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EASTERN ANATOLIA IN THE CHALCOLITHIC AND EARLY BRONZE AGE

By C. A. BURNEY

INTRODUCTION

THE POTTERY DESCRIBED in this article was collected during a survey of ancient sites in eastern Turkey carried out in the summer of 1956. More than 150 Chalcolithic, Bronze Age and Iron Age sites were recorded : only the Chalcolithic and Early Bronze Age pottery is discussed here, the later periods being reserved for a future article. A considerable quantity of potsherds was collected, so that only a selection of the more significant examples has been illustrated. The zone covered by this survey is best described as eastern Anatolia within the mountains, excluding both the Pontic region and the south-eastern provinces of Turkey, bordering on Syria and Iraq : it is the narrowest part of the great natural bridge between Asia and Europe that has given Anatolia its long and varied history. The survey covered the greater part of the provinces of Sivas, Malatya, Elazığ, Muş, Bitlis and Van. Sites near Adıyaman, also visited, are not dealt with here. The plain of Iğdır, north of Mount Ararat, was partially explored in 1957, and yielded important material, but the plain of Karaköse proved to have few sites, and those with little surface pottery. The sherds here described are supplemented by intact vessels from Ernis, on the north-eastern shore of Lake Van, now in Van Museum.

The first region comprised in the zone explored on this survey is that of Malatya-Elazığ, on the upper Euphrates. For the purposes of this article this includes the districts of Divriği and Kangal, in the province of Sivas ; the districts of Gürün and Darende were not explored. Sites were recorded in several administrative districts west of the Euphrates, those of Divriği, Kangal, Hekimhan, Arguvan, Akçadağ and Malatya. East of the Euphrates most of the sites examined lie fairly close to Elazığ, particularly in the fertile plain called Altınova, south-east of the town, and on or near the road west to Malatya ; there are also a few sites near Palu, east of Elazığ. Exploration was not extended south of Altınova. This region includes lands suitable for early farming communities, such as the Arguvan area, which has undulating grasslands, adequate water and an equable climate. Nevertheless, although these lands lie athwart an important natural road up from the south-east, there is as yet no material to suggest that this was a primary centre of farming, the earliest pottery hitherto found being Chalcolithic. Malatya lies at the junction of two natural roads into Anatolia proper, one from the south-east, up from the Tigris valley to Elazığ and thence across the Euphrates, the other from the south-west ; this latter gives access to Malatya from Cilicia and the Amuq plain, the roads from these two areas meeting at Maraş. From Malatya a major route continues north-westwards towards Sivas and central Anatolia. There are also two other roads, less used : one leads

west to the plain of Elbistan and thence on to Kayseri and central Anatolia ; the other leads north-east, by the Euphrates valley, towards Erzincan and north-eastern Anatolia. At various periods the area around Malatya was subject to influences from the Diyarbakır region, via Elazığ, and from Cilicia and the Amuq. Even Elazığ seems also at times to have been in close contact with Cilicia. The small plain near Palu has yielded pottery showing Syrian influence.

The second region covered by this survey is less homogeneous, comprising three parts : first, the districts surrounding Lake Van and immediately to the east ; second, the plain of Muş ; third, the plain extending from Bulanık eastwards to Patnos. Most of the sites around Lake Van are Urartian : the pottery from these will be described in a later article. But the small areas of fertile land bordering the lake are sheltered from the worst severities of the long winter, and are very well watered, being ideal for early settlement, for which the local abundance of obsidian provided another incentive ; it is possible that some prehistoric sites are now submerged beneath the waters of Lake Van, the level of which is far from stable. Narrow mountain valleys may likewise have been settled as early as the fourth or fifth millennium B.C., but the nature of the country makes any exhaustive search of such valleys at present impracticable. The plain of Muş, in geological times a lake-bed, is not as fertile as its appearance suggests : this may explain the scarcity of remains earlier than the second millennium B.C. ; much of this plain was probably a swamp, and the soil is not of the best quality for agriculture. The plain between Bulanık and Patnos is open, good grazing land but not so well watered as the districts around Lake Van. There is an easy approach to Lake Van from the north-west, from the plain of Karaköse through Patnos to Erciş, on the north shore ; another natural gap leads from Bulanık past the Nazık Lake to Ahlat. Three roads lead to the lake from Persia, the easiest one going up the Kotur valley and through Özalp to the Lake of Erçek ; more difficult routes approach from the north-east, through the plain of Çaldıran, and from the south-east, over the bleak uplands near the headwaters of the Zab River, and thence down the Hoşap valley. Access to the Muş plain from the western end of Lake Van is easy, and there is an important road south down the Bitlis gorge. Pack animals can move along paths south from Van across the mountains of Hakkâri, but there is no open, easy route. The plain of Muş was probably relatively isolated until the Late Bronze Age, although Assyrian armies later marched up the Arsanias River, now called the Murat. Access from the north to the plain is fairly easy, and the district of Bulanık can be reached by crossing a high ridge.

Two areas covered by this survey, but lying outside the Van-Muş-Bulanık region, are the plain of Karaköse, on the great highroad into Anatolia from the east, and the plain of Iğdır : the first has few sites, perhaps because much of it is covered with gravel, but the second is very fertile, being part of the middle Araxes valley, which contains also a number of ancient sites north of the river, around Erivan.

The yield of surface pottery varied considerably from one area to another. Many of the sites, such as the Urartian fortresses, are not true mounds (*höyük*s) : on these and on mounds not recently, if ever, ploughed, including many of those in the plain of Muş, relatively few sherds are to be found on the surface.

THE CHALCOLITHIC CULTURES OF EASTERN ANATOLIA

Some years ago the prevalent opinion amongst archaeologists was that the Chalcolithic cultures of Mesopotamia and Syria, chiefly distinguished by their several styles of painted pottery, did not penetrate north of the Taurus range and its continuation east of the Euphrates. But J. Mellaart has shown, from the results of his survey of prehistoric sites in the southern part of the Anatolian plateau, that in fact the Taurus was certainly not an impassable barrier, even before the period when Hassuna painted pottery was in use in northern Mesopotamia and at Mersin.¹ To the east, the natural road into Anatolia was by Elazığ and across the Euphrates to Malatya, or passing north of it. Thus it is not altogether remarkable that some true Halaf pottery has been found at Kuyuluk, a small mound near Hekimhan, half-way between Malatya and Sivas. It must surely occur elsewhere, but the chances of collecting sherds of this ware on the surface are small. More widespread are sherds painted with chevrons, and probably to be associated with the Hassuna type of painted ware : the closest parallels are from the Arguvan district, just west of the Euphrates, and from Hinsor, six miles west of Elazığ. Some chevron-painted sherds might, however, be as late as Mersin XII.² Precise dating of most of the Chalcolithic pottery collected from the surface of mounds in the Elazığ-Malatya region cannot be attempted until stratified material becomes available. But there is at least sufficient evidence to make it clear that both the plains of Elazığ and the area between Malatya and Arguvan, together with the Hekimhan area, were in contact with north Syria and Mesopotamia during the fifth millennium B.C.

Local wares, usually dark burnished and varying greatly in their quality of firing, preponderate over wares of southern origin. At Kuyuluk the Halaf ware was certainly imported : only three or four sherds were found, in contrast to the mass of local pottery, most of which is crude and soft-baked. A local Chalcolithic painted pottery occurs at Hinsor, near Elazığ, and at a site close to Palu : the decoration is in matt red paint on a cream slip. A similar sherd from Aşağı Sazlıca, near Hekimhan, could be of this painted ware. Plain wares, hard-fired, from Hinsor and Palu are undoubtedly Chalcolithic, and reinforce the evidence for connections with the south-east. At Silbistan, just west of the Euphrates and north of Malatya, the normal preponderance of dark burnished wares

¹ *AS.* IV (1954), pp. 175-240. Çukurkent has Neolithic pottery showing similarities to that of Mersin (*ibid.* pp. 180-6). Much new material has been found at Hacılar, near Burdur (see *AS.* VIII).

² i.e. latest Ubaid. But chevrons are not common in Mersin XIIB, whereas they are the predominant motif in the Hassuna levels (XXIII-XX).

occurs, but there are also some sherds of plain buff ware, including some with "grass-wiped" surface, apparently comparable with pottery found in the Maraş plain.³

There is thus evidence of widespread contact with Syria and perhaps with Mesopotamia throughout the Elazığ-Malatya region in Chalcolithic times, but the comparatively small quantities of pottery likely to have come from the south suggest that such contact was not very close.

The Chalcolithic cultures of the Van region are as yet known from one site only, Tilkitepe, twice excavated, but with no really complete publication of the results.⁴ Further north, there were occupation levels stratified beneath the first Early Bronze Age level at Karaz, but there is no evidence yet available from which to outline the Chalcolithic period in the regions of Erzurum and Karaköse. Tilkitepe, close to Van, provides a sequence of three main levels.

Tilkitepe III, the earliest level, contains fine Halaf painted pottery, burnished, as excellent as any found in Mesopotamia. Obsidian was exported from the districts near Nemrut Dağ and Süphan Dağ, on Lake Van; but the very abundance of natural obsidian will make it extremely hard to locate the sites where it was worked. It remained in use during the third millennium B.C. in the Van region, though probably less extensively, for there is no evidence of such long blades as were found at Tilkitepe.

For Tilkitepe II, with its burnished, unpainted wares, there are no parallels yet known, except possibly with Geoy Tepe N.⁵

The last Chalcolithic level, Tilkitepe I, is characterised by straw-tempered ware, often decorated with blocks of wavy lines in matt red paint. There is a very little plain straw-tempered ware from the Muş plain that appears to be of the same type, but unpainted. Straw-tempered ware and the motif of wavy lines occur at Geoy Tepe M,⁶ but that cannot be regarded as the centre of this essentially Persian painted pottery, for blocks of wavy lines frequently form part of the decoration of painted vessels at Tepe Siyalk in Period III (levels 1-6)⁷; in Siyalk III, 7, these are replaced by blocks of chevrons, also arranged vertically as part of the design,⁸ and the same motif occurs in Tepe Hissar I.⁹ It therefore seems reasonable to regard the Van region, and perhaps also the Muş plain, as

³ Information kindly supplied by J. Mellaart.

⁴ W. Jenny, *PZ.* XIX (1928), p. 284 ff., and E. B. Reilly, *TT.* IV (1940), pp. 156-165.

⁵ T. Burton-Brown, *Excavations in Azerbaijan, 1948* (London, 1951), p. 16 and p. 22 (no. 674). Very little of this level was excavated.

⁶ *ibid.* pp. 20-5 and p. 37 (nos. 1 and 97); pls. I, II, III (nos. 43 and 97).

⁷ R. Ghirshman, *Fouilles de Sialk I* (Paris, 1938), pls. XII (1 and 5), XIII (1), XIV (1-4), XVII (1, 3, 5) and XVIII (4).

⁸ *ibid.* pl. XX (3) and pl. XXI (4).

⁹ E. F. Schmidt, "Tepe Hissar Excavations, 1931," in *The Museum Journal* (Philadelphia), Vol. XXIII, no. 4 (1933), pls. LXXXVI A (H815 and H1127) and LXXXVII (H1562).

the westward extension of a late Chalcolithic culture, towards the end of the fourth millennium B.C. Thus the original contacts with Mesopotamia, apparent in Tilkitepe III, were succeeded by absorption into a north Persian cultural province. Some of the Early Bronze Age pottery from sites near Lake Van suggests that the tradition of plain or only slightly burnished buff ware persisted into the third millennium B.C., in a conservative region.

DETAILED DESCRIPTION OF CHALCOLITHIC WARES IN EASTERN ANATOLIA

The Malatya-Elazığ Region

West of the Euphrates little painted pottery was found that can definitely be classed as of Hassuna type and period, although there is one jar rim from İsaköy (Fig. 1) ; near Elazığ, a jar rim from Hinsor (Fig. 2) is also of Hassuna type. Painted chevron ornament in various styles occurs on pottery from the Arguvan area and Silbistan, near Malatya, but this could be post-Hassuna.

There is a little true Halaf ware from Kuyuluk, close to Hekimhan, including a bowl (Fig. 3) and a sherd with wavy lines, a style found at Carchemish (Fig. 4)¹⁰ ; another sherd is painted with a degenerate version of the *bukranium* (Fig. 5). Local Halaf ware was found at Kuyuluk and Hinsor (Fig. 6), and at Karahüyük. The soft-baked local pottery of Kuyuluk (Figs. 7-10) may be contemporary.

Ubaid painted pottery occurs at Kuyuluk and İsaköy, but only one or two sherds ; one sherd from Arslantepe and another from Furuncu, with simple bands in viscous black paint, may also be of Ubaid ware. It is either to this period, or more probably to one immediately following, that the plain buff ware from Hasirci IV, not far north of Malatya, must be assigned. This small site seems to be of one period, and has almost exclusively the plain light ware (Figs. 11-13), much of it straw-tempered, that is characteristic of the Late Chalcolithic at Tarsus and of Amuq Phase F¹¹ ; some vessels were turned on a slow wheel.¹² A "grass-wiped" bowl (Fig. 14) and a sherd with a similar surface from Silbistan suggest connections with the Maraş plain as well as Cilicia. One sherd from Hasirci IV (Fig. 15) has bands of dots, made with a sharp point stuck into the wet clay : this seems to be of Ninevite 5 type¹³ ; if so, there must have been contact with northern Mesopotamia till the end of Chalcolithic times. There is one painted sherd, with red bands on plain greenish-buff slip, from this site.

In the Arguvan area there may have been a local Chalcolithic pottery, painted and plain, to which various chevron-painted sherds could belong (Figs. 16-18), including a bowl from Horomhan painted on the inside with chevrons filled in with cross-hatching (Fig. 19). A jar from İsaköy, of plain pinkish-buff ware, has red dabs painted along the narrow flat top of the rim (Fig. 20). Certain of the

¹⁰ Sir Leonard Woolley, *Iraq I* (1934), pls. XVIII-XIX.

¹¹ H. Goldman, *The Excavations at Gözlü Kule, Tarsus* Vol. II (Princeton, 1956), p. 82. For connections with Amuq F and general correlations, see *ibid.* p. 87. For Amuq F, see R. Braidwood, in *Relative Chronologies in Old World Archaeology* (Chicago, 1954) pp. 37-8 and fig. 1.

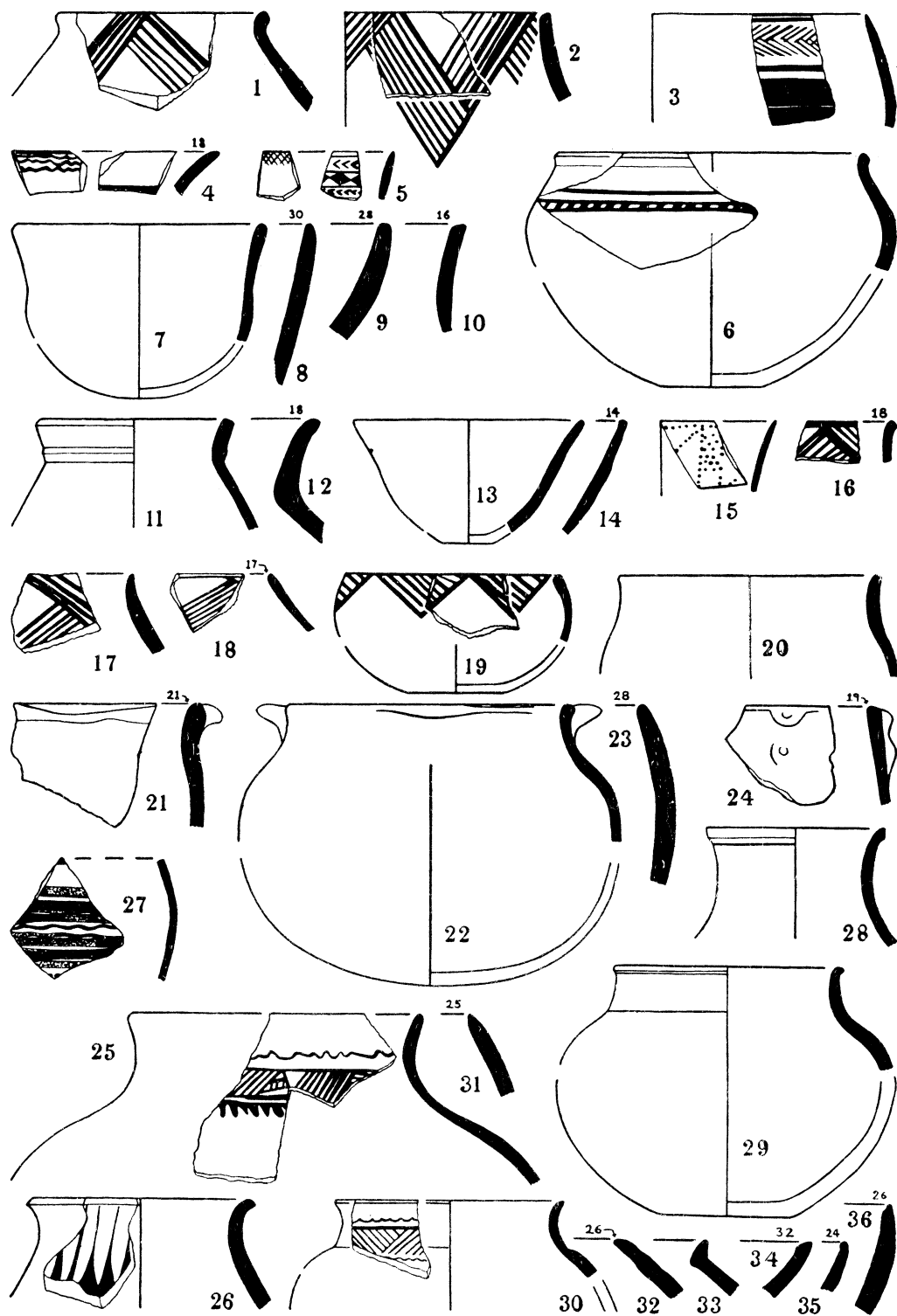
¹² "Handmade wheel-finished" vessels occur at Tarsus in the Ubaid phase (*Tarsus* Vol. II, p. 77), but also in the Late Chalcolithic (p. 82).

¹³ For Ninevite 5 incised ware in general, see *LAAA*. XX (1933), pls. LXII-LXIII. Though there is no exact parallel to the pattern on this sherd from Hasirci IV, its fine texture supports the comparison with Ninevite 5 ware.

Note.—All examples throughout are hand-made and $\frac{1}{4}$ scale, unless otherwise stated. Diameters (in cm.) are shown, where ascertainable, above line of rim.

Chalcolithic Pottery (Figs. 1–36).

- | | | | | |
|----|---------------|---|---|--|
| 1 | İsaköy | . | . | Light red ware, inside plain, outside plain greyish-buff slip decorated in matt brick-red to grey paint. |
| 2 | Hinsor | . | . | Plain pinkish-buff ware, outside slightly greenish, and decorated in matt blackish-brown paint. |
| 3 | Kuyuluk | . | . | Buff ware, hard-fired, inside plain, outside burnished and decorated in orange-red paint ; dull red paint 0.5 cm. down along inside of rim. |
| 4 | Kuyuluk | . | . | Pinkish-buff ware, decorated on both sides in red paint. |
| 5 | Kuyuluk | . | . | Plain buff ware, matt orange-red paint on both sides. |
| 6 | Hinsor | . | . | Plain pinkish-buff ware, decorated in matt red paint outside. |
| 7 | Kuyuluk | . | . | Fine grey burnished ware. |
| 8 | Kuyuluk | . | . | Coarse black and reddish-brown ware, inside black and in parts brown, outside red, slightly burnished on both sides. |
| 9 | Kuyuluk | . | . | Plain coarse drab greyish-brown ware. |
| 10 | Kuyuluk | . | . | Plain coarse pinkish-brown ware. |
| 11 | Hasirci IV | . | . | Plain buff ware. |
| 12 | Hasirci IV | . | . | Plain reddish-buff ware, outside plain buff. <i>Probably turned on a slow wheel.</i> |
| 13 | Hasirci IV | . | . | Plain pinkish-buff ware. |
| 14 | Hasirci IV | . | . | Plain pinkish-buff ware, "straw-wiped" over outside, but not up to rim. |
| 15 | Hasirci IV | . | . | Plain buff ware, hard-fired, with <i>pointillé</i> decoration on outside. |
| 16 | Karahüyük | . | . | Light red ware, inside plain, outside pinkish-buff slip, very slightly burnished and decorated in matt red paint. |
| 17 | Karahüyük | . | . | Light red ware, inside plain, outside cream-buff slip, very slightly burnished and decorated in matt dark red paint. |
| 18 | Karahüyük | . | . | Pinkish-buff ware, with very slightly burnished cream slip on both sides, decorated outside in matt red-brown paint. |
| 19 | Horomhan | . | . | Plain buff ware, decorated inside in matt red paint. |
| 20 | İsaköy | . | . | Plain hard-fired pinkish-buff ware, with red-painted dabs along narrow flat top of rim. |
| 21 | Silbistan | . | . | Black and grey-brown ware, inside grey-brown, slightly burnished, outside black burnished. |
| 22 | Tepecik | . | . | Reddish-brown ware, inside plain, outside slightly burnished. |
| 23 | Silbistan | . | . | Plain smooth light orange-buff ware, greyish outside. |
| 24 | Silbistan | . | . | Black and reddish-buff ware ; inside plain smooth light red and buff, unevenly coloured, and on outside for 1 cm. below rim ; plain black from there downwards on outside. |
| 25 | Hinsor | . | . | Buff ware, hard-fired ; inside plain ; smooth cream slip outside, with decoration in matt red paint. |
| 26 | Sığam | . | . | Buff ware, plain cream slip on both sides, decorated in matt red-brown paint outside. |
| 27 | Aşağı Sazlıca | . | . | Hard-fired buff ware, inside plain, outside cream-buff wash decorated in matt crimson and orange-brown paint. <i>From lower levels.</i> |
| 28 | Hinsor | . | . | Brick-red ware with red-brown surface, inside plain, outside very slightly burnished. |
| 29 | Hinsor | . | . | Plain pale greenish ware. |
| 30 | Hankendi | . | . | Light greenish ware, probably overfired ; inside plain, outside decorated in matt dark brown paint. <i>Not definitely Chalcolithic.</i> |
| 31 | Sekerat | . | . | Plain uneven surfaced light greenish ware. |
| 32 | Piklis | . | . | Plain rough pinkish-brown ware, grey core. |
| 33 | Piklis | . | . | Plain coarse reddish-buff ware, straw-tempered, core partly grey. |
| 34 | Piklis | . | . | Plain, rather coarse, light red ware, grey core. |
| 35 | Hunan II | . | . | Softish plain light grey ware, light orange core. |
| 36 | Hunan II | . | . | Plain soft light orange ware. |



painted fragments have a smooth cream slip that gives them a remarkable similarity in finish to some of the E.B. III painted pottery of this region (see below).

