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EXCAVATIONS AT BEYCESULTAN, 1958

I. A MIDDLE BRONZE AGE SHRINE

By SETON LLOYD

THE FIFTH SEASON of excavation at Beycesultan took place in May and June of 1958. In addition to the Director and Mr. James Mellaart, the staff included Mr. David Wilson (Institute joint-scholar for 1958), Mrs. Selina Tomlin as architect and Bay Osman Aksoy representing the Turkish Government. In this season two main tasks remained to be completed. One of these was the clearance of a large religious building, of the "Burnt Palace" period (Level V), one corner of which had been uncovered in 1957, beneath the Late Bronze Age shrines in Area "R". The other was the completion of the deep sounding ("SX") in the Chalcolithic levels, begun in 1957. Mr. Mellaart took charge of this latter operation and has summarised the results in a separate section of this report. Those of his own 1958 excavations at Hacilar, near Burdur, whose stratigraphical implications are closely related, also appear elsewhere.

The building which emerged from the excavations in Area "R", by analogy with the pairs of shrines discovered in 1957 in the Early Bronze and Late Bronze Age levels (*AS. VIII*, 1958, pp. 104 ff.), is closely associated with the neighbouring megaron-type shrine, as is shown schematically in the same report (Level V plan in Fig. 6). Unlike its neighbour, however, this is an impressive building, over 20 m. long, containing a range of five chambers, each apparently having its own ritual purpose. The two end chambers (one of which, at the western end, was cleared in 1957), are undoubtedly places of offering, as each is provided with the now familiar "blood altar"—a pedestal for sacrificing small victims, arranged so that the blood may drain into a built-in pottery vessel—and each has its separate entrance from outside the building. Once more also, each contained a fair quantity of pottery, evidently used for votive purposes. In the western chamber it occupied recesses in the wall on each side of the "blood altar", one of which also contained the ashes of a fire. In the larger chamber at the eastern end, which also contained a hearth and facilities for cooking, it had accumulated around a small offering-table just inside the doorway. The three remaining chambers form a separate suite, and their function would be easy to interpret as a main sanctuary approached through two vestibules. The outer vestibule has its own entrance from outside and the inner one is connected with the sanctuary by a central doorway of a breadth which is not found elsewhere in the building. Both vestibules contained a certain amount of pottery, and a conspicuous feature in the centre of the inner one was the emplacement from which some sort of circular cistern had been removed. Since an object of this sort, if built of pottery, would hardly have been worth removing, we must assume, as we did when similar evidence was found in the "Burnt Palace", that the cistern was of bronze. There were impressions in the floor of the wooden

beams upon which it had rested. Like other buildings in Level V, this one had been most thoroughly destroyed by fire and there were signs that its contents other than pottery had previously been looted. It is perhaps significant that the only chamber which had been completely and totally denuded of everything it contained was that which we suppose to have been the main sanctuary.

The pottery had little to distinguish it from that found in other parts of the site in Level V (*AS.* VI, 1956, Fig. 3, p. 131), except for a type of spherical jar ornamented all over with small knobs (Pl. IIIb). More interesting perhaps was the construction of the walls, which varied in thickness from 65 cm. to 1.00 m. and in part remained standing to a height of 2.00 m. As elsewhere in Level V, they consisted of mud brick in a powerful timber framework. Groups of vertical posts, at rather irregular intervals, were tied together by horizontal "runner" beams on either face of the wall, occurring after every three or four courses of brick. An unusual feature, not observed elsewhere, were the bulky logs of wood placed cross-wise in the thickness of the wall on which the posts stood. Unlike other buildings of the period also, major groups of posts did not occur at the intersection of the walls—a device which has seemed to us structurally weak. As usual, the great quantity of timber used in this building had provided fuel for a destructive fire of great intensity.

Quite apart from the very substantial construction of this building, its formal planning gives it a public character; and since certain of its attributes are now indisputably connected with religious ritual, its designation as a "temple" would almost certainly be justified. In any case, the architectural form which it embodied was evidently abandoned in the subsequent period, for the building which next rose upon its site was once more a simple *megaron*, this time without even a recognisable altar (*AS.* VIII, 1958, Level IV plan in Fig. 6, p. 109). The requirements of ritual tradition had outweighed the obvious inconvenience of the site, for it had proved necessary to sink lines of enormous boulders across the ruins of the old building in order to provide adequate foundations for the new one.

In examining the stone foundations of the Level V temple, we learnt something also about a building period immediately beneath (Level VI), which must correspond to the transitional period between the Early and Middle Bronze Ages. Creating a foundation for the northern wall of the temple were the remains, once more destroyed by fire and partially calcined, of a very powerful stone wall, 2 m. thick and standing to a height of almost 5 m. If this was the enclosure wall of the city at Level VI, it may well have been strengthened with towers, for a little to the west of the temple it turned northwards at a right-angle to enclose a paved chamber, whose extent we were unable to determine. Nor could it be discovered whether the site was already occupied by a religious building at this earlier period. A chronological gap between the shrines in Level V and those of the Early Bronze Age in Sounding "SX", the latest of which belongs to Level XIII, could only be filled if the excavations at Beycesultan were one day resumed.

