

THE CULTURAL RESOURCES MANAGEMENT PROJECT IN JORDAN SALVAGE EXCAVATIONS AT A BRONZE AGE CEMETERY NEAR TELL EL-'UMEIRI

by
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Introduction

In order to provide adequate public services for the rapidly growing areas around Amman, the Jordanian Government, through the Water Authority, has initiated a number of development projects. One of them is the construction of a large reservoir southwest of Amman, on the northern edge of the Madaba Plains, and along the Airport Highway. The construction site is located on a hill slope at Palestine grid coordinates 234.7 141.6 (K737 map 3153.1.SE) to the east of the major archaeological site of Tell el-'Umeiri, under investigation by an American team (Geraty *et al.* 1989; 1991; Herr *et al.* 1991).

Regarding the reservoir project, coordination between the Department of Antiquities and the Water Authority was established since the planning stage in 1991, but the actual work on the site began during the summer of 1992. The initial task of the contractor was to dig two meters deep into the upper slope of the hill in order to establish the foundation of the reservoir.

Intensive survey was conducted across the project area. Some pottery sherds were found, dated to the EB IV and Iron Age II periods, but there were no other indication of structures. Later during the work, as a result of bulldozing activities, a number of cavities were exposed in the area of the reservoir. Subsequent investigations by a team of the Department of Antiquities revealed the presence of an extensive cemetery dated to the EB IV and MB II periods. In order to rescue as much information as

possible, the Department of Antiquities Director General, Dr. Safwan Tell, quickly organized an excavation team in order to salvage the site, without delaying or interfering with the construction work.

Within two days it was clear that the hill contained an extensive cemetery, rather than just a few isolated tombs. The limits of the cemetery are still not determined, since much of the area is under cultivation, but robbers' activities and an agricultural bulldozing operation on the upper slopes of the hill revealed the presence of more tombs, some 200 meters away from the reservoir site. Given the short time available, however, the rescue project concentrated on the tombs exposed during the reservoir construction project.¹ The cemetery area, according to surface survey estimates, is limited to the north by a new farm and an agricultural road leading to the village of Khreibet es-Suq; to the east by the hilltop; to the south by an agricultural road, and to the west by the airport highway, for a total area of approximately 100 dunums² (Fig. 1; Pl. I, 1). The excavation area was defined as the South-West field.

Geology

The area where the cemetery is located is a hill with little soil and vegetation cover. The soil consists of clay silt and small stones or chalky marl (*huwwar*). This soil is of recent formation. The layers under the surface consist of very highly fractured chalky marl, dated to the Upper Cretaceous period. Twenty bore holes were dug in the

1. A total of seven weeks of excavation were conducted between September 1 and October 15, 1992, and between February 16 and March 1,

1993 under the direction of Mohammed Waheeb.
2. The reservoir is located in al-Yaduda village, land plot n. 633.

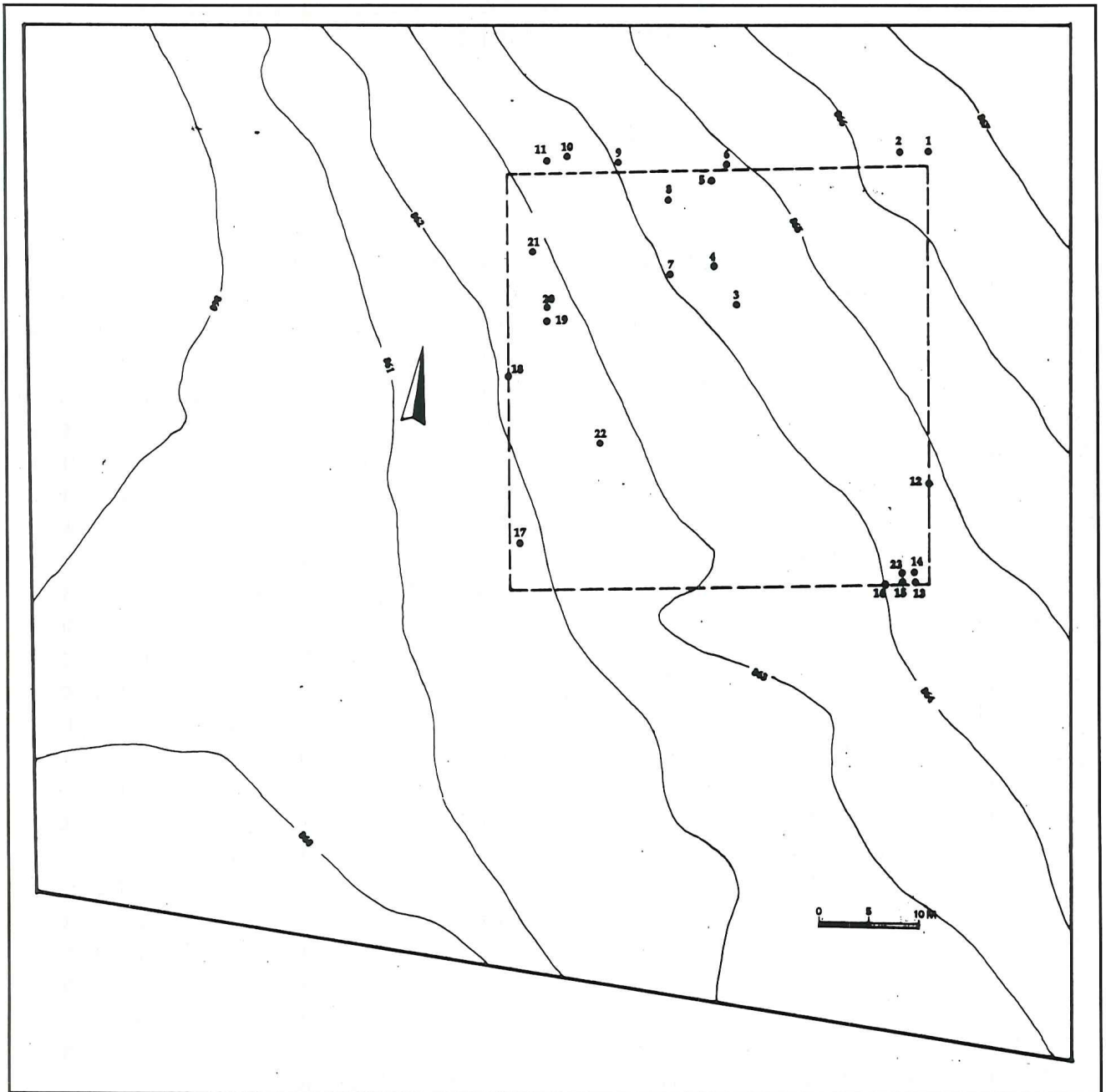


Fig. 1. General plan of the reservoir site and of the location of the tombs and cisterns found during the salvage excavations.

area to a depth of 4 to 8 meters, in order to check the soil and bedrock. These test pits found some humidity and fractures in the marl layers (Isa *et al.* 1992).