Silbistan, just north of Malatya, has quite different pottery from the nearby site of Hasirci IV. Save for a few sherds of light ware, the pottery comprises hand-made dark burnished wares: their chronological relation to the light wares is uncertain. A vessel with a lug at the rim (Fig. 21) may be as late as East Anatolian E.B. I, and is rather like a jar from Tepecik, near Elazığ (Fig. 22). The balance of evidence favours a date at the very end of the Chalcolithic period for the pottery from Silbistan (see also Figs. 23-4).

A local Chalcolithic painted pottery occurs at Hinsor, west of Elazığ, and at Sığam, near Palu, both examples being jars (Figs. 25-6). A sherd from Aşağı Sazlıca, in the Hekimhan area (Fig. 27), may be of this ware, but this is only a possibility, for similar pottery is not known from any other site west of the Euphrates. Provisionally this painted ware may be assigned to the end of the fourth millennium B.C., immediately before the E.B. I period. Probably contemporary are jars of plain ware from Hinsor (Figs. 28-9), although they could be earlier. A painted jar fragment from Hankendi (Fig. 30) is perhaps Chalcolithic.

From Sığam and Sekerat, close to Palu, come plain light greenish and buff wares (Fig. 31), undoubtedly Chalcolithic and of southern origin: shapes are simple.

The deeper levels of Arslantepe certainly date well back into Chalcolithic times, but no analysis of pottery from that site can yet be attempted. Both dark burnished and plain light wares occur there, and almost certainly the site was occupied in the Halaf period.¹⁴

The Van Region and the Muş Plain

The pottery of Tilkitepe has not yet been supplemented by other Chalcolithic sites in the Van region, though these must surely exist, if only because of the importance of the obsidian trade. The plain straw-tempered ware found in the Muş plain (Figs. 32-6) may reasonably be compared with that of Tilkitepe I and Geoy Tepe M: it is utterly different from the rest of the wares found there. Its small quantity may indicate a sparse population in this plain in late Chalcolithic times, although such theories based only on surface finds are necessarily tentative.

THE EAST ANATOLIAN EARLY BRONZE AGE

Throughout almost the whole highland zone of eastern Anatolia, in the upper reaches of the Kur-Araxes basin and around Lake Urmia a distinctive pottery, hand-made, usually black or dark grey burnished, was in use during the greater part of the third millennium B.C. This pottery first drew attention by its style of decoration, in patterns consisting of ribs in low relief applied to the surface, though this is but the most outstanding form of ornament.¹⁵ The ware was first properly recognised in Turkey at Karaz, near Erzurum¹⁶; it occurs at Pulus, north of Erzincan,¹⁷ and it has been found at excavations, largely of barrows, in

¹⁴ Plain sherds collected from deep levels seem likely to be of this period.

¹⁵ For a general discussion of this pottery, as then known, see W. Lamb, *AS. IV* (1954), pp. 21-32, especially fig. 2.

¹⁶ H. Z. Koşay, *Türk Tarih Kongresi* 1943, pp. 164-177 and figs. 1-21 and plan.

¹⁷ K. Kökten, *Belleten* VIII (1944), p. 675 and pl. XCV.

the Trialeti district,¹⁸ at sites near Ardahan, Kars, Iğdır, Erivan and Nahcevan¹⁹ and at Geoy Tepe, near Lake Urmia.²⁰ Theories have been advanced concerning the possible connections of the Khirbet Kerak ware of the Amuq plain, Syria and Palestine with this pottery of eastern Anatolia.²¹ Since this is so distinctive of that region, it will henceforth be termed "East Anatolian Early Bronze Age ware".²²

The texture of this East Anatolian E.B.A. ware varies with the type of vessel. The core is usually black or grey, and both surfaces may be the same; it is, however, common for the interior of a vessel to be light in colour, and, with large jars, unburnished. The burnish is normally applied direct to the surface, and there is seldom a slip. The finer specimens are very highly polished.

Certain features characterise this pottery during the greater part of the third millennium B.C. The most widespread of these is the heavy rim with more or less rectangular section, folded over from the top, here called the "rail" rim. To this type of rim there is often attached a flat ledge-handle, varying in shape from triangular to a mere thickening of the rim: such handles were suitable, as a pair, for lifting heavy jars. On the whole, jars and deep bowls are the commonest forms, and handles are rather rare, except for the triangular ledge-handle and, secondly, the Nahcevan lug, which is confined to the eastern half of this vast highland zone. Small, fairly thin bowls, with well-defined junction of neck with shoulder, became particularly characteristic of the Elazığ region.

It is at present quite impossible to say with any certainty in what part of eastern Anatolia or Trans-Caucasia this E.B.A. ware first developed. One thing seems clear: it would be rash to assume that it originated in the Kur-Araxes basin, south of the Caucasus, although the middle Araxes valley is very fertile, and has a number of sites; Trialeti was certainly on the edge of this cultural zone. This ware was found in quantity at Geoy Tepe, but comparison with the pottery of Karaz and the regions of Van, Elazığ and Malatya suggests that Urmia was rather peripheral. The northern limit of this East Anatolian ware is the Kur-Araxes basin, since

¹⁸ B. A. Kuftin, *Archaeological Excavations in Trialeti I* (Academy of Sciences of the Georgian S.S.R., Tiflis, 1941), pp. 101-118 and pls. CXII, CXIV, CXX, CXXII-CXXV, LXXXV (top); figs. 116-8, 120-4, 126 (mainly from Beshtasheni). See also B. A. Kuftin, *Archaeological Excavations in Tsalka District*, 1947 (Tiflis, 1948), figs. 14-15 and pls. XXIV-XXV, XXX-XXXII, XXXIV-XXXV, XXXIX-XL, XLIV (mainly from Osni).

¹⁹ For sites near Kars and Ardahan, see *DTCFD*. XI (1953), pp. 189-206; pls. X-XV. For a general description in English of Trans-Caucasian material, and particularly of sites near Erivan and Nahcevan, see H. Field, *Contributions to the Anthropology of the Soviet Union* (Smithsonian Miscellaneous Collection, Vol. 118, no. 13 [1948], pp. 75-85).

²⁰ *Excavations in Azerbaijan* 1948, pp. 36-47 and p. 55 (no. 326); pls. III-VII.

²¹ (a) S. Hood, *AS*. I (1951), pp. 116-8. (b) Ruth Amiran, "Connections Between Anatolia and Palestine in the E.B.A." (*IEJ*. 2 [1952], pp. 89-103). (c) *A Forgotten Kingdom*, pp. 31-7. (d) W. Lamb, *AS*. IV (1954), pp. 30-1.

²² This term denotes a definite cultural province: otherwise it would be indefensible. Perhaps it ought strictly to be called "East Anatolian-Trans-Caucasian E.B.A."

it has not been found in or north of the Caucasus,²³ nor does it occur in the swampy, low-lying plain of the Kur-Araxes near the Caspian Sea. The precise eastern limits of this pottery await definition by an archaeological survey of north-western Iran ; but it seems improbable that it will be found to occur far to the east or south of Lake Urmia.²⁴ To the south, the mountains between Lake Van and Assyria, extending westwards to the Euphrates and beyond, provide a natural boundary for this E.B.A. culture. Certainty on this point must await a survey of sites throughout the province of Diyarbakır. But, to the west, it is scarcely found south of the mountains between Malatya and Adıyaman, the latter belonging geographically and culturally to the "Fertile Crescent" ; nor does it occur in the plain of Maraş.²⁵ The western limits of this East Anatolian E.B.A. ware can now be defined fairly precisely. In the north-west it does not occur in the districts of Zara and Hafik, east of Sivas, nor at Maltepe, close to that town²⁶ ; but it has been found in the districts of Divriği and Kangal. It is the normal E.B.A. ware in the districts of Arguvan and Hekimhan, respectively north and north-west of Malatya, and in the Akçadağ district, west of Malatya. Perhaps a survey of the Elbistan plain would show it to belong to this eastern cultural zone. Contacts with central Anatolia must have been principally by the natural highway up from the Malatya region to Sivas, and not by any road from north-eastern Anatolia, since this pottery does not occur in the Kelkit (Lycus) valley, which has the same Late Chalcolithic culture as Dünder-tepe and Alişar²⁷ ; nor has it been found in the Erzincan plain. It does, however, occur in the plain of Bayburt.²⁸ Thus this pottery is distributed over a vast expanse of the highland zone, although in some isolated areas within the highlands, such as the plain of Muş, it is not the normal E.B.A. ware : there, however, examples occur, probably imported. This comparative uniformity of culture is all the more remarkable in a zone so divided by mountain barriers. The inhabitants of these highland territories in the third millennium B.C. may well have been the Hurrians, whose existence in Akkadian times is attested by tablets in their language from the Khabur valley.²⁹ This fact, and the limits of distribution of this

²³ e.g. it does not occur in the Kuban valley. A little East Anatolian E.B.A. ware occurs in Colchis (B. A. Kuftin, *Materials for the Archaeology of Colchis* Vol. II [Tiflis, 1950], fig. 35), but this seems to lie on the periphery of the East Anatolian-Trans-Caucasian cultural zone.

²⁴ The E.B. I relief-decorated sherd from Hasanlı (Sir Aurel Stein, *Old Routes in Western Iran* [London, 1940] pl. XXIV, no. 1) is so far unique at that site, and may have been imported from the north.

²⁵ Information kindly supplied by J. Mellaart.

²⁶ T. Özgüç, *Belleten* XI (1947), pp. 641-655.

²⁷ From the results of a survey of Tokat *vilayet* carried out by the writer in 1955. There is one important E.B. site near Suşehri, but no major site to the west before the plain of Erbaa.

²⁸ See footnote 17.

²⁹ A. Goetze, *JCS.* 7 (1953), p. 62, where reference is made to the "Samarra Tablet" (*RAss.* 9, 1 ff.) and to a Hurrian foundation inscription (*RAss.* 42, 1 ff.), both probably from the site of Urkish.

East Anatolian E.B.A. ware, make it hard not to associate this pottery with the Hurrians.

After this summary of the texture, forms and distribution of the East Anatolian E.B.A. ware, a more difficult problem remains, that of the dating and chronological subdivisions of the Early Bronze Age in this eastern zone. A date of *c.* 2750 B.C. for the earliest appearance of this pottery has been suggested,³⁰ but the evidence of Geoy Tepe³¹ and the occurrence of a sherd of East Anatolian E.B.A. type with a spiral in relief, in a Chalcolithic level at Alaca,³² makes a rather earlier date, perhaps as high as *c.* 3000 B.C., probable. The Early Bronze Age, and the pottery associated with it, cannot have continued in eastern Anatolia later than *c.* 1900 B.C. : at Geoy Tepe the K period, in which this ware is prevalent, ended earlier than that.³³ There is some definite evidence, from Geoy Tepe and Karaz, from which two or three subperiods of the Early Bronze Age in eastern Anatolia can be distinguished. Three subperiods (E.B. I, E.B. II and E.B. III) are here proposed; and these terms will be used henceforth throughout this article. They may be taken to correspond, but only very approximately, to the three subdivisions of the K period at Geoy Tepe.³⁴

The outstanding characteristic of the East Anatolian E.B. I period is the uniformity of its pottery both in shapes and in decoration. The "rail" rim, particularly on large jars, seems to be a universal feature of this period, though it continues later, and the flat triangular ledge-handle occurs in the Malatya–Elazığ region and in the Muş plain, as well as in the Maraş and Adıyaman areas—where, however, it was an import from the north. Most striking is the widespread occurrence of relief decoration, no two patterns being identical (see Map I) : this is found at Geoy Tepe (K I period), near Lake Urmia³⁵ ; at Van ; in the districts of Nahcevan, Erivan and Trialeti, south of the Caucasus³⁶ ; at Karaz³⁷ ; in the Elazığ region ; and at several sites west of the Euphrates, as far north-

³⁰ W. Lamb, *AS.* IV (1954), p. 30.

³¹ The affinities of the M period suggest that it ended *c.* 3000 B.C. or very little later. Geoy Tepe K was near the edge of the East Anatolian zone, and is thus unlikely to be the earliest site with pottery of its kind. The evidence of Trialeti can hardly be used to date material from Geoy Tepe (as in *Excavations in Azerbaijan*, 1948, p. 34).

³² C. E. Arseven, *Les Arts Décoratifs Turcs* (Istanbul) p. 15. This sherd with spiral in relief is in the Ankara Museum.

³³ The D period marks such a break (*Excavations in Azerbaijan*, 1948, p. 69) that it seems probable that newcomers made their appearance. For reasons to be discussed in a future article a date of *c.* 1950–1900 B.C. seems likely for the beginning of Geoy Tepe D. With the G period to be accounted for, the very latest date for the end of the K period would be *c.* 2000 B.C.

³⁴ The K₃ period at Geoy Tepe must have ended before the E.B. III pottery in the Van region went out of use (see chronological table).

³⁵ *Excavations in Azerbaijan*, 1948, pls. III and IV (no. 45), and p. 38.

³⁶ (a) For sites near Nahcevan and Erivan, see note 19, also *AS.* IV, pp. 26–8 and fig. 2. (b) For Trialeti, see *Tsalka*, 1947, figs. 14–15 (from Osni), and pls. XXV and XXXV ; see also *Trialeti I*, pl. CXX, top right (from Beshtasheni).

³⁷ H. Z. Koşay, *Türk Tarih Kongresi* 1943, Karaz figs. 8–12, 14, 15, 17. See also *Les Arts Décoratifs Turcs* p. 17 (fig. 26).

west as the district of Divriği. Spirals in relief, usually in pairs, are widespread from Karaz eastward. Another form of decoration in the E.B. I period is the groove-and-dimple, particularly common at Karaz.³⁸ Perhaps it is to this period that a heavy incised ware, hitherto found only in the district of Arguvan, north of Malatya, must be assigned.³⁹ It seems, therefore, almost certain that this E.B. I culture spread, probably quite rapidly, over the whole of eastern Anatolia and beyond, into Georgia and Lake Urmia, from one original homeland. Possibly this was the middle valley of the Araxes, the area of Erivan and Iğdır, for thence it could easily have spread northwards to Trialeti and south-eastwards to Lake Urmia, as well as westwards to Karaz and Pulus. But there remains the very real possibility that the homeland of the East Anatolian E.B.A. culture was in the Elazığ-Malatya region. One fact making Elazığ—an area which, from its pottery, seems to have been rather more advanced than Malatya—perhaps a likelier homeland of this culture than the middle Araxes valley is that there is certainly a Chalcolithic culture of considerable duration there, whereas in north-eastern Anatolia there is as yet no substantial evidence of any Chalcolithic occupation, although excavation would almost certainly reveal some. Throughout the third millennium B.C., and indeed down to the Late Bronze Age, the plain of Muş remained relatively backward and isolated, as did the Van region until the beginning of Urartian times (c. 900 B.C.) : there is, therefore, no possibility that the East Anatolian E.B.A. culture originated in those parts.

This remarkable homogeneity of culture eventually began to break down, and regional diversification in shapes and decoration of pottery gradually appeared. There was no break in the general continuity, and nothing to suggest the advent of newcomers ; nevertheless, the new developments are sufficiently marked to justify their assignment to a second phase of this culture, East Anatolian E.B. II. Throughout the zone the relief decoration of E.B. I seems to disappear. In the east—comprising the regions of Lake Urmia, Lake Van, the middle Araxes and Trialeti—there appears a most individual type of lug-handle, applied to the body of the vessel as a clay boss, and then pierced : this has come to be termed the Nahcevan lug,⁴⁰ and is the outstanding characteristic of the E.B. II period. It has been found at Geoy Tepe in the K 2 period,⁴¹ and at sites in the Van region, including the large group of vessels from Ernis, on the north-east shore of the lake, said to come from a cist-grave ; it occurs also in the districts of Nahcevan, Iğdır⁴² and Trialeti,⁴³ and

³⁸ *AS.* IV, pl. I (I), and unpublished examples, also from Karaz.

³⁹ Perhaps cf. *Bulleten* XI (1947), pl. XCIII, from Arslantepe. The antecedents of this pottery remain obscure.

⁴⁰ For a brief discussion, see W. Lamb, *AS.* IV (1954), pp. 28–9.

⁴¹ *Excavations in Azerbaijan*, 1948, p. 41 (no. 320).

⁴² (a) K. Kökten, *DTCFD.* XI (1953), pl. XIII (4) and p. 203. (b) *Trialeti* I, fig. 8. (c) *Bulletin du Musée de Géorgie* XIII B, figs. 37–8 and pl. XV ; also fig. 62 (p. 107) for Shengavit.

⁴³ *Trialeti* I, pls. CXXIII–CXXV and fig. 117, and *Tsalka*, 1947, pls. XXIV, XXXII, XXXIV (?) and XLIV. Here (*Tsalka* pl. XXIV) there is a Nahcevan lug on an incised lid.

likewise at Karaz, although there it seems to be rather rare. It is often accompanied by finger-depressions ("dimples") on either side. At Yaycı, just west of Iğdır, is a site where much decorated pottery was found, together with Nahcevan lugs. The style of ornament there was entirely grooved, and motifs include spirals and concentric circles. Similar grooved decoration occurs at Beshtasheni, in Trialeti, but there it may be of E.B. I date, contemporary with a jar ornamented with both spirals in relief and incision⁴⁴; alternatively, relief decoration may have continued in Trialeti into the E.B. II period.⁴⁵ Unfortunately the material from Trans-Caucasia is at present of little use in any attempt to subdivide the pottery of the East Anatolian E.B.A. Although the evidence of Geoy Tepe⁴⁶ suggests an E.B. I date for bowls with sharply everted rim, of the form found at Yaycı, the group of vessels from Ernis, which is almost certainly of the E.B. II period, contributes to the evidence supporting an E.B. II date for most of the pottery from Yaycı; a clearer indication that such a dating is correct is the abundance of Nahcevan lugs.

In other parts the development from E.B. I to E.B. II is less sharply defined, for the Nahcevan lug is not found further west, in the Elazığ-Malatya region, nor in the plain of Muş. But in the Elazığ area, though the "rail" rim continues in use, a refinement of shapes is noticeable: this might date back to the E.B. I period, but it seems likelier to belong principally or entirely to E.B. II, and such pottery is here dated exclusively to the later period. The typical E.B. II form at sites near Elazığ is a small, deep bowl, with vertical neck and slightly flaring rim, the junction of neck with shoulder being sharply defined. This fairly simple form is found elsewhere, as at Lız, near Bulanık, but more crudely made, and more or less the same shape occurs at Ernis. Incised ware of Cilician E.B. II type reached the Malatya area, as far north as Kara Hüyük, close to Arguvan. There was still, however, a certain homogeneity throughout the East Anatolian zone in the E.B. II period, with the notable exception of the limited distribution of the Nahcevan lug. The date of the E.B. II period is far from certain, but a round figure of c. 2500 B.C. for its beginning would fit the evidence of Geoy Tepe.⁴⁷ It was anyhow probably of shorter duration than E.B. I, which is here assigned approximately to the first half of the third millennium B.C.