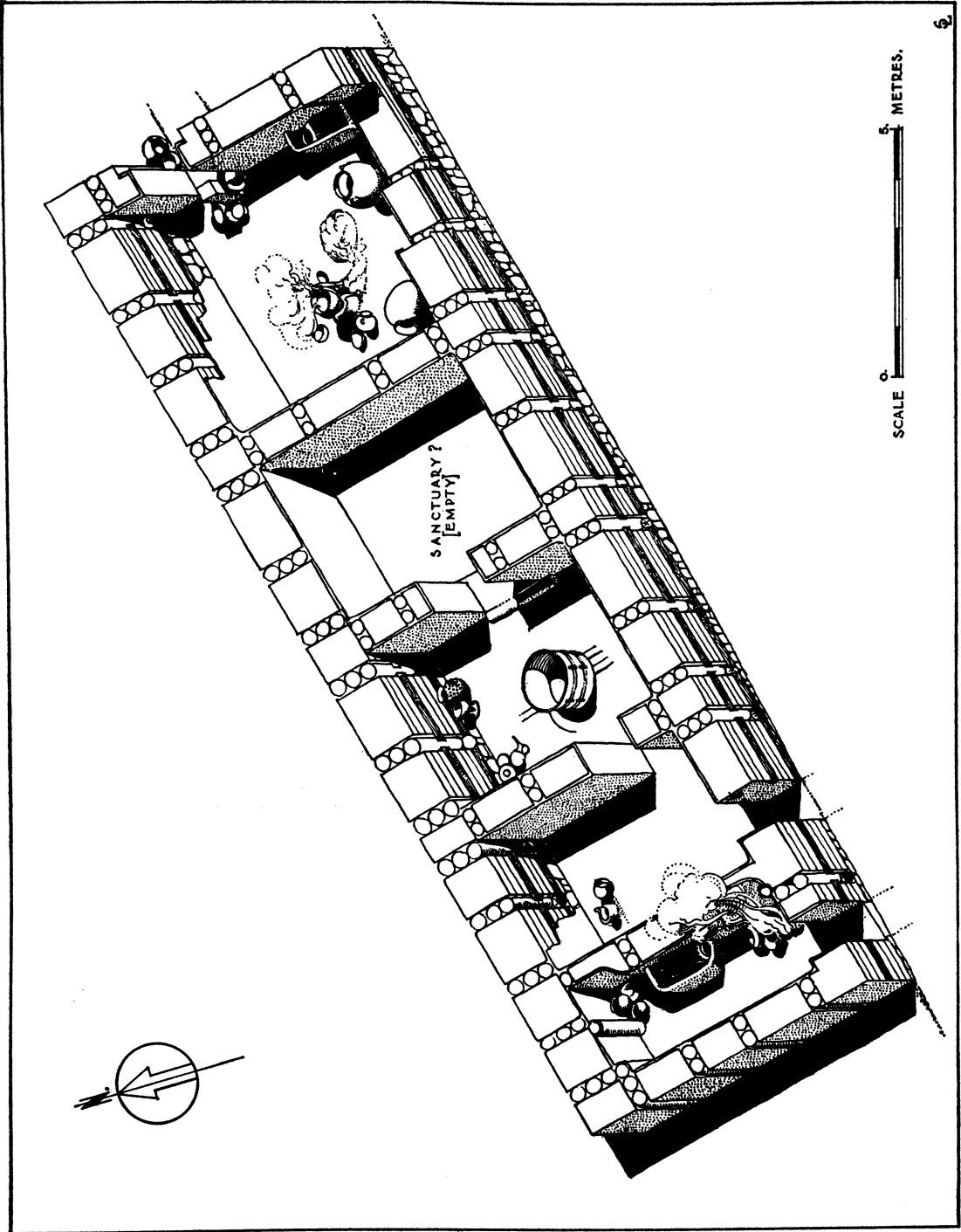


FIG 1. Religious Building in Level V : schematic plan.

II. THE CHALCOLITHIC SOUNDING

By JAMES MELLAART

Sounding "SX", begun in 1957 on the western part of the mound, was completed in 1958, when virgin soil was reached at a depth of 1.45 m. below our datum, the dry river bed on the eastern side of the mound. Below the five Late Chalcolithic levels penetrated in 1957, sixteen more building levels of the same period and culture were recorded before virgin soil was reached. These twenty-one Late Chalcolithic levels account for not less than 11 m., nearly half the height of the mound, a sequence not yet paralleled at any other site in Anatolia. Our hope that remains of the Hacilar culture might be found at the bottom of the mound was not realised. The earliest occupation of Beycesultan belongs to the beginning of the Late Chalcolithic period, which we now think followed the Hacilar culture almost immediately.

There is reason to think that the total of Late Chalcolithic building levels may have been even greater than suggested above. In Levels XX and XXI our sounding was found to be penetrating debris which covered the remains of an enclosure-wall, built in the immediately preceding period to protect a settlement temporarily restricted to the western half of the mound only. Later this wall had been discarded when the town was extended to cover the eastern half as well. Level XXII, however, also represented an extended settlement; and between this and Level XXI one must accordingly allow for a stratigraphical hiatus corresponding to its period of temporary contraction. Though we have no means of accurately measuring this span of time, it would be fair to suggest that it was equivalent to at least two building levels. Moreover, both Levels XXVI and XXXI show subphases or rebuildings, so that the total of the Late Chalcolithic building levels can be estimated as a minimum of about twenty-five.

It hardly needs emphasising that this represents a period of extraordinary length, but what causes even more surprise is the apparent lack of any major developments within this period. From beginning to end it appears to be essentially the same. Neither the small changes observable in the development of the pottery nor the change of brick sizes in Level XXXIII warrant its subdivision into successive phases. It is for this reason that we have refrained from arbitrarily creating a "Middle Chalcolithic".

Even within the limited area of the sounding (never more than $c. 8 \times 4$ m.) small copper objects were found in Levels XXI, XXII, XXV, XXXIV (with a silver ring) and XXXV, fully justifying the use of the term Chalcolithic.

Burials within the settlement are rare. Two contracted child burials were found, one in an earth grave (Level XXVIII), the other in a coarse pot (Level XXIX). No funerary offerings were found with them. Evidence is rapidly accumulating to show that the well-known West Anatolian habit of extramural burial for adults can be traced back to the Late Neolithic period (Hacilar).

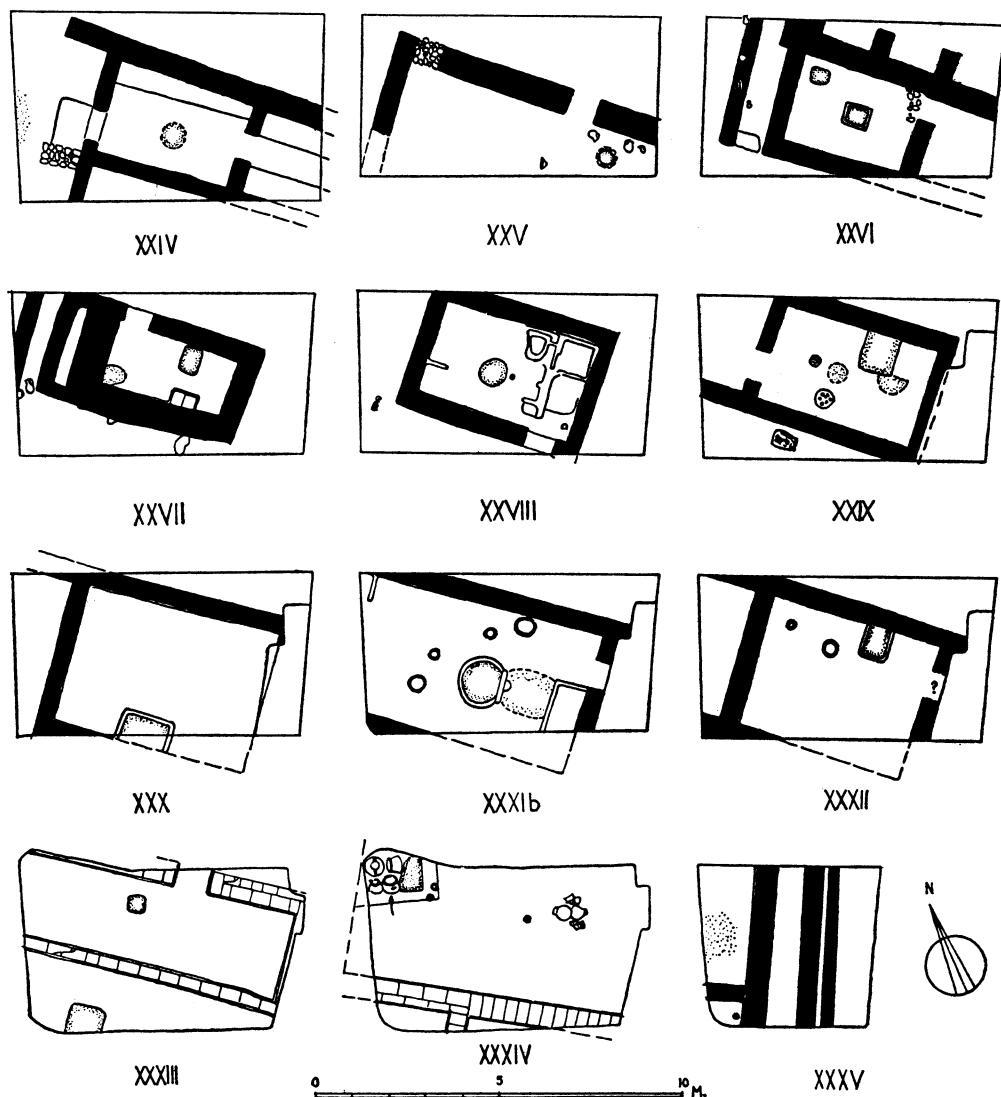


FIG. 2. Beycesultan. Chalcolithic house plans from Levels XXIV-XXXV.

