri mār Adad-bēl-apli šar māt Māri(m)ma]
- 6 [ itte] miik tē[mīja amdalikma ina nigūt libbēja ]
- 7 [ekalla(?) lū ēpuš dālāti ina bābā]tīša ]
- (gap)

- 1' [enūma ālu u ekallī šuātu ana urkāt ūmē] ennaḥ[ūma ušalbarrū igāršu miqta irāššū(?)]
- 2' [r]ubā'u urkūt ša ellā [anḥūssu] lēmurma luddi[š šumī šaṭra itte šumēšu]
- 3' [a]na ašrēšu lutēr ša šumī šaṭra it[te] šumēšu ana ašrē[šu utarru ilānū, rabātu]
- 4' [ša] Tābēte ikribēšu lu i[šammūšu(?)] ša šumī šaṭra unakkarūma šumšu]
- 5' [kīmū šu]mēja išaṭtaru Sīn u [Šamaš(?)] ilānū rabātu ša šamē u eršetī]
- 6' [zēr]ēšu u šumēšu ina māt Māri [luḥalliqū]
- 7' ina <sup>iii</sup>[... UD.x.]KÁM līmi Mudammeq-[Bēl Aššur-kettī-lēšer šar māt Māri]
- 8' [ É].GAL an-ni-[i

### 2. Transliteration:

- 1 A, 4' [É.GAL <sup>i</sup>Aš-šur-ZI]-SI.SÁ šar<sub>4</sub> KUR <sup>ra</sup>A X-EN-g[ab-be šar<sub>4</sub> KUR A A X-EN-A šar<sub>4</sub> KUR A-ma]
- 2 A, 5' [e-nu-ma(?) i+na] a-ba-i-ia<sup>mes</sup> XX.MEŠ [ma]herūte ... mamma lā ...]
- 3 A, 6' [ G]I<sup>?</sup> NÍG TAR x x (x) x š[u<sup>?</sup> ]
- 4 A, 7' [É.GAL la(-a) i-p]u-uš <sup>gis</sup>IG.MEŠ i+na K[Á.MEŠ-ša la(-a) ]
- 5 A, 8' [ù <sup>i</sup>Aš-šur-ZI]-SI.SÁ šar<sub>4</sub> KUR A A X-EN-ga[b-be šar<sub>4</sub> KUR A A X-EN-A
- 6 A, 9' [šar<sub>4</sub> KUR A-ma K]I mi-lik tē-[mi-ia am-da-lik-ma i+na ni-gu-ut lib-be-ia .....]
- 7 [É.GAL lu e-pu-uš <sup>gis</sup>IG.MEŠ i+na KÁ.MEŠ-ša ]
- (gap)

- 1' B, 1' [e-nu-ma ] (traces) e-<sup>ra</sup>na<sup>?</sup>-ḥ[<sup>u</sup>-ma ušalbarru ]
- 2' B, 2' [NU]N EGIR-ku šá el-la a[n-ḥu-su I]GI-ma lu-ud-d[i-iš MU šaṭ-ra KI-te MU-šú]
- 3' B, 3' <sup>ra</sup>a<sup>?</sup>-na KI-šú lu<sup>?</sup>-GUR-er<sup>?</sup> šá MU šaṭ-<sup>ra</sup> KI-te MU-šú a-na KI<sup>?</sup>-[šú utarru ilānū rabātu]
- 4' B, 4' [š]á <sup>unw</sup>DÜG.GA-be-te BAL.MEŠ-šú lu <sup>ra</sup>i<sup>?</sup>-[šam-mu-šu(?)] šá MU šaṭ-ra KÚR-ru-ma MU-šú ki-mu]
- 5' B, 5' [M]U-ia IN.SAR <sup>d</sup>XXX <sup>ra</sup>u<sup>?</sup> [<sup>d</sup>UTU ]

- 6' A 1' [NUMUN.MEŠ-šú u M]U.MEŠ-<sup>7</sup>šú<sup>7</sup> ina KUR A [luḥalliqū]  
 B, 6' [NUM]UN.MEŠ-šú u MU.MEŠ-šú<sup>7</sup> ina māt Māri luḥalliqū]

## The colophon

- 7' A, 2' [(vacant) ina <sup>iii</sup>x UD.x].KÁM li-mi <sup>i</sup>Mu-SIG<sub>5</sub>-[<sup>d</sup>+EN <sup>i</sup>Aš-šur-ZI-SI.SÁ šar<sub>4</sub>  
 KUR A]  
 B, 7' (vacant) ina <sup>iii</sup>AP[IN ]  
 8' A 3' [(vacant) É].GAL an-ni-[ ]

## 3. Translation

- 1 [(Property of) the palace of Aššur-ke]ttī-lēšer, the king of the land of Māri, the son of Adad-bēl-g[abbe, king of the land of Māri, son of Adad-bēl-apli, also king of the land of Māri.]  
 2 [When (?)] none [of] my fathers, my royal [predecessors ]  
 3 [ ] ..... [ ]  
 4 [— none (of them) had bui]lt [a palace, none (of them) had hung/fixed doo]rs in [its] gate [ways ]].  
 5 [But then Aššur-kettī]-lēšer, the king of the land of Māri, the son of Adad-bēl-gabb[e, king of the land of Māri, son of Adad-bēl-apli, also king of the land of Māri] —  
 6 [ I thou]ght by myself [and with joy in my heart ]].  
 7 [I built a palace, I hung/fixed doors in its gateways, ]].

(gap)

- 1' [When this city and my palace in future days] becomes weak [and old and its wall starts to break down],  
 2' the future prince who will come up shall see [its bad condition] and he may restore it. [My written name (i.e. my inscription)]  
 3' may he put back to its place [together with his name (i.e. his inscription)]. The one who will [put back] to its place my written name together with his name, [the great gods]  
 4' of (the city of) ʿĀbētu will [hear] his prayers. [The one who will take away my written name]  
 5' and writes down [his own name instead] of my name, the gods Sîn and [Šamaš, the great gods of heaven and earth],  
 6' shall [destroy] his semen and his name in the land of Māri.  
 7' In the month Araḥ[samna<sup>7)</sup>....., the x]<sup>th</sup> [day], when Mudammeq-[Bēl] was eponym. [Aššur-kettī-lēšer, the king of the land of Māri], [has founded<sup>7</sup> th]is pala[ce (...)].

## 4. Comment

2 Rf. to the parallel passages in: S. M. Maul, *Die Inschriften von Tall Bdēri*, p. 20 line 3 and p. 37 line 3.

3 Cuneiform characters included in this line are heavily damaged. The photographs at my disposal are not good enough for reliable reading.

4 The addition *urette* (or possibly *uretti* or *uratte*) is based on a contemporary inscription of the Assyrian king Tiglatpileсар I. (1114–1076 B.C.), in which the production and setting up of doors of the king's palace in Assur is reported in a very similar context: <sup>sis</sup>dalāt(IG.MEŠ) <sup>sis</sup>a-š[*u-l*]i š*i-ra-te* *ēpuš*(DŪ-uš) *i-na mē-ser siparri(ZABAR) / ū-re-ki-iš i-na bābātī(K[Ā.M]JEŠ)-ša ū-re-et-te*, 'I made high doors of fir, I reinforced (them) with bronze bands (and) hung (them) in its gateways'. (rf. to A.K. Grayson, *Assyrian Rulers of the Early First Millennium BC I (1114–859 BC)*, RIMA 2, Toronto 1991, p. 55, lines

7) Acc. to text B.



69–70; apart from that cf. A.K. Grayson, *ibid.* p. 135, lines 79f. [Aššur-dān II.] and p. 202, line 4; p. 228, line 60; p. 276, lines 20f.; p. 282, lines 63f.; p. 289, lines 27–29; p. 323, line 30 [Assurnāširpal II.]. The addition *ukīn*, which is less applicable, is based on a building inscription of Adad-nīrārī I. (1307–1275 B.C.) from Assur (relating to the Anu-Adad temple; cf. A. K. Grayson, *Assyrian Rulers of the Third and Second Millennium BC (to 1115 BC)*, RIMA 1, Toronto 1987, p. 154, lines 8–12).

6 Rf. to parallel passages in: S. M. Maul, *Die Inschriften von Tall Bdēri*, p. 20 line 7.

7 The restoration of line 7 results from line 4.

1' Rf. to S. M. Maul, *Die Inschriften von Tall Bdēri*, p. 37 line 8 with respect to the suggested restoration of the line.

7' For the eponym Mudammeq-BēI rf. to H. Freydank, *Beiträge zur mittelassyrischen Chronologie und Geschichte*, Berlin 1991, p. 151ff. H. Freydank's assumption that Mudammeq-BēI was 'sehr wahrscheinlich Eponym zur Zeit Tiḡlatpilešars I.', is confirmed by the existing new text. We know from the inscriptions of Aššur-kettī-lēšer, which were found in Tall Bdēri, that Aššur-kettī-lēšer was a contemporary of Tiḡlatpilešar I<sup>8)</sup>. The same as the already known inscriptions of Aššur-kettī-lēšer, the new cylinder inscription from Tall Ṭābān/Ṭābētu is not only inscribed with an Assyrian date (*limu*) but also with a yearname, which is probably only valid in the area of the Ṭābētu principedom. This form of dating is based on Babylonian traditions. The short summary of the inscription after the Assyrian date can probably be interpreted as the name of the year assigned by Aššur-kettī-lēšer.

## II. Brick fragments: A building inscription of a grandchild of Aššur-kettī-lēšer?

Fragments of inscribed bricks were found in Tall Bdēri as well as in Tall Ṭābān. Whereas the brick fragments from Tall Bdēri were only saved from the building rubble, with which a pit had already been filled in the Old Ages<sup>9)</sup>, the two inscribed brick fragments from Tall Ṭābān can be allocated to a wall complex from the Middle-Assyrian period (building level 2).

Originally, the inscribed bricks were square, the same as the non-inscribed bricks of the wall complex, which have a side length of 36 cm. The external appearance of the bricks discussed in this paper hardly differs from the inscribed bricks from Tall Bdēri<sup>10)</sup>. They are only poorly baked and manually inscribed, the same as the bricks from Tall Bdēri. In the case of the two fragments, the line height is approx. 7 cm.

A direct join of the two fragments is not possible and it will not be possible to find out as to whether they are actually parts of the same brick. It cannot be excluded, however, that the two fragments belong to different inscriptions but the circumstances of the discovery speak against this. It is very likely that the two fragments belong to the same inscription of the same king.

Due to the exceptionally bad preservation of the brick inscriptions, the reading presented in the following should be rated as an interpretation proposal. New discoveries of inscriptions will finally clear this issue.

Different from initial expectations, the building owner of the building, which was rediscovered in relics, was not Aššur-kettī-lēšer. In all probability, this king is still mentioned in the last line of the brick inscription, which altogether probably did not have more than three lines. It is difficult to complete the traces *A-šur(-)* [ in line 2' of the 1st brick fragment (Fig. 2–1) in any other way than to the name Aššur-kettī-lēšer. In all probability, a rest of this royal name is also preserved in the second brick fragment (Fig. 2–2). The two lying wedges, which can be seen in front of the title 'King of the land of Māri' in the second preserved line, can be easily interpreted as the last third of the sign DI(= SÁ). Accordingly, the last line of the brick inscription would read: *A-šur-[ZI-SI.S]Á šar<sub>4</sub> KUR [A]-[ma]*<sup>11)</sup>. As the paral-

8) Rf. to S.M. Maul, *Die Inschriften von Tall Bdēri*, p. 34 to the lines 19–21.

9) Rf. to S.M. Maul, *ibid.* p. 41.

10) Rf. to *ibid.* p. 41–46. In all probability, at least one of the inscribed bricks found in Tall Bdēri originally came from Ṭābētu/Tall Ṭābān (rf. to *ibid.* p. 45).

11) The spelling *A-šur-ke-ti-SI.SÁ* (rf. to *ibid.* p. 23, line 6, text E) is a possible alternative.

lel inscriptions from Tall Bdēri clearly show, the first, unpreserved line of the inscription contained the name of the royal building owner after the mention of É.GAL. In line 2 after the name of the building owner, the title *šarru* ‘king’ followed (preserved in fragment 1, line 1)<sup>12</sup> or even more likely the title *šar māt Māri*<sup>13</sup>. The traces in line 1 of the second brick fragment can probably also be restored to the title ‘King of Māri’, in front of which another royal name must have been stated at the time. On the existing building inscription, the building owner is named in the 1st line, his father in the 2nd line and in the 3rd line his grandfather, namely Aššur-kettī-lēšer. Unfortunately, we do not know the name of the royal building owner, the grandson of Aššur-kettī-lēšer, nor the name of his son.

The brickwork laid open in ‘building level 2’ probably belongs to a building, which was set up as a palace in the name of the grandson of Aššur-kettī-lēšer, who held the title “king of the land of Māri”, as did his father and his grandfather.

#### Brick fragment 1

- 1' *šar*<sub>4</sub> [  
2' A-šur(-)[

#### Brick fragment 2

- 1' ] 𒊩𒌆𒀭 K[UR  
2' ] x *šar*<sub>4</sub> KUR 𒊩𒌆 [

#### Reconstruction of the brick inscription

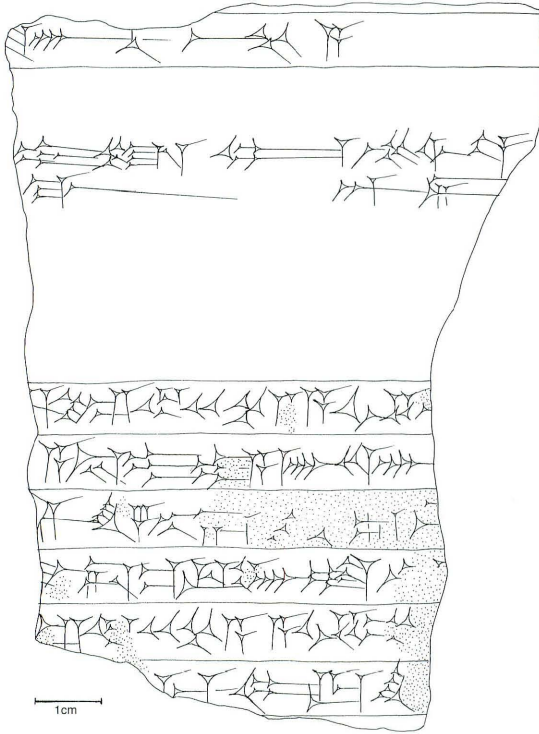
- 1 [ekal(É.GAL) ROYAL NAME]  
2 *šar*<sub>4</sub> [māt(KUR) Māri(A) mār(A) ROYAL NAME] 𒊩𒌆𒀭 māt(K[UR) Māri(A) mār(A)]  
3 A-šur-[ketti(ZI)-lēšir(SI.S)Á] *šar*<sub>4</sub> māt(KUR) Māri(m) (𒊩𒌆)-[ma]

- 1 [Palace of ROYAL NAME],  
2 of the king [of the land of Māri, of the son of ROYAL NAME], the king of the lan[d of Māri, the son of]  
3 Aššur-[kettī-lēš]er, [also] king of the land of Māri.

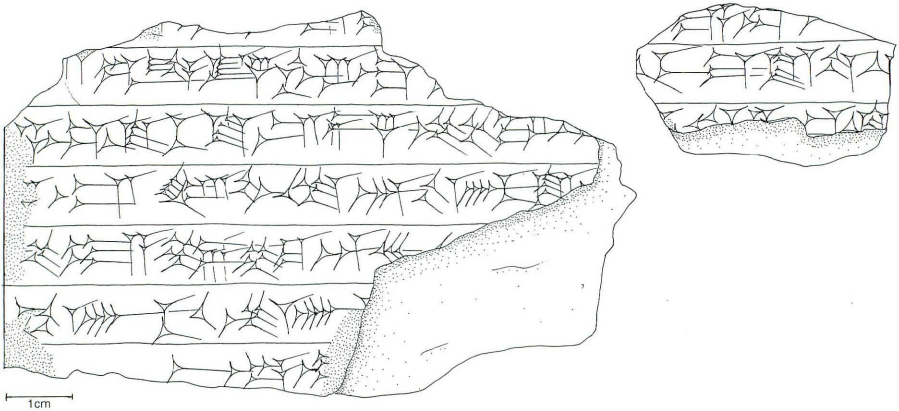
12) As in the Bdēri bricks 1, 2 and 3 (rf. to *ibid.* p. 42–44).

13) As in the Bdēri bricks 4 and 5 (rf. to *ibid.* p. 44).



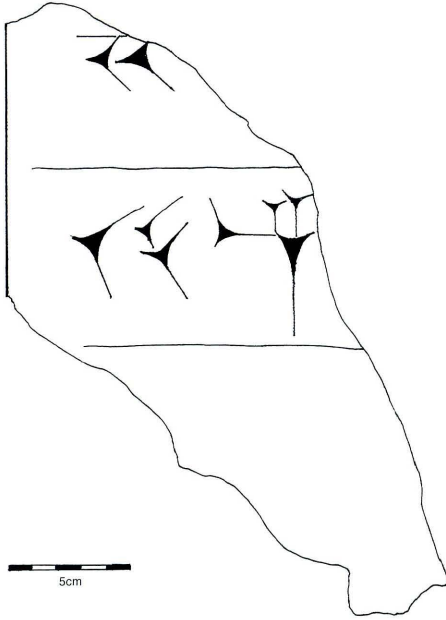


1. Cylinder fragment A

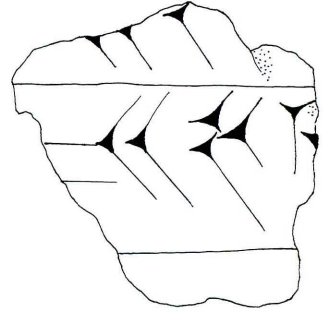


2. Cylinder fragment B

Fig. 1 Fragments of cylinder inscriptions from Ṭabētu/Tall Ṭabān



1. Brick fragment 1



2. Brick fragment 2

**Fig. 2** Brick fragments from Ṭābētu/Tall Ṭābān





## EXCAVATIONS AT THE SHELL-MIDDEN OF RH6 1986–1988 (MUSCAT, SULTANATE OF OMAN)

Paolo BIAGI\*

### Preface

The shell-midden site of RH6 is situated along the right bank of Wadi Aday, in the Qurm National Reserve, close to the northernmost mouth of the wadi itself (Fig. 1). It is one of the shell-middens discovered in the Sixties by R. Jäckli, distributed both along the edges of the mangrove swamp of Qurm and on the adjacent Cape of Ra's al-Hamra; an area whose ecological importance has already been pointed out in several articles [Tosi and Durante 1977; Biagi et al. 1984; 1989; Biagi and Nisbet 1992]. Its precise geographical location is 23°37'12" Lat N and 58°28'46" Long E (Fig. 2).

The site, some 7 metres higher than the highest level reached by the tide (Fig. 3), was tested for the first time in 1981, when a bull-dozer opened a trench along the western slope of the mound [Tosi and Durante 1977: 158] which brought to light a stratigraphical sequence, some 13 metres long and 1.70 metres thick, towards the centre of the site (Fig. 4-bottom). The section revealed the existence of alternate, almost horizontal, anthropogenic and natural layers, mainly composed of marine shells, (burnt) fish, charcoal and wind-blown sand. No archaeological feature, such as post-holes, pits or hearths, was recognized along the profile. Three samples of organogenic material were collected from different depths of the sequence for radiometric dating. They gave the following results: top layer: 5569 ± 60 BP (Hv-13195, on ashy sediments); 50–100 cms: 5566 ± 165 BP (Hv-11629, on fish bones); bottom layer: 5992 ± 80 BP (Hv-13196, on ashy sediments) [Biagi 1994: 20].

### The 1986 and 1988 excavations

The first season took place between December 31, 1985 and January 27, 1986 [Biagi 1985]. The excavations were carried out in three different areas of the site: 1) a trench, 1 metre wide and 12 metres long, was opened along the southern slope in order to define the depth of the anthropogenic deposits in this part of the site; no man-made feature was observed along its profiles (Fig. 4-top); 2) a second trench, 3 × 2 metres wide, was excavated at the top of the mound; 3) a third accurate excavation was carried out on the surface of only one square metre (square X), to continue the bull-dozer trench opened along the western slope. The aim of this trench was to control the depth of the deposits uncovered seven years before.

During the 1988 season of fieldwork, carried out between October 22 and November 2, one square metre (square Y), adjacent to square X, was excavated with the same methodology employed during the preceding campaign (Fig. 3).

All the deposits from areas 2) and 3) were sieved with a 3 mm mesh. Part of the soil removed during the 1986 season was also floated; this led to the collection of the major part of the archaeological, macrobotanical and zooarchaeological remains.

As already mentioned, the upper trench was opened over a surface of six square metres in quadrants A-B/100–101–102. The excavations revealed the following sequence: layer 0: surface level of recent and subrecent eolic sand of yellowish brown colour (10YR 5/4), without archaeological finds, some 10–25 cms thick; layer 1: very loose-textured, sandy layer of dark greyish brown colour (10YR 3/2), with several fragments of marine shells and no charcoals, some 35 cms thick, with a thin level of small

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pebbles at its base. The remains of a burial with three bodies [Coppa pers. comm. 1997], in a very bad state of preservation, were found at the bottom of this layer in square A/101 (Fig. 5). The tomb had been delimited by a circle of sharp-edged limestone boulders, and the bodies had been buried without any grave goods. They lay crouched on their left side in northeast-southwest direction. A small sample of human bones was 14C dated to  $3580 \pm 80$  BP (OxA-2629) [Hedges et al. 1997: 256], which indicates that the skeletons are to be attributed to the Bronze Age. West of the burial, a small, shallow depression, called Pit 1, was discovered in squares A/100–101. Among the other finds, it yielded eight vessels obtained from *Fasciolaria Trapezium* shells removing part of their thick body whorl and the solid columella in the way described by Kenoyer [1984: 57]. This structure was dated to  $5750 \pm 60$  BP (Bln-3636/I) and to  $5890 \pm 60$  BP (Bln-3636/II), from the same sample of *Terebralia palustris* mangrove shells. Layer 2, a sandy-textured level of dark brown colour (7.5YR 3/2), with rare shells, was some 20 cms thick. From this level come several blanks, semi-finished and finished shell-hooks, which should indicate that the manufacture of these objects had taken place in this part of the site. All the specimens are obtained from valves of *Pinctada radiata* and *Pinctada margaritifera* shells [Ghisotti pers. comm. 1988]. The base of this level is represented by a palaeosurface on which many stone tools have been recorded and mapped *in situ* (Fig. 6), among which were one polished, conglomerate adze, anvils and various types of hammerstones, pestles and net-weights. Layer 3 below, was excavated only in square B/100, down to a depth of some 20 cms. It was composed of ash and concreted sand of a dark grey colour (10YR 3/1) with lenses of charcoal. It was dated to  $5970 \pm 80$  BP (Bln-4315), from charcoals of *Avicennia marina*, to  $5830 \pm 80$  BP (Bln-3640/I) and  $5930 \pm 80$  BP (Bln-3640/II), from the same sample of *Anadara uropigimelana* marine shells, and to  $5980 \pm 60$  BP (Bln-3641/I) and  $5950 \pm 60$  BP (Bln-3641/II), from the same sample of *Terebralia palustris* mangrove shells. This excavation was interrupted at the bottom of this layer when two well-defined post-holes, 26 and 18 cms deep respectively, were found at the base of square B/100 (Fig. 6).

The excavation of the two square metres (X and Y) in area 3 (Fig. 7), revealed a sequence some 1.70 m thick [Biagi 1985] composed of the following layers (Fig. 8):

- layer 0:** disturbed, recent or subrecent layer of light brownish grey colour sand (10YR 6/2) containing fragments of shells, some 30 cms thick. One deep burrow was observed in square X;
- layer 1:** disturbed sandy layer of dark brown (7.5YR 3/2) colour with shell fragments and charcoal pieces, 5–10 cms thick;
- layer 2:** is partly covered by a 2 cms thick, black (10YR 2.5/1) lens of charcoal above a level of sand with a few shells and fish bones, 10 to 18 cms thick;
- layer 3:** concreted at the top with fish bone lenses and concentrations of shells at the bottom, maximum 10 cms thick. Very dark greyish brown (10YR 3/2);
- layer 4:** almost continuous lenses of charcoal with burnt fish and ashes, some 5 cms thick, of very dark grey colour (10YR 3/1);
- layer 5:** sandy, concreted layer, very rich in shells and lenses of fish bones at its top, some 7 to 14 cms thick. Dark greyish brown (10YR 4/2);
- layer 6:** of sandy texture, containing many shell fragments, delimited by two thin levels of charcoal. It has a maximum thickness of 5 cms. Very dark greyish colour (10YR 3/2);
- layer 7:** fish lenses in a sandy texture, with charcoal lenses in square Y, 5 to 10 cms thick. Dark brown colour (7.5YR 3/2);
- layer 8:** concreted sand with charcoal, almost continuous lenses, maximum 5 cms thick. Dark greyish brown colour (10YR 4/2);
- layer 9:** layer of shells, mainly undecolored *Terebralia palustris*, some 30 cms thick, with a level of charcoals towards the bottom. A circular structure delimited by wadi pebbles containing several quartz crystals was found in square X. This layer, of dark brown colour (10YR 3/3), was dated to  $6230 \pm 70$  BP (Bln-3635/I) and  $6140 \pm 70$  BP (Bln-3635/II) from the same sample of *Anadara uropigimelana*, and

to  $6340 \pm 60$  BP (Bln-3639/I) and  $6240 \pm 60$  BP (Bln-3639/II), from the same sample of *Terebralia palustris*;

**layer 10:** thin level, some 4 cms thick, of almost pure sand covered with a continuous lens of very small, round beach pebbles and undecoloured shells of *Umbonium Vestiarium*, containing many chipped stone artefacts;

**layer 11:** sandy layer, some 7 to 10 cms thick, rich in Oyster shells still attached to rounded limestone pebbled, less than 10 cms in diameter. It was dated to  $6130 \pm 60$  BP (Bln-3634/I) and to  $6250 \pm 60$  BP (Bln-3634/II) from a sample of *Anadara uropigimelana*, and to  $6140 \pm 60$  BP (Bln-3633/I) and  $6279 \pm 60$  BP (Bln-3633/II), from the same sample of *Terebralia palustris*. Dark greyish brown colour (10YR 4/2);

**layer 12:** thin layer of sand containing a continuous level of charcoal fragments, maximum 4 cms thick. Very dark grey colour (10YR 5/1);

**layer 13:** layer of sand with scarce shell fragments, 18 cms thick, of very dark greyish brown colour (10YR 3/2), dated to  $6240 \pm 70$  BP (Bln-3632/I) and to  $6310 \pm 60$  BP (Bln-3632/II), from the same sample of *Terebralia palustris*;

**layer 14:** layer of sand of very dark greyish brown colour (10YR 3/2), with the same characteristics of the overlying one from which is separated by a level of shells. This layer produced the following dates:  $6360 \pm 60$  BP (Bln-3638/I) and  $6290 \pm 60$  BP (Bln-3638/II), from the same sample of *Anadara uropigimelana*, and to  $6420 \pm 80$  BP (Bln-3637/I) and  $6530 \pm 80$  BP (Bln-3637/II), from the same sample of *Terebralia palustris*. This layer lies on the calcareous rubified bedrock of the terrace, into which three wedged postholes, some 15 cms in diameter, have been excavated.

At present it is difficult to correlate the two sequences at the top of the mound (squares A-B/100–101–102) and along the western edge (squares X and Y). In fact there is a discrepancy of some 2.20 metres between the natural bedrock level in squares X-Y and that in the upper trench; this should suggest the presence of a step in the bedrock, between the two excavated areas (Fig. 3).

### The material culture finds

The chipped stone assemblage

The Holocene chipped stone industries of the Oman coastland have recently been revised by M. Uerpmann [1992] who has pointed out the difficulty in describing these assemblages according to any European typological list. This is mainly due to the presence of a very high number of “unconventional” instruments obtained with the hard hammering technique [Maggi and Gebel 1990], while the “conventional” tools often represent only a very small percentage of the total number of instruments. This is partly true also for the RH6 collection, even though this is one of the few cases in which the “conventional” instruments are rather numerous.

In this article, only the finds from square Y of the vertical sequence of the western trench opened in 1988 are taken into account, since the chipped stones from the 1986 excavations have already been published by Maggi [1990].

Table 1, below, shows the number and weight of the chipped stone artefacts and of the raw materials employed for their manufacture; while table 2 gives the number of the unretouched artefacts, instruments and cores according to their layer of recovery.

Unfortunately Maggi [1990] does not provide the exact number of artefacts collected during the 1986 excavation and the precise provenance of the artefacts layer by layer, so that the two assemblages are not easy to compare.

The importance of quartz and flint in the lowest layers (14 and 13) of the sequence is clear from table 1. The use of quartz, both opaque and hyaline, diminishes from layer 7 upwards, when the exploitation of blonde flint begins to increase. Jasper is relatively important in layer 10, a thin level of



**Table 1** RH6, square Y: materials employed for chipping artefacts. Q = quartz, HQ = hyaline quartz, J = jasper, F = flint, BF = blonde flint, QZ = quartzite, G = green/greystone. ( ) complete, unretouched artefacts. [ ] weight in grams.