It is with the final phase of the Early Bronze Age that the cultural unity of this great zone completely vanishes. The change is most marked in the Elazığ-Malatya region, where there appears a new painted pottery, invariably hand-made, the ware being hard-fired and buff or pinkish in the core, with plain buff or yellow surface both inside and out; the

⁴⁴ *Trialeti I*, pl. CXX (top right: spiral in relief, with incision above; middle right: grooved spiral).

⁴⁵ This would not affect the theory that throughout eastern Anatolia, and in the Urmia region, relief decoration does not occur after the E.B. I period, because Trialeti was remote, possibly with a time-lag in development out of E.B. I styles.

⁴⁶ *Excavations in Azerbaijan*, 1948, p. 39 (no. 1064).

⁴⁷ The Cilician E.B. II incised ware from Malatya cannot be later than c. 2400 B.C. See footnote 110.

decoration is in matt paint, usually blackish-brown or reddish-brown. Examples of this pottery have been published from Arslantepe, Malatya, but they are described as "late Hittite", and dated together with Alışar IV ware from the same site.⁴⁸ Observation at several sites has shown that this painted pottery is later than the burnished E.B. I and E.B. II ware. Moreover, the "rail" rim can be seen to continue in certain forms of this E.B. III painted ware. The distribution of this pottery shows that it formed a distinct cultural province: in the north-west it seems to have the same limits as the E.B. I ware, being found in the Divriği and Kangal areas, but not around Sivas, where, at Maltepe, there occurs at this time a local painted pottery which has affinities with Alışar Ib and III.⁴⁹ It occurs in the Arguvan and Hekimhan districts and around Malatya, and also in the Elazığ region; but there the site which seems to be richest in this pottery is at Hankendi, on the road west from Elazığ to the Euphrates. The southern limit of this painted pottery is the same as that of the E.B. I and II wares, namely, up to the mountain barrier that divides the highland zone from north Syria; it seems unlikely that it will be found in the Diyarbakır region. To the north-east the mountainous Dersim provided a barrier through which this pottery apparently did not penetrate. The centre of this painted pottery culture lay west of the Euphrates, probably near Malatya. At some sites near Elazığ occur fragments of bowls and jars with parallel, horizontal grooves below the rim: these can be dated, by parallels in Cilicia⁵⁰ and further west,⁵¹ to Tarsus E.B. III, and so cannot have been introduced later than c. 2100 B.C. Thus this pottery belongs to the East Anatolian E.B. III period. In the Elazığ area it represents an extension into the east Anatolian zone of an essentially west Anatolian cultural province, and probably an inferior local imitation of Cilician pottery of this type. Plain hand-made bowls with inverted rim provide another parallel with Cilicia,⁵² and constitute one of the forms of the E.B. III painted pottery. The grooved ware from sites near Elazığ probably dates to c. 2200–2100 B.C., and the painted pottery, though its chronological limits are not at all certain, cannot have begun before that century. It seems likely to have been roughly contemporary with all or part of the period when Cappadocian ware was in use in central Anatolia: it cannot, therefore, have come

⁴⁸ L. Delaporte, *RHA.* II, 16 (1934), pls. 21 (15), 22 (5, 8–14), 24 (9, 10, 12), 25 (1), 26 (9), 29 (4); *RHA.* V, 34 (1939), pls. 10, 11 and 12 are entirely E.B. III, also pls. 13 (1–2), 14 (1–3, 7, 8). Alışar IV ware includes: *RHA.* II, 16, pls. 27 (5–6), 28 (1–3), 29 (3), 31 (12), 32 (6–9, 11).

⁴⁹ See footnote 26.

⁵⁰ *Prehistoric Mersin* p. 193 (fig. 20) and p. 199 (fig. 123, no. 4); *Tarsus* Vol. II, pl. 355 (no. 390).

⁵¹ (a) Beycesultan, *AS.* VI (1956), p. 127 (fig. I, no. 23). (b) Kusura, *Archaeologia LXXXVI* (1936) p. 20 (fig. 7, no. 6). (c) Troy: Blegen, *Troy* Vol. II, p. 241 and fig. 257 (nos. 11–12), shape A 19 (wheelmade).

⁵² cf. *Tarsus* Vol. II, pl. 354 (no. 436 a–g), which are of "light clay" ware. This form of bowl, in red wash ware, similar to fig. 214 from Hankendi, is widespread in the late E.B.A. in the Cilician–West Anatolian cultural zone, including Beycesultan, but it does not seem to be common in the Elazığ–Malatya region.

into use before *c.* 2200 B.C., nor have continued beyond *c.* 2000 B.C., if as late as that. The comparatively small quantities, judged from surface finds, in which E.B. III wares, both painted and plain, seem to occur suggest that they were in use for only a short time, perhaps not much more than a century. To what extent the older dark burnished wares continued it is impossible to say without excavation; but unpublished material from Arslantepe suggests that there was no complete break in continuity. Nevertheless, this painted ware is so distinctive in every way that it gives the E.B. III period a markedly different character from the preceding E.B. I and E.B. II periods.

Further east the changes in pottery were very much less abrupt, but there was definite development. At Geoy Tepe, in the K 3 period, there was at first a relative abundance of Nahcevan lugs, but at the end of this period these degenerated into mere solid knobs, with depressions on either side, but unpierced.⁵³ In one of the later levels at Karaz the same unpierced lugs are found. The occurrence of one of these degenerate Nahcevan lugs at Zülfübülak, in the plain of Çaldıran, some thirty miles north-east of Lake Van, supports the dating of the finely incised ware found there to the E.B. III period. Its appearance at two other sites, at Adilcevaz and at the north-east corner of Lake Van, suggests that it reached the lake by the road from Çaldıran down the valley of the Bendimah Çay. One sherd from Zülfübülak has a crudely incised spiral. Similar incised decoration occurs at Karaz and at Tepecik, both near Erzurum.⁵⁴ But for the origins of this style of ornament one must look northward to the middle Araxes valley, or possibly as far as Trialeti, where incised patterns appear on vessels of E.B. I-II type.⁵⁵ Bluntly incised "pot-hook" spirals are reported from sites near Erivan.⁵⁶ The fashion for such decoration developed in Trialeti, with the arrival of newcomers, into a refinement of design not found in eastern Anatolia. Of more immediate relevance to Zülfübülak is the pottery from Yaycı: this does not include any examples of patterns scratched after firing, but it is not unreasonable to see in some of the more finely grooved sherds from that site either the immediate forerunner or the contemporary inspiration of the incised ware of Zülfübülak. Thus the occupation of Yaycı probably continued into at least the beginning of the E.B. III period.⁵⁷ Like the Nahcevan lug, incised decoration was confined to the region north and east of a line from Karaz to Van. Painted pottery from Kızılkale (Taze-

⁵³ *Excavations in Azerbaijan*, 1948, p. 47; pl. III (no. 300), p. 55 (no. 326), p. 46 and pl. VII (no. 538).

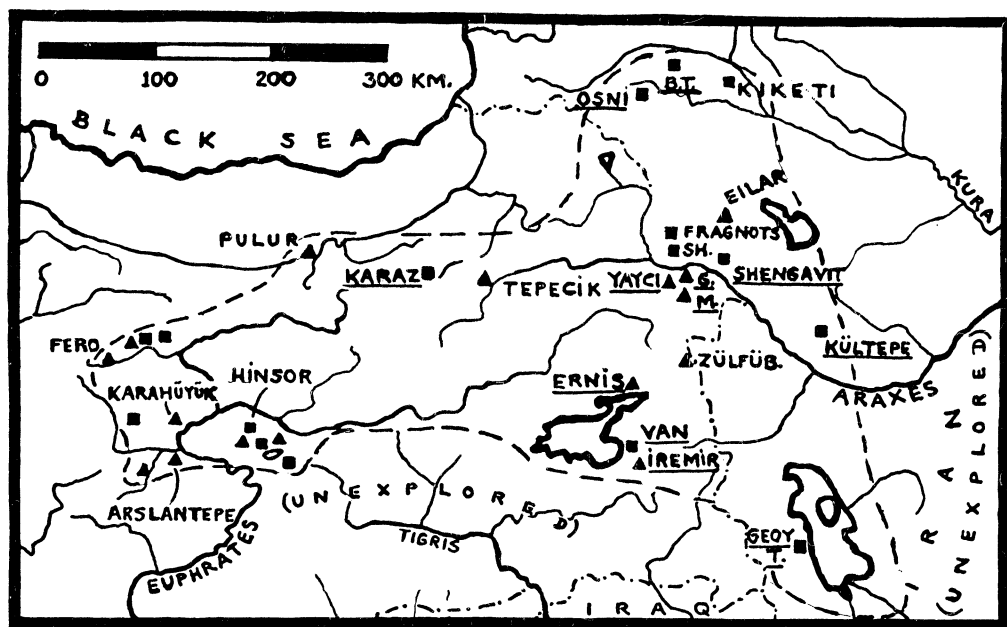
⁵⁴ H. Z. Koşay, *Türk Tarih Kongresi* 1943, fig. 7, and unpublished examples from Karaz and Tepecik, near Hasankale.

⁵⁵ *Trialeti* I, pls. CXX (top right) and CXXII; fig. 116.

⁵⁶ Eilar, Shresh-Blur, Fragnots (?) and elsewhere: (a) *Bulletin du Musée de Géorgie* XIII B, p. 141, fig. 61 and pls. XXVIII-XXIX. (b) *Soviet Archaeology* III, p. 212. (c) *AJSL*, (1938) p. 109.

⁵⁷ This is made certain by the occurrence of a degenerate Nahcevan lug of the E.B. III type (*DTCFD*. XI (1953), pl. XIII, no. 3).

kent), near Erivan, displays spirals of the "pot-hook" type,⁵⁸ very likely derived from this incised ware. At Zülfübülak the patterns were scratched on the surface of the vessel after firing. The large group of Early Bronze Age vessels from Ernis, several of which have Nahcevan lugs, could date to the beginning of E.B. III rather than to E.B. II; but the complete absence of both the late, unperforated type of Nahcevan lug and incised decoration shows that it cannot be any later than that: on the whole it seems likelier to belong to the E.B. II period. Though incised lids occur in the E.B. I period,⁵⁹ and crude incision, perhaps a degeneration of the



MAP I. The East Anatolian-Transcaucasian E.B.A. Cultural Zone.

The scale is approximate. The probable limits of the East Anatolian-Transcaucasian cultural zone are indicated by a broken line, and modern frontiers by a broken line with dots. Only the more important sites are shown, particularly in the regions covered by Maps II and III. Solid squares indicate sites with E.B. I relief decoration; sites underlined indicate E.B. II Nahcevan lugs.

The following abbreviations are used:—

B.T. = Beshtasheni (Trialeti).

G. = Gökçeli.

M. = Malaklu.

SH. = Shresh-Blur.

ZÜLFÜB. = Zülfübülak.

"groove-and-dimple" ornament, is found before E.B. III, the fine, close incised patterns are distinctive of that period. The dating of the E.B. III period in the Van region and to the north remains far from certain. But the affinities of Geoy Tepe D suggest that the E.B. III period, its earlier stages being equivalent to Geoy Tepe K 3, cannot have continued much beyond c. 1950–1900 B.C. It may not have begun more than two centuries before that.⁶⁰

⁵⁸ A. Zakharov, *RHA*. I, 4 (1931), pl. 4, p. 115; also *Afo*. XIV, fig. 12.

⁵⁹ e.g. at Geoy Tepe (*Excavations in Azerbaijan*, 1948, p. 53 and pl. III, no. 35).

⁶⁰ See footnote 34.

EXTERNAL RELATIONS OF EASTERN ANATOLIA IN THE EARLY BRONZE AGE

Some comment is necessary on the connections of the East Anatolian E.B.A. culture, as evidenced by its pottery, with other parts of the Near East. It is, however, too soon to attempt a comprehensive discussion of such connections until there is stratified material available from several sites. Only a few questions, therefore, are dealt with here.

The distance separating the Kuban from Trialeti is not great, so that contact between the Kuban valley and Trans-Caucasia is probable. Moreover, at Sukhumi, in Colchis, was found material very similar to that from the Kabardino Park burials, near Nalchik.⁶¹ Although these burials appear to be later than the great tomb at Maikop, it is not improbable that Colchis was in contact with the Kuban as early as the period c. 2300–2200 B.C. Such a date for the rich barrow at Maikop is supported by the use of the “dimple” as decoration on at least one metal vessel found there⁶²; in shape this vessel resembles the common form of jar, found at Ernis and elsewhere, both undecorated and with Nahcevan lug and dimples. It seems likely, from recent discoveries in the western Pontic region of Anatolia, that the Maikop barrow belongs to a culture having some relationship—how close it is not yet possible to say—with the royal tombs at Alaca, whence the inspiration of Early Kuban metalwork may have sprung.⁶³

A question of more importance for the archaeology of the Near East is that of the possibility of a connection between the Khirbet Kerak ware, of the Amuq plain, Syria and Palestine, with the East Anatolian E.B. I and E.B. II burnished pottery. A north-eastern origin for Khirbet Kerak ware has long been postulated.⁶⁴ With the new evidence now available a more detailed theory may be advanced. Parallels can be discerned between Khirbet Kerak ware and East Anatolian E.B.A. ware in general, but particularly with the Elazığ region, where there occurs a feature found also on Khirbet Kerak pottery: this is the use of horizontal grooves round the neck and up to the rim of jars.⁶⁵ Relief decoration in the East Anatolian E.B. I style, including spirals, is found on Khirbet Kerak ware,⁶⁶

⁶¹ M. Gimbutas, *The Prehistory of Eastern Europe I* (Cambridge, Mass., 1956), p. 62.

⁶² *Oriental Silver: Compilation of Ancient Oriental Vessels of Silver and Gold* (The Imperial Archaeological Commission, 1909) pl. CXXX, no. 330 (in Russian).

⁶³ Schaeffer's date of c. 2200–2000 B.C. for the great tomb at Maikop (*Stratigraphie Comparée* [Oxford, 1948] p. 521) is supported by the Anatolian material, since the Alaca tombs can be dated to c. 2400–2200 B.C., and because the centre of this culture, with its rich burials, now seems to lie in the Tokat–Amasya region, making contact with the Kuban valley by sea more probable. See T. Özgüç and M. Akok, “Objects from Horoztepe” (*Belleten* XXI [1957] pp. 211–9). See also H. Z. Koşay and M. Akok, *Belleten* XIV (1950), pp. 481–5.

⁶⁴ See footnote 21.

⁶⁵ Cf. examples from Tabarat-al-Akrad (S. Hood, *AS. I* [1951], Types 13 and 13a, fig. 7 (p. 131), and pl. XII, B3). Similar grooving occurs on potstands at Beth-Shan.

⁶⁶ (a) *AS. I*, Type 19a, fig. 8 (p. 136) and pl. XII, A3. (b) An unpublished sherd from Tell Judeideh, in the Antioch Museum. (c) G. M. Fitzgerald, “The Earliest Pottery From Beth-Shan” (*Museum Journal*, Philadelphia, XXIV (1935), pl. VII, nos. 1, 3, 4, 8). Though relief ornament continues in Level XI, the spiral (no. 3) comes from Level XII.

and indeed most of the parallels with eastern Anatolia are with the E.B. I period ; but a renewal, if not a continuity, of contact is strongly suggested by an incised potstand from Beth-Shan XI.⁶⁷ Since the period in which Khirbet Kerak ware occurs in Palestine is generally dated *c.* 2600-2400 B.C.,⁶⁸ these links with East Anatolian E.B. I are not surprising. All the evidence tends to suggest a migration or invasion, probably fairly swift, of people moving out of the Elazığ region into the Amuq plain. Negative evidence relevant to the problem of the route taken by these newcomers to Syria is now available from several areas : Khirbet Kerak ware has not been found at sites east of Aleppo,⁶⁹ nor around Gaziantep⁷⁰ ; it is absent from Cilicia, where East Anatolian E.B.A. ware is likewise lacking. At Sincirli, on the road from Malatya to the Amuq plain, there is pottery of Cilician E.B. II type,⁷¹ which reached the Malatya region at some time during that period (*c.* 2750-2400 B.C.). Both the distribution of East Anatolian E.B.A. ware, therefore, and the fact that the Elazığ region seems to have been more completely integrated into the east Anatolian zone than the sites close to Malatya make any migration to the Amuq plain from Malatya by the natural road through Maraş improbable. Adıyaman lies off any main road, and there is no easy route thither through the mountains south of Malatya : moreover no East Anatolian E.B.A. pottery has been found in that area.⁷² But a movement from the plains around Elazığ southward, and then westward, perhaps crossing the Euphrates near Birecik, would have been possible. Significantly, there is a noticeable concentration of mounds with pottery of Judeideh XI date in the Afrin valley, leading into the Amuq plain from the north-east.⁷³ If such a migration from the Elazığ plains did in fact occur, it probably did so in the century *c.* 2700-2600 B.C.

The E.B. III painted pottery of the Malatya-Elazığ region may be considered, provisionally, as an easterly manifestation of the taste for painted wares apparent in Anatolia in the last quarter of the third millennium B.C., and most familiar from the pottery of Alıışar III and Kültepe. This E.B. III pottery is not, however, in any way directly related to the Cappadocian ware : rather does its technique of hard firing suggest

⁶⁷ "The Earliest Pottery From Beth-Shan," pl. VIII, no. 6. On present evidence this suggests contact, however tenuous, with north-eastern Anatolia.

⁶⁸ For discussion, see *AS.* I, p. 119. Khirbet Kerak ware is roughly contemporary with the Fourth and Fifth Dynasties in Egypt.

⁶⁹ R. Maxwell-Hyslop et al., "An Archaeological Survey of the Plain of Jabbul, 1939" (*PEQ.* 1942, pp. 8 ff.).

⁷⁰ It is not mentioned in the reports on pottery from the excavations at Sakceğözü, nor from exploration of neighbouring sites : (a) J. Garstang, *LAAA.* XXIV (1937), pp. 119-140 and pls. XXIII-XXXV. (b) J. du Plat Taylor et al., *Iraq* XII (1950), pp. 53-138.

⁷¹ F. von Luschan, *Ausgrabungen in Sendschirli* V (Berlin, 1943), pl. 15 (d-ad) and pl. 16 (b-d, n).

⁷² A survey of sites near Adıyaman and Besni, carried out by the writer, has made it clear that the affinities of the area lie entirely with the south.

⁷³ R. Braidwood, *Mounds in the Plain of Antioch* (Chicago, 1937), Map XXII (p. 55) ; also Maps V and VIII.

affinities with lands further south. There are definite parallels to this painted pottery of Malatya and Elazığ to be seen in Alalakh, Level XII, where the "pine-tree" motif is fairly common, and also the habit of painting notches along the top of handles.⁷⁴ The same "pine-tree" motif, found at Arslantepe, near Malatya,⁷⁵ occurs likewise at Tarsus in the Middle Bronze Age,⁷⁶ and so adds to the probability that the East Anatolian E.B. III period in the Malatya-Elazığ region continued after c. 2100 B.C.

THE CHRONOLOGY OF THE TRIALETI BARROWS

Although the barrows (*kurgans*) in the Trialeti district of Georgia mostly date to the Middle Bronze Age, the earlier ones are contemporary with the East Anatolian E.B. III period, so that it seems fitting to include here a discussion of the whole group of burials. Several attempts have been made to arrange the material from these barrows into chronological order, and to fix their absolute dating by comparison of their metalwork with that found elsewhere. But a more reliable criterion of date than precious metal vessels and jewellery, since these may be handed down from father to son, is pottery. It is principally on the evidence of the pottery that a new sequence and absolute chronology is here proposed, differing in important respects from that suggested by Kuftin and summarized by Minns,⁷⁷ and from the low dating proposed by Schaeffer.⁷⁸ A complete and accurate assessment of all the material from the Trialeti barrows is impossible until a stratified site is excavated: no sequence obtained entirely from tombs can be as conclusive. But the pottery, added to the other material, provides ample evidence that Trialeti was an area where a culture developed out of the fusion of two completely different elements, one from the steppes north of the Caucasus, the other from the Araxes valley, and ultimately from north-western Persia.

In the period called Chalcolithic by Kuftin the pottery can without doubt be classed with the E.B. I and II of the East Anatolian cultural zone, to which Trialeti then belonged. But the pottery from the barrows marks a complete break with that tradition. Barrow VIII, however, has a fragment of black burnished ware with grooved and ribbed ornament that must be considered a survival from the E.B. II period; it also has a jar fragment of dark brown ware, with deeply incised herring-bone patterns and pendant triangles, which has no close parallels. Although the presence or lack of a pit may not be of much importance, it may possibly be significant that Barrow VIII, together with Barrows IX and XVIII, has no pit.