THE CEMETERY

A total of five tombs were excavated in the project area, together with 18 “cisterns” (below). Three tombs were dated to the EB IV, one to the MB IIB period, and one was empty. The “cisterns” usually contained

some silt deposit and sherds, all dated to the EB IV period. “Cisterns” 3 and 6 also contained a few human bones. The tombs are characterized by a rock-cut chamber accessed by a shaft. One or more blocking stones were usually found, sealing the chamber. No particular features, such as benches or lamp niches were found inside the chambers, with the exception of tomb 13, where a *mastaba* is found on the eastern sector of the chamber. The “cisterns”, also

cut in the *huwwar*, usually have a baggy round shape, with an opening in the center of the roof, often covered by a blocking stone (Pl. I, 2). There is no particular pattern in the plan of the cemetery: "cisterns" and tombs are randomly dug on the hill slopes, apparently during a relatively short period of time, since they rarely cut each other. All of the tombs but one were disturbed, either by bulldozing (tomb 2, the only MB IIB tomb), or were robbed in antiquity (tombs 1 and 15). Tomb 13, however, was intact, and it will be discussed here at some length.³

Tomb 13

Tomb 13 was found in the southeast corner of the excavation for the water reservoir. The bulldozer had partially destroyed cistern 14, portions of which in antiquity collapsed into tomb 13 (see below and Fig. 2). The tomb was accessed through the opening left by the collapsed wall separating the two rock-cut features.

Removal of the deposits in the western part of the tomb allowed for the plan and dimensions of the chamber to be established. The tomb consists of a bilobate chamber, accessed by a shaft. The northeastern sector of the chamber, where the burials were concentrated, is semi-circular in plan, and measures 2.10 m north-south by 1.70 m east-west. The roof was low and gently domed reaching a maximum height of 1.40 m. The western sector of the chamber was also roughly circular, measuring 3.30 m north-south by 3.00 m east-west. The roof reached here a maximum height of 1.60 m. In total, the chamber measures 4.40 m on its long axis (northeast-southwest) and 3.20 m on its short axis (northwest-southeast). The entrance of the tomb was arched in regular shape. The entrance way measured 0.80 m and reached a maximum height of 0.45 m and a width of 0.60 m. Fi-

nally, the roof of the main chamber is buried under 1.4 m of *huwwar* bedrock (Fig. 2).

The tomb was well sealed, with few deposits inside, which makes it the best preserved tomb found during the rescue excavation. Except for its northwestern side, it seems to have been undisturbed from antiquity. The external outline of the shaft could not be observed because of construction activity and the possibility of roof collapse. The shaft then remained unexcavated. From the inside, a large single blocking stone could be observed.

The floor of the tomb consisted of a levelled and beaten surface of *huwwar*. The western side of the tomb contained a large amount of roof fall along with silt deposits. The deposits came from cistern 14, whose wall collapsed into the tomb.

The fill in this western side consisted of two distinct layers. The upper layer was characterized by a deposit of soft brown soil with gravel wash which extended from the northern side towards the entrance to a maximum depth of about 0.30 m. Below this was a much denser compact layer of *huwwar* which increased in hardness as it approached the floor of the tomb. The lower part of this layer was laminated, showing clear evidence of seasonal deposition by intrusive water over a prolonged period of time. This layer covered the floor to a maximum depth of 0.60 m near the collapsed wall of cistern 14.

The burials were all concentrated in the northeastern sector of the tomb. The floor of this extension of the tomb is 20 cm above the floor of the main chamber, a feature similar to the Sport City tomb in Amman (Zayadine 1978). All the pottery was found in the main chamber, in front and to the right of entrance. The jars and the jugs, especially, were closely grouped together. The lamps were located in front of the en-

3. A more complete publication of this salvage project will appear in Geraty *et al.* (forthcoming).

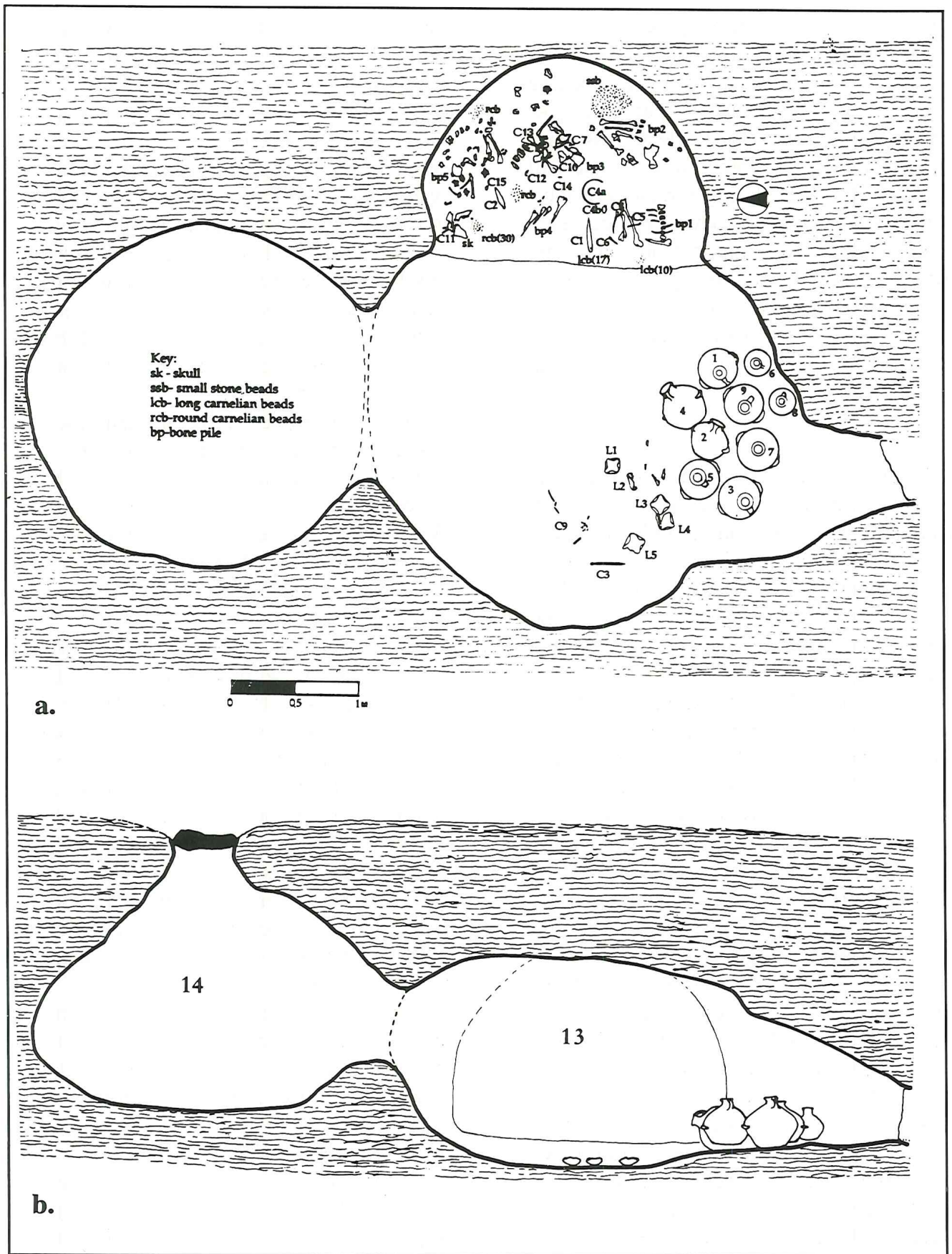


Fig. 2. a. Plan of Tomb 13 (right) and cistern 14 (left), with location of the bone piles and grave assemblage.
 b. Section of Tomb 13 (right) and cistern 14 (left). Drawings by Yazid Elayan.

trance, together with a bronze spearhead and other bronze objects. These objects, found in fragments, suffered severely from the effects of water and roof fall occurring on this side of the tomb.