Layer	Materials							totals
	Q	HQ	J	F	BF	QZ	G	
(1)	2 (-) [22]	1 (-) [1]	1 (-) [4]	5 (2) [7]	5 (4) [17]	3 (1) [6]	- [-]	17 (7) [57]
(2)	- (-) [-]	- (-) [-]	1 (-) [4]	15 (3) [13]	57 (23) [68]	- (-) [-]	- [-]	73 (26) [85]
(3)	2 (-) [13]	1 (-) [1]	- (-) [-]	8 (2) [3]	22 (10) [41]	3 (-) [13]	- [-]	36 (12) [71]
(4)	2 (-) [10]	1 (-) [1]	- (-) [-]	15 (3) [8]	9 (3) [4]	- (-) [-]	- [-]	27 (6) [23]
(5)	19 (-) [31]	1 (-) [1]	- (-) [-]	9 (2) [10]	29 (9) [31]	- (-) [-]	- [-]	58 (11) [73]
(6)	6 (-) [20]	1 (-) [1]	- (-) [-]	1 (-) [1]	8 (4) [11]	22 (-) [3]	- [-]	38 (4) [26]
(7)	16 (-) [19]	4 (-) [4]	- (-) [-]	4 (2) [5]	10 (3) [11]	1 (-) [1]	- [-]	35 (5) [40]
(8)	33 (-) [40]	36 (3) [19]	2 (1) [2]	12 (3) [9]	1 (1) [1]	3 (-) [9]	1 [3]	88 (8) [83]
(9)	17 (4) [38]	34 (4) [14]	9 (5) [4]	7 (2) [16]	1 (1) [1]	2 (1) [6]	1 [3]	71 (17) [82]
(10)	5 (-) [5]	37 (6) [23]	30 (9) [26]	5 (-) [1]	8 (6) [9]	- (-) [-]	- [-]	85 (21) [64]
(11)	6 (2) [8]	47 (9) [24]	3 (3) [5]	5 (2) [4]	1 (1) [1]	- (-) [-]	2 [2]	64 (17) [44]
(12)	3 (1) [1]	6 (-) [1]	1 (-) [1]	2 (2) [1]	- (-) [-]	- (-) [-]	- [-]	12 (3) [4]
(13)	13 (-) [55]	126 (17) [51]	3 (3) [2]	15 (7) [6]	6 (5) [5]	1 (1) [9]	17 [27]	181 (33) [155]
(14)	43 (4) [44]	33 (10) [21]	2 (1) [1]	51(16) [60]	- (-) [-]	3 (-) [41]	4 [19]	136 (31) [186]
Totals	167 (11) [306]	328 (49) [162]	52 (22) [49]	154 (46) [134]	157 (70) [200]	38 (3) [88]	25 [54]	921 (201) [993]

**Table 2** RH6, square Y: number of artefacts, instruments and cores recorded per layer.

Layer	Artefacts	Instruments	Cores
(1)	17	2	-
(2)	73	5	-
(3)	36	1	2
(4)	27	1	-
(5)	58	1	1
(6)	38	1	2
(7)	35	-	-
(8)	88	1	-
(9)	71	2	2
(10)	85	2	3
(11)	64	1	1
(12)	12	-	-
(13)	181	6	1
(14)	136	3	-
Totals	921	26	12

sand, beach gravel and marine shells of *Umbonium vestiarius*, which might indicate some kind of artificial floor related to a hut construction. These observations have ethnographic parallels in the subrecent hut-structures of the coast of northern Dhofar such as those of Ra's Sharbitat [Biagi and Maggi 1990: 551] and Shuwaymiya.

The square Y sequence yielded 921 artefacts, 201 of which were measured to develop the length/width and dimensional dispersion diagrams of Fig. 9, which show the microlithic and hypermicrolithic character of the assemblage. From these diagrams the relevance of blonde flint is noticeable from layer 7 upwards.

As shown in table 2, the number of retouched instruments and cores is rather low, and the ratio retouched : unretouched pieces is much lower (1 : 23) than that reported by Maggi [1990: 293] for square

X of the 1986 excavation (1 : 10).

The number of cores is relatively high (12), mainly microflakelet and hypermicroflakelet polyhedric types, often obtained from quartz (Fig. 10) except for two specimens on black jasper (Fig. 10-7) and blonde flint (Fig. 11-27).

The instruments include a very limited number of characteristic tools (Fig. 11 and table 3); they have been tentatively described according to the typological list of G. Laplace [1964].

**Table 3** RH6, square Y: list of the instruments and cores according to their layer of recovery

Layer	Instruments																Cores
	B	G	T	Be	LD	PD	DT	Gm	F	R	P	L	A	D	Dv	N	
(1)	-	-	-	-	-	-	-	-	-	1	-	-	-	1	-	-	
(2)	-	-	1	1	-	-	-	-	1	-	-	-	-	-	Sm2	-	
(3)	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	2	
(4)	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	
(5)	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1	
(6)	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	2	
(7)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
(8)	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	
(9)	-	1	-	-	-	-	-	-	-	-	-	-	-	-	Sp?	2	
(10)	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	3	
(11)	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1	
(12)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
(13)	-	-	-	2	3	-	-	-	1	-	-	-	-	-	-	1	
(14)	-	1	-	1	-	-	-	-	1	-	-	-	-	-	-	-	
Totals	-	2	2	7	3	-	-	-	1	7	-	-	-	1	3	12	

The end-scrapers are represented by only two specimens from layer 9 (Fig. 11-1) and layer 14 (Fig. 11-2). The first is a long end-scraper on a blade of blonde flint with a complementary simple, bilateral retouch, opposed to a straight point. The second is a small carinated specimen on a broken bladelet of reddish flint.

There are two marginal truncations on flakelets of blonde flint from layer 2 (Fig. 11-3) and 3 (Fig. 11-4).

The perforators/drills are among the best represented classes of instruments: they come from layer 2 (Fig. 11-5), 4 (Fig. 11-6), 6 (Fig. 11-9), 8 (Fig. 11-7), 13 (Fig. 11-8 and 10) and 14 (Fig. 11-11). They are all straight, obtained from flakelets of blonde or reddish flint (1 from a bladelet) with two convergent abrupt, direct or bipolar retouches. One only specimen is on a broken bladelet (Fig. 11-5); while only one is made on a hyaline quartz flakelet (Fig. 11-8).

There are 3 backed blades on blonde flint from layer 13: two are fragments, on extremely narrow blade (Fig. 11-13 and 11-14), one on a fragment of bladelet with abrupt, lateral retouch (Fig. 11-12).

The foliates include only one pedunculated bladelet of blonde flint with a tang obtained by flat, inverse retouch, from layer 2 (Fig. 11-15).

The side scrapers comprise seven specimens (Fig. 11-16 to 22), six of which have a simple, deep retouch sometimes almost covering the entire surface of the tool. Only one has a simple, marginal retouch, on a hyaline quartz flakelet (Fig. 11-22). The others are chipped from different varieties of flint or from liver-coloured jasper (Fig. 11-19) of hyaline quartz (Fig. 11-18 and 20).

The denticulates are represented by one carinated, side scraper on a corticated flakelet of blonde flint (Fig. 11-23).

There is only one probable splintered piece on a hyaline quartz flakelet (Fig. 11-24) and two sommaire retouched tools on liver-coloured jasper (Fig. 11-25) and on blonde flint (Fig. 11-26).

## The polished and ground stone industry

Many polished and ground stone tools were recorded on the palaeosurface uncovered at the base of layer 2 of squares A-B/101–102 (Fig. 12). The polished stone tools recorded *in situ* on this palaeosurface are listed in the following table:

**Table 4** RH6, tools recorded from the palaeosurface of squares A-B/101–102. Measures in mm. c = complete, f = fragment.

Square	Layer	L	W	T	Weight (gr)	Type	Status	Material	
1	B101	2	86	67	27	196	round stone	c	volcanic rock
2	B101	2	75	46	42	222	hammerstone	c	metamorphic rock
3	B101	2	61	55	40	212	hammerstone	c	limestone
4	B101	2	325	76	60	2720	pestle	c	metamorphic rock
5	B101	2	(67)	(14)	(42)	48	round stone	f	metamorphic rock
6	B101	2	120	125	33	838	flat stone	c	quartzite
7	B101	2	102	(60)	60	588	round stone	f	metamorphic rock
8	A102	2	84	34	22	102	hammerstone	c	quartzite
9	A101	2	50	43	17	60	net-sinker	c	limestone
10	A101	2	87	45	22	92	hammerstone	c	sandstone
11	A101	2	40	37	12	24	net-sinker	c	limestone
12	B101	2	112	25	20	82	hammerstone	c	schist
13	B101	2	(60)	37	32	108	hammerstone	f	sandstone
14	B101	2	79	26	15	36	hammerstone	c	quartzite
15	B101	2	48	36	14	38	net-sinker	c	limestone
16	B101	2	45	42	16	36	net-sinker	c	limestone
17	B101	2	65	62	29	188	round stone	c	metamorphic rock
18	B101	2	49	25	13	8	flake	f	limestone
19	B101	2	87	36	21	85	polished adze	c	conglomerate
20	B101	2	(162)	(145)	43	1485	flat stone	f	quartzite
21	B101	2	90	38	27	152	hammerstone	c	quartzite
22	B101	2	135	55	36	328	hammerstone	f	quartzite
23	A101	2	44	42	18	46	net-sinker	c	limestone
24	A101	2	60	(53)	17	84	net-sinker	f	limestone
25	A101	2	63	49	17	44	net-sinker	c	limestone
26	A101	2	48	58	18	78	net-sinker	c	limestone
27	A101	2	72	37	30	98	round stone	f	sandstone
28	A101	2	(47)	55	20	80	round stone	f	metamorphic rock
29	A101	2	72	54	22	130	round stone	c	sandstone
30	A101	2	41	47	18	54	net-sinker	c	sandstone
31	A102	2	104	47	23	134	hammerstone	c	quartzite
32	A102	2	(157)	59	40	523	pestle	f	quartzite
33	A101	2	63	30	11	44	hammerstone	c	quartzite
34	A102	2	107	70	45	555	anvil	c	limestone
35	A102	2	68	58	53	298	hammerstone	c	metamorphic rock
36	A102	2	(67)	(36)	(35)	64	hammerstone	f	quartzite
37	A102	2	(32)	(18)	(35)	22	round stone	f	limestone
38	A102	2	90	53	35	230	hammerstone	c	quartzite
39	A102	2	48	21	30	40	round stone	f	quartzite
40	A102	2	65	56	23	128	net-sinker	c	limestone
41	A101	2	100	85	34	400	net-sinker	c	sandstone
42	A102	2	(35)	(28)	(25)	48	round stone	f	limestone
43	A102	2	123	70	15	134	hammerstone	c	quartzite
44	B102	2	110	51	12	106	hammerstone	c	quartzite
45	B102	2	92	34	16	70	polisher?	c	metamorphic rock
46	B102	2	105	43	19	128	hammerstone	c	metamorphic rock
47	B102	2	67	54	21	116	round stone	c	limestone
48	B102	2	40	41	14	30	net-sinker	c	limestone
49	A102	2	42	48	14	48	net-sinker	c	limestone



Among the other pieces, the palaeosurface (Fig. 6) yielded one adze, accurately polished all over its surfaces from a conglomerate pebble of green and white colour. It has an oval section, with flattened central surfaces, and a slightly oblique, almost rectilinear cutting-edge (Fig. 13). Apart from this, five small fragments, most probably from another polished adze in redstone, come from Pit 1 in layer A/101 (Fig. 15-1), while one fragment of polished greenstone was found in layer 7 of square X (Fig. 15-2). Hammerstones. There are 17 (Fig. 14-8, 9 and 13) objects which are certainly hammerstones as proved by their bruised or fractured ends. They are often long and narrow quartzite or greenstone, flat pebbles which have not been shaped in any way, apart from the specimen of Fig. 14-8 which has a wide groove at its proximal end. Also three round greenstone pebbles from the palaeosurface which show evident traces of pecking at one edge can be included in this group.

Most of the hammerstones were found on the palaeosurface even though four of these objects were collected in layer 14, square X.

Pestles. Two large, heavy objects of cylindrical shape can be classified as pestles. One quartzite specimen has one heavily worn, flat edge; while the second is a long and heavy greenstone tool (Fig. 12) with surfaces almost completely worn by use. Both these instruments come from the palaeosurface.

Net-sinkers. The excavation yielded 49 net-sinkers of different shape and size. They can be easily subdivided into two main classes of objects: girdled sinkers (Fig. 14-1 to 7) and two-notch sinkers (Fig. 14-10 and 11). The girdled sinkers are oblong, spheroid pebbles girdled longitudinally by a slight pecked, or more rarely sawn-in groove. They are usually of a rather small size. It is still unclear whether they were used as net-sinkers or fishhook sinkers [Strong et al. 1930: 110]. The two-notch sinkers are of flat elliptical shape with two bifacial notches on the long sides. A complete list of the net-sinkers is provided in table 5.

Anvils. Only two elliptical stone objects with circular, concentrated zones of pitting or cup-marks on both flat surfaces (Fig. 14-12) have been classified as anvils or crushing stones [Uerpmann, 1992: 92]. As noted already for the scottish shell-middens, these tools might be connected with some kind of flint manufacture [Mellars, 1987: 122].

Other stone tools. The collection includes many other stone objects often of circular or elliptical shape whose function cannot be better specified. They are mainly obtained from wadi or beach pebbles.

Stone beads. The stone beads consist of fourteen serpentinite and one phyllite specimens from various layers (Fig. 16-A) whose dimensions have been plotted to develop the diagram of Fig. 16-B. Most specimens are of cylindrical shape ranging from 3 to 7 mm of diameter and 1.5 to 5 mm of thickness. Only two pieces vary from this typology. They are: one long, round-sectioned, serpentinite bead, 61 mm long, with oblique pierced holes at both edges, weighing 8.5 grams, (Fig. 15-3), and one 22 mm long, tubular, serpentinite specimen (Fig. 15-4); they both come from the south trench. One pierced, serpentinite small plaquette, which probably represents an initial stage in the manufacture of the polished beads, was found in square X, layer 14.

The miscellaneous finds are represented by seven polished quartzite (Fig. 15-6, 8 and 9) and greenstone (Fig. 15-7 and 10) small balls collected from different levels of the sequence; one fragmented, almost cylindrical sandstone object (Fig. 15-5); one octagonal, polished, steatite artefact (Fig. 15-14); and three accurately polished greenstone (Fig. 15-11 and 13) and phyllite (Fig. 15-12) flat discs, with a perimetral groove, perhaps to be interpreted as labrets (?) [Heizer 1956: 53] or some kind of very specific weights (?).

### The marine shell assemblage

The marine shell industry is almost exclusively composed of three varieties of objects: vessels, fish-hooks at various stage of manufacture and beads.

Eight vessels obtained from *Fasciolaria trapezium* a gastropod which is very common along the coasts of the Gulf of Oman [Gensheimer 1984: 66], were found in square A/101, Pit 1 (Fig. 17). They

**Table 5** RH6, list of the net-sinkers. Measures in mm. c = complete, f = fragment. DA = Oman Dept. of Antiquities number.

Square	Layer	L	W	T	Weight (gr)	Status	Material	DA
Y	0	72	53	17	115	c	quartzite	10768
Y	0	71	55	23	83	c	quartzite	10769
Y	0	72	49	21	112	c	quartzite	10770
Y	0	72	48	21	70	c	quartzite	10771
Y	0	58	45	20	60	c	limestone	10772
Y	0	74	53	24	145	c	limestone	10773
X	1	67	52	22	94	c	quartzite	.....
X	1	60	57	17	74	c	sandstone	.....
Y	1	28	19	12	10	c	metamorphic	10839
A101	1	52	50	15	34	c	quartzite	.....
A101	1	38	31	12	22	c	limestone	.....
A101	1	37	42	15	38	c	limestone	.....
A101	1	47	49	20	70	c	limestone	.....
A101	1	38	35	19	38	c	limestone	.....
A101	1	37	40	13	32	c	limestone	.....
A101	1	50	42	16	50	c	limestone	.....
A101	1	53	43	13	46	c	limestone	.....
A101	1	60	46	32	134	c	metamorphic	.....
A101	Pit1	38	38	15	32	c	sandstone	.....
A101	Pit1	42	41	12	32	c	sandstone	.....
A101	Pit1	42	40	13	38	c	sandstone	.....
A101	Pit1	43	48	14	50	c	sandstone	.....
A101	Pit1	49	48	22	80	c	limestone	.....
A102	1	73	57	22	128	c	limestone	.....
A102	1	48	43	18	56	c	limestone	.....
A102	1	47	38	12	32	c	limestone	.....
A102	1	65	50	18	90	c	limestone	.....
A102	1	30	29	11	16	c	limestone	.....
A102	1	53	46	22	74	c	limestone	.....
A102	1	35	25	11	16	c	limestone	.....
A102	1	30	25	13	14	c	limestone	.....
A102	1	82	68	28	266	c	sandstone	.....
B101	1	38	35	20	38	c	metamorphic	.....
B102	1	45	39	18	46	c	limestone	.....
B101	2	32	28	10	12	c	limestone	.....
B101	2	39	47	10	24	c	sandstone	.....
X	4	53	40	37	120	c	metamorphic	.....
X	13	26	16	16	7	c	sandstone	9887
Y	13	20	15	12	(4)	f	sandstone	10780
Y	13	(18)	25	23	(8)	f	quartzite	10841
X	14	28	25	22	24	c	metamorphic	.....
X	14	55	46	36	142	c	metamorphic	.....
Y	14	173	126	52	650	c	metamorphic	10767
Y	14	(36)	25	20	10	c	quartzite	10774
Y	14	39	29	22	50	c	metamorphic	10776
Y	14	30	26	22	27	c	metamorphic	10777
Y	14	32	23	22	26	c	metamorphic	10778
Y	14	(12)	13	8	(2)	f	sandstone	10779
Y	14	41	29	15	29	c	quartzite	10840

all show the same characteristics: part of the body whorl and the internal solid columella have been removed by sawing and chipping as well as the internal central part of the shell.

A list of the shell fish-hooks is given in table 6.

**Table 6** RH6: typology of the shell fish-hooks. Measures in mm. f = fragment, c = complete, r = retouched, p = polished, DA = Oman Dept. of Antiquities number.

Square	layer	L	W	T	status	tool	edges	others	Figure	DA
B/101	2	47	32	3	f	debitage	–	–	–	9810
A/102	2	67	34	8	f	debitage	–	–	–	9784
A/102	2	49	34	9	f	debitage	–	–	–	9785
A/101	1	54	40	4	c	blank	r	–	18–20	9781
A/101	Pit1	20	17	2	c	blank	r	–	–	9807
A/101	Pit1	47	36	4	c	blank	r	–	–	9811
A/101	Pit1	19	15	3	c	blank	r	–	–	9812
A/101	Pit1	28	10	–	f	blank	r	–	–	9813
A/101	Pit1	37	30	3	c	blank	r	–	18–19	9808
B/101	1	40	32	7	c	blank	r	–	18–17	9786
A/102	1	35	19	3	c	blank	r	–	–	9814
A/101	2	50	42	6	c	blank	r	–	18–22	9790
A/101	2	36	26	5	c	blank	r	–	–	9789
A/101	2	55	48	7	c	blank	r	–	18–21	9797
A/101	2	50	38	5	c	blank	r	–	18–23	9800
A/101	2	75	64	11	c	blank	r	–	18–25	9798
A/101	2	63	54	11	c	blank	r	–	18–24	9799
A/101	2	41	32	3	c	blank	r	–	18–18	9791
A/101	2	28	24	4	c	blank	r	–	–	9794
A/101	2	(32)	(17)	4	f	blank	r	–	–	9795
A/101	2	(37)	(26)	4	f	blank	r	–	–	9815
A/101	2	(22)	19	3	f	blank	r	–	–	9816
B/101	2	83	65	11	c	blank	r	–	–	9806
B/101	2	52	39	5	c	blank	r	–	–	9796
A/102	2	52	40	8	c	blank	r	–	–	9783
A/102	2	56	48	12	c	blank	r	–	–	9782
A/102	2	(27)	10	3	f	blank	r	–	–	9803
A/102	2	(25)	(21)	2	f	blank	r	–	–	9804
A/102	2	52	(36)	4	f	blank	r	–	–	9805
Y	9	37	23	4	c	blank	r	–	–	10782
Y	10	32	19	5	c	blank	r	–	–	10783
Y	14	29	20	5	f	blank	r	–	–	10781
A/102	2	23	17	2	c	blank	p	–	18–15	9802
B/102	2	22	(14)	4	f	blank	p	–	18–16	9817
B/101	1	(31)	(22)	3	f	blank	p	–	–	9787
A/101	Pit1	37	30	3	c	blank	p	notch	18–12	9808
A/101	2	(27)	(15)	3	f	blank	?	pierced	–	9793
B/102	2	24	19	2	c	blank	r	notch	18–13	9818
B/102	2	(25)	25	3	f	blank	p	notch	18–14	9819
X	11	(32)	(23)	8	f	blank	p	–	–	9792
A/101	1	39	11	6	f	hook	p	notches	18–9	9830
A/101	1	(34)	13	(2)	f	hook	p	–	–	9831
A/102	1	(13)	3	2	f	hook	p	–	–	9836
B/101	1	15	3	(2)	f	hook	p	notch	18–1	9832
B/101	1	52	10	8	f	hook	p	notches	18–10	9829
B/101	1	(14)	5	(1)	f	hook	p	–	–	9788
B/101	1	(22)	(5)	2	f	hook	p	–	–	9822
A/101	Pit1	(19)	2	2	f	hook	p	–	–	9826
A/101	Pit1	(28)	10	(3)	f	hook	p	notches	–	9813
A/102	2	14	3	(1)	f	hook	p	–	–	9826
A/102	2	(50)	12	6	f	hook	p	notches	18–11	9827
A/102	2	37	7	5	f	hook	p	notches	18–4	9828
A/102	2	(40)	9	5	f	hook	p	notches	18–6	9801
B/101	2	(20)	4	3	f	hook	p	–	–	9835
Y	1	31	5	4	f	hook	p	notches	18–5	10784
X	5	21	5	3	f	hook	p	notch	18–7	9824
X	9	13	7	2	f	hook	p	–	18–3	9823
X	14	33	7	2	f	hook	p	–	18–2	9820
X	14	22	3	3	c	hook	p	notch	18–8	9821
South trench		(29)	7	(4)	f	hook	p	notches	–	9825



Artefacts representing all the different stages of manufacture of the shell fish-hooks are attested at RH6, even though they are particularly common in layers 1 and 2 of the upper trench [Biagi and Travers 1985: 410]. Their manufacture procedure seems to have been similar, but not identical, to that described by Arkell [1953: 65] for Sudan and Dyal [1982: 56] for Australia. In fact, the RH6 fish-hooks are from valves of *Pinctada radiata* and *Pinctada margaritifera* marine shells [Ghisotti pers. comm. 1987]. Drop-shaped, pointed blanks were produced retouching the shell valves. The blanks were later polished all over their surface (Fig. 18-15 and 16) and pierced near the pointed edge. A notch was then obtained enlarging the small hole, from which the polishing for the definitive shaping of the hook had been initiated (Fig. 18-12 to 14). Finally, one or more notches were produced along the stem of the finished hook, whose scope was to hold the line (Fig. 18-3 to 11).

Other shell instruments are one small, well-polished, pierced, shell ball from square X, layer 11, 15 pierced *Columbella* shells, all from the uppermost levels, and 24 beads, polished from shell valves, except one from *Dentalium*, whose occurrence throughout the sequence and dimensions is shown in the diagrams of Fig. 16.

### The bone industry

It consists of two main categories of objects: fish-hooks and points. The fish-hooks are of double-pointed type, otherwise called gorges [Schenck 1926: 227], obtained from narrow flakes of long mammal bone polished all-over their surface. They are of variable dimension, 19–52 mm long and 3–6 mm wide, with a slightly convex shape and oval section. RH6 yielded 11 of such items both from the top trench and from squares X and Y of the western trench (Fig. 19-32 to 42). Given the absence of any worn part of their surface, or of an off-centre equatorial groove for line attachment, it is difficult to ascertain whether they were part of composite fish-hooks [Schenck 1926: 226], or were utilized as horizontal hooks [Cleyet-Merle 1990: 84] in the way illustrated by Clark [1948: 47].

The bone points are 19, mainly obtained from flakes of long, small mammal bones or from (caprovind or gazelle) bones with epiphysis (Fig. 19-1 to 31). They occur throughout the whole sequence. Their tip has a circular, oval or, more rarely, triangular section. In a few cases they are polished over the entire surface. One almost complete, very elongated, entirely polished specimen from the upper trench has a circular section. The awl has a groove towards its rounded, proximal end (Fig. 19-20).

Other bone instruments include polished, oval-sectioned, elongated fragments with one perforation, sometimes close to a polished, round edge (Fig. 19-28 to 31).

Apart from the already-mentioned artefacts, the assemblage comprises a small, polished plaquette (Fig. 19-43) and a turtle bone with a double, diverging perforation (Fig. 19-44).

### Considerations

The importance of RH6 as one of the oldest shell-midden sites of the coast of Oman has already been pointed out in a few papers [Biagi 1987; 1988; Biagi et al. 1989; Uerpmann 1992].

In fact this is one of the few coastal aceramic settlements which have been carbon dated between the half of the seventh and the first centuries of the sixth millennium BP [Biagi 1993]. These dates indicate that the site was inhabited during the climatic deterioration which, according to the available data, started around 6500 BP and led, soon afterwards, to the current arid phase [Clark and Fontes 1990].

The material culture assemblage includes a chipped stone industry obtained from raw materials which are available in a two hours' walk from the site [Maggi and Gebel 1990: 6]. Even though the material employed for chipping instruments varies throughout the seven centuries of occupation of the site, the classes of instruments, which are in fact poorly represented, seem to be characterized by rather constant types. According to Maggi [1990: 298] there are only three pieces which recall specific tools which are typical for the assemblages of the fifth millennium BP neighbouring site of RH5, namely three pièces esquillées of the so-called Ra's al-Hamra chisel [Maggi and Gebel 1990: 18] or wedge

type [Uerpmann 1992: 78]. Following the observations of M. Uerpmann [1992: 89] the chipped stone assemblage of RH6 is to be attributed to the Saruq-Facies, even though the presence of flat-retouched tools, which characterize the facies itself, are extremely rare [Maggi 1990: Fig. 5-19]. A typical instrument is the so-called RH6-drill [Uerpmann 1992: 82], like those illustrated in Fig. 12-9 to 11. A certain continuity between RH6 and RH5 can also be postulated on the basis of the characters of the chipped stone assemblages of the lowest layers of site RH5, where the “conventional instruments” are better represented than in the upper levels, which yielded a high percentage of wedges and sommaire-retouched types [Biagi et al. 1989: 4].

Regarding the ground and polished stone assemblage, a noticeable difference can be observed between the RH6 and RH5 hammerstones. The RH6 ones are from naturally-shaped wadi or beach pebbles, while most of the RH5 ones have a well-defined form, sometimes with polished surfaces, often showing pecking marks on the flat faces [Biagi et al. 1984: 52], and with a wider working edge.

The RH6 net-sinker are represented by a few specimens, namely the grindled, grooved or saw-in small types, which occur, for example, at Saruq [Uerpmann 1992: 95], but which are not common at RH5. It is not easy to state whether the variability in the net-sinker types would suggest different fishing techniques, even though one can notice that the small specimens are more common to the lowest part of the sequence, as can be seen from table 5. Fishing was surely one of the main activities of the RH6 settlers as shown by the abundance of fishing implements, such as net-sinkers, shell-hooks and bone gorges, and the amount of bones attributable to several fish species [Biagi and Travers 1985: 409]; the marine reptiles are also represented by sea-snake and rare green turtle (*Chelonia Mydas*) bones. A workshop for the production of shell-hooks is most probably documented by the finds of the palaeosurface uncovered in the topmost trench (Fig. 13).

As regards the mammal remains, the presence of domesticated animals is documented since the lowest layers of RH6 by the occurrence of dog bones [Uerpmann H-P. pers. comm. 1995], while Thar has been identified from layer 11, dated to  $6270 \pm 60$  BP (BIn-3633/II) and  $6130 \pm 60$  BP (BIn-3634/I). The gathering of marine and mangrove shellfishes was also practised as indicated by the great amount of shells throughout the entire sequence. *Terebralia palustris* is common from the lowest layer 14, dated to the mid-seventh millennium BP; it shows that the mangrove swamp already existed by that time as confirmed by the archaeobotanical analyses [Biagi and Nisbet 1992: 575]. Other interesting observations are provided by the finds of layer 11: the commonest shell species, *Saccostrea cucullata*, was introduced into the site in small groups still attached to round pebbles, suggesting the presence of a rocky coastline during this settlement phase.

To conclude, RH6 is one of the oldest shell-midden sites of the coast of Oman and, undoubtedly, the oldest of the Ra's al-Hamra/Qurm region. Even though only two small trenches were opened at the site, an extremely interesting and rich material culture assemblage has been recovered which shed some light on the way-of-life of the first Holocene fisher/gatherers of the Oman peninsula since the middle of the seventh millennium BP. Unfortunately, most of the faunal assemblages brought to light during the excavations are still waiting for being analysed. Nevertheless the few data available indicate that the economic strategy of the RH6 inhabitants was almost completely based on the exploitation of the resources provided by the marine and mangrove swamp environments.

### Acknowledgements

The Author is very grateful to the Minister of National Heritage and Culture, H.H. Sayyid Faisal bin Ali bin Faisal al-Said as well as to the Director of the Department of Antiquities of the Sultanate of Oman, Ali Ahmed Bakhit al-Shanfari for all their help during his stay in the country. Thanks are also due to the Director of the Italian Archaeological Mission to the Sultanate, Professor M. Tosi who promoted the excavations at site RH6, as well as to all the members of the same Mission who took part in the research works, Dott. M. Cattani, E. Isetti, R. Maggi, R. Nisbet, A. Pessina, I. Tiscornia and R. Travers.