⁷⁴ Sir L. Woolley, *Alalakh* (London, 1955) pl. XCII (Levels XII and XI), pl. XCVIII, sherds c and o (unstratified) and pl. XCI.

⁷⁵ *RHA.* II, 16 (1934), pls. 21 (no. 15), 22 (no. 5), 29 (no. 4).

⁷⁶ *Tarsus* Vol. II, figs. 287 (no. 783) and 291 (no. 909).

⁷⁷ E. H. Minns, "Trialeti," in *Antiquity* 67 (1943), pp. 129-135.

⁷⁸ *Stratigraphie Comparée* p. 512, where a date of c. 1550-1450 B.C. for Barrows I, V-IX, XV-XVIII, XXII, XXIII, XXV, XXVIII, XXIX, XXXIV and XXXVI is proposed.

Barrow XI, with incised ware only, has analogies—in the motifs of cross-hatched triangles and dots between parallel lines—with some vessels of “Early Middle Kuban” date at Kabardino Park, near Nalchik, in the northern Caucasus, and from a barrow at Kislovodsk, on the Podkumka River.⁷⁹ This may hardly be later than Barrow VIII.

In the Khram valley there is a group of barrows (IV, XIII, XIX, XXIV) in which were found black burnished vessels with finely incised decoration of chevrons and triangles, one of which has also round its neck a band of dots within parallel double lines. These were obviously not the graves of rulers, their contents being modest. Barrow XI, said to be contemporary with these, was slightly richer, though not in pottery. No exact parallels exist for the vessels of this group,⁸⁰ but comparison with the pottery of Barrow XI rather suggests a local development of incised designs originally introduced from north of the Caucasus: cross-hatched triangles and dots within lines remain in use. A poker-butted spearhead was found in Barrow XXIV.⁸¹

Next in the sequence is Barrow V, the first with painted pottery, of ultimately Persian antecedents. There are three plain jugs with knobbed handle, and a jug with an incised band below the neck: this decoration probably makes this tomb either contemporary with or immediately following the incised pottery of the previous group.

Barrow XVII, the richest of all, seems to come next in chronological order. Remarkable as its metalwork is, the two painted jars are hardly less so. Although the decoration on the necks of these pots, with their wavy lines and chequerboard pattern, has Persian analogies, the main part of the design—on one jar a snake band, on the other running spirals—is most un-Persian: in fact, the best comparison is with the “classical” Tripolye culture of the Ukraine.⁸² This is one fact that makes it impossible to consider Barrow XVII as the final development of the Middle Bronze Age culture of Trialeti. A jug with knobbed handle is like those from Barrow V. Incised decoration also occurs, but in an extraordinarily fine and elaborate form, with patterns of closely cross-hatched bands and a cross: this ornament seems, from the published photograph,⁸³ to give almost the effect of embroidery. This is hitherto unique, and should probably be interpreted as a supreme local refinement of the tradition of incised pottery, derived from the steppes: after that no more incision occurs in the barrows of Trialeti, except for one example from Barrow XVI.

It does not at present seem possible to distinguish a sequence among the remaining barrows, unless perhaps Barrow XXIX, with its cart, is

⁷⁹ M. Gimbutas, *The Prehistory of Eastern Europe* I, fig. 36 (p. 66) and fig. 38, no. 19.

⁸⁰ Incised vessels from Arçadzor, Balluka, Sirhovend and Ahmah, sites in Russian Azerbaijan, seem derived from, rather than contemporary with, the pottery from the barrows in the Khram valley (see *Soviet Archaeology* XXVII [1957], pp. 140–150).

⁸¹ *Trialeti* I, fig. 109, comparable with D. B. Stronach's Types 4–4B and 5 for Anatolia (*AS.* VII [1957], pp. 113–4), which first appear c. 2300 B.C.

⁸² *The Prehistory of Eastern Europe* I, p. 104 (fig. 57).

⁸³ *Trialeti* I, pl. LXXIV.

the latest.⁸⁴ The painted pottery, especially that from Barrow VII, is closely related to that from Narekvari, not far north-east of Trialeti, and Zurnabad, over 150 miles to the east, just south of the Kur River; similar pottery occurs at Astabad, near Erivan, but the centre of this painted ware probably lay along the upper Kur valley.⁸⁵ The "pot-hook" spirals of Kızılkale (Tazekent) pottery do not occur in Trialeti, though a jar from Barrow V has "S" spirals round its neck, arranged vertically between metopes with wavy lines. No parallel is known for the unusual solid discs painted on a jar from Barrow VI: these seem to be an exaggeration of the small blobs at the apex of each pendant triangle, such as appear on a jar from Barrow VII and a sherd from Barrow I. In Barrow XVI was found a jar with incised herring-bone bands forming triangles pendant from ribs, similarly incised, around the neck. The decoration on this pot resembles the triangles on a painted jar from Barrow V; it is also similar to a jar from Samthravo cemetery, where in addition there is a jug with incised band round the neck, not unlike that from Barrow V. Probably, therefore, some of the graves at Samthravo date to the first quarter of the second millennium B.C., while others date to the last⁸⁶: there is nothing inherently unlikely in this. Apart from precious metal objects, Barrow XV produced a poker-butted awl, a type originating in the late third millennium B.C., and a ribbed spearhead; a dagger with similar ribbing was found in Barrow XXIX, together with a wooden cart.

It is not possible to fix the absolute chronology of Trialeti at all precisely, but there is sufficient evidence for an approximation. The introduction of incised ware from the northern steppes must be related to the general spread of such pottery over the vast regions north of the Caucasus, so that it cannot have reached Trialeti before the beginning of the Middle Kuban period. There is stratigraphic proof that the pottery of this period post-dates the Early Kuban culture, best exemplified at Maikop.⁸⁷ With *c.* 2300–2200 B.C. as a likely date for the Maikop barrow, there is no reason why the Middle Kuban period should not have begun by *c.* 2100 B.C., with that as an approximate date for Barrow VIII in Trialeti, followed closely by Barrow XI. The group of barrows in the Khram valley can be assigned to the very end of the third millennium B.C., *c.* 2050–1950 B.C.: the poker-butted spearhead from Barrow XXIV makes a later date rather improbable. Comparison with Geoy Tepe D and Kızılkale suggests that the painted pottery of Persian origin cannot have reached Trialeti before *c.* 1950 B.C.; Kızılkale may be earlier than Barrow V, the first containing painted ware. The dating of "Classical"

⁸⁴ *The Prehistory of Eastern Europe* I, pp. 78–9, where it is stated that the grave-goods accompanying the carts in the "Tri Brata" barrows suggest a date for them in the 18th or 17th century B.C.

⁸⁵ Hançar, *AfO.* XIV. For Kızılkale see footnote 58.

⁸⁶ E. Chantre, *Recherches Anthropologiques dans le Caucase* (Paris, 1886), Tome II, pls. L–LIV. Republished in *Stratigraphie Comparée*, figs. 277 and 297.

⁸⁷ *The Prehistory of Eastern Europe* I, pp. 67–8.

(Middle) Tripolye is far from certain,⁸⁸ so that the two painted jars from Barrow XVII are of little chronological value, except to indicate that this rich burial was probably not later than *c.* 1900 B.C.; a date closely following Barrow V is likewise suggested by the knob-handled jug, though this type had a long life. A fairly early date for Barrow XV seems indicated by the poker-butted awl. The cart buried in Barrow XXIX rather points to a date for this in the 18th century B.C., at the end of the sequence of Trialeti barrows.

Interpretation of ethnic movements from pottery and other material remains can be very dangerous. Nevertheless, it is permissible to suggest that the arrival of newcomers from the northern steppes is demonstrated in Trialeti by the incised pottery and the cart in Barrow XXIX; a similar cart found at Shresh-Blur⁸⁹ suggests that these newcomers reached the middle Araxes, since burial of carts is a habit of steppe-dwellers. The metalwork, with its profusion of stags and other animals, and with the spiral pattern on a cup from Barrow XVII, suggests, together with the painted pottery from the same tomb, strong influences from north of the Caucasus. The complete break with the East Anatolian E.B.A. tradition itself points to a change in population. Very possibly these newcomers were the first Indo-Europeans to enter Anatolia from the north-east, amongst whom were the Hittites, whose arrival in central Anatolia can be linked with the destruction of Kültepe II.⁹⁰ A date for their arrival in Trialeti during the century *c.* 2100–2000 B.C. is therefore plausible.

It remains quite uncertain whether the spread north-westwards to Trialeti of painted pottery, perhaps not directly of Persian derivation, was the result of migration or of trade, though the latter seems more likely on present evidence. After the end of the M.B.A. sequence of tombs at Trialeti this contact apparently ceased, although painted pottery survived on the Araxes, at Kızılvan, showing a decadence perhaps comparable with that of Geoy Tepe C and B.

DETAILED DESCRIPTION OF EAST ANATOLIAN E.B.A. WARES

The Van Region

In this region only a few sites have yielded pottery of E.B.A. date. These sites are: İremir, Van citadel and a site at its foot, Hino, Karagündüz, Keçanis, Aşağı Mollahasan, Zülfübülak, Bişikümbet and Adilcevaz (see Map II). Of these the most important are İremir, Zülfübülak and Adilcevaz. Potsherds described as now in the Van Museum come from either Tilkitepe or Van citadel.

The Van region was comparatively isolated and backward throughout the third millennium B.C. and later, but perhaps more especially during the E.B. I

⁸⁸ *ibid.*, p. 99 (based on the work of T. S. Passek). But C. F. C. Hawkes (in *Prehistoric Foundations of Europe* (London, 1940) pp. 108–9, and Chronological Tables III, V and VI) proposes a lower dating.

⁸⁹ *The Prehistory of Eastern Europe* I, p. 79.

⁹⁰ For a discussion of the series of sites destroyed at this period, including Kültepe II, see J. Mellaart's article "The End of the Early Bronze Age in Anatolia and the Aegean" (*AJA.* 62, no. 1 [1958]).

period. It is therefore likely that the traditions of the previous period, the Late Chalcolithic of Tilkitepe I, with its buff wares, only slightly burnished, continued ; this seems to be exemplified by a small jar from İremir (Fig. 37). From the same site comes a jar of similar shape and size, but in brownish-grey burnished ware : this suggests that the two styles of pottery were in use side by side, a theory made all the more plausible by the occurrence in the E.B. II period, also at İremir, of a vessel with a Nahcevan lug, of coarse plain light red ware (Fig. 49). This dates to a period when, as the Ernis pottery and similar vessels from Van Museum show, the normal East Anatolian E.B. II burnished ware had become fully established on the shores of Lake Van.

There is relatively little pottery that can be dated with fair certainty to the E.B. I period, since the Ernis group is of E.B. II date, and includes no pots with relief ornament. The only known example in this region of relief decoration is in Van Museum (Fig. 39) : since it is in the close style, it is likely, on the evidence of Karaz, to date to the later part of the E.B. I period. A heavy bowl from İremir (Fig. 40) may be E.B. I or later. Jars with "rail" rim (Figs. 41-3) may likewise be E.B. I, but could be later, as also could two bowls with "rail" rim (Figs. 44-5). Again from İremir comes a fragment of a jar decorated with a vertical bar below the rim, with an impressed circle on either side (Fig. 46), a style of ornament found at Karaz in the deepest E.B.A. levels. A sherd with groove may be an example of "groove-and-dimple" ornament, of which there is a finer specimen, also from İremir (Fig. 47) : at Karaz this style of decoration is found in levels that can be assigned to the E.B. I period. The later vessels from Geoy Tepe, with their "dimples" and small diagonal grooves, are not really the same⁹¹ ; probably they represent a degeneration of the true "groove-and-dimple" decoration of E.B. I. A sherd with trace of a rib comes from Hino, where there is also part of a jar with grooved decoration. Heavy rims of jars and bowls from Adilcevaz may be of E.B. I date, rather than later. A deep bowl, now in Van Museum (Fig. 48), seems to be a primitive form of the normal E.B. II bowl, and could be of either E.B. I or E.B. II date.

The large group of vessels from Ernis, said to have come from a cist, but unearthened in 1937 in circumstances of some uncertainty, provides a corpus of E.B. II pottery in the Van region,⁹² with which similar forms found at other sites near the lake can be compared. The first type is a simple jar or deep bowl, with sharp junction of neck with shoulder (Figs. 77-84) : it is of the normal dark burnished ware, usually black, undecorated. This elementary shape has only a few exact parallels at Geoy Tepe⁹³ ; it is known also in Trialeti⁹⁴ and at Karaz ; a similar bowl was found at Lız, near Bulanık (Fig. 158), nor is the cruder type of E.B. II bowl from the Elazığ region (Figs. 207-8) essentially different. In metal this form occurs at Maikop.⁹⁵ The absence of the true "rail" rim at Ernis is

⁹¹ *Excavations in Azerbaijan*, 1948, figs. 294 and 449 (K2 period) ; figs. 306, 385 and 538 (K3 period) and figs. 342-3.

⁹² For a brief notice of the Ernis pottery see *Iraq XI* (1949), p. 52 (where it is erroneously stated that "all have been made with the wheel") and pl. XXXI. Since the vessels from Ernis belong to three quite different periods (E.B. II, Middle Bronze Age (?) and Urartian), it is hardly likely that they all come from one cist-grave.

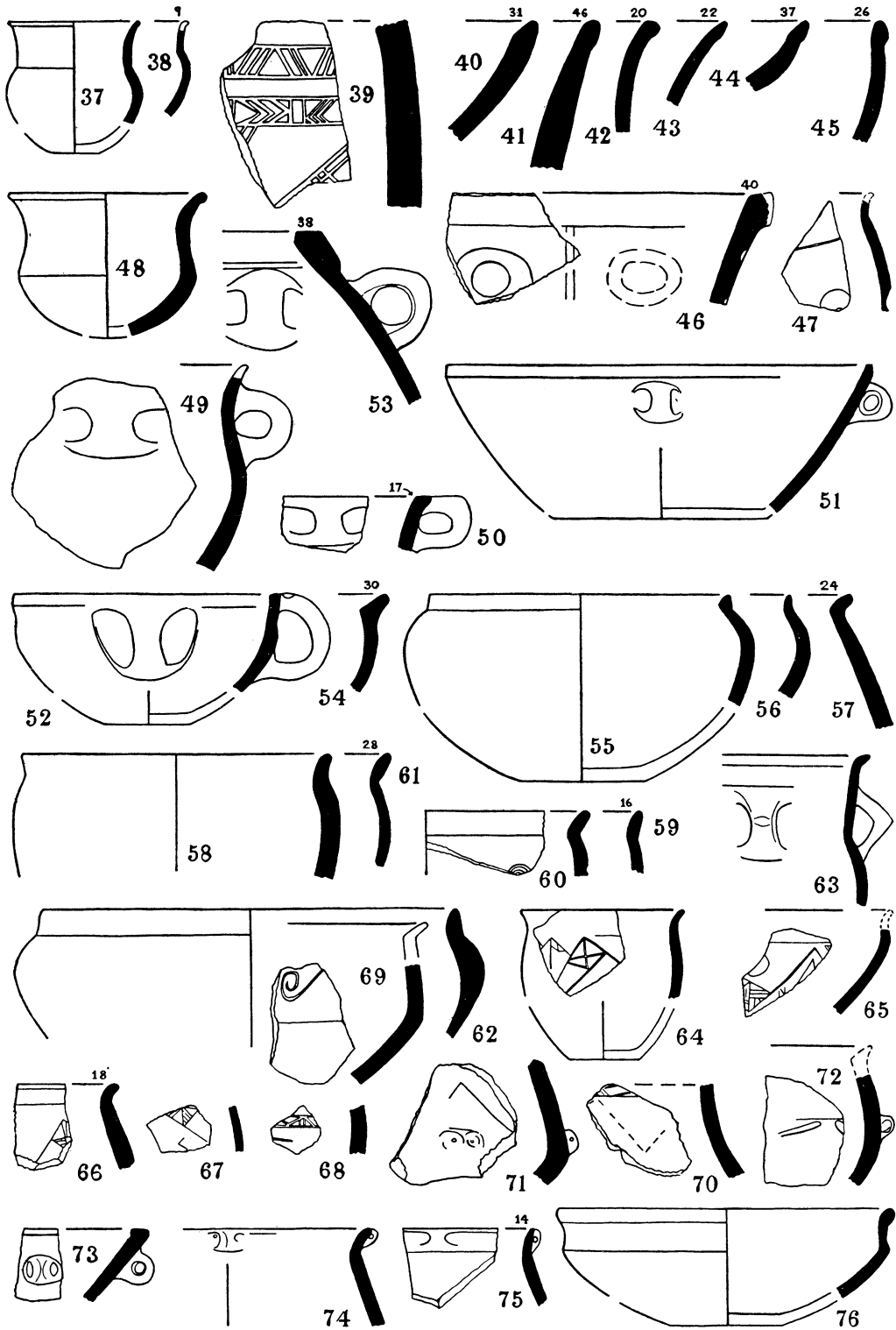
⁹³ *Excavations in Azerbaijan*, 1948, fig. 8 (p. 39), nos. 1066, 146, 147.

⁹⁴ *Trialeti I*, fig. 122 and pl. CXXIII (from Beshtasheni). Cf. also *Materials for the Archaeology of Colchis II*, fig. 35 (p. 135). These jars are deeper than those from Ernis, and may be of E.B. I date.

⁹⁵ *Oriental Silver*, nos. 9-10 (pl. II) and no. 330 (pl. CXXX).

Early Bronze Age Pottery from the Van Region (Figs. 37-76).

- | | | |
|----|--------------------------|---|
| 37 | İremir . . . | Yellowish-buff ware, inside plain, outside very slightly burnished. |
| 38 | İremir . . . | Brownish-grey ware, inside plain, outside burnished. Rim broken off. |
| 39 | Van Museum . | Black and dull red gritty ware, inside plain dull red, outside black burnished with relief ornament in the close style. |
| 40 | İremir . . . | Grey ware, black to dark grey surface, slightly burnished. |
| 41 | İremir . . . | Plain drab brick-red ware. |
| 42 | İremir . . . | Plain drab brownish-buff ware. |
| 43 | İremir . . . | Light grey ware, very slightly burnished. |
| 44 | İremir . . . | Greyish-black ware, inside black and brownish-grey burnished, outside grey-brown, slightly burnished. |
| 45 | İremir . . . | Grey-brown ware, black core ; inside plain, outside slightly burnished. |
| 46 | İremir . . . | Coarse, very rough-surfaced light red and grey ware, rather gritty ; inside plain light red ; outside plain grey, with decoration of impressed circle and vertical bar, probably with another circle to the right of the bar. |
| 47 | İremir . . . | Brown ware, grey core, inside plain, outside very slightly burnished, with "groove-and-dimple" decoration. |
| 48 | Van Museum . | Drab red and black ware, inside plain drab red to red-brown, outside burnished black, with brown in parts. |
| 49 | İremir . . . | Coarse, rough-surfaced light brick-red ware, grey core. Deep bowl with Nahcevan lug. Rim broken off. |
| 50 | Adilcevaz (Kümbet Hüyük) | Black and brown ware ; inside and top of rim brown, very slightly burnished, outside black burnished. Nahcevan lug at rim. |
| 51 | Van Museum . | Dark grey ware, inside dark grey-brown, very slightly burnished, outside black burnished. Bowl with Nahcevan lug. |
| 52 | Van Museum . | Grey-brown ware, inside slightly burnished, outside black, highly burnished. Bowl with Nahcevan lug. |
| 53 | Van Museum . | Black and light red ware, inside plain light red, outside black, highly burnished. Storage-jar with Nahcevan lug. |
| 54 | İremir . . . | Black and brick-red ware ; inside, and to top of rim, brick-red, slightly burnished ; outside black burnished. |
| 55 | Zülfübülak . | Black and brick-red ware, inside burnished brick-red, red-brown burnished round rim, outside black burnished. |
| 56 | Zülfübülak . | Plain brown and grey-brown ware, very rough inside. |
| 57 | İremir . . . | Grey-brown ware, very slightly burnished. |
| 58 | İremir . . . | Heavy light red ware, grey core ; inside plain, outside plain light red-brown. |
| 59 | İremir . . . | Light grey ware, with grey and light grey burnished surface. |
| 60 | İremir . . . | Black burnished ware, with "dimple" on outside. |
| 61 | Van Museum . | Light reddish-brown ware, with burnished slip, reddish inside. |
| 62 | Van Museum . | Drab red and grey ware, inside plain drab light red, outside black to dark grey burnished. |
| 63 | Van Museum . | Grey and buff ware ; inside plain buff, outside grey, slightly burnished. |
| 64 | Zülfübülak . | Black ware, inside very slightly burnished, outside plain, with incised decoration. |
| 65 | Zülfübülak . | Grey ware, inside brown, very slightly burnished, outside grey burnished, with incised decoration and "dimple". Rim tentatively reconstructed. |
| 66 | Zülfübülak . | Grey ware, inside plain grey-brown, outside black burnished, with incised decoration. |
| 67 | Zülfübülak . | Grey ware, inside light grey-brown, slightly burnished, outside plain smooth grey, with incised decoration. |
| 68 | Zülfübülak . | Grey ware, inside plain, outside burnished, with incised decoration. |