Of the economy of this period little need be said. Mixed farming supplemented by hunting evidently provided for the basic needs of the community. Wheat (probably Emmer) was stored in plastered grain bins in the houses of Levels XXVII, XXVIII, XXXI, XXXIV and XXXIX. Lentils were also frequently found. Animal bones include those of dog, sheep, goat, ox, pig, wild boar, red and roe deer.

Pottery forms the bulk of the finds and other small objects are exceedingly rare. Human figurines are conspicuous by their absence, animal ones most infrequent. But for a silver ring, no articles of personal ornament were found. The stone industry is poor and consists mainly of flint, chert and occasionally obsidian, blades. Only two small polished celts were found in the whole sounding. The most likely explanation for this dearth of objects is that our excavations hit upon a poor quarter of the town.

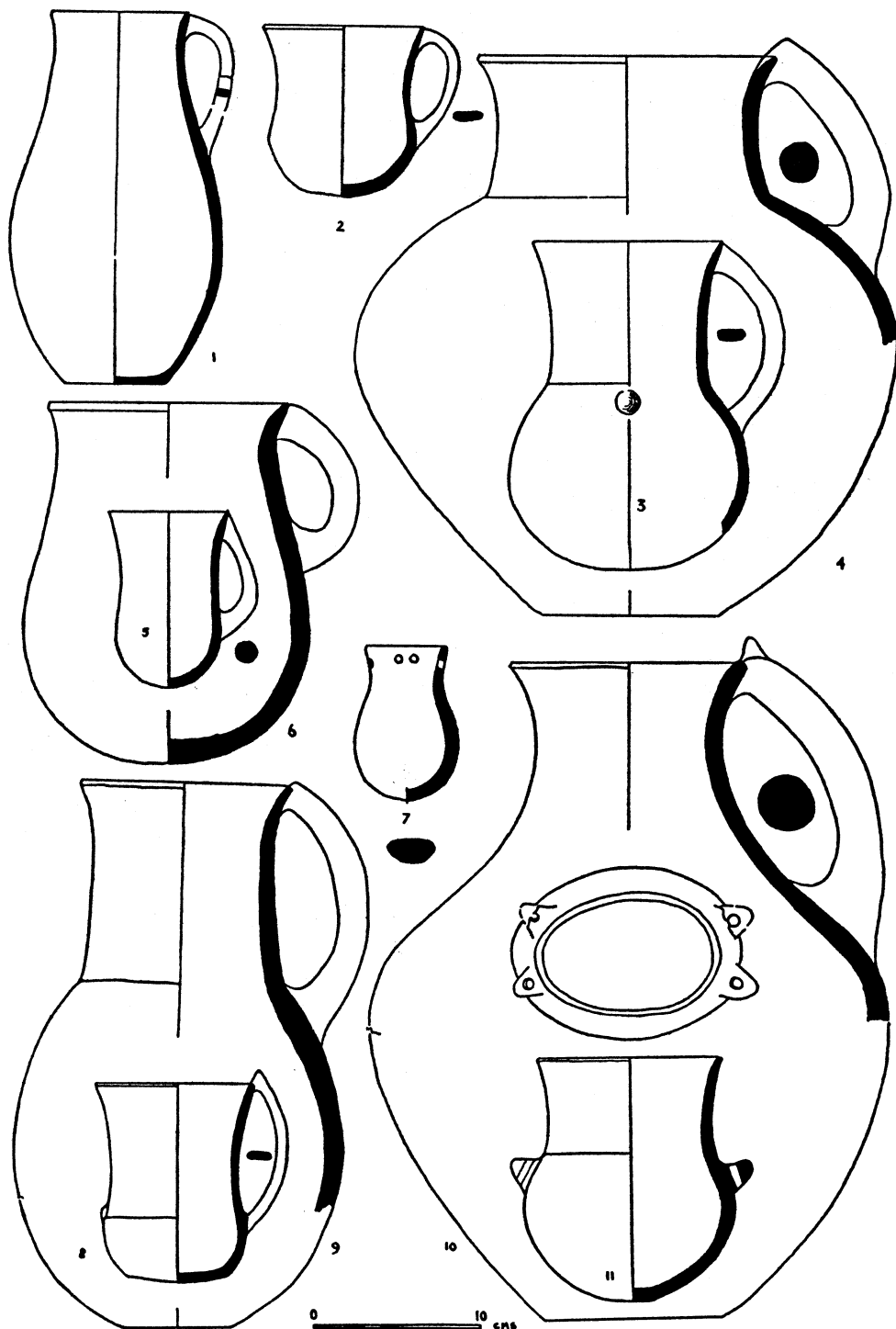


FIG. 3. Beycesultan. Late Chalcolithic burnished ware: Jars, jugs and cups. (1)
 (All vessels are hand-made, burnished ware with numerous straws and grits.)

Late Chalcolithic Houses (Fig. 2)

Well-built house remains were found from Level XXIV downwards to Level XXXV. Levels XX–XXIII are represented by floors and hearths, and Levels XXXVI–XL by clay bins and fragmentary walls only, not illustrated here. The walls are built of mud brick, without stone foundations. The interior of the room, as well as hearths and subsidiary structures, such as bins, benches, etc., are invariably coated with yellow mud plaster. The floors consist of beaten clay. Posts often supported the flat roof. Internal buttresses, characteristic of the Hacilar houses, are not found. Raised hearths are invariably built on a foundation of stones and pebbles, or pot sherds, and covered with plaster.

Some detailed features of each of the houses illustrated in Fig. 2 may be tabulated as follows :

- XXIV. The so-called “megaron”. Southern front *anta* stone built. Doorway in the porch preceded by a raised step. Bench along north side of main room. Circular hearth in middle of the room, not raised. Back room (or porch) with raised “sleeping platforms”.
- XXV. Entered from the north. Hearth, not raised, off centre, east of the doorway. Part of north wall stone-built.
- XXVI. Doorway in porch (?) on east side. Outer north wall buttressed. Raised circular hearth on latter (XXVIa), central rectangular raised hearth on lower (XXVIb) floor. In XXVIa a passage west of the house with stone threshold. In XXVIb open area instead.
- XXVII. Minute house with doorway probably in north wall. Rectangular raised hearth against north wall. In front of it a bench made of two bricks, measuring $32 \times 32 \times 7$ cm. Cooking place in south-west corner. Brick-built plaster-lined bin, containing carbonised wheat, built up against west wall of house. A passage beyond.
- XXVIII. Burnt house. Doorway in south wall. Circular raised hearth, with central post hole east of hearth. A complicated series of bins occupies eastern half of the room. Traces of another in south-west corner. Brick size : $34 \times 27 \times 6$ cm.
- XXIX. Doorway in west wall. Rectangular raised hearth against north wall. In front of it a semi-circular ash-pit. Two subsidiary

- FIG. 3. 1. XXXI. Brown burnished surface. ($\frac{1}{2}$ the scale of the others.)
 2. XXXII. Red, mottled buff burnished slip. BS/58/874.
 3. XXV. Red-topped, greyish-black burnished slip.
 4. XXXVI. Dark grey burnished.
 5. XXVIb. Fine pink, mottled yellow burnished slip. Red interior.
 6. XXXIVa. Brown burnished surface.
 7. XXXII. Light grey unburnished ware. Four pairs of holes below rim.
 8. XXVIb. Light grey burnished ware. BS/58/875.
 9. XXVII. Black burnished slip.
 10. XXXVI. Red-brown burnished.
 11. XXVIII. Oval jar in smoothed buff ware. Two pairs of lugs.