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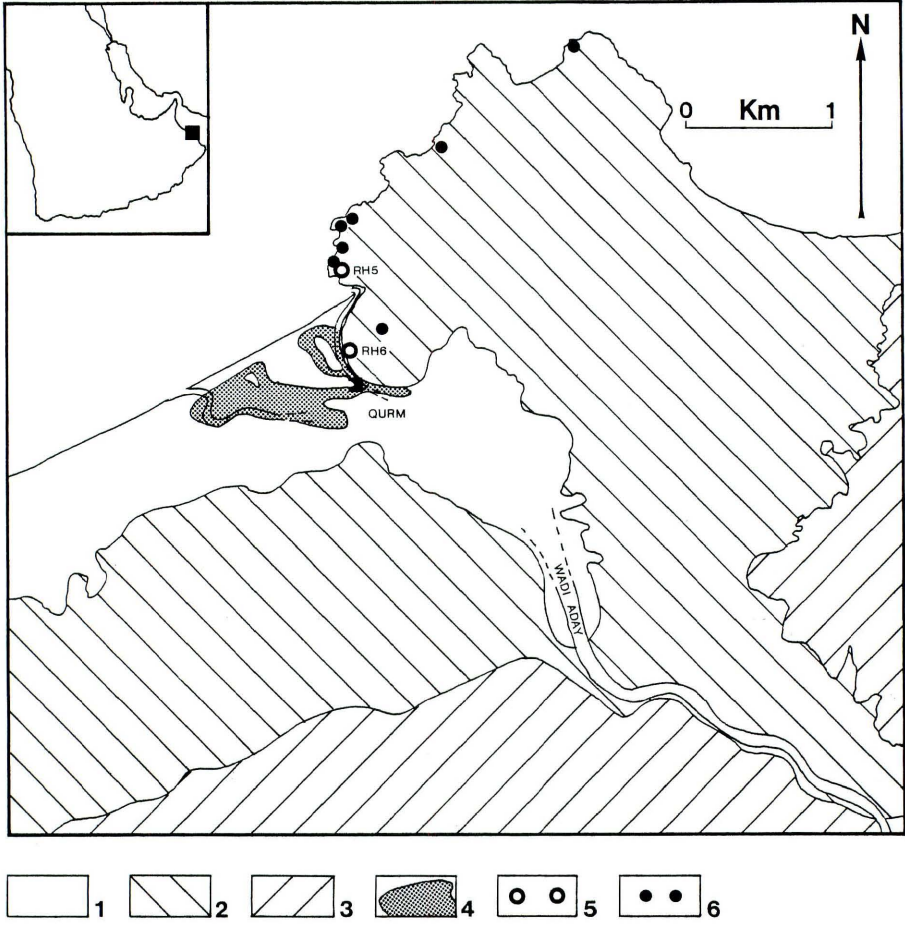


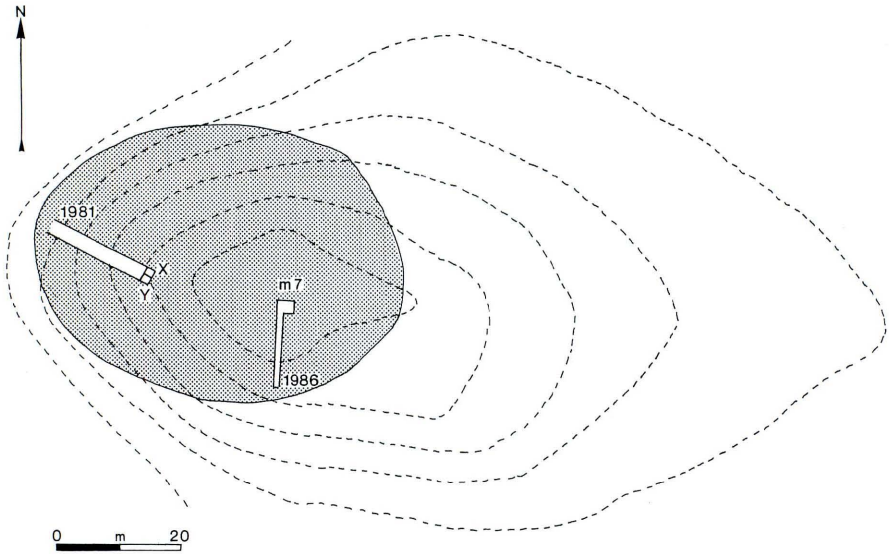
Fig. 1 Distribution map of the shell-middens in the Qurm and Ra' al-Hamra area with the location of site RH6.

- 1) lowland zone, 2) foothills, 3) mountain zone, 4) mangrove swamp of Qurm,
- 5) 14C dated shell-middens, 6) other sites in the area (after P. Biagi 1994: 21).

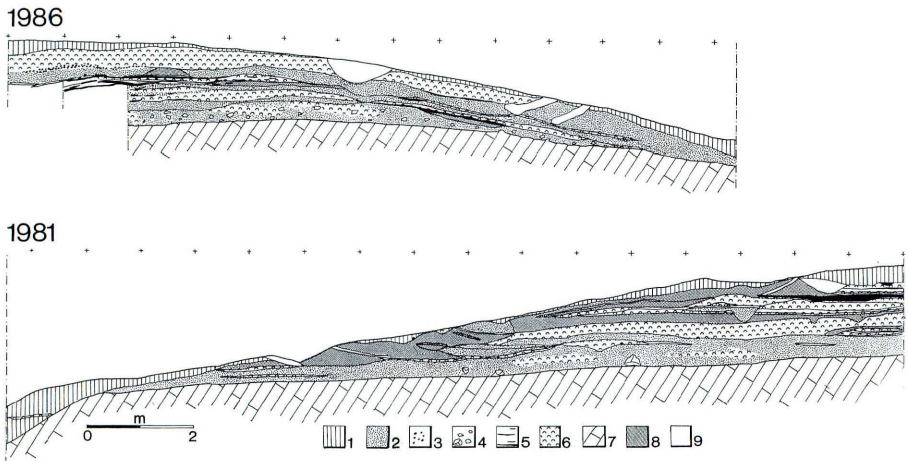


**Fig. 2** Aerial photograph of the Qurum/Ra's al-Hamra zone with the location of site RH6 (arrow) (top) and of site RH6 from the north (bottom) (photos by R. Salm and P. Biagi).



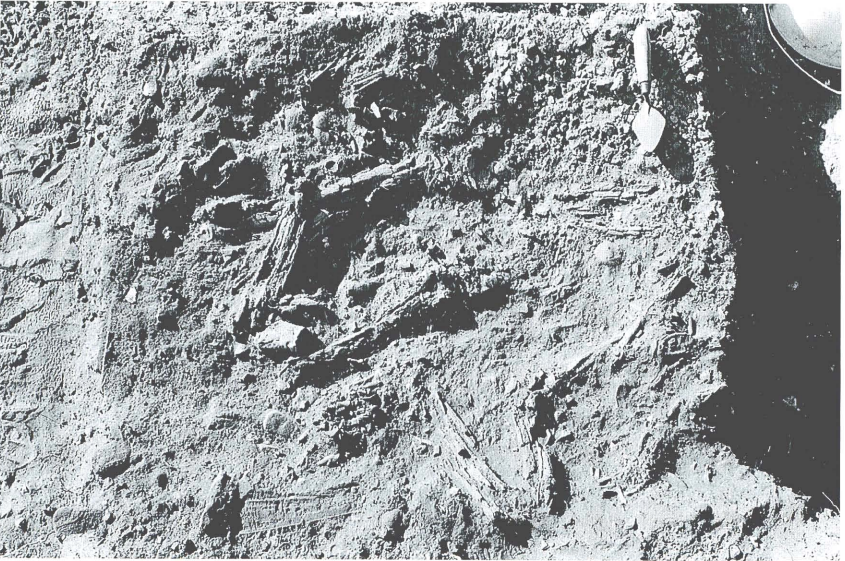
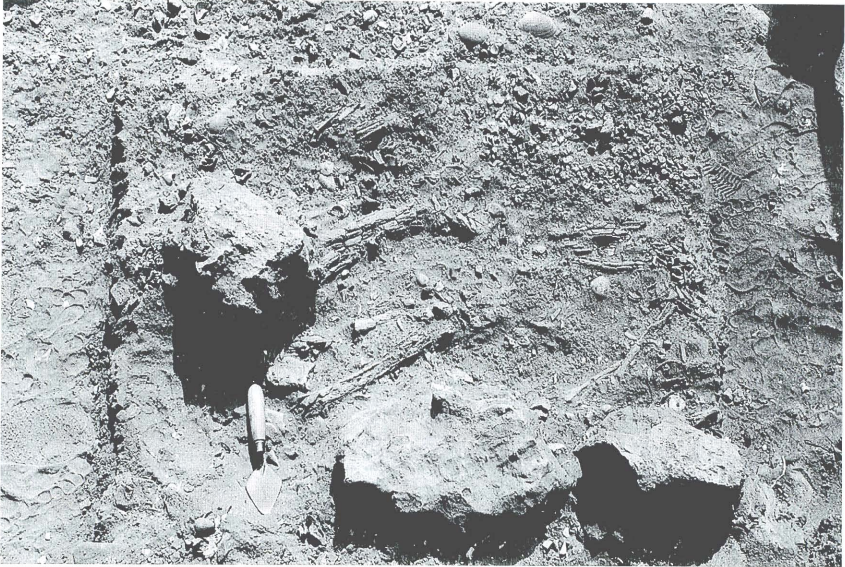


**Fig. 3** RH6: site plan with the indication of the extension of the shell-midden (shaded area) and the location of the various trenches. Contour lines every 1 metre (drawing by P Biagi).



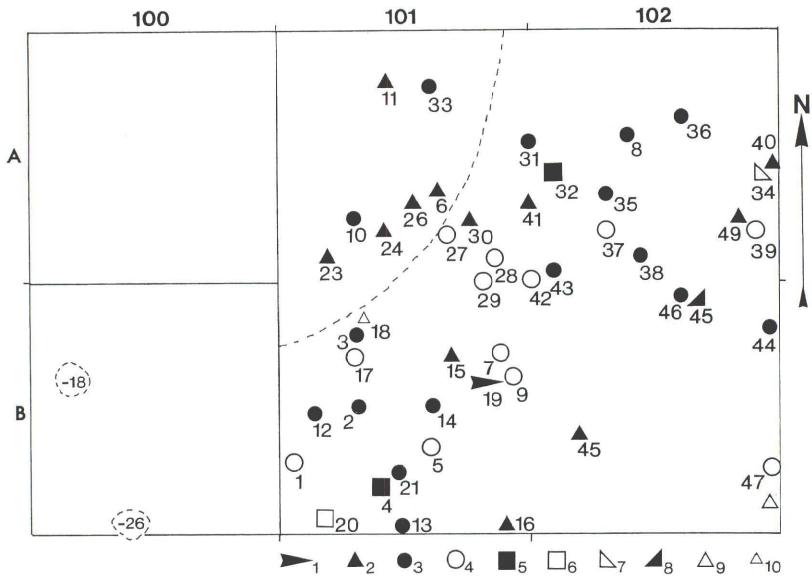
**Fig. 4** RH6: section through the deposits excavated in 1981 (west trench), and in 1986 (south trench).

- 1) Subrecent sand, 2) sand, 3) allochthonous pebbles, 4) stones, 5) charcoal lenses, 6) marine and mangrove shells, 7) bedrock, 8) fish bones, 9) disturbed deposit (drawing by E. Starnini from original by M. Cattani, S. Salvatori and I. Tiscornia).



**Fig. 5** RH6: remains of the crouched, multiple burial uncovered in squares A/100–101, layer 1 of the top trench at the moment of discovery (top) and at the end of excavation (bottom) (photos by P. Biagi).





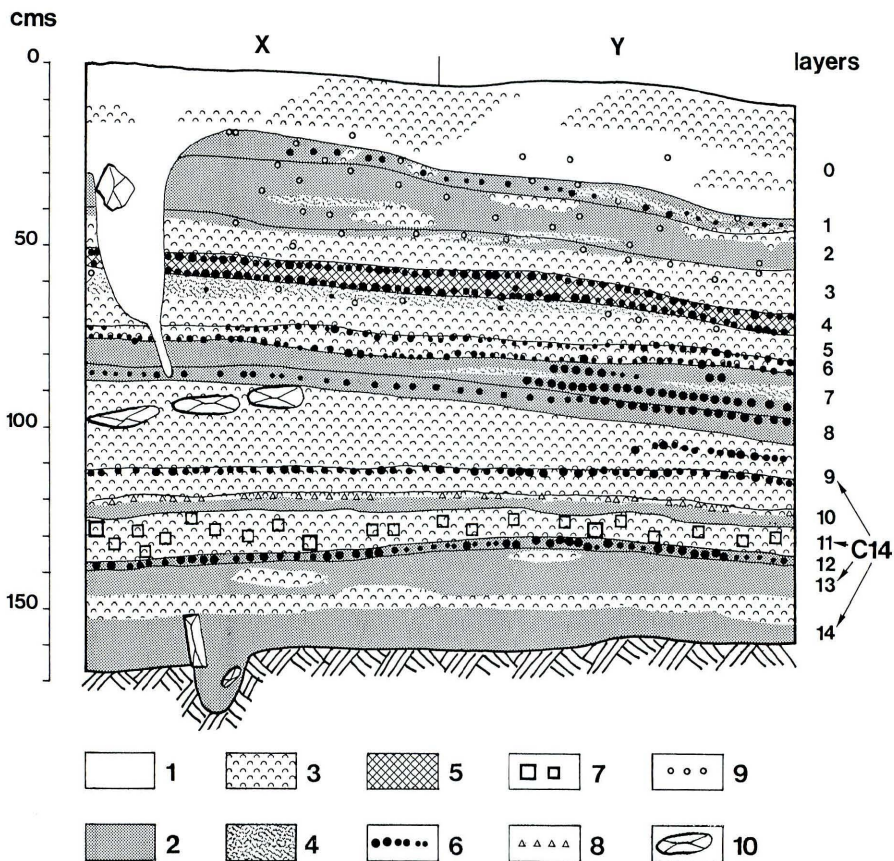
**Fig. 6** RH6: palaeosurface of squares A-B/101-102, with the indication of the various finds.

1) polished adze, 2) net-sinkers, 3) hammerstones, 4) round pebbles, 5) pestles, 6) flat stones, 7) anvils, 8) polishers, 9) grooved disc, 10) stone flake (drawing by P. Biagi from original by M. Cattani and I. Tiscornia).



**Fig. 7** RH6: section through the deposits of squares X and Y in the western trench (photo by P. Biagi).





**Fig. 8** RH6: section through the deposits of squares X and Y in the western trench with the indications of the different layers and of the samples taken for 14C dating.

- 1) disturbed, 2) sand 3) marine and mangrove shells, 4) fishbone lenses, 5) ash, 6) charcoal,
- 7) coastal pebbles, 8) beach gravel, 9) concretions, 10) stones (drawing by P. Biagi).

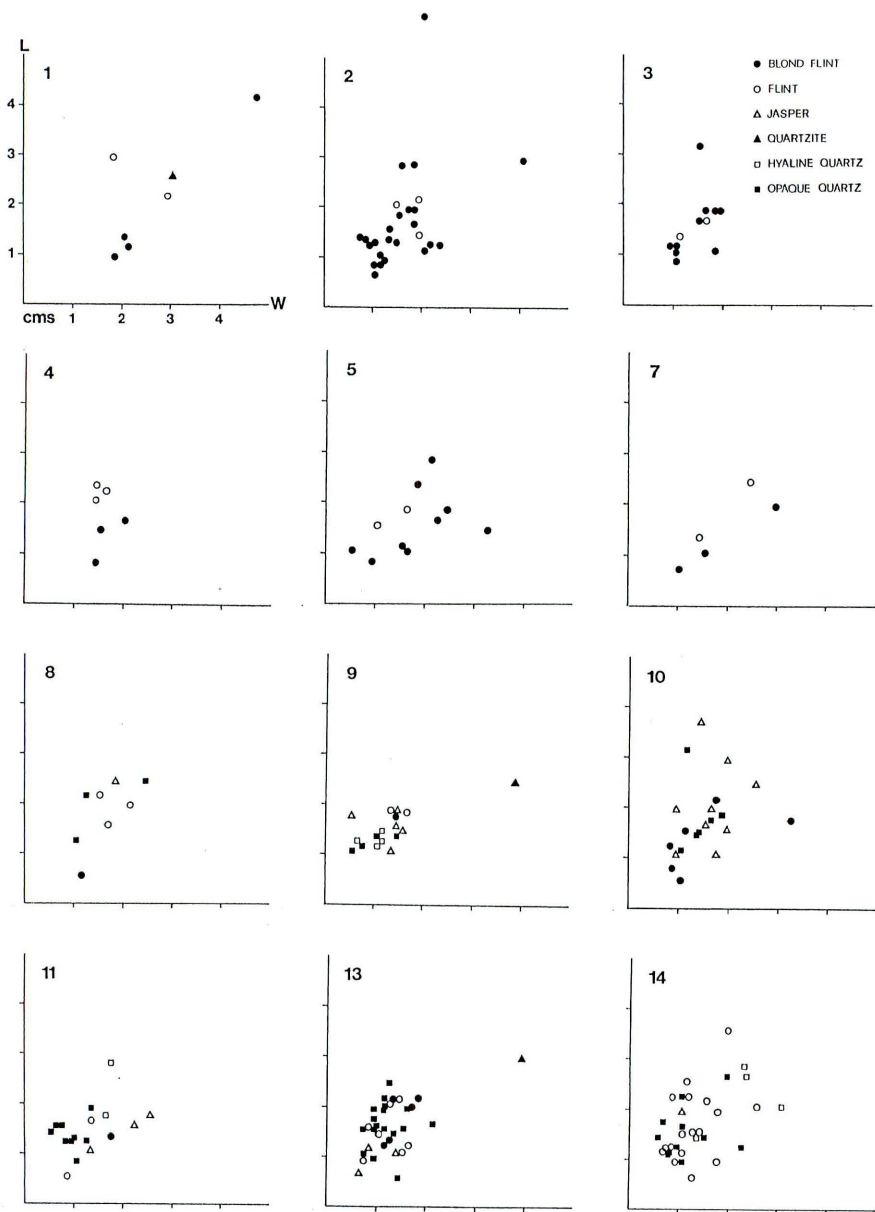
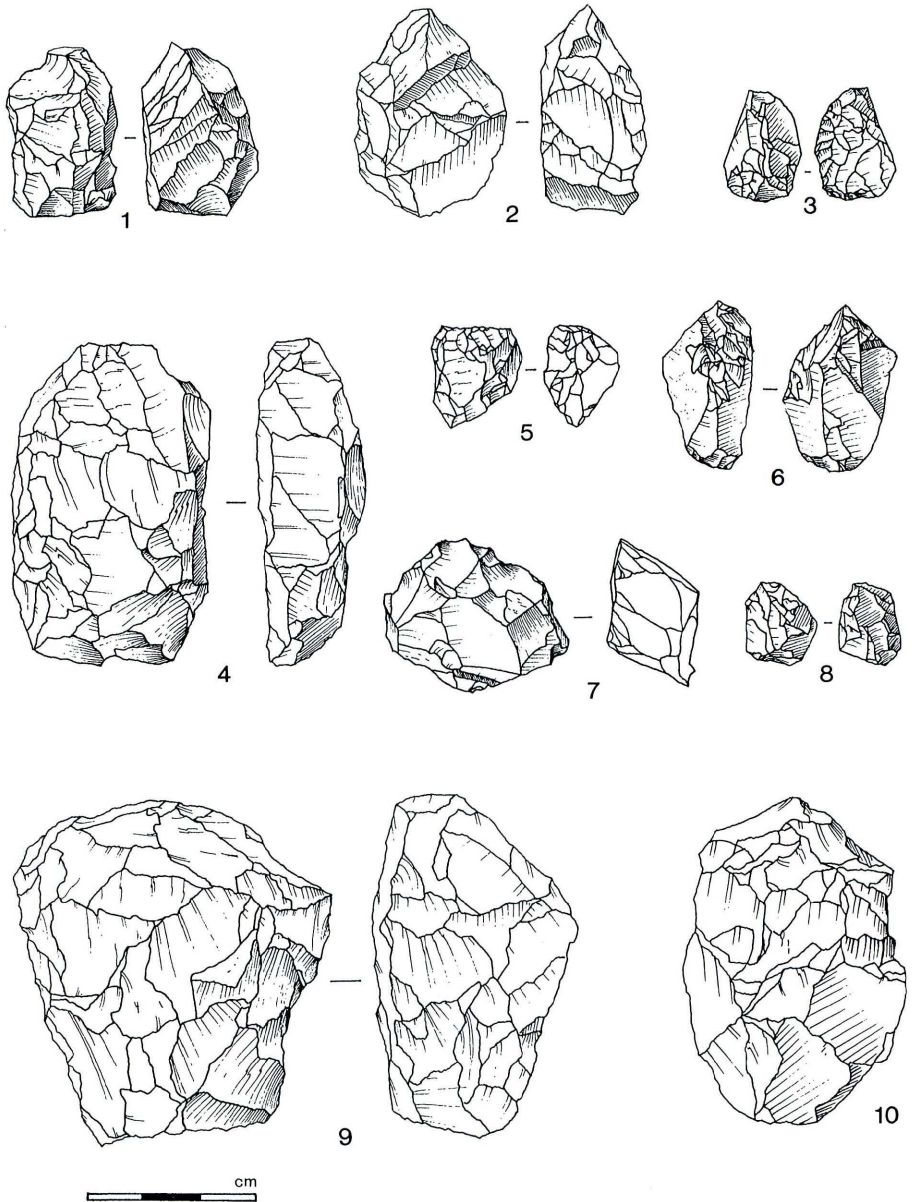
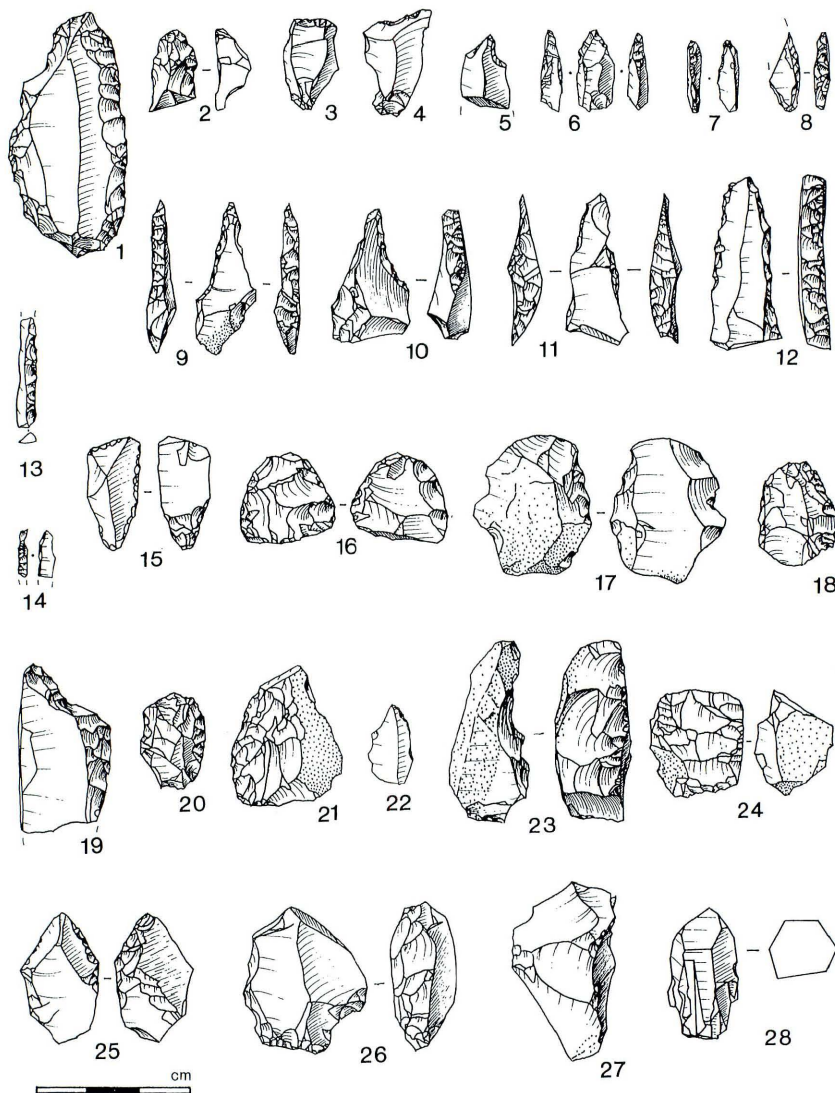


Fig. 9 RH6: dispersion diagrams of the complete, unretouched, chipped stone artefacts from different layers (drawing by P. Biagi).

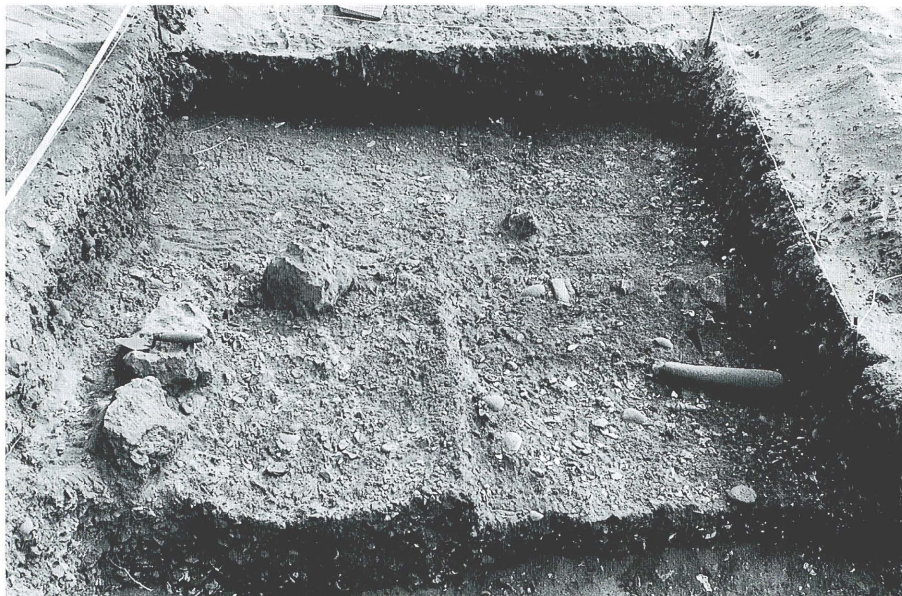


**Fig. 10** RH6: cores from layer 6 (2 and 3), 9 (4, 5 and 9), 10 (6-8), 11 (1) and 13 (10) (1:1) (drawing by G. Bombonato).

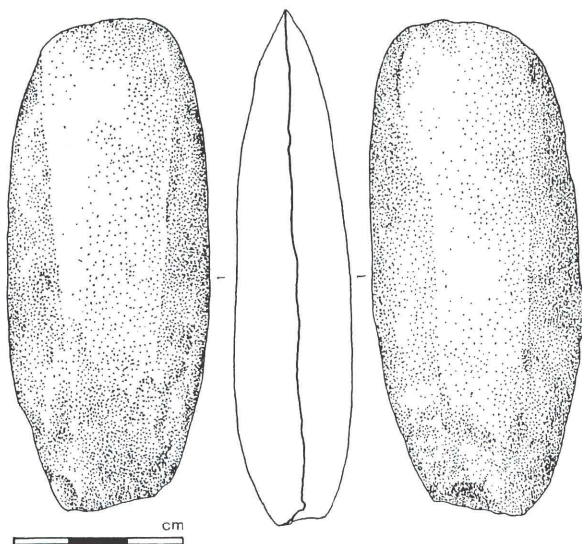




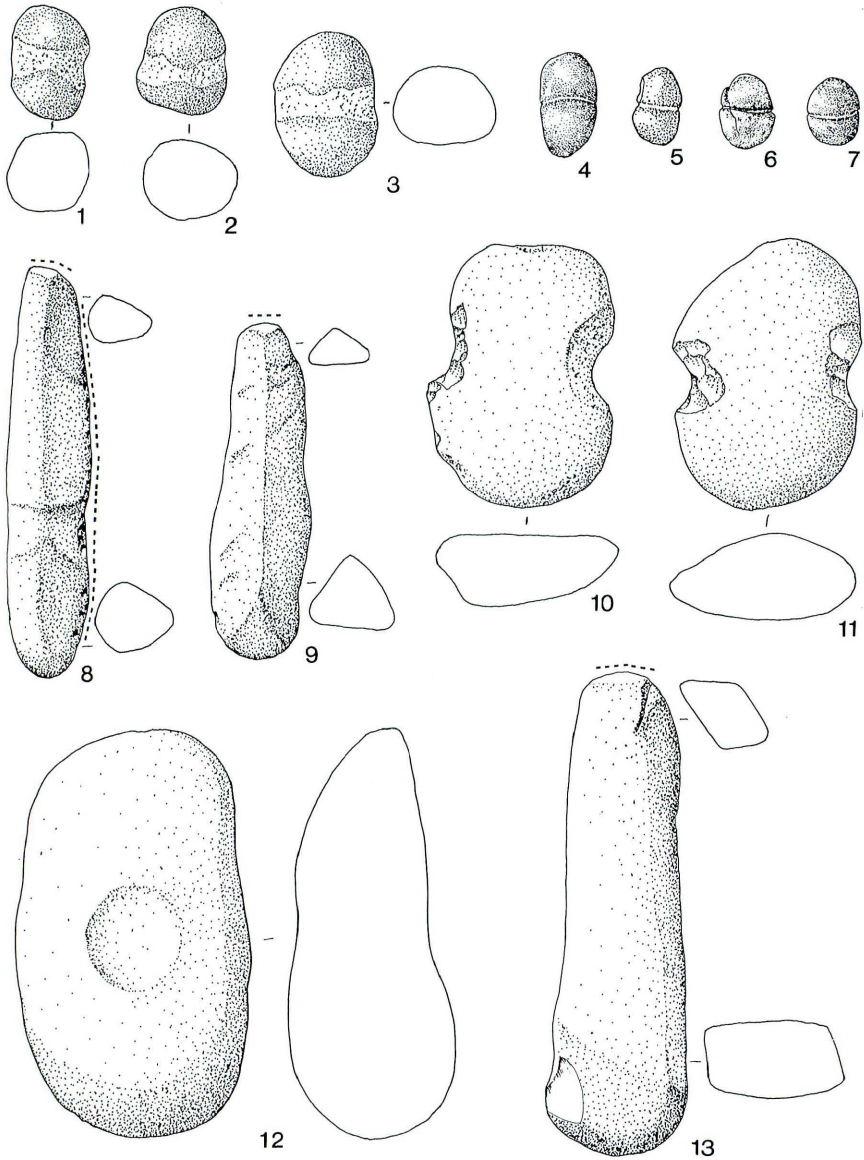
**Fig. 11** RH6: chipped stone artefacts from square Y. End scrapers (1 and 2), truncations (3 and 4), drills (5-11), backed blades (12-14), foliate (15), side scrapers (16-22), denticulate (23), spintered piece (24), sommaire tools (25 and 26), blonde flint core (27) and hyaline quartz crystal (28). Provenance: layer 1 (16 and 23), 2 (3, 5, 15, 25 and 26), 3 (4), 5 (27 and 28), 6 (9), 8 (7), 9 (1, 24 and 28), 10 (18 and 19), 11 (20), 13 (8, 10, 12, 13, 14 and 22), 14 (2, 11 and 21) (1:1) (drawing by G. Bombonato).