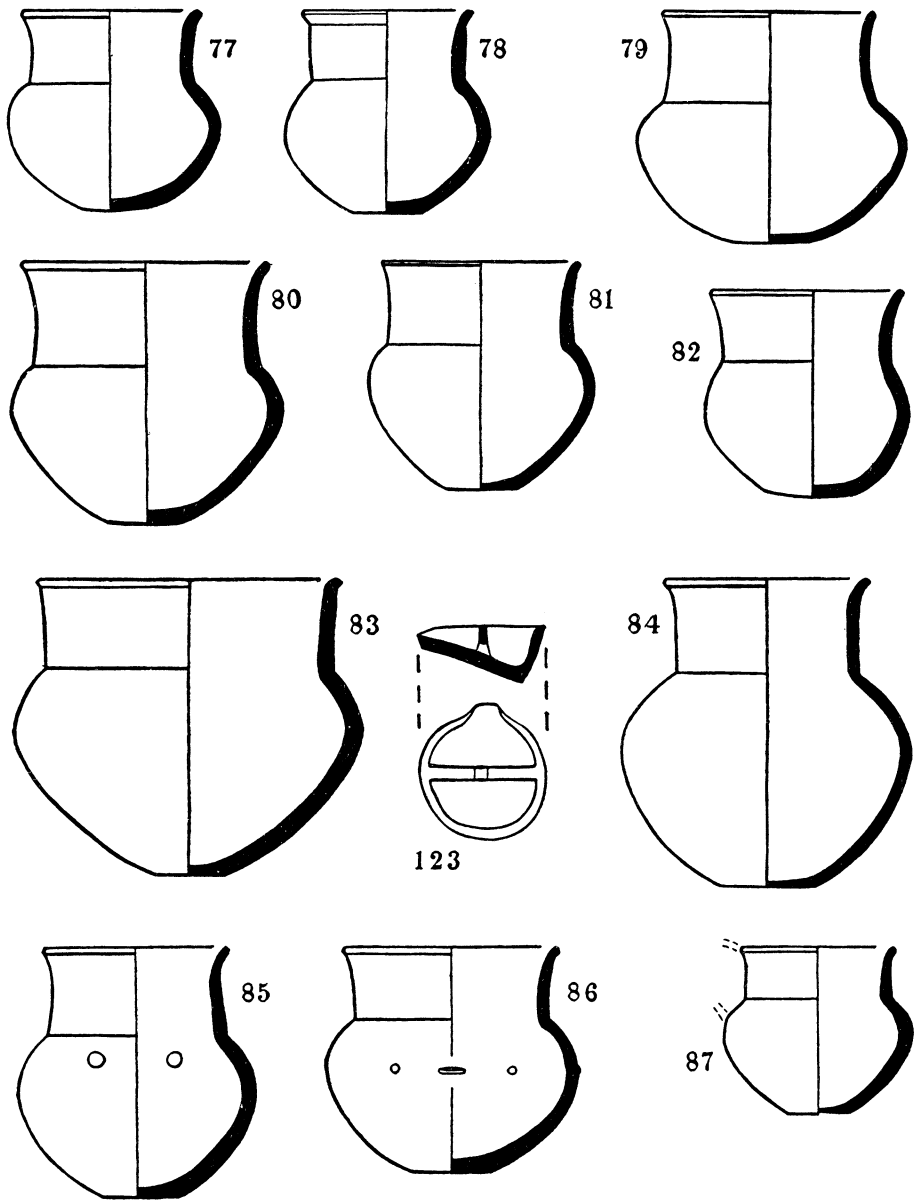


- 69 Zülfübülak . . . Light grey ware, inside plain, outside burnished, with incised spiral ornament.
- 70 Adılcevaz (Kümbet Hüyük) . . . Dark grey and red-brown ware ; inside plain red-brown ; outside mottled grey and light grey burnished, with incised decoration (the lower part perhaps imitating stitching).
- 71 Zülfübülak . . . Black to very dark grey ware, inside plain, outside mottled grey and black, very slightly burnished, with incised decoration and vestigial Nahcevan lug.
- 72 Aşağı Mollahasan . . . Grey ware, inside plain grey-brown, outside plain very dark grey. Bowl with vestigial, unpierced Nahcevan lug. Rim tentatively reconstructed.
- 73 Van Museum . . . Gritty dark grey ware, inside plain, outside plain grey and burnished black. Small Nahcevan lug.
- 74 Van Museum . . . Black ware, inside dark grey, slightly burnished, outside black burnished. Small Nahcevan lug.
- 75 Van Museum . . . Brown ware, grey core, inside plain, outside grey and brown burnished. Small Nahcevan lug.
- 76 Zülfübülak . . . Brown burnished ware, grey core ; burnish slight on inside.

E.B. II Pottery from Ernis, now in Van Museum (Figs. 77-123).

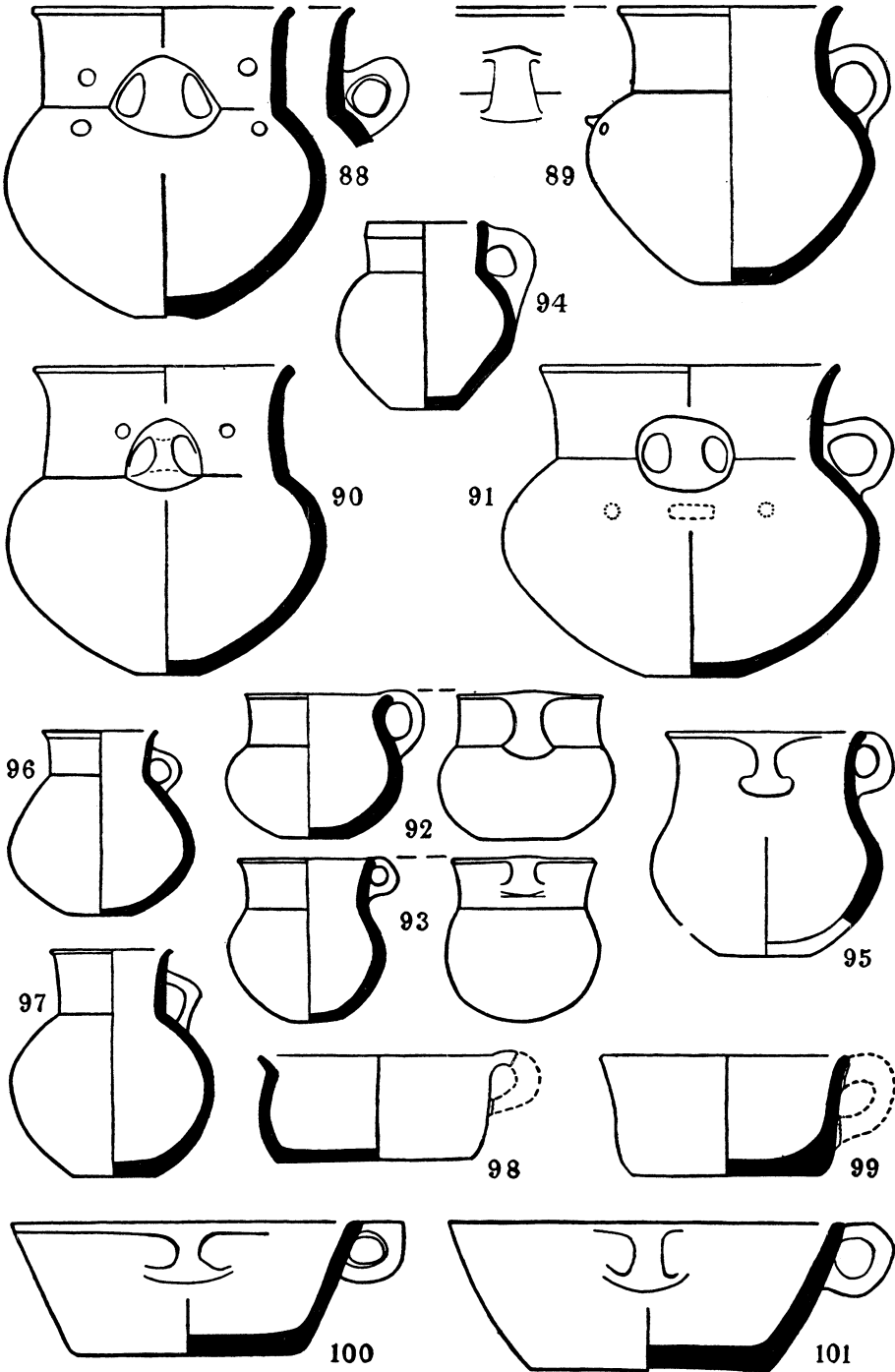
Note.—Figs. 86, 96-7, 105-6, 108, 110 and 123 are half the normal scale.

- 77 Black ware, inside plain, outside highly burnished.
- 78 Fine blackish-red ware ; inside plain, brick-red burnished round rim ; outside black, highly burnished.
- 79 Grey-brown ware : inside plain grey ; outside black burnished.
- 80 Black ware, inside plain, outside highly burnished.
- 81 Fine black ware, inside plain blackish-grey, brown burnished below rim, outside highly burnished.
- 82 Black ware, inside plain, outside highly burnished.
- 83 Black ware, inside plain, outside highly burnished.
- 84 Reddish-grey ware, inside plain dull red, outside black burnished.
- 85 Fine red-and-grey ware, inside plain light red, outside black, partly burnished. Two "dimples".
- 86 Brick-red and black ware, inside plain brick-red, outside black burnished. One vestigial ledge-handle, with a "dimple" on each side.
- 87 Black ware, inside plain grey, outside plain black, slightly burnished in parts. Traces of a handle from rim to shoulder.



E.B. II Pottery from Ernis (cont.)

- 88 Black ware, inside plain, outside highly burnished. Nahcevan lug on one side, vestigial ledge-handle on the other ; eight "dimples" (four on each side). Countersunk base.
- 89 Reddish-grey ware, inside plain buff, outside black, very slightly burnished in parts, brown burnished near rim. Strap-handle, and one vestigial ledge-handle with a "dimple" on each side.
- 90 Black ware, inside plain, brownish-black burnished round rim, outside black burnished. On one side, Nahcevan lug with one "dimple" on each side ; on the opposite side, vestigial ledge-handle, also with one "dimple" on each side.
- 91 Black ware, inside plain, outside burnished. Nahcevan lug and (on opposite side) vestigial ledge-handle with one "dimple" on each side.
- 92 Dark grey ware, inside plain brownish-black, burnished near rim, outside black burnished.
- 93 Dark grey ware, inside plain black, outside black burnished, partly red-brown burnished from rim to shoulder.
- 94 Red-brown ware, black core, rather crudely made ; inside brown, very slightly burnished ; outside black and red-brown, slight uneven burnish.
- 95 Black ware, inside plain, outside highly burnished.
- 96 Blackish-brown ware, inside plain, outside unevenly burnished.
- 97 Brownish-black ware, inside plain greyish-black, outside greyish-black burnished.
- 98 Plain reddish-grey ware.
- 99 Black and red ware, inside plain dull red, outside black and brownish-black burnished. Handle broken off.
- 100 Plain drab light red ware. Nahcevan lug at rim.
- 101 Dark grey ware, both sides greyish-black burnished. Nahcevan lug at rim.



some indication that it may be less typical of the E.B. II period than of the E.B. I, though elsewhere, as in the Elazığ-Malatya region, it continued in E.B. III. Typical of the E.B. II period in the Van region are those vessels of the same forms as Figs. 77-84, but ornamented with a vestigial ledge-handle, having a "dimple" on each side, or simply with two "dimples" (Figs. 85-6). Though no exact parallels have been found at Geoy Tepe, this type of decoration occurs on other forms.⁹⁶ Even more characteristic of E.B. II, and represented in the Ernis group (Figs. 88-91), are jars of this form, with Nahcevan lug and dimples. The Nahcevan lug occurs on fragments from İremir (Figs. 49-50) and Adilcevaz (Fig. 51), and on sherds in Van Museum (Figs. 52-3). Small cups from Ernis (Figs. 92-3) have parallels at Geoy Tepe throughout the K period ⁹⁷, and occur also in Trialeti ⁹⁸ and at Karaz in a level probably of E.B. II date. There are also larger cups (Figs. 94-5). Handled jars (Figs. 96-7) are probably not very typical. There are also shallow handled dishes, with flat base (Figs. 98-9); rather similar are heavy dishes with a Nahcevan lug (Figs. 100-2) and a flat dish ornamented with a knob and "dimples" (Fig. 103). Fairly deep bowls, with sharply everted rim, occur not only at Ernis (Figs. 104-7), but also at İremir (Fig. 54) and Zülübülak (Fig. 55); they are typical of the Iğdır area (Figs. 124-7). From Ernis come two bowls of this form ornamented with diminutive ledge-handle and two "dimples" (Figs. 108-9), closely paralleled by a bowl now in Van Museum: thus this form, with its several variations of rim (cf. Figs. 56-62) may be considered, after the Nahcevan lug, as one of the most characteristic features of the E.B. II period at sites near Lake Van, even though a parallel at Geoy Tepe is of the E.B. I period.⁹⁹ Less typical is a shallow necked bowl (Fig. 110). Five vessels from Ernis, though published here, are probably of second millennium B.C. date; these are: a bowl with flat-topped rim (Fig. 111), a carinated bowl with ledge-handle on the carination (Fig. 112), a bowl with three parallel grooves along the shoulder and a vestigial notched handle on the rim (Fig. 113), a wide bowl with flaring rim (Fig. 114) and a deep bowl with two grooves below the rim (Fig. 115). Plain cooking ware dishes and bowls from Ernis (Figs. 116-122) and a lamp (Fig. 123) are probably of E.B.A. date. A jar now in Van Museum, with sharply bent handle (Fig. 63), may be of E.B. II date, though it could be E.B. I.

By far the most important site for the E.B. III period in the Van region is Zülübülak, with its pottery decorated with patterns incised after firing (Figs. 64-8); one sherd (Fig. 69) has a crudely incised spiral, and a fragment from Bişikümbet may have a similar one. An incised sherd from Adilcevaz (Fig. 70) suggests the introduction of this type of decoration from the Çaldıran plain to the north shore of Lake Van. A more widespread feature of this period is a degenerate form of the Nahcevan lug, which becomes small, and in some cases vestigial, since it is unpierced. At Zülübülak an unpierced Nahcevan lug (Fig. 71) helps to date the incised ware to the E.B. III period, from the evidence of Geoy Tepe and Karaz.¹⁰⁰ A crude version of this unpierced lug also occurs at Aşağı Mollahasan (Fig. 72). Perhaps slightly earlier, but likewise of this period, are three sherds now in Van Museum, with small Nahcevan lugs (Figs. 73-5). An open carinated

⁹⁶ *Excavations in Azerbaijan*, 1948, figs. 10-12 (pp. 43-6): here, however, there are dimples with grooves rather than vestigial ledge-handles.

⁹⁷ *ibid.*, fig. 8 (p. 39), no. 1090 (K₁ period); pl. III, no. 30 (K₂ period) and no. 958; fig. 12 (p. 46), no. 953 (K₃ period).

⁹⁸ *Tsalka*, 1947, pls. XXXI, XXXIX, XL (from Osni).

⁹⁹ *Excavations in Azerbaijan*, 1948, fig. 8 (p. 39), no. 1064.

¹⁰⁰ For Geoy Tepe, see footnote 53.

bowl from Zulfübülak (Fig. 76) is of a form not found at Ernis, and is therefore likely to belong to E.B. III rather than to E.B. II. There seems to be no E.B. III pottery in the Ernis group.

The Iğdır Plain

Apart from some heavy jars from Gökçeli, which may be of E.B. I date, the pottery from Yaycı and Gökçeli,¹⁰¹ the two E.B.A. sites examined in the plain of Iğdır, seems to be entirely of the E.B. II and E.B. III periods. No relief decoration was found.

Yaycı, the more important site, yielded a considerable amount of black burnished pottery with grooved decoration. Fairly deep bowls with sharply everted rim (Figs. 124-7) are typical of these two sites, and resemble Figs. 104-7 from Ernis: they are bowls of this form (Figs. 128-9) that are ornamented, one with chevrons and concentric circles, in broad grooving. They provide evidence for an E.B. II date for such grooved ware; these bowls with everted rim indicate a link with the Van region. Patterns on the grooved ware include, apart from the chevrons and concentric circles of Fig. 128, spirals (Fig. 130). Nahcevan lugs are common: they vary considerably in size, the large ones being E.B. II (Figs. 132-3). Some deep bowls (Figs. 134-6) are also E.B. II, perhaps a crude form of Figs. 124-7.

Of uncertain date are simple open bowls (Fig. 137) and a lid, burnished but undecorated.

The decorated ware with finer grooving may be assigned provisionally to the E.B. III period: shapes are deep bowls with carinated shoulder (Figs. 138-9), deep bowls with sharp junction of neck with shoulder (Fig. 140) and a hole-mouth bowl (Fig. 141); all these bowls are small. Deep bowls with a single narrow groove along their rounded shoulder, including one with a lug at the rim (Figs. 145-9), are perhaps of E.B. III date, but could be earlier. Indeed, none of the pottery with grooved decoration is definitely E.B. III: possibly all of it should be dated to E.B. II. More certainly dating to E.B. III are the fragments with the smaller Nahcevan lugs (Figs. 150-2). A massive pedestal, of plain red ware (Fig. 153), may be E.B. III, because it has an absurdly diminutive Nahcevan lug near its base; perhaps this is contemporary with the degenerate Nahcevan lug published by K. Kökten,¹⁰² which proves that occupation continued through the E.B. III period.

The Karaköse Plain

Two sites, Yiğnitepe and Musun, yielded E.B.A. and later pottery. Grey and black wares, slightly burnished, occur; but the quantity found was so small that no significant information could be obtained.

The Bulanık and Malazgirt Areas

No E.B.A. pottery was found in the Malazgirt area, but a certain amount at various sites near Bulanık. These sites are: Kekerli, Pülür, Şeyhyakup, Bulanık and Lız.

Some heavy jar rims from Bulanık are probably of E.B. I date, but the only fragments definitely of this period are two decorated sherds from the same site, one with incised linear decoration, probably of chevrons, the other with a circle and grooves (Fig. 157), a variant on the "groove-and-dimple" style.

¹⁰¹ K. Kökten, *DTCFD*. XI (1953), pl. XIII, nos. 3-5 and p. 203.

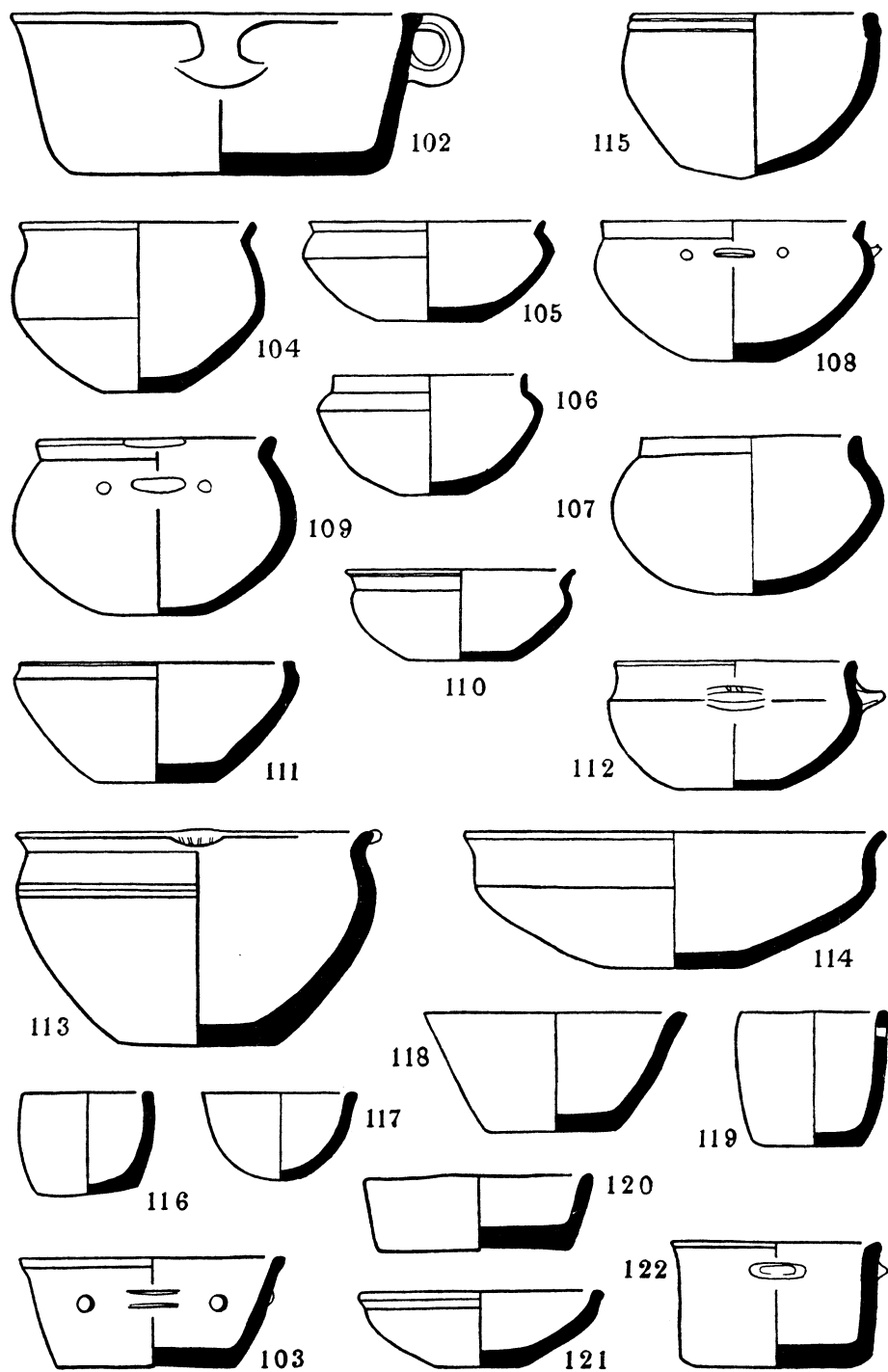
¹⁰² *ibid.*, pl. XIII, no. 4.

