



Yortan Cemetery in the  
Early Bronze Age of  
Western Anatolia

Turhan Kâmil

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To my mother

## INTRODUCTION

In 1900 Paul Gaudin, an engineer in the employment of the Ottoman Sultan, began to excavate a prehistoric cemetery at a location called Yortan near Gelembe, ca. 16.5 km north-east of Kırkağaç and ca. 55 km south of Balıkesir. In October of the following year a more extensive digging was carried out, this time with the assistance of V. Chapot from the French School of Athens. Over one hundred burials were thus cleared out with an apparently unsuccessful attempt to locate the settlement at the nearby Çavdar Tepe. Monsieur P. Gaudin's involvement in the field seems to have come to an end at this point. In the following eighty years much has been said and written about Yortan, yet neither its chronological limits nor meaning in the prehistory of west Anatolia are clearly demonstrated, while a term "Yortan Culture" is now a familiar though somewhat ill-defined part of the Early Bronze Age of Anatolia.

Two main reasons underlie the cause of this controversial fame of Yortan. First, Gaudin was never able to produce a full publication of his work and only a brief report was presented to l'Académie des Inscriptions et Belles-lettres in 1901 when some of the finds were also displayed before the members present. The absence of a scientific report has naturally obscured details of the site. Neither the stratigraphy of the site nor the burial customs of the Yortan people could be determined, and even the exact location of Yortan remained uncertain. Secondly, after the fashion of his times Gaudin saw no harm in removing most of his finds out of Turkey and in distributing them to various museums in Europe. Thus it is now a very costly and time-consuming occupation for anyone to attempt a study of the whole of the pottery from Yortan. In 1936 K. Bittel and J. Stewart undertook to investigate the nearby site of Babaköy, then in the process of being robbed by the villagers. This and a later research by K. Kökten at Babaköy were very useful in the way of confirming some of the burial customs that had become apparent at Yortan. A full understanding of the culture involved was, however, frustrated by the disturbed condition of the site. Some fragmentary pieces of pottery and several complete pots from five intact tombs which had escaped the looters' attentions could reveal the identity of the site to be very similar to that of Yortan but were not enough to present a comprehensive knowledge on the pottery repertoire of the Yortan Culture.

In this study the pottery of Yortan cemetery is for the first time presented in a nearly complete corpus, together with two plans which are faithful reproductions of Gaudin's original drawings in blue print. The whereabouts of the originals and the rest of the pencil drawings of the burials are unknown to the author. Without the excavation report by the excavator himself there are still questions to which satisfactory answers cannot be given today. This is, however, no fault of Monsieur Gaudin who worked with care, recording conscientiously, and was methodical and precise even by present standards of archaeological investigations. His notes and sketches bear witness to work towards a full publication which somehow never materialised. The fact that not all of the finds can today be referred to their original locations in the tombs is a serious defect that lies not with him but with those who were responsible for the good keeping of his records and finds. In this endeavour to obtain a better understanding of Yortan, an effort has been made to present as clearly as possible almost everything that was lifted from the site. The collection at St. Germain-en-Laye makes a particularly important addition to various wares and shapes which had long been noted from other and better known collections but could not be fully analysed through lack of proper publications. One is now also helped by the more recent developments in the prehistory of western Anatolia. Besides

Blegen's published work at Troy/Hisarlık there is a full Early Bronze Age pottery sequence of Beycesultan in the south-west and Yortan, situated in between these two sites, can now be analysed in a comparative study without much difficulty. Extensive surveys by D. French in the regions of Balikesir, Akhisar and Manisa help to define the limits of the culture as represented at Yortan, and the preliminary reports from Karataş-Semayük excavations in the plain of Elmali and from Sardis in the Gediz (Hermos) Valley throw further light on the burial customs.

This study is based on the pottery which was excavated by P. Gaudin at Yortan and some care has been taken not to confuse it with the so-called "Yortan Culture" pottery. Today the finds from Yortan can be easily located in museum registers under the title of Yortan and as "presented by P.Gaudin" or his widow. The latter group, illustrated in Fig.91-100, contains a selection of pottery vessels which display features similar to those of Yortan but can come from anywhere in a large area of the Yortan Culture as defined in Chapter 5. None of these often rare and exquisite objects was scientifically excavated but all have come to be known through the mediation of what one may describe as that immortal parasite of ancient remains, the antiquity dealer. It is, therefore, with some regret that these plundered riches are included here and it has been done so only for the sake of demonstrating some of the significant variations within the Yortan Culture. One vexing aspect of Yortan is its chronological position in the broader complex of the Early Bronze Age of western Anatolia. To this problem Chapter 3 and 4 are assigned, with the result of the three classes of the pottery dating to a time-span of over one thousand years, 3500 B.C. to 2100 B.C. The overall chronological scheme adopted is that offered by J.Mellaart who favours the high chronology of the calibrated C14 dates and synchronizes the beginnings of Troy I with Beycesultan XVI, rather than Beycesultan XIX. The Early Bronze Age in general starts at an earlier period, perhaps with Kumtepe Ib. Early Bronze Age II falls largely into Troy II, and Troy III and Beycesultan XII mark the beginnings of Early Bronze Age III.

The work was undertaken with the encouraging and most stimulating supervision of Mr. J.Mellaart to whom the author also owes most of the material illustrated in Fig. 91-100. Together with Mr. T.Watkins, Mr. Mellaart was also kind enough to read the final draft and make innumerable corrections in the text and illustrations. Such a widely travelled research programme is well beyond the means of an ordinary student and it could not be materialised without a generous grant of \$605.00 from the Central Research Fund of London University. Various museum authorities were most generous and helpful in granting permission to study and publish their collections. At the Istanbul Archaeological Museums Dr. N. Asgari and Miss B. Aksoy were helpful in every conceivable way; in London the Trustees of the British Museum readily granted the rights of publication: Dr. E. Sollberger, Keeper of the Department of Western Asiatic Antiquities, and Dr. J. Curtis and Dr. D. Collon offered all the necessary assistance with friendship and patience; Dr. R. Barnett kindly informed me of the existence of the long forgotten plans of the Yortan excavations in blue print copies, and subsequent to this discovery Mr. T. Mitchell very generously allowed me to study and publish them. In Brussels Prof. Dr. D. Homès-Fredericq and Dr. C. Skinkel-Taupin of the Musées Royaux d'Art et d'Histoire were most welcoming for their interesting "Yortan Collection"; I owe my deep gratuities to Monsieur D. Beyer and Mademoiselle A. Caubert of the Musée du Louvre for offering valuable help and advice on the various Yortan Collections in the museums at Paris; I thank Prof. J-L Huot for allowing me to work on and take samples for petrological analysis from the small collection at l'Institut d'Archeologie Orientale, Mademoiselle E. Fontan for the small but important group in the

Musée National de Céramique at Sèvres, and Monsieur J-P. Mohen without whose good will it would have been quite impossible to gain access to the little known material in the Château de St.Germain-en-Laye.

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"Les fouilles révélèrent un alignement de jarres funéraires exactement conforme à la direction du chemin, avec des intervalles généralement inégaux entre les pièces. Par endroits, l'orifice d'un des vases s'ouvrait sur le fond d'un autre placé en avant, à la lisière du sentier, et ayant la même orientation. Des tranchées furent ouvertes des deux côtés de la route selon ces directions. Les travaux ont bien montré que le chemin actuel était la partie centrale et la plus importante du champ d'inhumation; Ils ont aussi fait découvrir des prolongements suivant la normale, en Est et en Ouest, et ont été poussés assez loin dans les directions diverses pour donner une idée précise de l'étendue de la nécropole antique et révéler le trace approximatif de la périphérie.

Si les fouilles n'ont pu être poursuivies assez longtemps pour faire connaître la totalité des objets que recèle la nécropole, en revanche elles permettent déjà, en raison du soin apporté aux relevés, de donner des renseignements sur ces objets et sur leur disposition.

Ils se divisent en deux séries: 1. les grandes jarres ou pithoi qui étaient de véritables sarcophages; 2. le mobilier funéraire contenu avec les corps dans les jarres....."

"Les pithoi sont répartis dans le champ sur un double alignement. La position qui leur a été donnée est à peu près horizontale; dans la plupart des cas cependant, ils présentaient une légère inclinaison, le centre de la base étant à un niveau un peu inférieur à celui de l'orifice; et ainsi toutes ces jarres mises à découvert dans leurs trous, dont les rebords paraissaient les protéger, faisaient, avec leurs larges cols un peu redressés comme pour ménager une trajectoire, l'effet d'une rangée de vieux obusiers en batterie.

C'était bien là leur disposition primitive. Ceux mêmes qui ont été brisés la conservent encore. Le plus souvent on retrouve, intacte, la dalle large et plate, rectangulaire ou parfaitement carrée, qui bouchait l'ouverture du vase. L'orientation des pithoi est partout sensiblement la même; l'orifice est tourné vers l'Est, et s'il y a parfois une légère déviation, elle n'est jamais considérable.

Ces grandes jarres ont incontestablement joué le rôle de sarcophages. La plupart recélaient des débris d'ossements, tellement attaqués et rongés par l'humidité que le fait seul de les déplacer, en les maniant avec précaution, suffisait à les réduire à l'état de fine poussière jaunâtre. L'aspect de ces ossements, leur couleur, permettent d'ailleurs d'écarter l'hypothèse de l'incinération.

Avec les débris humains, les jarres renfermaient une grande quantité d'objets, des poteries en majorité. On ne saurait déterminer le nombre moyen des pièces contenues dans chacune d'elles; il variait de 1 à 16; mais il semble avoir été en rapport avec le nombre des corps déposés dans chaque jarre, et plusieurs d'entre elles ont certainement servi de sépulture à plusieurs corps."

These well-known observations of P. Gaudin can now be fully established as archaeological facts through the plans of the excavation and the sketch drawings of each pithos burial (Fig.1-11). Besides a few minor omissions, ie. no. 42 burial missing on Plan II, or the absence of heights on the contour lines, the plans of the area and the excavations are remarkably



precise. Clearly Gaudin's engineering background was to his advantage, giving him all the technical training which had not yet been fully introduced into the study of antiquities. The circumstances surrounding the beginnings and the end of the excavations are not known. It seems that Gaudin's attention was drawn to the site by the discovery of some of the burials by the villagers, and in the course of two seasons' digging he was able to locate and examine one hundred and seven burials in pithoi or jars mainly lying under the Kirkagaç - Gelembe road. Several trenches laid out perpendicular to the road show that the distribution of the burials over the gently rising ground is uneven, that while nothing was discovered on the south-eastern section there is every possibility of finding a lot more burials in the north-eastern parts towards Kelembe. Also the area to the north of the road and beyond the rocks at the smaller Kirkagaç - Kelembe route could be holding a part or the rest of the cemetery (Plan II). Obviously a thorough exploration of such a sprawling burial ground is a costly and time-consuming undertaking which for one reason or another could not be maintained by Monsieur Gaudin beyond the second season.

More difficult to explain is the extension of the excavations to the small mound of Çavdar Tepe ("Tchavdar Tépé" on Plan I). There is no detailed plan or recording of the four trenches opened up near the summit. One trench is a square sounding on the east side and was probably unproductive. The other three are in a cluster on the south-east side. Two of the trenches are in the form of curving parallel lines, on the circumferences of two circles, and the third is a narrow straight trench placed independently and on the radius of the circles. This curious cluster of trenches shows the intriguing but obscure detail of three pithoi, two upstanding and a third lying horizontally in a north-south direction (Plan I). Without the excavator's notes the author is unable to see for certain the purpose of this work; it could be that on Çavdar Tepe further prehistoric remains, possibly the settlement site of the cemetery, were discovered and the illustration of the three trenches repeated on both plans and marked with a radius of six metres for the circular trenches is meant to be the scale to the plans.

The illustrations of each burial on graph paper and to the scale of 1:10 are equally precise. The contents of each jar or pithos is sketched out, including the human bones, and one may well assume that with such carefully made illustrations the excavators were also able to keep notebooks with a consistent numbering system that related each object to individual tombs. It is, therefore, all the more regrettable that today these notes are not available, and the museums to whose custody the finds were passed on do not have the numbering system. Perhaps a serious omission in Gaudin's excavation methods is the lack of any stratigraphic recording which may have produced results in agreement or disagreement with the three-fold classification of the pottery.<sup>2</sup> On the other hand it could be argued that since the depth of the soil deposit which held the burials is only 1.00 m to 1.50 m, it would have been largely irrelevant for chronological purposes, the latest burials (with Class C pottery) not necessarily occurring in shallower levels. It is more likely that the growth and expansion of the grounds was gradual, and different parts were used in different periods so that one can propose the existence of three broadly separate locations within the general boundaries of the cemetery, where in each such location one of the three classes of the pottery (Class A,B,C) may have been in the majority. Naturally our inability to refer the finds to the burials limits this view to a mere hypothesis which today can be tested only by a thorough investigation of another nearby cemetery.

With the nature and limitations of the available records outlined, one

may proceed to demonstrate, in conjunction with other broadly contemporary sites of western Anatolia, the burial habits of the Early Bronze Age people at Yortan. A quick glance at the site plans reveals an interesting detail, that the choice of grounds for the burials lay on rock terrain. In one place, south of the road, the pithoi are actually situated around several small outcrops of rock. This disposition of the pithoi immediately brings to mind the observation that in the Cyclades the lay-out of the cemeteries is suited to the physical formation of the terrain with the rock outcrops used to divide the burial ground into separate pockets of burials.<sup>3</sup> If one is correct in speculating a westward extension of the Yortan necropolis, then a similar disposition of burials becomes apparant at Yortan as well.

The investigations at nearby Babaköy, which may be considered a cemetery site identical to Yortan, were carried out by K. Bittel and J.R. Stewart in 1936<sup>4</sup> and by K. Kökten in 1949.<sup>5</sup> Unfortunately Bittel's attention was drawn to this site by the news of illicit diggings so that the results obtained were largely based on robbed tombs and are, therefore, limited in scope. In both cases the scholarly interest in the site appears to have been a restrained one which did not go as far as a proper survey of the area. Two prehistoric sites at Sardis on the shores of Marmara Gölü (Lake Gygean),<sup>6</sup> and tombs and habitation deposits at Karataş-Semayük in the Elmali plain<sup>7</sup> are the most recent and better investigated sites.<sup>8</sup> Karataş is particularly important in offering a unique combination of archaeological data; this is as yet the only Early Bronze Age site in western Anatolia where both the cemetery and the settlement deposits standing side by side have been carefully and scientifically excavated. The location of the Elmali plain among the mountains of Lycia and not necessarily on the main current of contemporary cultures may raise doubts over the validity of the comparative material from the site. Moreover this plain belongs to the south-west cultural province, which is in many ways different from the Early Bronze Age of the north-west where Yortan is situated. Yet such strong regional variations as those observed in the pottery traditions do not seem to have persisted in the burial customs and cultic beliefs where instead there is a remarkable uniformity throughout the Early Bronze Age of western Anatolia.

Everywhere, except at Iasos on the south-west coast, the method of burial is predominantly in pottery vessels, large and small, and in extra-mural cemeteries outside the settlements. There is certainly no mention of architecture at Yortan or Babaköy while at Beycesultan and Troy/Hisarlık the graveyards were clearly outside the settlements and are yet to be found. A few child burials in jars and deposited under the house floors are the only exceptions to this rule. At Sardis the pithos and cist graves seem to be mixed with some habitation deposits but not with any architecture.<sup>9</sup> Presumably as at Karataş-Semayük the burial ground had encroached upon an abandoned domestic quarter of the settlement but at no one time did the living and the dead share the same ground.<sup>10</sup> Further confirmation of this fact in the burial tradition of western Anatolia is found at Ovabayındır in the plain of Balıkesir. In 1956 a brief excavation was carried out on one of the two small mounds on either side of the Değirmenderesi.<sup>11</sup> The sounding revealed the remains of a rectangular house and a child burial in a jar under the house floor. But the large and rich pithos graveyards of this and other sites of the area lay elsewhere outside the settlements.<sup>12</sup> The widespread tradition of the extra-mural cemeteries is, in fact, not limited to the Early Bronze Age but continues into the Second Millennium B.C, together with the use of pottery vessels as coffins. Several such tombs were found in the Middle Bronze Age deposits at Karataş-Semayük.<sup>13</sup> The cemeteries at Gordion near Yassı Hüyük<sup>14</sup> and Yanarlar near Afyon<sup>15</sup> are from the Old Hittite period. The former site contains a mixture of cist graves, simple

inhumations and pithoi, but the Yanarlar burials are exclusively in pithoi.

Gaudin's excavation plan (Plan II) shows one hundred and seven burials, but only one of these vessels could be traced today.<sup>16</sup> It is said to be the largest example found on the site and measures ca. 1.75 m in height and over 1.00 m in diameter at the widest part. Smaller vessels must have been used for infants and children (Fig. 4, 5, 6, 7). At Babaköy one such burial is no.1.<sup>17</sup> At Karataş-Semayük out of some five hundred tombs a large number belong to infants and children in smaller jars<sup>18</sup> and it is logical to assume the presence of the same practice at Yortan as well. Ironically, the origins and development of long lasting and distinctly west Anatolian pithos burial tradition are yet to be discovered. The earliest known jar burials are at Beycesultan Level XXII, two children in coarse ware vessels.<sup>19</sup> Of roughly the same date are several jar burials of children at Kephala on Keos where a small cemetery contains the earliest known built graves of the Aegean.<sup>20</sup> A date in the Late Neolithic of the Cyclades, between the Saliagos Culture and the Pelos phase, makes Kephala ancestral to the well known cist graves of the Early Cycladic period.<sup>21</sup> The presence of these jar burials among the stone graves can be interpreted in terms of contacts with western Anatolia where the custom could have already become established and had even spread to the islands.<sup>22</sup> On the other hand it is essential to make a distinction in the attitude of the ancients towards a dead child and a dead adult; in the former case there seems to have been the practice of burying a dead child in a jar, intra-murally or extra-murally, without a fuss or ceremony while in the latter case the use of a proper burial jar of specific details was the established custom. The former habit was naturally practised almost anywhere from Greece and the Balkens to Syria,<sup>23</sup> using any fitting pot or jar but not necessarily being associated to the traditions of burying adults in pithoi or other types of graves. In other words it was one thing to put a dead infant or child away under the floor in a convenient pot and another matter to bury regularly the population of a settlement in large, sometimes colossal vessels which had to be manufactured especially for the purpose. The presence of a few jar burials with children on Keos or elsewhere on the islands may, therefore, not imply a knowledge or acceptance of the pithos burials of Yortan or other Anatolian sites. So far Kos has produced the only burials<sup>24</sup> that can be considered true pithos graves beyond western Anatolia in the Early Bronze Age of the Aegean. In the East several sites in Central Anatolia - i.e. Ahlatlıbel, Alishar, Kültepe - are well supplied with such tombs together with other types.<sup>25</sup> Beyond Anatolia the Byblos cemetery of the "Eneolithic" period comes nearest to resembling the west Anatolian examples.<sup>26</sup>

In this study the Yortan burials which had contained the "A" Class pottery are dated to the EB1 period at the earliest, and this is also the earliest date which can possibly be ascribed to any of the known Anatolian pithos cemeteries. The pithoi, often over 1.00 m in height, and sometimes over 2.00 m at Karataş-Semayük,<sup>27</sup> show quite an advanced potter's technology capable of making a sturdy red/orange fabric and shaping the vessel to such particular details that suit its purpose admirably well. Naturally one suspects a long chain of development which reached perfection at the EB1 period, at least in certain parts of western Anatolia. Hacilar near Burdur is the nearest excavated early site, and no such burial was found there. The odd twenty-two skeletons buried in Settlements VI-I were in simple, oval pits cut into the earth.<sup>28</sup> The only traces of the later burial customs that can possibly be traced back to the site are the extra-mural position of the cemetery and the introduction, for the first time, of pottery into the scanty burial gifts.<sup>29</sup> Somewhat blemished pottery burials of Kusura which show such habits as covering the dead with broken sherds of pottery or halving a

jar and then placing the two halves end to end to cover the whole body <sup>30</sup> could be considered an early stage in this development. However, the pottery (Class A) recovered from the graves does not look particularly early and such less distinguished methods of burials may well be explained as due to the poorer economy or craftsmanship of the people who could not always build or afford the larger pithoi.

Gaudin's observation that all the pithoi were placed in the same alignment can now be seen on the excavation plan (Plan II). In all the tombs the opening is turned to the south-east, east, or north-east, that is to say the orientation of the cemetery is an east-west direction. This consistency in the direction of the Yortan burials is in fact a general rule applying to many other Early Bronze Age burials of western Anatolia. At Babaköy, both Bittel and Kökten were able to note the custom in the intact as well as the robbed graves. <sup>31</sup> Similarly, the rule is invariably the practice at Sardis-Ahlatli Tepecik, <sup>32</sup> Sardis-Eski Balikhane, <sup>33</sup> Aphrodisias, <sup>34</sup> and Karataş-Semayük. <sup>35</sup> Even at Iasos where the cist graves were in use, suggesting affinities more in the direction of the Cyclades than Anatolia, a large number of the tombs are placed more or less towards the sunrise. <sup>36</sup> The custom does not survive into later ages. The Yanarlar pithoi are without a consistent direction <sup>37</sup> while at Gordion only the pithoi are more or less in the same alignment, south-east to north-west. <sup>38</sup>

The stone cist graves which take the form of a rectangular or round box, lined and covered with flat slabs of stone, are not reported from the north-west. Only one burial at Yortan, no. 80 (Pl II, Fig. 9), may be a sort of cist grave where besides the flat stone lid two more slabs are placed along either side of the incomplete pithos, probably as supports for its weakened structure. Otherwise Sardis-Ahlatli Tepecik would appear to be the most northern occurrence of this Cycladic type of grave. <sup>39</sup> Their absence at Karataş-Semayük is noticeable but they are found at the more inland site of Kusura. The only exception to the exclusive use of the pithoi and jars in the north-west cemeteries are the remarkable finds reported from Dorak on the southern shores of Lake Apolyant (Uluabat). There, apparently two individuals were found deposited in two pithoi but two other persons, perhaps a "royal couple", lay in state in richly furnished shallow graves with stone linings. <sup>40</sup> These burials differ considerably from the Cycladic cist graves and are more like the royal tombs of Alaca Hüyük. <sup>41</sup>

According to the finds at Karataş-Semayük the stump or round base of the pithoi was placed into a hole dug into the base rock, <sup>42</sup> thus anchoring the vessel to the ground. The rest of the vessel lay at a angle rising gently to the ground surface and with the neck and mouth facing the east. These particulars in shape and disposition of the pithoi were, one suspects, deliberately designed to facilitate the deposition of the dead and of the offerings. The size and weight of some of these vessels are such that their transportation for long distances would have been a very laborious, if not an impossible, task and therefore one may safely assume that the entombment of the dead and the offerings took place at the side of the grave after the empty jar had been put into position. Also the distance between the potter's grounds where the pithoi and jars were manufactured, presumably at the site of the settlement, and the cemetery could not have been considerable. On these assumptions one may conclude that each settlement site marked on the map also indicates a nearby burial ground, and the settlements of Yortan and Babaköy cannot be far off.

The slight remains of the Yortan skeletons were not instructive for the excavator, <sup>43</sup> while at the disturbed Babaköy cemetery only a few features

concerning the details of the position of the body could be obtained. Indeed, at the latter site the disorderly state and inadequately preserved condition of the skeletons led Kökten to consider the possibility of the tombs containing only the secondary burials,<sup>44</sup> where an earlier stage of the funerary rite would involve decomposing the corpse elsewhere outside the burial jar. Outside Anatolia this process of excarnation away from the final burial place has been suggested for the rectangular ossuaries of East Crete and cist graves of Aghios Kosmos in Attica.<sup>45</sup> At Yortan Kökten's view finds some confirmation in the drawings of Gaudin where only the skulls of the human remains are indicated. However, better preserved and more carefully recorded Sardis and Karataş finds now stand to eliminate this opinion. As Bittel could observe on the meagre remains of the Babaköy skeletons,<sup>46</sup> the deceased was invariably tucked into the pithos intact and left to rest in a contracted position on one side. The head pointed to the east and the feet to the west. Often one tomb could be used for several persons. In such cases the remains of the previous individual would simply be brushed to the lower, narrower end of the jar and thus room would be made for the newcomer. The Babaköy pithoi are said to contain two or three individuals. At Yortan the record figure is six in no. 23 pithos (Plan II, Fig. 3) which has a very broad mouth and shoulder, but two persons per tomb appears to have been the more common practice. At Karataş the greatest number is eight in Tomb 112 of the Main Cemetery.<sup>47</sup>

At Yortan and elsewhere pottery is by far the most common type of object given to the dead. Metal finds are very rare, possibly indicating that still in the EB1 and early EB2, which is the date preferred here for the majority of the burials, metallurgy had a limited spread in western Anatolia.<sup>48</sup> One or two tombs were furnished with four marble idols,<sup>49</sup> and some others with terracotta spindle whorls.<sup>50</sup> At present there is no evidence for the offering of food in the way of animal meat or fruit. In fact, bowls which would normally serve as containers for such offerings form a relatively small number of vessels from the burials. Jars and jugs are present in much larger numbers, possibly suggesting cultic beliefs more in the direction of libations and offerings of liquids than solid food.

It has been suggested that the pottery of Yortan and other cemeteries could be special groups of vessels belonging to the dead and not representative of the wares found on the settlement sites.<sup>51</sup> The opinion held here is that among the fifteen shapes of Class A pottery only a few shapes can be considered as such while the remaining majority, including Class B and C vessels, need not be so in their basic forms and wares. The smallest vessels, the juglets, are surely miniature versions of Shape IX XII jugs and were probably "toys" for children, living or dead. The same purpose may apply also to the small bird-shaped jugs. The larger examples and the triple jars, Shape XV, on the other hand, may well be objects of the cult and are found on settlement sites as well as in burials. Jars of Shape II form another distinct and popular shape of small vessels. Some of them were found to contain a red/orange coloured substance and were probably containers of some cosmetics or a special stuff such as red or yellow ochre used in the cult of the dead. Such a custom is well illustrated at the Neolithic site of Çatal Hüyük where in some of the burials the skull and/or skeleton were smeared with red paint.<sup>52</sup> At Yortan and Babaköy the skeletons were found in poor conditions of preservation, and without hard evidence the point cannot be verified for the Early Bronze Age. A similar situation is confronted in the Cycladic graves where marble bowls and palettes have been found with remains of a red pigment.<sup>53</sup>

The limited space inside the pithos tomb and the adverse physical

conditions for the preservation of the organic matter obscure the exact position of the offerings in relation to the contracted skeleton; or probably no particular significance was attached to such an arrangement. One can only suppose that such objects as "toys" were possibly placed near or into children's hands to keep them happy or preoccupied after life. With the delivery of the offerings one may imagine the burial ceremony drew to an end and was completed by the sealing of the pithos mouth and the inhumation of the whole tomb. At Yortan slabs of stone, trimmed to regular shapes, are reported for enclosing the pithoi mouths. Some other means such as a large pottery bowl or large pieces of sherds may also have been used as "lids". Such variations are reported from Sardis-Ahlatlı Tepecik<sup>54</sup> and Karataş-Semayük,<sup>55</sup> but Gaudin does not specify any at Yortan. Once the cover was placed into position, the packing stones would be heaped up against it, a few more vessels could still be offered among the stones, and finally the tomb would be buried and levelled off. At Karataş the pithos mouth was marked by a "retaining" wall of field stones (Pl. I). This feature is absent at Yortan where also the stone lids do not seem to have been secured into place with packing stones. The fact that whether at Yortan or Karataş, these graves could be found and opened up, or new ones sunk into the ground without disturbing the existing ones, shows that some means of markings above the ground were utilised to indicate the exact location of each burial. This is one aspect of the prehistoric cemeteries which often proves impossible to clarify. Any evidence for such markers would normally lie directly above the ground and thus would easily be swept away in the passage of time. At Babaköy Bittel thought the stone lids stood higher than the top of the pithos rim and therefore could have functioned as surface markers.<sup>56</sup> It is a plausible explanation but it fails to take into account certain details. Not all the covering stones were apparently shaped to stand above the pithoi and the ground level; it is difficult to imagine how, for example, the square slabs of Yortan would have functioned in this way, while other types of "lids" such as bowls could not have served a purpose as such at all. Instead, a completely different explanation is now provided by the Karataş finds which may well be accepted as yet another widespread feature of the west Anatolian burials. At this site most of the burials also lay very close to the ground surface and were often damaged by natural agents and human action. However, much careful and patient work eventually bore its reward, and in Trench 98 the ancient ground surface was uncovered in good condition and with slight remains of circular structures.<sup>57</sup> The subsequent stratigraphic work showed that each such structure actually belonged to a pithos burial (Pl. II). With this unique evidence at hand we may now imagine the cemetery at Karataş as a large, sprawling ground standing outside the immediate bounds of the settlement, and marked with pockets of circular structures on slight stone foundations. Whether the Karataş method of marking was used elsewhere remains to be confirmed by future research. The use of other methods outside Anatolia is noteworthy. For example at Aghioi Anargyroi on Naxos a cemetery of twenty two cist graves was surrounded by an enclosing wall and each burial is thought to have been marked with flat stones on the ground surface.<sup>58</sup> At Akrotiri on the other hand a platform-like structure on the cap stone was found to function in this way.<sup>59</sup> At Yortan the necessity of surface markers was realised in order to explain the orderly arrangement of the graves, but no particular feature was identified as such.

1. M. Collignon, 1901, CRAI: 810 ff.
2. See Chapter 2, p.14.
3. C. Doumas, 1977, St. M. A. 58: 31 ff.
4. K. Bittel, 1939, A. f. O. 13: 1 ff.
5. I.K. Kökten, 1949, Bell. 13: 811 ff.
6. D. G. Mitten and G. Yügrüm, 1974, Arch. 27, no. 1: 22 ff; 1971, HSCP 75: 191 ff; D. G. Mitten, 1968, BASOR 191: 6 ff.
7. M.J. Mellink, 1964, AJA 68: 272 ff; 1965, AJA 69: 241 ff; 1966, AJA 70: 246 ff; 1967, AJA 71: 253 ff; 1968, AJA 72: 254 ff; 1969, AJA 73: 319 ff; 1970, AJA 74: 345.
8. A large necropolis at Midas City ought to be added to the list. It was excavated by H. C. Ambel and is yet to be published. See C. H. E. Haspels (1971) The Highlands of Phrygia I, p. 285, no.3.
9. D. G. Mitten and G. Yügrüm, 1974, Arch. 27: 25; 1971, HSCP 75: 191 ff.
10. M. J. Mellink, 1969, AJA 73: 319; T. S. Wheeler, 1974, AJA 78: 416.
11. E. Akurgal, 1958, Anatolia 3: 156 ff.
12. Ibid., p. 157. The team was able to see some intact but many robbed burials in the village of Ovabayındir and outside it. Also some at Mandraköy (Yeniköy), 10 km south-east of Ovabayındir.
13. M. J. Mellink, 1967, AJA 71: 257; 1969, AJA 73: 330.
14. M. J. Mellink, (1956) A Hittite Cemetery at Gordion, p. 3 ff.
15. K. Emre (1978) Yanarlar. A Hittite Cemetery near Afyon.
16. CVA no. 3, Brussels, Belgique. Pl. 4, no. 16.
17. K. Bittel, 1939, A. f. O. 13: 9.
18. J. L. Angel, 1976, AJA 80: 388.
19. S. Lloyd and J. Mellaart (1962) Beycesultan I, p.26.
20. J. E. Coleman (1977) Keos. I. Kephala, p. 44 ff.
21. Ibid., p. 109 ff.
22. T. S. Wheeler, 1974, AJA 78: 423.
23. A similar opinion is expressed also by T. Özgüç in relation to Kusura and Alişar burials. See Die Bestattungsbräuche im Vorgeschichtlichen Anatolien (1948), pp. 28, 29. For a list of burials in Anatolia see T. S. Wheeler, 1974, AJA 78: 425.
24. L. Morricone, 1950 BdA. 35: 324. One may also assume that other Eastern islands along the Anatolian coast - Lemnos, Chios, Samos - were familiar with the burial method.
25. T. Özgüç, op. cit., pp. 22-41.
26. T. S. Wheeler, 1974, AJA 78: 421 ff.
27. M.J. Mellink, 1965, AJA 69: 243; 1967, AJA 71: 253.
28. J. Mellaart (1970) Excavations at Hacilar, p. 88 ff.
29. Ibid., p. 89 ff.
30. W. Lamb, 1936, Archaeologia 86: 55.
31. K. Bittel, 1939, A. f. O. 13: 5 ff; I. K. Kökten, 1949, Bell. 13: 812.
32. D. G. Mitten and G. Yügrüm, 1974, Arch. 27, no. 1: 26.
33. D. G. Mitten and G. Yügrüm, 1971, HSCP 75:
34. B. Kadish, 1971, AJA 75: 126.
35. M. J. Mellink, 1964, AJA 68: 271.
36. D. Levi, 1965-66, ASAA 27-28: 516. But one exception to this rule in western Anatolia occurs at Kusura where disturbed burials were oriented to the West. See W. Lamb, 1936, Archaeologia 86: 55.
37. K. Emre (1978) Yanarlar. A Hittite Cemetery near Afyon, p. 16.
38. M. J. Mellink (1956) A Hittite Cemetery at Gordion, p. 3.
39. D.G. Mitten and G. Yügrüm, op. cit., p. 26. Two cist graves were found at Babaköy, but K. Bittel dated them to historic times. See 1939, A. f. O. 13: 10.
40. J. Mellaart, 1959, ILN 28 November: 754 ff.
41. H. Z. Koşay (1951) Alaca Hüyük Kazısı, 1937-1939, p. 53, Pl. CXV-CCVII.

42. M.J. Mellink, 1964, AJA 68: 272.
43. T. S. Wheeler, op. cit., gives a reference to a study of some Yortan bones on p. 420, no. 51. Presumably the article in question deals with a few human bones that were given to the Brussels collection together with the large pitthos, see p. 11 above.
44. I.K. Kökten, 1949. Bell. 13: 813.
45. C. Renfrew (1972) The Emergence of Civilisation. p. 429, 430.
46. K. Bittel, 1939, A. f O. 13: 6.
47. M.J. Mellink, 1965, AJA 69: 243.
48. See Chapter 2, p. 21
49. See Chapter 2, p. 19
50. See Chapter 2, p. 20
51. See Chapter 3, p. 52, 53
52. J. Mellaart (1967) Çatal Hüyük. A Neolithic Town in Anatolia, p. 207, 209.
53. C. Doumas, 1977, St. M. A. 58: 58.
54. D. G. Mitten and G. Yüçrüm, 1974 Arch. 27: 26.
55. M.J. Mellink, 1964, AJA 68: 271; T. S. Wheeler, 1974, AJA 78: 417.
56. K. Bittel, 1939, A. f O. 13: 4, 5.
57. M. J. Mellink, 1968, AJA 72: 255; 1969, AJA 73: 319 ff.
58. C. Renfrew (1972) The Emergence of Civilisation, p. 158. But this aspect of the cemetery seems to be in doubt, see T. S. Wheeler, op. cit., p. 423.
59. C. Doumas, op. cit., p. 36, 87; C. Doumas (1977) Art and Culture of the Cyclades, ed. J. Thimme, p. 35.