**Fig. 12** RH6: palaeosurface uncovered in square A-B/101–102, layer 2 with instruments still *in situ* among which the greenstone pestle (arrow) (photo by P. Biagi).

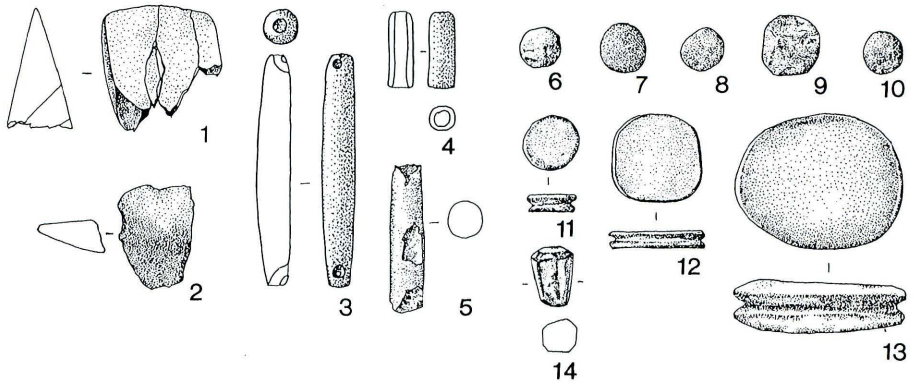


**Fig. 13** RH6: polished, conglomerate adze from square B/101, layer 2 (drawing by G. Marchesi).

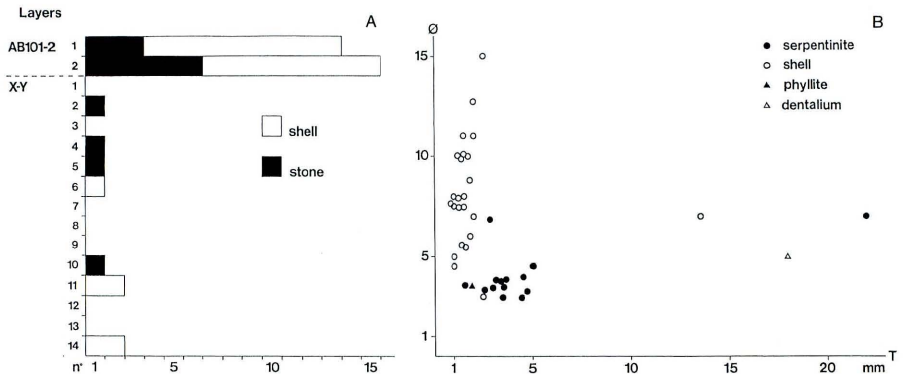


**Fig. 14** RH6: stone grindled (1 to 7) and two-notch (10 and 11) net-sinkers, hammerstones (8, 9 and 13) and anvil (12). Provenance: Y14 (1 to 3), Y13 (5), X13 (6), surface (4 and 7), B101-2 (8), A101-2 (9), Y0 (10 and 11), A102-2 (12), A101-1 (13) (2:3) (drawings by G. Marchesi and E. Starnini).





**Fig. 15** RH6: polished stones (1 and 2), long beads (3 and 4), sandstone cylinder (5), small balls (6 to 10), grooved discs (11 to 13) and steatite artefact (14) (2:3) (drawing by G. Marchesi).



**Fig. 16** RH6: distribution diagram of the stone and shell beads through the sequence (A) and diameter/thickness dispersion diagram of the stone and shell beads (B) (drawing by P. Biagi).

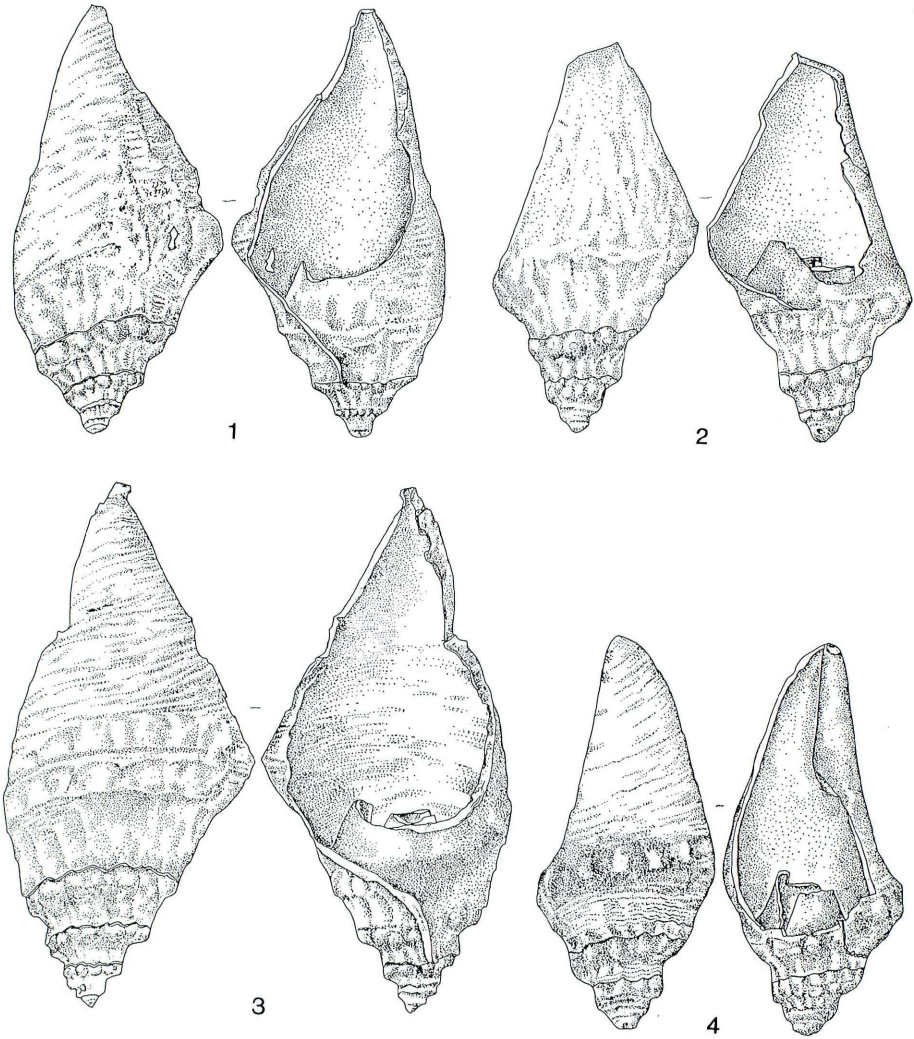


Fig. 17 RH6: *Fasciolaria trapezium* vessels from A/101, Pit 1 (1:2) (drawing by G. Marchesi).

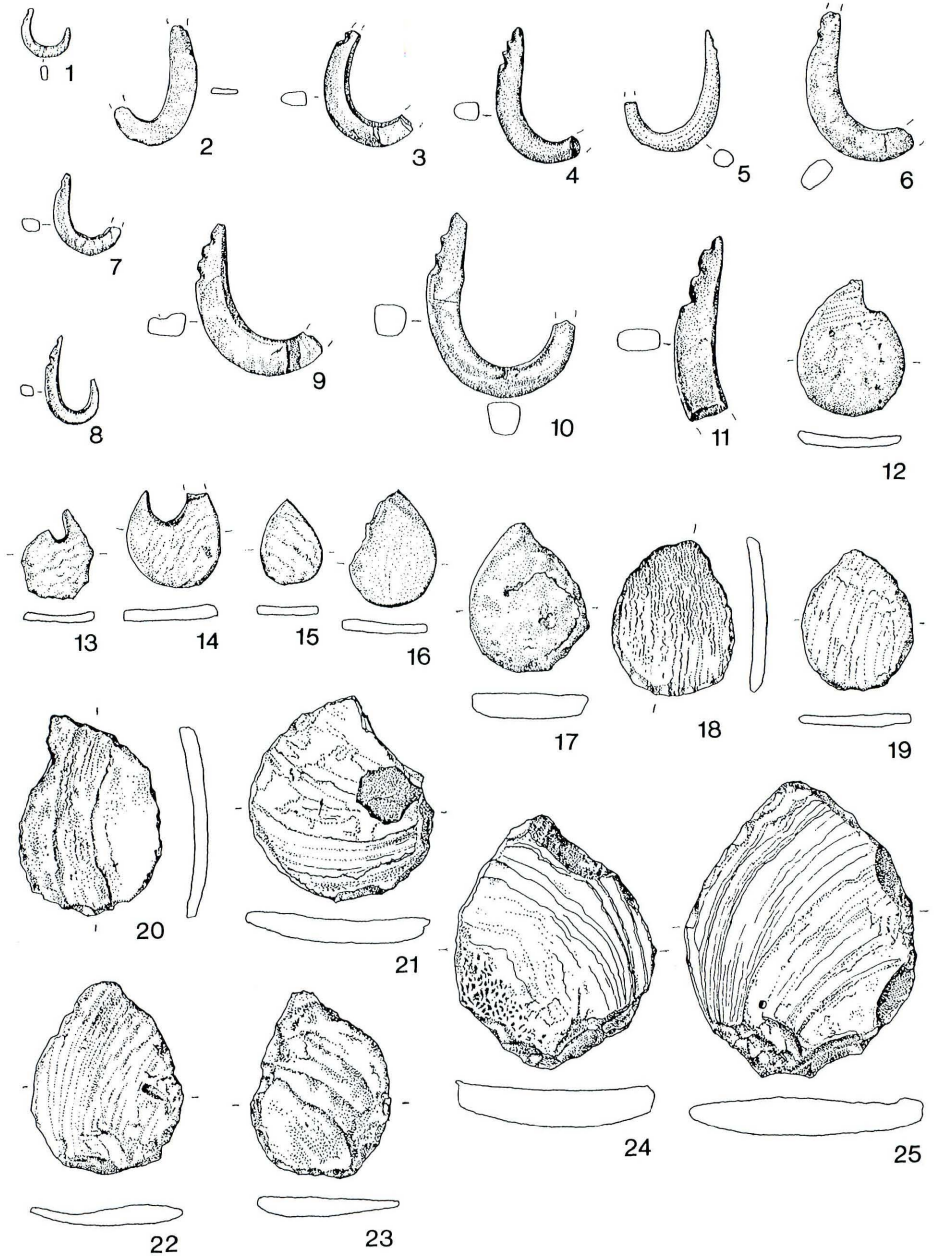
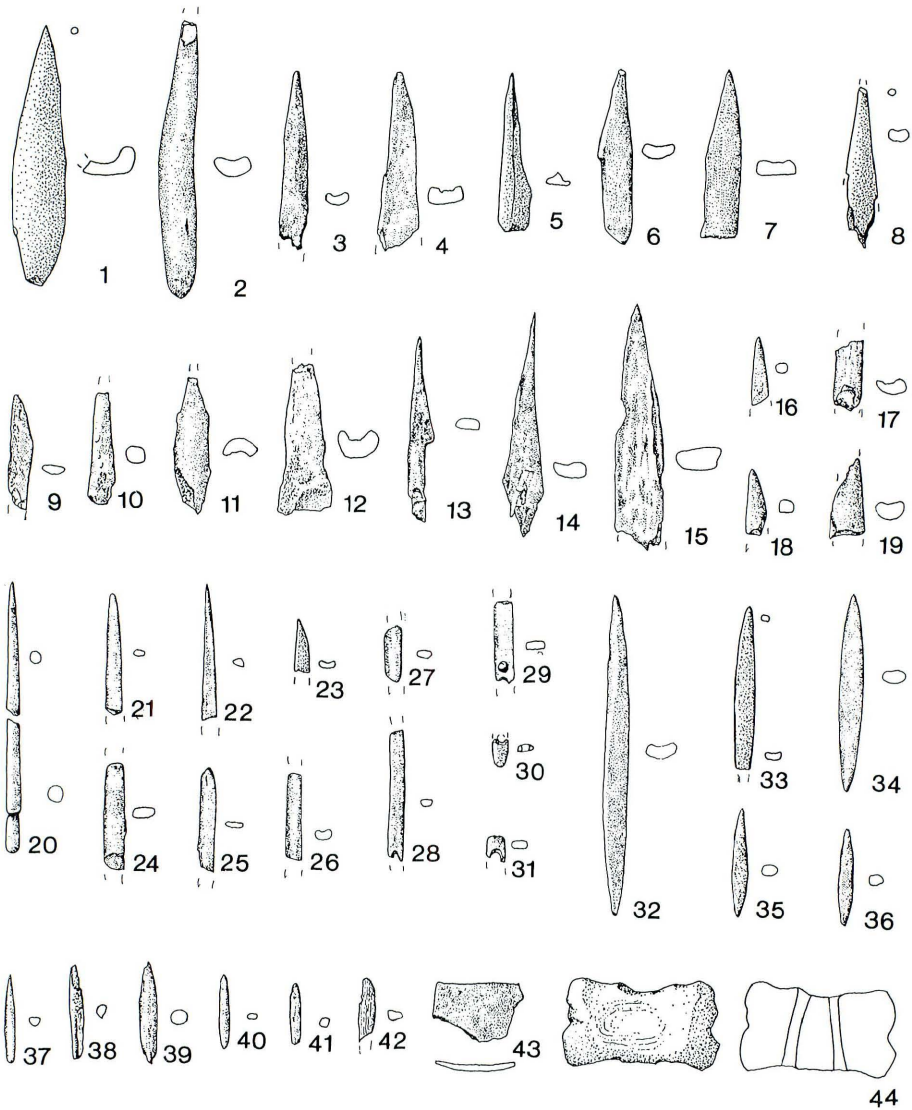


Fig. 18 RH6: shell fish-hooks at different stages of preparation (2:3) (drawing by G. Marchesi).





**Fig. 19** RH6: bone points (1 to 31), gorges (32 to 42), plaquette (43) and pierced turtle bone (44). Provenance: X1 (21), X2 (29), X6 (13 and 16), X10 (6, 22, 38 and 42), X11 (2), X13 (11, 17 and 25), Y1 (1, 5 and 44), Y2 (8 and 30), Y10 (23), A101-1 (3, 10, 15, 19, 20 and 26), A101-Pit 1 (7, 18 and 31), A101-2 (4, 12 and 41), A102-1 (28, 37 and 39), A102-2 (40). B101-2 (9, 14 and 24), B100-3 (27 and 43) (2:3) (drawing by G. Marchesi).

## TRADE ROUTES IN THE OLD ASSYRIAN PERIOD

Hiroimichi OGUCHI\*

The main part of the Old Assyrian period is known as the period of “Kültepe-Kaniš *Karum* II-Ib”, which is generally subdivided into two major periods, *Karum* II and Ib, with an interruption of occupation (Ic) lying between them.

When we give consideration to a matter of trade routes in these periods outlined below, the perception of the spatial distribution, by phase, of Khabur ware outside its main distribution zone<sup>1)</sup>, in addition to historical consideration, seems significant. In fact such distributions give some indications of change regarding trade routes frequently used during each period. Viewed from another side, these periods may be described as Khabur Ware Period I (ca. 1900–1814 B.C.) and as part of Khabur Ware Period 2 (ca. 1813–1700 B.C.), respectively<sup>2)</sup>. Attempts made through this article are to elucidate trade routes on archaeological ground and to appreciate changes of trade routes during the time when the Old Assyrian tin trade was executed, in terms of the peripheral distribution of Khabur ware<sup>3)</sup>. Naturally, these will require comments on views so far taken on textual ground.

### Chronological and historical framework

The Kültepe *Karum* II period probably started during the reign of Erišum I of Assyria<sup>4)</sup>, lasted in the reign of Ikunum and certainly in the reign of Sargon I (Šarruken), and ended during, or at the end of, Puzur-Aššur II<sup>5)</sup>. Assyrian trading activities at this time are well known from the Kültepe *Karum* II texts written in the Old Assyrian dialect of Akkadian and chiefly belonging to the reigns of Sargon I and Puzur-Aššur II<sup>6)</sup>. The Old Assyrian trade was based on a trade network comprised of a number of Assyrian settlements, which were called *karū* and *wabarātum*<sup>7)</sup>. The *karum*- and *wabartum*-settlements existed widely in Anatolia and northern Mesopotamia<sup>8)</sup>. At Kültepe, i.e., Kaniš, an important *karum* was seated. Assyrian traders brought tin (*annakum*) from the east, probably from Afghanistan, a source

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1) See Oguchi 1997a, 1997b and 1998.

2) These periods are to be defined within the main distribution zone of Khabur ware [see Oguchi 1997b: p.196ff.].

3) Hence it follows, in the present article, that trade routes in question are discussed in being only viewed from the main distribution zone of Khabur ware. Anatolian routes comprising a certain trade network centred on Kaniš are excluded from consideration, because no Khabur ware occurs in Anatolia with the exception of Kültepe-Kaniš.

4) Balkan 1955: p.59; Orlin 1970: p.210; Larsen 1976: p.81.

5) Larsen 1976: pp.81–83.

6) Although several Old Assyrian tablets have been recovered from Aššur, most of them are those which have been found in Middle Assyrian archives or out of context [Pedersén 1985: p.27; cf. Larsen 1976: p.55]. With the exception of these Old Assyrian tablets, only building and dedicatory inscriptions, relevant to this period, are known from Aššur itself.

7) The term *karum*, basically meaning a “quay”, was used to denote an area of settlement of Assyrian traders within a city. On the other hand, the term *wabartum* was used to denote a smaller Assyrian settlement subordinate to a neighbouring *karum*.

8) According to M.T. Larsen, who has attempted to distinguish between the *karum*- and *wabartum*-settlements of the Kültepe *Karum* II period and those of the Kültepe *Karum* Ib period, 10 *karum*- and 10 *wabartum*-settlements, belonging to the period of Kültepe *Karum* II, are now known [Larsen 1976: pp.237–240; cf. Orlin 1970: pp.34–35 and pp.75–78]. The *karū* were seated at Kaniš (Kültepe), Durhūmit, Ḥattuš (Boğazköy), Waḥšušana, Burušaitum (?? Acembhöyik), Ḥurama, Ḥaḥḥum, Niḥria, Uršu and southern Zalpa/Zalpaḥ (? Tell Hammam et-Turkman). The *wabarātum* were seated at Ḥanaknak, Mama/Mamma, Badna, Wašḥania, Ulama, Šalatuwar, Karaḥna, Šamuḥa, Tuḥpia and northern Zalpa/Zalpaḥ. These cities, also inhabited by Assyrians, were politically autonomous city-states under indigeneous rulers each of which was usually called “*ruba’um* (prince)” [Orlin 1970: p.8, p.73 and p.176]. Some of the Anatolian principalities controlled large territories each of which was designated “*matum*” [Orlin 1970: p.73]. That is to say, the Assyrians made not political but economic expansion into Anatolia.

of tin<sup>9)</sup>, into Aššur, from which it was re-exported to Kaniš, together with various types of textiles (*kutanū*, *šubatū*, etc.) among which most important were Babylonian (“Akkadian”) textiles<sup>10)</sup>. Tin and textiles imported into Kaniš were distributed to other trading outposts, and in return silver and gold were sent back to Aššur.

The occupation of *Karum* level II at Kültepe-Kaniš ended in a conflagration, and after the destruction, the *karum* area was temporarily uninhabited. At other *karū* and *wabarātum*, what happened or nothing happened is not known because of no extant texts. One considers that the destruction of Kültepe *Karum* II resulted from an inner struggle in Anatolia, and that it did not affect all Assyrian *karū* and *wabarātum* [Veenhof 1985: p.193]. In parallel with this event, however, a certain political change occurred at Aššur. After Puzur-Aššur II came Naram-Sin, probably a ruler of Ešnunna and a usurper on the throne of Aššur<sup>11)</sup>.

The Kültepe *Karum* Ib period, certainly dated from the reign of Šamši-Adad I of Assyria (ca. 1813–1781 B.C. on the middle chronology), probably covers the reign of Hammurabi of Babylon (ca. 1792–1750 B.C.)<sup>12)</sup> or may extend into the first decade of Samsuiluna’s reign<sup>13)</sup>. In the time of Šamši-Adad I, another usurper on the throne of Aššur, the trade between Aššur and Kaniš was resumed; and the trade between Aššur and other Anatolian cities/towns where *karum*- and *wabartum*-settlements existed was renewed<sup>14)</sup>.

9) Recent investigations have indicated Afghanistan as the most probable source of tin [Stech & Pigott 1986: p.44 and Fig. 1].

As for tin, a problem has recently arisen. Recent research has revealed the existence of tin mines in Bolkaradağ in the Cilician Taurus range [Yener & Özalp 1987: pp.223–225 and see Fig. 1]. Whether these mines in Turkey were available at this time remains a problem. The most recent research, however, has confirmed that at Kestel also in the central Taurus range, another tin mine exists, of which the original working can be dated to the third millennium B.C. on the basis of pottery found there [Yener & Vandiver 1933: p.213; Willies 1933: p.263]. On the other hand, the excavations at Göltepe, a third millennium site near Kestel, have revealed ceramic fragments of crucibles suggesting the production of tin metal [Yener & Vandiver 1933: p.207ff.]. Kestel is located 4 km west of Çamardı southeast of Niğde; Göltepe is located 2 km away from the Kestel tin mine. The Taurus mountains are considered to have been the location of the “Silver Mountain” in the Akkadian period [Bottero 1971: p.324; Gadd 1971: pp.425–426]. Of interest is one place-name, Anaku (the “Tin/Lead Country”), listed together with Kaptara (Crete) as lands beyond the Upper Sea (the Mediterranean), in a later Assyrian text giving information on geographical names with the name of Sargon who is no doubt considered the king of Akkad [Gadd 1971: pp.429–430]. At any rate, J. Nicholas Postgate most appropriately suggests that “even if they were yielding at this time, we must presume that the Assyrians had access to cheaper and/or more reliable supplies” from the farther east [1992: p.212]. K.A. Yener and P.B. Vandiver also assume that “the quantities of tin in the Kestel mine in the second millennium may not have been sufficient to supply the increasing demands” for making bronze [1933: p.212].

10) Obviously, a well-known business letter (VAT 9249) from a merchant in Aššur to his representative in Kaniš mentions the purchase of garments of the “Akkadians”, further referring to the absence of the “Akkadians”, i.e., their textiles, from Aššur [Leemans 1960: pp.98–99 or D. Oates 1968b: p.35]. In addition, it is interesting to note that in some of the Kültepe texts, textile products from Gasur is mentioned [Veenhof 1972: p.190]. The site of Gasur (Yorgan Tepe), later called Nuzi, has yielded a handful of so-called “Cappadocian” tablets. Hence the economic connection between Aššur and Gasur/Nuzi, before Šamši-Adad I, is also a matter of consideration.

11) This Naram-Sin appearing in the Assyrian king-list is most likely to be identical with the contemporary ruler of the same name of Ešnunna because at Tell Asmar-Ešnunna, there have been found tablets with a year-name recording his conquest of Ašnakkum, located certainly in the upper Khabor basin [Landsberger 1954: n.24 on p.35; D. Oates 1968b: p.25; Larsen 1976: p.42]. In sum, Aššur is considered to have been put under the control of Ešnunna for a short while. In addition, after Naram-Sin came Erišum II, who, though described as son of Naram-Sin in the Assyrian king-list, was probably a member of the native dynasty [D. Oates 1968b: p.25]. Needless to say, Erišum II was the king who was deposed from the throne of Aššur by Šamši-Adad I.

12) See Buchanan 1969: pp.758–759.

13) See N. Özgüç 1968: p.319.

14) Whether all the *karum*- and *wabartum*-settlements of the Kültepe *Karum* II period were retained in the time of Šamši-Adad I is uncertain. According to Larsen, the following *karū* and *wabarātum* are at least known from the Kültepe *Karum* Ib texts [Larsen 1976: p.239]: *Karū*: Kaniš (Kültepe), Šamuha, Tawinia (= ? Tamnia), Timelkia and Wašhanja.

*Wabarātu(m)*: Amukuwa/Ankuwa (? Ališar Hüyük) and Mama/Mamma.

Šamuha and Wašhanja were the seats of *wabarātum* during the period of Kültepe *Karum* II. Tawinia and Timelkia appeared as the seats of new *karū* in the period of Kültepe *Karum* Ib, in which Amukuwa also newly appeared as the seat of a *wabartum*.

In the Kültepe *Karum* Ib period, a certain political change took place, as known from the “letter of Anum-ḫirbi of Mama to Waršama, king of Kaniš”, found in a Ib period building on the city-mound at Kültepe [Balkan 1957: p.8; Orlin 1970: p.99]. This letter shows that, irrespective of Assyrian trading activities in Anatolia, some city-states, like Mama, which had been not so politically important, came into power in point of equal status with Kaniš, each taking possession of a *matum* consisting of a number of petty vassal city-states. The so-called “Anitta inscription”, a Hittite text from Boğazköy, shows that Piḫana, who ruled the city of Kuššara, captured Neša (≅ Kaniš), that Anitta, the son and the successor of Piḫana, fortified Neša and made it his capital, and that from Neša, Anitta campaigned against



It seems that tin was still an important commodity of the trade<sup>15)</sup>, which was also conducted by Assyrian traders of Aššur under the control of the new Amorite king Šamši-Adad I, who, establishing a new capital called Šubat-Enlil at Tell Leilan, resided mainly there when he was not engaged on his military campaigns. It also seems that Babylonian textiles were also still re-exported to Anatolia. Šamši-Adad himself and his family used the Old Babylonian dialect of Akkadian, while Assyrian traders still used the Old Assyrian dialect of Akkadian. This may be due to Šamši-Adad's career as known from the biographical note on himself in the Assyrian king-list<sup>16)</sup>. As exemplified with both the temples of Tell al-Rimah and Tell Leilan, this king adopted a Babylonian rather than a traditional Assyrian plan when constructing monumental religious buildings<sup>17)</sup>. These tempt us to suggest that Šamši-Adad would have been familiar with Babylonian customs as well as Babylonian fashions in architecture<sup>18)</sup>, further leading us to assume that he cannot have had no interest in the importation of textiles from Babylonia. Probably, such a trade network as there was in the Kültepe *Karum* II period must have been maintained to a great extent. In connection with the trade, what should be taken into consideration is the assumption that Šamši-Adad I must have required the firm economic basis for conducting his campaigns and further maintaining his large realm.

After the death of Šamši-Adad I, the Assyrian kingdom rapidly declined, despite Išme-Dagan's efforts to maintain his territory left. Having regained the throne of Mari, Zimri-Lim gained political supremacy over the middle Euphrates region, the lower Khabur valley and the Balikh valley, and possibly over part of the upper Khabur basin. Needless to say, Mari was an important position for controlling routes connecting southern Mesopotamia and the west. Westwards from Mari, such routes run along the Euphrates or across the Syrian desert via Tadmor. During the "Assyrian interregnum", Mari functioned evidently as a transit station for products from the west, as shown in the Mari texts (e.g. ARMT I: 7). Zimri-Lim's domination over such territory, after confusion with the collapse of the Assyrian kingdom, brought political stability, at least to the areas along the middle Euphrates. Thus trade flourished. Tin was also imported, perhaps from the direction of Elam into Mari, from which it

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such kingdoms as Ḫatti (≙ Ḫattuš), Zalpuwa (northern Zalpa), Ḫarkiuna, Šalatiwara (Šalatuwar), Ullamma (Ulama) and Buruṣhanda (Buruṣhattum) [Orlin 1970: pp.237–239 and pp.242–245]. The "Anitta inscription" also records Anitta's victories over such kingdoms, thus suggesting the first wide-spread control of Anatolia by a single city — Neša (≙ Kaniš) [Orlin 1970: p.239]. At any rate, we can speculate that several powerful states forming *matū* appeared in Anatolia in the period of Kültepe *Karum* Ib, besides large states forming *matū* since the period of Kültepe *Karum* II.