E.B. II Pottery from Ernis (cont.)

- 102 Dark grey ware, inside very slightly burnished, outside black, plain or slightly burnished. Nahcevan lug at rim.
- 103 Dark red ware, inside plain, outside black, very slightly burnished. Vestigial ledge-handle with one "dimple" on each side.
- 104 Fine black and dull red ware, inside plain dull red, outside black, highly burnished. *Possibly turned on a slow wheel.*
- 105 Black and red ware, inside plain red, burnished along rim, outside black burnished.
- 106 Greyish-black ware, inside plain, outside black, highly burnished.
- 107 Black ware, inside plain, outside highly burnished.
- 108 Blackish-brown ware, inside plain, outside black burnished; black and brown, unevenly burnished, along both sides of rim.
- 109 Reddish-grey ware, both sides plain grey, reddish in parts along rim. Strap-handle (broken off), with one "dimple" on each side.
- 110 Black and red ware, inside plain dull light red, outside black burnished.
- 111 Black ware; inside black, with grey, brown and red patches, burnished with a pointed object; outside reddish- and blackish-brown burnished.
- 112 Plain reddish-grey ware. Ledge-handle, with two notches on top. *Rim probably turned on a slow wheel.*
- 113 Brownish-black ware, inside plain, outside uneven burnished. Three parallel grooves along shoulder; vestigial notched handle on rim.
- 114 Light red ware, red burnished slip with black burnished patches. *The top part, above carination, possibly turned on a slow wheel.*
- 115 Reddish-grey ware, inside plain dark grey, outside blackish-brown, slightly burnished. Two grooves on outside, one on inside.
- 116 Light red ware, inside plain grey, outside plain uneven light red and grey.
- 117 Plain dark grey ware.
- 118 Plain brownish-black ware.
- 119 Plain dark grey ware. Two string-holes.
- 120 Plain coarse black ware. Crudely made dish, of oval shape (14 × 12.5 cm.).
- 121 Greyish-brown ware, both sides uneven plain reddish-brown and black.
- 122 Black ware, inside plain dark grey, outside brownish-black, partly burnished.
- 123 Plain coarse black ware. Lamp.

Early Bronze Age Pottery from the Iğdir Plain (Figs. 124-156)

- 124 Yaycı . Dark grey ware, inside plain brick-red and buff, outside plain smooth dark grey.
- 125 Yaycı . Black ware, smooth and slightly burnished.
- 126 Yaycı . Grey ware, inside grey-brown, very slightly burnished, outside mottled grey and black burnished.
- 127 Gökçeli . Plain black to grey-brown ware, inside grey-brown, outside black; dark brown burnished strip along inside of rim.
- 128 Yaycı . Black and red-brown ware; inside plain rough drab red-brown; outside black burnished; red and red-brown, slightly burnished, along inside top of rim. Grooved decoration on outside.
- 129 Yaycı . Black and light red ware, inside plain light red, outside black burnished, with grooved decoration.
- 130 Yaycı . Dark grey ware, inside plain, outside black burnished, with grooved decoration.
- 131 Yaycı . Grey-black ware, inside plain grey, outside black burnished, with grooved decoration.
- 132 Gökçeli . Black to reddish-buff ware, inside plain rough-surfaced reddish-buff, outside black burnished. Nahcevan lug.
- 133 Yaycı . Grey ware, slightly burnished. Bowl with Nahcevan lug (broken off).
- 134 Gökçeli . Light brown and grey ware, inside light brown burnished, outside black and uneven light brown burnished.
- 135 Yaycı . Grey ware, inside plain light grey, outside grey burnished.
- 136 Yaycı . Black ware, inside light brownish-grey, slightly burnished, outside plain smooth black.

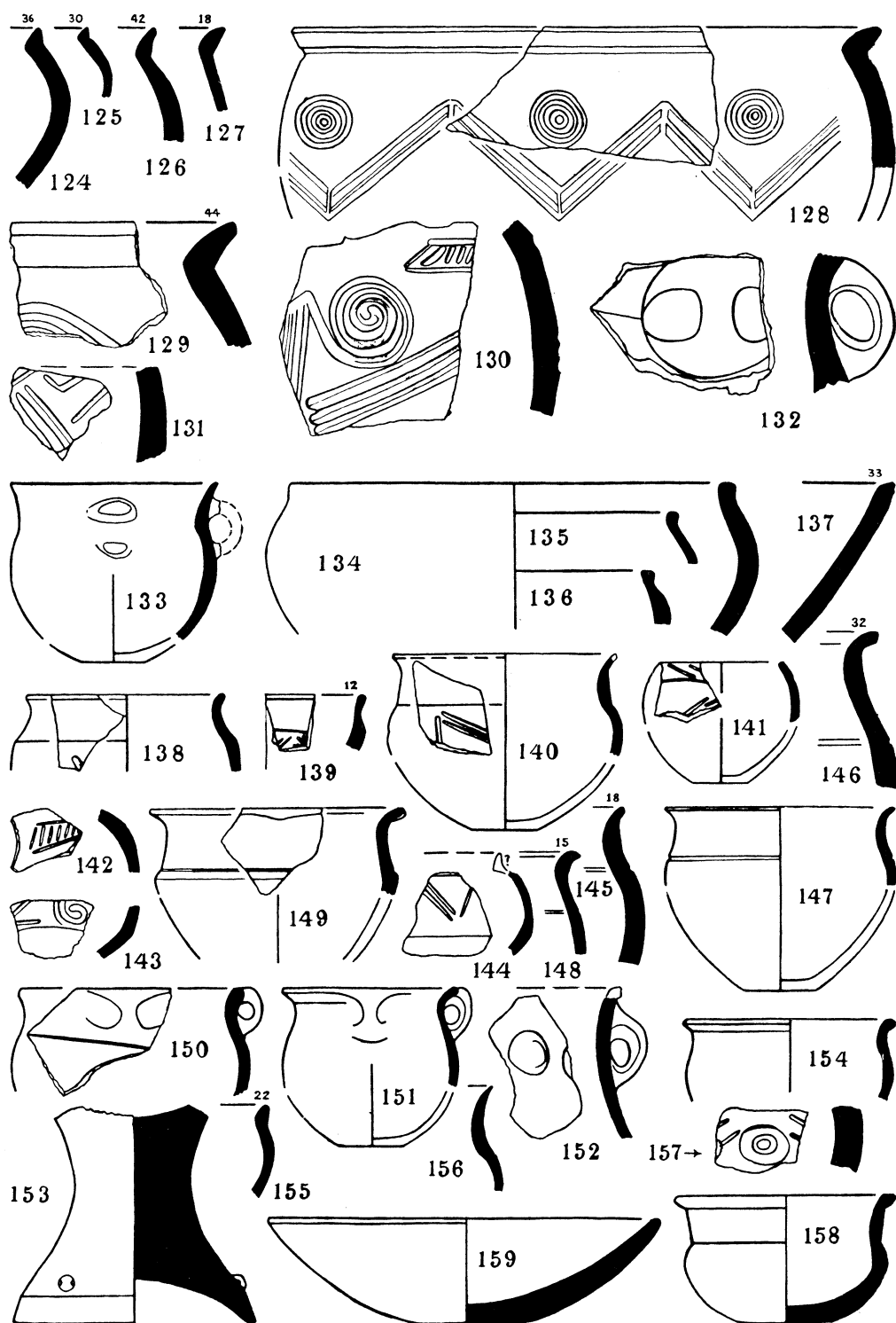


Early Bronze Age Pottery from the Iğdır Plain (cont.)

- 137 Yaycı . Dark grey and brick-red ware ; inside plain drab brick-red ; outside mottled dark and light grey burnished.
- 138 Yaycı . Grey-brown ware, inside plain, outside very dark grey burnished, with fine grooved decoration.
- 139 Yaycı . Grey-brown ware, inside plain, outside rather mottled black and grey burnished, with fine grooved decoration.
- 140 Yaycı . Blackish-brown ware, inside plain, outside black burnished, with fine grooved decoration.
- 141 Yaycı . Grey-brown ware, inside plain, outside black burnished, with fine grooved decoration.
- 142 Yaycı . Black and brown ware, inside plain brown, outside black, highly burnished, with fine grooved decoration.
- 143 Yaycı . Black ware, inside plain, outside very slightly burnished, with grooved spiral.
- 144 Yaycı . Plain black ware, smooth on outside, with fine grooved decoration. Rim tentatively reconstructed.
- 145 Yaycı . Dark grey ware, inside plain smooth, outside burnished.
- 146 Gökçeli . Black to grey ware, inside plain grey, outside black burnished ; brown burnished strip inside rim.
- 147 Yaycı . Grey-brown ware, inside plain, outside mottled black and grey, slightly burnished.
- 148 Gökçeli . Black to light brown ware, inside plain light brown, outside plain black ; dark brown burnished strip inside rim.
- 149 Yaycı . Grey-black ware, inside plain grey, outside black burnished. Small lug at rim.
- 150 Yaycı . Black to dark grey ware, inside plain grey, black burnished outside and round rim. Small Nahcevan lug at rim.
- 151 Yaycı . Black to dark grey ware, inside plain grey-brown, black burnished outside and round rim. Small Nahcevan lug at rim.
- 152 Yaycı . Plain pinkish-buff ware. Small Nahcevan lug. Rim tentatively reconstructed.
- 153 Gökçeli . Plain red ware, grey core, smooth on top side. Heavy pedestal-base, with very diminutive Nahcevan lug near bottom.
- 154 Yaycı . Light grey ware, inside plain, outside very slightly burnished.
- 155 Gökçeli . Black to light grey ware, inside light grey, very slightly burnished, outside black burnished.
- 156 Gökçeli . Black ware, inside slightly burnished, outside plain.

Early Bronze Age Pottery from the Bulanık Area (Figs. 157-9)

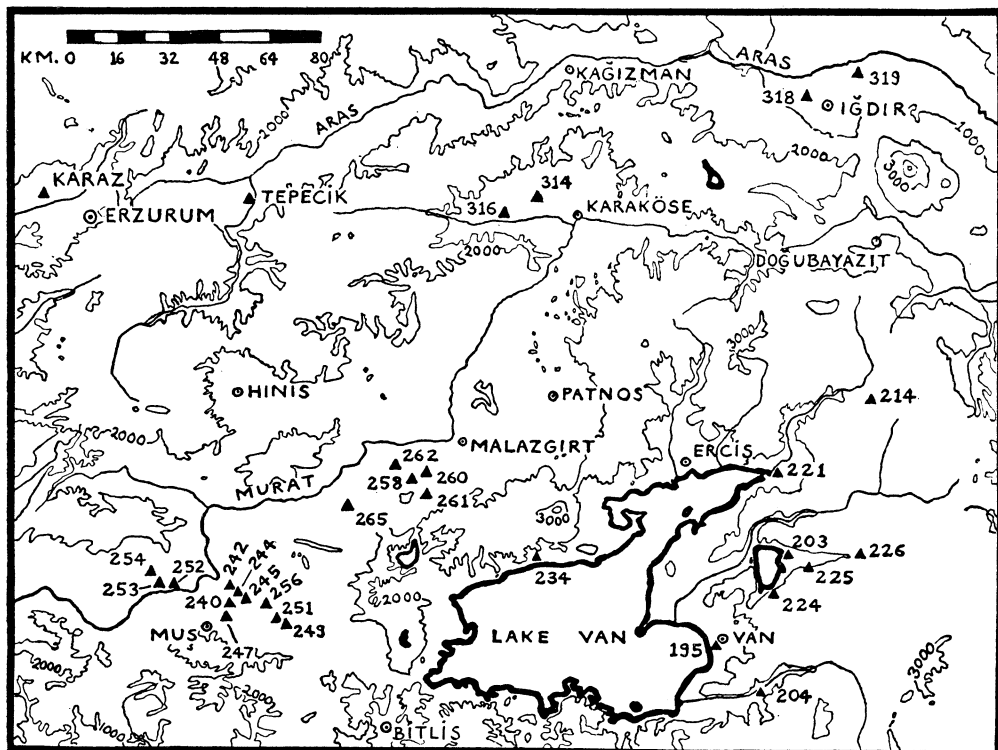
- 157 Bulanık . Light reddish-grey ware, inside plain drab light red, outside light cream-grey, very slightly burnished, with "groove-and-circle" decoration.
- 158 Lız . Black and red-brown ware, inside plain red-brown, outside black, burnished below the shoulder, highly burnished above it.
- 159 Lız . Plain coarse drab light reddish-brown ware.



At Lüz was found a large fragment of an E.B. II bowl (Fig. 158), a crude version of the type so common in the Elazığ region, and, though shallower, fairly similar to those from Ernis. There was also a simple open bowl (Fig. 159).

The Muş Plain

This geographically isolated plain was relatively backward and cut off from the East Anatolian E.B.A. cultural zone throughout the third millennium B.C.



MAP II. E.B.A. Sites in Easternmost Anatolia.

The administrative district (*kaza*) in which each site is situated is in brackets.

- | | |
|----------------------------------|----------------------------|
| 195. "Van Kale Hüyükü" (Van). | 251. Miğrakom (Muş). |
| 203. Karagündüz (Van). | 252. Dom (Muş). |
| 204. İremir (Gurpınar). | 253. Gaybeyan (Muş). |
| 214. Zülfübülak (Muradiye). | 254. Ziyaret (Muş). |
| 221. Bişikümbet (Muradiye). | 256. Kırtakom (Muş). |
| 224. Hino (Van). | 258. Şeyhyakup (Bulanık). |
| 225. Keçanis (Van). | 260. Pulur (Bulanık). |
| 226. Aşağı Mollahasan (Özalp). | 261. Kekerli (Bulanık). |
| 234. "Kümbet Hüyük" (Adilcevaz). | 262. Bulanık. |
| 240. Oğonk (Muş). | 265. Lüz (Bulanık). |
| 242. Şeyhyusuf (Muş). | 314. Yiğnitepe (Karaköse). |
| 244. Şeyhpirim II (Muş). | 316. Musuri (Aleskirt). |
| 245. Hunan (Muş). | 318. Yaycı (İğdır). |
| 247. Soğkom Tepesi (Muş). | 319. Gökçeli (İğdır). |
| 249. Alikirpun (Muş). | |

Comparatively little pottery of this period was found. Nevertheless, there are sherds that can be dated to the E.B. I and E.B. II periods, some of which may have been imports.

There was in the Muş plain a local E.B.A. pottery, sherds of which were found at several sites : Alikirpun, Oğonk, Piklis, Şeyhpirim II, Gaybeyan, Ziyaret

and, most important of all, Soğkom Tepesi. This last site, close to Muş and beside the road to Bitlis, yielded a great quantity of pottery. The local ware is hand-made, and the forms are very simple, mostly deep bowls, some of which seem to have a hole-mouth, such as that from Şeyhpirim II (Fig. 160); the surface is usually plain brown or light grey, but the inside may be buff. Examples illustrated include bowls from Soğkom Tepesi (Figs. 161-5), one of which has a hole 2 cm. below the rim, presumably so that it could be carried with a cord. From the same site come several fragments of jars: one of these has a lug handle just below the short neck (Fig. 166). One fragment of a deep bowl exemplifies (Fig. 167) several sherds from Oğonk, including one with a thick section, tapering up to a sharp rim. Part of a strainer, from Piklis, may be of E.B.A. date. At Alikirpun was found local E.B.A. ware of unusually fine quality, being highly burnished (Fig. 168). East Anatolian E.B. I ware is represented by three pieces with grooved decoration, including a bowl from Şeyhpirim II (Fig. 169). A sherd from Soğkom Tepesi has a "dimple": it is from a thin vessel, and may well be of E.B. II date. One possible parallel with the E.B. II of the Elazığ region is provided by a bowl with a vestigial notched lug at the rim (Fig. 170: cf. Figs. 212-3), which rather suggests some slight contact between Elazığ and the Muş plain. A jar from Soğkom Tepesi with the East Anatolian flat triangular handle at the rim could be E.B. I or later. Thus a small quantity of East Anatolian E.B.A. pottery has been found at sites in every part of the Muş plain.

The relative paucity of E.B.A. pottery in the Muş plain may indicate that it was sparsely populated during the third millennium B.C., and perhaps till c. 1400 B.C. or later. But the dearth of recently ploughed mounds may have made this period under-represented amongst surface sherds.

The Elazığ Region

The large quantity of East Anatolian E.B.A. pottery found in this region makes it possible to treat in detail only the more distinctive features.

Excavation is necessary before it can be determined whether the East Anatolian E.B. I ware developed in this region out of the local late Chalcolithic ware. Dark burnished pottery certainly existed here in the fourth millennium B.C.

The E.B. I period, as elsewhere in eastern Anatolia, is most easily recognised by relief decoration, though only three examples were recorded from sites near Elazığ. One from Hinsor (Fig. 171) is from a large jar of the normal E.B. I form, with "rail" rim; a sherd from Uluova (Fig. 172) seems to belong to the close style of relief, as likewise does a sherd (Fig. 173) from a site south-east of Gölcük, the lake lying close to the road up from Diyarbakır¹⁰³; both these, on the evidence of Karaz, are late E.B. I. Without excavation it is impossible to guess what proportion of jars in the E.B. I period were ornamented with relief decoration. Usually these jars were large and heavy and, from comparison with Geoy Tepe¹⁰⁴ and elsewhere,¹⁰⁵ almost certainly deep; but no complete profiles were found, and all but a few of the many rim sherds belonging to such vessels are broken off at or above the junction of neck with shoulder, a natural place of fracture (Figs.

¹⁰³ This site is near Sarsap Mevki, 5 km. from Gölcük: my thanks are due to D. B. Stronach, who collected surface pottery from there.

¹⁰⁴ See footnote 93.

¹⁰⁵ For Trialeti, see footnote 94. Probably, for Karaz, *Türk Tarih Kongresi* 1943, Karaz fig. 17. See also *AS. IV* (1954), p. 27, fig. 3 (nos. 1-2), from Eilar and Kültepe (Nahcevan).

174-9). At some sites in Altınova—Könk Tepecik, Tülüntepe and Aşağı İçme—occur jars ornamented with parallel horizontal grooves below the rim (Figs. 180-3), a type not found elsewhere in eastern Anatolia, though it has parallels with Khirbet Kerak ware.¹⁰⁶ Heavy bowls with “rail” rim are not common (Fig. 184), and seem likely to be E.B. I. There is thus relatively little pottery that can be assigned without any doubt to the long E.B. I period.

Jars of a certain type, particularly common at Hankendi, could be either E.B. I or E.B. II: perhaps more probably they continued in use through both periods (Figs. 185-9). The flat triangular handle attached to the rim, and its modifications, apparently—from the unpublished evidence of Arslantepe¹⁰⁷—continued throughout the Early Bronze Age. Nevertheless, it seems plausible to date most vessels with such handles to the E.B. I period. Perhaps of E.B. I date, but early in the period, is a deep bowl from Tepecik with a rounded version of the triangular handle (Fig. 22): since, however, this has a parallel at Silbistan, it may be late Chalcolithic. It must be emphasised that the flat triangular handle is not a good criterion for dating to any sub-period of the East Anatolian E.B.A. (see Fig. 190). A handled bowl from Hinsor (Fig. 191) could be E.B. I or II.