It seems that the vessels did not contain any solid material when placed in the tomb. A small amount of dust in addition to few *huwwar* fragments were found in the large jars.⁴ Given the presence of "scum lines" inside the jars, however, it is still possible that they contained some liquids. Two of the large jars rested on their sides, possibly displaced by roof fall.

The contents of the northeast sector of the chamber were well preserved. The disarticulated and partially articulated bone heap occupied most of this side of the chamber (Pl. I, 3). Smaller bones and bone fragments were found on the bottom of the bone pile. There was no evidence for a bedding layer or matting. A thin layer of soft marl resting on the *huwwar* floor could have served as bedding for the bones. No deposit had accumulated here except for a small layer of dust and some roof fall. Two daggers and other bronze objects (pins, a bronze belt, and other fragments) were found together with the bones, as well as a large amount of stone and carnelian beads.

In terms of the construction method, the tomb builders apparently tried to reach the layer of hard white marl into which they could carve the chamber, with some assurance that the roof would remain secure. The chisel marks in the walls and ceiling were apparently made away from the worker. Where best preserved, the chisel marks are 0.02-0.03 m wide and 0.05 m long. The tomb cutters probably hammered spikes or rods down into the rock and then they used them as levers to take away blocks or fragments of marl. In the chamber ceiling chisel marks run obliquely, and some are slight-

ly curved, possibly as a result of using picks or perhaps sharp-edged (flint?) tools.

The Finds

Pottery: Four types of pottery vessels are present in 'Umeiri tomb 13: large storage jars with folded "envelope" ledge handles (Fig. 4: 6); same vessel type, with the addition of wide strap handle from neck to shoulder (Figs. 3: 1-3; 4: 4-5; 5: 9), jugs with strap handle from neck to shoulder (Fig. 5: 7-8), lamps (Fig. 6: L1-L5). Jars with folded "envelope" ledge handles and a wide strap handle from neck to shoulder are typical of the Amman area. Parallels for this type come almost exclusively from tomb groups in the area (Jabal et-Taj, Jabal el-Jofeh, Msherfeh, Umm el-Bighal: Dajani 1968: Pl. 40; Hadidi 1982: Pls. 79: 3; 80: 5; Helms 1989: Figs. 2: 4; 4: 2, 5, 6; 5: 15; 6: 5, 7; Ibrahim and Qadi forthcoming; Palumbo and Peterman 1993: Fig. 1: 1-2), and can be considered the most typical pottery type of the Amman-Zarqa region (see Palumbo and Peterman 1993 for the introduction of the new "A-Z family" in the picture of Southern Levantine EB IV pottery "families"). All of the jars in this tomb group have an "X" pattern formed by horizontal or vertical finger-nail impressions on the strap handle. It is interesting that while this pattern is always present, the associated decorative elements are not (finger nail impressions, incised lines, thumb impressions) so that each of the six jars has a different decoration. Moreover three of the jars (3, 5, 9) and both jugs have a bronze band fastened around the handle. To our knowledge, this feature is unique, and unparalleled anywhere in the region for this period.

The two jugs with wide strap handles are also typical of the Amman area. The closest parallels are all from Amman area tomb groups (Jabal et-Taj, Jabal el-Jofeh, Msher-

4. Thanks to Dr. Fehmi Shatat (University of Jordan Laboratory of the Faculty of Agriculture) for his treatment of the jar contents.

feh, Amman Sport City, Tla' el-'Ali, Umm el-Bighal).⁵

The number of lamps (5) is quite unusual. There is no lamp niche in the tomb, and the lamps were all found on the floor close to the pottery group. They all have flat bases, and the usual four spouts typical of the EB IV lamps throughout the Southern Levant. Three of the lamps were used (traces of burnings are visible on the spouts) while two were not.

The wares belong to two basic categories: low-fired reddish, brickly wares, and very high fired gray wares. They are both quite typical of the Amman area EB IV tomb and domestic assemblages (Palumbo and Peterman 1993: 27).

Bronzes: The copper and bronze (?) assemblage of tomb 13 is among the richest found in EB IV tombs of the region. The two daggers belong to two different types: the longer dagger in Fig. 7:1 belongs to type 3 of the narrow dagger series as defined by Graham Philip (1989: 104-106). This dagger type is present throughout Northern and Central Palestine and Transjordan, but also as far as Hama, in a late EB III context. According to Philip, the presence of two incised lines on the midrib gives to the dagger a "prestige" character, since this type of decoration on weapons is usually found (in Syria as well as in Mesopotamia) in association with prestige items (1989: 106).

The second dagger (Fig. 7: 2) is Philip's type 26 (1989: 109), characterized by a shorter blade and three rivets arranged in a triangular pattern. They mainly occur in Northern Palestine, and in clear contexts they usually appear together with a narrow dagger, as at 'Enan and Menahemiya (Eisenberg 1985; Bahat 1976). According to Philip, this may indicate that the weapon was considered a "secondary" dagger or knife, compared to the other type.

The tanged spearhead is Philip's type 5

(1989: 75). The closest parallels are found at the Amman Sport City Tomb (Zayadine 1978: 63, Fig. 4: 6), 'Ain es-Samiyeh, Beth Shan, Dhahr Mirzbaneh, Gibeon, Hazorea, Jericho, and Menahemiya, but similar types were also found at Byblos and Carchemish (bibliographic references in Philip 1989: 318-323). At 'Ain es-Samiyeh Tomb 204 (Shantur and Labadi 1971), Amman Sport City (Zayadine 1978), Gibeon Tomb 50 (Pritchard 1963), Jericho (Tombs D1 and M16) (Kenyon 1965), this type of spearhead is associated with type 3 daggers, such as the one found in 'Umeiri tomb 13.

Pins with curled heads are also quite common in EB IV contexts, but their association with weapons is not very frequent.

The copper "crown" (Fig. 8: C4a) and the "buckle" possibly associated with it (Fig. 8: C4b) are probably the base of a leather or fabric cap. Only one parallel is known for this item, at Jericho Tomb L2, where a similar copper band (not decorated) was found around the skull of a primary burial (Kenyon 1965: 148 and Fig. 41: 8). A copper band very similar to the one found at Jericho is still unpublished, and it was recently found by one of the authors (Mohammed Waheeb) during the salvage excavations of an EB IV and MB II cemetery near Khirbet Umm Zeytuna, in Wadi Kufrenjeh, at Palestine grid coordinates 210.5 185.4. This item is certainly to be considered a "prestige" good, and its presence in this context explains the quantity and quality of the bronze objects found with it.

A large number of bronze fittings, often with rivets still in place and traces of wood inside, was also found in the tomb. According to Shay (1983: 32) these are copper parts of wood "scepters" of distinguished personages. Kenyon has a similar suggestion, interpreting them as bronze decoration of staves for ceremonial use (1965: 555-556). Parallels to these come almost exclusively from the richest tombs at Jericho (L2, P5, P12, P22, and O1: Kenyon 1965).

5. See references in Palumbo and Peterman 1993: 25 and Fig. 5: 1-2.

Other Objects: A large number of beads was found in the tomb. Most of them are simple stone beads, but there are also several dozen disc-shaped, biconical, and barrel-shaped carnelian beads. In such a large number they are only found at Jericho, mainly in the Outsize type tombs (P5, P6, P12, P16, P22, P30, O1, and O4: Kenyon 1965).

The biconical silver bead (not illustrated) is another item that outlines the higher social status of the people buried in 'Umeiri Tomb 13. Precious metals are only present in EB IV assemblages at Jericho (Tomb O1: Kenyon 1965: 126), where two small cylindrical gold beads were found, and at Khirbet el-'Aqibat (Tomb 204), which contained a silver goblet of Syrian origin (Shantur and Labadi 1971; Carre-Gates 1986; Palumbo 1991: 124).