- 15) For arguments about the tin trade at this time, see Balkan 1955: p.43, D. Oates 1968b: pp.33–34, Hamlin 1971: p.278, Larsen 1976: pp. 88–89, and T. Özgüç 1986: p.17.
- 16) From a letter of Iasmāḫ-Adad, the younger son of Šamši-Adad I, we know that Ila-kabkabi, an Amorite ruler, and Iaggid-Lim, another Amorite ruler and the father of the Mari king Iaḫdun-Lim, concluded a non-aggression pact, but that, this pact broken, war was waged between them [Laessøe 1963: p.41; D. Oates 1968b: p.38 with n.2]. This Ila-kabkabi, identical with the namesake in the Assyrian king-list, was probably the father of Šamši-Adad I, securing a foothold in the area around Terqa on the middle Euphrates, southeast of Jebel Bishri (called the "Basar" mountain in ancient times, particularly in the late third millennium B.C.). The biographical note concerning Šamši-Adad I in the Assyrian king-list makes it possible to assume that Iaggid-Lim defeated Ila-kabkabi, who thus fled together with his family to Babylonia [Laessøe 1963: pp.43–44]; it tells us that in the time of Naram-Sin, Šamši-Adad went to Babylonia, and then came back to the north, taking the city of Ekallatum. It is interesting to note here that the name of Ila-kabkabi has been found in a tablet from Ischali (ancient Neributum), a site in the Diyala region and part of the kingdom of Ešnunna [D. Oates 1968b: p.38 with n.1]. This may give a hint as to the later relationships between Ešnunna and Šamši-Adad's kingdom. The biographical note further tells us that after his three-year stay in Ekallatum, Šamši-Adad turned against Aššur, where he deposed Erišum, ascended the throne and ruled for 33 years. However, we now should take it into consideration that recent studies, based on new chronicle texts found at Mari, suggest the necessity of revising the chronology for Šamši-Adad's reign as king and the traditionally-drawn inference on his earlier career as king [e.g. see Whiting 1990b: p.167ff.(esp. pp.214–215) and Villard 1995: p.873].
- 17) D. Oates 1982: pp.91–92. For the temple of Tell Leilan, see Weiss 1985: pp.10–11.
- 18) Here we must pay attention to the fact that except for Aššur where, as at Kültepe-Kaniš and some other Anatolian sites in which Assyrians were present, the Old Assyrian dialect of Akkadian was used, the Old Babylonian dialect of Akkadian was rapidly adopted in writing by ruling classes throughout northern Mesopotamia, as well as in southern Mesopotamia, after the Ur III period [Postgate 1992: n.63 on p.307 and n.550 on p.330]. The fact is that Babylonian culture influenced northern Mesopotamia steadily and rapidly; we can also appreciate this from a ceramic point of view. In this respect, we may say that Šamši-Adad's preference for Babylonian culture went with the tide, also perhaps accelerating the spread of the Old Babylonian dialect.

was re-exported to the west, such as Ḥalab (Aleppo), Karkamiš (Carchemish), Qatanum (Qatna) and Ḥašura (Hazor)<sup>19</sup>. Trade conducted by Mari under Zimri-Lim may have sometimes impinged on the trade that was still continued between Aššur and Kaniš<sup>20</sup>. An incompletely published text from Mari, which is assigned to the time of Zimri-Lim, shows that a caravan was set out from Karana under Aškur-Addu in the direction of Kaniš [Gerstenblith 1983: p.12; see also Balkan 1957: p.49]. Aškur-Addu, son of Samu-Addu, is known to have been under the protection of the Mari king as a pro-Zimri-Lim man, after regaining the throne of Karana from Ḥatnu-rapi, a usurper<sup>21</sup>. It was Ḥammurabi of Babylon, Zimri-Lim's once ally, who conquered Mari, as best known from Ḥammurabi's 33rd and 35th date-formulae. After his defeating Subartu again and his capturing Ešnunna, Ḥammurabi's 39th date-formula records his victory all over the enemies including Subartu (*ca.* 1753 B.C.). Ḥammurabi's direct territorial control thus extended from south Mesopotamia to the area of Ešnunna in the northeast and to Mari along the Euphrates in the northwest. It may have reached as far as the area around Terqa. Moreover, to the north, there were vassal-states. For example, Iltani's husband Aqba-Ḥammu ruling Karana had a seal inscribed as "servant of Ḥammurabi"<sup>22</sup>, paying a heavy tribute to Ḥammurabi [Dalley 1976: pp.31–32]. Aššur and Ninuwa (Nineveh), which would have remained in the hands of Išme-Dagan (*ca.* 1780–[?1741] B.C.), the successor of Šamši-Adad I, may have become finally vassal-states, as suggested in the prologue of Ḥammurabi's law code. Texts from Tell al-Rimah, dated to the times of Ḥatnu-rapi and Iltani at Karana, include references to tin [D. Oates 1968a: p.137; Dalley 1984: p.64]; and in the economic texts of the Iltani archive at Rimah, the name of Kaniš occurs [D. Oates 1968a: p.137; Dalley 1976: pp.31–32]. These may suggest that the Old Assyrian tin trade continued till/beyond the end of Ḥammurabi's reign, which may be supported by the fact that a text from Tell Leilan mentions a treaty between the city of Aššur and Till-abunu<sup>23</sup>, a ruler at Seḥna (= Šubat-Enlil), who is dated after Ḥammurabi's having smitten Mari in battle (*ca.* 1761 B.C.) and before Iakun-ašar's ascending the throne of Seḥna, destroyed by Samsuiluna of Babylon in *ca.* 1728 B.C.<sup>24</sup>

### Clarification of the distribution of Khabur ware by phase in historical context

The contemplation of the distribution of Khabur ware by phase enables us to delineate trade routes in given times from the side which is described as the main Khabur ware distribution zone. In the course of such contemplation, the necessity of putting interpretations on the Khabur ware distributions inevitably arises. Thus we now proceed to such interpretative problems.

19) Leemans 1960: p.123. As attested in the Mari texts, other commodities traded were wine (*karanam*), oil (*šamnum*), honey (*dišpum*), grain (*še'um*), clothing (*šubatam*), woods (*urnum*, *šurmenum*, *supalum*, *taskarinnum*, *elammakum*, etc.), precious or semi-precious stones such as lapis lazuli (*uqnum*), carnelian (*samtum*), turquoise (*ḥašmanum*), alabaster (UD. AŠ) and rock-crystal (*dušem*), and metals such as copper (*erum*), bronze (*siparum*) and iron (*parzillum*) [see also Gerstenblith 1983: pp.13–15]. Silver (*kaspum*) and gold (*ḥurašum*) were also traded; but silver functioned chiefly as currency. It is interesting to note that horses (*sistu*) were also imported into Mari. "White" horses from Qatanum (Qatna) and "red" horses from Ḥarsamuna, a town in Anatolia, were known at that time [Dalley 1984: pp.161–162].

20) Hamlin 1971: p.280.

21) Dalley 1984: p.38. In addition, it is known that Aškur-Addu married a daughter of Zimri-Lim [Munn-Rankin 1956: p.94].

22) Hawkins 1976: p.256.

23) Eidem 1987–88: p.115; *idem* 1991: p.127.

24) The Assyrian king-list enumerates after Išme-Dagan a certain Aššur-dugal as "son of a nobody", the designation showing an obscure usurper, and six kings each of which is described also as "son of a nobody" [D. Oates 1968b: p.25]. But another version, preserved in a fragmentary text from Aššur, gives the information of the names of three more kings, *i.e.*, Mut-Aškur, Rimu-x and Asinum. From the Mari texts, Mut-Aškur is known as Išme-Dagan's son. As for Rimu-x, nothing is known. Asinum may have been perhaps a grandson of Šamši-Adad I: the building inscription of Puzur-Sin, found at Aššur, records the overthrow of Asinum, the x.y. (grandson ?) of Šamši-Adad [D. Oates 1968b: p.25; Veenhof 1985: pp.213–214]. In this period of confusion at Aššur, the Assyrian trading activities in Anatolia may have ceased.



## (1) Khabur Ware Period 1 (ca. 1900-1814 B.C.)

*The main distribution zone of Khabur ware*

This zone, attested as the main Khabur ware distribution zone particularly in the following period, 2, can be divided into five areas from a topographic point of view: i) the area around Aššur, ii) the plain south of Jebel Sinjar and Tell 'Afar, iii) the area northeast of Jebel Sinjar and Tell 'Afar and extending to the Tigris, iv) the area between Nineveh and Jebel Bashiqa lying west of Jebel Maqlub, and v) the upper Khabur basin [see also Oguchi 1997b: p.206]. In the 'Afar plain area lie Tell al-Rimah and Tell Taya, which provide the most important evidence for Khabur Ware Period 1 [see Oguchi 1997b: p.196 and p.202; *idem* 1998: p.119 with n.3]. Tell Jigan, also providing convincing evidence for the period 1<sup>25</sup>, lies in the north of the Nineveh area.

In this period, there were a number of separate city-states in these areas. Aššur was one of the independent states. Excepting Aššur and its vicinity, these states, lying in the fertile land of the rainfall zone, were economically based on rain-fed agriculture. The dry-farming areas were also utilized by nomads, who moved seasonally between steppe pastures, occasionally intruded into cultivated land, and interacted with sedentary people such as farmers and townspeople in various ways. Nomads, who were West Semitic, also occasionally threatened settled people forming political entities, as either raiders or settlers. Settled people relied on each state authority protecting them from such threats. The daily life of settled people in each state was thus structured under the control of a ruler. The sedentary population of the north at this time would consist largely of Akkadians (*i.e.* East Semitic speakers), including Amorites (*i.e.* West Semitic speakers) and Hurrians<sup>26</sup>. The rulers of Aššur at this time had Akkadian names: — as Erišum, Ikonum, Šarruken and Puzur-Aššur [D. Oates 1968b: p.24]. In consideration of recently confirmed evidence for the possible identification of Tell Brak with Nagar/Nawar<sup>27</sup>, Hurrian rulers controlling some states may have been present in north Mesopotamia<sup>28</sup>. Also, Amorite rulers would have been present. The social conditions of these areas thus showed a mosaic of complexly-interrelated language groups, including nomads, and a different language group.

Aššur itself was a city, geographically and economically, on the fringe of the main concentration of population of the dry-farming areas [D. Oates 1968b: p.20]. Aššur was, however, an advantageous position for controlling important routes connecting the settled population of the north and that of the south. There is no doubt that Aššur, conducting the trade noted above, gained an economic advantage over other states in the areas which are marked as the main distribution zone of Khabur ware in the succeeding period, 2. Although Assyrian traders brought profit to other local states through their travelling expenses and road-tax, an economic difference between Aššur and other states would have

25) See Oguchi 1997b: Fig.1:3–5 and *idem* 1998: n.3 on p.119.

26) The estimate for ethnolinguistic components of the population of the beginnings of Khabur Ware Period 2 may be made on the basis of personal names textually recorded at Chagar Bazar. It may also reflect the composition of the population in the north of Khabur Ware Period 1 to some extent. In the Chagar Bazar texts found in 1936, 26 personal names were identified and ethnolinguistically distinguished: 12 ordinary Akkadian and doubtful names, 8 Hurrian names, 3 Amorite names, 1 Sumerian name, 1 name known under the dynasty of Agade, and 1 name which has a reminiscence of the Cappadocian tablets [Gadd 1937: p.183]. In the texts found at Chagar Bazar in 1937–38, Akkadian names predominate, and the remainder consist chiefly of Amorite and Hurrian names which are in the proportion of about 5 to 6 [Gadd 1940: p.34]; this has been re-examined by Stephanie Dalley, who shows that, of the total number of the names (476), 32.3% are Akkadian, 15.5% are Amorite, and 20.6% are Hurrian [1976: p.38]. However, it should be noted that all personal names do not necessarily reflect legitimate ethnic background.

27) Oates & Oates 1994: p.173. See also Oates & Oates 1993: pp.159–161 (in particular for an inscribed clay bottle stopper). For the consideration of Nagar/Nawar, see Matthews & Eidem 1993: pp.201–206, in which the existence of two cities called Nawar, a northern Nawar/Nabula (? Girnavaz Höyük) and a southern Nagar/Nawar (? Tell Brak), is hypothesized, with the re-examination of an inscribed seal impression once found at Tell Brak, which shows that the name of the seal owner is Hurrian, followed by the name Nagar.

28) From the Post-Akkadian to the Ur III period in southern Mesopotamian terms, Hurrian rulers in northern Mesopotamia are well known from epigraphic sources; Atal-šen, king of Urkiš and Nawar (from a bronze tablet), Kiklip-atal, king of Tukriš (from Hittite sources), Tiš-atal, king of Urkiš (from a white stone tablet), another Tiš-atal, king of Karaḫar (from a seal), and again another Tiš-atal, described as the “man of Ninua (Nineveh)” (from two Ešnunna tablets) [Wilhelm 1989: pp.9–12]. Accordingly, there is no reason to deny that Hurrian rulers were also present in early second millennium northern Mesopotamia.



obviously existed at this time.

The present evidence of the occurrence of Khabur ware in this period suggests that in the 'Afar plain and the Nineveh area, a stylistic change of pottery first occurred. Thus this new ceramic style, *i.e.*, Khabur ware, seems to have continued to diffuse steadily into the other areas until the beginnings of Khabur Ware Period 2. A piece of evidence from Tell Mozan probably suggests the presence of at least one level assigned to this period, 1, at this site<sup>29)</sup>. The presence, at Tell Billa and Chagar Bazar, of occupation assigned to the period 1 remains a possibility<sup>30)</sup>. These tempt us to assume that through frequent interpersonal contact, the prevalence of Khabur ware reached to some boundaries of the main Khabur ware distribution zone represented in Khabur Ware Period 2, at a date towards the end of Khabur Ware Period 1<sup>31)</sup>. We can further speculate that peoples of independent states in this zone must have had close ties each other, socially and economically. The four areas, other than the area around Aššur, of the zone, enjoying almost the same natural environment, can be marked as a region comprising groups of people sharing similar material expression, certainly from the Nineveh V period onwards. This must have formed the basis of the steady spread of a new style of pottery. In sum, in the four areas of the zone, the close social relationships between groups of people living cities, towns and villages which comprised independent states had been established before. Aššur, which took advantage of its position at the junction of natural routes, went towards merging with other socially-interrelated areas, and conducted the tin and textile trade, using routes passing in such areas. Not only caravans but also messengers/ envoys (*šiprū ša alim*) from Aššur to *karum* Kaniš passed through such routes. The Old Assyrian trade may have accelerated interpersonal contact between these areas.

The textile trade is a piece of evidence for contact between the north and the south<sup>32)</sup>. More convincing archaeological evidence for such contact may be reflected in a Khabur Ware Period 1 ceramic repertoire which will be confirmed through future excavations at some sites. In fact, southern Isin-Larsa and related types have been found at northern Mesopotamian sites, still in the earliest part of Khabur Ware Period 2<sup>33)</sup>. The Khabur ware fashion is that which formed locally under ceramic traditions of north Mesopotamia on which southern cultural influence was constantly exerted. Southern ceramic influence was merging into the Khabur ware fashion thereafter.

Problematical is the trade of copper which is, needless to say, an essential substance to make bronze. The Kültepe texts mention that copper was traded by both Assyrians and Anatolians, but that the trade was done only internally within Anatolia<sup>34)</sup>. In fact, the mention of having sent copper to Aššur is absent from the texts<sup>35)</sup> [Larsen 1976: p.91]<sup>36)</sup>. Mogens T. Larsen considers that copper may have brought directly from a source outside of central Anatolia to Aššur, possibly from the famous copper mines of Ergani in southeastern Turkey [1976: pp.91–92]. This presumption can now be connected with the occurrences of Khabur ware along the upper Euphrates, which is, however, a problem concerned with the next Khabur Ware Period, 2.

29) See Oguchi 1998: n.3 on p.119.

30) See also Oguchi 1998: n.3 on p.119.

31) In case a Khabur ware assemblage which is dated towards the end of Khabur Ware Period 1 is recovered from some site, the assemblage itself seems to be difficult to distinguish from that of Khabur Ware Period 2, unless diagnostic pottery for Khabur Ware Period 1 is included among it. This may be the reason why the number of sites which can be assigned to Khabur Ware Period 1 is limited.

32) In this respect, we must pay attention to the fact that some texts from Tell ed-Der, a suburb of ancient Sippar (Abu Habba), suggest the presence of a small trading outpost of Assyrian traders at Sippar [Walker 1980: pp.15–17].

33) See Oguchi 1997b: n.26 on pp.210–211.

34) Larsen 1976: p.91; Veenhof 1972: p.350. Cf. Orlin 1970: p.56.

There were other commodities traded, which were however not of significance; for example, they were wool, straw, hide, grain, oil and honey, which were traded locally [Orlin 1970: p.58].

35) It was also quite rare to transport bronze itself [Larsen 1976: pp.86–87].

36) However, a tablet from Tell ed-Der (IM 49309) mentions that a quantity of copper, delivered by several individuals, lay in the *babtum* of Aššur, thus suggesting that amounts of copper, brought from elsewhere, were re-exported to Babylonia [Leemans 1960: pp.101–102; see also D. Oates 1968b: p.34 with n.7].

### *A secondary distribution area of Khabur ware*

Dinkha Tepe, belonging to a different cultural sphere, is a site at which there may be a phase related to the latter part of Khabur Ware Period 1<sup>37)</sup>. In consideration of the facts that Khabur ware occurs most abundantly in Dinkha IV phases b-c and that a certain Isin-Larsa type occurs only in Dinkha phase b, together with an Isin-Larsa-related type similar to that of the early phase of level 1 at Chagar Bazar, it seems that there is a possibility that the earliest phase, a, of Dinkha IV falls in Khabur Ware Period 1, perhaps within the reign of the Assyrian king Puzur-Aššur II.

Given that the Old Assyrian tin trade was responsible for the introduction of Khabur ware at Dinkha Tepe<sup>38)</sup>, we can give an explanation for the occurrence of Khabur ware in the Ushnu-Solduz valley. At present, we can propose two sites as the places through which tin was brought from the east, *i.e.*, Afghanistan, to Aššur; Tell Shemshara in the Rania plain of Iraq and Dinkha Tepe in the Ushnu-Solduz valley of northwest Iran. Tell Shemshara was known as Šašrum in the Ur III period and was later called Šušarra, where was a depot for tin in the time of Šamši-Adad I<sup>39)</sup>. The Rania plain was part of the mountainous territory of the Zagros, where such Zagros groups as the Turukkeans, the Lulleans, the Gutians and the Elamites managed to maintain their independence. Some mountaineers would have also occupied the mountainous area between the Nineveh area and the Ushnu-Solduz valley. The important fact is that the Rania plain and the Ushnu-Solduz valley are linked together by a route running via Sardasht and Kaneh [see Levine 1974: Fig.1 on p.101]. The possibility also exists here that there may have been at least one trading outpost in the Ushnu-Solduz valley<sup>40)</sup>. Since the shortest route for passing through such a mountainous area must have been more attractive for Assyrian traders, a route along the Greater Zab river to the Kalishin pass, *i.e.*, to the Ushnu-Solduz valley, seems to have much used at this time. Further, this assumption enables us to speculate that in the course of Assyrians' passing through this particular tin route, a trading outpost may have been established in the Ushnu-Solduz valley, perhaps towards the end of the Kültepe *Karum* II period, and that like the Anatolians, people living in the valley must have accepted the transit of Assyrian traders and their residence, and in return, Assyrian traders must have brought profit to them in various ways<sup>41)</sup>. Needless to say, the location of Dinkha Tepe, on which southern Mesopotamian ceramic influence was certainly exerted, is much nearer to the main Khabur ware distribution zone than the location of Kültepe-Kaniš; thus the Khabur ware fashion must have been easy to diffuse into the Ushnu-Solduz valley: accordingly, the introduction of Khabur ware at Dinkha Tepe, *i.e.*, in the Ushnu-Solduz valley, is considered earlier than the appearance of Khabur ware at Kültepe, where it falls within Khabur Ware Period 2 on epigraphic ground. The fact that Dinkha Tepe has yielded a quantity of Khabur ware suggests that Khabur ware was manufactured at the site itself; this is another matter of consideration. The life of Assyrians inhabiting trading outposts hypothesized in the Ushnu-Solduz valley may have differed from that of the Assyrians of *karum*- and *wabartum*-settlements in Anatolia, who, though maintaining there their own customs in writing, religion, and law, used domestic household commodities including pottery, and built their residences by using Anatolian material techniques.

37) See Oguchi 1998: n.3 on pp.119–120.

38) See Hamlin 1971: pp.306–307 and *idem* 1974: p.132.

39) See Laessøe 1959: p.85ff.

40) Hamlin 1971: pp.306–307; Hamlin 1974: p.132; Kramer 1977: p.105.

In re-examining the British Museum's materials from Aurel Stein's soundings/surveys and the details of Wolfram Kleiss's surveys, Stephan Kroll has recently reassessed sites probably yielding Khabur ware in the Ushnu-Solduz valley [1994]. According to Kroll, there are four Khabur ware-related sites other than Dinkha Tepe and Hasanlu [Kroll 1994: pp.164–165]. This further raises the possibility that there was at least one trading outpost in the Ushnu-Solduz valley.

41) Cf. Veenhof 1995: p.863, suggesting that caravans which brought tin from Afghanistan were not organized by the Assyrians themselves. If so, however, the occurrence in quantity of Khabur ware at Dinkha and the existence of other sites yielding Khabur ware in the Ushnu-Solduz valley are not well explicable.



## (2) Khabur Ware Period 2 (ca. 1813–1700 B.C.)

This period may be divided into three stages from a historical point of view; Stage 1 (ca. 1813–1781 B.C.), Stage 2 (ca. 1781–1761 B.C.) and Stage 3 (ca. 1761–1700 B.C.). This is also required for convenience of explanation in the present article. Stage 1 is represented by the reign of Šamši-Adad I, and Stage 2, by the period between the death of Šamši-Adad I and the defeat of Mari by Ḫammurabi of Babylon. Stage 3 is the remainder of the period 2.

At this time, the population of northern Mesopotamia consisted largely of Akkadians, including Amorites and Hurrians, as suggested through the Chagar Bazar texts representing a scene in the period of Stage 1<sup>42</sup>. The Tell al-Rimah area A temple texts reveal the high percentage of the presence of Hurrians [Dalley 1976: p.38]. But these Hurrians, composed largely of male names, may have possibly been those who, belonging to various strata of society, worked for, and served in, the temple itself [cf. Sasson 1979: pp.3–4]. The “Iltani” archive at Rimah, probably marked as representing a scene in the period of Stage 3, shows that, of the total number of the names (177), 35.0% are Akkadian, 26.5% are Amorite, and 13.8% are Hurrian [Dalley 1976: p.38]. The Hurrians attested in the “Iltani” archive clearly belonged to various strata of society including a stratum of menial male and female workers working in the palace of Tell al-Rimah (Karana/Qaṭara<sup>43</sup>). This may be a piece of evidence for Hurrians’ having infiltrated into strata of society. The Tell Leilan texts from the palace of the lower town area, which represent a scene in the period of Stage 3, shows that the population of Hurrians at Šeḫna (= Šubat-Enlil) did not grow, in addition of the fact that most of the local kings around Šeḫna bore Amorite names [Eidem 1987–88: p.115]. In the period of Stage 3, Amorite rulers still played important roles in the politics of areas in the main distribution zone of Khabur ware, although some Hurrian rulers were probably present<sup>44</sup>.

The activities of West Semitic nomads and semi-nomads were conspicuous at this time. Such mobile pastoral people are known as tribal groups consisting of the people called the Iaminites (*Iamina/Iaminū*), the Sutians (*Sutū*), the Haneans (*Hana/Hanū*), the Rabbeans (*Rabbayū*), and the Sim’alities (*Sim’al*)<sup>45</sup>. As tribal names, Iamutbal, Numḫa, Idamaras/Idamaraz and Ia’ilanum are also known.

The Iaminites, usually referred to as the Benjamins (*Banu/Binu-Iamina*), were widely scattered over northern Mesopotamia, Syria and southern Mesopotamia<sup>46</sup>, and formed the confederation of a number of tribes, among which were four important tribes known as Ubrabu, Iaḫruru, Amnanu and Iariḫu<sup>47</sup>. One believes that they played in the past an important role of West Semitic infiltration into southern Mesopotamia [Gelb 1961: p.38]. They frequently made raids on towns, as inferred for example from a date-formula of Zimri-Lim which recorded his having defeated Benjamins at Saggartum (? Tell Abu Ha’it/Tell Namliya)<sup>48</sup>. The Sutians, comprising several tribes, dominated mainly the Syrian

42) See note 26 in the present article.

43) D. Oates considers that the identification of Tell al-Rimah with ancient Karana can be fully established [1976: p.xi; 1982: p.89]. S. Dalley, though supporting D. Oates’s view [1976: pp.35–36], states that “the identification of this site is still not quite conclusive” [1984: p.xix]. Cf. Eidem 1989: p.67 with n.2 and p.76ff., suggesting that Rimah was Qaṭara; for the most recent argument, however, see the new Rimah report (pp.18–20) referred to in the postscript below.

44) E.g. see Goetze 1953: p.67, illustrating the presence at Eluḫat of a Hurrian ruler named Šukri-Tešub (ARMT II:109).

45) In addition, the Ḫabiru/Ḫapiru are also known, but may be regarded as a general designation for nomads: in the Mari texts, a Sūtian and men belonging to the tribe of Iamutbal are designated as Ḫabiru [Kupper 1973: p.27].

46) For example, they were active around Mari, Terqa and Jebel Bishri, and particularly in the area of Harran, and were also present in the lands of Ḫalab, Qatna and Amurru, and around Sippar and Uruk in southern Mesopotamia [Gelb 1961: p.38 and p.41; Malamat 1971: p.15; Kupper 1973: p.25]. From this, the present writer is inclined to imagine the presence of some nomadic tribes behind Ila-kakkabi and his family including Šamši-Adad I, and further to guess that during their exile in Babylonia, Ila-kakkabi and his family may have received support from nomadic tribes (see also note 16 in the present article) [cf. Villard 1995: p.873]. This also leads the present writer to a guess about the later activities and fate of Aminu, the elder brother of Šamši-Adad, and about circumstances for the establishment of Šubat-Enlil; Aminu, on the other hand, may have fled into the upper Khabur basin and, receiving support from some nomadic tribes, may have succeeded in getting a foothold in the area, which may have led his brother Šamši-Adad to the later establishment of Šubat-Enlil at Tell Leilan.

47) Gelb 1961: p.38 and p.41; Malamat 1971: p.15; Kupper 1973: p.25.

48) Kupper 1973: pp.25–26.



desert and were severe plunderers for settled people<sup>49</sup>), as known from a letter from Iasmah-Adad to Šamši-Adad concerning some Sutiens' attack on the town of Iabliya and 2000 Sutiens' march towards Qatanum (Qatna)<sup>50</sup>. The Haneans were not only nomads moving between encampments but also certain semi-nomads living in villages and towns; they were active in the area extending between the upper Khabur and the Balikh, and particularly in the area of Terqa; they were often employed in the service of the Mari palace in the time of Iasmah-Adad, viceroy of Mari, and as soldiers by Zimri-Lim, king of Mari<sup>51</sup>. The Rabbeans, called brothers of the Benjaminites, controlled an urban-tribal state in the land of Rabbum on the northern fringe of the Syrian desert, *i.e.*, on the right bank of the middle Euphrates [Astour 1978: pp. 1–2]. They may have belonged to the Benjaminite confederation. The land of Rabbum faced the lands of Amnanum and Ubrabum on the left bank of the Euphrates, where other urban-tribal states were controlled by Benjaminite tribes<sup>52</sup>. A letter from Šamši-Adad to Išji-Adad of Qatanum in the Mari texts tells us that Šamši-Adad organized a coalition against Sumu-epuḫ of Iamḫad, in which not only the rulers of Karkamiš, Ḫaššum and Uršum but also the ruler of the Rabbeans (ARMT I:24). This shows that the Rabbeans formed an alliance with Šamši-Adad I, which was an important factor in Šamši-Adad's political and/or economic success in the west [see also Oguchi 1997b: pp.209–210]<sup>53</sup>. Finally added to these tribal groups are the Sim'alites (*Banu/Binu-Sim'al*), who are regarded as a tribal group from which the "Lim dynasty" of Mari derived and which originated in the land of Idamaras<sup>54</sup>. It has been most recently assumed that the Sim'alites, *i.e.*, the *Banu/Binu-Sim'al* ("sons of the left/north"), and the laminites, *i.e.*, the Benjaminites ("sons of the right/south"), were two branches of the Haneans [Malamat 1989: n.28 on p.35].