## CHAPTER 2 FINDS FROM YORTAN CEMETERY

### a) Pottery

Large pithoi and smaller jars serving as funerary urns, and the much smaller vessels buried with the dead form the main type of objects found at Yortan. The pithoi are naturally heavy, coarse vessels and, with the exception of a few, they were apparently not lifted for the museum collections. Today only one example is known to exist and it belongs to the collection of the Musées Royaux d'Art et d'Histoire in Brussels.<sup>1</sup> Several more are said to be registered in the inventory of the Berlin museums.<sup>2</sup> The Brussels pithos is a spacious container measuring ca. 1.75 m in height. The neck is short and broad. The diameter measures largest the rim, over 1.00 m. The body is equally broad in the upper half and narrows down to end in a pointed but blunt base. There are four loop handles and four knobs on the shoulder, such projections probably functioning as grips for manoeuvring the "coffin" into the desired position. The fabric is coarse, reddish brown in colour, and tempered with gravel. Technically it is highly competent work, shaped with considerable skill and fired to a hard, sturdy structure. For the remaining one hundred and six burials we have to be content with Gaudin's words and drawings:

"Dans la seconde cité d'Hissarlık, Schliemann avait découvert des centaines de jarres mesurant de 1<sup>m</sup> 50 à 2 mètres de hauteur. Celles de Yortan ont des proportions un peu inférieures. La longueur totale approche rarement de 2 mètres, et la diamètre ne dépasse 1 mètre, à la panse, que dans peu de cas. On a pu noter, à titre de fait isolé, une paroi de 0<sup>m</sup> 55 millimètres, et les plus fortes épaisseurs sont d'environ 0<sup>m</sup> 40. Le parement extérieur est rugueux, et la qualité de la poterie, où l'argile est mêlée de gravier, est en général médiocre. Le col est souvent très large, mais peu évasé. Certains vases sont presque sphériques, mais les formes allongées sont les plus fréquentes. L'extrémité opposée au col n'est parfois qu'une pointe mollement arrondie mais la plupart sont munis d'une sorte d'arête circulaire qui peut jouer le rôle d'une base. Sur l'épaule se profilent diverses saillies, les unes en forme d'anse, les autres, rondes et déprimées au centre, qui sont peut-être une grossière imitation de certaines parties du corps humain, comme les yeux et le nombril."<sup>3</sup>

It seems that Gaudin made scaled drawings of all the excavated tombs, together with their contents. Fig. 1-11 are reproductions of some of these drawings. Out of the total of one hundred and seven tombs some eighty three could be found in these illustrations. The whereabouts of the remaining twenty four are not known. Obviously the pithos shape had a slow evolution and was a deliberate creation to suit the purpose of accommodating the contracted corpse of a human, together with the burial gifts.<sup>4</sup> The narrower, lower end would contain the decomposed remains of an older occupant of the tomb while the more spacious upper parts would be for the intact newcomer. The excavators of the Karataş-Semayük cemeteries could observe that such funerary pithoi were made exclusively for the burials and not used for other purposes.<sup>5</sup> Only the smaller jars for infants and children might have been ordinary domestic utensils as well.

Classification of the Yortan pithoi into some six shapes is based on the overall form of the body and without any apparent chronological significance. Had the excavation reports been better preserved some dating criteria between the pithoi shapes and the pottery found inside them might have been found.

But as the material stands the classification is merely to indicate with greater clarity the types of funerary jars used at the site, and it must be admitted that the differences between the groups are often rather slight and arbitrary. The first shape is quite easy to recognise, consisting of smaller jars of globular or slightly elongated body (Fig. 12). There is nothing particular about them to suggest a special production for the graveyard. Shapes 2, 3, 4 and 5 are all very similar and only slightly differ in the proportions of the height and width of the body; shape 2 vessels, big and small, are rather narrow and elongated (Fig.12-14); shape 3 is broad at the shoulder or middle body (Fig.14-17); shape 4 consists of pithoi with a distinctly conical body (Fig.17-18), while shape 5 can be distinguished by the markedly sunken profile of the section between the broad upper body and the much narrower base (Fig.19-21). The last group, shape 6, differs from the rest in having a stump rather than a blunt and rounded base (Fig.22). According to Gaudin the Brussels pithos is the largest found at Yortan,<sup>6</sup> and indeed the illustrated examples are never over 1.50 m in height. The three pithoi found at Babaköy (Pl. I,II) are bigger, almost 2.00 m in height, but the overall shaping is identical to those of Yortan. The Karataş pithoi of broadly the same shapes also tend to be taller, varying between 1.20 m and 1.80 m and even sometimes exceeding 2.00 m.<sup>7</sup> The ornamentation of these colossal jars was apparently unimportant and limited to a few simple plastic features. Pointed knobs on the shoulder of the body are found on nos. 11, 52, 03, 04 (Fig. 2, 6, 8); on nos.26, 57, 58 there is a single line of the rope pattern (Fig. 3, 7); and the "medallion motif", as it is known at Karataş, occurs on nos. 15, 38, 45 (Fig. 2, 4, 5). The smaller jars, nos. 32 and 36 (Fig. 4), which may have originally been made for purposes other than funerary, are more elaborately ornamented with handles, knobs and bands. Some of the Karataş pithoi were also incised on the upper body or round the neck.<sup>8</sup> This type of decoration is not reported from Yortan but it may be worth pointing out that these urns lying directly in the ground were probably heavily encrusted with lime which would have concealed much of the finer surface decoration. In fact, Professor Mellink was able to note this type of ornamentation at Karataş only after the cleaning of the pottery, and we do not have reason to believe that conservation and cleaning of the pithoi and jars were undertaken at Yortan in 1901.

Now, eighty years after their first discovery it is, of course, impossible to trace all the objects that were brought out of the burials. Nevertheless with over two hundred and fifty vessels which could be studied the Yortan pottery still makes an impressive and significant addition to the Early Bronze Age of western Anatolia. In terms of shapes and such technical details as the colour and texture of the fabric the pottery may now be divided into three classes, A, B, C, which correspond roughly to the EB1, EB2 and EB3 periods. Unfortunately this classification cannot be backed by sound stratigraphic observations at the site,<sup>9</sup> and therefore divisions between the classes must remain tentative. Between A and B, and B and C, there need not be rigid dividing lines, but the pottery of A and C is truly different in every respect, leaving little doubt as to the existence of a considerable chronological and cultural difference between them.

Within Class A pottery, which is by far the most numerous group containing two hundred and twenty four vessels out of a total of two hundred and sixty three, three main types - bowls, jars, jugs - and several more unusual forms, such as the triple vase, can be distinguished. It is an exclusively handmade pottery without the use of the potter's fast wheel. There is hardly any variation in the fabric so that the shape rather than the ware or ornamentation has been used to divide it into some sixteen groups. The surface decoration was used as the basis for such a classification for

the Louvre collection by E. Pottier, <sup>10</sup> but the method is considered unproductive and largely irrelevant here for the elucidation of the problems surrounding the Yortan pottery and culture. The fabric is always very high in mineral content with a lot of mica and quartz which on the surface appear as tiny, small, or large, shiny particles. Often the surface of the pots is pitted due to pieces having fallen out. On most of the larger vessels it is not a fine fabric, but very coarse examples are also rare. A more refined clay and temper, still with the same mineral content, was often used for the smaller vessels such as the juglets, Shape VI, or small jars, Shape II. No straw temper was detected in any of the pieces examined. The petrological analysis of a fragment of a jar, Shape III, gave the following results which can be taken as standard for most of the Class A jars and jugs:

"The matrix is birefringent in shades of orange and yellow, and contains sherds or muscovite and biotite mica. Other inclusions are:

Hornblende	0.1/0.2-0.5 mm; occasional
Quartz	0.1/0.3 mm on average. Some grains are less than 0.1 mm and subrounded; scattered
Plagioclase feldspar	0.3/0.4 mm, subangular; occasional
Pumice/volcanic glass	0.1/-0.5 mm; scattered
Haematite	0.1 mm and less; scattered" <sup>11</sup>

The firing temperature is about 800°C and sometimes the pots easily crack, crumble, or flake off in layers. One exception to this rule is provided by the jugs of Shape XI - XII where almost all of the vessels are fired hard and do not crumble to pieces. These deficiencies in the technique of the Yortan craftsmen did not, however, prevent the production of a highly attractive and individual pottery superior to that found at Troy/Hisarlık or Thermi. This achievement was largely due to the competence in the shaping of the vessels, to the pleasing and rounded contours, and also to the care taken in the surface finish. It is never left coarse but smoothed, or more often slipped and burnished to a shining reflection. <sup>12</sup> Since all this pottery was handmade there is individuality in every piece, without a feeling of mass production. The shapes and their general outlook are vivid, unaffected by dull, metallic elements which in later periods come to dominate the pottery everywhere. Black and grey colours are clearly in the majority. Those vessels which are in two-thirds red, brown, or orange-red colours, form a separate and parallel group of shapes but are far fewer in number. Jug no. 159 (Fig. 44), of Shape VIII is a good example reflecting many characteristics of the "A" class pottery; it has a coarse fabric but in its soft, rounded outline, and slipped and burnished surface it makes an attractive object. Also the uniform orange-red colour and the distinct chevron motif in matt white show success in the process of firing. In every detail of the shape, fabric and surface finish these red ware vessels are in fact no different from the black or grey ones. The following analysis was carried out on a fragment of the no. 159 jug, Shape VIII. The results obtained are quite similar to those of the above mentioned black jar, Shape III:

"Red/brown fabric. Birefringent from orange to yellow.

Hornblende	0.2 mm; infrequent
Quartz	0.1-0.5 mm; angular, subangular and subrounded; frequent
Polycrystalline quartz	0.2 mm; infrequent
Feldspar	0.5-0.1 mm; subrounded; occasional
Pumice/volcanic glass	0.5-0.1 mm with a mean size or 0.3 mm; frequent
Haematite	0.5-0.1 mm; scattered"

Among the small jugs, Shape IX, no. 177 (Fig. 47) is very striking in its uniform lustrous brown colour. The black jug no. 163 (Fig. 45) of the same shape is similarly a fine piece. One of the jugs of Shape IV, no. 75 (Fig. 32, Pl. VI) is fired dark grey in the upper section and light brown in the lower parts of the body. Such a distinct partitioning of a pot into two colour zones could be considered intentional, i.e. a well-known feature of Early Cypriote pottery. However, at Yortan such vessels are rare and were probably accidental products. The predominance of the black and grey wares in Yortan "A" class pottery seems to be a wide-spread aspect of the north-west Anatolian cultures in the EB1 and EB2 periods. Further south there is a marked increase in the preference for lighter colours in shades of red and brown. At Karataş-Semayük, for example, sturdy jugs in burnished red brown and sometimes decorated with matt white linear patterns are a characteristic of the pottery of the Elmalı plain.<sup>13</sup> Among the Yortan "A" class pottery there is no apparent chronological significance in the occurrence of the red or red brown ware.

The ornamentation on the burnished or less often smoothed surface is either in white filled incision or in the so-called matt white painting. Less common are the jugs with moulded relief features only. The origins and distribution of the two former methods of decoration is a rather complex phenomenon. In western Anatolia it goes back to the beginnings of the Late Chalcolithic period of Beycesultan.<sup>14</sup> Beyond, in the Aegean, it is found in the Middle Neolithic and Late Neolithic of the East Islands,<sup>15</sup> of the Cyclades (Saliagos)<sup>16</sup> and of Greece,<sup>17</sup> with even earlier appearance in the Neolithic of South East Europe.<sup>18</sup> Its distribution in Anatolia is equally wide, extending from Mersin Level XIIa to İkiz Tepe in the plain of Bafra.<sup>19</sup> Yet without the stratigraphic soundings penetrating into the earliest of the Chalcolithic period it remains impossible to determine whether the origins of this pottery style at Yortans and elsewhere in western Anatolia were independent or derived from the East or West. It would, however, be incorrect to assume a "floruit of the style" preceding the Troy I period (EB2).<sup>20</sup> The opinion has been based on the poor representation of the pottery at Troy/Hisarlik. Elsewhere in this study it has been suggested that the pottery of Troy/Hisarlik and Kumtepe occupy a precarious position in the Early Bronze Age of the north west, not necessarily representing the complete pottery repertoire of the area.<sup>21</sup> Thus, while there may be only a few white painted sherds in Troy I and II, in the contemporary Yortan pottery it is in full blossom, and a "floruit" of this type of ornamentation may well be in the EB1 and EB2 periods, at least in north-west Anatolia.

At Yortan this type of decoration is always preferred for jars and jugs, and there is little variation in the motifs used. Invariably they are in the

form of three or four chevrons applied onto the body in groups of two, three, four or five lines, and only a few jugs have additional patterns. One jug with cutaway spout, no. 207 (Fig. 61) has double running lozenges, one on either side of the angular handle. Another, no. 174 (Fig. 47) of Shape IX has cross-hatched lozenges in between the chevrons.

The white substance or paint is usually applied very thickly so much so that at the apex of the chevron motif the overlapping lines stand out in relief. When hydrochloric acid was dropped on the white lines only, it gave a reaction in bubbles indicating <sup>22</sup> that it is lime, probably limestone powdered and mixed with water. One is struck by the fact that on almost every pot these white lines are considerably faded or washed out and they do not really conform to a contrasting pattern upon the darker surface. Presumably this was not the condition of the pottery at the time of its production. One suspects that the white substance which would have been mixed with water and applied on the already burnished surface wore out over the millennia under such environmental factors as the fluctuating ground water-table and the soil conditions. One exceptionally well preserved vessel is the incomplete jug no. 152 (Fig. 42) where somehow the chevrons have survived in a bright white colour contrasting well with the burnished black background. In some cases the mottled surface proves to be unsuitable for this type of decoration; where, for example, light grey rather than black colours are present the white lines do not clearly stand out, no. 184 (Pl.X) Sometimes the pattern itself is in vague tones, varying between dirty white and light grey, which again tends to be absorbed by a similar coloured background.

It seems that white decorated pottery gradually went out of favour towards the end of the EB2 period; at least, this is what one finds at Troy/Hisarlık where it is no longer evident in Troy III, and at Beycesultan where it disappears at the end of the EB2 levels. It must, however, be pointed out that this pottery was apparently not popular at either site at all times, and there is always the possibility of a longer sequence at Yortan and elsewhere. Class C pottery which has been identified as EB3 in date does not have this type of jug or jar, thus confirming its disappearance in the north west after the EB2 period. Such unprovenanced jugs as no. 36 (Fig. 97, Pl. XIX) or no. 46 in Schiek and Fischer <sup>23</sup> may be dated on account of their shape to the end of EB2, and the former jug is decorated with white filled incisions suggesting that already before the beginning of EB3 the somewhat frail painted ornamentation was going out of favour in the Yortan Culture as well. On the other hand the latter jug is still decorated with white chevrons, and in fact white painted sherds were found at Polatlı in late Phase I and early Phase II which correspond to Troy III-IV. <sup>24</sup>

In Class A pottery incision is only used on small vessels, Shape II, IV, VI, and the small bird shaped jugs (Fig. 73). The limited space on the surface was naturally unsuitable grounds for painting. Small lids, Shape V, which belong to the jars are similarly decorated. A few incised exceptions among the larger vessels are no. 57 (Fig. 29), a jar with a unique basket handle, and an unusual jug, no. 246 (Fig. 76). <sup>25</sup> This obvious restriction in the shapes of the incised pots may have, however, been a local phenomenon, peculiar to Yortan and not a general feature of the Yortan Culture. Thus, bowls no. 1, 4 (Fig. 91) from the Balıkesir plain are identical in shape to the plain bowls of Yortan, but some are incised or grooved on the carinated rim; or the large jar, no. 24 (Pl. XVIII) though similar to Shape II jars on tripod feet, is more like Shape III examples and yet it is incised and not painted.

On the whole, the incision is very competent and executed, before firing, with a thin point in deep, steady lines. The motifs are all linear, in various combinations of parallel or curvilinear lines, short strokes, dots, or wedge-shaped punctures. A white paste was filled into the incised pattern to make it stand out over the burnished surface.<sup>26</sup> Among the juglets, Shape VI, no. 111 (Fig. 35) is a perfect little vessel with the simple white filled pattern showing clearly over a lustrous red brown surface. Sometimes, however, defects in the firing process would cause mottling and failure to create a striking contrast between the pot surface and the incised pattern.

A third type of ornamentation found on Class A pottery consists of simple plastic features in the form of knobs; prominent, or small and wart-like; or crescents, parallel bars, and chevrons. The most commonly used are the knobs, always placed on the upper part of the body or, on the cut-away spouted jugs, on either side of the neck. The crescents are often shallow in relief. Some are quite small, no. 179 (Fig. 48), others large and sweeping, no. 192 (Fig. 54). One large jug, no. 186 (Fig. 51) has the more unusual crescents, each divided in the middle by a perpendicular line. Parallel bars are found in groups of two, three or four, no. 210 (Fig. 63), no. 206 (Fig. 61), no. 241 (Fig. 74). More interesting are the small pendant-like features stuck onto the base of the neck at the front of the pot. This occurs only on jugs of Shape IX-X, and XII. On jug no. 221 (Fig. 67) it is particularly vivid, resembling a pair of beads or jewellery worn round the neck. At the back, below the handle, even the knot of the string from which the "beads" would have been suspended is shown. A similar amusing detail can be observed on jug no. 186 (Fig. 51); here the "necklace" worn is in the form of a string of knobs all attached to the neck base with short strokes. Further up the neck the knobs on either side and below the rim are shaped like earrings.

Vertical flutings as a mode of decoration covering the whole or most of the body are rare at Yortan, occurring on three jugs only. Jug no. 162 (Fig. 45) is one of them and is really a small version of the tall, handsome jug no. 41 (PI.XX) of unknown provenance. Jug no. 242 (Fig. 75) (PI.XV) has rather prominent flutings. It is a heavy vessel and unique among the Yortan shapes in its horizontal and broad form of beak spout. The third vessel is the large bird vase no. 232 (Fig. 72). On two other jugs of the latter shape, plastic lines are used sparingly to indicate "wings" in a stylised fashion.

The second class of Yortan pottery, "B", contains a number of vessels which on the basis of parallels with the pottery of Troy/Hisarlık are identified as late EB2 in date. The "teapot" or deep bowl with a basket handle and side spout (Fig. 79) is a particularly distinctive shape, unknown in the EB1 of western Anatolia. Basically the most outstanding differences between this and the "A" class are in the nature of the fabric and surface treatment. It is a fine fabric and always fired hard. Light colour slip is thinly applied and no longer highly burnished. Mottling occurs but far less than in Class A. These technical as well as stylistic differences are considered sufficiently strong here to keep the pots separate from the earlier group. However, without a stratigraphic recording such division should be kept flexible. It is highly probable that some of the "A" class shapes continue to the end of the EB2 period. The carinated bowl with a loop handle could be one such shape; or on typological grounds there are the jugs of Shape X with a shallow and broad form of the cut-away spout (Fig. 58,59) which is not too dissimilar to the tall beak spout of the EB3 period. Those jars of Shape III with sharper outlines, or jugs of Shape XI and XII could also be considered later than the EB1 or early EB2. On similar lines a

number of vessels from the Balıkesir plain may tentatively be dated to this latter phase of the EB2 of Yortan. Jug. no. 36 (P1. XIX) has already been mentioned; it is a handmade, perfect product with symmetry all round, and in every possible detail a superior and more developed pottery than Class A of Yortan. Secondly there are the small jars, no. 11-15 (Fig. 92) which on account of their tall flaring pedestals and richly incised decoration could also be regarded as typologically later examples of Shape IV Yortan jars.

Class C pottery represents the EB3 period of the site and corresponds to the pottery of Troy III-IV and Beycesultan XII-X. Again as for the previous class, the number of vessels that can be assigned, with some confidence, to this category is rather small; but the break with the Class A type is clear and absolute with no question of continuity. Almost all of these jars and jugs are made of a very fine fabric, still with a rich micaceous content. The petrological analysis of a piece from jug. no. 279 (Fig. 81) shows that a different deposit of clay might have been used at this time:

"Red fabric. The matrix is birefringent from orange to red and is very micaceous. The mica appears to be muscovite.

Quartz	0.1-0.3 mm subangular; scattered
Polycrystalline quartz	0.4 mm; occasional
Muscovite	0.2 mm; scattered
Biotite	0.2 mm; scattered

The walls are usually very thin, hard fired, and invariably in light colours of red and grey. Due to the fine fabric the surface is naturally very smooth. Often it is coated with a thin slip or wash but never burnished to the extent of the "A" class pots. Except for the occasional grooved line there is no other ornamentation. The potter's fast wheel is now in use with the result of greater degree of symmetry in shaping. No. 277 (Fig. 80; P1.XVI) is a very fine piece, made of an extremely fine fabric and thin walls. Its proportions are faultless. This jug and lentoid flask no. 282 (Fig. 82; P1.XVII) do have a cutaway type spout but one which is quite different from the earlier examples; the neck is rather tall and cylindrical, and the part of the spout cut away is short without giving it a beak-like appearance. In the absence of a larger group of material it is not possible to draw further general characteristics of the Yortan pottery during this period. The available twenty pieces are barely sufficient to allocate the site to this period, and we can only speculate that the EB3 pottery of Yortan was not very different from that of the rest of west Anatolia.

#### b) Idols and Figurines (Fig. 84)

Only four idols were found at Yortan.<sup>27</sup> They are made of white marble, highly schematised, and of the types widely known in the Aegean area. The larger no. 289 is in the "fiddle" shape with a long, stalk-like projection representing the neck and head. The lower parts, or the body, are featureless and only the shoulders or arms are indicated as small protrusions. Some thirteen similar idols were found at Beycesultan in the shrine complex of level XXIIb.<sup>28</sup> Two rather crude pieces from Thermi I and II,<sup>29</sup> and a few broken pieces from Troy I and II<sup>30</sup> may all be considered as basically belonging to this type. The second and third idols, no. 290, 291

(Fig. 84) are even more schematic, no more than pieces of marble with the top and bottom ends rounded and the middle part notched to indicate the waist line or the neck. The upper section or the head is incised with eyes and eyebrows. At Beycesultan one broken piece in Level XVI could be of this type,<sup>31</sup> otherwise it is not found at the site. Plenty of examples, especially without the incised bird-like face, are known at Troy/Hisarlik throughout the Early Bronze Age. In Blegen's classification Type 1 and 2 are closer to the Yortan idols.<sup>32</sup> The Karataş-Semayük burials have also yielded some plain examples,<sup>33</sup> though here and probably in the Burdur-Isparta region at large a different type of idol with a stalk neck and disc head was more popular.<sup>34</sup> So far this variety has not been found in large numbers in the north-west.<sup>35</sup>

The fourth idol, no. 292 (Fig. 84), belongs to a more unusual variety with short arms, not unlike the wings of a penguin, and an elongated head where only the ears and nose are indicated. Several examples of uncertain provenance are known in museum collections outside Turkey.<sup>36</sup> The earliest discovery goes back to the beginnings of the century and is said to come from a village, Kilia, in the Gelibolu (Gallipoli) peninsular.<sup>37</sup> A second is found in Schmidt's catalogue, no. 7643 which is not illustrated but the description leaves no doubt to the identity of the fragment.<sup>38</sup> Otherwise the only stratified finds are two fragments from the L. Chalcolithic levels (Below Level VIIId) of Aphrodisias.<sup>39</sup>

Outside Anatolia no. 289-291 Yortan idols find fairly close parallels in the Aegean, particularly in the Cyclades.<sup>40</sup> The earliest occurrence of the fiddle type is at Saliagos and dates to the beginnings of the Beycesultan Late Chalcolithic.<sup>41</sup> Such a wide distribution of these objects is in sharp contrast to the existence of quite different burial customs and pottery assemblages between Anatolia and the islands. Therefore only within western Anatolia does it seem reasonable to postulate, on grounds of similar idols, identical burial customs, and some pottery shapes, i.e. multiple vessels, duck vase, a certain degree of uniformity in religious or cultic beliefs. If so, then the shrine complexes of Beycesultan Level XVII-XIII need not be a unique occurrence but a part of a broadly similar temple architecture of western Anatolia in the Early Bronze Age.<sup>42</sup>

No terracotta figurine is reported from Yortan. One broken human figure with incised decoration was found at Babaköy<sup>43</sup> and its absence from Yortan could be accidental. At Thermi such terracottas are said to appear not before Town III when the marble idols cease to exist.<sup>44</sup> But any chronological significance that one may see in this sequence can be dismissed on the facts of the Troy stratigraphy where the marble idols continue to be made in Troy III and later periods.

A completely different sort of object, which is found in the tombs of the Balikesir plain but not at Yortan, is an intriguing small terracotta in the shape of a small powder flask. Two fragments were found at Babaköy (Fig. 89, no. 9). Several more are known to come from the robbed cemeteries of the region.<sup>45</sup> One such object no. 35 (Fig. 97) has a relief motif which could well represent the sign for "life" in Egyptian hieroglyphics. A second occurrence of the sign is on a jug of the same provenance.<sup>46</sup> On the assumption that the object in question carries a cultic significance, the opinions vary between a symbolic horn of the bull<sup>47</sup> and a symbolic phallus of the fertility cult.<sup>48</sup> On the later opinion Bossert once made a remarkable attempt at identification, suggesting it could not represent the phallus of a bull but belonged to another animal.<sup>49</sup>

c) Spindle Whorls (Fig. 85-87)



All thirty-six spindle whorls belong to the British Museum Collection. Several are illustrated in the burials, nos. 8, 11, 36, 47, 59 and 80 (Fig. 1,2,4,5,9). The shapes vary between biconical and truncated biconical. The last six are larger and cylindrical (Fig. 87). On nos. 293-322 the vertical piercing in the centre has rounded edges on the top and base, or in some cases a sunken central part on the top (Fig. 85,86). Nos. 316 and 317 (Fig. 86) were for some reason cut horizontally into two halves. The ornamentation over a very fine and hard fired fabric is only in incision and usually limited to the upper section of the biconical shape. As on the incised pottery, white filling was used to bring out the delicate motifs over the smoothed or burnished surface in dark grey, red or brown/yellow colours. The largest no. 327 and 328 are stamped with a small stamp seal and a row of wedge-shape strokes respectively (Fig. 87).

Spindle whorls are a familiar type of object in the Early Bronze Age of Anatolia but are rather rare and crudely made in the Aegean. The Yortan examples do not differ considerably from those of other sites in western or central Anatolia. On the whole, the Beycesultan whorls tend to be more richly ornamented both on the upper and lower parts of the biconical shape.<sup>50</sup> Also the truncated version is said to appear after the EB2 period. Similarly the differences both in shape and decoration between the Yortan and Thermi examples are rather slight, ie. Yortan nos. 303-307 (Fig. 85) (Troy Type 23) are absent in Town I-III where most of the Thermi whorls are found.<sup>51</sup> Troy I-IV whorls come nearest to those of Yortan.<sup>52</sup> Thousands of them were found by Schliemann.<sup>53</sup> Blegen records 429 pieces in Troy I-III. Despite their large numbers, these objects belonging to the common house utensils do not show enough stylistic variations to be useful in the dating of unstratified finds. Thus, at Troy the incised whorls really start in IIId as Type 23 but this is no guarantee for dating the Yortan examples to this period; some fine decorated whorls are found in Troy I while at Beycesultan they are actually in the majority already in Level XVII, and at Thermi in Town I-III which on the pottery analysis are contemporary with the Troy I-II period. Also Type 23 continues to be found beyond Troy III levels. The truncated shape of Yortan nos. 293-298 (Troy Type 21) is not found in Troy I which again may or may not be chronologically significant.

#### d) Metal Objects <sup>54</sup> (Fig. 88)

Objects of copper/bronze are disappointingly scarce and those made of gold are even rarer.<sup>55</sup> Even if one were to take into account the possibility of the excavators overlooking some less well preserved pieces, it is still clear that the Yortan people did not possess metal tools and weapons in such abundance as to bury them with their dead. In 1939 K. Bittel was able to study and publish only the copper/bronze and iron pieces and his conclusions are still valid.<sup>56</sup> The spiral bracelets are simple and common objects found in all periods. The pins no. 329-333 are well known types at Thermi I-V and Troy I-II settlements: no. 329 is Type 3 or 4 of Troy/Hisarlik;<sup>57</sup> no. 331 and no. 333 are found in Thermi I, no. 31-53, and IV, no. 30-19<sup>58</sup>; no. 332 and no. 330 are not unlike Type 3 and 1 or 2 of Troy respectively; no. 329 has a corroded head which may be obscuring some details. Pins with such a bell-shaped head are also found at Thermi IV, no.30.20<sup>59</sup>, and continue to occur beyond the Early Bronze Age.

The blade with a thickness of 0.01-0.02 mm belongs to a rare type with a spiral tip. Blegen could not find any but they are well known in Schliemann's Sammlung, no. 6208, 6209, 6210.<sup>60</sup> Of these "Rasiermesser" no. 6209 is almost identical to the Yortan blade, that even the handle has a

similar shape. The purpose of such an object is not immediately apparent.<sup>61</sup> A closer examination of the Yortan find has shown that the handle is carefully made and without any rivet hole. This proves the object was held and operated as it is, without a handle attachment. The author is inclined to identify it as a razor and the spiral tip may have been useful in the delicate operation of shaving. Schliemann's finds can not be reliably dated, though the object did not probably come into use before Troy II or the end of EBA1.

The shaft-hole axe of the hammer type, no. 336 (fig.88), is better known in the Anatolian EBA and was produced toward the end of the EB2.<sup>62</sup> On the Yortan axe the moulding round the edge of the shaft hole is noticeable and may be an indication of an even later date than the EB2. No. 335 and no. 337 are made of iron and quite different from the rest of Yortan metal objects. One is an arrow head or a small spear head with a flat and broad blade. No. 337 should be some sort of a piercing tool. It is obvious that they can not possibly belong to the E.B. Age burials of Yortan, when the metal was still largely unknown. They must be considered intrusions from much later times, perhaps as late as the Byzantine or Ottoman periods. At the recent excavation of Samsat (samasota) on the Euphrates an arrow/spear head identical to no 335. was found in the Medieval levels on top of the mound<sup>63</sup>.

It is hard to believe that by the EB1 and EB2 periods metal objects were still scarce in this part of western Anatolia. A more plausible explanation may therefore be that the Yortan burials, especially those of Class A pottery, do not belong to a particularly prosperous community where metal weapons and tools would have normally been passed on from one generation to another rather than disposed of as burial gifts. In fact, the richer tombs of the Balıkesir plain are known to have yielded a greater number of metal weapons.<sup>64</sup>

1. F. Mayence and V. Verhaagen, CVA no.3, Belgique, Pl. 4, no. 16.
2. W. Orthmann, 1966, Ist. Mitt. 16: 24.
3. M. Collignon, 1901, CRAI: 812.
4. See Chapter 1, p. 7.
5. M. J. Mellink, 1964, AJA 68: 275. T. Özgüç was able to make the same remark for the Kusura, Alişar pithos burials. See Die Bestattungsbräuche im Vorgeschichtlichen Anatolien (1948), p. 25, 31, 32.
6. Stated so in the registration of the pithos in the Musées Royaux d'Art et d'Histoire (Cinquantenaire) Brussels.
7. M.J. Mellink, 1964, AJA 68: 273; 1967, AJA 71: 253.
8. J.L. Angel, 1976, AJA 80: 388, Table 2.
9. M.J. Mellink, 1964, AJA 68: 274; 1969, AJA 73: 321.
10. See Chapter 1, p.5.
11. E. Pottier, CVA Louvre 4, France, no. 5.
12. I am greatly indebted to Miss L. Johns of the Institute of Archaeology, London, for this and other analyses of the pottery. I would also like to take the opportunity to express my gratitude to Professor J-L. Huot who allowed me to take samples from the small collections of l'Institut d'Archéologie Orientale, Paris.
13. Without thin sections of every piece it is often difficult to see whether a pot was slipped or burnished, or merely self-slipped which is a process of smoothing that brings up the finer particles of the fabric.
14. M.J. Mellink, 1964, AJA 68: 276.
15. S. Lloyd and J. Mellaart (1962) Beycesultan I, p.81. Recent excavations by Prof. R. Duru at Kuruçay, Burdur, are said to have produced material that could be earlier than Beycesultan XL and later than Hacilar I. According to the excavator the pottery does not contain the linear decoration in white, see 1980, An.St. 30:224,225.
16. J. Mellaart, 1954, An.St. 4: 204; A. Furness, 1956, PPS 22: 174 ff.
17. A. Furness, op.cit.; J.D. Evans and C. Renfrew (1968) Excavations at Saliagos, p.81 ff; J.E. Coleman, 1974, AJA 78: 334.
18. Ibid.
19. J. Deshayes, 1972, Arch. 25, no. 3: 201; J. Yakar, 1975, Tel Aviv 2: 142.
20. J. Mellaart, 1954, An. St. 4: 205 ff; J. Yakar, op.cit., p.138 ff.
21. A. Furness, op. cit., p.205; J. Yakar, 1979, An. St. 29: 54.
22. See Chapter 3, p.53, 54.
23. The same test was carried out on the Mersin white painted pottery. See J. Garstang (1953) Prehistoric Mersin, p.183. "...a white pigment gives the bubble reaction of lime to a drop of hydrochloric acid." However it should be pointed out that not all the burnished pottery with white decoration need be made in this technique. Indeed Prof. B. Alkım informs me that his analysis of this type of decoration on İkitiz Tepe pottery shows quite a different technique which does not involve the use of any lime or paint.
24. S. Schiek and F. Fischer, 1965, FS 17: Taf. 27.
25. S. Lloyd and N. Gökçe, 1951, An. St.1: 46, 56.
26. See Chapter 3, p. 48.
27. Mr. J. Mellaart informs me that some of the Balikesir incised patterns are actually filled in with yellow or red paste which is presumably red or yellow ochre.
28. M. Collignon, 1901, CRAI: Pl.1.
29. S. Lloyd and Mellaart (1962) Beycesultan I, p. 266, 269.
30. W. Lamb (1936) Excavations at Thermi, Lesbos, Pl. XXII, no. 35-65, 35-54.
31. C. W. Blegen (1950) Troy I, p.261, no.35-65; Fig. 360, no.35-287.
32. S. Lloyd and J. Mellaart, op. cit., Fig. F.1, no.18.
33. C. W. Blegen (1950) Troy I, p. 27, 28; Fig. 127.
34. M.J. Mellink, 1967, AJA 71: Pl. 77, Fig. 14,15; 1964, AJA 68: Pl.82, Fig., 24,25.

34. *ibid.*
35. H.Th. Bossert, Altanatolien, Pl. 21, no. 133. One idol is said to be from the Manisa area. A second is reported from Dorak (personal communication from J. Mellaart).
36. J.L. Caskey, 1972, AJA 76: p. 192, 193.  
O. Höckmann (1977) Art and Culture of the Cyclades, ed. J. Thimme, p.176, Pl. 560-566.
37. J. L. Caskey, *op.cit.*
38. H. Schmidt, 1902, Heinrich Schliemanns Sammlung.
39. B. Kadish, 1971, AJA 75: p. 129, 131, ill. no. 1598a.3, 1598e.5.
40. O. Höckmann, *op.cit.*, p. 221, 222, 228.
41. J.D. Evans and C. Renfrew (1968) Excavations at Saliagos, p. 86, 87.
42. The identification of these complexes as "shrines" has been rejected by M.J. Mellink. M.J. Mellink, 1964, AJA 68: 304. Review of Lloyd and Mellaart Beycesultan I.
43. K. Bittel, 1939 A.f.O. 13: Abb. 9, no. 10.
44. W. Lamb (1936) Excavations at Thermi, Lesbos, p.149, 177.
45. W. Orthmann, 1966, Ist. Mitt. 16: 22, Abb. 9, no. 79-81.
46. J. Mellaart (1966) Chalcolithic and Early Bronze Age in the Near East and Anatolia, Fig. 39, no. 10.
47. W. Orthmann, *op.cit.*
48. H. Th. Bossert, 1960, Or. 29: 317 ff; S. Schiek and F. Fischer, 1965, FS 17: 159, 166, Taf. 24, no. 32.
49. *Ibid.*
50. S. Lloyd and J. Mellaart, *op.cit.*, p. 274, 277, 278.
51. W. Lamb (1936) Excavations at Thermi, Lesbos, p. 162, Fig. 47.
52. C. W. Blegen (1950) Troy I, p. 29, 50, 216-218; Troy II, p. 216, 218; Troy III, p.14, 116.
53. H. Schliemann (1880) Ilios, p. 229 ff, p. 416 ff.
54. In U. Esin's works Kauntitif Analiz Yardımıyla Anadolu'da Başlangıcından Asur Kolonileri Çağına Kadar Bakır ve Tunç Madenciliği (1967), some eight metal objects are listed as "Yortan" (Ana. no. 11795-11802). This a misleading terminology. None of these eight pieces are known to come from Yortan but in the Istanbul Archaeological Museums are registered as finds from the Balıkesir area. I am most grateful to Miss B. Aksoy for supplying me with this information.  
P.S. de Jesus, The Development of Prehistoric Mining and Metallurgy in Anatolia, Prt. I,II, (1981), lists Prof. Esin's finds, repeating the mistake.
55. See M. Collignon, 1901, CRAI: 814.
56. K. Bittel, 1939, A.f.O. 13: 16 ff.
57. C.W. Blegen, *op.cit.*, Fig. 125, Fig. 358.
58. W. Lamb, *op.cit.*, Fig. 48a.
59. *ibid.*, Fig. 48b.
60. H. Schmidt, 1902, Heinrich Schliemanns Sammlung.
61. K. Bittel (1934) Prähistorische Forschung in Kleinasien, p.51-53; Pl. XIX 7-11.
62. D.B. Stronach, 1957, An.St. 7: p. 117,118.  
P.S. de Jesus (1981) The Development of Prehistoric Mining and Metallurgy in Anatolia, Prt. I,II, p. 136.
63. I thank Prof. N. Özgüç who allowed me to pass on the news prior to her publication of the Samsat Excavations.
64. K. Bittel, 1955, Ist.Mitt. 6 : 113 ff; S. Schiek and F. Fischer, 1965, FS 17: 157 ff; D.B. Stronach, *op.cit.*

## CHAPTER 3 A COMPARATIVE STUDY OF THE YORTAN POTTERY

In the absence of any stratigraphy at Yortan the only way to identify and date the finds is by a typological and comparative study. The former method has been used here with considerable reserve and only secondary to the latter method. It is thought that a disciplined analysis of the parallels with the well-known sequences of the west Anatolian sites is a more reliable method of research than a purely typological study. The stratified sites in question are Troy/Hisarlik on the Troad coast, Thermi in Lesbos, and Beycesultan near Çivril in the Vilayet of Denizli. The more distant Poliochni, Karataş-Semayük and Aphrodisias provide supplementary material. It is not for the first time that the Yortan pottery has been the subject of such a study. It is, however, only now that more than 90% of the finds are available as one body of material showing all that there is to be seen from the site. The fact that the mentioned sites are not located in the immediate vicinity of Yortan and could actually represent quite different cultural zones, may raise doubts as to the validity of the parallels and conclusions drawn from them. For example, according to the EB2 sequence of Troy/Hisarlik and Beycesultan, the technique of decorating burnished pottery with matt white painting goes out of use towards the end of the period, and at no time was this ornamentation popular on these sites. But at Yortan, and probably elsewhere in the Yortan Culture, it was commonly used throughout the period with a possible extension into the next period. The proposed three-fold division of the pottery is, therefore, tentative and the lines between the classes, especially that between Class A and B, and B and C, ought to be kept flexible allowing for a certain amount of continuity and survival. Many of the parallels sited are very close and often identical, and it is hard to believe that the conclusions drawn will be proved drastically wrong by future work.