The E.B. II period is well represented in this region, particularly at Könk and Hinsor. The typical form is a small deep bowl, with sharply defined junction of neck with shoulder (Figs. 192-7), or with less defined junction (Figs. 198-9). There are also bowls with more flaring rim (Figs. 200-2) and rounded bowls (Figs. 203-5). All are well made, and many are quite thin. Some of these bowls have the “rail” rim, which tends to have a fairly sharp top, and are obviously a development from E.B. I pottery. Indeed some, perhaps jars rather than bowls, may date to the earlier period (Figs. 179, 206). But otherwise it would be reading too much into the available material to try to deduce any typological development: some variations must have appeared before others, but with hand-made vessels subtle differences of rim and general shape are of doubtful significance. These E.B. II bowls have been found at Hinsor, Hankendi, Könk and Tadım, but they must occur at other sites. A cruder version of this type of bowl occurs at Hankendi (Figs. 207-8), not unlike the simple bowls from Ernis (Figs. 77-84). Simple bowls are dated provisionally to E.B. II, but could be earlier or later (Figs. 209-10). Incised decoration, such as appeared at this time in the Malatya region, seems not to occur in the Elazığ region: nor is incision used at all, except for one sherd from Avcılı, with rough criss-cross pattern (Fig. 211), of uncertain date. Open bowls with diminutive lug at the rim (Figs. 212-3) may be E.B. II, and have a possible parallel in the Muş plain (Fig. 170).

The E.B. III period is distinguished mainly by its painted pottery, described below. The dark burnished wares, however, continued, probably including the large jars with “rail” rim typical of E.B. I. Bowls with inverted rim (Figs. 214-5), of plain ware, from Hankendi and Tepecik, somewhat resemble in shape one of the forms of the E.B. III painted ware, and have external parallels.¹⁰⁸ An E.B. III innovation is a grooved ware, plain or only very slightly burnished, with parallels in Cilicia and elsewhere¹⁰⁹: the forms are jars and bowls, and there are several examples from Hankendi, with others from Hinsor, Tepecik and Avcılı (Figs. 216-9).

¹⁰⁶ See footnote 65.

¹⁰⁷ Pottery from both French excavations at this site is now in Ankara, at the Museum and in the Citadel.

¹⁰⁸ See footnote 52.

¹⁰⁹ See footnotes 50 and 51.

"Hole-mouth" bowls from Hankendi and Könk (Figs. 220-1) may be E.B. III, but could well be earlier.

The Malatya Region

This region, with the districts of Divriği and Kangal, had a less homogeneous culture in the E.B. I and E.B. II periods than did the sites near Elazığ; in the E.B. III period it formed the greater part of a cultural province with distinctive painted pottery.

As in the Elazığ region, there is a limited amount of pottery that can definitely be assigned to the E.B. I period. Relief decoration is found at Hornovîl, Sivrikaya and Hasartepe (Figs. 222-4): it is, however, conspicuously lacking at Arslantepe. Two of the three relief-decorated fragments are of pinkish-brown ware and plain, the third having the more usual black burnished outer surface. The absence of relief decoration south of Hekimhan and Divriği hints at the arrival of the people bringing the East Anatolian E.B.A. culture direct from the Karaz area or further east, rather than up from Elazığ. In the Arguvan area, though no relief ornament has been found, there are two examples of grooved decoration of E.B. I type. At Yeşilkale, on the road north-west from Hekimhan to Kangal, occurs grooved ware that is probably also E.B. I (Fig. 225).

A form of either Cilician or central Anatolian origin and of E.B. I date is the small simple bowl, with black burnished inner surface, found in the Arguvan area and at Fethiye (Figs. 226-7); a refined form, with very slightly everted rim, occurs at İsaköy (Fig. 228). This is not an East Anatolian E.B.A. form.

The heavy incised ware found near Arguvan, particularly at Yukarı Sülmenli but also at Horomhan and İsaköy, may be of E.B. I date (Figs. 229-32). The fragment from Horomhan (Fig. 232) may have been inspired by the style of decoration in close relief, of the later part of the E.B. I period; likewise the small depressions may be diminutive versions of the "dimple". Nevertheless, this ware has a distinctive character, and it is not at all impossible that excavations may show it to be of Chalcolithic date. Whatever its date, however, it was a local development, apparently peculiar to the Arguvan area, where distinctive cooking-pots also occur (Figs. 233-4).

To the beginning of E.B. II belong bowls with inverted rim and a band of incised decoration, found at Arslantepe and Karahüyük (Figs. 235-6). Such incised bowls are fairly common at Arslantepe, where incision occurs also in a narrow band at the base of a jar neck and on handles. Motifs include chevrons and "sprays", like leaves on a stalk. Incised sherds of plain buff and red wares from Karahüyük are probably E.B. II, since one has a crude form of the "spray". This incised ware is important as evidence that the E.B. II period in this region cannot have begun much after c. 2500 B.C., since it has affinities with the E.B. II of Cilicia¹¹⁰; but such incised ware seems not to have been abundant around Malatya.

Evidently of E.B. II date is a deep bowl from İkinciler with a degenerate form of "rail" rim and a two-knobbed lug (Fig. 237); this type of lug is common at Arslantepe.

The difficulty of distinguishing E.B. I from E.B. II pottery in this region is probably explicable by a general continuity of forms, particularly of jars with the "rail" rim, which are found at virtually every site. Flat triangular handles have

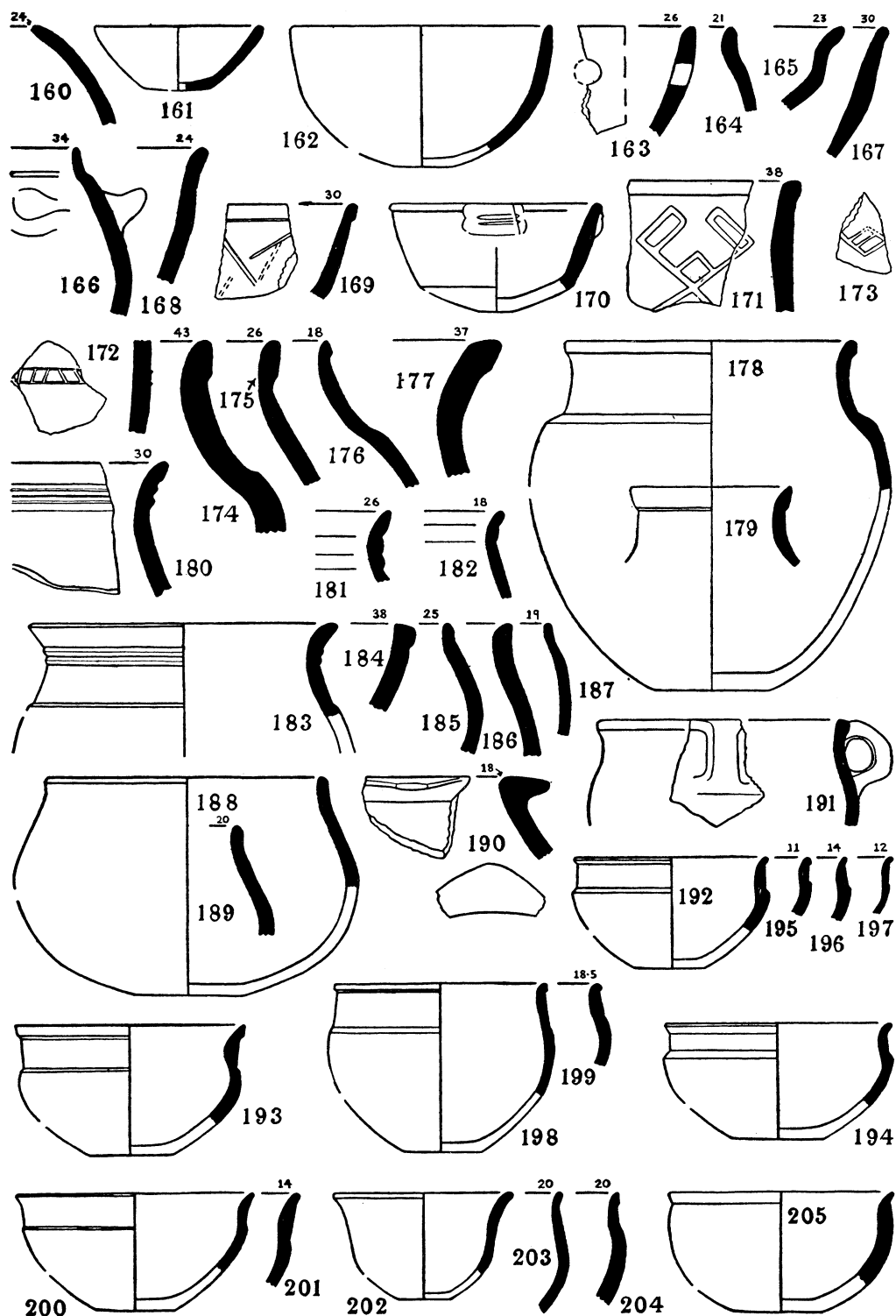
¹¹⁰ Cf. the "red gritty chevron incised ware" and the "red gritty cross-stitched incised ware" of Tarsus; the latter has close parallels at Sincirli, and it is possible that the centre of this particular type of incised ware lay in the eastern part of the Cilician plain. See *Tarsus* Vol. II, nos. 278-9 (pp. 122-3 and pl. 255); also fig. 254.

Early Bronze Age Pottery from the Muş Plain (Figs. 160-170)

- 160 Şeyhpirim II . Dark grey ware, inside plain, outside very slightly burnished.
 161 Soğkom Tepesi Plain, unevenly coloured grey and red-brown ware, grey core.
 162 Soğkom Tepesi Blackish-brown ware, inside plain, outside very slightly burnished.
 163 Soğkom Tepesi Rather coarse grey ware, very slightly burnished. Bowl with large string-hole.
 164 Soğkom Tepesi Light red-brown ware, grey core ; inside plain, outside partly grey and very slightly burnished.
 165 Soğkom Tepesi Plain brownish-grey ware, grey core.
 166 Soğkom Tepesi Plain coarse drab red ware. Jar with lug-handle.
 167 Oğonk . . Grey ware, inside plain buff, outside plain grey.
 168 Alikirpun . . Light brown and light grey ware, inside light brown burnished, outside light grey, highly burnished, but light brown, highly burnished, for 2·75 cm. below rim.
 169 Şeyhpirim II . Light greyish-buff ware, inside plain, outside very slightly burnished in parts, with grooved decoration.
 170 Şeyhyusuf . Grey and buff ware, inside plain buff, outside grey burnished ; buff burnished along rim. Vestigial notched handle at rim.

Early Bronze Age Pottery from the Elazığ Region (Figs. 171-221)

- 171 Hinsor . . Black and buff ware, inside plain buff, outside black burnished, with relief decoration.
 172 Uluova . . Black and red-brown ware, inside plain drab red-brown, outside black, highly burnished, with relief decoration.
 173 Sarsap Mevki . Drab light red to grey ware, inside plain drab light red, outside plain grey, with decoration in relief.
 174 Kövenk . . Black ware, inside plain (grey-black 2 cm. below top), outside burnished.
 175 Avcılı . . Dark grey-brown ware, inside plain, outside slightly burnished.
 176 Hoğu . . Black and buff ware, inside plain buff, outside black burnished.
 177 Hankendi . Black and buff ware, inside plain reddish-buff, outside black burnished ; uneven black and buff on top of rim.
 178 Hinsor . . Black and red-brown ware, inside plain light red-brown, outside black burnished.
 179 Hinsor . . Black burnished ware, brown burnished on inside of rim.
 180 Tülüntepe . Black and red-brown ware ; inside red-brown, slightly burnished ; outside black, highly burnished.



E.B. Pottery from Elazığ (cont.)

- | | | |
|-----|--------------|--|
| 181 | Könk . . | Red-brown and black ware, inside plain red-brown, outside plain grey-black. |
| 182 | Aşağı İçme . | Black and brown ware, inside plain smooth brown, outside black burnished. |
| 183 | Könk . . | Black ware, inside light red and buff, slightly burnished, outside black, highly burnished. |
| 184 | Hankendi . | Black ware, inside light red-brown, slightly burnished, outside black, slightly burnished. |
| 185 | Hankendi . | Light grey ware, inside plain, outside burnished. |
| 186 | Hankendi . | Dark crimson burnished ware, grey core. |
| 187 | Hankendi . | Brownish-black ware ; inside plain brown, and round rim ; outside mottled grey, very slightly burnished. |
| 188 | Könk . . | Blackish-brown ware, inside plain brown, outside uneven black and grey burnished. |
| 189 | Tadım . . | Buff and black ware, inside plain buff, outside black, very slightly burnished ; plain buff on outside of rim, for 1 cm. down. |
| 190 | Tadım . . | Buff and black ware, inside plain buff, outside black, slightly burnished. Flat triangular handle at rim. |
| 191 | Hinsor . . | Black and buff ware, inside plain buff, outside black burnished. |
| 192 | Könk . . | Black ware, highly burnished. |
| 193 | Tadım . . | Very light grey ware, inside plain, outside smooth and very slightly burnished. |
| 194 | Hinsor . . | Black ware, inside very dark grey burnished, outside black burnished. |
| 195 | Hankendi . | Light grey ware, slightly burnished. |
| 196 | Könk . . | Black ware, highly burnished. |
| 197 | Könk . . | Grey ware, inside plain, outside burnished. |
| 198 | Hinsor . . | Black ware, with high burnish applied with a pointed object. |
| 199 | Hinsor . . | Black ware, inside plain very light grey, outside black, highly burnished, brownish by rim. |
| 200 | Könk . . | Black ware, highly burnished. |
| 201 | Könk . . | Black ware, inside plain, outside dark grey burnished. |
| 202 | Hankendi . | Black ware, inside plain brown and black, outside streaky light grey and black burnished. |
| 203 | Hinsor . . | Grey ware, inside brown, very slightly burnished, outside brownish-grey burnished. |
| 204 | Könk . . | Black and buff ware, inside plain buff, outside black burnished. |
| 205 | Könk . . | Very dark grey burnished ware. |
| 206 | Tepecik . . | Reddish-grey ware, inside plain, outside grey burnished. |
| 207 | Hankendi . | Black and reddish-brown ware, inside plain red-brown, outside grey-brown burnished, brown burnished near rim. |
| 208 | Hankendi . | Black and brown ware ; inside plain light brown, and round rim ; outside black, highly burnished. |
| 209 | Könk . . | Black and brown burnished ware. |

E.B. Pottery from Elazığ (cont.)

- | | | | | |
|-----|----------|---|---|--|
| 210 | Tepecik | . | . | Black ware, slightly burnished. |
| 211 | Avçılı | . | . | Light greyish-buff ware, very slightly burnished, with incised decoration on outside. |
| 212 | Hinsor | . | . | Dark grey ware, inside light greyish-buff, very slightly burnished, outside streaky black and grey burnished. Bowl with diminutive lug at rim. |
| 213 | Könk | . | . | Black to dark grey ware, slightly burnished. Bowl with diminutive notched lug at rim. |
| 214 | Hankendi | . | . | Plain light red ware. |
| 215 | Tepecik | . | . | Plain, coarse, unevenly made drab red ware, grey core. |
| 216 | Tepecik | . | . | Plain light red ware. Bowl with grooved decoration outside. |
| 217 | Hankendi | . | . | Brown ware, inside plain, outside very slightly burnished on "ribs" between grooves. Jar with grooved decoration outside. |
| 218 | Hankendi | . | . | Plain brown ware. Jar with grooved decoration. |
| 219 | Hankendi | . | . | Plain, rather crude buff ware. Bowl with grooved decoration, and very slight groove along top of rim. |
| 220 | Hankendi | . | . | Grey and brown ware, inside plain light brown, outside grey, smooth and very slightly burnished. |
| 221 | Könk | . | . | Blackish-brown ware, inside brown, slightly burnished, outside black, slightly burnished. |

Early Bronze Age Pottery from the Malatya Region (Figs. 222-243)

- | | | | | |
|-----|-----------------|---|---|---|
| 222 | Hornovıl | . | . | Dark pinkish-brown ware, inside plain, outside very slightly burnished, with relief decoration. |
| 223 | Hasartepe | . | . | Grey-brown ware, inside plain, outside black burnished, with relief decoration. |
| 224 | Sivri Kaya | . | . | Plain pinkish-brown ware, outside fairly smooth, with relief decoration. |
| 225 | Yeşilkale | . | . | Drab red and black ware, inside plain drab red, outside black burnished, with grooved decoration. |
| 226 | İsaköy | . | . | Black and brown ware, inside black, highly burnished, outside light brown burnished. |
| 227 | Yukarı Sülmenli | . | . | Black and brown ware, inside black burnished, outside black, grey and light brown, slightly burnished. |
| 228 | İsaköy | . | . | Grey and red-brown ware; inside very smooth grey burnished; outside plain brown, grey near rim. |
| 229 | Yukarı Sülmenli | . | . | Brown ware, inside plain, outside burnished, with incised decoration. |
| 230 | Yukarı Sülmenli | . | . | Greyish-brown ware; inside uneven brown and red-brown, very slightly burnished; outside black, slightly burnished, with incised decoration. |

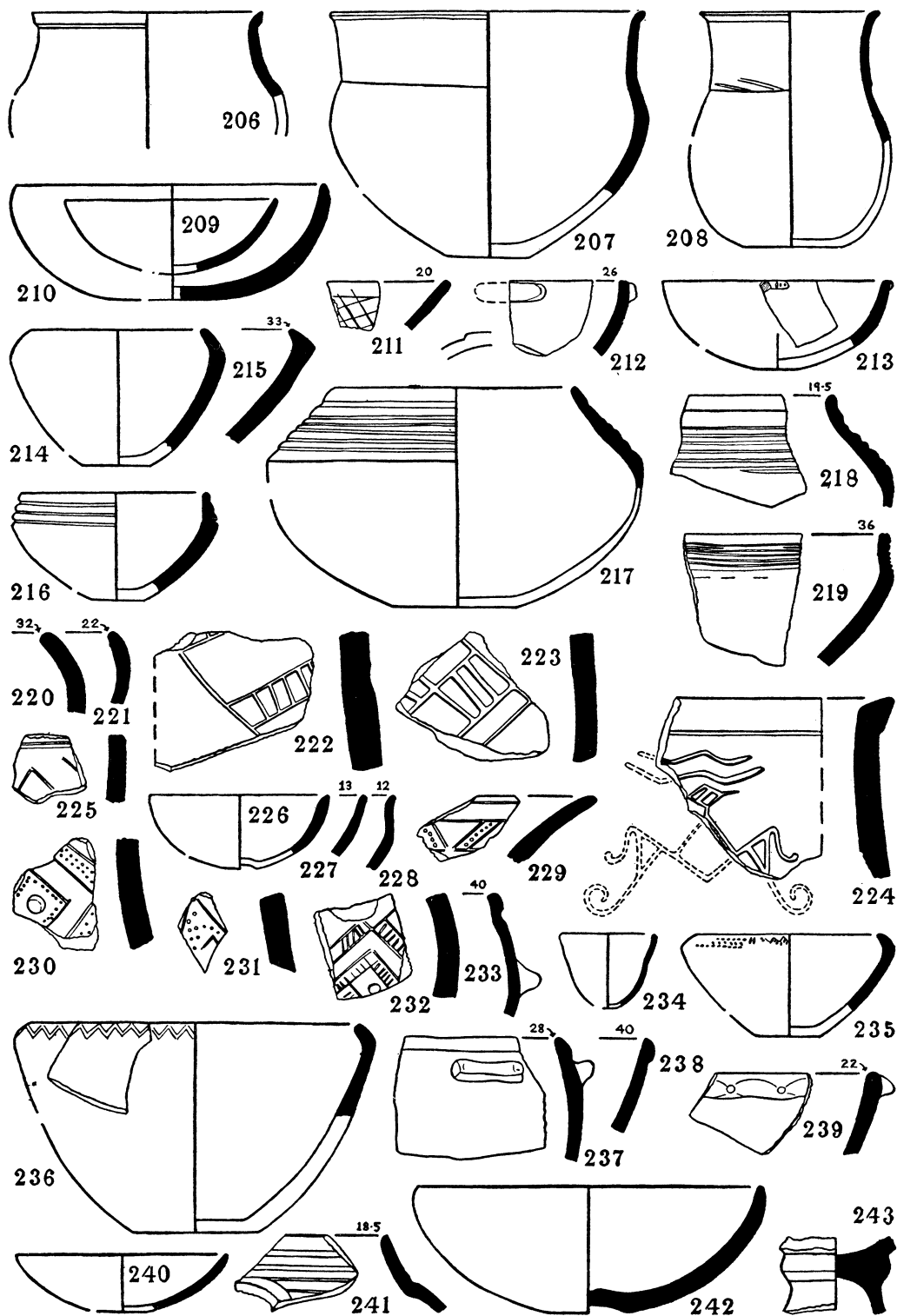
E.B. Pottery from Malatya (cont.)