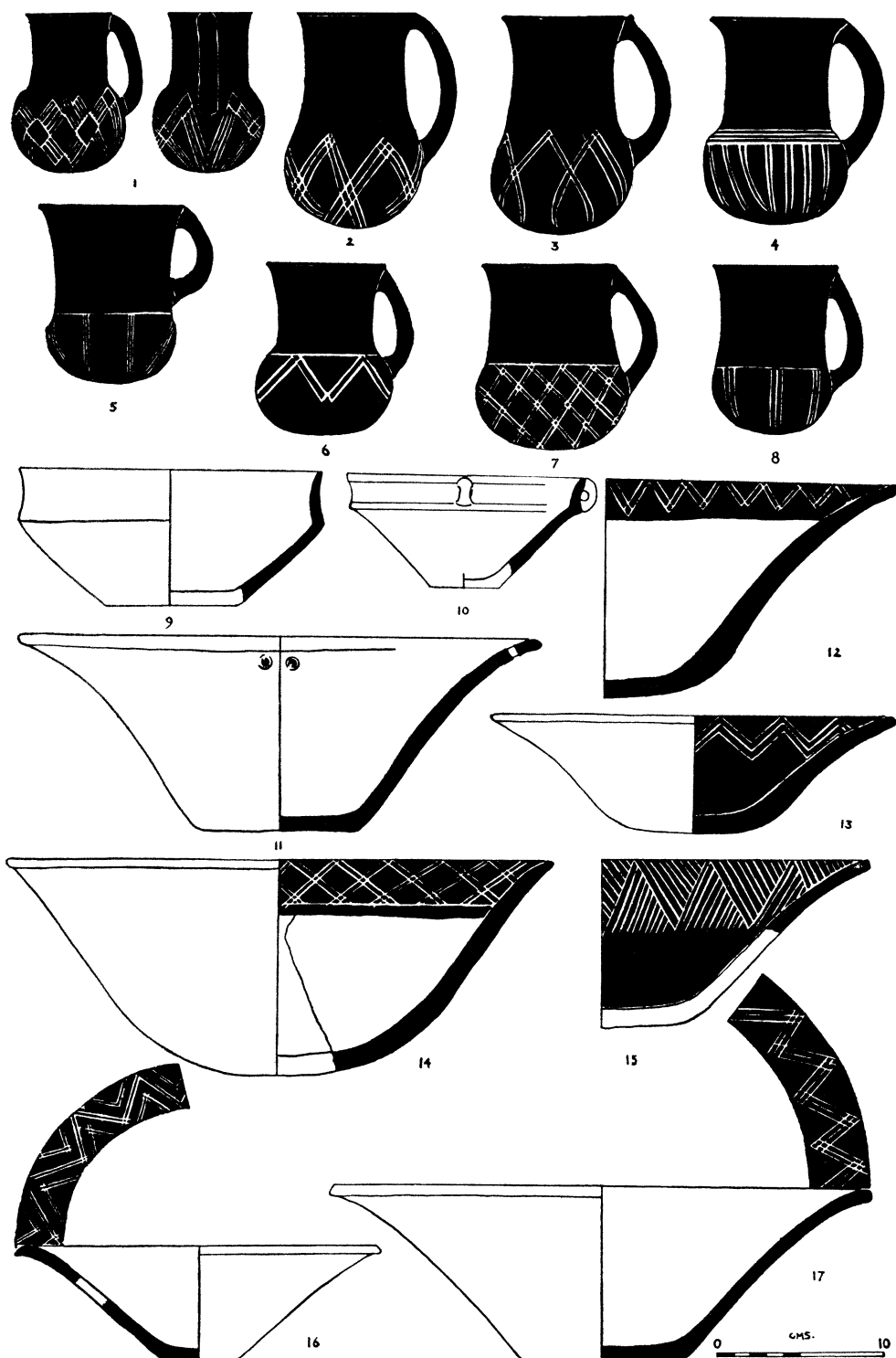


FIG. 4. Beycesultan. Late Chalcolithic restored white-painted cups (1-8) and bowls, plain (9-11) and painted (12-17). ($\frac{1}{2}$)
(All examples are hand-made, black ware with straws and grits.)

circular cooking places and pot-hole paved with sherds for drainage.

- XXX. Doorway in south or east side. Raised rectangular hearth against south wall.
- XXXIb. Burnt house with doorway in east wall. Raised circular hearth with mud brick screen at the back. Ash patch behind it. Plastered bin containing carbonised wheat to the left of the doorway. Four clay-lined pot-holes, one of which was filled with lentils. Another bin in north-west corner.
- XXXII. Burnt house. Doorway probably in east wall. Raised rectangular hearth against north wall. Two clay-lined pot-holes.
- XXXIII. Long room, with doorway in north side. Hearth not raised. Another room, further south, with sunk rectangular hearth. Change in brick sizes ($56 \times 32 \times 8$ cm.). Black bricks properly bonded, thick yellow plaster on walls.
- XXXIV. Long room, with two post holes. No hearth, but cooking place in clay platform in north-west corner (Pl. IIIa). Groups of pottery *in situ* on the floor. In pot marked by arrow, group of copper tools and silver ring (see below, p. 47). Both rooms beyond the south wall are burnt. Brick size $60 \times 32 \times 8$ cm.
- XXXV. Change in orientation of houses. Long axis now north-south. House on left, passage on right. Three different floors.

Late Chalcolithic Pottery (Figs. 3-5)

The pottery from Level XL to XX forms a homogeneous group, showing a minimum of development. Coarse red and buff ware accompanied the more frequent slipped and burnished ware, which in spite of many heavy shapes is not badly made. In contrast to the Early Chalcolithic Hacilar ware, both straw and grit tempers the fabric. Decoration other than mottled effects and a good burnish is rare. Incision occurs on a few handles, plastic ornament is rarely found and a few sherds show an indifferent pattern burnish. The only common form of ornament is decoration in white matt paint applied to the burnished surface. Patterns are few and simple, invariably rectilinear, rarely thick and most often extremely thin.

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|---------|-----|--|----------------|
| FIG. 4. | 1. | XXIV. Red, mottled yellow burnished slip. | } White paint. |
| | 2. | XXV. Dark red burnished slip. | |
| | 3. | XXVIb. Black burnished slip. | |
| | 4. | XXXVI. Jet-black burnished slip. | |
| | 5. | XXXVI. Jet-black burnished slip. | |
| | 6. | XXXIX. Jet-black burnished slip. | |
| | 7. | XXXVI. Jet-black burnished slip. | |
| | 8. | XXXVIII. Jet-black burnished slip. | |
| | 9. | XXVIII. Light grey burnished slip. | |
| | 10. | XXVII. Red-brown burnished slip. | |
| | 11. | XXXIa. Buff topped, black burnished. | |
| | 12. | XXXII. (Plain in XXIX.) White on brown rim, red-brown outside. | |
| | 13. | XXXI. (Plain in XXIX.) White on dark brown. | |
| | 14. | XXXIV. White on black, mottled yellow. | |
| | 15. | XXXIII. White on jet-black burnished slip. | |
| | 16. | XXXV. White on jet-black burnished. | |
| | 17. | XXXIV. White on red-brown burnished. | |