The laborious task of giving each parallel individually and in full detail may be justified by emphasising the importance of the method; it is upon this comparative study that the whole understanding of Yortan is based, and it is here that some differences of opinion may well be raised. Clarity in the use of the relevant material will, it is hoped, at least serve to prevent controversy and present the facts in full light.

### CLASS A POTTERY

#### SHAPE I Bowls (Fig. 23, 24; Pl. III)

Together with the Berlin Collection eighteen bowls are known to have come out of the pithos burials. Berlin Nr. Vas. 4463 is known to exist but could not be illustrated.<sup>1</sup> Except for no. 11 and no. 12 (Fig. 24) all the Yortan bowls belong to the carinated type and are hand-made. Irrespective of their relatively rare occurrence among the jars and jugs, they form a very useful group of material for comparison with the settlement sites. Some more bowls with similar features are known from the robbed cemeteries of the north-west, but clearly bowls were still used far less frequently as burial gifts than jars and jugs, possibly to be explained by the nature of the funerary customs.<sup>2</sup>

### Bowl no. 1, 2, 3, 4 (Fig. 23)

These small bowls show the characteristic profile of a carinated shoulder, incurved rim with a round lip, and a rounded base. The shape is well-known in the EB1 and EB2 of western Anatolia. Its ancestry goes back to the Kumtepe Ia<sup>3</sup> and Ib, <sup>14</sup> phases where besides the rolled rims, there are bowls with slightly incurving rims. There can be little doubt that the sharp angular profile of the EB2 is a development from the rolled rim, best illustrated in Kumtepe Ib 2 and Ib 3.<sup>5</sup> The true inverted rim and angular shoulder as seen on the Yortan bowls, is first found in the Ib 4 phase.<sup>6</sup>

Bowl no. 1 is a plain vessel without any ornamentation or lug. Bowl no. 2 has an incised cross on its rounded base, and the carinated shoulder is pierced vertically in two places forming a pair of string holes. This particular detail is not known from Troy/Hisarlik or Thermi bowls but some identical examples are found on a number of sites in the regions of Balikesir, Akhisar and Manisa.<sup>7</sup> Bowl no. 3 has a lug handle set on the carination. Bowl no. 4 has the more distinctive tubular lug in a pair and below the carination. Two such lugs are illustrated from Troy Ib and Ic but both sherds belong to a different shape of bowls, A.25 and A.24 respectively.<sup>8</sup> Similarly, this feature occurs in Poliochni Blue but on jars rather than bowls.<sup>9</sup>

### Bowl no. 5, 6 (Fig. 23)

Both are set on flaring pedestal bases with slightly oval openings. The former bowl has a horizontally pierced tubular lug which together with the pedestal base forms a good diagnostic feature for some close parallels with Troy, Thermi and Beycesultan:

#### Troy/Hisarlik

Shape A.13 of Troy I is an identical vessel. It is worth pointing out that when only a fragment of a vessel is at hand, it is often not possible to determine whether the sherd belongs to a bowl with or without a lug, or with a base. Some of the sherds classified as Shape A.12 may, therefore, belong to this bowl as well. The following examples of the pedestal base are satisfactory parallels to the Yortan bowl no. 5:

Fig. 224 no. 36.840	Troy Ib
Fig. 236 no. 29, 32, 34	Troy Ib
Fig. 239 no. 23, 24	Troy Ic
Fig. 262 no. 27	Troy Ic

Such bases are first noted in Troy Ib. However, this could be a mere coincidence and the shape could start from earlier levels. A shorter pedestal base, without the openings, is first noted in Kumtepe Ia 2<sup>10</sup> and later in Ib 2.<sup>11</sup> In fact, the cylindrical tubular lug of the Yortan bowl does appear already in Troy Ia.

#### Examples:

Fig. 235 no. 2	Troy Ia with three transverse incised lines
Fig. 239 no. 3	Troy Ic (also no. 1, 5, 7, 12)
Fig. 260 no. 8	Troy Ic
Fig. 261 no. 16	Troy Ic

On the Yortan bowl the lug has five transverse grooves, similar to the incised lines on the first examples from Troy I, where sometimes this ornamentation takes the form of neat flutings. ie. Fig. 261, no. 10. Towards the end of Troy I the lug changes shape, taking the characteristic "ends pinched up" form - ie. Fig. 261, no. 17, 18; Fig. 244, no. 2-7.

Kumtepe once more gives an earlier appearance of the tubular lug, in the Ib phase where the form is slightly concave but becomes more straight in the Ic phase.<sup>12</sup> The contemporary Poliochni Black and Blue also have similar lugs.<sup>13</sup>

#### Thermi

No. 96, Pl. XXXV, from Town I or II makes a good parallel. The upper part is largely missing so that the shape of the lug or handle is not known; but the rest of the bowl on a pedestal base is not different from Yortan or Troy/Hisarlık bowls. A second bowl, no. 6, Pl. XXXV, from Town I is similar, though the base is rather short without the "window" openings, and the lug is not tubular.

#### Beycesultan

Pedestal bowls with the "window" openings are found in the EB2 period and are classified as Shape I, without the tubular lug:

Fig. P.22      no. 10, 13, 15      Level XVIC

Beycesultan bowls tend to be decorated with matt white painting on the carinated shoulder, a feature which is not seen on the Yortan bowls but is known to occur at other sites of the Yortan Culture.<sup>14</sup> The absence of the tubular lug on the Beycesultan bowls could be explained as due to the incomplete form of the vessels, especially when such lugs do occur on other forms of the carinated bowl. As a regional and local characteristic these lugs are often ornamented elaborately with ribbings and flutings:

Fig. P.23      no. 3, 7, 9, 22      Level XVI

#### Bowl no. 6 (Fig. 23)

It differs from the previous bowl only in the position of the carinated shoulder which is set rather high up, so much so that the rim appears to be thickened. It resembles the incurving rolled rims of Kumtepe Ib,<sup>15</sup> and the flat topped rims of Ic phase.<sup>16</sup> Other diagnostic features are the pair of small knobs on the rim, and the vertical piercing of both the knobs and the rim. Judging by the finds of the Balakesir tombs, this type of knob was common on the bowls of the Yortan Culture but is lacking at Troy/Hisarlık, Thermi, or Beycesultan. Shape A.6 of Troy I is the nearest to it, Fig. 234, Fig. 253, and possibly these protrusions represent an earlier or cruder version of the prominent horn lugs of the EB2 Beycesultan.

#### Bowl no. 7 (Fig. 23)

This bowl differs from the rest of the carinated bowls in the deep body shape which is formed by straight flaring sides and a small, well-defined

flat base. In Troy/Hisarlık Shape A.12 from I-III settlements is generally related but differs on specific details. Usually instead of the small lug handle there is a tubular lug or loop handle.

#### Thermi

In Class A, Bowl no. 1 is identical and noted for being the most common type of bowl in this class (Town I-II):

Pl. XXXV no. 2, 64      Town I

#### Beycesultan

Some fragments from the earlier levels of the Early Bronze Age period belong to the shape, no. 5 (EB1) on Mellaart's typology:

Fig. P.14 no. 20-25      Level XIX  
Fig. P.15 no. 18-21, 28, 29      Level XVIII, XVII

Those of Level XVI, Fig. P.23, are also similar in general form, but are elaborated with lugs or loop handles.

Bowl no. 8 (Fig. 24; Pl. III)

The profile is still carinated but not so angular as the above bowls, and the inverted rim shows a flattish lip. This more rounded carination is a development which starts in Middle Troy I - ie. Fig. 259, 263, and continues into Troy II.

#### Thermi

The nearest examples are found in Class B, Bowl no. 1:

Pl. XXXV no. 159      Town II or III  
Pl. XXXV no. 188      Town III  
Pl. X no. 321      Town IV  
Pl. XXXVI no. 353      Town IV

#### Beycesultan

Shape 4 of the EB1 levels is a satisfactory parallel showing the same deep body and rounded carination. Only the small, angular lug of the Yortan bowl is missing:

Fig. P.14 no. 10, 11, 19      Level XIX  
Fig. P.15 no. 35, 37, 38      Level XVII

Thus, while Troy and Thermi evidence suggest a date later than the beginnings of the EB2 period, Beycesultan finds point to an earlier occurrence in the south-west. This could be interpreted as a proof of the contemporaneity of Troy I and Beycesultan Level XIX.<sup>17</sup> However, in the face of the rest of the parallels it is considered insufficient grounds for changing Mellaart's revised chronology.



Bowl No. 9, 10 (Fig. 24)

These shallow and carinated bowls are provided with a horizontal loop handle which at Troy/Hisarlık does not appear before the second settlement:

Fig. 412	no. 16, 22	Troy IIC
Fig. 375	no. 36.838	Troy IID
	no. 36.854	Troy IIF

As Shape A.16, they are much deeper than the Yortan bowls and are often wheel-made. Yet such handles do not occur in Troy I, and a later date in the EB2 seems more plausible than in the beginnings of the period.

Thermi no. 495, Pl. XXXVII, from Town V is a plausible parallel hence supporting the lower date. The shape is noted as being rare in Class C pottery. Beycesultan also lacks good parallels. The loop handles are found in the EB2 levels, i.e. Fig. P. 23, no. 4, 5, 6, but they tend to be rather highly flung and quite unlike the Yortan shape. The only evidence for an earlier date is provided by the two special bowls from Level XVIII, Fig. P. 17, no. 4, 5, but again the similarities are rather general.

Of the three bowls from the Berlin Collection, Berlin Nr. Vas. 4463 is mentioned by both W. Lamb and W. Orthmann,<sup>18</sup> and represents a very distinct shape with flaring sides, rounded base, and lugs set on the rim. It is quoted as being very similar to bowl no. 111, Pl. XXXV, from Thermi Town II. The remaining two bowls, no. 11 and no. 12 (Fig. 24) on the other hand are completely different from all other Yortan bowls. The shape is deep, sack-like, and without a defined base. The simple and upright rim has a small lug handle. One similar bowl was found at Babaköy,<sup>19</sup> otherwise the comparative material is completely lacking in Anatolia. In view of their simple and rounded shape, and earlier date in the Early Bronze Age seems appropriate, and they may even be imports (Cyprus?).

SHAPE II Small jars with tall neck and on feet  
(Fig. 25-27; Pl. IV)

Together with the next shape of jars of an identical general form, these vessels constitute a numerous and highly distinctive shape of pottery from Yortan. Except for no. 50 (Fig. 27) all the known examples share the same features. The neck is tall, often cylindrical or slightly flaring. It is topped with a flanged rim. Two holes placed opposite one another and below the rim serve to attach lids of Type (a) (Fig. 33, 34). The body is round or globular and stands on three or four feet. There are always two vertically pierced lugs (tab handles) on the middle of the body, and sometimes also two small knobs in between the lugs. Jar no. 50 differs from the others in its larger size and in the everted rather than flanged form of the rim.

The jar was initially made in separate parts, the neck and body. After joining them the additional features such as the feet were applied before the slip coating and incision. To produce vessels of this size, the fabric had to be finer than that used for the larger jars and jugs; but there are some coarser pieces and often the firing temperatures are low. No. 19 (Fig. 25) is an exceptionally fine product with very thin and hard-fired walls, and a very smooth burnished surface. Burnishing, possibly after a slip coating, appears to be the usual way of surface treatment. The absence of the red ware jars is notable. No. 13 (Fig. 25) and a second jar in the Berlin Collection<sup>20</sup> are plain vessels, the rest being ornamented by incision. The

linear geometric motifs are arranged in two ways - either horizontally parallel to the contours of the body (no. 13 - no. 29), or vertically between the neck base and the feet (no. 30 - no. 50). Oddly enough the popularity of these small vessels at Yortan is contrasted by their almost total absence at Troy/Hisarlik and Thermi. Some related jars occur at Beycesultan.

#### Troy/Hisarlik

The nearest shapes are C. 28 and C. 35 which do not occur in Troy I. The following coarse examples of C. 28 may be cited:

Fig. 401	no. 35.769	Troy IIg
Fig. 401	no. 35.515	Troy IIg

These jars are similar only in the general shape of the lugs and body which stands on a flattened base. C. 35 on tripod feet, therefore, makes a better comparative case:

Fig. 403	no. 36.742	Troy II d
Fig. 403	no. 37.967	Troy II d
Fig. 403	no. 37.427	Troy II g

Some surprisingly good examples of the Yortan shape are found in Troy IIIa, Fig. 78, no. 34.525, no. 34.289, which are also incised in the Yortan fashion.

#### Thermi

The jar is completely missing in all levels.

#### Beycesultan

Here, too, the jar falls short of being identical and it can only be related to the Yortan shape in a general way:

Fig. P. 22	no. 5	Level XVIc	has pierced lugs and incised chevrons, but is not on tripod feet
Fig. P. 25	no. 24	Level XVI	no. 19 of the same level could also be rated as a related shape
Fig. P. 33	no. 12	Level XV	but larger in size
Fig. P. 38	no. 21	Level XIV	ornamented with grooves which are not found on the Yortan jars
Fig. P. 41	no. 1,3	Level XIV	

Although these jars are undoubtedly a variation of the Yortan shape, they do not share the same details of form and ornamentation. The rarity of Type (a) lids at this site is also worthy of note.

This partial or complete absence of close parallels from all three sites calls for an explanation. Is it because such vessels were mainly produced for the burials and so are largely absent on settlement sites? Or is this pot one of the characteristics of the Yortan Culture pottery and therefore does not occur outside it? On present evidence the answer seems to lie somewhere in between the two alternatives. Almost complete lack of finds at Troy/Hisarlik and Thermi, which otherwise are closely related to Yortan and can even be understood as sites situated on the peripheries of the Yortan Culture tend to favour the former possibility. In support of the latter is

the fact that quite similar jars are reported from the Sardis burials 21 which still belong to the Yortan Culture, but they are missing altogether in the pithos burials of the plain of Elmalı where the pottery is basically different from that of the north-west.

SHAPE III Larger jars with tall neck and on flattened base  
(Fig. 28-32; Pl. V)

Twenty seven jars belong to this shape.<sup>22</sup> In basic outline they are not different from the previous group, but some are rather large and instead of the pierced lugs, four small loop handles are set vertically on the upper body. Only on no. 54 (Fig. 28) are these handles replaced by four elongated knobs. The base is flattened or slightly rounded but never on tripod or quadruple feet. Elsewhere this generalisation does not seem to exist. Among the vessels of uncertain provenance, no. 24 (Pl. XVIII) is an identical large jar but like the jars of Shape II it stands on tripod feet and has lugs and incised decoration.

With the exception of no. 57 (Fig. 29) ornamentation is always in matt white chevrons, four on each pot. Sometimes there are also plastic knobs. No. 57 is a misfit; it is covered with incised lines, on the neck and body, and besides the four loop handles there is a basket handle over the horizontal mouth. The incised and white-filled pattern on the neck is rather striking but has not been noted from any of the excavated sites. A second but coarser jar of similar details is known to have been found in the robbed tombs of the north-west (Fig. 93, no. 23).<sup>25</sup>

The fabric is naturally coarser than that of the smaller jars; but the surface finish is still fine and often burnished to a high shine.<sup>24</sup> The comparative material is just as weak, with the better material again coming from Beycesultan. As in the case of the previous group of smaller jars, similarities between the Yortan jars and those of the three major sites exist only in the general form of the body and the spout. The most recurring features of Yortan, the small loop handles on the body and the matt white painting, are never found elsewhere.

At Troy/Hisarlık C 28 is the more relevant shape. Specific examples from Level IIg have already been listed.<sup>25</sup> One further broadly similar jar is no. 559, Pl. XIII, in Thermi Town II.

Beycesultan

Fig. P. 33	no. 9, 12	Level XV	and possibly no. 4, 6. Light brown coloured no. 9 has incised zigzag band or chevron motif.
Fig. P. 42	no. 3	Level XIV	differs from Yortan no. 4 only in the replacement of the handles with lugs.

Here, too, the comparative data suggest a date in the second half of the EB2 period. Yet the nature of the fabric, surface treatment, and the mottled colouring are all familiar technical details, shared by bowls and jugs, and therefore the beginnings of these jars need not be put later than other types. No. 54 (Fig. 28) is the only jar that imposes some difficulty in dating. The rim, neck and body are not different from the rest of the group, but here the characteristic small loop handles are substituted by four elongated knobs. Also the fabric is finer in texture and lighter in colour. Originally it may have been slipped in a light red colour. Possibly it is a

later version of the shape. A similar typological distribution may be suggested also for a number of jars, no. 53 (Fig. 28), no. 56, 58, 60, (Fig. 29), no. 70 (Fig. 32), which all show a sharper outline marked by a carinated body, tall and conical neck and flattened base. No. 70 (Fig. 32) is even provided with a raised base. On these grounds it seems plausible to ascribe them a general date between the middle and late EB2 while the rest with more rounded and irregular outlook could belong to the early phase. A similar typological division is not apparent among the smaller jars of Shape II.

In Poliochni "Yellow" similar vessels combine the characteristics of these and Shape II jars;<sup>26</sup> in size they are like Shape III but have pierced lugs, incised decoration, and tripod feet. Their occurrence in the "Yellow" period is proof of the shape's continuity to the end of the EB2, and into the EB3 period.

SHAPE IV Small jars with short neck or hole-mouth  
(Fig. 32, 33; Pl. VI)

The diagnostic feature is the small rounded or globular body, topped with a short neck or hole-mouth. No. 71-73 (Fig. 32) have the simple flattened base; no. 74-76 (Fig. 32, 33) stand on tripod feet, and the rest are on short flaring pedestal bases (Fig. 33). Every jar is provided with vertically pierced lugs. No. 79 (Fig. 33) is a particularly fine specimen, ornamented with fine incision and finished to a faultless lustrous black surface. The shape cannot be said to typify the pottery of Yortan, but it does represent a rather striking form and is found in good numbers on the settlement sites. The interior of no. 76 jar (Fig. 33) was found to contain the remains of some red orange coloured substance which must be the same as that in Shape II jars.<sup>27</sup> Depending on the form of the neck and rim, lids Shape V of a) or b) types were used with these jars.

Troy/Hisarlik

C. 24, C. 25, C. 27 (on flattened base); C. 34 (on tripod feet); and C. 26, C. 31 (on pedestal base) are the relevant shapes. C. 34 and C. 31 are found at the end of Troy II but the rest are essentially Troy I shapes. Once more the crude and coarse nature of the material becomes rather obvious when compared with the fine products of the Yortan potters.

Fig. 230	no. 36.686	Troy Ia
Fig. 230	no. 36.689	Troy Ib
Fig. 230	no. 35.758	Troy Ic similar to Yortan no. 1
Fig. 230	no. 35.539	Troy Ic on tripod feet
Fig. 230	no. 36.691	Troy Ic
Fig. 230	no. 36.692	Troy Ic on pedestal base
Fig. 230	no. 36.687	Troy Ib with hole-mouth
Fig. 230	no. 37.983	Troy Ic

There are also a number of body sherds in Troy I, Fig. 244, no. 23, 27; Fig. 247, no. 12, which are incised and may well belong to C. 24 and C. 31 shapes.

Thermi

This site also yields some very satisfactory parallels. Most of the finds come from Town I-III. The hole-mouth appears in Town IV:

PL. VIII	no. 9, 10	Town I	second jar is decorated with ribbings
PL. XXXV	no. 113	Town II	
PL. XXXV	no. 196	Town III	
PL. VIII	no. 249	Town III	decorated with impressed herring-bone pattern
PL. XXXVI	no. 250	Town III	

In the shape of the body, rim, and to a lesser degree pierced lugs, all of these jars are indistinguishable from Yortan no. 75, 76 (Fig. 32, 33). Only the raised base is not found at Yortan. Instead there is the more developed pedestal. The following examples are on tripod feet:

PL. XXXV	no. 114	Town II	
PL. XIII	no. 200	Town III	has vertical, incised bands
PL. IX	no. 201	Town III	incised

Three further examples are the hole-mouth type:

PL. XIII	no. 356	Town IV	incised
PL. XXXVII	no. 387	Town IV	biconical shape, incised
PL. XXXVII	no. 410	Town IV	
PL. XXXVII	no. 411	Town IV	

#### Beycesultan

Karataş-Semayik has not produced any such examples. It is also rare at Beycesultan. The known examples are ornamented in heavy grooves:

Fig. P.41	no. 4, 6	Level XIV
Fig. P.45	no. 3	Level XIIIc

The Yortan jars are ornamented sparingly in fine incision. The more richly incised examples, no. 11-15 (Fig. 92) are from the Balikesir tombs. Some of these jars are on tall and flaring pedestal bases which together with the more elaborate ornamentation and superior surface finish could be taken to imply an EB2 date later than that of the above-mentioned Yortan jars. Such a date is conceivable only for no. 71, 72 (Fig. 32) of Yortan, which are made of a uniform light grey and hard fabric without mottling. Also no. 72 could be likened to Beycesultan jars, no. 4, 6 of Level XIV, Fig. P.41.

In the Cyclades the shape is known as the pyxis. Both stone and clay pyxides occur in the Grotta-Pelos and Keros-Syros Cultures,<sup>28</sup> but any relationship between the Anatolian jars and the Cycladic pyxides ought to be understood in the broadest sense of the word. True, in both regions the shape contains an individual and marked character, it is provided with pierced lugs, and there is a lid with string holes; but the common features cannot be taken beyond this point, and in other details of shape and decoration there is no resemblance whatsoever. The only vessel that can possibly be regarded as remotely related to the Cycladic pots is the pyxis proper, Fig. 91, no. 9/10, which with the flanged base and almost upright sides bears some resemblance to the Grotta-Pelos variety with a slightly domed lid.<sup>29</sup>

#### SHAPE V Lids (Fig. 33-34 ; Pl. VI)

Lids make up an additional group of comparative material. The basic

form varies according to the shape of the rim and neck of the pot which is enclosed by these delicate objects. At Yortan two main types, (a) and (b), are known and they belong to the jars of Shape II and IV. A third, Type (c), is a coarse vessel and was clearly for a storage jar.

Type (a)

At Yortan they are mostly in a convex or dome shape. A central knob on the outside serves as lid-handle. Two holes on either side of the knob correspond to those of the jar below the rim, and also to the pierced lugs on the middle body. The fabric, surface treatment, and incised decoration are the same as those of the jars.

Kökten's finds at Babaköy Burial no. 430 were enough to prove that at least some of these lids belong to the jars of Shape II. Now Gaudin's illustrations, Pithos no. 8, 15, 45, 47, 48, 58, 62, 06, (Fig. 1-11) are also available. Some of the lids, especially those with a flat rather than a convex profile might also have been used with the pyxis which is not represented in the Yortan finds but is known from other cemeteries of the north-west, no. 7-10 (Fig. 91).

Jars of Shape III are also suitably formed for this type of coverage but somehow none of the Yortan examples has the necessary string holes under the flanged rim.

Both convex and flat lids are found throughout Troy/Hisarlık as Shape D.14 and D.15. Several were found at Kumtepe:<sup>31</sup>

Fig. 267	no. 33.195	Troy I
Fig. 267	no. 36.678	Troy I
PL. 78	no. 724	Kumtepe Ic 1
PL. 78	no. 826	Kumtepe Ic 2

The Thermi lids classified as Type Ig and Ii belong to the convex shape and are found in Town I-II. Type Ih is flat and very common in Town I-III. Type If, which is also convex but much smaller in size, appears in Town III-IV. In the absence of the jars, Shape II, one must assume that all these lids were for the pyxis and hole-mouth jar of Shape IV, both of which occur in good numbers on this site and Troy/Hisarlık. At Beycesultan only three such lids were found. The first two, Fig. P.20, no. 5 and 7, come from Level XVIII, and the third, Fig. P.33, no. 7, from Level XV.

Type (b) (Fig. 34)

These lids have a flat top crowned with five knobs, four of which are flattish and obliquely pierced. The fifth is a central and conical one. The general shape of the lid is cylindrical so that the straight sides fit over the short, collar-neck jars of Shape IV. Troy Shape D.11 is an exact parallel in the Early sub-period of Troy I. One fragment was found in Kumtepe Ic 2 phase.<sup>32</sup>

Fig. 231	no. 33.162	Troy Ic
Fig. 23	no. 825	Kumtepe Ic 2

Thermi

Lids Type XIV a and b are in this shape.

PL. XVII	no. 107	Town I or II
PL. XXXV	no. 196	Town III

### Type (c) (Fig. 34)

The only example from Yortan is a coarse and irregularly shaped vessel without any ornamentation. Shape D.1 from Troy/Hisarlık is an exact parallel and occurs from Troy I onwards. The later examples are wheel-made. At Thermi it is Type XIII d (PL. XL) and is found in Town I and III-IV.

Obviously the purpose of these objects was to provide coverage for the jars with suitable apertures; but as handmade pottery, the lid and the pot never show a tight fit, and one may wonder whether this was a symbolic rather than a practical arrangement. Since the holes are positioned opposite one another, the lid would have been tied down on either side, perhaps with some perishable string. With Type (b) lids, there is no hole under the jar rim, and it must have just fitted over the short and upright neck, unless the vertically pierced lugs on the jar body and those on top of the lid also had the function of securing the two pieces into one unit. Perhaps in this way the "sacred" contents of the pots were "safely" enclosed as part of the rite, and then deposited in the tombs with the dead.<sup>33</sup>

### SHAPE VI Juglets (Fig. 35 ; Pl. VII)

Some thirteen pieces are illustrated for this miniature and striking jug shape.<sup>34</sup> With the exception of no. 100 (Fig. 35) the height is never above 7.5 cm. The short neck is round, or more rarely angular, and extends to form an obliquely cut, or cutaway type spout, sometimes with a notched tip. The single loop handle can be oval or angular in section. The pouring channel is no more than a narrow hole leading into a solid body with little space to hold any liquid.

The miniature size could only be attained by using a fabric much finer than that for the larger jugs. The surface is always highly burnished and ornamented with incised and white filled patterns. No. 110 and 111 are particularly fine products.

One crude juglet from the the Third City is illustrated by Schliemann in Ilios, no. 44.<sup>35</sup> Otherwise it is not represented at Troy/Hisarlık or Beycesultan. However, one fair example is known from Kara Ağaç Tepe<sup>36</sup> and there are some surprisingly good parallels at Thermi:

PL. XII,	no. 63	Town I	classified as Miniature vase
XLIII			Type 38
PL. XII	no. 556	Town I	
PL. XII	no. 126	Town II	
PL. XXXV	no. 140	Town II	
PL. IX	no. 506	Town V	Class C, jug 11 - incomplete

The juglet is best represented in the Class A pottery of Thermi. Jug no. 11 of Class C could also be this shape, which is in line with the argument that these vessels are really miniatures of the larger jugs, Shape VII-X, which start in the beginnings of the EB2 period, if not earlier, and last to the end of the period.

A rare appearance on the settlement sites once again provokes the question of the purpose of these jugs. It is most unlikely that they could

be considered small containers of a rare or valuable liquid. The globular or pear-shaped body is simply not made to hold any liquid at all. As miniatures of the larger jugs they were perhaps children's "toys". Since some are found in the habitation levels of Thermi the living children might have had them as well. The lack of finds at Beycesultan and Karataş-Semayük shows clearly that this is another characteristic of the Yortan pottery not found in the south-west.

SHAPE VII Small jugs with obliquely cut spout (Fig. 36, 27;  
PL. VII)

The largest jug, no. 117 (Fig. 36) is not higher than 12.5 cm. Otherwise these and the next shape of jugs share the same features. A round or globular body stands on a flattened base, and only in two cases are tripod feet provided. The short neck is broad and flaring, and is cut obliquely to form a modest beak spout. A slightly everted rim always has a round rimlip. Each jug is provided with a loop handle which is placed between the upper part of the body and the lowest point of the rim at the base of the neck. Jug. no. 117, and no. 126 (Fig. 36, 37) have a second, smaller loop handle on the front of the body. More unusual is no. 119 (Fig. 36), with three such extra handles. Obviously the hallmark is the form of the spout and the single loop handle. Only one jug, no. 113 (Fig. 36) does not comply with this rule, and instead it has a horizontal spout. Several more jugs with this type of spout are illustrated from the Berlin Collection <sup>37</sup> but they seem to be later in date, possibly belonging to Class B or C pottery of Yortan.

The fabric varies between fine and coarse. The surface is smooth and often burnished after slipping. Mottling is very common. Black and grey colours dominate and out of a total of twenty two jugs only three could be singled out as red ware, <sup>38</sup> no. 132, 133, and 134 (Fig. 37). Incision is never applied to this or the next shape. When ornamented it is either with simple plastic features or, more commonly, with matt white painting. No. 131 (Fig. 37) is a particularly unsuccessful product; the overall shaping is irregular, the walls are rather thick, and due to the mottling, and possibly also to the chemical environment of the burials, the chevrons are hardly visible. In some parts they actually appear in a tone of grey and darker than the background colour. At the other extreme no. 119 (Fig. 36) is a very fine piece, unfortunately incompletely preserved. A highly burnished surface is in two colours, black above the handles and a mild tone of light brown on the lower body. This gives the impression of the ability to control oxidisation and reducing the atmosphere of the kiln. However, such vessels are very rare at Yortan and need not be any more than accidental products. <sup>39</sup>

Troy/Hisarlık

Shape B.13, B.14, and to a lesser degree B.17, are beak-spouted jugs. Smaller examples are rare, and all the finds show a fabric coarser than that of Yortan. Shape B.13 and B.14 belong to Troy I. Shape B.17 more or less takes the form into Troy II:

Fig. 228	no. 35.540	Troy Ic
Fig. 228	no. 35.541	Troy Ic



## Thermi

Jugs 1, 5, 6 of Class A and jug 1, 2, 6 of Class C are fairly good parallels:

PL. XII	no. 71	Town I
PL. X	no. 560	Town I
PL. VIII	no. 161	Town II
PL. XII	no. 164	Town II or III
PL. XII	no. 235	Town III
PL. VIII	no. 253	Town III impressed chevrons
PL. XII	no. 570	Town IV

## Beycesultan

One such beak spouted jug makes an early appearance in Level XIX. But the shape becomes common in the EB2 Levels (Shape no. 8):

Fig. P.14	no. 31, 36	Level XIX
Fig. P.22	no. 3, 12	Level XVIc
Fig. P.25	no. 5, 6, 7, 8, 13	Level XVI
Fig. P.38	no. 13	Level XIV
Fig. P.39	no. 2, 3	Level XIV

Some of these jugs are in a neck and spout form which is slimmer than that of the Yortan jugs. This slight deviation in broadly the same type of jug can be observed also on jugs of the Elmali plain and may be attributed to regional variations.

Further comments on the peculiarities of the shape are outlined under the next Shape.

SHAPE VIII Larger jugs with obliquely cut spout (Fig. 38-44; Pl. VIII)

These larger vessels make better comparative material than the smaller jugs which were probably also play-objects for the younger population of the site. Altogether some eighty five jugs are known to exist, which makes the shape the most numerously represented one in the pottery of Yortan.<sup>40</sup> Ornamentation and other details are the same as those noted for the previous Shape VII. Being larger and thicker pots, the fabric is naturally coarser but few jugs are very coarse.<sup>41</sup> The formation of the body and neck is rarely perfect, with much asymmetry all round. The surface colour is mottled in tones of black, grey and brown. Nevertheless these jugs often make a very attractive pottery and it seems that this achievement is mainly due to the application of a slip coating and subsequent burnishing. In this way the coarse nature of the fabric could be concealed and a lively outlook gained. Moreover, since all the vessels are hand-made the irregularities in shaping are favourably balanced by a feeling of individuality that is embodied in each pot.

Characteristically, the globular body sits on a small base, tilted forward. The single loop handle is usually oval in section, but sometimes it acquires a sharper outline becoming a little angular. This metallic feature does not, however, appear on any other part of the pot. Several attractive jugs, no. 140, 145, 146, 149 (Fig. 39, 40, 41) share a gently rounded bulge on the lower part of the neck and the spout is cut steeply in a true beak-like formation. All these details contribute to the naturalistic

and lively, rather than dull and metallic, impression of the shape. To illustrate the point with one example, Fig. 94, no. 28 is a jug with a better fabric and symmetry and therefore it is technically a superior product. Yet in its dull grey colour and rigid outline, it does not make a beautiful or attractive vessel.

Jug no. 149 (Fig. 41) may be pointed out as the best Yortan product of the shape. Jug no. 160 (Fig. 44) falls slightly out of the general shape. It is a rather squat vessel, with a broad neck and spout which give it a "Kusura cup" type outlook. Dark, brownish colour and very prominent knobs all add to the "foreign" appearance of the vessel.

#### Troy/Hisarlık

B. 13 is an identical shape and found throughout Troy I. None of the examples is ornamented with matt white chevrons:

Fig. 228	no. 36.735	Troy Ia
Fig. 228	no. 36.843	Troy Ia
Fig. 228	no. 36.760	Troy Ib
Fig. 228	no. 36.641	Troy Ic
Fig. 228	no. 37.1137	Troy Ic

The shape continues into Troy II and III as B. 17, but then the spout is less beak-like and more horizontal:

Fig. 388	no. 35.575	Troy IIg
Fig. 388	no. 35.513	Troy IIg
Fig. 388	no. 35.429	Troy IIg
Fig. 70	no. 34.278	Troy III

Kumtepe, ca. 5 km north-west of Troy/Hisarlık also has these jugs in the Ic 1 phase, thus confirming an early EB2 appearance of the shape in the Troad.<sup>42</sup>

PL. 78	no. 721, 722	Kumtepe Ic 1
PL. 78	no. 816, 817, 818	Kumtepe Ic 2

But several jugs from Kara Ağaç Tepe are the closest Troad finds to the Yortan group.<sup>43</sup> In every detail of the shape - oblique cutting of the spout, single loop handle, overall proportions of the shape, and the surface treatment - they are almost indistinguishable from those of Yortan.