On the other hand, the Iamutbal tribe is known to have been in the Jazira and in the area east of the Tigris; the Numḫa tribe is known to have migrated seasonally along the middle Euphrates and in the fringes of the upper Khabur basin; the Idamaras tribe is known to have been present in the area around Ašnakkum, certainly within the upper Khabur basin<sup>55</sup>. The Ia'ilanum tribe is known to have been also in the area east of the Tigris<sup>56</sup>. There seems to be no doubt that these West Semitic nomads and semi-nomads played a role in history at this time.

#### ***The main distribution zone of Khabur ware***

In the beginnings of Khabur Ware Period 2, the use of Khabur ware seems to have become prevalent in the five areas of the main Khabur ware distribution zone (see also above). Although these areas divided into a number of separate city-states containing linguistically interrelated or different peoples, the settled populations of the areas were closely interrelated in respect of their sharing almost the same material expression, as illustrated with Khabur ware. On the other hand, however, southern Mesopotamian culture was steadily infiltrating into these areas. This is supported by the occurrence of southern Mesopotamian or southern-related types at sites in these areas and at Dinkha Tepe, a site outside of the main distribution zone of Khabur ware, and by the rapid adoption of the Old Babylonian dialect in northern Mesopotamia. In other words, Aššur itself, which attained economic development and had an economic advantage over other states, did not exercise any particular

49) Gelb 1961: p.38; Kupper 1973: p.26.

50) Laessøe 1963: p.62.

51) Gelb 1961: pp.36–37; Laessøe 1963: p.62; Kupper 1973: p.27.

In addition, it is known that in the course of the consolidation of his state Mari, Iaḫdun-Lim defeated and subdued tribes of the Haneans, and that he assumed the title of "king of Mari, and the land of Ḫana", as Zimri-Lim did later [e.g. Gelb 1961: p.37 or Astour 1978: p.1].

This tempts the present writer to speculate that behind the "Lim dynasty" of Mari were the Haneans, while behind Šamši-Adad I were the Benjaminites (laminites) and their "brothers", the Rabbeans (see also note 46 in the present article).

52) Astour 1978: pp.1–2.

53) See also notes 46 and 51 in the present article.

54) Malamat 1989: n.23 on p.10.

55) D. Oates 1968b: p.38; Kupper 1973: p.26; Hintz 1973: p.263; Beitzel 1984: p.30 and pp.33–34. For the Idamaras region, regarded as denoting the upper Khabur basin, compare Kupper 1973: p.9 with Astour 1992: p.32.

56) Laessøe 1963: n.2 on p.147.

influence over them, not only politically but culturally. However, Aššur played a role in introducing southern Mesopotamian culture to the north and in giving profit to other states when Assyrian traders passed through cities, towns and villages. Needless to say, tin was of course in demand at other states.

We can now speculate about the extension of power of the Amorite king Šamši-Adad I. His first aim must have been to gain the wealth accumulated at Aššur through the tin and textile trade during the period of Kültepe *Karum* II. Šamši-Adad himself must have been also convinced that the tin trade would produce a large profit hereafter. Naturally this would have led him to secure trade routes. Secondly, Šamši-Adad must have thus aimed to control the areas in which traditional trade routes ran (see below). The areas were those which made it easy to use slow-moving pack animals, *i.e.*, donkeys, and which formed a society comprising closely-related people in respect of material culture. In particular, such areas as were economically based on rain-fed agriculture were important for donkey caravans; they are indeed marked as the core areas of the main distribution zone of Khabur ware. After taking control of an area, Šamši-Adad could further collect necessary material for his troops, and could also levy additional troops, from the settled people of the area.

The wealth of Aššur would have therefore become an economic basis for Šamši-Adad's first campaigns; and through the tin trade conducted by Assyrian traders, under the control of Šamši-Adad, a fund for his successive campaigns would have been provided. In this respect, the position of Ekallatum (≙ Tell Haikal<sup>57)</sup>) was important for Šamši-Adad who spent a considerable part of his life on campaigns and resided in Šubat-Enlil: it occupied a position for watching Aššur, as well as for a tin route via Šušarra which became the easternmost outpost of Šamši-Adad's kingdom. There was of course adequate reason for his elder son Išme-Dagan's being installed as viceroy of Ekallatum. Tin, as well as copper, was also necessary in large quantities for manufacturing weapons for Šamši-Adad's troops<sup>58)</sup>. Probably, tin was in great demand at this time for his campaigns, and was the most important trade commodity producing a large profit. We can thus assume that this would have required the exploitation of a new tin route, which may have been a route linking the Rania plain directly with Afghanistan. On the other hand, a tin route via the Ushnu-Solduz valley and along the Greater Zab river was probably also much used; and another route linking the Ushnu-Solduz valley with the Rania plain via Kaneh and Sardasht must have been also used.

The establishment of Šubat-Enlil (Tell Leilan) was also important for Šamši-Adad: from the resident capital, he could control fertile agricultural land, *i.e.*, the upper Khabur basin, marked as one of the core areas, economically based on rain-fed agriculture, of the main distribution zone of Khabur ware. The political stability immediately after conflict and the centralized political system established by Šamši-Adad may have allowed market systems to develop in the areas based on rain-fed agriculture. This must have also accelerated the spread of Khabur ware. During Šamši-Adad's reign, Khabur ware thus reached the acme of fashion within the certain boundaries of the main distribution of Khabur ware. The main distribution zone provided a political and economic nucleus for Šamši-Adad's kingdom. Under such a situation, the economic differences between the areas of the zone may have dissolved, trending towards a balance. Šamši-Adad's preference for Babylonian culture must have also given a stimulus to the introduction of southern Mesopotamian culture in the north. This can be illustrated with the appearance of a hybrid between southern and northern ceramic traditions, such as the "band-painted, eversible-necked/rimmed shoulder cup" type of Khabur ware<sup>59)</sup>.

Furthermore, Šamši-Adad had a political and/or economic interest in the western region. As shown in a text appearing on stone tablets from Aššur, Šamši-Adad claimed that he had erected his stele in the

57) Ekallatum has been regarded as being identified with Tell Haikal, north of Aššur but on the east bank of the Tigris, although it had been formerly believed that it was Tell ed-Dahab, near the confluence of the Tigris and the Lesser Zab, south of Aššur.

58) See Laessle 1959: p.91.

59) For this type of Khabur ware and discussion about it, see Oguchi 1997b: Fig. 1: 22, 24, 28, and p.198, p.203 and n.26 on p.211.



land of Lebanon<sup>60</sup>). In this sense, his conquest of Mari was significant: from Mari ran traditional trade routes towards the western region. He further established the fortified town of Šubat-Šamaš, perhaps near to or not far from Tuttul (Tell Bi'a)<sup>61</sup>. We can now give possible explanations for the occurrences of Khabur ware in the west, from aspects of Šamši-Adad's interest in the western region as well as of his securing trade routes towards Kaniš. Western ceramic influence was also exerted on Khabur ware<sup>62</sup> through Šamši-Adad's political and economic activities in the west.

After Šamši-Adad's death, the main distribution zone of Khabur ware politically fell into confusion. The economic balance, established during Šamši-Adad's reign, between the areas of the zone may have been a factor of the immediate appearance of independent states. Despite such a situation, the florescence of Khabur ware continued within the main distribution zone. On the other hand, Mari under Zimri-Lim became a transit trade centre, and the trade saw florescence. The Old Assyrian trade trended towards a decline. The Turkkians, which came into power, probably hampered traffic on the tin route via Šušarra.

It was Ḫammurabi of Babylon that cut a prominent figure among the powerful states at that time by an adroit alternation of warfare and diplomacy. Babylonian cultural influence was further exerted over the north through his vassal-states in the main distribution zone of Khabur ware. After Ḫammurabi of Babylon, the main distribution zone of Khabur ware became the place of a conflict of interests between Babylon under Samsuiluna and Iamḫad under Ḫammurabi I<sup>63</sup>. Khabur ware continued in use in states which organized groups of vassal-states and allies around the most powerful states within the main distribution zone of Khabur ware. Babylonian ceramic influence, as well as western ceramic influence, was occasionally exerted over the main distribution zone of Khabur ware. A hybrid between southern and northern ceramic traditions, *i.e.*, the "straight/concave-sided beaker" type of painted Khabur ware, thus appeared at the beginning of the succeeding period, *i.e.*, Khabur Ware Period 3 (*ca.* 1700–1550 B.C.)<sup>64</sup>.

#### **Secondary distribution areas of Khabur ware**

The isolated occurrences of Khabur ware at "peripheral" sites certainly show that in some level, there was contact between the main distribution zone and the secondary distribution areas of Khabur ware. There is no doubt that there was much closer and more frequent contact between ethnolinguistic peoples living within the main distribution zone of Khabur ware, as briefly shown above. The important

60) See Grayson 1987: p.50 or Luckenbill 1989: p.17.

The same text mentions that Šamši-Adad received tribute from the kings of Tukriš and the king of the "Upper Country". The term "Upper Country" seems to denote a geographical unit including Ebla. Of interest is the fact that Tukriš was a state under a Hurrian ruler in the later third millennium B.C. (see note 28 in the present article). Were the kings of Tukriš Hurrians at that time?

Further for Šamši-Adad's campaign into Lebanon, see also and *cf.* Villard 1995: p.881.

61) H. Lewy 1958: pp.1–5.

62) The similarities between Khabur ware and Syro-Cilician painted pottery have so far caused confusion in distinguishing between them. In particular, Syro-Cilician painted bowls are to some extent similar to Khabur ware bowls in shape. The further point is that unpainted, high ring-based/pedestalled bowls, which present similar appearances to Syro-Cilician footed/pedestalled bowls, occur, often associated with Khabur ware. Western ceramic influence on north Mesopotamia is thus presumable. This particular problem will be discussed in a future separate article.

63) This is now inferred from tablets found at Tell Leilan (Šubat-Enlil/Šeḫna). Among the Tell Leilan texts from the lower town area, there is a letter from Ḫammurabi to Tillaya alias Till-abnu, a ruler of Šeḫna, showing that Till-abnu was a vassal king under Ḫammurabi [Eidem 1987–88: p.114]. This Ḫammurabi is attested as king of Iamḫad by another letter, from a king of a neighbouring state to Till-abnu, in which the king of Ḫalab, the capital of the Iamḫad kingdom, was referred to [Eidem 1987–88: p.114]. Four other letters from Ḫammurabi (I), king of Iamḫad, were also found, including a letter to Mutiya [Eidem 1987–88: p.115; *idem* 1991: p.126]. From these matters, Jesper Eidem suggests that the powerful state of Iamḫad gradually gained loose control over the upper Khabur basin, probably in intermittent conflict between Iamḫad and Babylon, and points out that such a conflict is exemplified with the 22nd year's campaign of Samsuiluna of Babylon, which may not have been more than a raid [1987–88: p.115; see also 1991: p.127 and p.130]. Chronologically, Ḫammurabi I of Iamḫad is known to have succeeded his father Iarim-Lim (I) during the second half of the reign of Ḫammurabi of Babylon, as a synchronism provided by the Mari archives [Rowton 1970: p.210 and p.214]. Strictly speaking, the date of his accession to the throne is at present considered as falling in the last years of Zimri-Lim of Mari [Eidem 1987–88: p.114; *idem* 1991: p.126].

64) For the "straight/concave-sided beaker" type of Khabur ware, see Oguchi 1997b: Fig.1:26,27,34, with discussion on p.198, p.203 and n.26 on p.211. See also the postscript below.



point is that certain economic differences lay between the main distribution zone and some secondary distribution areas in respect of the presence or absence of natural resources such as metals, woods, *etc.* For example, it is well known that the Akkadian king Sargon, probably seeking resources, conquered the “Cedar Forest” (the Amanus mountains) and the “Silver Mountain” (the Taurus range)<sup>65</sup>. An epic called the “King of Battle (*šar tamḥarim*)”, a text found in Egypt with the Amarna letters, tells us that Sargon marched into Anatolia, *i.e.*, the city of Puruṣḥanda<sup>66</sup> (= Buruṣḥattum, where an Old Assyrian *karum* was seated), possibly located south or southeast of Tuz Gölü (the Salt Lake). But this epic is no longer credited<sup>67</sup>. At any rate, there is no doubt that Anatolia was a rich repository of natural resources which made up the lack of resources in Mesopotamia. It is also well known, from the foundation inscription of the Šamaš temple at Mari, that Iaḥḏun-Lim of Mari made an expedition to the “Cedar and Boxwood Mountain” (the Amanus mountains) and to the Mediterranean coast, and then that he obtained there several kinds of wood<sup>68</sup>.

With this point in mind, possible explanations for the occurrences of Khabur ware in the secondary distribution areas of Khabur ware can be now given [see Oguchi 1997b: pp.208–211]. The Khabur Ware Period 2 “peripheral” sites yielding a little Khabur ware or yielding it to some extent in quantity, which should be now marked as those outside the main distribution zone of Khabur ware, are (a) Nuzi, (b) the Rania plain site — Tell Basmusian, (c) the Ushnu-Solduz valley sites — Dinkha Tepe, Hasanlu, Tepe Gondavelah, Kulera Tepe, Mohammad Shah Tepe, Gird-i-Khusrau, *etc.*, (d) the middle Euphrates sites — Mari, Terqa and ‘Usiyeh, (e) the lower Khabur valley sites — Tell Fadghami and Tell Ta’ban, (f) Tell Bi’a, (g) the middle and upper Balikh valley sites — Tell Hammam et-Turkman, Tell Sahlan, Sultantepe and Aşağı Yarımaca, (h) Ebla, (i) Alalakh, (j) the İslahiye-Gaziantep-Nizip region sites — a site around Nizip, Tilmen Hüyük, Gedikli Hüyük and Sakce Gözü, (k) the upper Euphrates sites — Lidar Höyük and İmikuşağı, and (l) Kültepe-Kaniš<sup>69</sup>. Except for some sites like Mari and ‘Usiyeh, these occurrences of Khabur ware may be explained in terms of the Old Assyrian tin trade as well as Šamši-Adad’s political and/or economic activities, often connected with his military activities also<sup>70</sup>. The points, concerned with the present article, are that in the Rania plain occurs Khabur ware in the period 2 and not in the period 1; that the occurrence of Khabur ware at Dinkha Tepe falls not only in the period 2 but also possibly in the latter part of the period 1; that in the period 2, Khabur ware occurs, on the one hand, at Tell Bi’a, Ebla and Alalakh, and, on the other hand, in the İslahiye-Gaziantep-Nizip region, certainly in the form of avoiding Aleppo-Ḥalab; and that in the period 2, it also occurs along the upper Euphrates at Lidar Höyük and İmikuşağı, the latter of which is situated near Ergani, a source of copper. These points have weight in inferring trade routes themselves and changes of such routes from the period 1 to the period 2, from the evidence of Khabur ware being distributed beyond the core of prevalence.

### Considerations of trade routes

- (1) The period known as “Kültepe-Kaniš *Karum* II” (Fig. 1)

A principal trade route used by the Assyrian traders in this period<sup>71</sup>) has been proposed by Albrecht

65) Bottéro 1971: p.324; Gadd 1971a: p.425.

66) Gadd 1971: pp.426–427.

67) J. Oates 1986: p.34.

68) Malamat 1971: p.9. For the text, see A.L. Oppenheim 1969: pp.556–557.

69) For assessments of evidence for the occurrences of Khabur ware at these sites, see Oguchi 1998: p.120ff. For the secondary distribution of Khabur ware, see Oguchi 1997b: Fig.2 or *idem* 1998: Fig.1.

70) See Oguchi 1997b: pp.208–211. The Khabur ware of Mari is dated from the time of Zimri-Lim. As for ‘Usiyeh, interpretation depends on whether Rapiqum, Ḥarbe and Iabliya, towns along the Euphrates downstream of Mari, belonged to the territory of Šamši-Adad’s kingdom.

71) In addition, it should be borne in mind that there were “smugglers’ routes”. We know that caravans organized by Assyrians paid a kind of road-tax to local rulers when caravans passed through their territories [Larsen 1976: p.93], and that local rulers supervised trade routes

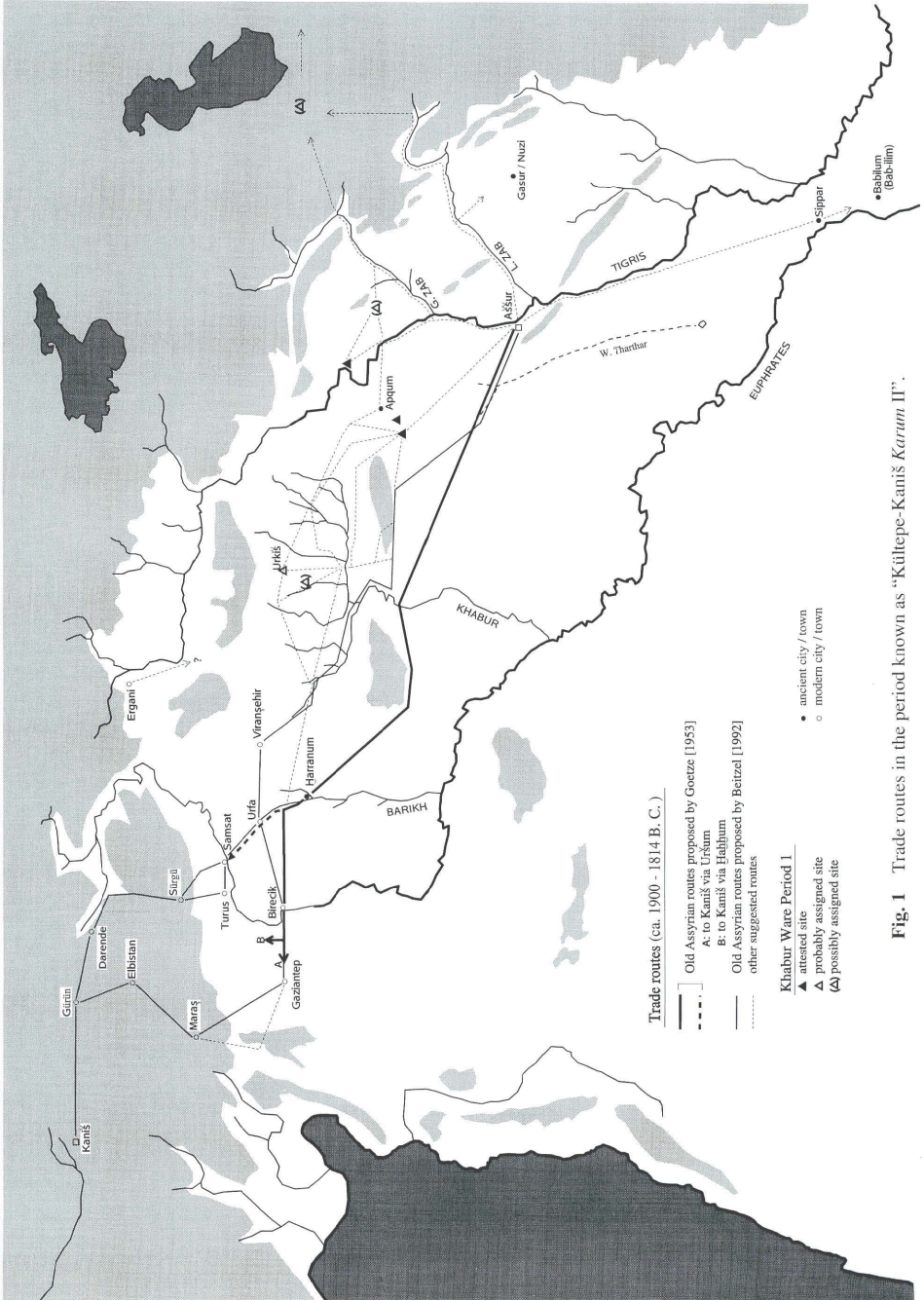


Fig. 1 Trade routes in the period known as "Kultepe-Kanis Karum II".



Goetze on the basis of the Kültepe texts [1953: p.64ff.]. He suggests that the main route ran from Aššur northwestwards along the *wadi* Tharthar, then west through the area south of Jebel Sinjar and across the lower Khabur river near Tell 'Arban (also called Tell 'Ajajeh/'Agaga-West), and, skirting the Jebel 'Abd al-'Aziz on its southern side and going towards Harran (Harranum), reached to an Euphrates crossing, most likely at Birecik, and that the route from the Euphrates crossing was taken towards either *karum* Uršu(m) or *karum* Ḥaḥḥum [*ibid.*]. This is a route running as closely as possible along the edge of the rainfall zone. With regard to this route, David Oates suggests that caravans may have found it more profitable to pay tolls to nomad tribes than to meet unpredictable demands of settled people [1968b: p.36 with n.1 and p.37]. On the other hand, Barry J. Beitzel has recently proposed a more northerly route [1992: pp.43–45]. Taking geographic and documentary evidence into consideration, he concludes that the Assyrian caravans proceeded west from Aššur to the upper Tharthar and then along the *wadi*, passed along the southern edge of Jebel Sinjar, and reached to the lower Khabur, from which they turned north to Hasseke and northwest to Ras al-'Ain and Viranşehir, and then turned west to Urfa, taking the alternative routes of crossing the Euphrates either at Samsat or at Birecik [Beitzel 1992: p.45 and the map on p.44]. In the case of the Euphrates crossing at Birecik, they passed through Maraş and Elbistan, and arrived at Kaniš; in the case of the Euphrates crossing at Samsat, they took a route via Sürgü, arriving at Kaniš [*ibid.*].

However, the use of donkeys as pack animals in the Old Assyrian trade may suggest that caravans traversed the areas in which adequate water and forage could be supplied to the slow-moving donkeys [*cf.* D. Oates 1968b: n.1 on p.36]. Hence it seems that routes frequently used by the Assyrian traders were in the 'Afar plain and in the upper Khabur basin<sup>72)</sup>, the areas which were inhabited by peoples sharing similar material expression and which were connected by three principal hollow ways recently suggested by Tony J. Wilkinson<sup>73)</sup>.

On the other hand, the main tin route from Afghanistan via the Ushnu-Solduz valley must have run along the Greater Zab river, which may have turned on the way to Ninuwa (Nineveh) or may have run directly to a place near the confluence of the Tigris and the Greater Zab, reaching to Aššur.

There must have been also intricate routes connecting independent states which traded locally each other; the Khabur ware fashion must have spread through such routes. The Assyrian trading activities, which also brought profit to other states in the main distribution zone of Khabur ware and enlivened their economy, would have accelerated the spread of Khabur ware. In this connection, it should not be overlooked that tin was naturally in demand at other states.

(2) The period known as “Kültepe-Kaniš *Karum* Ib” (Fig. 2)

Specific geographical routes at this time is generally discussed on the basis of the so-called “Old Babylonian itinerary” texts, which consist of two tablets preserved in the Oriental Museum of the University of Illinois at Urbana and another tablet known as a more complete version of the itinerary and found in the Yale Babylonian Collection [Goetze 1953: p.51ff.; Hallo 1964: p.57ff; Goetze 1964: p.114ff.]. These texts, which describe a round-trip journey from Larsa to Emar, are usually dated to the reign of

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and provided guard-services in return [Orlin 1970: p.153]. Thus, the safe of the caravans on journeys was to some extent assured, although trade routes were not always safe and secure. At any rate, the particular mention of robbery is absent in the Kültepe texts [D. Oates 1968b: p.36; Larsen 1976: p.93]. In fact, there were various taxes, duties and fees in the Old Assyrian trade [see Veenhof 1972: p.219ff.]. It is a fact that Assyrian traders gained great profits from the trade even under the conditions of being bound by various duties. It is also a fact that for shirking the payment of taxes which reduced the profits of trade, on the other hand, smuggling (*pazzurum/pazzurtum*) was made by taking probably unusual and difficult routes [Veenhof 1972: pp.305–306; Larsen 1976: p.156].

72) In this respect, the proposal that Apum, through which an Old Assyrian trade route passed [Goetze 1953: p. 67], was the name of the area around Tell Leilan (Seḥna) [*e.g.* see Whiting 1990a: p.575] is a matter of consideration. In addition, the location of Tell Brak is important, because it lies at an opening between the marshy land along the *wadi* Radd to the east and a field of volcanic rock deriving from the extinct volcano of Kaukab, *i.e.*, at a crossing of routes linking the upper Khabur basin with the Sinjar-'Afar plain, Aššur and the farther south [D. Oates 1977: p.236].

73) Wilkinson 1990: p.51.



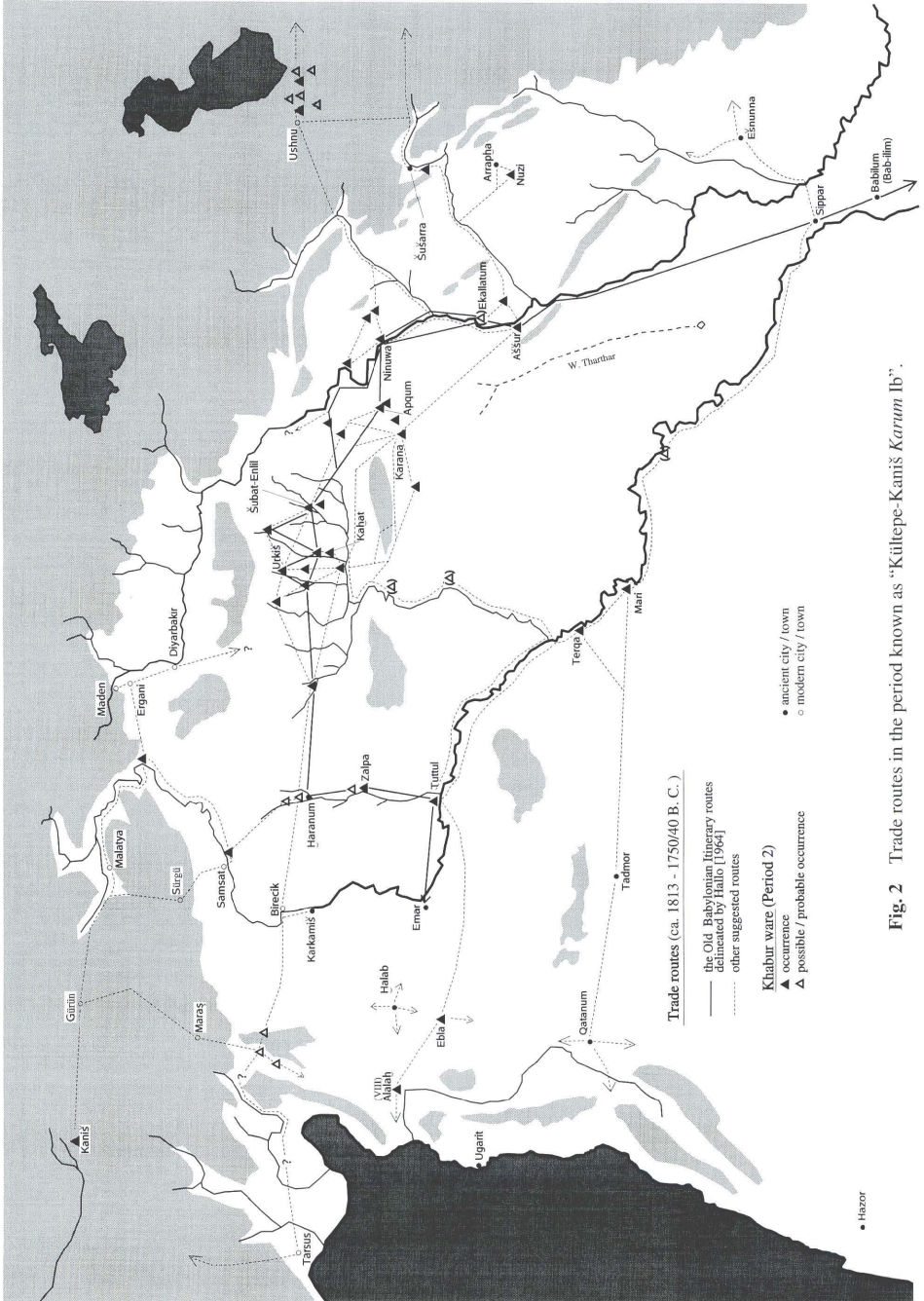


Fig. 2 Trade routes in the period known as "Kultepe-Kamiš Karum Ib".

Rim-Sin of Larsa<sup>74</sup>). According to William W. Hallo<sup>75</sup>), the itinerary route ran from Aššur to Ekallatum (≙ Tell Haikal), then stretched north along either bank of the Tigris, and either continued along the Tigris to Šubat-Enlil or turned on the way west to Apqum ša ʿIM (≙ Tell Abu Maria) and then northwest to Šubat-Enlil (Tell Leilan), from which it traversed the upper Khabur basin via Ašnakkum (? Chagar Bazar<sup>76</sup>) or Urkiš (Tell Mozan<sup>77</sup>), reaching Ḥarranum (Harran). From Ḥarranum, the route turned south to Tuttul (Tell Bi‘a) along the Balikh, and then turned west, reaching to Emar (Meskene Qadime).

This suggests that the route from Aššur to Ninuwa (Nineveh) was one of the main routes at this time. It seems probable that the Aššur-Nineveh route frequently used ran along the west bank of the Tigris. This route seems to have turned northeast at a place near the junction of the Tigris and the Greater Zab, thus trending towards the Ushnu-Solduz valley along the Greater Zab. It is most likely that a route from Nineveh to the east, *i.e.*, the Ushnu-Solduz valley, was also frequently used. These routes would have been trunk roads through which tin was brought to Assyria. These tin routes continued to be much used until the end of the 17th century B.C. In the time of Šamši-Adad I, also much used was another tin route via the Rania plain, in which Šušarra (Tell Shemshara) lay as a local administrative center and Tell Basmusian, perhaps as a settlement of Assyrian traders. This route along the Lesser Zab to Šušarra was probably linked by the route running between the Rania plain and the Ushnu-Solduz valley. However, the increasing demand for tin in the time of Šamši-Adad I (see above) tempts us to assume that a route from the Rania plain directly to Afghanistan was newly exploited. The route via the Rania plain diverged to Ekallatum and to Aššur. Further it would have been linked at the ancient town of Qabra (modern Altun Köprü), *i.e.*, at the crossing of the Lesser Zab, by a route towards Nuzi and Arrapha (modern Kirkuk). After the collapse of Šamši-Adad’s kingdom, however, the tin route via Šušarra was not used: as noted above, the Turckians came into power in the mountainous area.