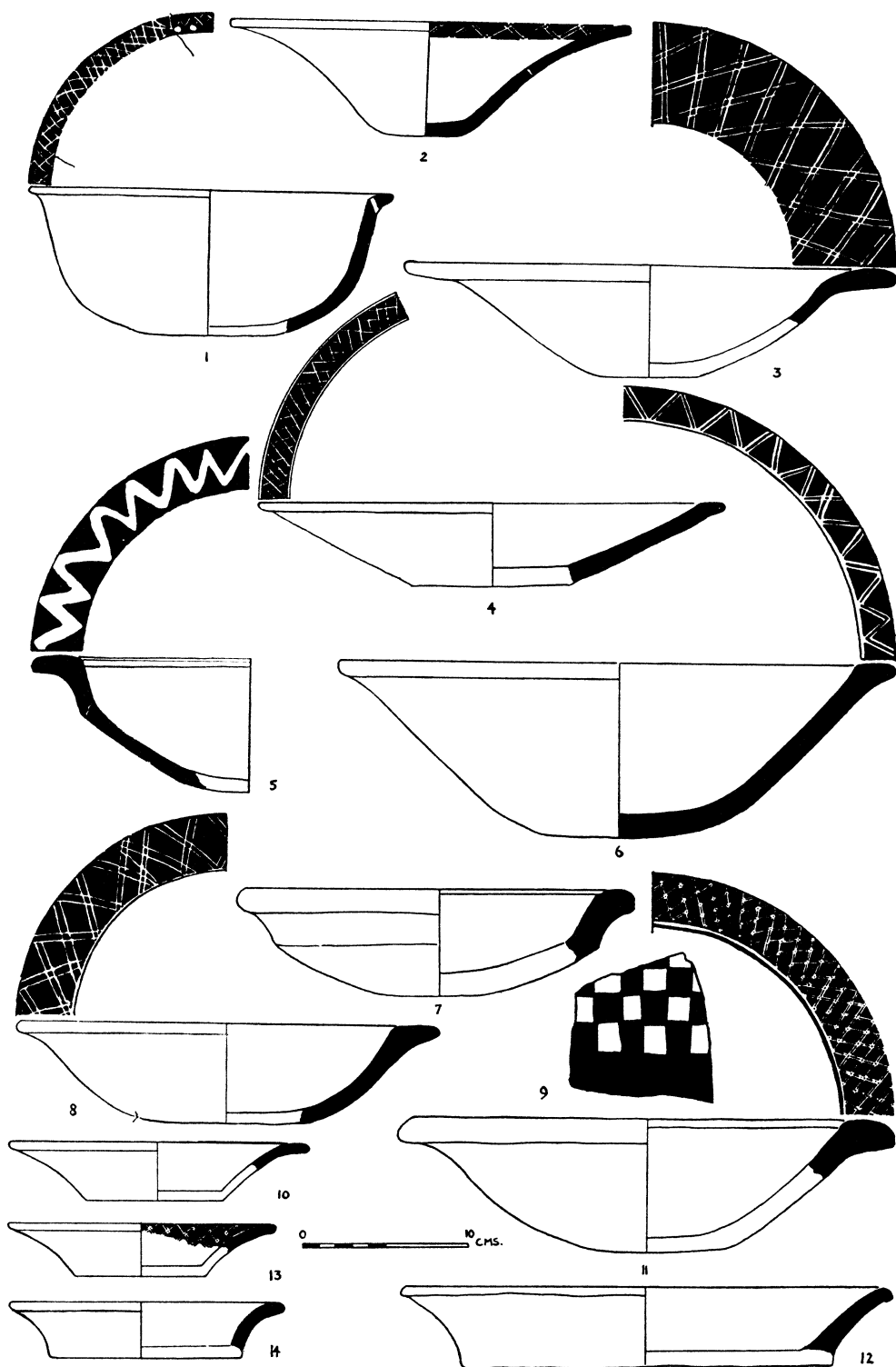


FIG. 5. Beycesultan. Plain and white-painted bowls from the lowest Levels XXXVI-XL. (†)
(All examples are hand-made, black ware with straws and grits.)

This decoration is applied only to the best wares, whatever their colour. Most of the burnished ware is dark (grey or black) coloured, but a fair percentage is red, brown, buff and grey. White-painted wares greatly increase in quantity below Level XXXIV, but are present in all Late Chalcolithic levels at Beycesultan. On a more restricted scale they remained in use there throughout the E.B. I and II periods, and finally disappeared at the beginning of E.B. III (Level XII). At no other site in Anatolia can white-painted pottery be traced back through thirty-six building levels and the recent discovery of white-painted wares in the top-most level at Hacilar (Fig. 6, p. 60) shows that it originated at the end of the Early Chalcolithic period. The substitution of a light-on-dark (white painted) for a dark-on-light (red on cream slip) technique has parallels elsewhere,¹ but though it no doubt saved the potter much labour, this cheap technique was, as a sherd count shows,² not very popular at this early period. The floruit of white-painted pottery falls in the Late Chalcolithic and E.B. I–II periods in Western Anatolia and the offshore islands, and in the Late Chalcolithic in the Konya Plain, Mersin (XII) and Büyük Güllücek. In the early third millennium B.C. we find it used in several local Late Chalcolithic cultures, at Alishar (14–12), at Alaca and at a number of sites in the Pontic region. A late revival was noted at Polatlı and Karaoğlu towards the end of the West Anatolian E.B. III period. Particularly interesting is the close correspondence in the use of the white-painted technique in Greece and Western Anatolia. White-painted wares (A3α) occur first in the Sesklo culture, which we consider contemporary with Hacilar. Not very common at first, white-painted ware figures prominently in the Dimini culture white-on-red (B3α1), to become typical of the Larisa culture (Γ1α1, white-on-black ware). In Central Greece it re-emerges in E.H. III as the Hagia Marina ware, roughly contemporary with the white-painted ware of Polatlı and Karaoğlu.

Shapes and Parallels

The number of shapes of the Late Chalcolithic pottery at Beycesultan is very restricted. Bowls with flaring sides and flat bases—the only shape

¹ Sesklo white on red ware (A3α) and red on white (A3β) wares; Wace-Thompson, *Prehistoric Thessaly*, p. 14. Also E.H.3 white on black Hagia Marina ware in Central Greece, and black on buff ware in Southern Greece.

² About forty out of a total of c. 100,000 (!) which incidentally shows the danger of digging on too limited a scale.

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- FIG. 5.
1. XXXVI. White on brown rim, black burnished ware.
 2. XXXVII. White on black burnished slip.
 3. XXXVII. White on brown burnished slip.
 4. XXXVIII. White on dark red rim, of black burnished bowl.
 5. XXXVIII. White on light grey ware.
 6. XXXVIII. White on jet-black burnished ware.
 7. XXXVIII. Grey burnished ware.
 8. XXXVIII. White on brown burnished ware.
 9. XXXII. (cf. XXXIX) Jar fragment. White on grey burnished ware.
 10. XXXIX. Fine black burnished ware.
 11. XXXIX. White on dark grey burnished ware.
 12. XXXIX. Fine black burnished ware.
 13. XL. White on black burnished slip.
 14. XL. Black burnished ware.

showing chronological variations—bag-shaped jugs and jars, often with knobbed handles, both large and small, are most characteristic of the burnished ware class, whether white painted or not (Figs. 3–5). Little mention need be made of the coarse wares; an oval jar (Fig. 3 : 11) is still reminiscent of similar shapes from Hacilar and the baking platters (AS. VIII, 1958, p. 124, Fig. 4 : 13) are found only in Levels XX–XXXI, but not before. They are equally characteristic of the Late Chalcolithic of the Konya Plain, but do not seem to occur in what might be called the Middle Chalcolithic Can Hasan culture. A jar neck with splashes of brown paint and a handle of Konya Plain type were found in Levels XXXII and XXXIII and are very like Mersin XVI cream slipped ware. Many sherds in Level XXX are almost indistinguishable from the Late Chalcolithic of the Konya Plain. Between them these, by themselves not very reliable parallels, suggest that the transition from Middle to Late Chalcolithic in the Konya Plain and at Mersin coincides *approximately* with our Level XXXI, or thereabouts. More important chronologically are the flat dishes with everted rim in black burnished ware (Fig. 5 : 10, 12–14) from Levels XXXIX and XL, which are closely matched in Mersin XIX–XVII,³ (Middle Chalcolithic).