#### Thermi

PL. XXXV	no. 18	Town I	
PL. VIII	no. 70	Town I	
PL. XII	no. 233	Town III	
PL. XII	no. 288	Town III	three knobs on the upper body
PL. XXXVI	no. 327	Town IV	brown ware
PL. XXXVI	no. 328	Town IV	grey, brown ware
PL. XXXVII	no. 413	Town IV	
PL. XXXVII	no. 419		with a rather broad neck and spout

#### Beycesultan

Fig. P. 25	no. 1, 2, 12	Level XVI but more like the "Kusura
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				cup"
Fig. P. 31	no. 4, 9		Level XV	on tripod feet
Fig. P. 32	no. 1, 2, 3		Level XV	
Fig. P. 40	no. 3, 4, 5, 6		Level XIV	

Several minor variations may be pointed out; no. 2 from Level XVI is more in the "Kusura cup" form which is not really represented at Yortan; no. 12 of the same level is a better parallel with a twisted handle, which on Yortan jugs no. 147 (Fig. 40) is single. In addition to the Beycesultan material some finds from Karataş-Semayük are worthy of mention:

Pl. 81	Fig. 23	<u>AJA</u> 68	(1964)	red slipped
Pl. 60	Fig. 6	<u>AJA</u> 69	(1965)	black, white painted
Pl. 83	Fig. 48	<u>AJA</u> 71	(1967)	dark, plain
Pl. 84	Fig. 34	<u>AJA</u> 72	(1968)	red polished
Pl. 73	Fig. 9	<u>AJA</u> 73	(1969)	red polished, white painted

These are some of the finds that come close to resembling the Yortan shape. But a more popular jug of the site has a narrower neck and more averted rim, already noted among the smaller jugs (Shape VII) of Beycesultan.<sup>44</sup> Two further aspects of the Karataş pottery are interesting; despite the less satisfactory parallels to the pottery of Yortan, the matt white painting, which has so far been rare outside Yortan in the EB2 period, is here in full use on black and red burnished wares; secondly, the characteristic pottery of the plain is red burnished, and matt white painting is not restricted to chevrons or zigzag lines, but takes other forms such as parallel lines or hanging spirals. On the whole it is a thicker, sturdier pottery than that of Yortan and often a very broad loop handle has the white decoration as well.<sup>45</sup>

Besides their large numbers at Yortan these jugs, small or large, are also conspicuous in having a very broad geographical distribution and are certainly the best known north-west shape outside the area. Beyond the Troad at Poliochni on Lemnos it starts in the "Black" period with a modest beak-spout and a rather large loop handle.<sup>46</sup> It continues into the "Green" period. Further west it is found at Dikili Tas in the EB2 levels,<sup>47</sup> and in Bulgaria from Ezero A (Horizon XIII) onward.<sup>48</sup> However, so far nothing comparable has come to light in the Cyclades or mainland Greece. Along the Anatolian coast it is probably one of the vessels that make up the so-called "Troy I horizon" at Emporio on Chios.<sup>49</sup> At Müşgebi a few unstratified jugs belong to the south-west variety of the shape.<sup>50</sup> Towards the south-east the "Kusura cup" and some more Yortan-like versions are well spread in the Burdur-Isparta region, ie. Senirce,<sup>51</sup> Mancarlı Hüyük, Yassı Hüyük<sup>52</sup> and make a surprising extension into the Eskişehir-Ankara region.<sup>53</sup>

The frequent appearance of the jug on the three main sites is very important in helping to secure a chronological identity for the shape and for the Yortan Class A pottery in general. Clearly, it was in use from the earliest levels of the EB2 period in the Troad, and possibly earlier at Beycesultan. But it does not seem to have evolved from an earlier shape at either of these sites. In view of its very substantial presence at Yortan it is, I believe, conceivable to suggest that the jug is a product of the Yortan culture with the beginnings being much earlier than the EB2 period. Its development could have been in the EB1. Poliochni and, to some extent, Ezero finds are in support of an early date.

SHAPE IX Small jugs with cutaway spout (Fig. 45-47; Pl. IX)

This and the next Shape, which are identical except for size, also make up a numerous and distinctly west Anatolian group of vessels.<sup>54</sup> The smallest jug, no. 161 (Fig. 45) is ca. 10 cm and the largest, no. 173 (Fig. 46) ca. 17 cm high. Shape X contains jugs which are never under 20 cm. The most characteristic of the shape is the cutaway form of the neck and spout. Jugs no. 167 (Fig. 45) and no. 168, 169 (Fig. 46) stand on tripod feet. The rest are on a rounded or flattened type of base. As usual the fabric varies between fine and coarse, and contains a micaceous body. The burnished or smoothed surface has all the signs of lack of even firing conditions. Few vessels such as no. 165 (Fig. 45) or no. 177 (Fig. 47) are fired to one uniform colour. But the shaping is very competent and always treated to a smooth finish. Besides slipping and/or burnishing, the decoration takes the form of simple plastic features or matt white painting. Jug no. 168 (Fig. 46) is striking in its three pairs of very prominent, almost horn-like knobs. Jug no. 169 (Fig. 46) has three horizontal bars across the painted chevrons. The pendant-like feature occurs on jug no. 171 (Fig. 46) and no. 173 (Fig. 46). A more unusually decorated vessel is no. 162 (Fig. 45) which is covered with flutings on the upper body. This type of plastic ornamentation is very rare at Yortan and the Yortan Culture in general.

Among the white painted jugs no. 174 (Fig. 47) is the most elaborately decorated one; it has three quadruple chevrons, three plastic crescents, and two large cross-hatched lozenges. In contrast to this and the above-mentioned jugs, no. 171 (Fig. 46) shows every sign of a failed product; the shape is irregularly formed, the colouring is in a state of confusion, and the faint chevrons appear as if allowed to trickle down, rather than drawn on, the surface.

For comparative material Thermi is the only site with such small jugs and they are therefore not treated separately from the next Shape.

#### SHAPE X Larger jugs with cutaway spout (Fig. 48-64; Pl. X-XII)

Thus far the presentation of individual jugs within their shape groups has been based mainly on the ornamentation and to some extent on the colour of the ware. Here the method is abandoned for once and the thirty four vessels are arranged according to the peculiarities of their most typical feature, the spout. In the making of these jugs, the two main parts, the neck and body, would normally be built separately and joined before the drying of the clay. The formation of the spout takes several cuttings; first a part of the upper section of the cylindrically set-up neck is sliced off in an oblique stroke producing a slanting or rising spout. For jugs of Shape IX-X the process of shaping the spout ends at this stage; but here more of the neck has to be removed in a second cutting, this time with a near-vertical stroke towards the neck base. The addition of the loop handle and other extra features such as the feet or knobs has to be carried out before the application of the slip coating which at Yortan was apparently done with a cloth or brush.

According to the degree of the cuttings the jugs can be divided into six groups which may or may not be typologically significant. The first four jugs, no. 179-182 (Fig. 48, 49) have a relatively short spout and the angle of the cutaway section (from the horizontal plane) is less than 45°. This gives the spout a beak-like appearance. In the second group, No. 183-187 (Fig. 50-52) the height of the spout is still short but the cutaway part is

deep and makes a curving profile. The third and fourth groups, no. 188-197 (Fig. 52-57) and no. 198-203 (Fig. 58-60) have taller spouts which on the former group are large and deep and on the latter broad and shallow. A further five jugs, no. 204-209 (Fig. 60-62), classified as the fifth group, resemble some of the previous types except that here the top part of the spout is either left horizontal or cut obliquely in the opposite direction towards the front of the vessel. No. 209 has a rare form of twisted handle; it is actually made of a number of thin and rounded strips of clay which are pressed and stuck together, perhaps imitating a basket handle of rushes or reeds. No. 207 jug is exceptional in its sharply everted rim with a flat top. This metallic outlook is increased by the triangular section of the handle and a very deep and narrow pouring channel.

The remaining three jugs, no. 210-212 (Fig. 63, 64) differ from the rest in body and spout shapes. Whereas the above jugs, and the Yortan jugs in general, are round or globular, these three are carinated and very metallic. The loop handle is flat, strap-like and joins the rim at a point high up from the neck base.

In ornamentation the white chevrons over a dark burnished surface again predominate. They are drawn in a characteristically rigid style of three, four or five groups of parallel lines. Only on no. 200 (Fig. 58) is a more flexible hand in evidence, drawing in steady and sweeping curves towards the base. Jug no. 207 is outstanding also in ornamentation; besides the quadruple chevrons and moulded double chevrons, there are two running double lozenges, one on either side of the handle, and one vertical zigzag line on the front body. In plastic one sees the usual knobs, bars, or crescents. Mostly they are placed on the upper body and/or on either side of the cutaway spout. Sometimes the crescents are long and sweeping, no 204 (Fig 60) or rather short and low in relief, no. 179 (Fig. 48). On one very large jug, no. 186 (Fig. 51) each crescent is partitioned in the middle by a perpendicular line. This jug also has a lively imitation of a necklace and a pair of earrings.

#### Troy/Hisarlik

The material is disappointingly small. Shape B. 15 has a kind of cutaway spout but the body is more like the jugs of Shape X:

Fig. 227	no. 35.649	Troy Ia
Fig. 247	no. 15	Troy If
Fig. 412	no. 29, 34	Troy IIc

Troy IIc examples are found in the Ledge. Oddly enough they are included under Shape B. 17 which is a jug with obliquely cut spout.

#### Thermi

PL. XII	no. 14	Town I	three knobs and impressed chevrons
PL. XII	no. 15	Town I	three knobs
PL. VIII	no. 69	Town I	
PL. XII	no. 116	Town II	three knobs and impressed chevrons
PL. XXXV	no. 117	Town II	
PL. VIII	no. 163	Town II	
		or III	
PL. XXXV	no. 203	Town III	impressed chevrons

PL. XXXV	no. 204	Town III	
PL. XXXVI	no. 234	Town III	incised on the base of neck
PL. XXXVI	no. 252	Town III	
PL. XXXVI	no. 287	Town III	

Thermi yields some of the closest parallels, especially for the plain vessels, thus strengthening one's impression that Lesbos was a part of the cultures of the opposite mainland coast.

#### Beycesultan

Shape no. 17 of EB1 and no. 10 of EB2 are jugs with the cutaway spout:

Fig. P. 14      no. 35      Level XIX

Unfortunately, this is a lonely find of the EB1 levels and might be considered an intrusion from the upper levels.

Fig. P. 22	no. 4	Level XVIIc	
Fig. P. 25	no. 11	Level XVI	
Fig. P. 31	no. 5	Level XV	on tripod feet, three knobs
Fig. P. 39	no. 1, 5	Level XIV	no. 5 and 13 are on tripod feet
	11, 13		
Fig. P. 40	no. 1	Level XIV	double twisted handle
Fig. P. 45	no. 4	Level XIIc	

Jug no. 1 of Level XIV is a rather squat vessel with a very broad neck and spout. No. 5 of the same level is quite similar to the third group of the Yortan jugs, i.e. no. 188-197 and can even be considered an import into Beycesultan.

Several fragments of body sherds with plastic features and matt white decoration are also very important additional material. One fragment, no. 11, Level XIV, has already been cited. Three more come from Level XVIIc, no. 2, 8, 11, and one need not doubt that these sherds belong to such jugs as Yortan no. 188, 197, 199, 201, 209.

Thus, while the pottery of the Troad is almost without the shape, Thermi I-III and Beycesultan EB2 levels (up to Level XIV) provide some excellent parallels and therefore the shape should not be considered as chronologically different from the jugs with obliquely cut spout. A more precise definition of the lower and upper limits must, however, remain tentative. Bearing in mind all the technical details and the stratigraphic occurrence of these and other jugs, one can state that here, too, the basic shape probably starts back in the EB1 period, and on grounds of typological observations - taller, more beak-like spout, sharper rim formation, etc. - some of the jugs, i.e. the fifth group, could be thought to date from the end of the EB2 period.

Outside Anatolia the shape is outstanding in its almost non-existent distribution. Even at Poliochni there is nothing comparable, thus confirming a limited distribution towards the Troad coast. In Early Bronze Age Crete a beak-spouted jug is thought to be a derived form.<sup>55</sup> It seems correct to look beyond the island for the ancestor of the vessel which does not occur in the preceding Neolithic material, and the fourth group of the Yortan jug is similar in spout formation. Yet the rest of the shape and ornamentation are quite unlike the Yortan examples and it is hard to see a direct link between them.

SHAPE XI Jugs with flanged rim and side-spout (Fig. 65; Pl. XII, XIII)

Six small jugs with a single or double side-spout form a separate shape which also exists in much larger vessels of the next group, Shape XII. The side-spout is certainly an important feature but it cannot be considered diagnostic. Such spouts are found on a number of quite different shapes, and therefore the present classification rests on the form of the neck and spout. The latter part is again in a slanting profile but unlike Shape VII-VIII jugs here the rim is considerably everted and forms a broad, inward-sloping spout. The fabric is moderately fine and is fired a little harder than the usual Class A pottery. The burnishing over the lighter tone of grey is low. In addition to the side-spout some of the jugs have plastic knobs and crescents.

The parallel material from the three main sites is most inadequate. There is simply nothing at Troy/Hisarlık and Beycesultan, while on Lesbos only one jug, Pl. X, no. 141, from Town II can possibly be held out as relevant. One find from Kara Ağaç Tepe,<sup>56</sup> Fig. 72, is the only parallel worth of emphasis. It is a highly burnished jug and compares with the Yortan example no. 217 (Fig. 65) in almost every detail showing that the lack of finds at Troy/Hisarlık or elsewhere could be superficial. Further comments may be reserved until the next Shape.

SHAPE XII Larger jugs with flanged rim (Fig. 66-69; Pl. XIII)

The overall form of these eight jugs is similar to that of the previous small shape. Compared with other jugs of the site, here the body tends to be more rounded and the single loop handle usually angular in section. The neck is short, except for no. 221 (Fig. 67) and in outline the flanged rim is oval and not circular. Only one jug, no. 225 (Fig. 69), is in red ware. The fabric is not coarse. It is always fired hard which makes these jugs less easily breakable than other Class A vessels. There is slip coating and good burnishing.

No. 221 jug is a very striking vessel. A tall, slender neck, very thin and triangular loop handle, and a large squat body, coupled with a very lustrous dark surface, combine to produce the most successful product of the Class A pottery.

The ornamentation is the same as on other jugs. There are the matt white painted chevrons, plastic crescents, or bars. Two jugs, no. 220 (Fig. 66) and no. 221 (Fig. 67), have the "pendant" motif which on the latter is particularly detailed, showing two round "beads" suspended from a "string line" knotted at the back.

Beycesultan has no comparable shape, but some good parallels can be sought out of the pottery of Troy I and Thermi I-III.

Troy/Hisarlık

It is Shape B.16 and occurs only in the Early and Middle sub-periods:

Fig. 236	no. 5, 14	Troy Ib
Fig. 240	no. 6, 7	Troy Ic

These fragments of spouts and handles belong to this Yortan shape. In the

publication of the above Troy/Hisarlik material, the missing lower parts were restored according to the Thermi finds.

#### Thermi

Pl. XII	no. 12	Town I	grooved chevron motif
Pl. XII	no. 99	Town I or II	
Pl. XII	no. 115	Town II	on tripod feet, ribbed decoration, and knobs
Pl. VIII	no. 139	Town II	with a side handle
Pl. X	no. 141	Town II	with a double side-spout
Pl. XII	no. 251	Town III	knobs on the body

The Thermi jugs tend to have a form of spout which is bent backwards. This feature has been noted on other Yortan jugs but does not occur on this shape.<sup>57</sup> Otherwise the parallel material is admirably alike Yortan, confirming the shape's beginnings in the Troy I period. On the other hand, the lack of finds in Troy II or Thermi IV-V does not necessarily mean a short lifespan in the EB2 period. On the contrary, there are such technicalities as the harder fired fabric, lighter colours of the smaller Shape XI, or high competence in shaping that may well be understood as indicators of a prolonged extension into the later phases of the EB2. Furthermore, the side-spout of one of the "teapots", Fig. 79, no. 267, looks almost exactly like the spouts of these jugs. This "teapot" (Class B pottery) is quite certain to date from the second half of the EB2 period.

#### SHAPE XIII Tankards (Fig. 70; Pl. XIV)

All three vessels are quite similar to each other. The body is globular or pear-shaped and the short neck flares open to the horizontal mouth. There are two flat loop handles, one on either side of the neck. The rounded base is only slightly flattened.

Neither Thermi nor Troy/Hisarlik has such vessels. On the other hand, at Beycesultan one or two finds suggest an early date in the EB1 period, or even earlier. Fig. P. 19, no. 2, in Level XVIIc is practically identical to Yortan no. 227 in shape but is different in its rather fine red coloured fabric. A second possible example is a small jar, Fig. P. 12, no. 4, from Level XX.

These possible early occurrences at Beycesultan are, however, offset by the presence of three almost identical tankards in Poliochni Red<sup>58</sup> which cannot be dated so early as the EB1 period of western Anatolia.

A certain degree of similarity between the tankards and the well-known depas of Troy II and III is obvious; both shapes share the same upright posture, the mouth opening is horizontal over a flaring neck, and the two loop handles are placed vertically, opposite one another. However, other particulars of the shape and fabric are considerably different and it seems incorrect to consider these tankards as a form of the late EB2 depas. Firstly, the Yortan pots are hand-made and therefore tend to be more irregular and curvilinear than the wheel-made depas. Secondly, the handles are flat in section and not round which is always the case of the depas shape, A. 39, A. 43 of Troy/Hisarlik. Thirdly, there is the nature of the fabric, which in no. 226 and no. 227 of Yortan is rather coarse and dark grey and quite the opposite of the fine and light coloured depas. In this last



respect no. 228 tankard of Yortan poses some difficulties; its fabric is indeed very fine and light brown in colour; the burnished surface is coated with a dark brown slip which has actually been compared with the brown wares of Thermi Class C pottery (Town IV-V).<sup>59</sup> These considerations together with the Poliochni Red tankards admittedly make it hard to put the shape into the category of the earliest Yortan pottery; but a link with the depas seems quite unwarranted.

#### SHAPE XIV Bird-shaped vessels (Fig. 71-73; Pl. XIV)

Here a number of vessels of a unique shape introduce a pleasant break into the monotonous recurrence of the innumerable jars and jugs of ordinary forms. All nine carry the feature of depicting a bird in a varying degree of realism. No. 229 and no. 230 (Fig. 71) are rather stylised and only vaguely recall such modelling. The other seven vessels are more or less identical in having a horizontally standing body on three feet, and it is really this characteristic and to some extent the ornamental details that give them the appearance of a bird in a standing position. The tail is indicated in a pointed knob, or a flat and broad projection. At the other end the neck and head are not modelled in any form of naturalism. Instead there is a functional spout of the cutaway type. No. 232 (Fig. 72) is the largest and with its broad, dumpy body may be representing a duck. The fluted decoration is purely ornamental. No. 233 has a long, slender body and upon a highly burnished surface the "wings" are roughly drawn in several grooved lines. No. 237 (Fig. 73) is the finest specimen of the shape, but may not come from Yortan.<sup>60</sup> The bright red colour slip and the plastic rectangle on either side of the body have no parallel in the Yortan pottery. Two miniatures, no. 234, 235 (Fig. 73) are decorated with incision which again may represent a stylised depiction of such details as wings and feathers.

In contrast to its interesting and often humorous qualities, the bird vase, or "askos", does not form a common pottery shape, and wherever found the numbers are limited to a few. Nothing comparable is known in the EB1 or EB2 levels of Beycesultan or Thermi. The Troy/Hisarlık material is a little more helpful. There are several spout fragments in Troy I, Fig. 245, no. 22-24, which could belong to such vessels. More important are Schliemann's finds, Ilios no. 160, 333 and 334,<sup>61</sup> which were found in the Second and Fourth Cities and represent a sow, a ram and a hedgehog, respectively. A second jug with the head of a sow on one end is known from Bos-öjök.<sup>62</sup> Zoomorphic vessels, often of a very superior quality and an astonishing variety, are a well-known feature of the Balikesir tombs,<sup>63</sup> but at Yortan only one jug, no. 247 of Shape XVI, could be found to represent an animal, perhaps a "double" hedgehog.

Despite the scarcity of the finds it is possible to suggest a date for the Yortan shape. The three jugs of the Schliemann Collection are ascribed to a EB2 date which though unreliably stratified can be confirmed by a number of independent sources. In the first case, while these vessels are special in overall shape, and probably usage, they are very similar to the jugs of Class A pottery in the form of a spout, neck and tripod feet. In other words there are good reasons for thinking that these special vessels were made by the same potters who also made the less complicated and more common jugs. Thus, the spout form of no. 230 or no. 232 (Fig. 71, 72) are really no different from that of Shape X jugs; or the miniatures no. 234 and 235 (Fig. 73) bear close resemblance, both in shape and ornamentation, to the juglets, Shape VI. Secondly, this quite strong case for giving the shape a

Class A pottery date can be strengthened by several stratified finds in western Anatolia. From the Chalcolithic levels of Demirci Hüyük (older than Phase I) comes a small jug without the tripod feet but still clearly representing a bird vase, perhaps an earlier form of it.<sup>64</sup> Several jugs in Poliochni "Blue" are more in this form than the Yortan shape;<sup>65</sup> they are basically Shape VIII jugs, mounted on tripod feet and lying in a horizontal position. Similar jugs are found further west, at Karanovo VII,<sup>66</sup> and in the earlier Ezero A (Horizon XI).<sup>67</sup> Then, several jugs from the Elmali plain appear in burials that can only be interpreted as middle or late EB2. One askos, red burnished and white painted, was found in Tomb 167 together with a small jug, a "rattle", as gifts to a child.<sup>68</sup> A similar jug at Beycesultan is in Level XIV, Fig. P. 37, no. 9. A second askos was found in Tomb 144 together with two "teapots",<sup>69</sup> or the deep bowl with a basket handle and side-spout, which according to the Troy/Hisarlık sequence belongs to the latter part of Troy II. In the absence of any contradictory evidence from Anatolia or the east Aegean, it seems certain to give the shape a prolonged use in EB1 and EB2. None of the Yortan examples looks particularly early so that here it may only be a question of an EB2 date. Obviously these vessels cannot be looked upon as ordinary utensils of domestic life. Rather, they must have been used in some cultic ritual or practice. Most of the finds came from the burials, and a purely secular function such as "toys" seems unlikely, especially if one bears in mind the large size of some of the examples. Also the spout form indicates that the vessel was, with the exception of two miniatures, intended to be used for pouring out liquids, and was not meant to be merely an object of play.

From the later EB3a period there is another type of vase of the piriform shape which is also called "askos" or "duck vase" and occurs at over one hundred sites in the Aegean.<sup>70</sup> One fragment was found in Beycesultan Level IX, Fig. P. 53, no. 1,<sup>71</sup> a complete pot is said to be from the İzmir region, and at Troy/Hisarlık it is Shape D. 12 of the fourth settlement. These finds from the islands and Greece are thought to be of the same date, the earliest examples occurring in the Phylakopi I Culture of Melos. In Greece it appears together with the matt painting as "heralds" of the MH1 period.<sup>72</sup> Thus, according to the present evidence, there is a considerable timespan between the Yortan bird vessels and the Aegean piriform pot which in any case shows little resemblance to the early shape.

#### SHAPE XV Triple vessels (Fig. 74; Pl. XV)

A second pot type in an unusual shape consists of three jars which were made separately and then stuck together on a triangular plan under a single loop handle. There are only two examples at Yortan, and in fact this is another shape that does not occur in large numbers elsewhere either. The Yortan examples are not particularly fine; no. 239 (Pl. XV) looks like a failure, or a rough job where the jars do not fit properly into the intended arrangement. The smallest pot with a narrow neck opening is too small and had to be raised to the right height by the addition of a tall stud on the base. No. 238 is a better work where all three jars with everted rim and horizontal mouth conform to the shape of a single multiple vessel. Both vases are made of a fine and hard fired fabric. The incised decoration on the smoothed or slipped surface is careless and almost scratch-like.

There is really no identical material from any of the major Anatolian sites, but vessels of the same genre do occur over a wide area. At Beycesultan, Fig. P. 14, no. 32, in Level XIX is a coarse double jar with a loop handle. A second, quadruple vessel, Fig. P. 20, no. 3, is a little

later in date from Level XVIIb. It has a different arrangement of handles and the ornamentation is not incised but matt white painted. A second double jar is known from Karataş-Semayük in Level V of the small central mound<sup>73</sup> which Mellink tentatively dates to the end of the Troy I period<sup>74</sup> but according to the chronology adopted here should fall into the latter part of the EB2 period.<sup>75</sup> These finds are not enough to fix a secure date for the Yortan vases. They only indicate that the shape is part of the EB2 pottery repertoire of western Anatolia, and that already in the EB1 period some complicated examples were in production.

Several stray finds, no. 38,39 (Fig. 98) are more like the Yortan examples.<sup>76</sup> Further east the shape makes a surprising appearance at Tarsus,<sup>77</sup> Mersin,<sup>78</sup> and Kazanlı<sup>79</sup> of Cilicia. At Tarsus-Gözlü Kule both fragments and complete vessels are said to begin in the EB2 period and continue to be made in the next period.<sup>80</sup> Some are wheel-made and in certain details different from those of western Anatolia. Nevertheless, it is quite obvious that the Cilician triple and quadruple jars did not have their ancestry in the local pottery tradition and therefore this should represent one of the few attestable links with the west in the EB2 period.

The kernos or multiple vessel is also a characteristic feature of the Early Bronze Age Cyclades. One splendid example comes from Melos in the Phylakopi I phase.<sup>81</sup> Some simpler double and triple vessels of the Grotto-Pelos culture are no doubt earlier versions of this complex subject.<sup>82</sup> Such tall and flaring pedestal bases are quite unknown in the Anatolian repertoire but one unique jar, said to be from Babaköy, no. 37 (Fig. 37), may well be considered a related form.<sup>83</sup> Its central part is not like the pedestals of the Cycladic kernoi but belongs to the jars of Shape III. Yet in the overall impression, and the position of the four small hole-mouth jars, the vessel bears some resemblance to the Cycladic "lamp" kernos.<sup>84</sup> The implications of such vaguely related objects in terms of contacts and interrelations between western Anatolia and the islands is difficult to evaluate. Obviously there is little familiarity in the actual shapes and ornamentation of these objects, whether it be the kernoi, pyxides or schematic idols, but it is also clear that the choice of producing such complex and unusual vessels of the same genre would have stemmed from the existence of some similar ideas and traditions.

#### SHAPE XVI Rare vessels (Fig. 74-76; Pl. XV)

To this final group belong a number of jugs which contain enough individuality to warrant separate treatment from any of the previous shape but still seem to be within the Class A pottery.

No. 240 (Fig. 74) is too broken for a definite identification of shape. The mottled dark surface has interlocking chevrons in white painting. A large hole on one side could be a side-spout. The forms of the neck and handles or lugs are not obvious.

No. 241 (Fig. 74) is a small jug with an obliquely cut spout and two sets of moulded parallel bars are set on either side of the body. It differs from Shape VII or VIII jugs in having a narrow neck and flaring spout. It is really more like the jugs of the south-west.<sup>85</sup>

No. 242 (Fig. 75; Pl. XV) is a striking if not an ugly black jug. It stands apart from the other fluted jugs of Yortan and of the south-west (where this mode of decoration is very common) in the very prominent and

heavy nature of the ribs. The broad and flat beak spout is also an unknown form at Yortan. A jug from Demirci Hüyük is a little similar in the fluted ornamentation.<sup>86</sup> A better parallel is from Karataş-Semayük.<sup>87</sup> The coarse black fabric, slipped and burnished to a shiny black surface, is in favour of an EB2 date.

In contrast to this rather heavy pot, no. 243 (Fig. 75) is a fine and delicately modelled black jug, quite unique in its shape. This is also the only Yortan vessel where matt white lines are not used to draw chevrons but instead there are groups of parallel lines. A later date in the EB2 seems more appropriate than one in the beginnings of the period.

No. 244, 245 (Fig. 75; Pl. XV). Similar jugs are known from Schliemann's finds. Ilios no. 358 is one example but it is different from the Yortan vessels in the setting of the double spout. In this respect no. 351 is a better parallel.<sup>88</sup> A triple spouted jug was found at Karataş-Semayük in Tomb 275.<sup>89</sup>

No. 246 (Fig. 76) is perhaps the most unusual vase of the site. In many ways it is not different from other cutaway spouted jugs; the spout, handle, globular body on tripod feet are all in the usual proportions, but this is the only jug of the shape to have the chevron or zigzag motif in incision rather than in matt white painting. Even more odd are the three sets of large triple holes round the body with each hole enclosed in a bubble-like cover of a very fine clay. All the "bubbles" are restored, which makes one wonder about the authenticity of such a feature, quite unknown from anywhere else.

Finally there is the striking jug, no. 247 (Fig. 76) which could also be classified as Shape X. The dark grey fabric is rather fine. The body is richly ornamented with plastic features which may be likened to a double hedgehog. This is the only zoomorphic vessel found at Yortan.

#### CLASS B POTTERY

An assortment of twenty vessels of different shapes can be singled out as a separate group dating from the end of the EB2 period. This classification and dating are based partly on the particulars of each pot and partly as a result of the parallel material at Troy/Hisarlık. In comparison with the Class A jars and jugs the fabric is usually finer and hard fired. Yet the superiority in technique does not necessarily mean higher quality products and certainly this pottery is far from being attractive or pleasing to the artistic eye. Often shaping is irregular, handles being set crookedly or the base being quite off centre. Also the available shapes are rather uninspired, lacking vitality or any striking quality. Another characteristic which readily dissociates these vessels from the "A" class is the treatment of the surface; being made of a finer fabric there is always a smooth surface but often it is dull, left either smoothed in the drab colours of the fabric - light red, grey, or dirty brown - or covered over with a thin slip of similar colours. Mottling is rare. Sometimes there is burnishing but it is never lustrous and ornamentation is limited to the odd twisted or grooved handle.

The limited comparative material is useful in determining a date roughly to the end, or latter part, of the EB2 period. The carinated bowls no. 250, 251 (Fig. 77) are completely different from Shape I bowls of Class A in the everted form of the rim and carinated lower body. On these lines they may be likened to the Beycesultan finds, Fig. P. 44, no. 22-24 in Level XIII or

even to Troy IVd, Fig. 182, no. 13-15. Small jars no. 252-254 (Fig. 77) are simple vessels and similar to equally crude Troy IIg finds, Fig. 401, no. 37.988, no. 37.773 and no. 37.992. But such crude and indistinct vessels can be found at all periods and do not really make reliable comparative material. A number of similar finds belong to the earlier Thermi I-III, Pl. XXXV, no. 68; Pl. VIII, no. 195; Pl. XXXVI, no. 295, 308. On the other hand, two larger jars, no. 255, 258 (Fig. 77) are almost identical examples of shape C. 28 of Troy IIg, Fig. 401, no. 35.515 and Fig. 403, no. 35.486. The latter is particularly close to Yortan no. 258. One further jar from the same phase, Fig. 387, no. 37.989, also matches Yortan no. 256 which can be restored to have a round loop handle and a side-spout. No. 259 jar, pinkish in colour, with two vertically pierced lugs, has a tall cylindrical neck and flanged rim which recall jars of Class A pottery. But a closer examination of the vessel reveals considerable differences; on Shape III there are no pierced lugs but four small loop handles on the upper body, and neither is the rim pierced nor the fabric so refined and hard-fired. It may therefore be more appropriate to compare no. 259 with the jars of the Poliochni "Yellow", Tav. CXCIC-CCI.<sup>90</sup> Similarly, although there is a certain degree of likeness between the jugs, no. 264 and 265 (Fig. 78), and Shape VII-IX of Class A, the technicalities in shape and fabric are quite different.

The last three vessels, no. 266-268 (Fig. 79) are certainly the most diagnostic late EB2 shape of the class. These pots are usually described as "teapots" because of the side-spout and the loop handle. All three are in the typical Class B pottery fabric of a fine quality and light colours. No. 266 and 268 are the finer products. The former teapot has a highly burnished red surface, similar to that of the bird vessel no. 237 of Shape XIV. No. 267 is thickly made and little of its brown slip remains over the light grey fabric. According to Blegen's stratigraphy at Troy/Hisarlık these vessels do not occur before the IIg phase where they are shape B.10, Fig. 387, no. 35.436 and no. 35.481. Some rather well preserved examples are also known at Karataş-Semayük.<sup>91</sup> Some of these parallels have an extra loop handle on the axis of the basket handle. A number of vessels in the Berlin Collection are also certain to stand apart from the "A" class shape.<sup>92</sup>

In summary, there are good reasons, both technical and stylistic, for identifying these twenty odd pots as a class of pottery separate from that of the "A" shape and perhaps a little earlier than the "C" pottery. Naturally, in the absence of a local stratigraphy the chronological limits and divisions ought to be understood as being rather tentative. One can be certain that none of these vessels is likely to occur in the EB1 period or in the earlier phases of the EB2 but nothing definite can yet be said over the exact duration of the black and grey burnished shapes which in some cases may well have lasted to the end of the EB2 in the Yortan region. It is also possible that a chronological rather than stylistic division between "B" and "C" pottery is erroneous, that while some of the "B" vessels continued to be made in the EB3 period, such "C" shapes as the depas or the trefoil spout may well have started already in the EB2 period.

#### CLASS C POTTERY

The remaining twenty vessels belong to a third class where technical and typological differences from the rest of the Yortan pottery are indeed very marked, leaving little doubt to their separate identity. Unlike Class A and B pottery, here the use of the fast wheel is in good evidence and often the fabric is the finest produced at the site. Oxidisation is rare and black or

dark grey colours almost never occur. In shape, with a few exceptions, there is hardly any spout, handle, or body form that may suggest affinities with the "A" types. The characteristic Shape VII-VIII or the cutaway spouted jugs are now completely absent. Instead there is a smaller jug with a very tall neck and beak spout. The handles are always round in section and the base is distinctly flat, probably made by string cutting. The comparative material from Troy/Hisarlık and Beycesultan shows a solid EB3 date which may for once and for all settle the ambiguous question of the existence of post EB2 material at Yortan.

No. 269 and 271 (Fig. 79 ; PL. XVI, XVII) are wheel-made tankards or depas, a hallmark of the late EB2 or EB3 pottery of western Anatolia.<sup>93</sup> The latter vessel is smaller in size and incomplete at the rim. The body shape is rather squat and rounded, otherwise both tankards show the same characteristic features; the neck flares open to a horizontal mouth and the two round loop handles are set opposite one another providing a firm grip on the vessel with both hands; a fine and hard-fired fabric is coated with a thin red/orange slip which is mostly gone at the removal of a thick layer of lime encrustation. This calcareous deposit on the pot surface is often encountered with Class C and to some extent Class B pottery possibly indicating that the location of the burials with the pottery was different from those with the "A" class pots. On this point the available drawings of Gaudin are of little help.<sup>94</sup>

The depas A.39 and A.43 start in Troy IID and continue into Troy IV. Fig. 380, no. 36.743, from Troy IID is quite similar to no. 269 of Yortan. However, such single handled Troy III examples as Fig. 68, no. 33.199 or Fig. 69, no. 33.191, are also rather close in body shape, allowing an EB3 date as well.

No. 270 (Fig. 79) is even more certain to be from the EB3 period. The fabric has a very fine quality in a uniform light colour and a metallic hardness. There are wheelmarks on the surface. An exact parallel at Troy/Hisarlık or Beycesultan is hard to find but the goblet form itself, the grooved lines on the tall neck, and the ring base with a sunken section are obvious EB3 features.

No. 272 and 273 (Fig. 80) are rather diagnostic by their trefoil shaped spout which again does not occur before Beycesultan Level X and Troy IIf and IIg. The latter jug is particularly refined with very thin and hard-fired walls. Its provenance as Yortan is, however, not certain. No. 272 is a coarser juglet in a uniform grey colour. At Beycesultan Fig. P.51, no. 6, 7 in Level X are trefoil or bifoil spout fragments. At Troy the spout occurs on shape 24 in Late II Fig. 387, no. 36.1150, Troy III Fig. 72, no. 35.1158, Troy IV Fig. 162, no. 37.904; Fig. 170, no. 15, and Troy V Fig. 248, no. 18, which are really much larger vessels than the Yortan jugs.

No. 275 (Fig. 80 ; Pl.XVI) is a small jug with a leaf shape spout and has long been recognised as being different in date from the rest of the Yortan pottery.<sup>95</sup> The smoothed surface is crudely ornamented with incised and punctured dots and lines which, together with the general form compares well with a Troy IVb jug, Fig. 161, no. 36.709.