The Nineveh-Apqum-Šubat-Enlil route was also much used, as attested by the “Old Babylonian itinerary” texts. This route probably passed on the northerly hollow ways among the three principal hollow ways suggested by Wilkinson<sup>78</sup>). The southerly hollow way seems to have linked the Tell ‘Afar plain with Tell Brak, located at an important opening of the upper Khabur basin<sup>79</sup>); this route, connecting Karana (≙ Tell al-Rimah) and Aššur on the other hand, appears to have run along the edge of the marshy area of the *wadi* Radd, *i.e.*, in the form of avoiding the marshy area. There appear to have been routes traversing the area south of Jebel Sinjar and trending towards Tell Brak (≙ Nagar<sup>80</sup>). These routes seem to have been also trunk roads traditionally used from earlier times. Both the Šubat-Enlil (Tell Leilan) route and the Tell Brak route connected at Urkiš (Tell Mozan). The Leilan-Mozan route thus led to Ras al-‘Ain on the outskirts of which is Tell Fakhariyah. Another route via Tell Brak also led to Ras al-‘Ain. Furthermore, a route to Ras al-‘Ain via Ašnakkum (? Chagar Bazar) must have been also used.

From Ras al-‘Ain, one of the Old Assyrian trade routes of the Kültepe *Karum* Ib period passed through the upper Balikh valley and the Nizip-Gaziantep-İslahiye region, reaching to Kaniš via Maraš and Gürün. Perhaps, a route through the so-called Cilician Gate may have been also used. From the

74) Hallo 1964: p.85; Gerstenblith 1983: p.10.

75) Hallo 1964: pp.70–83 and see Figs.5–6.

76) One suggests that Chagar Bazar, on the *wadi* Dara, a branch of the *wadi* Khanzir flowing into the *wadi* Jaghjagh which is the only perennial tributary of the Khabur river, may perhaps be identified with ancient Ašnakkum, referred to in the Mari texts and the “Old Babylonian itinerary” texts [van Liere 1963: p.120; Hallo 1964: p.74; Drower 1971: p.330].

77) For the identification of Tell Mozan with ancient Urkiš, see Buccellati & Kelly-Buccellati 1997: pp. 85–86. Needless to say, Urkiš was assumed to be Tell ‘Amuda, also called Tell Shelmola, near Tell Mozan. However, Tell ‘Amuda/Shelmola is now considered ancient Kulišhinaš [Faivre 1992: pp.145–146].

78) See Wilkinson 1990: p.51 and Fig.1.

79) See also note 72 in the present article.

80) The Mari king Iaḥdun-Lim’s two year names record a victory over Šamši-Adad in front of the city of Nagar and the burning of the harvest of Šamši-Adad’s country [Veenhof 1985: p.207 with n.57]. The name Nagar was, therefore, still retained in the early part of Šamši-Adad’s reign, and continued to be used till the name Nawar, replacing the old form, became prevalent [see also Matthews & Eidem 1993: pp.203–204]. If Tell Brak was Nagar, the event took place in front of the site itself.



upper Balikh valley, there must have been a route trending towards Samsat, which was linked by a “copper route” along the Euphrates (İmikuşağı-Lidar Höyük). İmikuşağı, situated near Ergani, a source of copper, may have had a role as an outpost through which copper was brought to Assyria, possibly via Lidar Höyük. In fact, the site itself is marked as a “peripheral site” yielding Khabur ware and its variants to some extent in quantity. The “copper route”, proposed in the present article, seems to have been also one of the trunk roads leading to Kaniš. A route from Samsat via Sürgü and Gürtin to Kaniš must have been also available. In sum, the Nizip-Gaziantep-İslahiye-Maraş route, the Samsat-Sürgü route and the Lidar Höyük-İmikuşağı-Malatya route were trunk roads to Kaniš at this time. The certain or possible occurrences of Khabur ware in these areas support this assumption.

Moreover, there was a route from the upper Balikh valley to Tuttul (Tell Bi‘a). Along the Balikh river lay another Apqum, *i.e.*, Apqum ša Baliḫa (? Ain al-‘Arus), Saḫlala (? Tell Saḫlan) and Zalpa/Zalpaḫ (? Tell Hammam et-Turkman<sup>81</sup>), which are place-names attested in the “Old Babylonian itinerary” texts. This route was linked by routes along the middle Euphrates. In the time of Šamši-Adad I, Alalāḫ was reached by a route via Ebla, in the form of avoiding Ḫalab and its vicinities. The occurrences of Khabur ware at Alalāḫ in level VIII and at Ebla in Mardikh IIIB are significant in this respect. Needless to say, this route was linked by the Balikh valley route and the middle Euphrates valley routes.

The so-called “Assyrian Dream Book” mentions the geographical order of Sippar, Rapiqum, Mari, Emar, Ḫalab, Qatna and Ḫašura (Hazor) [A.L. Oppenheim 1956: p.260 and p.312]. It goes without saying that Sippar, Rapiqum, Mari and Emar were cities/towns on the route along the Euphrates. At that time, the Euphrates river itself was a course of boat traffic. In the “Assyrian interregnum” at Mari, wine, honey and oil brought from Karkamiš (Carchemish) to Mari (*e.g.* ARMT V:13 and VII:257) are considered to have been transported by boat on the Euphrates river. In the time of Zimri-Lim of Mari, the Euphrates river was also used for transporting goods by boat, and the land route along the Euphrates was further used. When Zimri-Lim regained the throne of Mari, the Ḫalab-Emar-Mari route would have been a much used route.

The land route along the Euphrates was linked by a route running along the lower Khabur valley, between the upper Khabur basin and the junction of the Khabur and the Euphrates. There lay Saggartum (? Tell Abu Ha‘it/Tell Namliya<sup>82</sup>), Qattunan (? Tell Fadghami) and Ṭabatum (? Tell Ta‘ban). The land route along the Euphrates was also linked by a route across the Syrian desert via Tadmor (Palmyra), which connected Mari and Qatna. Mari and Sippar were connected by the Euphrates valley route leading southern Mesopotamia. Northern Mesopotamia and southern Mesopotamia were, on the other hand, linked by a route from Aššur to Sippar, through which Babylonian textiles were imported to Aššur.

These routes<sup>83</sup>, discussed above in point of having been much used, would have continued to be used for various purposes if infrequently, after *ca.* 1750/40 B.C. in which the Assyrian trading activities for Anatolia ceased. Certainly, however, the route along the Greater Zab towards the Ushnu-Solduz valley was subsequently much used: contact between the main distribution zone of Khabur ware and the Ushnu-Solduz valley continued after the end of the Assyrian trading activities in Anatolia, as now attested by appreciating the presence at Dinkha of later types of Khabur ware [see Oguchi 1998: p.122]. Probably, tin would have also continued to be brought by merchants from Afghanistan through the Ushnu-Solduz valley into independent states in north Mesopotamia<sup>84</sup>.

81) See van Loon & Meijer 1988: pp.XXV–XXVI, suggesting that Tell Hammam et-Turkman may be identified with Zalpa/Zalpaḫ.

82) *Cf.* Rollig & Kühne 1977–88: pp.120–121, for the modern village of Sejer/Seger, Tell Fiden and Tell Suwwar. The possibility of the identification with Saggartum remains at Tell Abu Ha‘it and Tell Namliya [see Rollig & Kühne 1977–78: pp.119–120].

83) For the most recent work on trade routes, see Astour 1995: p.1408ff.

84) In this connection, it is interesting to note that a Middle Assyrian text from Tell al-Rimah shows that tin (AN.NA) was imported from Nairi [D. Oates 1967: pp.90–91; Wiseman 1968: p.175 and p.183 (TR 3019); for AN.NA, *cf.* Moorey 1985: p.124]. The land of Nairi (later Urartu) is known as indicating the region extending from the area around Lake Van to the area east of Lake Urmia. The Rimah text obviously suggests a direction in which tin was brought. Much later, even after the particular contact between the Ushnu-Solduz valley and the main distribution zone terminated (*ca.* 1600 B.C.), tin was still brought from the east.



### Acknowledgements

I am deeply grateful to Mr. Charles Burney for guiding me in researching Khabur ware from the point of view of trade and trade routes.

### Postscript

Since this article was sent to the printer, the following new report on pottery from Tell al-Rimah has been published: C. Postgate, D. Oates and J. Oates, *The Excavations at Tell al Rimah: The Pottery* (Iraq Archaeological Reports, Vol. 4), British School of Archaeology in Iraq, London/Aris and Phillips Ltd., Warminster (1997). It is now necessary to note that this report suggests the earliest appearance of the “straight/concave-sided beaker” type of Khabur ware, the painted version of the type termed “grain measures” by M.E.L. Mallowan. This is illustrated with an example (Pl.78:875) which came from the upper fill of AS4 (part of area AS phase 3, now also described as site A level 4). Rimah area AS phase 3, yielding Khabur ware, is that which can be discussed from the point of view of pre-Šamši-Adad I (*i.e.* Khabur Ware Period 1). The distribution graph of this type of painted vessel, illustrated in the new report (p.71), shows that it occurs in large quantities in site A level 3, and that in site C level 6, dated between *ca.* 1775 B.C. and *ca.* 1750 B.C. on epigraphic ground (p.30), it also occurs. These pieces of new information may suggest the necessity of revising my view that this type of painted vessel is a type characteristic of Khabur Ware occurring in Khabur Ware Periods 3–4. At any rate, reconsideration is now needed regarding later types of Khabur ware.

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## TERRACOTTA OBJECTS FROM AREA A OF 'USIYEH, Part 1: Terracotta Plaques and Models

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### Introduction

The site of 'Usiyeh is located on the right bank of the Euphrates river, between the towns of Ana and Haditha. The site had a vast expanse of a protrudent area caused by the meanders of Euphrates with measurements of about 1200 m in the north-south direction and about 1000 m in the east-west direction. Area A is the highest area of 'Usiyeh, lying southwest of the site. The excavations of Area A were carried out from November 1982 to December 1983 by the Japanese Archaeological Expedition in Iraq (an expedition from Kokushikan University), headed by Professor Hideo Fujii, with cooperation of the State Organization of Antiquities and Heritage in Baghdad<sup>1)</sup>. A multi-room underground structure (Underground Structure)<sup>2)</sup> and the remains of other structures were discovered in Area A [cf. Fujii *et al.* 1984/85: pp. 112ff.; Oguchi 1992: pp. 61ff. and Oguchi 1996: pp. 66ff.]. The later structures proved that in Area A there were some large public or religious buildings.

Many terracotta objects were discovered from Area A of 'Usiyeh. All of them were found in fragments, scattered around the Underground Structure and the other remains rather than in the Underground Structure, in contrast with the fact that other such small finds as shell, metallic and stone objects were found exclusively in the Underground Structure. The terracotta objects must have been contemporary with the large public or religious buildings rather than with the Underground Structure. The date of the buildings falls within the early second millennium B.C. (probably between 1900 B.C. and 1600 B.C.); thus the terracotta objects seem to be also datable to this period.

The main aim of this paper<sup>3)</sup> is to analyze the small terracotta plaques and models from Area A of 'Usiyeh, from technical and typological points of view. Other terracotta objects, such as terracotta statues, statuettes and other multifarious terracotta objects, are, however, excluded from discussion in this paper. These will be discussed in a separate article in the near future.

### A: Terracotta Plaques (Pls. 1, 2, 3, 8 and 9<sup>4)</sup>)

Three groups of terracotta plaques were found in Area A of 'Usiyeh. The first group (Group 1) is the plaque on which is each depicted the figure of a human (T1 to T10). The second group (Group 2) depicts some image or figure of a god (T11), and the third group (Group 3) are animals (T13). All of them, except for T12, are cast from a mould, on only one face, the front face; and each of the plaques

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- 1) The excavations were carried out as a rescue survey of the Qadisiyeh (Haditha) Dam Salvage Project, and were given a grant of the Science Research Promotion from the Fund of Japan Private School Promotion. The preliminary reports of the excavations appeared in *al-Rāfidān* Vol. 5/6 [Fujii *et al.* 1984/85: pp. 111–150] and in *Archiv für Orientforschung* Band 34 [Fujii and Matsumoto 1989: pp. 166–173]. The full report has been written in my Ph. D. thesis [Oguchi 1996]. I would like to thank Professor Hideo Fujii for permitting me to use all the finds from Area A of 'Usiyeh for my study. Moreover, I would particularly like to thank Mr. Charles Burney for giving me many suggestions. Thanks are also extended to the members of the expedition [for the members, see Oguchi 1992: p. 72 notes 5 and 6; Oguchi 1996: p. 18f.].
- 2) The multi-room underground structure (Underground Structure) seems to have been a tomb for a high personage or a noble family, and was constructed as the first occupation in Area A.
- 3) The main contents of this paper are those which have been condensed, with reconsideration, from parts of my Ph. D. thesis [Oguchi 1996].
- 4) The original drawings of T1 (Pl. 1) and T8 (Pl. 2) were drawn by Ms. Yayoi Koike, and T10 (Pl. 2) was drawn by Dr. H. Oguchi. The photographs of the plates were taken by Dr. H. Oguchi.



usually has a slightly convex back, which was smoothed by hand. Their fabric contained sand and straw. Their colour range was irregular, although a reddish colour was the most common.

### Group 1 (Pls. 1, 2 and 8)

Among Group 1, the plaques of T1 to T4 represent nude females, and the representations of T5 to T8 must have been nude females too. T1 is the only specimen of the upper part of a female with a face. The others are the middle or the lower parts.

The front of T1 is deficient in solid effect and displays rough workmanship compared with the other specimens. The delta parts of T2, T3 and T4 are represented by incised decorations. T2 puts double anklets on her ankles. The nude female terracotta plaque with the double anklets is rare, but one of the specimens from Tello also wears double anklets [Barrelet 1968: Pl. 43–454]. T2 can stand alone without any support. The bottom part of T6 and T8 is also for stability. On the other hand, there is some doubt as to whether these were standing alone without any support. These female terracotta plaques may have been set against the wall. T3 is holding her breast. The mould of T4 must have been cracked, because T4 has an accidental raised line. The terracotta plaque must have been mass-produced and not so carefully made. The female of T8 is standing on a platform.

T9 is possibly the lower part of a human figure, whose legs and feet are covered by a cloth which is represented by horizontal incised lines. On the other hand, a specimen similar to T9 is unknown at other sites, as far as I know. Therefore it is still unsure whether T9 is a human figure or not.

T10 is a lower part of a human figure and wears his/her medium length skirt-like clothes. Such style of terracotta plaque seems also rare. The man/woman is standing on a platform.

### Group 2 (Pls. 3 and 9)

T11 is the only specimen of Group 2, which represents Enkidu or a hero, full-face, as a nude wearing a horned hat, with an elaborate beard and bull's ears. He is holding a standard or a staff on his left side with both hands. The original figure of T11 can be conjectured as a hero standing with his body turning towards the right, with full-face and with a tail, on the evidence of a terracotta plaque from Ur [Woolley and Mallowan 1976: Pl. 64–2]. According to Woolley and Mallowan, the Ur terracotta plaque is very large (61 cm), and was found against a door of the H̄endur-sag chapel of the site [*ibid.*: p. 173]<sup>5)</sup>. Probably the plaque of Ur was used to guard the door in the same way as the guardian lions. Pairs of nude heroes are sometimes seen holding door-posts on cylinder seals in the early second millennium B.C. [cf. Collon 1986: No. 144]. The specimen from Ur is painted in bright red with black on the beard and eyes [Woolley and Mallowan 1976: p. 173], which is interesting because the guardian lion statues from 'Ūsiyeh are also painted. In the early second millennium B.C., the entrances of the temples or chapels were guarded by painted terracotta plaques or statues, which may have been a custom.

There is a specimen that was cast from the same mould as T11, from the Mound of 'Ūsiyeh (Tell 'Ūsiyeh) excavated by the Iraqi expedition [Aga 1987/88: Fig. 7]. Were these terracotta plaques made within 'Ūsiyeh or imported from the same manufacturer? This is a question because we could not find any moulds in the area of 'Ūsiyeh. Anyhow it is certain that there is a close relation between the finds of Area A and those of the Mound of 'Ūsiyeh.

### Group 3 (Pls. 3 and 9)

Two specimens, T12 and T13, come under Group 3, although T12 has a different aspect from all the other terracotta plaques. The back of T12 is a concave face, which is not a mould-made specimen. The figure is applied on the base; then incised lines are used as the decoration. T12 seems probable to be a fragment of decorated pottery. The fabric is also rather similar to the pottery. The design of T12 must be a maned quadruped; it seems to be an onager, but this is still unsure.

T13 is a representation of a lion, and is a common motif in southern Mesopotamia. Similar speci-

5) Smaller examples occur in the house site and Diqdiqah of Ur [Woolley and Mallowan 1986 pp. 173, 239 and 240].

mens were found at Mari [Parrot 1959: Pl. 31–1144 = Barrelet 1968: Pl. 66–715], Tello [Barrelet 1968: Pl. 51 nos. 536 and 537], Larsa [*ibid.*: Pl. 57 nos. 600ff.] and Tell ed-Dér [De Meyer (*ed.*) 1978: Pl. 28–5]; and they date from the Isin/Larsa to the Old Babylonian period.

### **B: Terracotta Models** (Pls. 4–7, 10 and 11)

Terracotta models from Area A of 'Usiyeh can be divided into two groups: Group 1 are models of chariots, and Group 2 are models of furniture of which there is only one specimen.

#### **Group 1**

T14 to T20 and T23 to T25 are fragments of model chariots. Among them, T14 to T19 are the front shields, T20 is the back seat or stand, and T23 to T25 are the wheels.

Restored features of these terracotta chariots seem to have had a front shield with a frame. The shields are usually broad and scalloped at the top. The scalloped part has another frame which is likely to be the rim of a pair of spectacles, and both the spectacle-like parts are pierced to let the reins through. The body has a slightly raised seat/stand behind it, and is pierced for the shaft and axle. There is no clear evidence as to whether the number of the wheels is two or four, though the 'Usiyeh terracotta chariots seem to have two wheels (see below).

Generally, the basic form with some decorations of the front shield is cast in a mould, and the back is made smoothly. Then the top of the shield, the scalloped part, is pierced, and some careful decoration is added. Then the front shield is attached to the body which is hand-made, and the wheels are probably attached by a stick after being fired.

T14 has at least 18 impressions made by a stick with a lozenge-shaped cross-section and covered by a fine cloth. The trace of the cloth is well preserved.

T15, also cast in a mould, is weathered; accordingly, the existence of any decoration is not known.

T16 and T17 have a twill decoration which is pricked diagonally by a pointed tool. This decoration may have been a piece of evidence suggesting that rush matting was actually used on some front shields, just as on the model of a bed. It seems very appropriate that rush matting was used for the front shields of the actual chariot, because it is light in weight, flexible and strong in projectile attack.

The front of the square front shield of T18 is crossed diagonally by an X-shaped framework, decorated by a row of short incised lines, and the inside of each triangle thus formed is also decorated by a row of raised lines (Pl. 196d). The latter decoration must have been engraved on the mould. These decorations may have also shown rush matting. The front shield with an X-shaped framework within the square had already appeared on the chariots of the 'war' panel of the standard of Ur [Woolley 1934b: Pl. 92]. The X-shaped framework is reasonable for the shield to reinforce. The design of T18 may have been similar to the actual chariot.

The designs of the frames on T14 to T18 may have shown a characteristic of the Middle Euphrates region, because the south Mesopotamian specimens are usually depicted with some figures of gods or goddesses, or their symbols on the frames. On the frameworks of T14 to T18, there are no figures depicted, and the designs shown are simple, perhaps deriving from the actual chariot rather than copies of the south Mesopotamian specimens. Probably T19 is part of the front shield of the southern type, because there is a frame, on which some symbol or figure was depicted. It is, however, too small to be discussed: the upper and lower sides are missing.

T20 is a seat or stand behind the chariot's body which is hand-made, and is pierced for a shaft and an axle beneath the stand. Both sides of the stand are decorated by a row of incised lines, and the centre of the back has a tapped projection. The form of this part is similar to three specimens from Mari (where they are assigned in date to the Neo-Sumerian to the Old Babylonian period) [Parrot 1959: p. 79 and Pl. 31–1499], Ur [Woolley and Mallowan 1976: Pl. 89–220] and Kish [Langdon 1924: p. 67, Pl. 7–2]. These three specimens are two-wheeled chariots and have a moulded front shield. There is no



example of a four-wheeled chariot with a moulded front shield, as far as I know. Therefore, all the 'Usiyeh models of chariots may have been of such two-wheeled type.

T21 and T22 are hand-made terracotta objects, and differ from the aforementioned chariot, but both the specimens have a pierced hole which seems to be used for the axle. These may have been models of some vehicles.

### Group 2 (T23)

T26 is a model of a bed, and comes under Group 2. T26 represents well an actual bed in the ancient Near East, which is short-legged, having a frame with rush matting. Terracotta beds are found at many sites in Mesopotamia and Elam. Most of these beds look the same as T26 with different rush matting decorations. Sometimes a naked female lies on the bed. Such figures may have been associated with a sacred marriage ceremony [Roaf 1990: p. 130].

### Conclusion

Generally, small terracotta objects have been found in temples, palaces, graves and ordinary houses<sup>6)</sup>. Anyhow, the significance of their religious function cannot be disregarded. Finds of Area A of 'Usiyeh, especially terracotta statues, suggests that there was an important religious place or a temple in Area A. The terracotta plaques and models of Area A must have been also related with the temple as votive offerings.

We could not find any toy-like terracotta human and animal figurines in 'Usiyeh. Most of the 'Usiyeh terracotta plaques and terracotta models were cast from moulds. Moulded terracotta objects spread in southern Mesopotamia during the late third millennium B.C. to the early second millennium B.C. The terracotta objects, cast in a mould, were probably of a tradition of south Mesopotamia, and this tradition appeared not only on terracotta plaques but also on terracotta chariots.

On the other hand, in other regions, moulded terracotta objects were obviously rare in those times. Actually in Syria, terracotta figurines showed an independent feature, and moulded terracotta objects were rare. At Mari in the Middle Euphrates region, we can see examples of both types of terracotta object, which belong to either south Mesopotamian tradition or Syrian tradition. Among the specimens from 'Usiyeh, there is no terracotta figurine that belongs to Syrian tradition, while all of them seem to come under south Mesopotamian tradition.

The history of terracotta chariots seems to have a long time range. The earliest evidence is a clay chariot found in the Halaf period; but according to Eliot, "since no evidence is adduced, this early dating may be viewed skeptically" [Eriot 1939: p. 513]. Certain evidence for the first appearance of terracotta chariots is obtainable from Mesopotamian sites of the Jemdet Nasr period: such examples have been found at Tepe Gawra in Stratum VIII and at Fara [Eriot 1939: p. 513; Speiser 1935: Pls. 34-c.1 and 78-2, 3]. Terracotta chariots had been used for a long time in the various regions, not only in Mesopotamia but also in Anatolia, Syria and Elam. At Tepe Gawra, such chariots occurred in all the levels between Stratum VIII and III [Speiser 1935: pp. 73ff, Pls. 34, 35, 36 and 78]. At Yorgan Tepe, chariot models were also found from Stratum VI to Stratum II, in which examples occurred indiscriminately throughout the temple, palace and private houses [Starr 1939: p. 415].

The chariots of 'Usiyeh displays detailed designs, because the forms and the basic designs of the front shields were cast from moulds. The moulded front shields are less common, compared with hand-made shields, and the distribution of moulded shields may have been restricted to within south Mesopotamia and the Middle Euphrates region stretching as far as the region of Mari [Parrot 1959: Pl. XXXI-1499]. On the other hand, in other regions, the terracotta chariots usually have a hand-made front shield: indeed there is no specimen of the moulded shields at Yorgan Tepe, Tepe Gawra or Assur [cf. Andrae 1970: Taf. 60ff]. The 'Usiyeh terracotta chariots are linked to southern tradition also from this point of view,

6) The discovery of such small terracotta objects in early second millennium B.C. graves seems rare at present.



although the decorations or figures depicted are slightly different from those of south Mesopotamia.

The dates of the terracotta chariots with a moulded front shields seem to be from the Ur III period to the Old Babylonian period, and these may have been of the two-wheeled type (see above). The two-wheeled type of actual chariot may have been already invented at the end of the third millennium B.C. within south Mesopotamia.

### Catalogue of Terracotta Objects (Plates 1 ~ 10)

(No.: 1. Field no. 2. Find spot 3. Colour 4. Fabric 5. References 6. Remarks 7. Comparisons)

- T1:** 1. UT-8 2. F.D. ④ 3. pinkish buff 4. sand and straw temper 5. I.M. 44; Fujii *et al.* 1984/5 Fig. 8-3; Oguchi 1996 T1
- T2:** 1. UT-17 2. E-XI, D3 3. light greenish to buff 4. straw and much sand temper 5. I.M. 68; Fujii *et al.* 1984/5 Fig. 8-7; Oguchi 1996 T2 7. Tello [Barrelet 1968 Pl. 43-454]
- T3:** 1. UT-9 2. E-XII ② 3. pinkish, buff surface 5. I.M. 43; Fujii *et al.* 1984/5 Fig. 8-4; Oguchi 1996 T3
- T4:** 1. UT-7 2. C-XI ② 3. reddish pink, creamy surface 4. fine sand and small straw temper 5. I.M. 42; Fujii *et al.* 1984/5 Fig. 8-6; Oguchi 1996 T4
- T5:** 1. UT-16 2. E-XI, Pit 2a 3. buff, pinkish surface 4. sand and straw temper 5. Oguchi 1996 T5
- T6:** 1. UT-29 2. Mound 2 B-VII, north-west part ① 3. reddish pink, creamy surface 4. much straw and fine sand temper 5. Oguchi 1996 T6
- T7:** 1. UT-27 2. B-XII, north part ① 3. greenish to reddish 4. sand temper 5. Oguchi 1996 T7
- T8:** 1. UT-4 2. E-XIII, west part ① 3. reddish, creamy surface 4. much sand, small straw and mica temper 5. I.M. 37; Oguchi 1996 T8
- T9:** 1. UT-5 2. E-XI, north part ① 3. light greenish 4. much sand and small stones temper 5. I.M. 36; Oguchi 1996 T9
- T10:** 1. UT-15 2. beneath the stone for the top step of staircase 3. brownish 4. much sand, small straw and mica temper 5. I.M. 69; Oguchi 1996 T10
- T11:** 1. UT-2 2. B-XI, east part ① 3. light greenish buff 4. fine sand and straw temper 5. I.M. 38; Fujii *et al.* 1984/5 Fig. 8-2; Oguchi 1996 T11 7. Tell 'Usiyeh [Aga 1987/88 Fig. 7], Ur [Woolley and Mallowan 1976 Pls. 64-2]
- T12:** 1. UT-1 2. Trench 1 ① 3. greenish 4. much sand and small straw temper 5. I.M. 39; Fujii *et al.* 1984/5 Fig. 8-5; Oguchi 1996 T12
- T13:** 1. UT-6 2. D-XII ② 3. reddish, creamy surface 4. sand, mica and small straw temper 5. I.M. 41; Fujii *et al.* 1984/5 Fig. 8-1; Oguchi 1996 T13 7. Mari [Parrot 1959 Pl. 31-1144 = Barrelet 1968 Pl. 66-715], Tello [Barrelet 1968 Pl. 51 nos. 536 and 537], Larsa [*ibid.* Pl. 57] and Tell ed-Dér [De Meyer (*ed.*) 1978 Pl. 28-5]
- T14:** 1. UT-3 2. Trench 3 ① 3. pinkish, creamy buff surface 4. straw and fine sand temper 5. I.M. 40; Fujii *et al.* 1984/5 Fig. 8-12; Oguchi 1996 T14
- T15:** 1. UT-10 2. Room E, -1.6 m 3. reddish pink, creamy surface 4. much sand and much straw temper 5. I.M. 45; Oguchi 1996 T15
- T16:** 1. UT-14 2. E-XI ① 3. reddish, partly creamy 4. sand, small stones and mica temper 5. I.M. 70; Fujii *et al.* 1984/5 Fig. 8-11; Oguchi 1996 T16
- T17:** 1. UT-22 2. E-XI, D3 3. reddish, creamy surface 4. sand, sand and mica temper 5. Oguchi 1996 T17
- T18:** 1. UT-30 2. Mound 2, C-VII (west), Trench 6 ① 3. reddish pink, creamy back surface 4. fine sand and much straw temper 5. Oguchi 1996 T18
- T19:** 1. UT-28 2. B-XI, north part ② 3. reddish 4. fine sand, and straw temper 5. Oguchi 1996 T19