Discussion

The pottery assemblage of tomb 13, in its composition and characteristics, does not differ from those found in other tombs of the Amman area, especially in the association of ledge-handle jars, with or without strap handle, and the squat, ovoid jug with strap handle. According to Palumbo and Peterman (1993) the association of these pottery types, and the presence of the large jar with ledge- and strap handles are characteristic of a new pottery family, that they define as "Amman-Zerqa (AZ)" family. As more tomb groups are brought to light in the Amman area, this definition is being strengthened by the new data.

The discovery of the EB IV cemetery at 'Umeiri East confirms the hypothesis presented by Palumbo and Peterman (1993: 30) that the AZ family may extend to the Madaba Plains area. The formulation of such an hypothesis was helped by the discovery of two tombs near Tell el-'Umeiri in 1992, containing typical "AZ" assemblage of jugs and jars of the types just described.⁶ The difference of this particular tomb as-

semblage from the others already mentioned is the particular richness of the copper and bronze⁷ objects found in association with the burials. Two daggers are rarely found in the same tomb, and it is even more rare the presence of a javelin together with the daggers. Copper "crowns" like the one found at 'Umeiri are known only in one tomb (L2) at Jericho. According to Shay (1983: 34) these "prestige" items represented the higher social status of the deceased person. The prestigious character of the grave goods contained in tomb 13 is also illustrated by the presence of several hundred beads, together with a silver bead, as well as of bronze fittings which have been interpreted as copper decoration of ceremonial staves or scepters. 'Umeiri Tomb 13, then, while it is not outstanding in the character of its assemblage, still is one of the richest EB IV tombs ever discovered in the Southern Levant. The persons who were buried there were certainly very distinguished people within their community.

In conclusion, the newly discovered EB IV and Middle Bronze Age cemetery at 'Umeiri East is an important addition to the archaeological evidence already coming to light in the Tell el-'Umeiri excavations. These excavations, however, still did not reveal clear EB IV contexts which should either be located in a limited area of the tell itself, or has to be searched for outside of the tell proper. The presence of "cisterns" with EB IV domestic pottery and of rich grave assemblages support the hypothesis that a permanent EB IV settlement existed in the area sometime during the last quarter of the third millennium B.C. Hopefully more research will be conducted in the framework of the *Madaba Plains Project* in order to clarify both the extension of the cemetery area and of the problematic presence of an important and partly unrecognized EB IV component.

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6. See note 7 in Palumbo and Peterman 1993.

7. No analyses have been conducted yet on the

metal objects to establish the presence of true bronze.

Appendix - Description of the Grave Assemblage:

Pottery

Fig. 3:1 (13/1): Folded “envelope” ledge handle jar with wide strap handle from below rim to shoulder. Wheel-made tall neck with flaring rim. Squat ovoid body with flat base. Three-flap handles, strap handle decorated with two “lines” of horizontal incisions, crossing each other to form a “X” pattern. Incisions were executed when clay was still relatively soft. Neck partially collapsed during execution or drying. Greenish “scum lines” interior. High fired. Surface 10YR 7/3, more reddish towards base, grayish on shoulder and neck. Internal diameter of mouth: 11.1 cm; internal diameter of neck: 8.1 cm; interior height: 31.9 cm.

Fig. 3:2 (13/2): Folded “envelope” ledge handle jar with wide strap handle from below rim to shoulder. Wheel-made tall neck with flared rim. Ovoid body with flat base. Three-flap handles, strap handle decorated with two “lines” of horizontal incisions, crossing each other to form a “X” pattern. Incisions were executed when clay was still relatively soft. Deep vertical incision in the middle of handle, close to attachment to shoulder. Line of finger-nail impressions at neck’s base. Possible “scum line” interior. High fired. Surface 10YR 7/3 to 10YR 5/1 (brownish near base, gray on shoulder and neck). Internal diameter of mouth: 12.3 cm; internal diameter of neck: 8.9 cm; interior height: 33.1 cm.

Fig. 3:3 (13/3): Folded “envelope” ledge handle jar with wide strap handle from below rim to shoulder. Wheel-made tall neck with straight rim. Mouth and neck are slightly “stretched” on the opposite side to handle attachment, to form a spout. Squat ovoid body with flat base. Three-flap handles, strap handle decorated with two “lines” of horizontal incisions, crossing each other to form a “X” pattern and continuing on the shoulder, where they join again at the base of a deeply incised vertical line bisecting the handle’s attachment to the shoulder. All these incisions executed on relatively soft clay. Applied band decoration at neck’s base, and two parallel lines on shoulder below strap handle attachment, incised on leather-hard clay. Possible traces of a bronze band on strap handle. Greenish “scum lines” interior. High fired. Surface 5YR 6/6 body, 7.5YR 6/2 shoulder and neck. Internal diameter of mouth: 10.1 cm; internal diameter of neck: 8.2 cm; interior height: 27.6 cm.

Fig. 4:4 (13/4): Folded “envelope” ledge handle jar with wide strap handle from below rim to shoulder. Wheel-made tall neck with flared rim. Ovoid body with flat base. Three-flap handles, strap handle decorated with two “lines” of horizontal incisions, crossing each other to form a “X” pattern. Incisions were executed when clay was still relatively soft. Deep vertical incision in the middle of handle, close to attachment to shoulder and continuing over it. Line of finger nail impressions at neck’s base. Two parallel lines incised on shoulder, below handle attachment, executed on leather-hard clay. Body partially collapsed inside above one of the ledge handles during drying. “Scum lines” interior. High fired. Surface 10YR 7/3 to 10YR 5/1 (brownish near base, gray on shoulder and neck). Internal diameter of mouth: 12.9 cm; internal diameter of neck: 9.2 cm; interior height: 34.6 cm.

Fig. 4:5 (13/5): Folded “envelope” ledge handle jar with wide strap handle from below rim to shoulder. Wheel-made tall neck with flaring rim. Squat ovoid body with flat base. Three-flap handles, strap handle decorated with two “lines” of vertical incisions, crossing each other to form a “X” pattern. Incisions were executed when clay was still relatively soft. One line of finger nail impressions at neck’s base, and two parallel lines on shoulder below strap handle attachment, incised on leather-hard clay. Bronze band applied at strap handle’s base. The band “clips” on both sides of handle. Rivet holes on both “clips”. Total length of band: 6.4 cm, maximum width: 0.9 cm. Greenish “scum lines” interior. High fired. Surface 10YR 7/3, more red-