Several jugs with tall beak spouts are also usually identified as later in date than the Class A jugs. Two incomplete jugs, no. 279 and no. 280 (Fig. 81) are added here to the well-known no. 276 and 281 (Fig. 80, 81; Pl. XVI). Once again a rather fine fabric in a uniform red colour and a thin slip coating typify the pottery. The single loop-handle is always round

rather than oval or angular. Troy/Hisarlik provides the best parallels, all of which date after the EB2 period. It is shape B.20, Fig. 72, no. 33.154 or no. 33.179, in Troy IId and continues into Troy V. Many more jugs belong to Schliemann's finds, Ilios no. 360-363 from the Third City, and no. 1149, 1151, 1154 from the Fourth City.<sup>96</sup> Karataş-Semayik also gives several good examples of the shape; two red jugs from Tomb no. 95 of the Main Cemetery are particularly like no. 276 of Yortan.<sup>97</sup> One different feature of these Elmall jugs is the presence of matt white painting over the burnished red surface. None of the "C" pottery of Yortan shows the ornamentation which may have been abandoned or forgotten in the north-west at the breakdown of the EB2 cultures.<sup>98</sup> If so, then the Karataş finds need to be explained as the continuity of the technique in this relatively remote part of south-west Anatolia. Mellink is inclined to date Tomb no. 95 to the end of Troy II but here a slightly later date in Troy III or the EB3 period is preferred.<sup>99</sup>

Two cutaway spouted jugs, no. 277 and 278 (Fig. 80, 81), could be looked upon as some evidence for a survival of the much earlier Shapes IX and X. Both jugs are made of an extremely fine and hard fired red/orange fabric. No. 277 is certainly the most delicately manufactured vessel of all the pottery recovered at this site. Two jugs with similar spouts are illustrated in Ilios no. 1161 and no. 1162 and reported to be frequent in the Fourth City.<sup>100</sup> A further example is at Aphrodisias in Complex II of the Acropolis mound.<sup>101</sup>

The flasks no. 282 and no. 283 are distinguished by the lentoid body shape in very fine fabric and thin walls. The second flask has a horizontal mouth and two loop handles of the type found on the depas. The tall neck of no. 282 ends in a cutaway spout and everted rim, similar to the shape of no. 277 jug. The single loop handle is gently twisted. The American excavations at Troy/Hisarlik did not apparently find this vessel, but there are some good examples of it in the Schliemann collection; Ilios no. 364 and no. 1113 are said to be from the Third and Fourth Cities.<sup>102</sup> This late EB2 or EB3 date can be readily confirmed by the finds at Poliochni "Yellow", Tav. CCX.<sup>103</sup> Though the shape is unknown in the repertoire of Beycesultan, it does appear further south at Karataş. One flask is from Tomb no. 41 of the Main Cemetery<sup>104</sup> and a second from Trench 66 of the megaron houses.<sup>105</sup> In Cilicia the lentoid flask in Red Gritty ware is first found in the EB3 levels of Tarsus.<sup>106</sup>

A small jug, no. 274 (Fig. 80), with the horizontal spout cut away above the handle is perhaps the most convincing piece of evidence for the existence of the EB3 burials at Yortan. The shape B.23 does not appear before Troy IVa, Fig. 162, no. 37.881. At Beycesultan it is Shape no. 27 of Level X, Fig. P.51, no. 3, 4 and is last found in Level VIII.

Among such fine products the presence of three vessels, no. 284, 285, and 286, in rather coarse ware is surprising. They are hand-made, with none of the refined technique of the class. The missing upper parts of the former two jugs make it almost impossible to ascribe them any definite identity. They are clearly outside the "A" class repertoire. The indecision is between a "B" or "C" date.

No. 287 is a wheel-made grey cup in fine metallic fabric. Undoubtedly it is later than the EB2 pottery of the west. The unburnished surface is slightly scarred with fine parallel lines which may be the markings of a comb-like tool used in the smoothing process. The small loop handle is flat and very broad, quite unlike any other handle of Yortan. Shape A.36 in Troy IVc and d could be a related shape, but more exact parallels are missing.

Finally a pair of human legs, no. 288 (Fig. 83 ; Pl.XVII), appear to belong to a vessel, possibly anthropomorphic, and in its fine quality fabric could also be considered as Class C. Judging by the surviving fragments, it was made in a naturalistic and not schematic fashion. On the feet the toes and ankles are clearly shown. Pl.XVII, no. 288, shows a small bowl-like object. This is certainly an inaccurate restoration of the surviving fragments. The top of the right leg is sufficiently preserved to indicate the curvilinear base of the upper parts of the object. Also the inner surface of this part of the leg is seen to have been left unsmoothed which proves that the feet belonged to a closed vessel and not to an open bowl. A similar left foot was found at Beycesultan Level X, Fig. P.56, no. 7.

## SUMMARY

P. Gaudin excavated Yortan systematically and he was also careful in the recording of the finds, alas only to be wasted or lost after his death. Today it remains quite impossible to relate all the objects to individual burials. Among the bowls, no. 1 and 2 (Fig. 23) could be from pithos no. 48 (Fig. 5) or the lentoid flask no. 282 (Fig. 82) from pithos no. 94 (Fig. 7), but these are the few exceptions. The cemetery could have been used at all times without any one spot containing the burials of one period or phase of the Early Bronze Age. On the other hand it is also possible that certain parts, i.e. to the south of the Kirkağaç-Kelebbe road, held only those tombs with the "B" or "C" class pottery. In any case as an archaeological rule the burial grounds and the tombs themselves are usually unsatisfactory for stratigraphic observations. The method of studying the finds of Yortan has, therefore, been a comparative one. An observant eye would be quick to note some of the marked changes in the making of this pottery. The underlying principle has been first to observe these changes and try to explain them in terms of cultural assemblages and relative dates through the stratified deposits of western Anatolia. Naturally this is not a perfect way of bringing any site into the full light of prehistory; but as long as there is a lack of adequate stratigraphic investigations of the settlement sites it is the only means available for a better understanding of Yortan. Also, with all the drawbacks of such a purely comparative analysis in mind, some of the results need not be doubted at all, while a good deal more appear to be quite plausible. For example, it is obvious that the cemetery does not contain anything that exceeds the Early Bronze Age period, at least not in the excavated area.<sup>107</sup> It is also certain that almost the whole of the Early Bronze Age is represented by the pottery, and the proposed three-fold classification - A, B, C - corresponds roughly to the EB1 - EB3 periods. Less certain and more like tentative suggestions are the more exact definitions of the individual shapes and types which in turn contribute to a further refinement of the chronological limits.

By far the largest material is the "A" class pottery in three main types - bowls, jars, jugs - with a further sub-division into some sixteen shapes. A vigorous comparative breakdown of the material, summarised on Table 1, establishes a firm EB2 date of western Anatolia, or more specifically the sequence of Troy I-II, Thermi I-IV and Beycesultan XVI-IV. Such vessels as the carinated bowl with a simple tubular lug (Shape I), small jars with short collar neck (Shape IV), or jugs with obliquely cut spout (Shape VII-VIII) are well-known and widely recurring types. Considering that on the one hand are a number of sites known from the material remains of the living and on the other possessions of the dead, not every shape of EB1-EB2 western Anatolia can be found at Yortan; but this in no way weakens the argument based on



these parallels and equations. The Yortan pottery is basically a selective group excluding such domestic wares as cooking pots or storage vessels, but still because it was selected by the living people from their own pottery industries it ought to represent, at least in part, the contemporary pottery repertoire. The numerous parallels cited are proof of this view. What the Yortan pottery cannot show is a full repertoire of the Early Bronze Age of the north-west. For such a detailed knowledge many more of the settlement and burial sites need to be excavated. A few important omissions at Yortan can be found among the finds of other burials of the area. One such missing shape is the bowl A.6 of Troy I, Fig. 238, 253, 254, and Thermi Class A, Bowl 5a, and Class B, Bowl B. 5. It is a bowl with straight or curving sides and the thickened rim inside forms a band-like surface which is sometimes decorated in incision. Fig. 91, no. 2, 3, 5, 6, illustrate several examples from the robbed pithos burials of the Balikesir region.

Thermi and Troy/Hisarlık are of little help in establishing the earliest occurrence of the "A" class shapes. Both sites are thought to be contemporary in their earliest levels which begin on the virgin soil without a trace of the preceding period. Kumtepe is the only site with some relevant material. Kumtepe Ic has long been established as a contemporary of Troy I where most of the parallels to the Yortan pottery are to be found. The earlier Kumtepe Ib deposits contain none of the pottery found at Yortan. The inevitable conclusion has therefore been that the earliest date for the Yortan burials is from Kumtepe Ic or Troy I phase of the Early Bronze Age. Further support may be found in the fact that Kumtepe Ib type pottery is also widely known on the settlement sites near Yortan and that had it been contemporary with Yortan some elements of it ought to have appeared in the shapes of Class A.

Despite the apparently secure position for the upper limits of Yortan it is felt here that some aspects of the question need to be examined with a more critical approach. Thus, what has been called the Kumtepe Ib type pottery is actually solely determined from quite small soundings on this rather small mound on the fringes of the Troad, and it seems not unreasonable to view the site and the recovered material with some caution as perhaps not fully representative of the culture concerned. The plains further south of the Troad are actually richer in Type Ib material and may well be the centre of it.<sup>108</sup> Furthermore, the "A" class pottery of Yortan and the parallel finds at Troy I and Beycesultan XVI appear in a fully developed stage of production, and since no other region of Anatolia can be pointed out as the origins of the shapes present there is a reasonable case for suggesting that the pottery developed in the area of the Yortan Culture, and the "A" class does not represent the earliest stages of this development. The so-called Kumtepe Ib phase must be a part of the development which was not quite recognised at Kumtepe itself. According to the adopted Troy-Yortan-Beycesultan synchronisation, Beycesultan EB1 levels are contemporary with the Kumtepe Ib phase but without signs of strong contacts. The fragment of a cutaway spout and a small jug with obliquely cut spout in Level XIX are notable. Such jugs are not found in Kumtepe Ib and the former shape is rare even in Troy I. If these finds are not contaminations from the upper levels then they provide some evidence in support of assigning some of the Yortan shapes to the earlier EB1 period. Indeed, outside Anatolia the characteristic jug with obliquely cut spout does appear in deposits recognised as preceding Troy I pottery; at Poliochni it is in the Black and Blue periods with Kumtepe Ib bowls, and at Ezero from Horizon XIII onwards. Similarly the Yortan tankards (Shape XIII) could be compared with the vessels of the EB1 or even Late Chalcolithic of Beycesultan. In short these observations may suffice for expressing some caution over the accepted

affinity of the Kumtepe Ib phase pottery to that of Troy I; at Yortan the earliest of the burials are, for the time being, seemingly certain to be roughly contemporary with the founding of the site at Hisarlık and on Lesbos, but there is the possibility of some of the shapes, i.e. carinated bowl, jugs with obliquely cut or cutaway spouts, or the askos, having earlier beginnings in the so-called Kumtepe Ib phase or Beycesultan Level XIX-XVII; the jug with obliquely cut spout could, for example, belong to a sequence of development not too different from that of the carinated bowl which in its sharply angular Troy I profile has its beginnings in the rolled or slightly incurved rims of Kumtepe Ia and Ib.

Returning to the question of a final date for Class A pottery, most of the parallels do not suggest survival later than mid-Troy II or the end of Beycesultan Level XIV. Class B pottery is indisputably the late EB2 material of the site. In particular the "teapot" no. 266-268 (Fig. 79) is a good example of this date. Nevertheless, several odd finds and some typological observations do indicate the possibility of at least some of the "A" shapes lasting throughout the period and being found together with the "B" class vessels. For example, bowls no. 9 and 10 (Fig. 24) are carinated with a horizontal loop handle, a feature which does not start before Troy II. The only uncertainty over this parallel is that most of the Troy II bowls are wheel-made and much deeper in body. The case of the bird-shaped vases, which are found at Karataş-Semayik together with the "teapot", is more certain. On less certain terms one may detect a typological development in a number of shapes through the EB2 early, middle and late phases. Among the jars with tall neck, Shape III, several are noted for showing uniformity in overall colour in lighter tones, less mottling and sharper outlines which could be thought later than the more rounded and dark burnished examples. In Shape X those jugs with taller and shallow cutaway spouts of group four (Fig. 58-60) come near to resembling the tall beak spouted jugs of the EB3 period and may also be later than the shorter spouts. Another such possibility is the jugs no. 204-209 of the same shape, with a cutaway spout form where the top part is cut to slant towards the front of the pot. The matt white painting on these jars and jugs need not be an obstacle for a date in the late EB2 period. It is correct to observe this method of decoration being largely absent in Late Troy II and Beycesultan Level XIII; but it is so at all times at either site and the method may well have had a more popular and persistent use in the Yortan Culture.

Consequently it seems correct to place most of Class A pottery in the first half of the EB2 period, and even earlier, but also to keep an open mind over the possibility of some of the shapes continuing to the end of the period. As far as the stratigraphy of western Anatolia stands Class B vessels are best put to this latter part of the period as well but the upper limits in relation to Class C pottery should also be kept fluid. Compared with Class A jars and jugs the differences in shape, ware and ornamentation of the "C" vessels are immediately obvious and need no further qualification. Rather close parallels at Troy III-IV and to a lesser degree at Beycesultan give them an EB3 date but perhaps not so late as Troy V. The distinction between this and "B" material is less outstanding and some degree of merging in certain shapes is conceivable. The jug with the spout cut away above the handle, the light grey goblet with grooves, or the lentoid flasks are EB3 beyond doubt while the tankard or depas, or the trefoil spout, could start at an earlier date among Class B vessels. Thermi on Lesbos is without the "B" or "C" shapes. Since Town I-IV are strongly connected to Class "A" pottery of the north-west, this absence of the "late" Yortan pottery tends to favour the end of the settlement falling quite short of the end of Troy II.

This chronological assessment of the pottery allows a lifespan of well over 1000 years for the cemetery of Yortan. In comparison with such a prolonged use of the grounds the finds are not large in quantity and there is an unequal representation of the different phases of the Early Bronze Age. Possibly the use of the site was not continuous and there was a break at the end of the EB2. At the same time it must be pointed out that the excavator's notes make it clear that not all of the burials were uncovered by Gaudin; some were robbed by the locals while a good many pithoi may still lie to the north and south of the Kirkagaç - Kelebbe route. It is also within reason to take the one hundred and seven pithoi as belonging to a small community of a nearby village site which came to be founded on the expansion of the settlements in the nearby fertile plains towards the end of the EB1 period and which lasted until towards the end of the EB3 period.

TABLE I.

Summary of parallels mentioned in Chapter 3.

Fig. and nos. refer to illustrations to be found in the site publications stated in the right hand column.

	SHAPE I BOWL no. 5, 6	SHAPE I BOWL no. 8	SHAPE IV JAR	SHAPE VI JUGLET	SHAPE VII-VIII JUG	SHAPE IX-X JUG	SHAPE XII JUG	
g					no. 35,575 no. 35,513 no. 35,429			g TROY
c						Fig. 412 no. 29, 34		c II
f		Fig. 259 Ie, f, g, h, j				Fig. 247 no. 15		f
d		Fig. 263 Fig. 258, Fig. 236 Id						d
c	Fig. 261, no. 16 Fig. 239 no. 23, 24		no. 36,692 no. 36,691 no. 36,539		no. 35,641 no. 35,540; no. 35,541		Fig. 240 no. 6, 7	c I
t	Fig. 236, no. 29, 32, 34 no. 36,840		no. 36,686		no. 36,760		Fig. 236 no. 5, 14	t
a	Fig. 235, no. 2		no. 36,689		no. 36,843 no. 36,676; no. 36,735	no. 35,649		a
V				no. 506				V THERMI
IV		no. 353 no. 321	no. 411 no. 410		no. 413; no. 419 no. 327; no. 328			IV
III		no. 188	no. 249, 250 no. 196, 200, 201		no. 288 no. 233; no. 253	no. 234, no. 287 no. 163, no. 203, no. 204	no. 251	III
II	no. 96	no. 159	no. 113, 114	no. 140 no. 126	no. 161	no. 116, no. 117	no. 139 no. 99, no. 115	II
I	no. 6		no. 9, 10	no. 556, no. 63	no. 18, 70	no. 14, no. 15	no. 12	I
XIIIc			P.45 no. 3 P.41 no. 4, 6		P.40 no. 3, 4, 5, 6 P.39 no. 2, 3	P.45 no. 4 P.40 no. 1 P.39 no. 5, 11, 13		XIIIc BEYCESULTAN
XV					P.32 no. 1, 2, 3 P.31 no. 4, 9	P.31, no. 5		XV
XVI	P.23, no. 3, 7, 9, 22				P.25 no. 2, 5, 6, 7, 12	P.25 no. 11		XVI
XVIc	P.22, no. 10, 13, 15		Shape 21		P.22 no. 3, 12	P.22 no. 4		XVIc
XVII		P.15, no. 37, 38						XVII
XVIII								XVIII
XIX		P.14, no. 19			P.14 no. 31, 36	P.14 no. 35		XIX

1. W. Lamb (1936) Excavations at Thermi, Lesbos, p. 86;
- W. Orthmann, 1966, Ist. Mitt. 16: 18, no. 65.
2. See Chapter 1, p. 9.
3. J. Sperling, 1976, Kumtepe in the Troad, Hesp. 45, no. 4:  
Fig. 9, no. 211, 212.
4. J. Sperling, op. cit., Fig. 12, no. 303, 304; Fig. 13, no. 407-8.
5. J. Sperling, op. cit., Fig. 13, no. 406-408; Fig. 14, no. 501-506;  
Fig. 15, no. 535-546. See also J. Mellaart (1962), Beycesultan I, p.  
107.
6. J. Sperling, op. cit., Fig. 19, no. 611-617.
7. See Chapter 5, p. 71, 72.
8. C.W. Blegen (1950) Troy I, Fig. 237, no. 31; Fig. 266, no. 7.
9. L. Bernabò-Brea (1964) Poliochni I, 2, Tav. LX-LXI.
10. J. Sperling, op. cit., Fig. 11, no. 230.
11. J. Sperling, op. cit., Fig. 13, no. 413.
12. J. Sperling, op. cit., p. 330.
13. L. Bernabò-Brea, op. cit., Tav. VIIa; Tav. XXIV; Tav. XXV.
14. See Chapter 5, p. 72.
15. J. Sperling, op. cit., Fig. 19, no. 610; Fig. 20, no. 647.
16. J. Sperling, op. cit., Fig. 23, no. 704.
17. J. Sperling, op. cit., p. 358 ff; see also Chapter 4, p. 62.
18. See p. 25.
19. K. Bittel, 1939, A.f.O. 13: Abb. 10, no. 4.
20. W. Orthmann, op. cit., p. 13, Abb. 6, no. 46.
21. D.G. Mitten and G. Yügrüm, 1971, HSCP 75: Fig. 4, 9.
22. A further six vessels are given by Orthmann, 1966, Ist. Mitt.  
16: 14.
23. This vase is now in Copenhagen.
24. See Chapter 2, p. 15.
25. See p. 30.
26. L. Bernabò-Brea (1976) Poliochni II, Tav. CXCIX-CCI.
27. See Chapter 1, p. 9.
28. J.E. Coleman (1977) Art and Culture of the Cyclades, ed.  
J. Thimme, p. 110 ff, PL. 388-391, 395, 396, 392.
29. Ibid.
30. I.K. Kökten, 1949, Bell. 13: Lev. XCIV.
31. J. Sperling, op. cit.
32. J. Sperling, op. cit.
33. See Chapter 1, p. 9.
34. Thirteen more juglets are given by W. Orthmann, 1966, Ist. Mitt. 16, p.  
10, Miniaturschnabelkannen.
35. H. Schliemann (1880) Ilios.
36. R. Demangel (1926) Le Tumulus dit de Protésilas, p. 18, Fig. 17.
37. W. Orthmann, op. cit., Abb. 1, no. 1, 2, 3.
38. It is possible that some of the twenty six vessels listed by Orthmann,  
op. cit., p. 4, jugs with obliquely cut spouts (Schnabelkannen,  
Gruppe 2) are also in red ware.
39. See also Chapter 2, p. 16.
40. Here only twenty seven jugs could be illustrated. The rest are in the  
Berlin Collection. See note 37, 38
41. Petrological analysis of jug no. 159, Fig. 44, see Chapter 2,  
p. 15-16.
42. J. Sperling, 1976, Kumtepe in the Troad, Hesp. 45, no. 4.
43. R. Demangel (1926) Le Tumulus dit de Protésilas, p. 39, Fig. 46;  
p. 55, Fig. 69; p. 57, Fig. 72.

44. For some examples of the form see M.J. Mellink, 1964, AJA 68: PL. 80, Fig. 16, 17, Pl. 81, Fig. 22, 23; 1966, AJA 70: PL. 59, Fig. 15, 17, 19; 1968, AJA 72: PL. 84, Fig. 34.
45. Ibid.
46. L. Bernabò-Brea (1964) Poliochni I, 2, Black - Tav. I f, g, Tav. III k; Blue - Tav. XLII-XLV; Green - Tav. CXXII.
47. J. Deshayes, 1972, Arch. 25, no. 3: 199.
48. G. I. Georgiev, N.J. Merpert and G.D. Dimitrov (1979) Ezero, Abb.174.
49. S. Hood (1965) Atti del VI Congresso Internazionale delle Scienze Preistoriche e Protostoriche, Sezione III, p. 226.
50. E. Vermeule, 1964, Arch. 17, no. 4: 247, 248.
51. H.A. Ormerod, 1911-12, BSA 18: PL. V, no. 3, 4; PL. VI, no. 4, 6; PL. VII, no. 6, 9, 10.
52. J. Mellaart, 1954, An. St. 4: p. 230, no. 352, 357-359; p. 232, no. 361, 362.
53. For a general account see J. Mellaart, 1971, CAH Vol. I, part 2: 371 ff, 383 ff. Also S. Lloyd and J. Mellaart (1962) Beycesultan I, p. 183.
54. Twelve more jugs with cutaway spouts belong to the Berlin Collection. See W. Orthmann, 1966, Ist. Mitt. 16: 6, Schnabelkannen Gruppe 4.
55. K. Branigan (1970) The Foundations of Palatial Crete, p. 190 ff; P. W. Warren (1973) Bronze Age Migrations in the Aegean, ed. R.A. Crossland and A. Birchall, p. 41 ff; J.L. Caskey, 1971, CAH, Vol. I, part 2, p. 799 ff.
56. R. Demangel, op. cit., p. 57.
57. See Shape VIII, p. 37.
58. L. Bernabò-Brea, op. cit., Tav. CXLIII i, CXLVI d, f.
59. R.W. Hutchinson, 1935, Iraq 2: 214.
60. The provenance of this jug is not so certain. The museum registration does give it as a "Yortan" find, but unlike other Yortan finds it is not specified as "given by P. Gaudin".
61. H. Schliemann (1880) Ilios.
62. A. Koerte, 1899, Ath. Mitt. 24: 1 ff, Pl. II.
63. Several examples are illustrated by W. Orthmann, op. cit., Taf. 2, no. 1, 2. The author was also able to view some examples in a private collection.
64. M. Korfmann, 1979, Ist. Mitt. 29: Abb. 7, no. 7; M. Korfmann, 1978, An. St. 28: 18.
65. L. Bernabò-Brea, op. cit., Tav. XLIII a, b.
66. V. Mikov, 1959, Arch. 12, no. 3: 88.
67. G.I. Georgiev, N.J. Merpert, and G.D. Dimitrov (1979) Ezero, Abb. 174.
68. M.J. Mellink, 1967, AJA 71: PL. 76 Fig. 11, 12.
69. Ibid., p. 253, PL. 76, Fig. 10.
70. R.S. Merrillees, 1979, Acts of the International Archaeological Symposium, Nicosia; S. Dietz, 1974, Act. Arch. 45: p. 138 ff.
71. The identification of the Beycesultan find, no. 1, is, however, doubted by some. See above, note 70.
72. Ibid.
73. M.J. Mellink, 1966, AJA 70: PL. 61, Fig. 30.
74. M.J. Mellink, 1968, AJA 72: 259.
75. See Chapter 4, p. 63.
76. One further triple jar, identical to no. 38 Fig. 98 of the Institute of Archaeology, London, belongs to the Marburg Collection, and is said to come from Mordoğan. See A. Götze (1957) Kulturgeschichte Kleinasiens, Taf. 2, a; p. 29, no. 12.
77. H. Goldman (1956) Excavations at Gözülü Kule, Tarsus. II. p. 104, Pl. 260, Pl. 278.

78. J. Garstang (1953) Prehistoric Mersin, Fig. 119, no. 16; Fig. 117, no. 5.
79. J. Garstang, 1938, AAA 25: Pl. VII, no. 10.
80. At Mersin, the vessel was found in a pit dating earlier than EB1 period, but this would be an unreliable stratigraphy. See J. Garstang (1953) Prehistoric Mersin, Fig. 123, no. 16.
81. R.C. Bosanquet, 1896-98, BSA 3: 57; J.E. Coleman (1977) Art and Culture of the Cyclades, ed. J. Thimme, Pl. 422-424.
82. Ibid. See also C. Renfrew (1972) The Emergence of Civilisation, p. 426.
83. The pot was given to the Fitzwilliam Museum, Camb., by J.R. Stewart. It was not an object that K. Bittel's team found at Babakoy, but J.R. Stewart had bought it from the antiquity market and therefore its provenance as Babakoy is not certain. I am most grateful to Mrs. D.E. Stewart who readily placed at my disposal Prof. Stewart's notes and photographs of his researches in the Balikesir area.
84. P. Getz-Preziosi (1977) Art and Culture of the Cyclades, ed. J. Thimme, Fig. 88, no. 3, 4.  
A possible survival of the object and custom in the Greek Orthodox Church has been suggested for the offering of the first fruit of the harvest. See S. Xanthanidides, 1905-06, BSA 12: 9 ff.
85. See p. 39, note 44.
86. M. Korfmann, 1979, Ist. Mitt. 29: Abb. 11, no. 1.
87. M.J. Mellink, 1965, AJA 69: Pl. 62, Fig. 21; but better parallels to this form of spout are seen on metal jugs from Alaca Hüyük and Mahmatlar. H.Z. Koşay (1951) Alaca Hüyük Kazısı, 1937-1939, Pl. CXXXII, Pl. CLXXVI; H.Z. Koşay, 1950, Bell. 14: Lev. XXXVIII, Res. 8, 10.
88. H. Schliemann, op. cit.
89. M.J. Mellink, 1969, AJA 73: Pl. 73, Fig. 10.
90. L. Bernabò-Brea (1976) Poliochni II.
91. M.J. Mellink, 1964, AJA 68: Pl. 81, Fig. 20.
92. W. Orthmann, 1966 Ist. Mitt. 16: Abb. 1, no. 1, 2, 3, 5, 6, 7; Abb. 2, no. 14, 15.
93. For a study of the shape see P.Z. Spanos, 1976, Depas amphikypellon, Ist. Mitt., Beiheft 6. No. 269 of Yortan is classified as Type III, BI/13, p. 109.
94. See Chapter 1, p. 5.
95. R.W. Hutchinson, 1935, Iraq 2: 214.
96. H. Schliemann, op. cit.,
97. M.J. Mellink, 1965, AJA 69: Pl. 61, Fig. 13, 14.
98. See Chapter 2, p. 17.
99. See Chapter 4, p. 63.
100. H. Schliemann, op. cit., p. 551.
101. B. Kadish, 1971, AJA 75: Pl. 29, Fig. 34.
102. H. Schliemann, op. cit.
103. L. Bernabò-Brea, op. cit.
104. M.J. Mellink, 1964, AJA 68: Pl. 82 Fig. 29.
105. M.J. Mellink, 1967, AJA 71: Pl. 82, Fig. 42.
106. H. Goldman (1956) Excavations at Gözlü Kule, Tarsus. II, Fig. 361, no. 557-559.
107. P. Gaudin excavated several trenches on the nearby mound of Çavdar Tepe (see Chapter 1, p. 5). The plans show three pithoi, but the meaning of these finds is not entirely clear. One of the pithoi is shown in a lying position with the mouth facing south. If a burial, then it ought to belong to a period later than the Early Bronze Age.
108. See also Chapter 4, p. 62, 74, 75.

## CHAPTER 4 CHRONOLOGY

A precise time-scale for any archaeological deposit is determined either by scientific dating (C14) or by the historical dates. Neither are available at Yortan itself, and it has therefore been essential to outline the position of the site as clearly as possible next to the rest of western Anatolia. Yet this laborious comparative study could only produce a relative date since none of the three main sites is itself furnished with absolute chronology.<sup>1</sup> The scientific dates in western Anatolia are available from only two sites, Aphrodisias and Karataş-Semayük, while the latter have to be derived from Mesopotamia and Egypt via the finds of Tarsus-Gözlü Kule in Cilicia. In this respect the central plateau with its earliest written records of Anatolia at large is very important. But the research into deeper prehistoric levels of such important sites as Kültepe or Karahüyük/Konya has yet to reach a level where solid correlations with the west are demonstrable.<sup>2</sup> In the meantime the stratigraphy of Tarsus continues to be almost the only intermediary grounds between the historic east and the prehistoric Aegean. In other words, at the present state of Anatolian archaeology there exists over the immense peninsular of Turkey a handful of excavated sites, placed widely from one another and which must be correlated internally into an overall pattern of relative chronology that can then be pinned down onto an absolute scale. A reverse method where the absolute dates are used to synchronise levels and sites is as yet unreliable due to the imperfection of the method itself (C14) and to the inconsistencies among the dates. It may perhaps become a primary method of dating when many more sites are scientifically investigated and many more consistent dates obtained.

Besides the rarity of the stratigraphically investigated sites, several defects inherent in the existing material complicate the matter further. For example, it is not often realised that at Beycesultan, a huge mound ca. 25m in height and ca. 1 km long at the base, the Late Chalcolithic and Early Bronze Age periods are known only from a small sounding, S X,<sup>3</sup> which at the lowest Level XXXIX measures no more than ca. 5 m x 5 m. Moreover, Level XVII-XIII, that is part of the EB1 and the whole of the EB2 periods, cut through a series of complexes best interpreted as shrines and the pottery from them could be regarded as being selective.<sup>4</sup> Thus, it is very possible that the contents of these levels are somewhat limited, allowing only a brief glance into a larger repertoire. The second vitally important site of Troy/Hisarlık on the other hand has often been over-emphasised for its truly crude material, that being a direct result of the site's identification with the mythical city of Troy.<sup>5</sup> When first proposed by Schliemann the idea was not widely accepted. Today the reverse is true with the unfortunate outcome that the sequence and finds of the site tend to be viewed with a biased approach where there is an unconscious or conscious assumption of its supremacy over other sites. It is hoped that one result of this study has been to undermine this bias further, and in a way reverse it in the direction of reviewing this small mound on the Troad as merely a prehistoric site which might have come into existence on the expansion of the inland cultures of the north-west. The American excavations under C.W. Blegen were scientific and are adequately published; but already much damage had been inflicted on the deposits by the pioneering work of H. Schliemann and of his other successors, and Blegen was left to work out a full stratigraphy from a number of small areas.<sup>6</sup> Thus the results are often unsatisfactory and a large number of finds from the preceding excavations just float precariously between levels or "Cities". Possibly one day all the material will be assembled into a more coherent body of finds. Meanwhile one must be content with what there is and



without synchronising these two major sites the problem of absolute chronology cannot be undertaken.

A convenient starting point may be where there is for once a general agreement, that the end of Troy II coincides with the end of Beycesultan Level XIII and the EB3a in western Anatolia starts in the succeeding Troy III and Beycesultan Level XII. At Yortan Class C pottery is ascribed to this period. For the earlier EB1 and 2 levels, however, no such generally acknowledged correlation exists; and it is perhaps to this point that the analysis of the Yortan "A" pottery makes a significant contribution.

At the publication of the Beycesultan excavations J. Mellaart initially offered the following equation:<sup>7</sup>

EB1	Beycesultan Level XIX - XVII	=	Troy I
EB2	Beycesultan Level XVI - XIII	=	Troy II

D. French in his study of the prehistoric remains of north-west Anatolia used this chronology suggesting that most of the Yortan pottery falls into Troy II.<sup>8</sup> Then at the publication of Poliochni on Lemnos and of the preliminary reports of the Karataş-Semayük excavations J. Mellaart altered his view and proposed a shorter length for the Troy/Hisarlik sequence:<sup>9</sup>

EB1	Beycesultan Level XIX - XVII	=	Kumtepe Ib
	Beycesultan Level XVII - XV	=	Troy I
EB2	Beycesultan Level XIV - XIII	=	Troy II

With some minor alterations D. Easton adopted this synchronisation, but more recently J. Yakar went back to the earlier suggestion, basing himself on the publication of the Kumtepe excavations.<sup>10</sup> Our analysis of the Yortan pottery is clearly in favour of J. Mellaart's revised synchronisation, and to argue the contrary would need a number of highly unlikely assumptions; thus if Troy I is to be equated with Beycesultan Level XIX-XVII then the Yortan "A" pottery, which has strong affinities with Troy I but not with Beycesultan XIX-XVII levels, has to be viewed as belonging to a site geographically poised in between the two sites and yet with very slender links to Beycesultan; in the following phase the position is reversed, and while Yortan "A" pottery is strongly represented in Beycesultan Level XVI-XIV, there is relatively little in Troy II. Obviously this is an unsatisfactory arrangement of the material and more a way of forcing a pre-conceived idea upon the evidence. There is reason to believe that after a prolonged development of the pottery in the area of Balıkesir, stronger contacts came to be established with the south-west and with further north-west.<sup>11</sup> It is quite unfounded and unnecessary to see the Troad as the centre of the growth and spread of this pottery; or to be more specific, having now come to full grips with the pottery of Yortan there is surely just as good a case for arguing that the Balıkesir-Akhisar region was a point of diffusion which by the EB1 period had reached the Troad coast and Beycesultan in opposite directions.

The position of the Kumtepe Ib pottery is as yet hard to assess. No doubt this is the material that underlies the Yortan pottery and is best known for its rolled rim bowls. The typical carinated bowl of Yortan and Troy I appears in the Ib 4 phase after a long development starting in Ia.<sup>12</sup> No other Yortan shape has been recognised in the Ib phase. This could, however, be accidental. It is quite unlikely that such Yortan shapes as jars of Shape II-III, or jugs of Shape VII-VIII would have appeared suddenly without a trace in the ancestral Ib phase. J. Mellaart has also expressed

similar doubts pointing out that in the pre-Troy I "Black" and "Blue" of Poliochni there are Ib bowls as well as other shapes such as the jug with obliquely cut spout and its askos version. He suggests that because of these shortcomings of the Kumtepe material the name of the culture (Kumtepe Ib) might eventually be changed into something else.<sup>13</sup> If this review of the Kumtepe material is correct then here may be the answer for the difficulty of synchronising it with any site in Anatolia and the Aegean. As far as the recognised shapes go it has quite a wide distribution reaching west Thrace and east Macedonia,<sup>14</sup> but in no level of Beycesultan can it be identified with satisfaction. Possibly at this time the Gediz valley formed the southern limits of the north-west pottery with little or no extension further south while the Beycesultan L. Chalcolithic north of Gediz has been recognised only at Kayışlar and Paşaköy.<sup>15</sup> But it could also be that lack of parallels is an erroneous fact and an outcome of the limited research on the small mound of Kumtepe.<sup>16</sup>

To sum it up, there seems to be enough reasons to postulate the "A" class pottery of Yortan developing in the depths of the EB1 (Beycesultan XIX-XVII and Kumtepe I) in the region of the Balıkesir plain. By the Beycesultan XVI, Kumtepe Ib, and Troy I this pottery province began to expand to the coast and the south, and the comparative material, outlined in Table I, is the proof of the diffusion. Moreover the Kumtepe I phase in the Balıkesir region may well be the basis and part of this development and not a separate phenomenon.