This would indicate that the beginning of our Late Chalcolithic is approximately contemporary with that of Middle Chalcolithic Mersin, Konya Plain, and in Mesopotamian terms, with that of Halaf. As Hacilar is contemporary with Early Chalcolithic Mersin, with the newly-found Çatal Hüyük West culture of the Konya Plain, and with Hassuna, there can be no gap between Hacilar and Beycesultan. In tabular form :

Beycesultan E.B. I	Konya Plain E.B. I	Cilician E.B. I	
Beycesultan Late Chalcolithic c. XXXI–XX	Konya Plain Late Chalcolithic	Mersin XV–XII Late Chalcolithic	
Beycesultan XL–c. XXXII	Konya Plain Can Hasan Middle Chalcolithic	Mersin XIX–XVI Middle Chalcolithic	Halaf
Hacilar V–I Early Chalcolithic	Konya Plain Çatal H. West culture Early Chalcolithic	Mersin XXIV–XX Early Chalcolithic	Hassuna Early Chalcolithic

Whereas the variations on jug, jar and cup shapes do not appear to reflect any chronological change, it is possible to establish a sequence of bowls, in spite of considerable overlaps.

First come the shallow dishes with flaring sides (type A), with or without decoration (Fig. 5 : 10, 12–14). These seem to be confined to the two bottom levels, XL and XXXIX. Then come bowls with thick rims and a slight carination below the rim (type B), especially in XXXIX and XXXVIII. These are often decorated (Fig. 5 : 5, 7, 8, 11). Next comes a

³ J. Garstang, *Prehistoric Mersin*, Fig. 72 : 2 (XIX) ; Fig. 74 : 6 (XVIII–XVII).

slightly more graceful version without carination (type C) (Fig. 5 : 1, 4, 6) with a range from XXXVIII to XXXVI, very often painted. And last in this class of painted bowls comes type D with flaring sides and a pair (or two pairs) of holes in the rim (Fig. 5 : 2, 3 ; Fig. 4 : 11-17) in Levels XXXVII-XXXI. Unpainted specimens of this type are found as late as Level XXVII. After Level XXVIII white-painted bowls disappear and new unpainted types take their place ; type E, a sharply carinated bowl (Fig. 4 : 9) in Levels XXVIII-XXVI, closely followed by type F (Fig. 4 : 10) a deeper bowl with an outcurving carinated rim, sometimes provided with lugs or handles (*AS. VIII*, 1958, p. 124, Fig. 4 : 4, 8, 9, 11) which predominates from Level XXV-XXII. Finally, smaller bowls with flaring sides (type G) (*AS. VIII*, 1958, p. 124, Fig. 4 : 6) close the sequence in Levels XX-XXI. Bowls not unlike our type C occur at Mersin in Level XIX ⁴ (rather unusual versions of Halaf ware) and the white-painted type F 70 at Tigani, ⁵ usually dated wrongly to the Troy I period, is exactly like type D. The white-painted bowls from Mersin XII ⁶ can be compared to Fig. 4 : 11-17, but bases, handles and patterns are on the whole different and more developed, which is in keeping with their probably somewhat later date, towards the end of the fourth millennium B.C. ⁷

III. AN EARLY METAL HOARD FROM BEYCESULTAN

By DAVID STRONACH

The discovery of a metal hoard in Level XXXIV at Beycesultan, for which a provisional date in the second half of the fifth millennium B.C. has been proposed on various grounds, ⁸ has provided us with the largest group of metal objects known from any context of similar date. The variety of objects in the hoard extends the repertoire of metal forms known from other sites of comparable age and one object illustrates the earliest use of silver attested so far. In short, the whole collection is of more than usual interest in that it throws fresh light on the remarkable progress that Near Eastern metallurgy seems to have made during the fifth millennium B.C.

In the past this progress had been hinted at by the copper pins, chisels and axes found in the Chalcolithic levels at Mersin ⁹ and by the similar copper objects recovered from Sialk I ¹⁰ and the Halaf levels at Arpachiya ¹¹ and Chagar Bazar. ¹² Also, a single piece of lead from Arpachiya had at

⁴ The rather unusual Halaf shapes, *ibid.* Fig. 72 : 5 and 10 are not unlike our white-painted bowls either.

⁵ *Athen. Mitth.* LX, 112 ff. and *PPS.* XXII, 1956, Fig. 6 : F70 and F69. Only a single pedestal was found at Beycesultan in the Late Chalcolithic.

⁶ *Prehistoric Mersin*, Fig. 118 : 1, 3, 4, 10, 11, 13, 14.

⁷ *ibid.*, p. 198, where they are provisionally dated to Late Troy I. This cautious date is far too low and based on the fact that white-painted pottery had not yet been found in pre-Troy I levels anywhere else.

⁸ See above, pp. 38 and 43.

⁹ J. Garstang, *Prehistoric Mersin*, 1953, Figs. 50, 69, 80b and 85.

¹⁰ R. Ghirshman, *Fouilles de Sialk I*, 1938, p. 16 and Pl. LII, 49, 53-6 and 58.

¹¹ M. E. L. Mallowan and J. Cruikshank Rose, *Iraq* II, p. 104.

¹² M. E. L. Mallowan, *Iraq* III, p. 26.

least suggested ¹³ the existence of gold and silver in the Halaf period. But it has taken this additional evidence from Beycesultan to fill out the picture. For now copper, silver and lead are all attested in the period in question, and the simultaneous use of gold can be regarded as practically certain.

This new information gives us a much clearer insight into the character of the metal industry that existed in Chalcolithic times. In the first place, the widespread use of different metals suggests that full-time metalsmiths must have been plying their trade over much of the Near East as early as the fifth millennium B.C. And secondly, the increasing number of early metal forms can be construed as further proof that even such things as metal vessels, which appear to have inspired certain Halaf pottery shapes,¹⁴ were being produced in the same period. Indeed, the production of metal vessels probably became one of the stock-in-trade achievements of the Chalcolithic metalsmith, for nothing else can account for the metallic appearance of so much of the pottery from Anatolia and elsewhere, particularly from the fourth millennium B.C. onwards.¹⁵

Returning to the details of the hoard from Beycesultan (see Plate IIIA and Fig. 6 : 1-15), it probably represents a typical household collection of small metal objects—such as must have been common at a time when every fragment of metal was jealously guarded and carefully handed down from one generation to the next. It was found in one of several storage jars situated in the corner of a room that seems to have been used for ordinary domestic purposes.¹⁶ Probably some of the metal objects were in everyday use while others, which were damaged or broken, were either waiting to be repaired or were simply being stored as part of someone's material possessions. The alternative possibility that the objects formed part of a metalsmith's hoard, which was intended to be melted down at a later date, is suggested by the fragmentary and unfinished appearance of certain of the articles. But it must be remembered that there was no other evidence from the house to support such an interpretation, and that the unfinished character of some of the objects need not be regarded as particularly significant at a time when all of them could have been stored as a form of wealth.