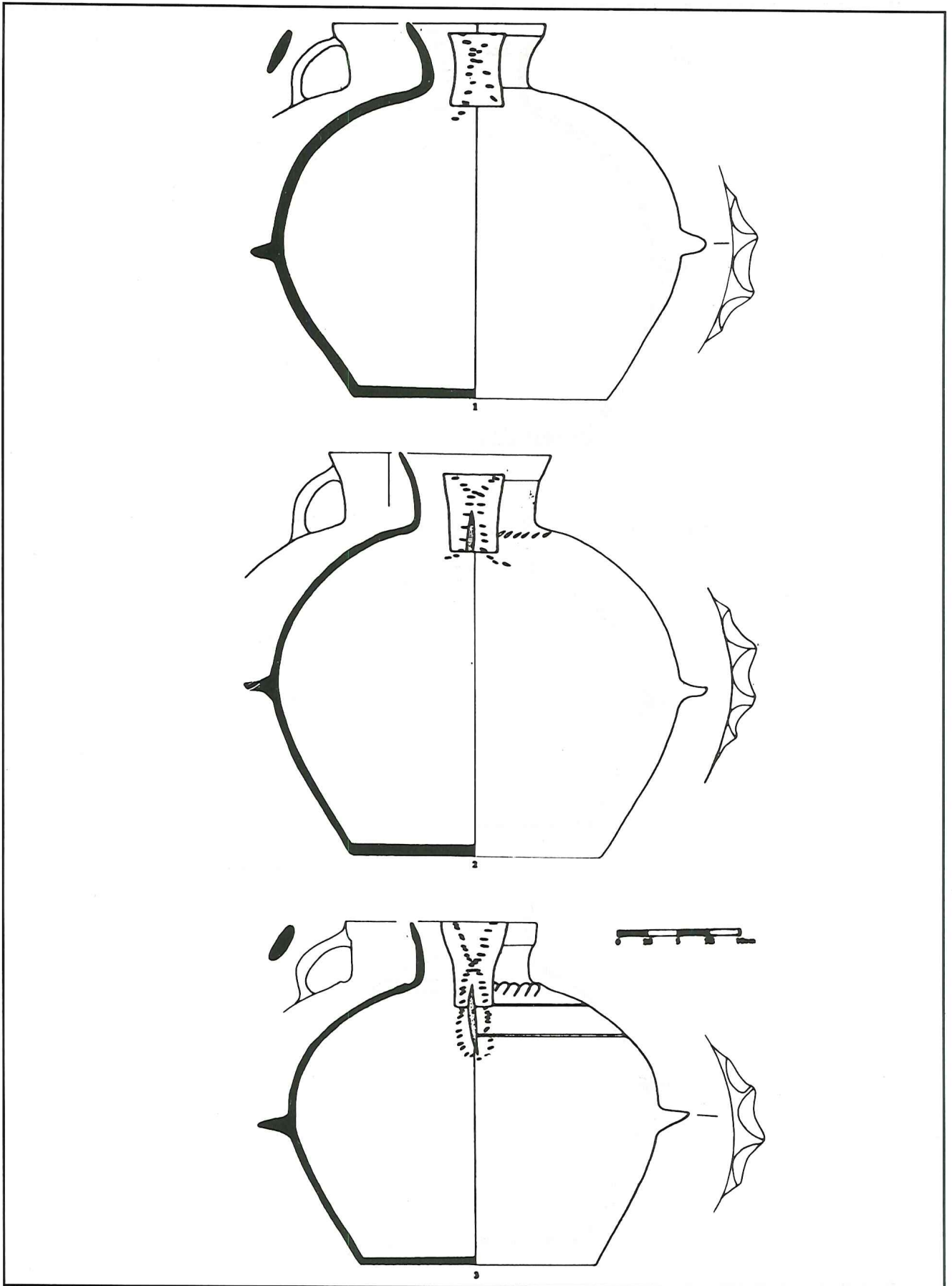


Fig. 3. Pottery from Tomb 13. Drawings by Ali Dajeh.

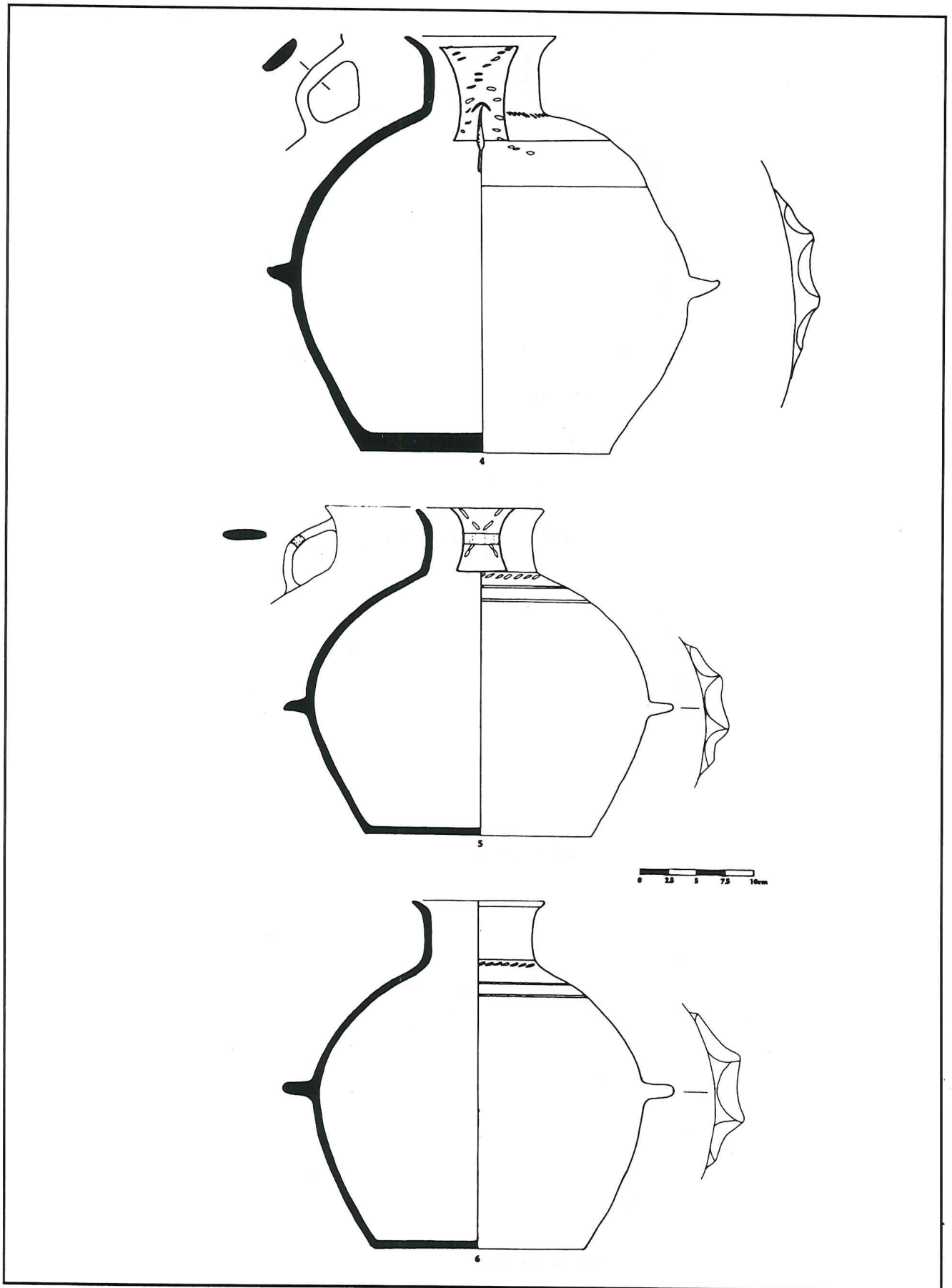


Fig. 4. Pottery from Tomb 13. Drawings by Ali Dajeh.

dish near base, grayish on shoulder and neck. Internal diameter of mouth: 10.8 cm; internal diameter of neck: 8.1 cm.; Interior height: 27.9 cm.

Fig. 4:6 (13/7): Folded "envelope" ledge handle jar. Wheel-made tall neck with flaring rim. Ovoid body with flat base. Three-flap handles. One line of finger nail impressions at neck's base, and two parallel lines on shoulder, incised on leather-hard clay. "Scum lines" interior. High fired. Surface and ware 10YR 7/3. Internal diameter of mouth: 11.2 cm.; internal diameter of neck: 8.7 cm.; Interior height: 29.9 cm.