- | | | | |
|-----|------------------|---|--|
| 231 | Yukarı Sülmenli | . | Grey and brown ware ; inside plain brown ; outside black to dark grey, slightly burnished, with incised decoration. |
| 232 | Horomhan | . | Straw-tempered brownish-grey ware ; inside uneven burnished light brown and grey ; outside plain rough dark grey, with incised decoration. |
| 233 | Yukarı Sülmenli | . | Straw-tempered grey-brown ware, inside plain, outside very slightly burnished. |
| 234 | Horomhan | . | Coarse grey and brown ware, very slightly burnished, outside brown only. |
| 235 | Arslantepe | . | Blackish-brown ware ; inside black, slightly burnished ; outside black and brown, slightly burnished, with incised band along rim. |
| 236 | Karahüyük | . | Dark grey burnished ware, with incised band outside along rim. |
| 237 | İkinciler | . | Blackish-grey ware, inside plain grey, outside black burnished. Bowl with " rail " rim and two-knobbed lug-handle. |
| 238 | İkinciler | . | Grey-brown ware, inside plain, outside uneven black and greyish-buff, slightly burnished. |
| 239 | Ören | . | Grey-brown ware, inside brown burnished, outside grey-brown burnished. Bowl with small two-knobbed lug on rim. |
| 240 | Arslantepe | . | Brown ware, inside burnished, outside plain. |
| 241 | İsaköy | . | Plain drab reddish-brown ware, grey core. Jar with grooved decoration outside. |
| 242 | Hüyük Değirmende | | Gritty dark brown ware, brown burnished slip (blackish on parts of outside and on base). Bowl with " <i>omphalos</i> " base. |
| 243 | Hüyük Değirmende | | Grey ware ; inside (top) plain smooth dark grey ; inside of hollow pedestal plain rough grey-brown ; outside red burnished slip. Fragment of a fruitstand. |

E.B. III Painted Pottery from the Malatya-Elazığ Region (Figs. 244-285)

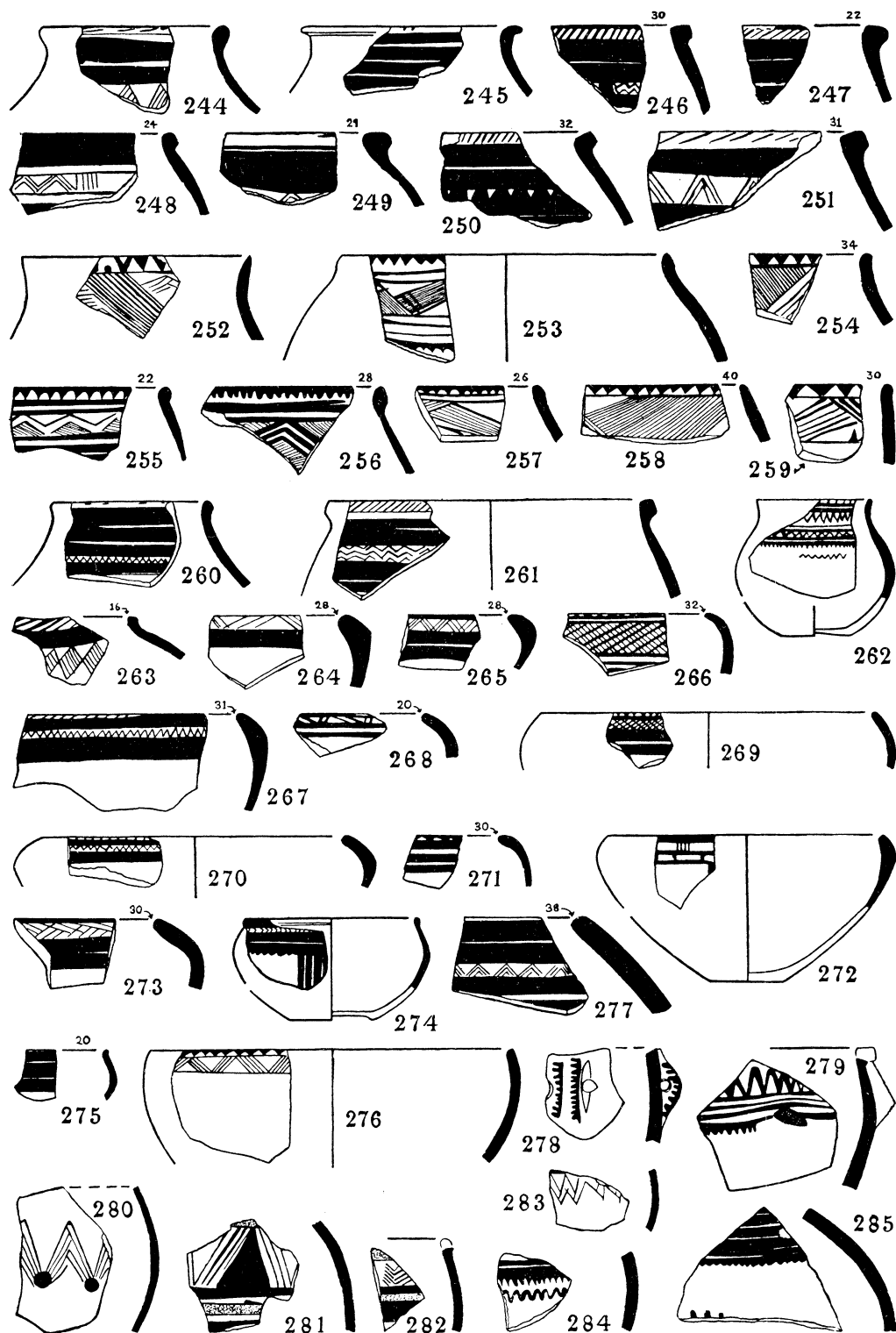
Note.—The ware, unless otherwise stated, is very light red or buff and hard-fired.
The paint is always matt.

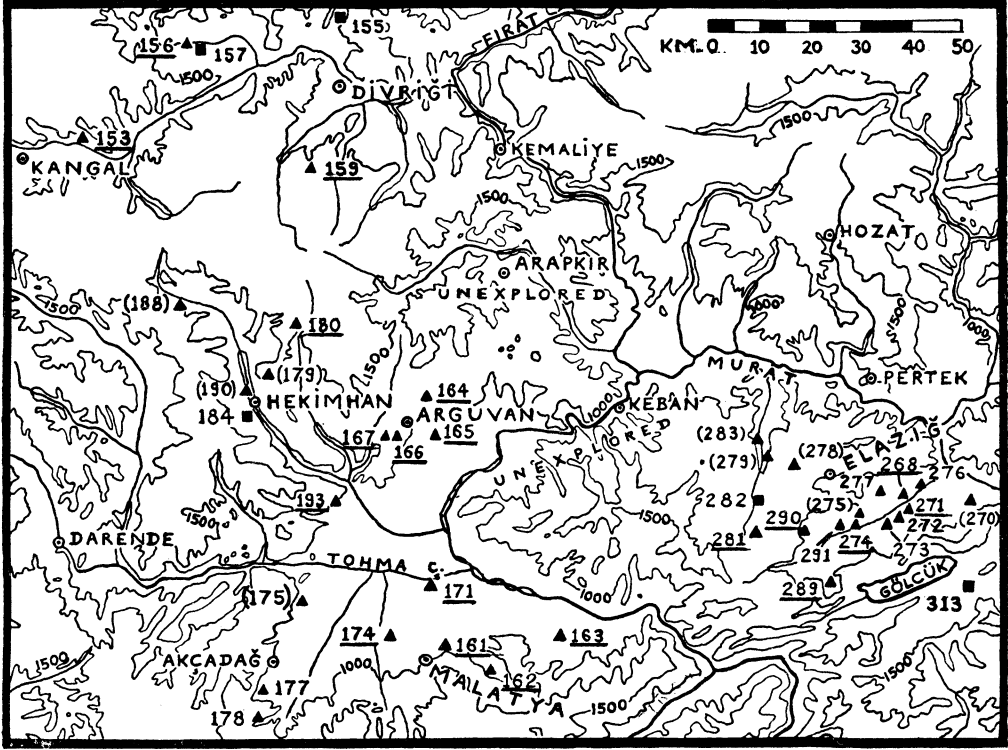
- | | | | |
|-----|-----------|---|---|
| 244 | Karahüyük | . | Inside plain, roughish buff ; outside black paint on light yellow-buff. |
| 245 | Karahüyük | . | Inside buff, very slightly burnished ; outside black-brown paint on buff. |
| 246 | Karahüyük | . | Inside plain dark buff ; outside black paint and brown (along rim) on buff. |



E.B. III Painted Pottery from Malatya-Elaziğ (cont.)

- 247 Arslantepe . . Inside yellow-buff, very slightly burnished ; outside black paint and brown (along rim) on buff.
- 248 Karahüyük . . Inside plain orange-buff ; outside black and red paint on pale cream.
- 249 Fero . . Inside plain yellow-buff, slightly greenish ; outside black paint on pale cream.
- 250 Karahüyük . . Inside plain dark buff ; outside black paint and dark brown (along rim) on dark buff.
- 251 Karahüyük . . Inside plain buff ; outside dark brown paint on buff.
- 252 Karahüyük . . Inside plain brownish-buff ; outside dark brown paint on brownish-buff.
- 253 Aşağı Sazlıca . . Inside plain orange-buff ; outside dark brown paint on orange-buff.
- 254 Horomhan . . Inside plain orange-buff ; outside black paint on orange-buff.
- 255 Yukarı Sülmenli . . Inside plain yellow-buff ; outside dark brown paint on cream.
- 256 Karahüyük . . Inside plain yellow-buff ; outside black-brown paint on yellow-buff.
- 257 Yukarı Sülmenli . . Inside plain yellowish-buff ; outside red paint on buff.
- 258 Karahüyük . . Inside plain yellowish-buff ; outside red paint on buff. *From low levels* (i.e. taken from a cut in the side of the mound).
- 259 Yukarı Sülmenli . . Inside plain yellowish-buff ; outside brown paint on buff.
- 260 Hankendi . . Inside plain buff ; outside black paint on buff.
- 261 Hankendi . . Inside plain buff ; outside black-brown paint on buff.
- 262 Könk . . Inside plain buff ; outside thin plain cream-buff wash, decorated in black-brown paint.
- 263 Tülüntepe . . Inside plain pinkish-buff ; outside dark brown paint on plain buff slip.
- 264 Karahüyük . . Inside plain buff ; outside light red paint on cream-yellow.
- 265 Karahüyük . . Inside plain buff ; outside dark brown paint on buff.
- 266 Karahüyük . . Inside buff, slightly burnished ; outside brown paint on buff.
- 267 Samanköy . . Inside plain yellow-buff ; outside dark brown paint on buff.
- 268 İsaköy . . Inside plain buff, with two blobs in dark brown paint (from 1 to 2.5 cm. below rim) ; outside dark brown paint on buff.
- 269 Fethiye . . Inside plain buff ; outside dark brown paint on buff. *Turned on a slow wheel?*
- 270 Karahüyük . . Inside plain yellow-buff ; outside dark brown paint on buff.
- 271 Karahüyük . . Inside plain buff ; outside black paint on cream-buff.
- 272 Hankendi . . Inside plain yellowish-buff ; outside black-brown paint on yellowish-buff.
- 273 Hankendi . . Inside plain yellowish-buff ; outside dark brown paint on yellowish-buff.
- 274 Hankendi . . Inside plain yellowish-buff ; outside black-brown paint on yellowish-buff.
- 275 Karahüyük . . Inside yellow-buff, very slightly burnished ; outside black paint (edged with brown) on yellow-buff.
- 276 Yukarı Sülmenli . . Inside plain orange-buff ; outside dark brown paint on buff.
- 277 Karahüyük . . Inside plain buff ; outside black paint on cream-yellow.
- 278 Yukarı Sülmenli . . Inside plain buff ; outside black paint on yellow-buff.
- 279 Hankendi . . Inside plain buff ; outside black-brown paint on buff.
- 280 Samanköy . . Inside plain buff ; outside black paint on buff.
- 281 Furuncu . . Inside plain buff ; outside blackish-brown to dark brown and dark red paint on buff.
- 282 Karahüyük . . Inside plain buff ; outside black and brown paint on buff.
- 283 Karahüyük . . Inside plain buff ; outside black paint on buff.
- 284 Karahüyük . . Inside plain yellow-buff ; outside black paint on buff to brownish-buff.
- 285 Hüyük Değirmende Light pink and grey ware ; inside plain smooth light grey ; outside black-brown paint on buff surface, slightly burnished.





MAP III. E.B.A. Sites in the Malatya-Elazığ Region.

Solid squares indicate E.B. I relief decoration ; site-numbers underlined indicate E.B. III painted pottery ; site-numbers in brackets indicate E.B.A. wares of uncertain subperiod. The administrative district (*kaza*) in which each site is situated is in brackets.

- | | |
|--------------------------------------|-----------------------------------|
| 153. Hüyük Değirmende (Kangal). | 268. Tülüntepe (Elazığ). |
| 155. Hornavıl (Divriği). | 270. Aşağı İçme (Elazığ). |
| 156. Fero (Divriği). | 271. Könk (Elazığ). |
| 157. Sivrikaya (Divriği). | 272. Sarpulu (Elazığ). |
| 159. Armutak (Divriği). | 273. Kövenk (Elazığ). |
| 161. Arslantepe (Malatya). | 274. Tinazit (Elazığ). |
| 162. Furuncu (Malatya). | 275. Kehli (Elazığ). |
| 163. " Fırat Yolu Hüyük " (Malatya). | 276. Tepecik (Elazığ). |
| 164. Karahüyük (Arguvan). | 277. Hoğu (Elazığ). |
| 165. İsaköy (Arguvan). | 278. Hulvenk (Elazığ). |
| 166. Yukarı Sülmenli (Arguvan). | 279. Erzürük (Elazığ). |
| 167. Horomhan (Arguvan). | 281. Hankendi (Elazığ). |
| 171. Hasirci III (Malatya). | 282. Hinsor (Elazığ). |
| 174. Samanköy (Malatya). | 283. Avcılı (Elazığ). |
| 175. Yukarı Orukcu (Akçadağ). | 289. Uluova (Elazığ). |
| 177. İkinciler (Akçadağ). | 290. Tadım (Elazığ). |
| 178. Ören (Akçadağ). | 291. Kuyulu (Elazığ). |
| 179. Yukarı Budaklı (Hekimhan). | 313. Sarsap Mevki (Erganımadeni). |
| 180. Aşağı Sazlıca (Hekimhan). | |
| 184. Hasartepe (Hekimhan). | |
| 188. Yeşilkale (Kangal). | |
| 190. Hasarkaya (Hekimhan). | |
| 193. Fethiye (Malatya). | |

a wide distribution. Bowls with "rail" rim from İkciler (Fig. 238) may be E.B. I or E.B. II, as likewise may a bowl with small two-knobbed lug at the rim (Fig. 239), from Ören. A hole-mouth jar from Samanköy is also of uncertain date, and similarly a simple bowl from Arslantepe (Fig. 240).

The dark burnished wares continued through the E.B. III period. Apart from the painted pottery, there is a jar rim from İsaköy (Fig. 241) of the plain grooved ware so common at Hankendi, and typical of E.B. III in the Elazığ region. One plain buff bowl, also from İsaköy, may be of E.B. III date. Black burnished bowls from Arslantepe with thick inverted rim, one of the shapes characteristic of the painted pottery, are evidently E.B. III.

Not every site in the Malatya region could be visited: for example, there are said to be some more mounds near Arguvan. The long awaited publication of the excavations at Arslantepe¹¹¹ would be of inestimable value for the sequence of pottery throughout the Elazığ-Malatya region. From Hüyük Değirmende come Figs. 242-3, neither of East Anatolian ware; a grooved sherd may be of East Anatolian E.B. II type.

The E.B. III Painted Pottery of the Malatya-Elazığ Region

This ware is invariably hand-made and hard-fired, with buff or orange-buff surface, sometimes pinkish-buff in the core. The inside is plain, often smooth; the outside is plain or coated with a plain slip or wash, cream or cream-buff. The painted decoration is most commonly in brownish-black paint, sometimes actually black, and of that viscous texture that is found on Ubaid ware. A dull red colour of paint is also found. Bichrome decoration is less frequent, but is found at Arslantepe, Furuncu and Karahüyük (Arguvan): the two colours are plum-red or red-brown and black or dark brown. The paint is always matt. Decorative designs tend to be limited to wide bands, so close together that they often merge, round the rim and just below; with these are groups of chevrons, sometimes supplemented by vertical lines in groups, between the broad bands; the decoration usually ends with a fringe along the bottom of the lowest band. The whole painted zone is generally confined to the upper part of the vessel. One of the commonest features is the painting of the rim with oblique strokes; a variant comprises a continuous series of vertical strokes along the outer face of the "rail" rim, merging with the adjoining ones at the top, tapering to a point at the bottom. Some vessels display very fine brushwork in their painting, with cross-hatching between chevrons, and sometimes above them also.

The above generalisations on the decoration of this painted pottery apply to the two most common shapes. These are, first, a deep, fairly globular bowl or jar with plain or "rail" rim: the E.B. I-II form, with break between neck and shoulder, seems lacking in this painted pottery. The second commonest shape is the inverted-rim bowl, which probably derives from the dark burnished bowl of this form of the E.B. II period: this type of bowl has a rim often sharply inverted and considerably thickened. These two forms are illustrated by Figs. 244-63 and Figs. 264-73 respectively. A less common shape is a fine bowl with small folded rim, probably having a ring-base, found at Hankendi, Arslantepe and Karahüyük (Figs. 274-5). This form is very typical of the M.B.A. of the Amuq and Cilicia, including Tarsus,¹¹² and belongs to a period in which Hurrian influence is generally supposed to have predominated in those regions: beginning c. 2100 B.C., this

¹¹¹ A brief note appeared in *AfO*. XVI, pp. 151-2.

¹¹² *Tarsus* Vol. II, pp. 168-9; figs. 287 and 368.

period overlaps by perhaps a century the E.B. III of Malatya and Elaziğ. The decorative pattern on these fine bowls includes four or five vertical zones, each comprising several parallel lines, which were probably continued down to the base. Apparently an exceptional form in this painted pottery is a bowl from Yukarı Sülmenli (Fig. 276), which could perhaps be Chalcolithic, and a hole-mouth jar from Karahüyük (Fig. 277).

The decoration on this painted pottery often includes elements haphazardly painted below the main zone of the design : such elements include a "spray", which could well be derived from the same motif that appears in the incised decoration of the E.B. II period in the Malatya region ; this motif when used vertically is the "pine-tree", which occurs at Arslantepe, and is paralleled in the M.B.A. of Tarsus and at Alalakh, Level XII.¹¹³

Some vessels had small handles (Fig. 278), painted with notches, paralleled also at Alalakh XII.¹¹⁴ From Hankendi comes a fragment with a curious vertical ridge (Fig. 279), probably a degenerate version of a lug, originally pierced.

Unpublished pottery from Arslantepe shows an even greater variety of patterns in this painted pottery than is displayed by the examples here published. Motifs include a rather crudely painted star. A sherd from Samanköy, with chevrons and "blobs", is at present unique (Fig. 280).

The extent of the region in which this painted pottery was used is shown by Map III, with which is given a complete list of the sites where it has been found. Hankendi is the only site east of the Euphrates where this pottery has been collected in considerable quantity, and Altunova seems to have been at the periphery of the province in which it was used. Arslantepe is rich in this pottery, but so also is Karahüyük (Arguvan), so that the land immediately west of the Euphrates, stretching from Malatya as far north as the Arguvan district, was probably the centre of this painted pottery province. Essentially this E.B. III ware was a product of local origin, with shapes developed from some of those of the E.B. II period : if, however, affinities are to be sought elsewhere, one must look to the Amuq, and particularly to Alalakh, with its long-lived local painted pottery, a tradition unbroken from Level XVI until as late as Level VIII.

CONCLUSION

No summary in one paragraph of the material illustrated, described and discussed in this article is practicable, nor can any irrefutable sequence of pottery be established until excavations are carried out and properly published. A Chronological Table has, however, been prepared, in order to establish in a summarised form the relationship between the various parts of the East Anatolian cultural zone, and also to correlate those parts, and the zone as a whole, with other regions in the different phases of the Early Bronze Age, and in the periods immediately preceding and following.¹¹⁵

¹¹³ See footnotes 74 and 76.

¹¹⁴ See footnote 74. These parallels with the Amuq and Cilicia rather suggest that certain features of the E.B. III painted pottery of the Malatya-Elaziğ region did not appear until the beginning of the Cilician M.B.A. (c. 2100 B.C.).

¹¹⁵ For the revised chronology of the Alalakh levels, see J. Mellaart, "Anatolian Chronology in the Early and Middle Bronze Age," in *AS.* VII (1957), pp. 55-88.

ACKNOWLEDGMENTS

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