Altogether the hoard consists of one silver object and fourteen copper ones. The single silver find is represented by the simple ring shown in Fig. 6 : 15. The various copper objects cover quite a range of metal forms, but it is curious that there were no pins amongst them. Perhaps the most interesting of the copper articles is a fragment of a dagger blade (Fig. 6 : 14) which represents the earliest dagger found so far. But the collection also includes the remains of at least one possible chisel (Fig. 6 : 4), two awls (Fig. 6 : 7, 11) and three needles (Fig. 6 : 1-3). The function of the

¹³ M. E. L. Mallowan and J. Cruikshank Rose, *op. cit.*, loc. cit.

¹⁴ See M. E. L. Mallowan and J. Cruikshank Rose, *op. cit.*, loc. cit.

¹⁵ I am indebted to J. Mellaart for drawing my attention to much unpublished material in this connection.

¹⁶ See above, p. 39 (fig. 2), and p. 43, also Pl. IIIa.



(a) The " Temple " building in Area " R ", Level V, from the north-east.



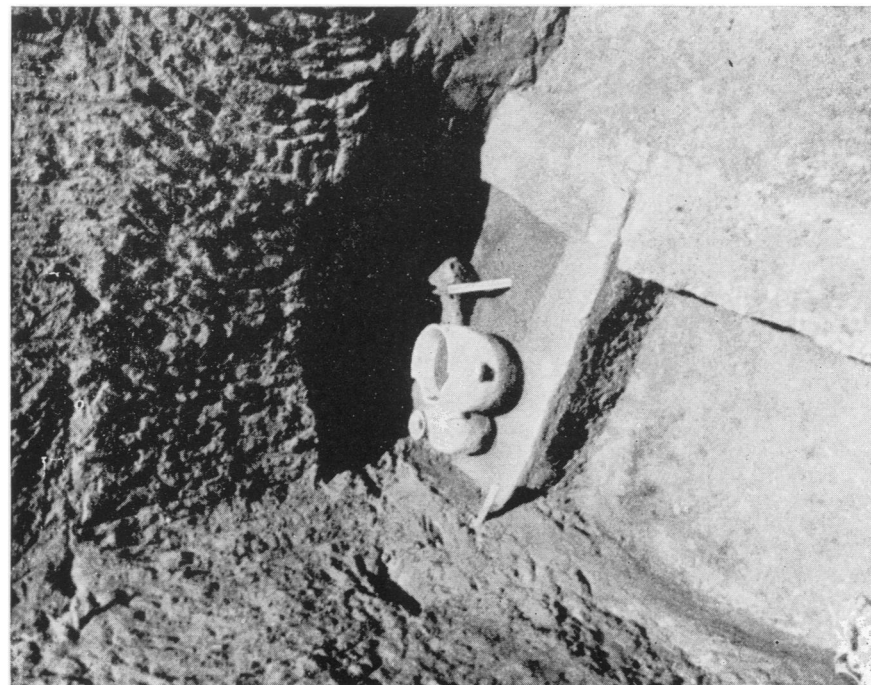
(b) " Temple " building in Area " R ", Level V. Inner vestibule with pottery in place.



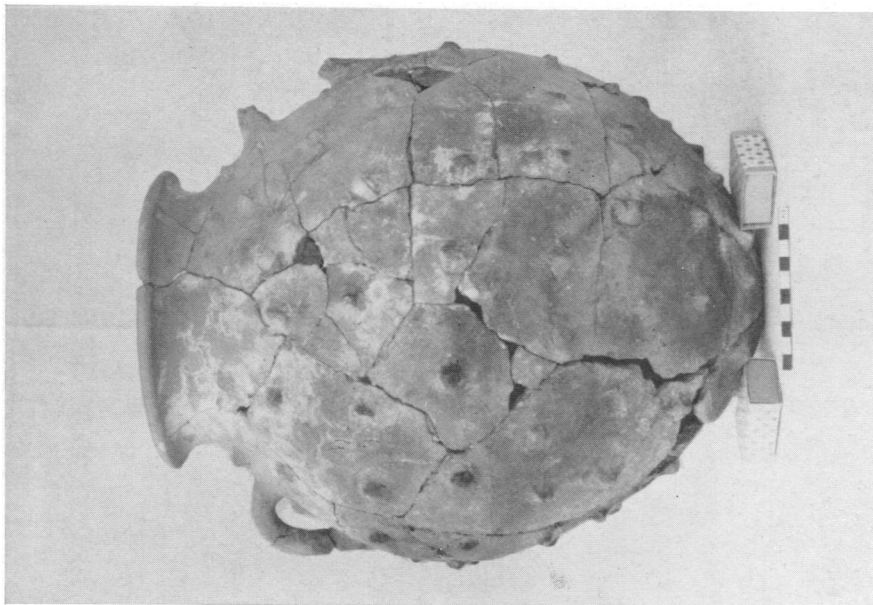
(a) Sounding SX. "Long-room" building in Level XXXIII with jar containing copper implements and silver ring of Level XXXIV appearing.



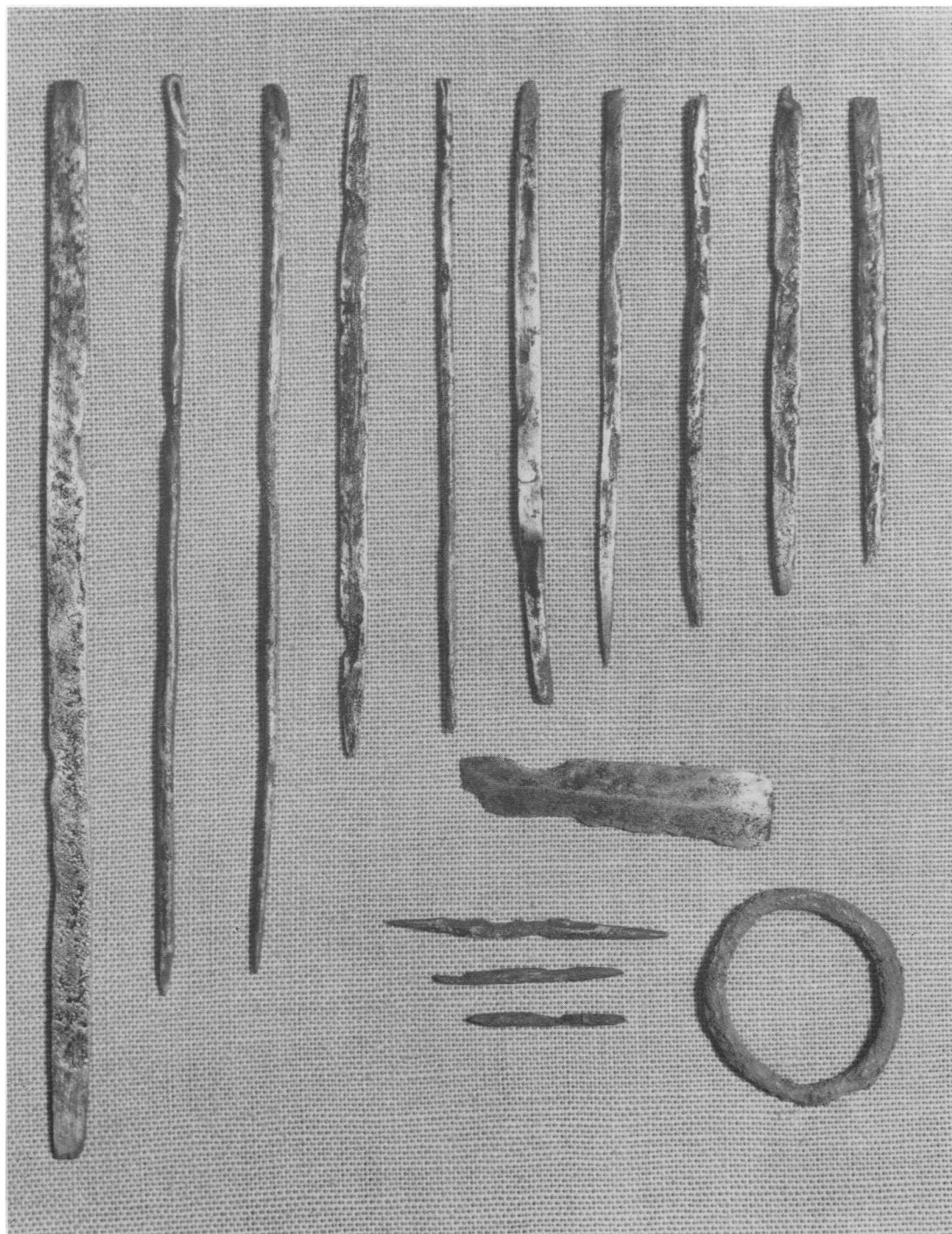
(b) Sounding SX. Single-chamber house in Level XXVIII with child burial in foreground.