Fig. 5:7 (13/6): Strap handle jug. Squat ovoid body with flat base. Wheel-made tall neck

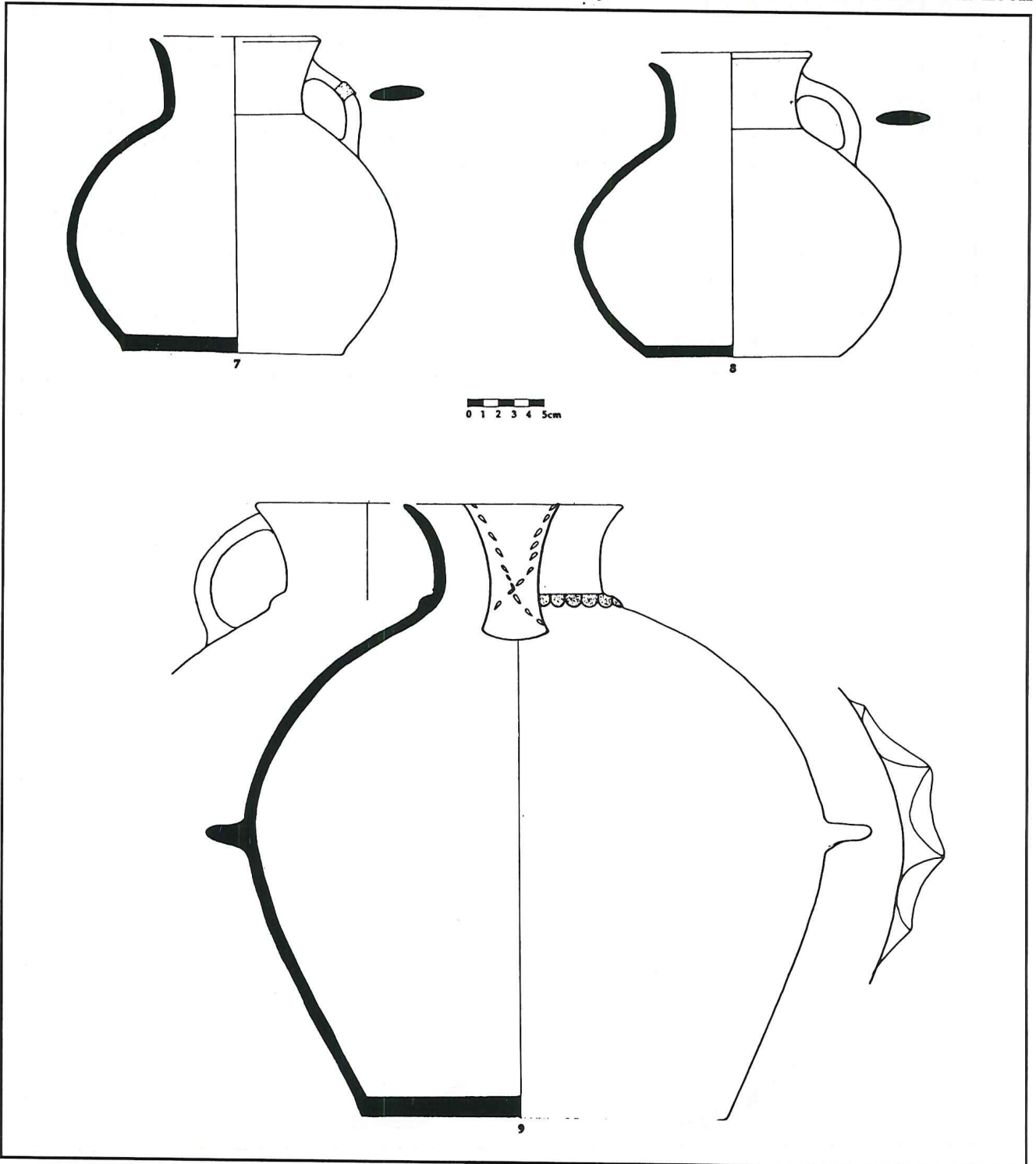


Fig. 5. Pottery from Tomb 13. Drawings by Ali Dajeh.

with flaring rim. Strap handle from below rim to shoulder. Bronze band applied at mid-strap handle. The band “clips” on both sides of handle. Rivet holes on both “clips”. Total length of band: 4.7 cm, maximum width: 1.2 cm. Medium-fired. Surface 5YR 6/6. Internal diameter of mouth: 10.5 cm; internal diameter of neck: 0.080 cm; interior height: 19.2 cm.

Fig. 5:8 (13/8): Strap handle jug. Squat ovoid body with flat base. Wheel-made tall neck with flaring rim. Strap handle from below rim to shoulder. Bronze band applied at mid-strap handle. The band “clips” on both sides of handle. Rivet holes on one “clip” (the other is missing). Total length of band: 4.6 cm, maximum width: 1.2 cm. Medium-fired. Surface 5YR 6/4. Internal diameter of mouth: 10.0 cm; internal diameter of neck: 7.2 cm; interior height: 16.8 cm.

Fig. 5:9 (13/9): Folded “envelope” ledge handle jar with wide strap handle from below rim to shoulder. Wheel-made tall neck with flared rim. Ovoid body with flat base. Three-flap handles, strap handle decorated with two “lines” of vertical incisions, crossing each other to form a “X” pattern. Incisions were executed when clay was still relatively soft. Applied band decoration at neck’s base. Bronze band applied at strap handle’s base. The band “clips” on both sides of handle. Rivet holes on both “clips”. Total length of band: 5.9 cm, maximum width: 1.4 cm. Greenish “scum lines” interior. High fired. Surface 10YR 6/3 to 10YR 7/4, more reddish near base, grayish on shoulder and neck. Internal diameter of mouth: 13.9 cm.; internal diameter of neck: 9.4 cm; interior height: 38.7 cm.

Fig. 6:L1 (13/L1): Quatrefoil lamp. Traces of burnings on all four spouts. Small pebble found inside. Surface 10YR7/3. Ware 2.5YR 5/6.