In his long overdue publication of the Kumtepe excavations, J.W. Sperling takes quite a different line of equations and places the beginnings of Troy I back to the Late Chalcolithic 4 of Beycesultan.<sup>17</sup> It is a weak synchronisation based on only a few odd shapes. As Sperling admits, the contemporaneity of Ib and Beycesultan Late Chalcolithic 3 cannot be observed among the finds and the carinated bowls of the latter site "seem vaguely related in style" to the Ib fragments. Better demonstrated, he goes on, is the equation of Troy I and Beycesultan Late Chalcolithic 4, which again is based on a number of fragments only, without taking into account the rest of the pottery. One sherd of Troy I bowl A.5 (Fig. 259) with a vertical handle is compared with a rather small fragment in Beycesultan Late Chalcolithic 4.<sup>18</sup> Two other fragments of the Troy I bowl are actually in different shape.<sup>19</sup> His second comparative shape, A.6 bowl, with flaring sides and rim thickened inside, occurs in Kumtepe Ic but not at Beycesultan, though he considers one bowl in Level XX, Fig. P. 12, no. 35, and a second in Level XIX, Fig. P. 14, no. 1, as similar in shape. Thirdly, the carinated bowl (Troy A. 12) of Beycesultan Level XIX-XVII is described as rounded in profile, ignoring those with angular carination,<sup>20</sup> and therefore more like the Middle and Late Troy I examples, so that the beginnings of Troy I should fall to levels earlier than Level XIX. Throughout his argument Sperling takes a rather narrow vision of the shapes and wares involved, without explaining the many contradictory sides of his conclusions. Here is also a good example of interpreting Troy/Hisarlık as a site where the appearance and disappearance of various elements are of primary importance over the rest of western Anatolia and the Aegean. Why could the carinated bowl not have originated elsewhere, perhaps in the Yortan Culture area, and reached the Troad coast at a later date?

Naturally the synchronisation of the two major sites via the Yortan pottery cannot deliver the final verdict but at least it has the advantage of offering the least contradictory scheme within the known facts of west Anatolian archaeology. Moreover, Thermi on Lesbos allows a certain degree of cross-examination of the results. Even before the publication of the

American excavations, W. Lamb was able to compare Troy I with Thermi I-IV, and there is now abundant material showing that even better parallels can be drawn with the Yortan "A" pottery, and indirectly with Beycesultan Level XVI-XIV. Thus, all three sites, with Yortan in the middle can be locked into one roughly contemporary unit as the EB2 period. A more problematic aspect of the Thermi sequence is defining the limits of Town IV-V, or the end of the Early Bronze Age period at the site. The excavator was in favour of a final date before the end of Troy II,<sup>21</sup> but a longer sequence has also been considered.<sup>22</sup> Basically the difficulty lies in the rarity of comparative material from the C phase. Among the diagnostic shapes are fragments of the face jar and sauceboat.<sup>23</sup> The latter vessel is a familiar feature of the Early Cycladic and Early Helladic. It is found in the Keros-Syros culture and is the type artifact of Lerna II (EHII).<sup>24</sup> At Troy/Hisarlık the shape is best known for the silver cup in IIg and also appears with the Urfirmis sherds in Blegen's Middle Troy I phase. The stratification of the latter finds is quite uncertain involving the important question of tying up the Early Helladic sequence with the Early Bronze Age of Anatolia.<sup>25</sup> Whether the EHI starts in Troy I or II, the existence of the sauceboat at Thermi only proves that the occupation of the site lasted to the end of Troy I or into the early phase of Troy II and not necessarily the full length of the EB2 period. In any case, there is always the possibility of the vessel reaching Lesbos before the Troad coast. The face urn (Troy D.13), which seems to be an Anatolian feature, is first found in Troy IID,<sup>26</sup> and later in IIg.<sup>27</sup> Otherwise, Thermi is without any of the well-known Late EB2 or EB3 material, the wheel-made pottery in general perhaps being the most significant absentee. The Yortan synchronisation is in support of a short EB2 phase at the site; in Chapter 3 many parallels drawn between Thermi I-IV and Yortan "A" pottery make it quite clear that the island was within the cultural sphere of the opposite mainland in the first half of the EB2 period, but neither Class B or C pottery of Yortan can be distinguished in Town IV or V, which, on the assumption that Lesbos remained close to the development of the mainland pottery, must mean that this late EB2 period is not present at the site.

The accommodation of Karataş-Semayük and Aphrodisias into the north-west sequence is less troublesome, though firm conclusions must await the full publications. According to M.J. Mellink, Level I-V of the small mound and some of the burials fall into the Troy I period.<sup>28</sup> It is not a widely accepted view, others preferring a longer or later sequence where Level I-V overlaps into Troy II and some of the finds exceed the end of the EB2 period.<sup>29</sup> Obviously without the final publication it would be unwise to dispute the excavator's tentative conclusions, but since the present synchronisation of Beycesultan and Troy/Hisarlık is different from that accepted by Mellink some re-adjustment of the levels is inevitable. On the whole, the parallels to Yortan are not many but there is enough to suggest that at least some of the "A" shapes are similar and probably contemporary. Such other shapes as the depas or teapot are late EB2 material showing that the large, sprawling cemetery conceals a long EB2 sequence but it is difficult to imagine the same duration for the small settlement point of the central mound. The present choice is, therefore, for a beginning of the small mound in the first half of the EB2 but perhaps not from its earliest stages. Some of the tombs and megara must fall into the late EB2 but the end of Level V should not be prolonged to such an extent. Such tombs as no. 1, 41, 95, and the megara in Trench 37 and elsewhere with wheel-made plates, depas, or the lentoid jug, bring the Karataş sequence into the EB3 period or Beycesultan Level XII and Troy III.

There is far less published material from Aphrodisias, hence greater

reliance on the tentative remarks of the excavator. B. Kadish describes the earliest finds at Pekmez Level VII as contemporary with the Late Chalcolithic 4 of Beycesultan.<sup>30</sup> On the Acropolis mound there is a much longer sequence of occupation than at Karataş, unfortunately limited to small soundings. Complex XI is said to have dark incised or matt white painted pottery. These burnished wares last until Complex VIII-VII where the wheel-made pottery appears.<sup>31</sup> In Complex VI stacks of the characteristic wheel-made plates are found. The appearance of the potter's wheel in western Anatolia is problematic. The earliest evidence of it is in Troy IIB, at Beycesultan it appears at a much later date in Level XIIIa, the last phase of the EB2 period. Such a wide gap is difficult to account for. Perhaps future research will alter the "facts" in favour of a more uniform distribution. The technology could have reached the area from the east or it could have had an independent evolution in the west from the simple turn table.<sup>32</sup> Meanwhile, one could assume that at least in the south-west there ought to be some proximity in the occurrence of the device at various centres, and that Complex VII of Aphrodisias should not stand too far apart from Beycesultan Level XIIIa. In Kadish's reports more is said for Complex II which contains Troy II-IV and Beycesultan Level XII shapes such as the teapot, dipper, cooking pot or a small jug with ribbed neck.<sup>33</sup> One illustrated jug is identical to no. 277 (Fig. 80 ; Pl.XVI) of Yortan Class C pottery.<sup>34</sup> In the succeeding Complex I there are idols and volute features of Troy IV-V and Beycesultan EB3b. In Complex B and C the Middle Bronze Age is reached.

Having outlined a system of relative chronology for the Anatolian sites there remains the straightforward task of transforming the frame onto an absolute time-scale. From Level II of the Karataş-Semayük mound a number of charcoal samples give a round date of c. 3000 BC<sup>35</sup> which should then pin down a part of the Yortan "A" pottery and of the EB2 Beycesultan but not the earliest phases of the period. A second and much higher point is provided by the Pekmez mound where a date at c. 4350 - 4060  $\pm$  70 BC stands for Level VIIId<sup>36</sup> or the Late Chalcolithic 4 of Beycesultan. The beginnings of Yortan may then lie somewhere in between these dates, ca. 3500 BC would be a reasonable guess. A more recent set of dates is now becoming available from the Demirci Hüyük excavations. The exact position of the Late Chalcolithic and Early Bronze Age levels between Phase E and Phase P has yet to be established; but it has already become obvious that this site occupies an important fortified position between western and central Anatolia, with deep stratigraphy extending back to the Late Chalcolithic of Beycesultan. In Phase P and K nine consistent C14 dates range between c. 3420 and c. 3750 BC, thus in absolute agreement with the high chronology of the scientific dating.<sup>37</sup> A further and rather convenient confirmation of such early beginnings for the Anatolian EB2 is from Bulgaria at Ezero; the transitional Horizon VIII-VII is noted for the appearance of new elements that are found in Troy I or the EB2 of north-west Anatolia. In Horizon VI-V these elements are well established and continue into Horizon IV-III. The excavators then offer the following synchronisation:<sup>38</sup>

Ezero	Horizon VIII-V	=	Early and Middle Troy I
	Horizon IV-III	=	Late Troy I

Troy II pottery is found in the top two horizons. A number of C14 dates from Horizon VII centre around c. 3400 BC with the seed samples giving c. 3340  $\pm$  BC.<sup>39</sup> This is in agreement with the Anatolian dates allowing enough time for the north-west elements to spread into the Balkans. Higher up in Horizon IV the seed samples are c. 2950  $\pm$  80 BC,<sup>40</sup> which may be taken as a round date for the end of Troy I or the first half of the EB2 period.<sup>41</sup>

Lower down the scale the next set of dates is from Complex IV and II of the Acropolis mound, Aphrodisias. In Complex IV the charcoal samples range between c. 2500  $\pm$  86 and c. 2120  $\pm$  55 BC,<sup>42</sup> and in the more recent Complex II the seed samples which yield more reliable dates than wood are c. 2150  $\pm$  59 and 2060  $\pm$  55 BC.<sup>43</sup> Yortan Class B and C pottery may then be placed roughly in between 2500 BC and 2100 BC. The rest of the divisions have to be worked out by pure guesswork and need not be pursued further. It would be quite rash to place too much reliance on these scientific dates. A glance at the available dates is enough to spot the many inconsistencies, sometimes even within the samples of the same stratum. On the other hand they do provide a broad framework that is in agreement with the archaeological conclusions.

Returning to the synchronisation of western Anatolia and Cilicia, one is again confronted with the unnecessary complications of facts due to inadequate or incomplete research of the two main sites, Mersin-Yükük Tepe, and Tarsus-Gözlü Kule, the latter having the better stratigraphy which still appears to be quite oversimplified and in need of a thorough revision. What seems to be certain is that Cilicia had at all times maintained pottery cultures that were distinctly different from those of the west and under the influence of central Anatolia and northern Syria. Thus when at ca. 11.5 m a large quantity of distinctly west Anatolian elements appear they make a startling change from the local wares and interpreted as the beginnings of a new period, EB3. The tankard, or depas, the fluted depas, wheel-made plates, bell-shaped goblet, or dipper, are typical among the new pottery. In the words of the excavator, the change "between EB2 and EB3 is striking and indeed dramatic in its implications".<sup>44</sup> Among the wares that have disappeared is the characteristic incised, cross-stitched Red Gritty ware. Destruction is also reported.

While there can be no doubt about the west Anatolian origins of the so-called EB3 Tarsus, it remains an unsettled problem whether the EB2 of EB3a of the west is the contemporary period.<sup>45</sup> The final solution must await further fresh material; meanwhile the available records appear to make better sense if the end of EB2 and the beginnings of the EB3 are considered contemporary with the beginnings of Tarsus EB3. Such Troy shapes as A.11, 12, 16, 18, 44, and the volute features that are found in Tarsus EB3 actually belong to Troy III-IV and not to Troy II.<sup>46</sup> Moreover, the facts of the Tarsus stratigraphy indicate a sudden point in time when the western features arrived, marked by destruction, which naturally finds a convenient explanation in the period of upheaval that is reported for the end of the EB2 of the west. As far as the levels preceding Tarsus EB3 are concerned one simply cannot draw the line in relation to the western sequence. The parallel finds are either very weak or non-existent. All that can be said with certainty is that at least some of what has been named Tarsus EB2 must fall to the time of the EB2 of Troy/Hisarlık, Beycesultan, and Class A and B or Yortan. This lack of contacts or exchange of goods need not come as a surprise; the excavators of Tarsus remark that "at no other time did Cilicia come so close to developing an independent indigenous character".<sup>47</sup> The contacts are mostly with Syria. Only by stretching the material to its utmost limits can one point to some related features in the pottery. One such vessel is the beak-spouted jug which is more like the south-west version than that of the north-west.<sup>48</sup> A second and better parallel is the multiple vessel in double, triple or quadruple combinations. It occurs on a number of Cilician sites with the Tarsus finds showing that its first appearance on the plain is in the EB2 period, and it continues to be made in the EB3.<sup>49</sup>

As for the question of the Egyptian and Mesopotamian dates in the west,

this is a matter that rests first on the synchronisation of Tarsus with the west Anatolian sites, and then of the Tarsus sequence with the historical periods. Unfortunately, just as the Tarsus-Troy-Beycesultan synchronisation is based on disputed grounds, the vital Cilician finds that have been recognised in a historical context are no more than one pot and a seal. The former find is a reserved slipped jug of Tarsus EB2 (?) and was found in the tomb of Cheops at Giza.<sup>50</sup> That puts Tarsus EB2 and EB2 of the west contemporary with the IV Dynasty. This not too secure datum can actually now be confirmed by the finds at Tell Chuera where the EB3 metallic ware pots with a diagnostic double-barrel lugs are well represented in Troy II with the earliest examples probably not occurring before Troy II d phase.<sup>51</sup> Some of the Troadic pots can even be considered imports from Syria. Kühne suggest the end of the EB2 Tarsus falls before the end of the EDIII period which he equates with the end of Troy II. But his reasoning of the west Anatolian pottery at Tarsus as due to the intensification of the commercial contacts with Syria does not at all explain the sudden and total appearance of the new elements in Cilicia.<sup>52</sup> The second synchronous Tarsus find in relation to Egypt is a glazed steatite seal of the EB3 period and is suggested to date from the first Intermediate Period.<sup>53</sup> This historical date then falls into the second half of the west Anatolian EB3 and defines the later parts of the Yortan Class C pottery and burials.

EZERO	POLIOCHNI	THERMI	KUMTEPE	TROY	YORTAN	BEYCESULTAN	KARATAŞ	APHRODISIAS	
				IV		VIII			2100*
	YELLOW			III		IX		II	
						X			
						XI		III	
						XII			
							Tomb 1, 45, 95 megara		2500*
	RED			II		XIIIa		IV	
I						XIIIb		V	
II		V				XIIIc		VI	
III						XIVa	V	VII	
IV		IV		Late		XIVb	IV	VIII	2900
V	GREEN	III				XVa	III		3000*
VI		II		Mid		XVb	II	IX	
VII		I	I			XVIa	I	X	
VIII				Early		XVIb			
IX	BLUE					XVIc		XI	3400*
X			b4			XVIIa			3500
XI						XVIIb			
XII	BLACK		I			XVIIc			
XIII						XVIII			
						XIX			

EBA IIIa

EBA II

EBA I

\* These absolute points roughly indicate the C14 dates from Karataş,

TABLE 2 Aphrodisias, and Ezero, mentioned in Chapter 4.

1. Several C14 dates from Beycesultan are generally rejected as being too low. See S.Lloyd and J. Mellaart (1962) Beycesultan I, p. 19 (Level XXXIII 3014  $\pm$  50 BC, and p. 75 (Level XXVIII) 2740  $\pm$  62 BC. Also M.J. Mellink, 1964, AJA 68: 304.
2. D. Easton, 1976, An. St. 26: 157 made a brave attempt at correlating the sequence of Karahiyük/Konya with those of Tarsus and Troy. Twenty seven levels of this important site are yet to be published, and one cannot draw conclusions on the general remarks of the excavator. J. Yakar, 1979, An. St. 29, outlines the weakness of the material.
3. S. Lloyd and J. Mellaart (1962) Beycesultan I, p. 18, Fig. 3.
4. However, M.J. Mellink does not accept these buildings to be "shrines". See, 1964 AJA 68: 304.
5. J. Mellaart has now raised a strong voice against this largely unnecessary identification  
See, Troy, a re-assessment, Transactions of the IV International Colloquium on Aegean Prehistory, 1977. Sheffield. On that occasion the author was also able to raise similar objections. Throughout this research the "mythical" and geographic name of the site, Troy/Hisarlik, has been used.
6. D. Easton, 1976, An. At. 26: 147.
7. S. Lloyd and J. Mellaart, op. cit., p. 107.
8. D. French, 1969, An. St. 19: 56, 57, 65.
9. J. Mellaart, 1971, St. Bal. 5: 119 ff.
10. J. Yakar, 1979, An. St. 29: 57 ff.
11. See Chapter 5, p. 74.
12. See Chapter 3, p. 26.
13. J. Mellaart, 1971, St. Bal. 5: 120.
14. D. French, 1961, An. St. 11: 112 ff.
15. ibid.
16. See, Chapter 3, p. 53.
17. J.W. Sperling, 1976, Hesp. 45, no. 4: 357 ff.
18. S. Lloyd and J. Mellaart (1962) Beycesultan I, Fig. P. 13, no. 10.
19. C.W. Blegen (1950) Troy I, Fig. 254, no. 27, 29.
20. S. Lloyd and J. Mewllaart, op. cit., Fig. P. 14, no. 20-23; Fig. P. 15, no. 28, 29.
21. W. Lamb (1936) Excavations at Thermi on Lesbos, p. 210.
22. D. Easton, op. cit., p. 155.
23. W. Lamb, op. cit., Pl. XIII.
24. J.L. Caskey, 1960, Hesp. 29: 290.
25. The position of Blegen's so-called EH sherds in Troy I has long been in dispute, and cannot really be solved to everyone's satisfaction until fresh deposits are examined. We tend to agree with those who are familiar with the material and consider it to be out of context. See D. French, 1961, An. St. 11: 119 ff, and J. Mellaart, 1971, St. Bal. 5: 124 ff. But also S. S. Weinberg (1965) Chronologies in Old World Archaeology, ed. R. W. Ehrich, p. 303, and D. Easton, op. cit., p. 151 ff.
26. C.W. Blegen (1950) Troy I, Fig. 405, no. 37-1033.
27. Ibid., Fig. 405, no. 11-339.
28. M.J. Mellink, 1968, AJA 72: 259.
29. J. Mellaart, 1971, St. Bal. 5: 122 ff., suggests a continuous sequence from the beginnings of the EB2 period up to the EB3, or in between Beycesultan XVI and VIII.  
D. French, 1969, An. St. 19: 57, is in favour of an EB2 or Troy II sequence with the end of Karataş EB2 coinciding with the end of Troy II.
30. B. Kadish, 1971, AJA 75: 138 ff.
31. Ibid.



32. P. Warren, 1969, Antiquity 43: 224 ff.
33. B. Kadish, op. cit.
34. Ibid.
35. 1966, Radiocarbon 8: 352 ff. For calibration, see D. Easton, 1976, An. St. 26: 170.
36. 1975, Radiocarbon 17: 205. D. Easton, op.cit. p. 169.
37. M. Korfmann, 1978, An. St. 28: 18.
38. G.I. Georgiev, N.J. Merpert and G.D. Dimitrov (1979) Ezero, p. 542.
39. Ibid., p. 518. The Aegean dates are also within these limits, though the value of these absolute points is reduced by the absence of solid comparative material with Anatolia. The EHI of Eutresis gives c. 3400  $\pm$  75 BC, and Sitagroi IV c. 3380  $\pm$  100 BC and c. 2960  $\pm$  100 BC.
40. Ibid. One charcoal sample gives c. 3390-3000  $\pm$  80 BC.
41. c. 2950  $\pm$  64 from EHII Eutresis is in favour of the EHII beginnings starting in Troy II.
42. 1971, Radiocarbon 13: 369. For calibration, see D. Easton, op. cit., p. 169.
43. Ibid.
44. H. Goldman (1956) Excavations at Gözli Kule, Tarsus II, p. 131.
45. M.J. Mellink (1965) Chronologies in Old World Archaeology, ed. R.W. Ehrich, p. 115 ff.
46. D. French, 1967, An. St. 17: 66.
47. H. Goldman, op. cit., p. 104.
48. H. Goldman, op. cit., Fig. 249, no. 211, 213, 214, 218.
49. See Chapter 3, p. 47.
50. M.J. Mellink, op. cit., p. 111. According to Mellaart's historical Chronology IV Dynasty dates to 2700-2554 BC which is in broad agreement with the C14 dates of the west. I am indebted to Mr. Mellaart for this point.
51. H. Kühne (1976) Tell Chuera, p. 49.
52. H. Kühne (1976) Tell Chuera, p. 114, 115.
53. M.J. Mellink, op. cit. 2260 - 2134 BC are the dates for the First Intermediate Period on Mellaart's chronology. See also D. Easton, 1976 An. St. 26: 163.

## CHAPTER 5 THE YORTAN CULTURE OF WESTERN ANATOLIA

The excavations at Yortan had unfolded a large group of prehistoric pottery which today can be rated to a position no less significant than that of Troy, Thermi, or Beycesultan. Since 1900 many more cemeteries, usually plundered for the satisfaction of the antiquity market, have yielded similar, often superior, pottery showing that Yortan is not a local phenomenon. Thus, over the years a term "Yortan Culture" has come to be a familiar part of Bronze Age Anatolia denoting an imperfectly recognised group of pottery between the so-called Troy culture of the Troad and Beycesultan of the south-west. Its somewhat enigmatic undertone is partly a result of the improper publication of the finds from Yortan and partly due to the clandestine recovery of most of the finds elsewhere. Hence, while in his highly constructive study of the region J. Mellaart tried to draw the geographical limits and cultural implications of the material, D. French in a customary cautious manner preferred to drop the term altogether and suggested a different classification based on the regional variations in pottery wares. In this study it has been thought essential to isolate the finds of Yortan from those of the so-called "Yortan Culture" of a more general provenance. In this way the facts of the matter could be stated and reviewed with clarity. We propose to continue to use the term "Yortan Culture" based on pottery, but only after submitting an explicit definition of the evidence, and "culture" in this context would mean an assemblage of pottery where there is a high degree of uniformity in the methods and material of the potter. To attain this end it needs to be demonstrated that there is an area in western Anatolia where a number of sites, both burials and cemeteries, contain pottery which is similar or identical to that found at Yortan cemetery. Secondly, the pottery of Yortan need not be special to the burials but should be found also in the habitation deposits. Thirdly, it is essential to draw the chronological limits of the material. From the following account it will also become clear that Yortan is neither the centre nor the most outstanding part of this pottery province. But because it was at this site that the pottery first became known, one may continue to use it as the type-site rather than introduce further complications by new terminology.

The nearest and best known site is Babaköy near Bigadiç. The pottery illustrated in Fig. 89 was found in pithos burials identical to those of Yortan. The jars are very much in the form and decoration of Shape II, III and IV.<sup>1</sup> One bowl found by Bittel is similar to the bowls no. 11 and 12 (Fig. 24).<sup>2</sup> Both the beak spouted Shape VIII and cutaway spouted Shape X jugs plain or with white painted decoration, are also reported.<sup>3</sup> No. 11 (Fig. 89) is a large overlapping lid, Type (C) at Yortan, while other types of lids are also well represented. The tall jug no. 14 and a small jug or cup no. 13 are quite different in shape and fabric and may well be identified with the "C" class pottery of the EB3 period. There is also J.R. Stewart's observation that a sherd of Troy V type was found at the site.<sup>4</sup> The bowl on tripod feet, no. 16 (Fig. 89) strikes one as being more like the Level XIII examples of Beycesultan than shape A.17 of Troy I or II.<sup>6</sup>

Although the Babaköy finds are not large enough to represent all the types and shapes of Yortan, it is still sufficiently representative to allow both sites to be attributed to the same pottery assemblage. To the west of Yortan are the disturbed sites of Soma and Bergama. The few available finds, Fig. 90, are again quite like the Yortan pottery of Class A, though the tall-neck jug from Soma, no. 18, could be of Class "B" date. More material is known from the cemeteries of the Balıkesir area which are exclusively robbed

and their contents divided up between the private collections and museums round the world. One exception to this sad and shameful state of affairs is a brief excavation of E. Akurgal at a small settlement mound of Ovabayındır near Değirmenderesi.<sup>7</sup> Only a small quantity of pottery was recovered, without an apparent stratigraphy, but it is very useful material in demonstrating the existence of at least some of the Yortan shapes on a settlement site of the region; the bowl with inverted rim is there, also in the variety with vertically pierced carination,<sup>8</sup> there are high pedestal bases, lids of Type (a) and fragments of jugs in Shape VII-VIII, or IX-X. The team which had undertaken this research was also able to confirm the looting of a number of nearby rich burials.<sup>9</sup> Fig. 91-100, no. 1-41 illustrate a few examples of this largely wasted prehistory. Some display features which are identical to those of Yortan and some may even originate from that site. Others such as jug no. 32 (Fig. 95) are products of a different centre but still belong to the same tradition of pot making. No. 37 (Fig. 98), said to be from Babaköy, is a most unusual vessel combining the characteristics of Shape III and IV in a kernos. No. 25-33, 38-39 (Fig. 94, 95, 96, 98) which again relate to the Yortan pottery but are generally known to have come from the cemeteries of the Balıkesir region. Further examples are illustrated by Schjögren and F. Fischer.<sup>10</sup> The bowls no. 1-6 (Fig. 91) have already been examined;<sup>11</sup> they make a significant addition to the repertoire of the Yortan bowls. Among the jars, no. 22 (Fig. 93) with tall collar neck and "wing" lugs is most like the Thermi jars in Town IV;<sup>12</sup> No. 23 (Fig. 93)<sup>13</sup> is almost a double of the Yortan jar no. 57 (Fig. 29); the tall, plain jar, no. 20 (Fig. 93), on tripod feet is in Shape III form, except that the double lugs or handles on the upper section of the body are not found at Yortan but occur on a jar of a different shape at Beycesultan Level XIV.<sup>14</sup> Other small jars with rich incised decoration and lustrous black burnishing are again related to such Yortan jars as no. 77 and 79 of Shape IV, and on account of their much taller, flaring bases, and richer ornamentation one is inclined to suggest a date towards the end of the EB2 period.<sup>15</sup> Two pyxides are in a rounded shape resembling a nomad tent; they make an interesting comparison with the Cycladic stone pyxis in the appearance of a house with a gabled roof;<sup>16</sup> no. 9/10 (Fig. 91) is more like those found in large numbers at Thermi I<sup>17</sup> and Troy I.<sup>18</sup> A large and coarse black jug, no. 34 (Fig. 97) is unique in reflecting the impression of a bird of prey in profile. Finally there is the brilliant jug, no. 36 (Fig. 97) which in its superbly balanced shape and a faultless, pitch black surface may well be rated as the most successful product in the whole of the illustrated material. The zigzag motif is incised and white filled, and it very probably belongs to a period later than most of the Yortan jugs of Shape VII-X.<sup>19</sup> Jugs of similar proportions could be sought out only at Beycesultan in Level XIIIa and Level XI.<sup>20</sup> Some fifteen dagger blades and eleven pins are also known to have been found in these Balıkesir tombs.<sup>21</sup> All, except no. 14, belong to the well-known types of the EB2 period. No. 14 dagger shows a very strong midrib section and is generally agreed to date later than the EB2 period. Similarly one pin, no. 25, with a bell-like head is better put to a late date.<sup>22</sup>

On the whole the Yortan products are inferior to those of Balıkesir burials but that does not alter the fact that here are a number of cemeteries which are situated within the same geographical zone and physical environment, and display almost identical pottery types. Furthermore this quite uniform pottery assemblage is not restricted to the burials but can be successfully correlated with the survey material from the nearby settlement mounds. The position of the Ovabayındır settlement in relation to Yortan has already been outlined. A survey material is often strongly biased in favour of the most common type of vessel from a settlement, the bowl, so that only a part of the Yortan repertoire can be identified on the mounds. Nevertheless

the parallels are, when located, rather satisfactory. The most widely spread type is the carinated bowl in the so-called black grey, red or brown Balıkesir and Akhisar/Manisa wares. Some are plain vessels, others are ornamented in matt white painting, and quite similar to no. 1-7 (Fig. 23) of Yortan. To cite a few examples: no. 26, Fig. 8, from Kayışlar<sup>25</sup> is no. 7 (Fig. 23) at Yortan; no. 14, 15, Fig. 8, from Pamukçu, or no. 19, 31, Fig. 8, from Kayışlar are small bowls with painting on the rim;<sup>24</sup> no. 24, 26, Fig. 9, from Halitpaşa I and II, or no. 22 Fig. 10, from Kayışlar, and no. 1, 5, Fig. 11, from Hacırâhmanlı and Halitpaşa II have the more upright inverted rim and carination,<sup>25</sup> similar to the Yortan bowl, no. 8 (Fig. 24) with or without the lug. Particularly important is the bowl with pierced carination, no. 31, Fig. 9 (Kayışlar) and no. 25, Fig. 12 (Ovaköy III). It occurs on some twelve sites of the area.<sup>26</sup> By contrast it is not among the carinated bowls of Troy/Hisarlık, Thermi or Beycesultan, and it may well be a speciality of this area. Then, a number of spout fragments, Fig. 20,<sup>27</sup> from Ovaköy III, Pamakcu, Kayışlar and Hacırâhmanlı are not classified but unmistakably belong to the Shape X jugs of Yortan. The body sherds, Fig. 22,<sup>28</sup> decorated with matt-white lines and chevrons must, except for no. 5, 8 also belong to such vessels. D. French is rather cautious in his recognition of the Yortan pottery and classifies it as a sub-group under the "Black Burnished Balıkesir" ware in the Troy II period. Other sub-groups are arranged according to ornamentation as plain, grooved/incised, white painted, and plastic. He prefers to see Yortan as a "cemetery" pottery not necessarily representing the "settlement" pottery of the survey. The present argument is that the Yortan pottery is not restricted to the burials but is merely a selection from a larger assemblage and can therefore be shown to have a full representation on the settlement sites, especially at better known Troy/Hisarlık, Thermi and Beycesultan. We may well suspect, therefore, that when more sites are excavated the parallels between the contents of the burials and the surrounding low mounds will be even greater. French himself does not give a definition of the Yortan pottery, but in ascribing it to several sites - Pamakcu, Paşaköy, Sındırgı, Halitpaşa II - he seems to use the incised sherds, lids of Type (a), and Shape X as his criterion.<sup>29</sup>

If the proposed assessment and correlation of the Yortan pottery are accepted, the definition of these cemeteries and mounds of the Balıkesir, Akhisar and Manisa areas as broadly comprising one and the same pottery assemblage or culture becomes inevitable and it may well be named after its type-site, Yortan. A full geographical definition of the Yortan Culture is not yet possible and one can only offer a rough outline on the basis of the presence and absence of the most outstanding characteristics of the pottery. In the west, Bergama in the valley of the Bakırçay (Kaikos) has already been mentioned.<sup>30</sup> In the same valley towards the coast twelve sites are known from a small survey.<sup>31</sup> The carinated bowl is again widespread, some rather characteristic plain examples occurring at Yeni Yeldeğirmen Tepe.<sup>32</sup> A variety with a tubular lug is found at Tepe I in the Gümüşova Deresi,<sup>33</sup> and one with a lug below the carination at Üyücek Tepe near Çandarlı.<sup>34</sup> But the occurrence at Tepe by Ayazköy<sup>35</sup> and at Üyücek Tepe of rim and neck fragments that are in the flanged form of Shape II, III jars of Yortan is even more significant. Indeed, such equations with Yortan are only natural, since all these sites are located within the geography of the Gediz valley, and even Lesbos further away off the Anatolian coast may be brought into the same pottery provenance. Opposite Thermi, I.K. Kökten reported a brief survey and small sounding at Kaymak Tepe in the plain of Altınova.<sup>36</sup> Unfortunately the results are hardly published, depriving us of invaluable knowledge for a precise definition of the coast in between the pottery of the off-shore islands and the inland Yortan.

At Bayraklı near İzmir Troy I-II pottery is reported from the lowest levels,<sup>37</sup> and one suspects at least some of it is more likely to be Yortan. At Sardis the prehistoric investigations on the shores of Marmara Gölü (Lake Gygean) revealed similar pottery at two locations, Ahlatlı-Tepecik<sup>38</sup> and Eski-Balikhane.<sup>39</sup> Both sites seem to be pithos burial grounds without architectural remains. Once again the excavators compare the pottery with that of Troy/Hisarlık but the illustrated examples, at least, are better paralleled at Yortan, though a certain degree of change in the details of shape is already apparent. For example, a small jug<sup>40</sup> belongs to the juglets, Shape VI, but the overall form shows different elements. Across the sea the excavations at Chios, Emporio, are yet to be published. Various deposits below the Mycenaean levels are ascribed to Troy I and II, and Kumtepe pottery. S. Hood speaks of a "Troy I horizon"<sup>41</sup> and we may again suspect that this pottery is actually directly linked with the Yortan Culture of the opposite mainland. Heraion I on Samos, on the other hand, though still within the sight of the north-west, is oriented more towards the south-west of Beycesultan.<sup>42</sup> Thus, it seems that the Gediz valley defines the immediate southern boundaries of the Yortan pottery. Further south the Yortan elements may still be found, i.e. at Beycesultan, but intermingled with those of the south-west. Judging by the Iasos finds,<sup>43</sup> the coast and the off-shore islands occupied an intermediate position between the Aegean, i.e. the Cyclades, and Anatolia.

Beyond these loosely defined southern and western geographical boundaries of the Yortan Culture which is effectively between the line joining Edremit and Balıkesir in the north and the Gediz (Hermos) in the south, it becomes more difficult to assess the meaning of any Yortan or other west Anatolian elements that may be encountered, especially further west in the islands and Greece. That there were contacts, peaceful or hostile, throughout the Bronze Age between the islands and the two mainlands on either side of the sea need not be doubted. The need for caution and moderation comes where it is a question of interpreting the evidence in terms of the origins and development of cultures and inter-relations. On Crete the Late Neolithic is thought to contain strong north-west Anatolian elements.<sup>44</sup> In the succeeding EB1 and EB2 periods Anatolian-like features are also detected but without a plausible explanation to their meaning, especially when so little is known of the south-west coast of Anatolia. Among these elements, foreign to the island's Neolithic, is the jug with a cutaway spout. Although the shape of the body and base is quite unlike those of Yortan, the form of spout and the small knobs on either side of the neck are truly identical to those of Yortan Shape X jugs in group 5.<sup>45</sup> However, the painted decoration, dark-on-buff, is unknown anywhere outside Crete. In Greece and the Cyclades there are various objects that can be recognised without doubt to belong to the Early Bronze Age of western Anatolia.<sup>46</sup> The tankard or depas, as perhaps one of the best known pottery shapes of the north-west occurs both on the islands and mainland in the ECII and EHII. In the reverse direction the sauceboat of the Cyclades and Lerna is at Thermi and Troy/Hisarlık. But in viewing the entire cultural assemblages in which these odd objects are found it seems wrong to maintain an Anatolian influence across the sea, except perhaps for Macedonia. One of the most typical pottery types of western Anatolia is the jug with a beak or cutaway spout. The jug does appear in the Keros-Syros culture of the Cyclades but it is quite unlike those of Yortan or Troy/Hisarlık. Similarly there is little direct resemblance between the jars, pyxides, and multiple vessels of either region. It is only in the idea of creating and using such types of vessels, whether it be for the tomb or in the house, that a broad cultural unity or familiarity may be suggested for the Aegean zone.<sup>47</sup>

In Anatolia, Aphrodisias and Karataş-Semayük are yet to be published. Probably their position in relation to Yortan and the north-west will prove to be not too dissimilar to that of Beycesultan of the same cultural province; here the local pottery is distinctly different in displaying a greater percentage of the red burnished wares and a more popular use of the fluted and ribbed ornamentation. Some rather close Yortan parallels may, therefore, be explained in terms of "contacts" between two neighbouring regions, rather than due to cultural superiority or influence. As one moves further away from the Gediz valley the trends and traces of Yortan become fewer and more general. Thus Karataş, and perhaps even Aphrodisias, show less satisfactory parallels than Beycesultan. In the Burdur-Isparta region - Senirce,<sup>48</sup> Mancarlı Hüyük, Yassı Hüyük,<sup>49</sup> etc. - the common Yortan jugs, Shape VIII, X, continue to be found but more in the tradition of Beycesultan and of Kusura further north. The latter site is the type-site of the squat cup (Kusura cup) but it also has some Shape VIII jugs without the fluted or ribbed drappings of the area and more in the plain burnished style of the north-west.<sup>50</sup> The Afyon-Emirdağ pottery shows a high quality and a general likeness to the Yortan jugs,<sup>51</sup> but the proportions are quite different and a reserved slip decoration applied in the form of a broad zigzag band is never found in the north-west. Two isolated occurrences of Yortan-like jugs are from Kula<sup>52</sup> and Emet.<sup>53</sup> In the Eskişehir-Ankara region the south-west elements are again strong; at Ahlatlıbel,<sup>54</sup> Polatlı,<sup>55</sup> Karaoğlan<sup>56</sup> the grooved, fluted or ribbed decoration is very popular, often applied on the "Kusura cups" with a high loop handle that can be plain, twisted, or cog-wheel type. Such Yortan characteristics as the cutaway spouted jug, small jars with collar neck, pyxides, lids, carinated bowl, or the tubular lugs, are completely absent. In view of this wide inland spread of the south-west pottery it is surprising to hear the excavator of Karahüyük/Konya refer to many Troy parallels in the lowest levels of the site.<sup>57</sup> Eagerly awaited publication of the material may solve the puzzle. Bos-özü and Demirci Hüyük finds are nearer to the north-west though still remain outside the immediate sphere of the Yortan Culture. Among the more obvious shapes, common to both regions, is a zoomorphic vessel and depas from Bos-özü,<sup>58</sup> and a small bird-shaped vessel and jugs from Demirci Hüyük.<sup>59</sup> Further north in the Iznik area the characteristic shape is a bowl with flaring or curving sides, the Yenisehir black topped ware.<sup>60</sup> There are some carinated bowls, tubular lugs, and white painted sherds. Being situated so close to the Troad and the Balıkesir plain it is quite expected to find features common to both areas, but as a culture unit or pottery assemblage it probably belongs to that which is now best known from Demirci Hüyük.