(a) Chalcolithic vessels in Level XXXIV, one of which contained the hoard of copper objects.



(b) Jar with knobbed ornament from "Temple" building in Area R, Level V.



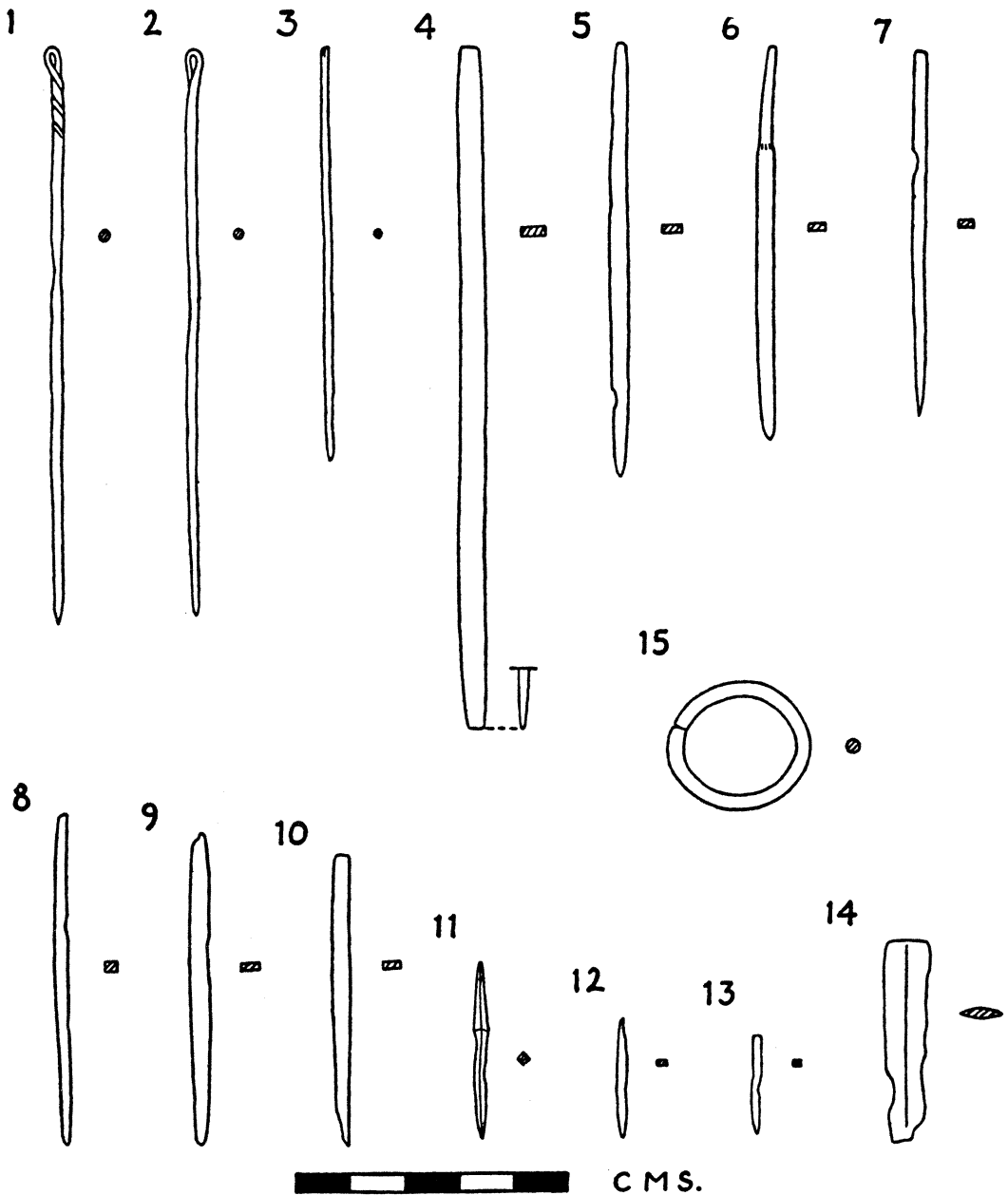


FIG. 6. Beycesultan. Group of copper tools and silver ring found in a pot in a house of Level XXXIV.

other fragments is less certain, although most of them might have been used as awls or borers.

Certain of the objects, such as the long chisel, look as if they might have been cast in an open mould, but most of the others, including the fragment of a dagger blade, undoubtedly look as if they were hammered into shape. In this respect the collection seems to confirm the evidence from elsewhere that at this time most tools were still being hammered out instead of being cast in a mould.

One surprising aspect of the collection is the fact that only two of the various awl-like implements (Fig. 6 : 6, 11) can be said to possess a distinct tang.¹⁷ But presumably this failing can be ascribed to the unfinished condition of the objects concerned. The only other unusual feature is the twisted head of one of the needles (Fig. 6 : 1) which would seem to illustrate a clumsy method of forming the eye that died out in later times. In all other respects the collection has a familiar appearance that only serves to emphasise the early development of standard metal forms.

As no analysis of the objects has been undertaken as yet, it is hoped that a full report on their composition can be included in the final publication of the Beycesultan excavations.

CATALOGUE

See line drawings in Fig. 6 and photographic reproductions in Plate IIIA.

- No. 1. Copper needle with a twisted head. Length 10.6 cm.
- No. 2. Copper needle. Length 10.4 cm.
- No. 3. Copper needle. Head missing. Length 7.6 cm.
- No. 4. Copper bar, probably used as a chisel. Length 12.5 cm.
- No. 5. Copper bar, possibly used as an awl. Length 7.9 cm.
- No. 6. Copper bar with an apparent tang at one end. Possibly used as an awl. Length 7.2 cm.
- No. 7. Copper awl. Length 6.7 cm.
- No. 8. Copper bar, slightly pointed at one end and broken off at the other. Length 6.1 cm.
- No. 9. Copper bar, similar to No. 8 but with a flatter section. Length 5.8 cm.
- No. 10. Copper bar with one end pointed as the result of a fracture. Length 5.4 cm.
- No. 11. Copper awl with a square section and a pointed tang. Length 3.3 cm.
- No. 12. Miniature copper point, possibly used as an awl. Length 2.2 cm.
- No. 13. Similar to No. 12. Length 1.8 cm.
- No. 14. Fragment of a copper dagger blade with a slightly rhombic section. Length 3.7 cm.
- No. 15. Silver ring. Greatest diameter 2.5 cm.

¹⁷ Cf. the distinct tangs found on similar tools from Sialk. R. Ghirshman, *op. cit.*, *loc. cit.*