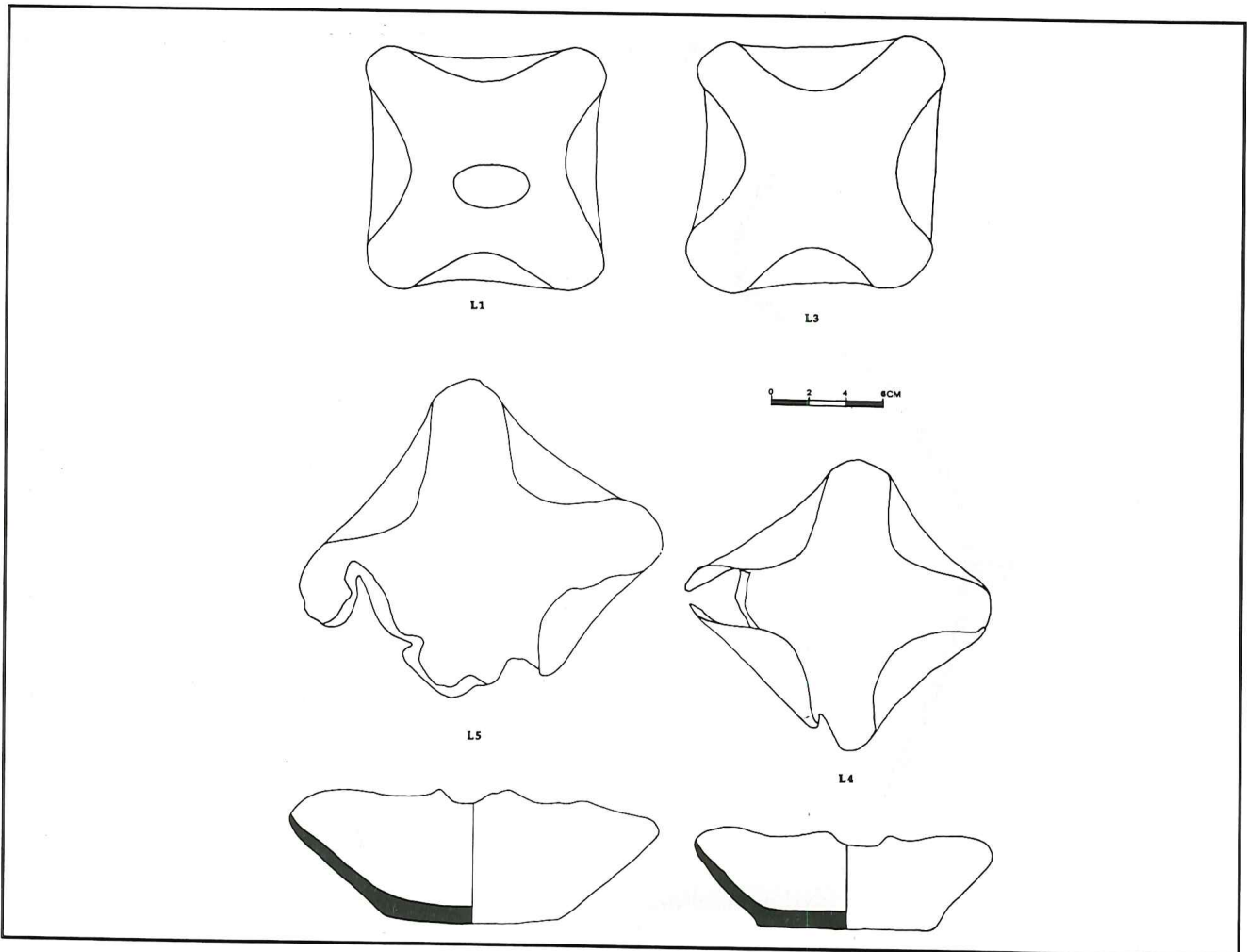


Fig. 6. Lamps from Tomb 13. Drawings by Sami Abbadi and Yazid Elayan.

Fig. 6:L3 (13/L3): Quatrefoil lamp. No traces of burnings on any of the four spouts. Surface 7.5YR 6/6 to 7.5YR 5/0.

Fig. 6:L4 (13/L4): Quatrefoil lamp. Traces of burnings on the three surviving spouts. Surface 2.5YR 5/8.

Fig. 6:L5 (13/L5): Quatrefoil lamp. Traces of burnings on the three surviving spouts. Surface 2.5YR 5/6. Ware 2.5YR 5/4.

Not illustrated:

13/L2: Fragment of a quatrefoil lamp. No traces of burnings on the two surviving spouts. Surface 10YR 7/3 to 10YR 5/1.

Copper and Bronze Objects

Fig. 7:1 (13/C1): Bronze (?) dagger with thick mid-rib and four rivet holes at handle's attachment. Rivets are still in place. Length: 27.15 cm. Maximum thickness 0.43 cm; width at handle's attachment 2.58 cm.

Fig. 7:2 (13/C2): Bronze (?) dagger with mid-rib marked by two parallel lines. Three rivet holes at handle's attachment, with rivets still in place. Length: 20.67 cm. Maximum thickness 0.38 cm; width at handle's attachment 2.81 cm.

Fig. 7:3 (13/C3): Copper javelin. Rhomboidal section, curled tang. Length: 25.68 cm. Maximum thickness: 1.14 cm.

Fig. 7:4 (13/C8): Copper awl. Rectangular section. Maximum length: 6.37 cm; maximum thickness: 0.25 cm.

Fig. 7:5 (13/C7): Copper pin. Curled head, rectangular section. Maximum length: 12.28 cm.; maximum width: 0.40 cm; maximum thickness: 0.22 cm.

Fig. 7:6 (13/C5): Bronze (?) pin with curled head and round section. Maximum thickness: 0.35 cm; maximum length: 10.38 cm.

Fig. 8:C4a (13/C4a): Copper "crown", decorated in repoussé and with a line of small holes, less than 0.1 cm in diameter, running along one of the edges. The holes are at a distance of 2.5 to 2.9 cm. from each other. Two larger holes at both tapered ends. Maximum width: 2.35 cm; minimum width: 0.88 cm; diameter: 19.70 cm. Thickness: 0.06 cm.

Fig. 8:C4b (13/C4b): Copper "buckle", leaf shaped, with one rivet hole. Maximum width: 3.54 cm; minimum width: 0.81 cm.

Not illustrated:

13/C6: Copper fastener, with a rivet still in place. Diameter: 2.41 cm. Thickness: 0.06 cm.

13/C9: Copper strip, in fragments. Thickness: 0.02 cm.

13/C10: Copper plaque with two rivets, still in place. Length: 5.33 cm; maximum width: 1.21 cm; thickness: 0.03 cm.

13/C11: Copper fasteners and plaque. Fasteners have small rivets in place, and traces of wood; plaque has two rivets in place at opposite ends. Plaque length: 5.94 cm; width 1.38 cm; thickness: 0.04 cm.

13/C12: Copper fasteners, with rivets still in place. Width: 1.48 cm; diameter: 2.02 cm; thickness: 0.03 cm. Rivet length: 1.03 cm.

13/C13: Copper strip and round fastener with rivets still in place. Strip width: 1.04 cm; thickness: 0.02 cm. Fastener width: 1.51 cm; diameter: 2.00 cm.

13/C14: Silver pendant or bead. Biconical shape, in fragmentary conditions. Maximum length 2.28 cm; maximum width 1.44 cm. Silver leaf thickness: 0.02 cm.

13/C15: Bone pendant decorated with 7 double circles on one flat side. Two holes at opposite ends.