Perhaps one of the more interesting outcome of this research has been locating Troy's position next to that of Yortan. Chapter 3 deals with the parallel finds in detail, and one can see that in the selected repertoire of the Yortan pottery the Troy I-II shapes are often represented in much better makes, and even superior products are known from the Balıkesir region. Our natural conclusion has, therefore, been that this area is the main centre of the pottery, spreading as far as the coast or even beyond. The site at Yortan is a part of it, perhaps not a particularly prosperous one, and the small settlement at Hisarlık may well be an extension or off-shoot of this cultural entity. If some local "Troadic" features are in existence, especially in the Troy II period, they were acquired through the site's proximity to the sea and the Thrace. One implication of the argument is to abandon the existence of a separate coastal Troy I culture between the Gulf of Edremit and İzmir. Some fifteen sites of the Yortan Culture area are known to have the Kumtepe Ib type pottery,<sup>61</sup> but in the Troad only Kumtepe has yet produced it. One may, therefore, imagine that this pottery marks the

beginnings of the diffusion from the inland sites towards the coast and beyond. In the succeeding EB2 or Troy I/Kumtepe Ic phase the process is completed and there are many new sites. Besides the mound of Hisarlık eleven sites are recognised with this phase.<sup>62</sup>

Beyond Anatolia, the north-west or Troy/Yortan elements continue to be found in the Thrace and Balkans. At Dikili Taş the EB2 period in Level 2-11 is readily recognised to be related and contemporary with Troy EB2 or Yortan pottery.<sup>63</sup> Even better parallels are from Karanovo VII<sup>64</sup> and Ezero B (Horizon VIII-II).<sup>65</sup> At the latter site the tubular lugs pierced horizontally (Horizon XIII-II), an askos shape jug (Horizon XI) and a jar with "wing" lugs (Horizon III) are particularly significant. The jug with the slanting spout is found in all levels, but the oblique cutting is never so pronounced as that of Yortan.

Before closing this chapter it would be lacking in comprehensiveness to ignore the significance of the pottery from Yortan in the connections between Anatolia and Cyprus in the Early Bronze Age. This is indeed a very interesting and engaging problem, but as long as there are so many gaps and faults in the prehistory of both Anatolia and Cyprus it can not be brought to conclusive results and must remain on an imprecise and controversial level. The weak points in the current archaeology of west Anatolia has already been outlined;<sup>66</sup> in tackling such a problem one has no more than a handful of sites - Tarsus, Mersin, Beycesultan, Troy - representing the whole of the south and west while a vast stretch of the coast and its hinterland remain hardly explored. In Cyprus the problem is in a way worse since due to a bias and poorly programmed scheme of research the main excavated sites and those under excavation are from later periods and the Early Bronze Age has been created out of a mass of unstratified finds from numerous tomb excavations. To this day the Early Cypriot period is known only from this typologically arranged material, without any stratigraphical observation.

Then, out of the impressive reservoir of unknowns and imperfections what are the points to bear in mind and reflect upon? In Cyprus the Red Polished Ware which has been assigned to the Early Cypriot period has a number of shapes which do not associate satisfactorily with the preceding Chalcolithic pottery. One shape is the jug with a tall beak spout or cutaway spout. Such jugs do occur elsewhere in the Aegean but even the untrained eye of an outside observer, unfamiliar with the pottery of western Anatolia would be able to note that the Anatolian repertoire of the shapes is the closest to the Cypriot pottery. A second shape is the jug with the spout cut away above the handle and in Red Polished III Ware; the Cypriot jugs have a different body form but the unusual cut of the spout is identical to those from Yortan, Fig. 80 no. 274, and Troy.<sup>67</sup> The askoi of Red Polished III Ware is again similar to those of Elmalı and Demirci Hüyük examples,<sup>68</sup> and finally one may also point out the two deep red bowls, no. 11, 12 fig. 24 which are not unlike the Red Polished I and II Ware bowls without incised decoration.<sup>69</sup> Besides the pottery shapes, and to some extent certain details of fabric, there are even better parallels and similarities in the metallurgy of the Early Bronze Age of Anatolia and Cyprus.

To some, these elements of comparative material have been substantial enough to suggest strong contacts with Anatolia.<sup>70</sup> Others speak with reserve and refer to "generic" similarities.<sup>71</sup> The contribution of the present work to this tacky problem can be only so far as demonstrating the proximity of the Yortan or west Anatolian pottery to that of the Early Cypriot period and thus bringing the argument a little closer to P. Dikaios' point of view. That the Early Cypriot material sometimes reflects marked likeness to that of

Yortan Class A and C may not be doubted, though we continue to remain quite impotent in penetrating beyond the superficial plain of similarities. One should also bear in mind that while these positive references on interrelations are noted, there exist some significant absentees. For example, the jars, Shape II-III, or the depas of Class B or C are completely unknown in the EC pottery. Or the Anatolian tradition of pithos burials have not been reported among the chamber tombs of Philia, Vounous, Vasilia, and elsewhere. Contacts, exchange of ideas, goods, or even the sharing of similar natural or historic fate between the island and her nearest mainland neighbour is natural and expected. We may, therefore, speculate that as research progresses towards broader geographical horizons and sounder scientific principles the existing comparative material will increase to a more meaningful body of facts and observations. Suffice to say that it seems not only Cilicia but the west and south Anatolia are relevant grounds for exploration, and the sudden and dramatic appearance of the west Anatolian pottery at the end of Tarsus EB 2 may well prove to be more significant for Cyprus than currently recognised.

Finally one may attempt to give a chronological definition of the culture. Besides Yortan many other sites are now known to have a full Early Bronze Age sequence lasting into the Second Millennium B.C. The last period of the Early Bronze Age, which at Yortan is represented by the Class C pottery, has a wide distribution under the title of Red Wash or Slip ware of western Anatolia. Obviously the term "Yortan Culture" cannot be applied to the entire Bronze Age sequence. There is too great a difference between the earliest and latest wares, and at the present stage of research it is quite impossible to see whether the EB3 wares of Yortan were any different from those of Troy III-IV or Beycesultan EB3. It is therefore proposed, as already suspected by Bittel, to limit the term to the Class A and partly Class B pottery, characterised by a highly burnished surface and ornamentation in white filled incision or matt white painting. Toward the higher limits, its extension into the so-called Kumtepe Ib phase is not unthinkable. Indeed, some of the Class A shapes may well start back in the EB1, or even earlier in the L. Ch. 4 or Beycesultan.

One notes with interest that while the region was densely populated in the Bronze Age, the formation of the settlements is in small and low mounds rarely exceeding ca. 100 m in diameter and ca. 5 m in height. This striking phenomenon in the settlement pattern of the north-west has long been noticed<sup>73</sup> and can be explained as due to the extensive use of wood in architecture and to the political circumstances of the age. But above all environmental factors such as the deforestation of the countryside and subsequent soil erosion must also be considered. The importance of the latter factor can now be observed in the formation of Demirci Hüyük.<sup>74</sup> The full height of the habitation levels between the summit of the mound and the virgin soil is ca. 13.5 m but only 5.5 m of the accumulated occupation is actually above the present plain level, and the rest, that is the earlier Bronze Age and Chalcolithic periods, are deep down, buried in the erosion soil. In other words the present mounds of north-west Anatolia are usually only the summits of settlements which lie well below the plain level and if excavated may well turn out to belong to much larger settlements.

In the historic centuries of the Second Millennium B.C. the region appears to have remained on the peripheries of the Hittite kingdom without achieving a major central power to meet the challenge from Central Anatolia.<sup>75</sup> If a serious break at the end of the EB2 period of western Anatolia can be proved beyond doubt, it is highly likely to be a very significant turning point in the prehistory of Anatolia and the Aegean; it



marks a change of direction in the cultural development that may have lasted uninterrupted since the Late Chalcolithic period. This change could have brought about linguistic and ethnic novelties, the Luwian speaking people being one such new force in Anatolia. If so, then there remains little cause for supposing a direct link between the Second Millennium B.C. Luwians and the people of Yortan.<sup>76</sup> Indirectly a gradual intermingling of the peoples, old and new, is not an unreasonable proposition, a process of cultural and ethnic development that has often characterized the peoples and cultures of the Anatolian peninsular. It has been suggested that several features on the pottery of the Yortan Culture could be the beginnings of the hieroglyphic writing in the Second and First Millennia BC.<sup>77</sup> As the evidence stands it is hard to be conclusive. With the exception of the Dorak finds there is hardly anything to speak for Egyptian influence under which the Anatolian writing system could have developed. On the other hand, no place outside Anatolia can be shown to have employed these signs and therefore it is more likely that Anatolia is the place of evolution, perhaps the Egyptian influence or impulse arriving via Crete. Since it is highly unlikely that the upheaval led to a complete annihilation of the old stock, the so-called Luwian speaking people must have absorbed at least certain strains of the people who produced the pottery of Yortan or Beycesultan. But before a direct link between the pot mark showing the figure of a human and the Egyptian "ankh", and between the Luwian hieroglyphics and the Yortan Culture, can be established, some more such hieroglyphic or proto-hieroglyphic signs need to be found on the pottery of the Early Bronze Age of north-west Anatolia.

1. K. Bittel, 1939, A. f O. 13: 1 ff; W. Orthmann, 1966, Ist. Mitt 16: 1 ff; For further details see I.K. Kökten, 1949, Bell 13: Lev. XCIV.
2. K. Bittel, op. cit., Abb. 10, no. 4.
3. Ibid., p. 9, 15.
4. J.R. Stewart (1948) Handbook to Nicholson Museum. p. 81.
5. S. Lloyd and J. Mellaart (1962) Beycesultan, Fig. P. 43, no. 6, 8, 9.
6. C.W. Blegen (1950) Troy I, Fig. 233, no. 35.537; Fig. 259; Fig. 412; no. 25, 26.
7. E. Akurgal, 1958, Anatolia 3: 156 ff.
8. Ibid., Abb. 4.
9. In and outside the village of Ovabayındır, and at Mandraköy (Yeniköy); I. K. Kökten, 1949, Bell. 13: p. 817, reported one looted site at Boztepe (Ivrindi). One further such site is mentioned by D. French, 1969, An. St. 19: 45, Pamukcu.
10. S. Schiek and F. Fischer, 1965, FS 17: Taf. 25. 27.
11. See Chapter 3, p. 25, 53.
12. W. Lamb (1936) Excavations at Thermi in Lesbos, PL. X, no. 480, 336.
13. Now in Copenhagen.
14. S. Lloyd and J. Mellaart, op. cit., Fig. P. 42, no. 2.
15. See Chapter 3, p. 33.
16. P. Getz-Preziosi (1977) Art and Culture of the Cyclades, ed. J. Thimme, p. 100 ff; Fig. 88, no. 6.
17. W. Lamb, op. cit., PL. XL, Type XIIIc.
18. C.W. Blegen, op. cit., Fig. 230, no. 35.648, no. 36.687, no. 33.159; Fig. 244, no. 30.
19. See Chapter 2, p. 17.
20. S. Lloyd and J. Mellaart, op. cit., Fig. P. 48, no. 17; Fig. P. 49, no. 9.
21. S. Schiek and F. Fischer, op. cit., p. 163.
22. ibid. Taf. 23
23. D. French, 1969, An. St. 19: 77-81.
24. Ibid.
25. Ibid.
26. Ibid. Also D. French (1968) Anatolia and the Aegean in the Third millennium BC, Fig. 32. Unpublished. The sites are: Yortan, Ovabayındır, Kayaşlar, Ovaköy III, Köseler, Naipli, Pamukcu, Paşaköy, Sındırgı, Kennez I, Uçektepe, Uçpınar. See Chapter 3, p. 26.
27. D. French, 1969, An. St 19: 89.
28. Ibid.
29. Ibid., p. 64, Fig. 12, no. 32-37.
30. See p. 70. Also S. Loeschcke, 1912, Ath. Mitt. 37: 402. A. Conze (1912) Altertümer von Pergamon I. 2, p. 157, 158. E. Boehringer and F. Kraus (1937) Altertümer von Pergamon IX, p. 100.
31. J. Driehause, 1957, Ist. Mitt 7: 76 ff.
32. Ibid., p. 84, Abb. 4.
33. Ibid., Abb. 1.
34. Ibid., Abb. 6.
35. Ibid., Abb. 3, no. 10. 17; Abb. 6, no. 9.
36. I.K. Kökten, 1949, Bell. 13: 816.
37. E. Akurgal (1950) Bayraklı Kazısı. Ön Rapor, p. 54.
38. D.G. Mitten and G. Yügrüm, 1974 Arch. 27, no. 1: 22 ff;  
D.G. Mitten, 1968, BASOR 191 Oct.: 7 ff.
39. D.G. Mitten, and G. Yügrüm, 1971, HSCP 75: 191 ff.
40. D.G. Mitten, and G. Yügrüm, 1974, Arch. 27, no. 1: 25.
41. S. Hood (1965) Atti del VI Congresso Internazionale delle Scienze Preistoriche e Protostoriche, Sezione III, p. 226.
42. S. Lloyd and J. Mellaart, op. cit., p. 181.
43. D. Levi, 1961-62, ASAA 23-24: 555-571; 1965-66, ASAA 27-28: 505-546.

44. J.D.S. Pendlebury (1939) The Archaeology of Crete, p. 41 ff; P.M. Warren (1973) Bronze Age Migrations in the Aegean, ed. R.A. Crossland and A. Birchall, p. 41 ff; J.D. Evans, 1962-63, Archaeological Reports, p. 29; S.S. Weinberg (1965) Chronologies in Old World Archaeology, ed. R.W. Ehrich, p. 301.
45. See Chapter 3, p. 41; Fig. 60-62.
46. For a list of objects in Greece see D. French (1968) Anatolia and the Aegean, p. 129-132; C. Renfrew (1972) The Emergence of Civilisation, p. 196 ff.
47. See p. 20, 33, 84.
48. H.A. Ormerod, 1911-12, BSA 18: 80 ff.
49. J. Mellaart, 1954, An. St. 4: 231, 232.
50. W. Lamb, 1936, Archaeologia 86: PL. VII, no. 8, 11.
51. Unpublished material, but it is on display in the Museum of Anatolian Civilisations, Ankara.
52. W. Lamb, 1931-32, BSA 37: 167, Pl. 23b; Beycesultan I, Fig. P.22, no. 6 jug is restored according to this example. But the Kula vessel does not have front protrusion in the shape of an animal head, but the feature is more like a small phallus. Two more, one on either side of the body, are now restored.
53. J.L. Myres, 1903, RAIOP 33: 373.
54. H.Z. Koşay, 1934, Ahlatlıbel Hafriyatı, TTAED 2.
55. S. Lloyd and N. Gökçe, 1951, An. St. 1: 45 ff.
56. R.O. Arık, 1939, Bell. 3: 27 ff.
57. S. Alp, Karahüyük Kazısı. Haberler. 1965, Bell. 29: 551; 1966, Bell. 30: 493; 1967, Bell. 31: 456.
58. A. Koerte, 1899, Ath. Mitt. 24: Taf. II.
59. M. Korfmann, 1979, Ist Mitt. 29: Abb. 7, no. 7.
60. D. French, 1967, An. St. 17: 49 ff.
61. D. French, 1961, An. St. 11: 104, Fig. 2. See also, Chapter 3, p. 53.
62. See J.M. Cook (1973) Bronze Age Migrations in the Aegean, ed. R.A. Crossland and A. Birchall, p. 40. The sites are: Kara Ağaç Tepe, Çoban Tepe, Kumtepe, Beşik Burnu, Hanay Tepe, Hantepe, Alexandria Troas, Colonsae, Kümbet, (Kocabahçe), Çiflik Tepe, Altın Oluk (near Papazlı).
63. J. Deshayes, 1972, Arch. 25, no. 3: 199.
64. V. Mikov, 1959, Arch. 12: 88 ff.
65. G.I. Georgiev, N.J. Merpert, G.D. Dimitrov (1979) Ezero, Abb. 204, 171.
66. See, Chapter 4, p. 60.
67. See, Chapter 3, p. 51.
68. See, Chapter 3, p. 45, 46.
69. See, Chapter 3, p. 29.
70. P. Dikaios, (1962) The Swedish Cyprus Expedition, Vol. IV, Prt. IA, p. 189 ff.
71. J.R. Stewart, (1962) The Swedish Cyprus Expedition, Vol. IV, Prt. IA, p. 274 ff.
72. K. Bittel, 1939, A. f. O. 13: 20.
73. A survey of these views is given by T. Özgüç, 1944, Bell. 8: 55 ff.
74. M. Korfmann, 1978, An.St. 28: 17.
75. There is no secure identification of the area in the Hittite geographical names. Lesbos-Lazpas is generally accepted; it is also quite certain that Arzawa occupied at least some parts of the Gediz/Hermos valley; Bakır Çay/Kaikos is often identified with Seha River. But the position of Ahhiyawa in the Troad and Troas, or in Mycenaean Greece, is yet to be settled.
76. H. Th. Bossert, 1960, Or. 29: 317 ff.
77. Ibid. See also Chapter 2, p. 18. The next possible earliest occurrence of the hieroglyphic writing in Anatolia is at Beycesultan, where a stamp seal was found below a Middle Bronze Age building in Level

VI. See S. Lloyd and J. Mellaart, 1958, An. St. 8: 97, PL. XXVI(a), and J. Mellaart, 1971, CAH I, part 2: 408.

## CATALOGUE OF THE FINDS

The pottery that could be examined is described briefly below. Except for Babaköy, Soma, and Bergama all the illustrations of pottery and idols are reduced approximately by half. Only the spindle whorls and metal finds are given without reduction. Together with ample illustrations it has been the author's aim to present the finds for critical study as a single body of excavated material, and thus to some extent eliminate the necessity of visiting all the main museums for a comprehensive knowledge of Yortan. Most of the pottery of uncertain provenance could not be examined by the author who is indebted to Mr. J. Mellaart for readily placing his personal records of these finds at the disposal of his student.

The following abbreviations are used:

B.M.	British Museum, London.
Brussels	Musées Royaux d'Art et d'Histoire (Cinquanteaire)
Cambridge	The Fitzwilliam Museum, Cambridge.
Istanbul	Istanbul Arkeoloji Müzeleri, Istanbul.
Louvre	Musée Du Louvre, Paris.
Paris Inst.	l'Institut d'Archéologie Orientale, Paris.
Sèvres	Musée National Céramique, Sévres.
St. Ger.	Château Sait-Germain-en-Laye, Paris.

## CLASS A POTTERY OF YORTAN

All Class A pottery is hand-made without the use of the fast wheel.

### SHAPE I Bowls (Fig. 23, 24; Pl. III)

1. - Coarse dark grey fabric and thick walls. Burnished, and possibly slipped. Dark grey colour of the fabric and surface turns buff in places. The carinated upper section is incomplete, where there might have been a lug or vertically pierced point, as on no. 2 bowl. (Paris Inst.)
2. - Fine, black/dark grey fabric. Inside and outside surface is also black, and burnished. Rounded base where there is incised cross. Without handle or lug; instead the carinated upper section and inverted rim is vertically pierced in two places forming a pair of string holes. (Brussels, inv. A.2656)
3. - Fine black to brown fabric and surface colour. Burnished to high shine. Similar to no. 2. One flat lug, vertically pierced and set on the carination. (B.M., inv. 132414)
4. - Fabric probably quite fine, rather thin walls. Slipped and burnished. Fired black without lighter oxidised patches. Flattened base. Below carination are a pair of vertically set tubular lugs; one is missing. (Louvre, inv. CA.1220 32)
5. - Fine, grey fabric. Burnished inside and outside. On the exterior, dark grey/black surface changes to red brown on one patch. Possibly also slipped. Stands on a high pedestal base pierced with four large holes. In between the point of carination and rim lip is set one tubular lug, pierced horizontally and decorated with six transverse incised lines. (Louvre, inv. CA.1220 31)
6. - Coarse fabric, mostly black which is also the overall colour of slipped and burnished surface. Some buff patches. About half of pedestal base and part of the upper body are missing. Carinated section is more like thickened rim with a flat and near horizontal top. A pair of small knobs on the rim top are vertically pierced. (Louvre, inv. CA.1220 83)
7. - Grey fabric which becomes coarser towards base. Burnishing is not obvious. Grey to light brown surface, perhaps coated with thin slip. Thick walls are sharply carinated. Small, well-defined, flattened base. One small handle is set below carination. (Louvre, inv. CA. 1220)
8. - Coarse fabric with large grain of mica, quartz and other inclusions. Fired hard, grey to light brown colour. Without slip or burnishing. Pitted exterior surface. Flattened base, rounded carination. Inverted rim has flat lip. One small, unpierced lug below carination. (B.M., inv. 132413)
9. - Dark grey fabric. Burnished inside and outside. Overall surface

colour is the same as fabric, in places turns to a lighter tone with some brown. Irregular shaping. Broken horizontal handle is set on the point of carination. (Louvre, inv. CA. 1220 29)

10. - Where visible fabric is dark grey colour. Burnished outside has a yellow/brown complexion which may suggest slip coating. Shape similar to no. 9, only body is deeper and more rounded in profile. (Louvre, inv. CA. 1220 24)
11. - W. Orthmann, 1966, 1st. Mitt. 16: no. 64
12. - See Orthmann, op. cit., no. 65

#### SHAPE II Small jars with tall neck and on feet (Fig. 25-27; Pl. IV)

Overall shape is the same on all thirty eight pieces. The round body stands on three or four feet. At the widest contour are two knobs and two vertically pierced lugs with one or two points, and round or flat in section. The neck is tall and cylindrical, sometimes flaring to the rim which is flanged and flat-topped. Below flanged rim are two holes for attaching lids of Shape V, Type (a). Linear decoration - parallel lines, zigzag bands or parallel lines filled in with dots - is exclusively incised and often white filled. The pattern is placed either horizontally on mid-body in between knobs and lugs, or perpendicularly from neck base to feet. The most varied element between individual jars is the surface treatment changing from black lustrous burnishing to a dull, light grey reflection. No. 37 is the only red ware example of the Shape. The texture of fabric is also liable to some change.

13. - Black fabric, burnished. In comparison to rounded body, three feet and cylindrical neck are rather short. (B.M., inv. 132418)
14. - Fine, dark to grey fabric. Remains of burnishing. Lugs are missing. Carelessly executed incision; there is a single line with strokes arranged roughly into herring-bone pattern. (Paris Inst., no. 25)
15. - Fabric is finer than usual. Light coffee brown in colour. Surface not burnished, but coated with black slip. Neck flares to a gently flanged rim. Two small knobs and one of tripod feet are missing. Faint incision. (Brussels, inv. A.2632, Yortan-Kelembe 10712)
16. - Black/dark grey fabric, burnished. Rounded body stands crooked on four feet. Horizontal mouth opening is not quite horizontal, and everted rim slopes inwards. Lines in between knobs and lugs are very faintly incised. (B.M., inv. 132419)
17. - Probably quite fine fabric. Surface colour is mostly dull dark grey with a light brown patch on one side. Smoothed. The rim is more everted than flanged. White filled incision. Inside remains of a red substance. (Sèvres, 10729 2)
18. - Black/grey fabric, burnished. Two thick and pointed lugs and two prominent knobs. Upper parts of neck are missing. Base of neck is ornamented with short strokes as a zigzag line, and dots. In four quarters of body which lugs and knobs divide up, three are filled in with bands of dotted lines, and one has a running zigzag with dots

on either side. (Louvre, inv. CA.1220 33)

19. - Very fine dark grey/black fabric, fired to a metallic hardness, and highly burnished. It is certainly the most delicate example of its type. Stands on four small, pointed feet. Most of neck is missing. (Louvre, inv. CA. 1220)
20. - Fine, black to grey fabric, burnished. Rather neat product but does not stand upright on the elegant tripod feet. Band of a single wavy line at base of neck, and three bands of dots round the body. (Paris Inst., no. 19)
21. - Dark grey fabric which breaks up in flakes. Little burnished surface is in a lighter tone in places. Half of the jar is missing. Cylindrical neck swells in the middle. A band of wavy lines in between the protrusions, and circles suspended from a horizontal line at neck base. (Louvre, inv. CA. 1220 56)
22. - Fine, grey fabric, burnished. Three of the four feet are restored. Incised decoration consists of a zigzag line with a row of dots on either side. At base of neck is a band of two parallel lines and a row of dots. (Brussels, inv. A.2635)
23. - Grey fabric. Burnished, with brown patches. One of four feet is restored. Rim is sharply everted and slopes outwards. Deeply incised decoration of circles and an interrupted double zigzag band. (B.M., inv. 132422)
24. - Fine, dark grey fabric, burnished. Part of the upper neck is missing. A wide band of double zigzag in between pointed lugs and knobs. Neck base has the common motif of short strokes suspended from a single horizontal line. (Brussels, inv. A. 2628)
25. - Fine, dark grey fabric. Burnished surface varies between this colour and a lighter tone. One of four feet is missing. Cylindrical neck, partly missing at rim. A wide band of running lozenge in between two flat lugs. (Louvre, inv. CA. 1220 84)
26. - Rather fine black to grey fabric, burnished. Two vertically pierced horn-like lugs. A wide band of double zigzag round mid-body and two parallel lines at base of neck. (Brussels, inv. A. 2630)
27. - Fine, black fabric. Highly burnished surface turns to brown colour on one side. One of the two pointed lugs is missing. White filling of the incised decoration - two opposing zigzags with a running lozenge in between - produces a good contrast on black surface. (B.M., inv. 132425)
28. - Fine, light grey fabric. Surface is in a dull colour of grey. The main incised pattern on mid-body consists of a band of wedge-shaped punctures. Upper body is covered with thin lines, perpendicular to a single horizontal line at neck base. (Brussels, inv. A.2633)
29. - Fine, black fabric, well burnished. One of three feet is missing. Flat, double pointed lugs. Neck flares to rim in a continuous curving rather than flanged profile. In between knobs and lugs are triple curving bends. (Paris Inst., no. 20)



30. - Grey fabric. Burnished surface is light brown in places. Three of the knobs and lugs are broken. Broad rim top slopes inwards. Each projection on mid-body is encircled by a double chevron, and there are short strokes in between feet and mid body projections. (B.M. inv. 132420)
31. - Very fine, light grey fabric and burnished surface. Shaped to perfection. Lugs, one of which is missing, are broad and pointed. Incised decoration consists of double chevrons filled in with dots. There is a similar band on neck base. Rather deep incision. (B.M., inv. 132372)
32. - Rather fine fabric, dirty brown in colour. But an inferior product, poorly shaped and ornamented. Cylindrical neck bulges in the middle. Three chevrons on the body, and a discontinuous wavy line at neck base. Only one foot preserved. (Brussels, inv. P.G.51.1.16, Yortan-Kelembé 10779)
33. - Fine, dark grey fabric. Burnished in similar colour, with one third of jar showing a reddish brown tone. Two double and two single chevrons. One of the two lugs and two of the tripod feet are missing. (Louvre, inv. CA.1220 57)
34. - Black/grey fabric. Highly burnished surface is mostly damaged. About half of jar is in a lighter tone of grey. Pairs of circles are hung from a single horizontal line at base of neck. Body is covered with eight chevrons forming a double zigzag band. (B.M., inv. 132423)
35. - Fine dark grey fabric, with same colour burnished surface. Rim is everted rather than flanged. A horizontal band at neck base, and a double zigzag band round mid-body. (Louvre, inv. CA.1220 40)
36. - Very fine fabric, light brown to buff in colour. Very smooth surface, possibly slipped. Deep incision in the form of a continuous band of a wavy line and a row of dots. Short strokes and a single horizontal line at neck base. (Brussels, inv. P.G. 51.1.14)
37. - Rather fine, red orange colour fabric. Breaks reveal a grey core. This is the only red ware example of this shape. Otherwise shares similar details with the rest. Burnished, a triple band forms a continuous zigzag on body. Strokes and a horizontal line at neck base. (Louvre, inv. CA.1220 45)
38. - Coarser, light grey fabric. Surface is badly worn out and covered in white encrustation. A triple band round body and a single incised line at neck base. Inside jar remains of red substance. (Brussels, inv. A.2397)
39. - Fine, light grey fabric. Burnished surface of same colour. Three feet. Deep incision consists of four triple chevrons round body and a horizontal line with strokes at neck base. (Brussels, inv. A.2636)
40. - Half of neck is restored, thus obscuring details of fabric. Surface colour is dark to light grey, burnished. Four intersecting triple chevrons round body, and short lines perpendicular to a horizontal

line at neck base. (Brussels, inv. A.2633, Yortan-Kelembé 10779)

41. - Coarser, grey fabric. Most of surface is worn out. One third of jar is in light brown colour. Neck and rim profile differs from the rest; neck flares to rim which is not everted but thickened with a flat top sloping inwards. Pierced lugs and knobs are rather small. Ornamentation in between projections consists of alternating triple chevron and obliquely set triple zigzag band. (B.M., inv. 132421)
42. - Dark grey, burnished, with a light brown patch. Deep incised lines are more like grooves. The unusual curvilinear motif is repeated on either side of the body in between two pointed lugs. (Istanbul, inv. 3446)
43. - Fine, grey fabric and burnished surface. Some reddish patches. Neck and one of four feet are missing. A band of dots and short strokes round the body form two broad chevrons. In between chevrons, on either side of body, are two short bands descending perpendicularly from base of neck. Inside jar traces of red substance. (Louvre, inv. CA.1220 70)
44. - Dark grey fabric. Burnished grey surface with brownish patches. Two lugs are missing. Incised decoration consists of two intersecting chevrons. In between and on either side are two small triple triangles filled in with dots. (Louvre, inv. CA.1220 76)
45. - Grey fabric which breaks up in flakes. Of the three feet, one remains. Deeply incised ornamentation is similar to above; chevrons are filled in with dots, and two "W" motifs are set in between chevrons, one on either side of upper body. (Louvre, inv. CA.1220 46)
46. - Fine dark grey fabric. Surface is in poor state of preservation. One of tripod feet is missing. Two flat lugs and two small knobs. The incised pattern is arranged round knobs; two bands of strokes, set in a zigzag pattern, form two chevrons above lugs. Below knobs are oblique lines and short bands as continuation of chevrons towards feet. (Brussels, inv. A.2629)
47. - Smallest jar of the shape. Fine, grey to brown fabric and surface. Prominent flat lugs. Incision is rather faint. Above each lug is a band of two parallel lines and dots. In between lugs, on either side of body, similar bands, also perpendicular to neck base; one band consists of double zigzag. The second has a different motif. (Brussels, inv. A.2634)
48. - Very fine fabric and highly burnished. Surface colour is mostly black. Some reddish patches. One of four feet is broken and missing. Ornamentation consists of four perpendicular bands of running lozenges, filled in with dots. Short strokes and a single horizontal line at base of neck. (Istanbul, inv. 3451)
49. - Quite fine fabric. Burnished surface is in grey colour and a little darker than fabric. Four perpendicular herring-bone motif in between lugs and knobs. (Istanbul, inv.3447)
50. - Coarser fabric. Burnished surface colour varies between black and light brown. Largest jar of the shape. Rim is everted rather than

incised, and tripod feet are placed rather close to one another. Four pointed and vertically pierced lugs. Round body is a zigzag band of dots and short lines. Small lozenges are suspended from base of neck. (B.M., inv. 132424)

SHAPE III Jars with tall neck and on flattened base (Fig. 28-32: P1.V)

Overall shape is little different from that of Shape II. All twenty vessels, except no. 54, have vertically set loop handles. Flanged rim is not pierced.

Petrological analysis of a piece from a jar of this shape, not illustrated, gave the following result:

Black paste (jar neck)

The matrix is birefringent in shades of orange and yellow and contains shreds of muscovite and biotite mica.

Other inclusions are:

Hornblende	0.1/0.2-0.5 mm; occasional
Quartz	0.1-0.3 mm on average. Some grains less than 0.1 mm and subrounded. Scattered.
Plagioclase feldspar	0.3/0.4 mm, subangular; occasional
Pumice/volcanic glass	0.1-0.5 mm; scattered
Haematite	0.1 mm and less; scattered

51. - Fine, black fabric. Slipped and burnished surface is in uniform black colour with a slight coffee-brown undertone. Poor shaping, one of the four loop handles is missing. Four small knobs in between handles. (Louvre, inv. CA. 1220 11)
52. - Small jar, more in the size of previous Shape. Fine black fabric, and surface, with some light brown patches. Rounded base, and four loop handles. (B.M., inv. 132426)
53. - Very fine, light grey fabric and surface colour, which is uniform. Tall flaring neck, and sharply everted rim with outward sloping top. Loop handles tend to take a triangular shape. (B.M., inv. 132370)
54. - Hard fired, fine fabric in dark grey. Surface is badly worn out. Possibly it was coated in a reddish slip. The only example of Shape where lugs or handles are replaced by solid and elongated knobs. Also the rim, or neck, is not pierced for lid attachment. (Sères, inv. 10729 7)
55. - Very large jar. Fine, grey to black fabric. Burnished probably after slip coating. Poorly preserved surface. Four loop handles and four knobs on upper body. (Louvre, inv. CA.1220 14)
56. - See W. Orthmann, 1966 1st. Mitt. 16: no. 40
57. - Fine dark grey fabric. Highly burnished. Oxidised patches on surface of similar colour. Unique shape; a basket handle over horizontal mouth opening. Four small handles round mid-body. Incised and white filled decoration. (B.M., inv. 132430)
58. - Fine, dark grey to black fabric and surface. Burnished. Tall neck flares to flanged rim. Body is slightly carinated and stands on small flattened base. Four loop handles, four knobs. Four triple

chevrons in matt white painting. (B.M., inv. 132428)

59. - Burnished surface in shades of grey, yellow, and buff colours. Flaring neck is set on a rather squat body with rounded base. Badly cracked. Four loop handles. Matt white painted triple chevrons are again barely visible. (Istanbul, inv. 3438 (?) )
60. - See W. Orthmann, op. cit., no. 41
61. - Burnished surface is in shades of dark grey and reddish brown. Tall, cylindrical neck. Four loop handles on mid-body. Four triple chevrons are largely faded out. (Istanbul, inv. 3438)
62. - Rather fine grey fabric. Burnished surface is slipped in a darker shade of grey. A large patch is oxidised to light orange colour. Four loop handles, and four knobs. Double chevrons (four) are faded. One of the loop handles is missing. Rounded base and gently flaring neck. (Istanbul, inv. 3434)
63. - Dark grey to black jar. Burnished. The colour is uniform, except for one small patch in light brown. Rather large body, slightly carinated. Stands on a flattened base. In proportion, neck is short. One of four loop handles is missing. Four matt white painted chevrons, each composed of three wide lines. (B.M., inv. 132427)
64. - Rather fine jar reflecting all the characteristics of its type. Fine fabric, but with some large grains. Slipped and burnished surface colour varies from black to light brown. Four loop handles and four knobs. Gently flaring neck is set crooked on body. Four quadruple chevrons in white/light grey colour painting. (Louvre, inv. CA. 1220 13)
65. - Intact jar. Black, well burnished surface turns light brown to buff colour on one side. Tall, flaring neck and rounded base. Four loop handles and four knobs on mid body. Four triple chevrons in faded matt white painting. (B.M., inv. 132429)
66. - Fine fabric, but rather thick walls. Burnished surface is mostly greyish colour with a buff/yellow undertone. Tall, cylindrical neck, small flattened base. Loop handles are set on upper body. Four continuous quadruple chevrons in matt white. (Istanbul, inv. 3435)
67. - Rather large jar, in fine and hard fired fabric. Two thirds of surface is in light brown. The upper parts are in grey. Large, globular body sits on slightly rounded base. Four loop handles, four knobs, and four quadruple chevrons, painted in white. (Louvre, inv. CA. 1220 12)
68. - Very fine, grey fabric. Smooth surface is in a light grey and brown colour. Rounded body does not stand on base. Four loop handles and four small knobs. (Sèvres, inv. 10729 4)
69. - Coarse but hard fired fabric, coated in red orange slip. Some darker patches. It is a thickly made jar. Four loop handles and four, flat knobs on upper body. (Sèvres inv. 10729 5)

70. - See W. Orthmann, 1966, 1st. Mitt 16: no. 38

SHAPE IV Small jars with short neck or hole-mouth (Fig. 32, 33; PL.VI)

Often called pyxis. Those with short collar neck are without holes below rim for lid attachment. Of the nine pieces three are with hole-mouth and take lids of Shape V, Type (a). Remaining six with short collar neck are closed by lids of Type (b).