- T20:** 1. UT-21 2. E-XI, south part ①~② 3. reddish pink, creamy surface 4. fine sand and straw temper 5. Fujii *et al.* 1984/5 Fig. 10; Oguchi 1996 T20 7. Mari [Parrot 1959 p.79 and Pl. 31–1499], Ur [Woolley and Mallowan 1976 Pl. 89–220] and Kish [Langdon 1924 p. 67, Pl. 7–2]
- T21:** 1. UT-24 2. E-XI ① 3. light greenish 4. much sand and straw temper 5. Oguchi 1996 T21
- T22:** 1. UT-23 2. F-XII, west part ② 3. light greenish 4. fine sand and straw temper 5. Fujii *et al.* 1984/5 Fig. 8–9 6. trace of red and black paint
- T23:** 1. UT-19 2. E-XI, D3 3. reddish pink, creamy surface 4. fine sand, straw and mica temper 5. Oguchi 1996 T24
- T24:** 1. UT-18 2. F2, below Phase 1 3. greenish buff 4. sand and straw temper 5. Fujii *et al.* 1984/5 Fig. 8–13; Oguchi 1996 T25
- T25:** 1. U.S. ② 2. reddish, creamy surface 3. fine sand, mica and straw temper 5. Oguchi 1996 T26
- T26:** 1. UT-11 2. G-XV ① 3. reddish pink, creamy surface 4. sand and small straw temper 5. I.M. 46; Fujii *et al.* 1984/5 Fig. 8–8; Oguchi 1996 T23 7. Ur. [Woolley and Mallowan 1976 Pl. 88]

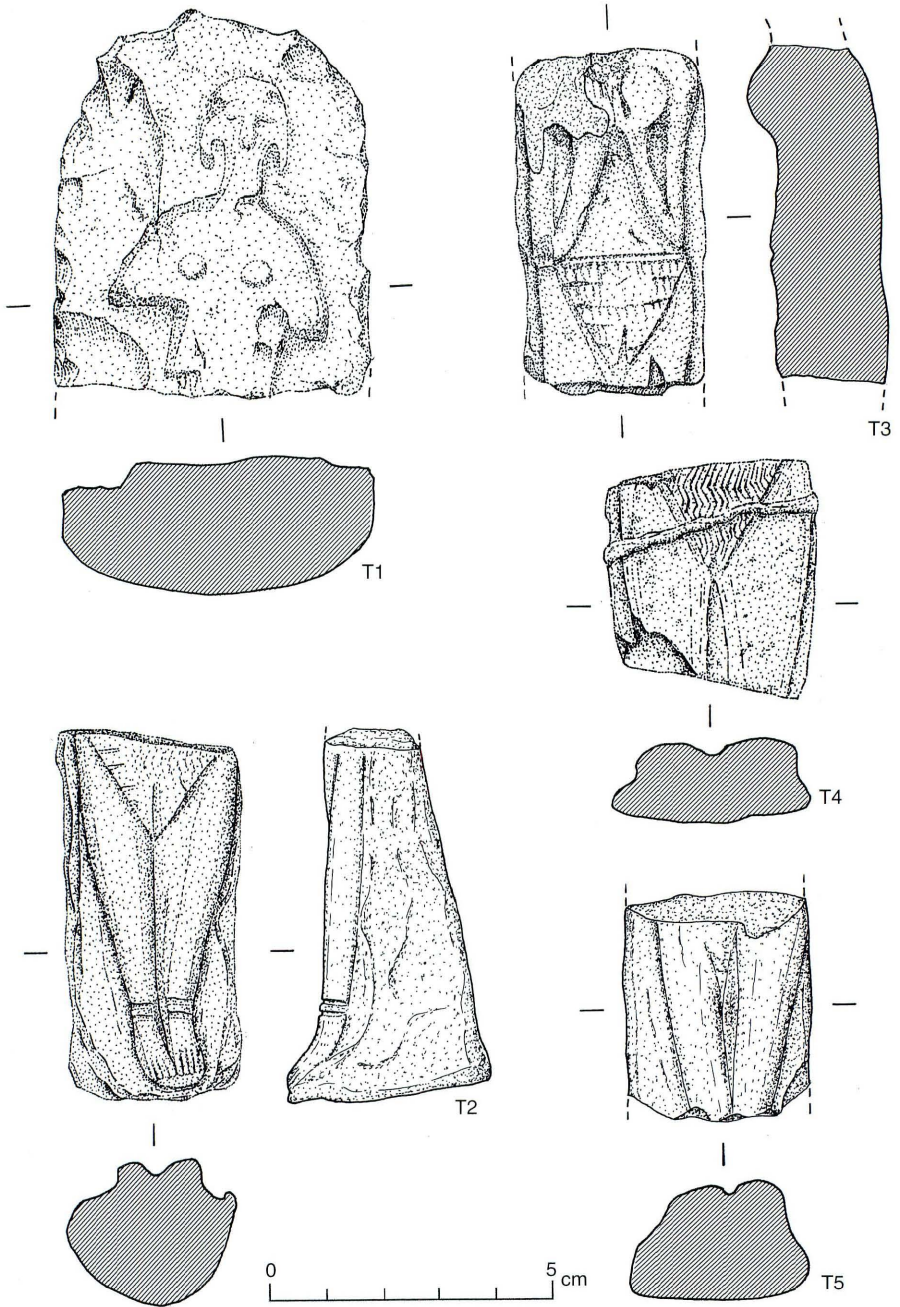
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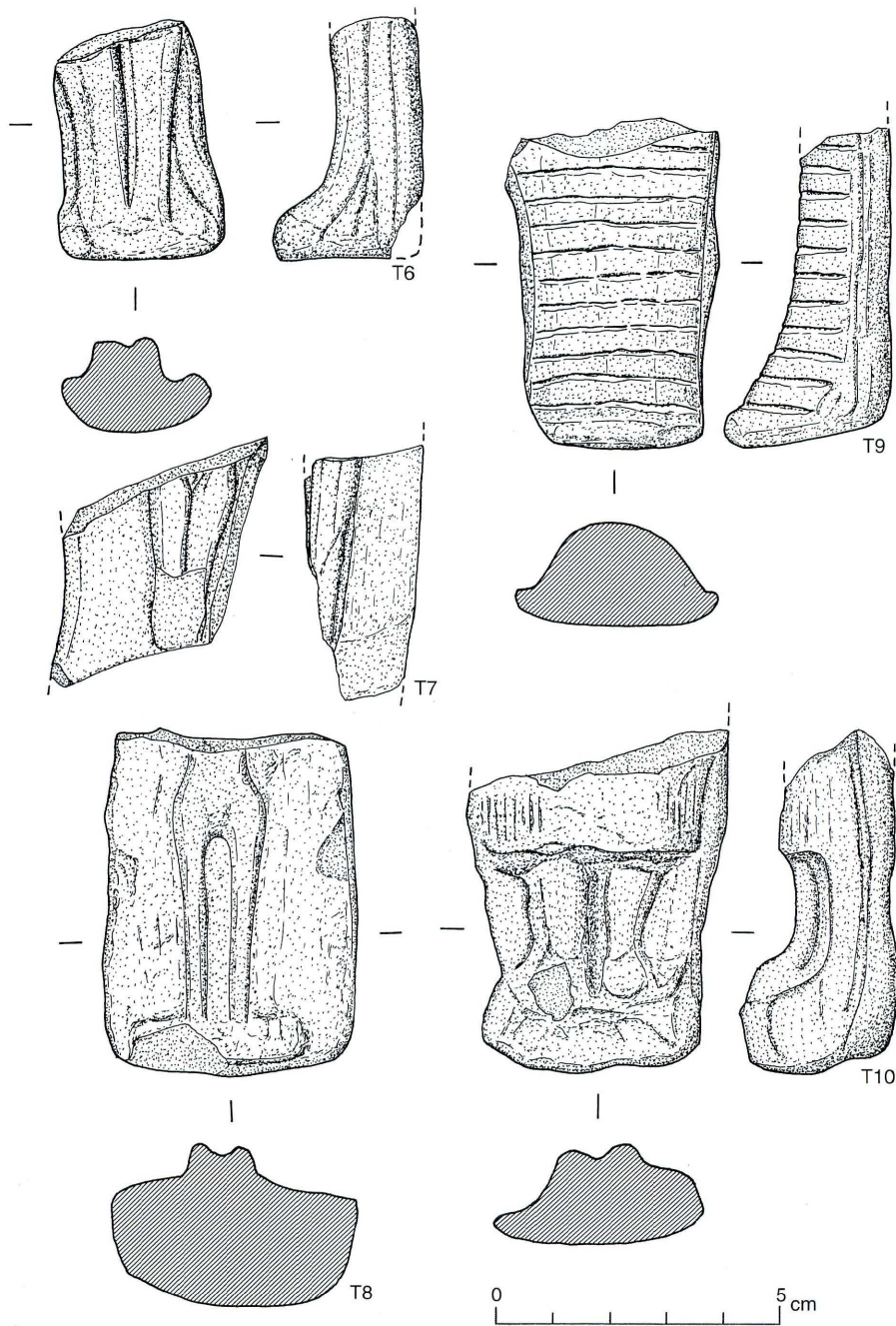
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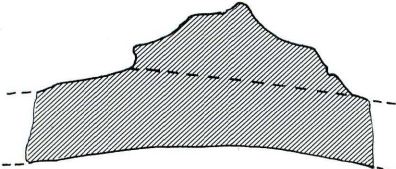
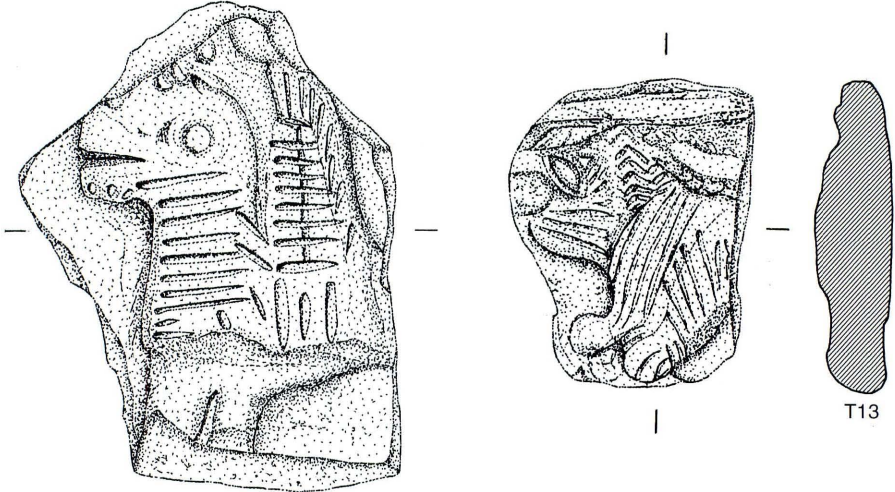
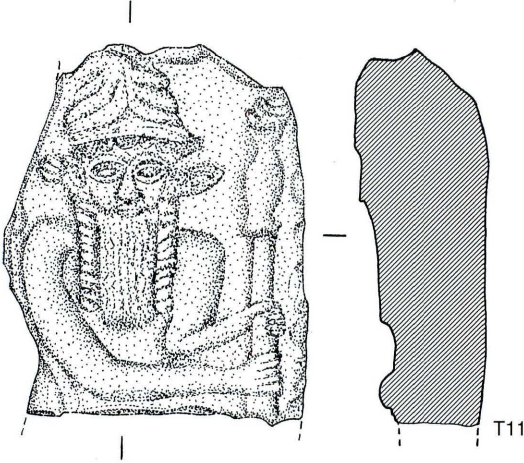
Pl. 1



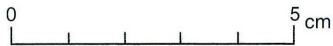
Terracotta Plaques from Area A of 'Usiyeh [Oguchi 1996: Pl. 126].



Terracotta Plaques from Area A of 'Usiyeh [Oguchi 1996: Pl. 127].

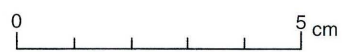
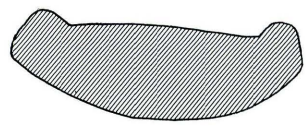
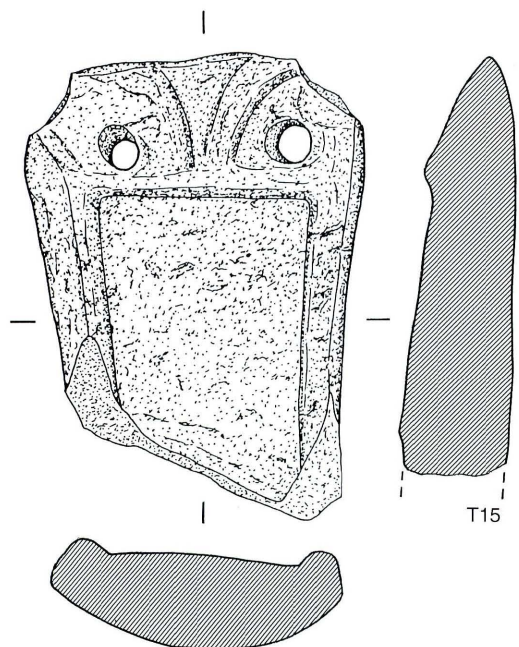
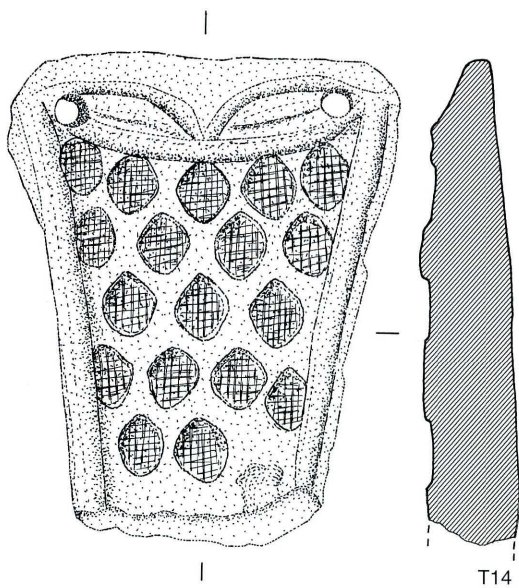


T12

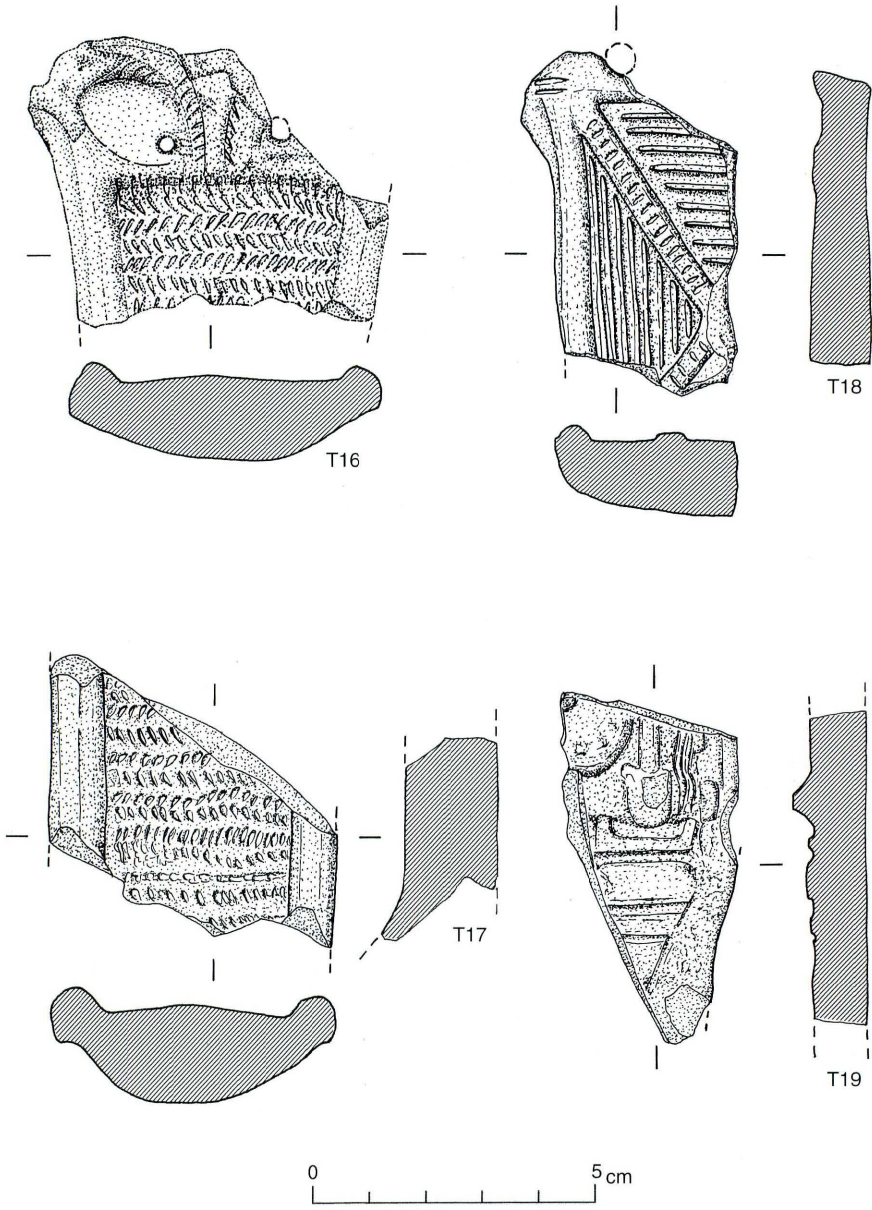


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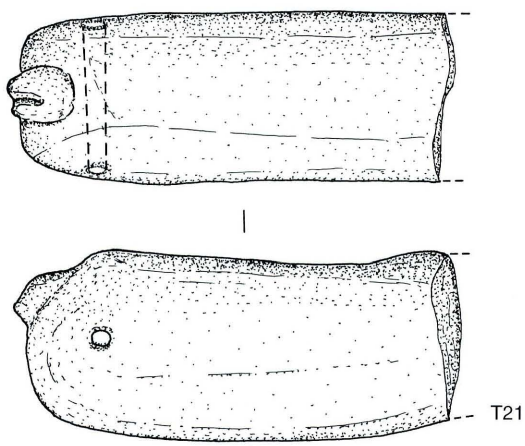
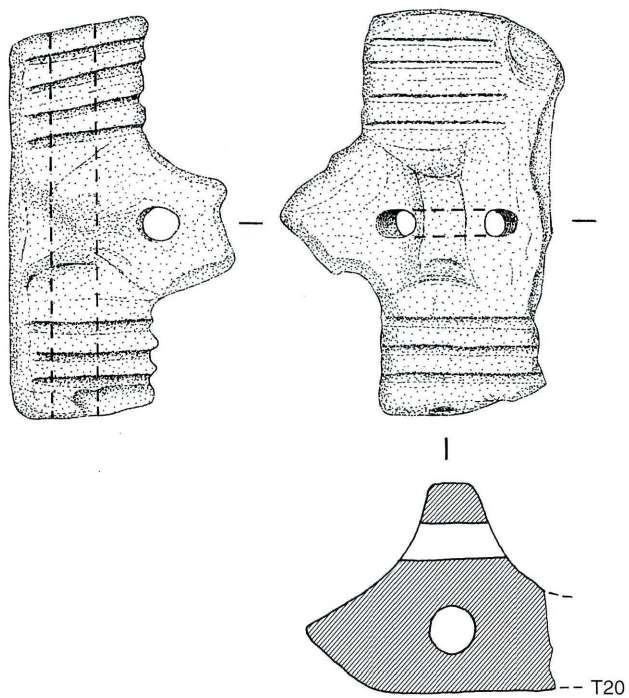




Terracotta Models from Area A of 'Usiyeh [Oguchi 1996: Pl. 129].



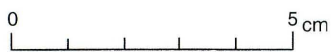
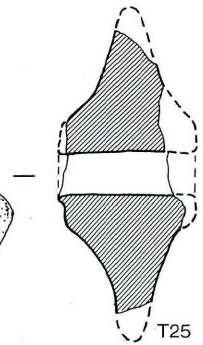
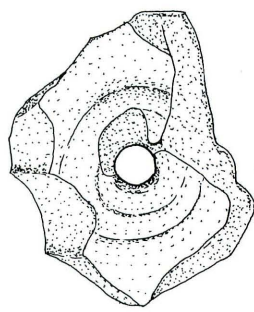
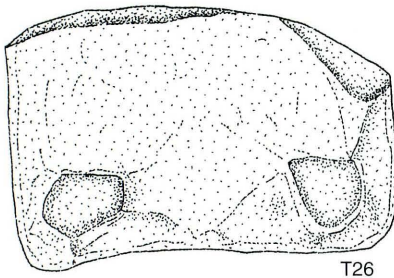
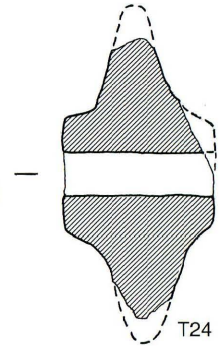
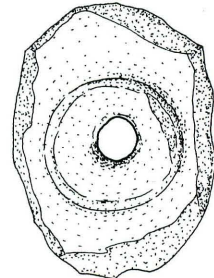
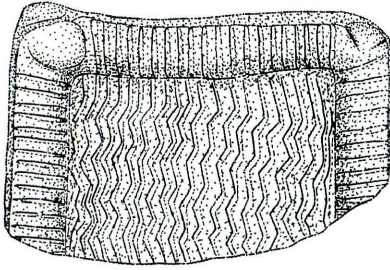
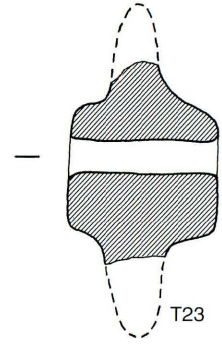
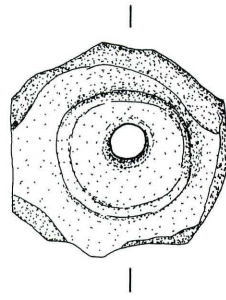
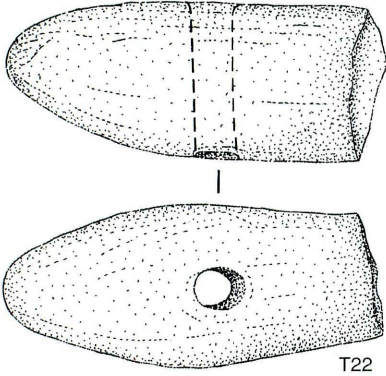
Terracotta Models from Area A of 'Usiyeh [Oguchi 1996: Pl. 130].



Terracotta Models from Area A of 'Usiyeh [Oguchi 1996: Pl. 131].



Pl. 7



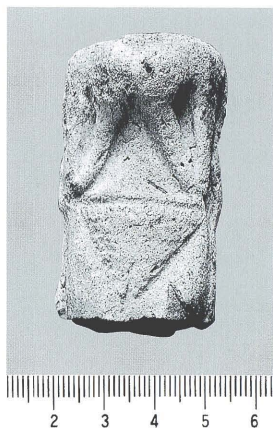
Terracotta Models from Area A of 'Usiyeh [Oguchi 1996: Pl. 132].



T1



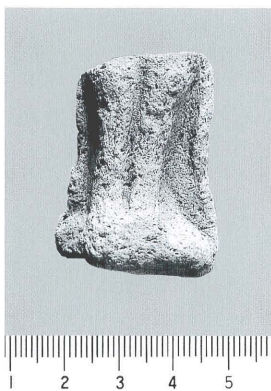
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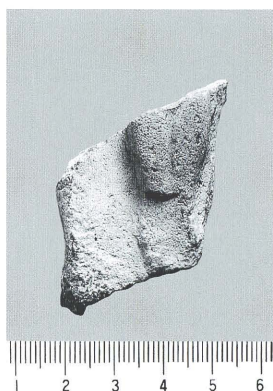
T3



T4



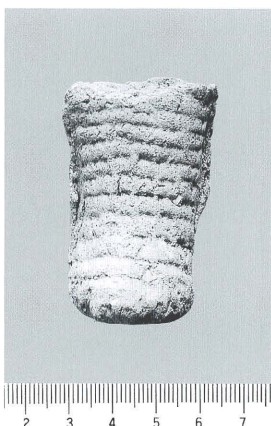
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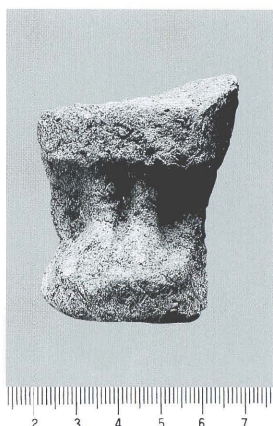
T7



T8



T9



T10

Terracotta Plaques from Area A of 'Usiyeh.

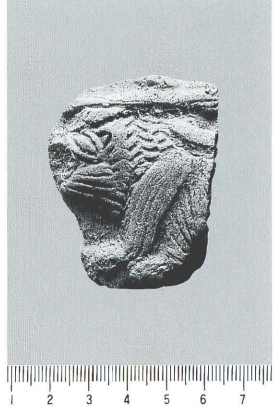




T11



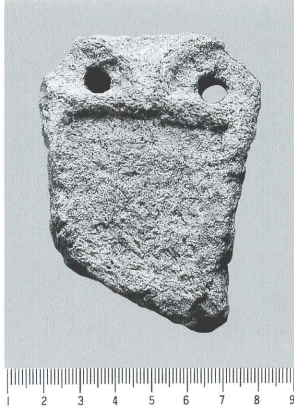
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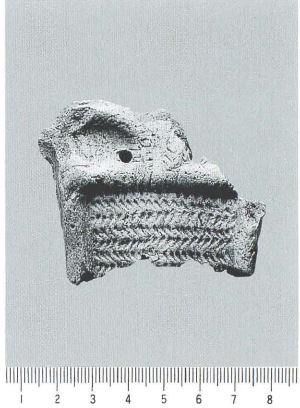
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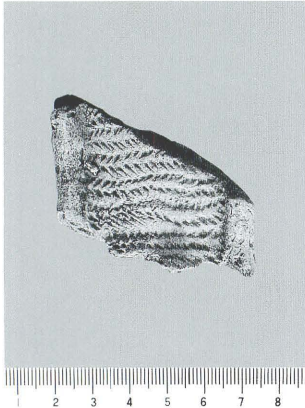
T14



T15



T16



T17



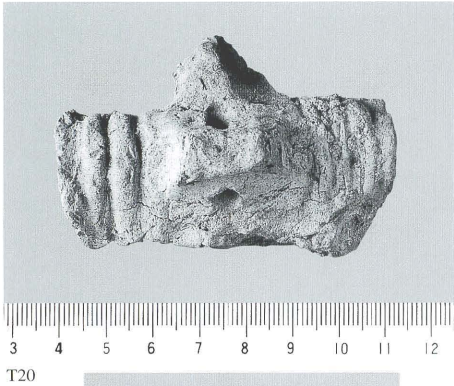
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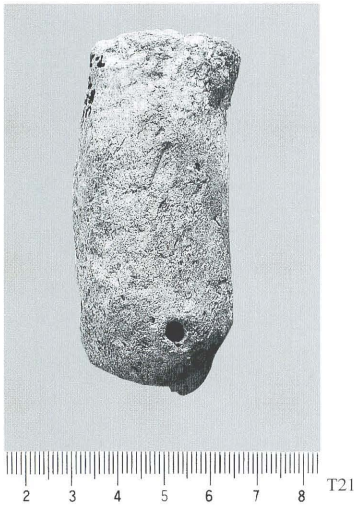
T19

Terracotta Plaques from Area A of 'Usiyeh.





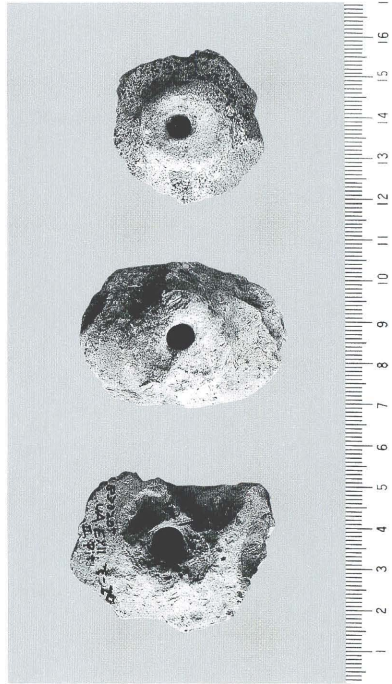
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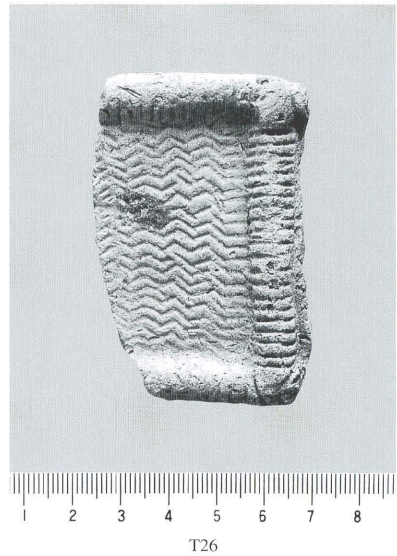
T21



T22



T23, T24 and T25



T26

Terracotta Models from Area A of 'Usiyeh.



## 『ラーフィダーン』編集方針

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  2. 論文、報告、書評、翻訳、研究ノートなど、原稿の種類と長短を問いません。ただし未発表のものに限ります。翻訳に関しては、予め原著者との合意を必要とします。
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(沼本)

ラーフィダーン 第XX巻 1999

1999年（平成11年）3月31日発行

編集  
発行 国士舘大学イラク古代文化研究所

東京都町田市広袴町 844

印刷  
製本 レタープレス株式会社

広島市安佐北区上深川町 809-5





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