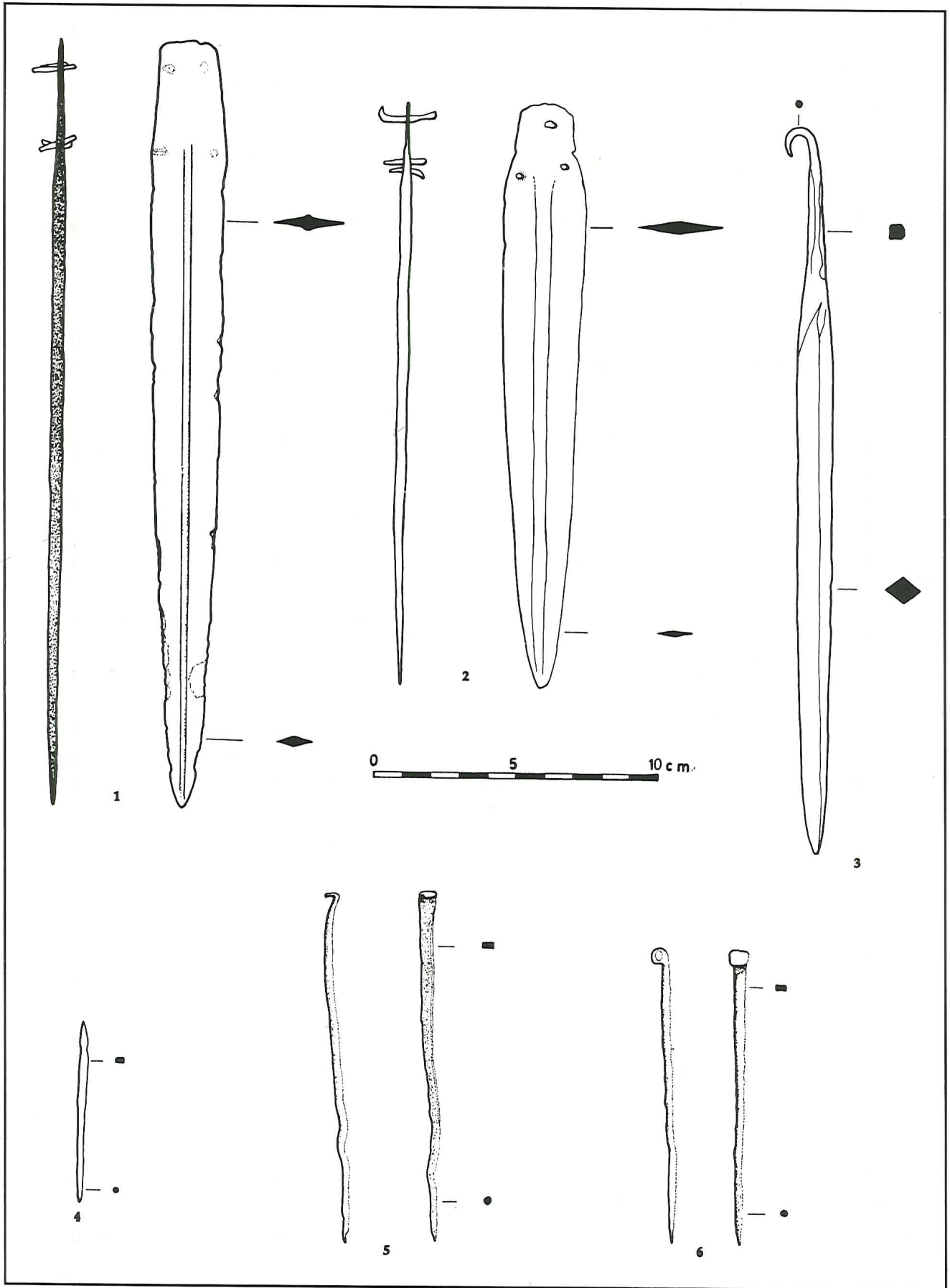


Fig. 7. Copper implements from tomb 13. Drawing by Yazid Elayan.

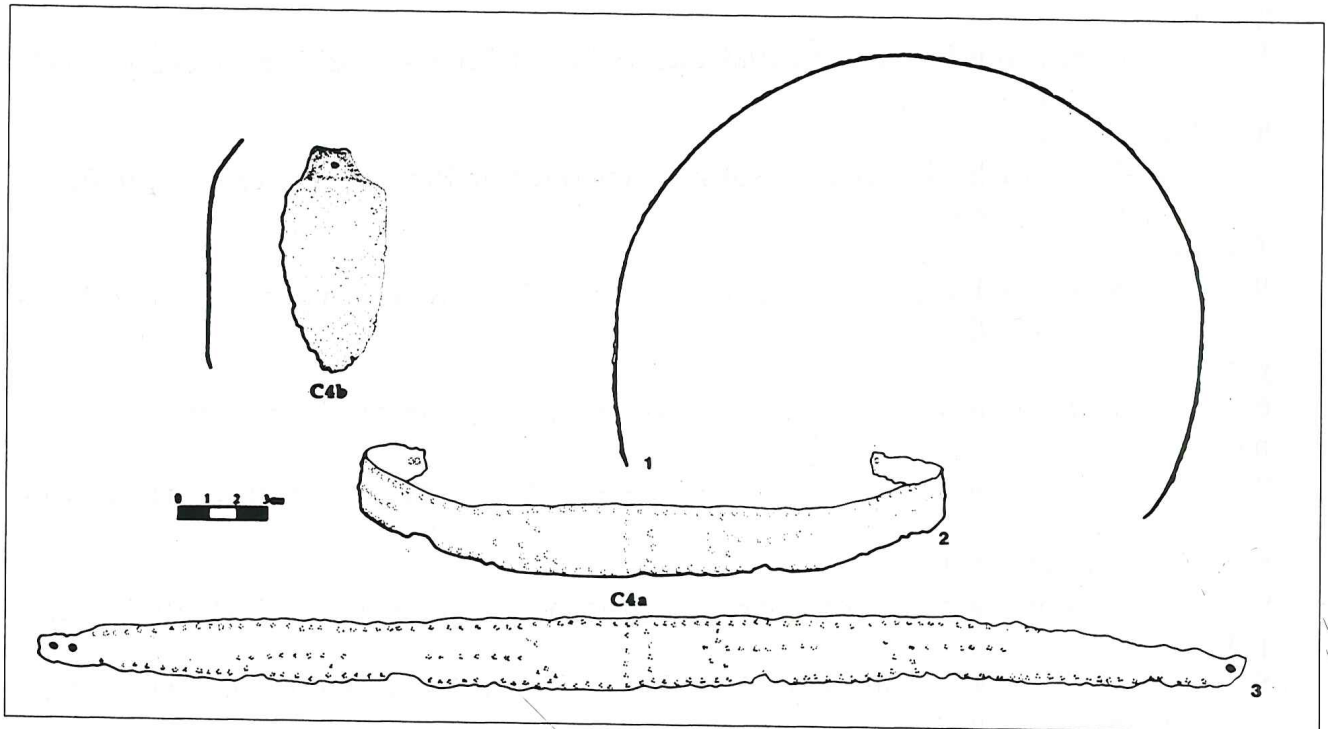


Fig. 8. Copper "crown" from Tomb 13. 1: vertical view; 2: horizontal view, band as found; 3: horizontal view, band expanded. Drawing by Yazid Elayan.

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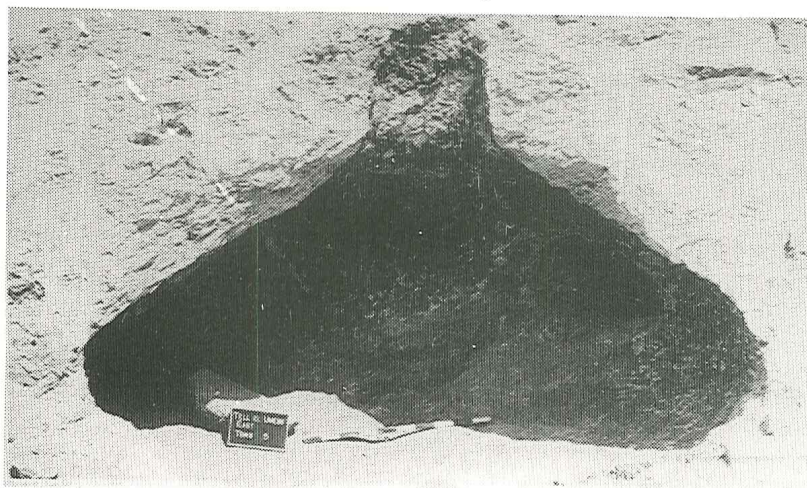
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1. General view of the bulldozer trench with some of the exposed tombs.



2. Section of one of the "cisterns" (Tomb 5).



3. Bone pile 1 in Tomb 13.