71. - Coarser fabric, fired hard and in uniform light grey. Surface appears to be smoothed only. Two rounded lugs. Short collar neck is pierced in two places for attaching lid. Flattened base. (B.M., inv. 132415)

72. - See W. Orthmann, 1966, 1st. Mitt. 16: no. 61.

73. - See W. Orthmann, op. cit., no. 57.

74. - Heavily encrusted in lime obscuring details of fabric and surface. Fabric appears to be quite fine in light grey which is also the uniform surface colour. Four lugs, pierced vertically with large holes. Hole-mouth where there are also holes for attaching lid. Tripod feet are partly missing. Incised decoration is shallow, careless, and without white filling. Two triple chevrons, and two bands of dots. (St. Ger., inv. 58579)

75. - Fine fabric, and highly burnished. Lower parts of body are in light brown, and the upper parts, including short collar neck, in dark grey to black colour. Four large lugs pierced vertically with large holes. Tripod feet. (B.M., inv. 132416)

76. - Intact jar. Probably quite fine fabric. Two thirds of burnished surface is dark grey and brown. Four vertically pierced lugs. Stands on four feet. Incised chevrons. Inside jar are traces of a red substance. (Louvre, inv. CA. 1220 39)

77. - Fine dark grey fabric. Some burnishing. Globular body stands on short pedestal base, flaring slightly. Four crescent shape lugs, vertically pierced. Incised decoration on the dark surface is in the form of four perpendicular, running lozenges on body, and a horizontal hatched band on pedestal base. (B.M., inv. 132417)

78. - W. Orthmann, 1966: 16: no. 49

79. - One of the finest products of the collection. Very fine, grey fabric is slipped and burnished to a black lustrous finish. Four pointed lugs. Short neck and pedestal base. Incised and white filled ornamentation consists of two triple lozenges alternating with two perpendicularly running lozenges. There is a single horizontal wavy line on pedestal base. (Louvre, inv. CA. 1220 36)

SHAPE V Lids (Fig. 33, 34; Pl. VI)

Type (a)

Fabric, surface treatment, and incised ornamentation identical to those of jars Shape II and IV. Except for no. 3, shape is convex in profile. A central knob serves as lid handle. Always two or more holes on either side

of central knob serve to attach lid to the related jar.

80. - Burnished exterior is black, and interior in grey colour. No ornamentation. (B.M., inv. 132433)
81. - Coarse fabric. Light grey to light brown colour. Without decoration. (B.M., inv. 132431)
82. - Coarse fabric. Black surface colour. Possibly burnished. Four holes. Central knob is off centre. (B.M., inv. 132439)
83. - Rather fine, black to grey fabric. Well burnished surface in similar dark colour. Chipped on one side. (Brussels, inv. 2635)
84. - Burnished surface black to light grey on outside, and reddish inside. (B.M., inv. 132434)
85. - Highly burnished, black to grey surface. Central knob is missing. Also broken round edges. (B.M., inv. 132440)
86. - Burnished surface, light grey in colour. Central knob is rather small. (B.M., inv. 132435)
87. - Burnished inside and outside, dark grey to light brown in colour. (B.M., inv. 132436)
88. - Rather fine dark grey fabric. Burnished inside and outside, in a lighter tone of grey. (St. Ger., inv. 58579)
89. - Rather fine fabric, and regular shaping. Dull surface colour varies between grey and black, with some brown undertones. (Brussels, inv. A.2658)
90. - Centre part is poorly preserved. Fabric is greyish in colour. Burnished outside in leather brown, but grey inside. (Louvre, inv. CA.1220 73)
91. - Grey to black outside, reddish inside. Two rather large holes. Central knob is mushroom shaped. (B.M., inv. 132437)
92. - Burnished, light grey colour, with a brown tone, Inside are traces of red substance, similar to those found in some of Shape III jars. (Brussels, inv. A.2659)
93. - Burnished surface in black colour. Rather prominent convex profile, almost conical. Two holes are obliquely pierced. (B.M./, inv. 132438)
94. - Rather coarse product. Some burnishing inside and outside. Dark grey in overall colour. Partly broken. (Brussels, inv. 2633)
95. - Highly burnished inside and outside. Grey colour. (Louvre, inv. CA. 1220 (40 bis) )
96. - Burnished, grey surface. Prominent central knob. (Louvre., inv. CA. 1220 64)

Type (b)

Fabric, surface treatment and decoration, as above. In shape, more like a small, shallow cup with straight sides. On flat top, four flat knobs round the central knob. They belong to jars with short collar neck, shape IV.

97. - Burnished inside and outside. Four holes, one in front of each knob round the edge. Central knob is quite conical. (B.M., inv. 132441)
98. - Burnished, grey in colour. Traces of red substance on interior. (Louvre, inv. CA. 1220 42)

Type (c)

99. - Irregularly shaped, coarse vessel. Fabric is dark grey. Outside surface mostly in light brown. Smooth surface is bumpy, possibly coated in thin slip. The base, or top of vessel is slightly convex, and round the edge are four roughly shaped lugs, pierced vertically. On one side between rim and lugs is a pair of holes pierced horizontally, which corresponds to those of lug above. This is the only vessel of its type at Yortan and probably belongs to a large jar with tall neck. (Sèvres, inv. 10729 1)

SHAPE VI Juglets (Fig. 35; Pl. VII;)

Smallest vessels of Yortan repertoire. Overall shape does not vary in all thirteen pieces. Tripod feet are found on all pieces, except no. 13; body is round or pear-shaped; spout is beak-like or cutaway. Fabric is rather fine, probably slipped and burnished. Linear decoration is exclusively incised and often white filled.

100. - Fine black fabric, highly burnished. Feet are large and cornered. One foot and part of handle restored. Body slightly carinated below incised upper part. Small pouring channel of neck is blocked by a corroded piece of metal. (B.M., inv. 132402)
101. - Dark grey fabric. Burnished surface is similar colour. Feet, loop handle and part of spout are missing. Three small knobs round mid-body. Angular neck. (Louvre, inv. CA.1220 44)
102. - Light brown and grey fabric. Burnished. One foot is missing. Cutaway type spout. (B.M., inv. 132373)
103. - Light grey and brown fabric, and burnished surface. Feet are partly broken. Beak spout. (Paris Inst., no. 22)
104. - Dark grey to light brown fabric. Surface badly worn out. One foot restored. Cutaway type spout. (B.M., inv. 132401)
105. - Black fabric, burnished to lustrous surface. But irregular incision. Tip of spout is notched forming a double pointed lip. (B.M., inv. 132400)
106. - Dark grey fabric. Black burnished surface. One foot and loop

- handle are missing. Angular neck. Notched spout tip. (Brussels, inv. A.2645)
107. - Dark grey to black fabric and burnished surface. Four perpendicular strips of herring-bone motif round body. Neck is completely missing. (B.M., inv. 132502)
108. - Grey fabric and surface colour. Uniform. Possibly burnished. Three small knobs round mid-body. Incised pattern is repeated round each knob. Almost vertical beak spout. Loop handle is more prominent than on other juglets. (Louvre, inv. CA.1220 34)
- 109.a,b- Light grey fabric. Burnished surface changes from light to darker grey. Only body remains intact. (Louvre, inv. CA. 1220 77)
110. - Dark grey fabric and surface colour. One foot partially restored. Beak spout with notched tip. Incised decoration is more elaborate than on other juglets. (Brussels, inv.A. 2643)
111. - Very fine, intact vessel. Fabric is in a light brown colour. Surface slipped and burnished to a lustrous red brown colour. Loop handle angular in section. Neatly executed, deep incision. White filled. (Louvre, inv. CA.1220 7)
112. - Reddish brown fabric. Slipped and burnished in the same colour. Rounded base without tripod feet. Spout tip broken, motif, four round upper body. (Louvre, inv. CA.1220)

SHAPE VII Small jugs with obliquely cut spout (Fig. 36, 37; PL. VII)

Overall shape of twenty one jugs consists of round, globular or slightly carinated body, a loop handle, flat or round in section, and a beak spout. One jug, no. 113 has horizontal mouth. Most pieces are burnished and some have slip coating. Linear decoration is exclusively in faded matt white painting.

113. - Intact jug, thickly made. Fabric probably quite fine. Highly burnished surface in black colour. Vertical stokes on neck. Base cut flat but uneven. Thick loop handle. Horizontal mouth is slightly pinched to form a spout. (B.M., inv. 132378)
114. - Fine fabric. Surface colour varies from black to light brown. Some burnishing. Tall, beak spout. Neck bulges at base. (B.M., inv. 132371)
115. - Coarse fabric. Part of rim and neck in light yellow, reddish colour. The rest is in black. Three small knobs round mid-body. (B.M., inv. 132382)
116. - Fine, black to grey fabric. Similar surface colour. Burnished, Loop handle is missing. Broad neck and spout. (Louvre, inv. 1220 58)
- 117.a,b- Broken handle is restored, obscuring fabric. Probably quite fine. Burnished surface mostly black, some brown oxidised parts. Carinated body on rounded base. (Brussels, inv. A.2647, Yortan-Kelembe 10712)



118. - Rather fine fabric. Burnished surface is dark grey. Beak spout and neck partly in light brown. Very well made overall shape represents all the characteristics of the Shape; round body sits on rounded base, loop handle is flat in section, and tall beak spout has a bulging lower part. Additional is a smaller, second loop handle on front of body. (Brussels, inv. P.G.51.1.4)
119. - Very fine jug. Fine, dark grey fabric. Highly burnished surface, yellow brown on lower parts of body, and black/dark grey on upper body and neck. One loop handle, and three smaller and angular handles round mid-body. Most of spout is missing. (Louvre, inv. CA.1220 59)
120. - Fine fabric, breaks up in flakes. Surface colour in light grey and brown. Three small knobs round mid-body. (Louvre, inv. CA.1220 68)
121. - Very fine, hard fired fabric. Dull surface colour of grey. Three small knobs on upper body. (Brussels, inv. A.2644, Yortan-Kelembe 10712)
122. - Coarse fabric, crumbles due to low firing temperature. Surface colour, mostly dark grey, some brown. Very broad neck and spout. The rim and parts of loop handle eroded. Three pairs of knobs on mid-body. (Louvre, inv. CA.1220 89)
123. - Broken handle and spout restored. Fabric probably quite fine. Highly burnished black surface. Three pairs of small knobs on mid-body. (Brussels, inv. A.2649, Yortan-Kelembe 10779)
124. - Fine fabric. Light grey to brown surface colour. Plastic decoration consists of three crescents round mid-body. (B.M., inv. 132385)
125. - Fine fabric. Surface colour grey to brown. Burnished. Slightly carinated body. Three triple chevrons, and three small knobs. (B.M., inv. 132391)
126. - Fine, hard fired fabric. Slipped and burnished black jug. Twisted loop handle. A second, small handle on front body and one of tripod feet are missing. Four double chevrons. Two small knobs. (Louvre, inv. CA.1220)
127. - Coarse, dark grey/black fabric. Breaks easily. Same colour surface. One third of jug is missing. Triple chevrons, and pairs of small knobs. (Louvre. CA.1220 81)
128. - Burnished, uniform black jug. Three pairs of triple chevrons, faded in matt white colour. Three pairs of small knobs, one in each chevron. (B.M., inv. 132393)
129. - Coarser fabric. Colour varies between black and light brown. Stands on pointed tripod feet. Body carinated. Three sets of carelessly drawn double chevrons. Three pointed knobs. (B.M., inv. 132399)
130. - Fine fabric, in dark grey colour. Surface is coated in a slip of light grey and pinkish colour. Three sets of triple chevrons, hardly visible. Three pointed knobs on upper body. (Istanbul, inv.

131. - Irregularly made, thick jug. Possibly slipped and burnished. Surface colour is light brown and grey. Carelessly drawn chevrons, largely faded out. Three pairs of small knobs. Irregular rounded base. (Louvre, inv. CA.1220 85)
132. - Coarse, light brown fabric. Slip coating in red. Round body. (B.M., inv. 132379)
133. - Coarse, dark grey fabric. Coated in a thin pinkish slip. Rather tall spout. Three knobs on upper body. (Brussels, inv. A.2648)
134. - See W. Orthmann, 1966, 1st. Mitt. 16: no. 8

SHAPE VIII Larger jugs with obliquely cut spout (Fig. 38-44; PL. VIII)

Commonest shape in the Yortan repertoire. Twenty six vessels are illustrated. Overall outline identical to previous shape. Ornamentation is in plastic, or chevron motif in matt white painting. Fabric coarser than that of smaller jugs.

135. - Coarse grey fabric. Lower body in grey colour. The rest reddish brown. Slip coating is mostly eroded. Three small knobs. Loop handle and parts of body missing. (Louvre, inv. CA.1220 55)
136. - Medium fabric, fired hard. Surface colour in dark grey and light brown. Four button-like knobs on upper body; two are placed on front as a pair. (Louvre, inv. CA.1220 86)
137. - Fine fabric. Well burnished surface, mostly black. Slightly carinated body on small flattened base. Three small knobs on upper body. Well-made loop handle, flattish in section. Rather a successful product. (B.M., inv. 132369)
138. - Fine black fabric. Burnished black surface. A brown patch round loop handle. Three small knobs on body. (Louvre, inv. CA. 1220 26)
139. - Quite fine, grey fabric. Dull surface colour in grey and buff. Flat loop handle is missing. (B.M., inv. 132380)
140. - Well burnished surface, in black and reddish brown colour. Round body sits tilted forward on small, flattened base. Tall beak spout shows considerable bulging in middle. One of the more striking examples of Shape. (Paris Inst., no. 73)
141. - Rather coarse fabric. Possibly slipped, colour varying between dark grey and light brown. (Louvre, inv. CA.1220 92)
142. - Rather coarse fabric, thick walls. Uneven surface. Dark slip, well burnished. Loop handle broad, and quite angular in section. Flattened base. (Louvre, inv. CA.1220 23)
143. - Fine, black fabric. Burnished surface of same colour. Triple chevrons mostly washed out. Three button-like knobs, one below handle. Loop handle and part of spout missing. (Louvre, inv. CA.1220 87)

144. - Fine, dark grey fabric. Neatly produced jug, in perfect proportions. Well burnished surface is black without oxidised patches. Three triple chevrons, drawn in regular lines. (Louvre, inv. CA.1220 27)
145. - Slipped and burnished dark grey/black surface. Large, globular body on flattened base. Matt white painting of triple chevrons is thickly applied. Four pointed, and slightly angular knobs. (B.M., inv. 13292)
146. - Probably fine fabric, rather thin walls. Slipped and burnished surface in black to light brown colour. Globular body stands on small flattened base. Neck flares to form beak spout. Most competent product. Three pairs of triple chevrons, with one small knob in each chevron. (Sèvres, inv. 10729 11)
147. - Coarse fabric, tends to crumble up. But a smooth surface finish due to slip coating and burnishing. Black/dark grey in colour. Twisted handle and tip of spout broken. Triple chevrons, and three small knobs. (Louvre, inv. CA.1220 21)
148. - Medium fabric. Probably slipped and burnished. Overall colour is dark grey, but with a red/brown lower part. Faded triple chevrons. Four small knobs, one on base of loop handle. (Istanbul, inv. 3398)
149. - A perfect example of Shape. Well fired, fine fabric. Slipped and burnished surface, black in two thirds. Round body stands crooked on small flattened base. Tall beak spout, flanged near rim. There are five quadruple chevrons, one at front, and a pair on either side. (Sèvres, inv. 10729 9)
150. - Medium coarse fabric. Slipped and burnished. Colour varies between black and light brown. Three pairs of triple chevrons, and three pairs of knobs inside chevrons. Flattened base. (Istanbul, inv.3399)
151. - Rather coarse fabric. Coated in slip, and burnished. Two thirds are in black. Chipped rim. Broad handle, and slightly flattened base. Triple chevrons, matt white paint is thickly applied. Three small knobs inside chevrons. (Istanbul, inv. 3400)
152. - Medium fabric, low fired and breaks easily. Slipped and burnished surface in black colour. Some light brown patches. Three quadruple chevrons where matt white paint is well preserved and stands in striking contrast to darker background. Spout is missing, and body badly cracked. (Paris Inst., no. )
153. - Black, burnished surface. Slightly carinated body, small flattened base. Loop handle angular in section. Three triple chevrons in faded matt white painting. Three crescents, one in each chevron. (Paris Inst. no. 15)
- 154a,b,- Coarse fabric, red brown. Red/orange slip coating. Some grey patches. Poor shaping. Cracked front, could have been caused by faulty firing conditions. (Louvre, inv. CA.1220 65)
155. - Coarse, light brown fabric. Red slip coating, some black patches. Three knobs on upper body. Handle and part of spout missing.

(B.M., inv. 132383)

156. - Coarse, light brown fabric. Poorly preserved surface. Appears to have red/orange colour slip coating. Some black patches. Three pairs of small knobs on upper body. Handle and part of spout missing. (B.M., inv. 132384)
157. - Coarse, reddish fabric with grey core. Thin red/orange slip coating, possible not burnished. Three pairs of horn-like knobs round mid-body. Neck and handle are completely missing. (Louvre, inv. CA.1220 96)
158. - Coarse, reddish fabric. Similar colour slip coating, but with black patches. Rather rough product. Originally it had quadruple chevrons, now barely visible. Very broad loop handle, rounded base. Spout is badly chipped. (Istanbul, inv. 3404)
159. - Coarse, red brown fabric. Surface coated with a thick red/orange slip and burnished. Despite unrefined fabric, walls are thin, and overall shape in good proportions. Jug sits tilted forward on a small flattened base. Broad, flat handle. Three triple chevrons. (B.M., inv.132389)

Red/brown paste

Birefringent from orange to yellow.

Hornblende 0.2 mm; infrequent

Quartz 1 mm-0.5 mm angular, subangular  
and sub-rounded; frequent

Polycrystalline quartz 0.2 mm; infrequent

Feldspar 0.5-0.1 mm sub-rounded; occasional

Pumice/volcanic glass 0.5-0.1, with a mean of 0.3 mm;  
frequent

Haematite 0.5-0.1 mm; scattered

160. - Medium fabric, but rather thin walls and fired hard. A reddish, dark brown slip. One side is largely restored. Rather squat body which does not stand on rounded base. Very broad neck and spout. Triple chevrons with a pair of prominent knobs in each chevron. Overall shape is similar to "Kusura Cup" of south-west Anatolia. (St. Ger., inv. 58567)

SHAPE IX Small jugs with cutaway spout (Fig. 45-47; PL.IX)

Fabric of eighteen vessels varies between fine and coarse. Often mottled surface colours due to uneven firing conditions. In overall shape the characteristic feature of this and next shape is the cutaway type spout. Round or globular body has a small flattened base or rarely tripod feet. Ornamentation is in plastic and in matt white painting.

161. - Quite fine fabric, thin walls. Dark grey surface with reddish patches. Possibly burnished. (Brussels, inv. A.2646, Yortan-Kelembe 10779)
162. - Intact jug. Surface is a light grey, thin slip. It does not stand up on round base. Cutaway neck pressed on either side forming a bifol-like spout. Loop handle and upper body covered with plastic ribs. (Louvre, inv. CA.1220 6)

163. - Intact jug. Slipped and burnished in uniform black lustrous colour. Squat body, very tall spout with everted rim. A faultless product. (Paris Inst., no. 10)
164. - Coarse jug. Thin slip coating. Surface colour is a mixture of grey, reddish and dirty light brown. Shaping is also rather rough. (Istanbul, inv. 3423)
165. - Rather fine, uniform black jug. Body slightly carinated. Angular handle. Lip of rim is flat and everted. Four oval knobs at point of carination. (Istanbul, inv. 3424)
166. - Thickly made jug. Slipped and burnished. Surface colour varies from dark grey to light brown. Flat lip of rim, everted. Three knobs on upper body. (Istanbul, inv. 3414)
167. - Medium fabric. Burnished surface in black and red brown. Large, globular body on tripod feet. End of spout missing. (Istanbul, inv. 3429)
168. - Fine fabric, thin walls. In uniform dark grey colour. Round body stands on tripod feet. One foot and loop handle are lost. Three pairs of horn-like projections round mid-body. Along cutaway part of the spout, rim sharply everted and flat topped sloping inward. Partly restored. (St. Ger., inv. 58576)
169. - Thickly made, fine jug. Surface colour is in black and light brown. Cutaway spout with everted rim. Three sets of triple chevrons. Four plastic bars are placed across chevrons. Tripod feet are partly restored. (St. Ger., inv. 58591)
170. - Very fine jug. Thin walls. Probably slipped and burnished. Surface colour mostly black with a large patch in lighter brown and yellow. Rim everted at top of cutaway spout. Flat lip of rim. Three very regularly drawn quadruple chevrons. One small knob on either side of spout. (Istanbul, inv. 3410)
171. - Coarse jug, grey fabric with large grains of mica and other inclusions. A blackish surface colour with red brown undertones. Roughly shaped. Most of spout missing. Chevrons drawn irregularly, more like paint running down over the surface. Three pairs of small knobs. At base of neck on front is a small plastic feature. (Louvre, inv. CA.1220 22)
172. - Fine, dark grey fabric. Surface colour is black in two thirds. A large patch in light brown. Slightly carinated body. Broken handle. Tip of spout is missing. Three sets of triple chevrons, and three small knobs. (St. Ger., inv. 58528)
173. - Neatly produced shape. But surface colour, perhaps in a thin slip coating, is confused. Dark grey and light brown where the painted chevrons hardly stand out. Small flattened base, off centre. Five quadruple chevrons intersecting one another at mid-body. Three pairs of small knobs, and pendant-like feature at neck base. Spout badly cracked. (B.M., inv. 132394)
174. - Medium fabric. Slipped and burnished surface mostly black. Handle and its base oxidised to light brown. Very well made jug. Upper

part of spout is missing. Everted rim with knobs on either side. Ornamentation on body consists of three quadruple chevrons, four hatched lozenges, and four plastic crescents, one on tip of each chevron. (Istanbul, inv. 3420)

175. - Rather small jug, but fabric coarse and grey in colour. Surface is slipped and burnished in red brown. Two small knobs on spout, one on either side. Four crescents on body and a small knob on front of body. The loop handle and one crescent are missing. The place of the lost crescent is marked by an incised line. (Louvre, inv. CA.1220 17)

176. - See. W. Orthmann, 1966, 1st. Mitt. 16: no. 22

177,a,b- Very fine jug, with perfect finish. Coated with a thick red brown slip, and highly burnished. A small plastic feature at base of neck on front. (Louvre, inv. CA.1220 9)

178. - Fine fabric in grey. Surface in red/orange slip, and burnished. rather large and round body that does not stand up on round base. Rim is sharply everted. Flat rim-lip. A faint incised line round neck base. (Louvre, inv. CA.1220 48)

SHAPE X Larger jugs with cutaway spout (Fig. 48-64; Pl. X; XI; XII;)

Among thirty four vessels very fine and very coarse fabric is rare. Mottled surface colour, often slipped and burnished. Shape identified by the cutaway spout. A single loop handle, oval or angular in section. Body is round or globular and stands on rounded base, or rarely on tripod feet.

179. - Rather thick and heavy jug. In dull dark grey colour with light brown patches. Smoothed or burnished. Relatively short spout. Knobs on spout, and three plastic crescents on upper body. There is an elongated knob on front at base of neck. (B.M., inv. 132367)

180. - Well burnished surface, mostly in dark grey colour. Some reddish parts near handle. Rather beak-like spout, thick loop handle. Three sets of triple chevrons drawn with precision. (Brussels, inv. A.2651)

181. - Fine, hard fired fabric. Well burnished surface, half in black and half in brown. Pear shaped body, topped with a rather narrow and short spout, partly missing. Knobs on spout below rim. Four plastic crescents on mid-body. On front upper body are three flat knobs "suspended" from base of neck. (B.M., inv. 132386)

182. - Rather large jug. Fine, dark grey fabric. Surface slipped and burnished in black colour with some light and reddish brown. Vertical strips indicate application of slip by brush or cloth. Spout mostly missing, knobs on either side. Very large body is slightly carinated in the middle. Three pointed knobs. (Istanbul, inv. 3416)

183. - Large jug, and quite intact. Well burnished, mostly in dark grey. Spout is rather short, and the pouring channel rather narrow. Knobs on spout and body. (Brussels, inv. A.3408)

184. - Medium fabric, possibly slipped and burnished. Mostly in dark grey,

- mixing with buff colour. Chevrons are mostly faded out and hardly visible on lighter background. Matt white paint (lime) is for some reason grey and actually darker than the surface of the pot. (B.M., inv.132368)
185. - Coarse fabric but fired hard. Surface in dark grey colour, quite uniform. Cutaway spout shows a distinctive profile. Three sets of triple chevrons, and three knobs. (St. Ger., inv.58533)
186. - Large jug in dark grey colour. One side has a brown patch. Lime encrustation obscures details. Large, globular body on rounded base. Short spout has everted rim. Below rim are two knobs but elaborated to resemble "earrings"; each consisting of an obliquely set, elongated knob with a round disc stuck to it. Neck base is ornamented with a "necklace" in the form of seventeen conical knobs. Below on upper body are three broad, divided crescents. (St. Ger., inv. 58563)
187. - Fine fabric. Burnished surface in dark grey. But on either side of body large areas in reddish brown. Rounded and large body is covered by two quadruple chevrons in faded matt white. Spout broken. A pot mark impressed into handle base. (B.M., inv. 132390)
188. - Slipped and burnished black jug, with a coffee brown undertone. Thin walls. Rim of cutaway spout is everted. Small knobs on spout are on either side and placed below rim. Faded triple chevrons on body and also plastic crescents, three altogether. (Istanbul, inv. 3401)
189. - Rather fine jug. Fabric is fine, and walls very thin. Slipped and burnished. Mostly black with reddish brown patches. Over very smooth surface three sets of quadruple chevrons are hardly visible. (Istanbul, inv. 3418)
190. - Medium, grey fabric, fired hard. Thin walls. Burnished black surface, turns reddish brown near handle. Tripod feet partly broken. Base of loop handle is "V" shape. Two knobs on spout near handle. Four pairs of plastic crescents on upper body. Originally it had the chevron motif in matt white, now almost completely erased. (Louvre, inv. CA.1220 17)
191. - Medium grey fabric. Burnished black surface mottled with red orange. The loop handle and part of spout are missing. Six chevrons, either triple or quadruple. There is one prominent knob in each chevron. A small plastic motif at base of neck. (Louvre, inv. CA.1220 97)
- 192,a,b- Uncleaned surface, badly eroded, conceals technical details. Probably slipped and burnished in black colour. It is a tall jug standing upright on flattened base. Everted rim with flat lip. In circumference neck is not round but angular. Two pointed knobs on spout, one on either side and below everted rim. On upper body are four pairs of sweeping crescents, also slipped and burnished. (St. Ger., inv. 58564)
193. - Slipped and burnished, mostly in black colour. Rim of cutaway spout everted. On upper, globular body, are four flat knobs, each with a slightly sunken centre. (Louvre, inv. CA.1220 15)

194. - Surface colour in dull black to reddish brown. Below handle body is carinated which becomes rounded towards front. Rather large and tall spout, flaring and with everted rim. Two knobs on spout near handle, six more on upper body. A short plastic line at neck base. (Brussels, inv. A.3409)
- 195,a,b- Well burnished black surface. Typically tip of spout is in light brown. Overall shaping most competent; tall cutaway spout flares in upper parts, everted rim. Restored at neck base. On body are three pairs of crescents. (Brussels, inv. A.2638)
196. - Tall jug with fine black fabric and burnished surface. Some reddish brown patches. Everted rim, flat lip that slopes outward. Body slightly carinated. Three small crescents in plastic. (B.M., inv. 132387)
197. - Fine grey fabric, hard fired. Burnished black surface mottled in light brown and red. Rather well made product. Tall cutaway spout with everted rim. Knobs on either side. Six quadruple chevrons are evenly drawn, each enclosing one prominent knob. (Paris Inst., no. 16)
198. - Rather successful product. Burnished, black in colour. Small hole on one side near handle. Three sets of quadruple or triple chevrons. (Louvre, inv. CA.1220 91)
199. - Medium fabric. Surface colour black on upper and light dirty-brown on lower parts of body. Top of spout is missing. Two crescents on either side of spout under everted rim. Globular body ornamented with eight triple chevrons and four plastic crescents. (Louvre, inc. CA.1220 18)
200. - Burnished surface mostly in black. Tall cutaway spout, forming a broad, shallow pouring channel. Everted rim. Slightly carinated body covered with intersecting quadruple chevrons. Towards lower parts of body, lines of chevrons break away from the rigid parallel lines and make sweeping curves. Four pointed knobs, one in each chevron. (B.M., inv. 132396)
201. - Burnished black jugs. Handle and some other patches oxidised in light colour. Cutaway spout is tall and broad as previous jug, no. 200. Three sets of holes on either side of a break in mid spout indicates, broken and repaired at the time of its production and use. Three pairs of triple chevrons, three pairs of small knobs. Two oval knobs on spout below everted rim. (B.M., inv. 132395)
202. - Broken and restored. Well burnished black jug. Tall, shallow cutaway spout, as above. Body in pear shape with a flat loop handle and flattened base. Three sets of quadruple chevrons and a small plastic feature on front at neck base. (St. Ger., inv. 58590)
203. - Very fine jug. Broken spout restored, obscuring fabric. Slipped and highly burnished. Mostly black. Angular loop handle and below, in light brown. Tall, elegant spout and balloon-like round body on tripod feet with corners. Two elongated knobs on spout below rim and near handle. One small knob on front of body. Four triple chevrons. (Istanbul, inv. 3428)



204. - Fine jug. Surface details obscured by lime encrustation. Appears to be mostly in black colour with red brown and yellow mottling. Loop handle and part of spout missing. Everted rim. Pear shaped body with a small flattened base. Two plastic strips with transverse grooves on spout below rim. On body are four pairs of sweeping crescents in low relief. A small plastic feature, "pendant", on neck base in front of pot. (St. Ger., inv. 58541)
205. - Dull surface colour in grey with red patches. As above top of cutaway spout is horizontal rather than slanting. Everted rim. Spout narrows down towards neck base. Five pointed knobs round mid-body. (Louvre, inv. CA. 1220 93)
206. - Burnished surface, coated with red slip. Some reduced patches in dark grey. Top of spout slants towards front of the pot. Globular body does not stand on rounded base. Three sets of horizontal bars on upper body. (St. Ger., inv. 58565)
- 207,a,b- Fine fabric, fired hard in black colour. Similar surface colour. Deep pouring spout with everted rim which becomes flanged in middle part of the cutaway section. Flat rim-lip. Loop handle is quite angular in section. Globular body on distinctly flat base. Two knobs on spout, below rim. Also in plastic are three sets of double chevrons inside white painted quadruple chevrons. At the back, on either side of the handle, two perpendicular, running double lozenges, one on either side of handle. (B.M., inv. 132397)
208. - Large jug, surface in black/dark grey colour and well burnished. Two knobs on spout are on either side and below rim. Globular body on round base is ornamented with four quadruple chevrons in faded matt white painting. (St. Ger., inv. 58532)
209. - Dark grey fabric and surface colour, covered in lime encrustation. Brown in parts. Unusual loop handle, made up of thin strips of clay stuck together. Broken and parts missing. Also one of tripod feet restored. Tall, straight spout has two short plastic protrusions, one on either side. Pear shaped body ornamented with four quadruple chevrons and six knobs. (St. Ger., inv. 58560)
210. - Fine fabric in dark grey colour. Surface slipped and burnished in black. Tall cutaway spout, everted rim with flat top. Flat, strap-like handle. Carinated body where on upper half are plastic lines, a pair on either side and three on front. This and the following jugs no. 211, 212 differ from the rest in having a taller spout, sharper details and markedly carinated body. (Istanbul, inv. 3413)
211. - Thickly made pot. Slipped surface in dark grey with a reddish undertone. Fine lines on surface indicate application of slip by brush or cloth. Rather broad and shallow pouring spout. Everted rim. Handle flat in section, and at base a plastic bar extending to the width of the handle. Markedly flat base with body that reaches the widest contour in the upper half. Three sets of triple chevrons mostly faded out. (Istanbul, inv. 3412)
- 212,a,b- Burnished jug, mostly in black or dark grey colour. Rather thick walls. Striking form of cutaway spout, marked by a sharply everted rim with flat top. Body carinated in the middle, small flat base.

On the upperhalf are three sets of triple plastic lines, perpendicular to neck base. (Istanbul, inv. 3415)

SHAPE XI Jugs with flanged rim and side spout (Fig. 65; PL. XII, XIII).

213. - Intact, small jug. Surface colour in dark grey and light brown. Possibly it had slip coating. On one side of body a side-spout. Single loop handle. Slanting spout with a characteristic flanged rim. (B.M., inv. 132398).
- 214,a,b,-Fabric finer than above, but liable to break up in flakes. Burnished surface in grey and light brown colour. One side-spout on body, four plastic crescents on upper body and one knob on front. Most of slanting spout and flanged rim missing. (Louvre, inv. CA. 1220).
215. - Similar to above. Only there is a double side-spout, and six knobs; one is on the front, a pair below loop handle within the crescents, one at handle base, and the remaining two on either side of body. (Louvre, inv. CA. 1220 5)
216. - Thick, sturdy pot. Slipped and burnished surface in dark grey. Broad, flattened base. Spout and rim as above. Double side-spout, one is missing, where a small hole pierced into body of pot. (St. Ger., inv. 585)
217. - Rather fine jug, slip coating in red orange colour. Body slightly carinated and does not stand on rounded base. Slanting spout similar to above but rim everted rather than flanged. Two loop handles, smaller one placed on front body. One side-spout. (St. Ger., inv. 58575)
218. - Rather fine jug. Breaks reveal dark brown and grey fabric. Surface in dark red slip. Thin, hard fired walls. Globular body which does not stand on rounded base. Part of slanting spout and flanged rim missing. Single side-spout set on body in an upright angle. (St. Ger., inv. 58547)

SHAPE XII Larger jugs with flanged rim (Fig. 66-69; PL.XIII)

Of the seven vessels, no. 224 is not certain to come from Yortan, though it is identical in every detail to other six jugs.

219. - Burnished surface in black and grey. Slanting spout with a flanged rim. Thin oval mouth opening is broader near tip of spout and narrows down towards handle. Large body ornamented with three plastic crescents. Although lacking in striking qualities, the pot is the product of careful and competent craftsmanship. (Brussels, inv. A.2639)
220. - Rather fine jug. Slipped and burnished in black. Elegant, angular loop-handle, slanting spout with flanged rim. Pear shaped body ornamented with plastic chevrons in triple groups. Three sets are round mid body and the third at handle base. Also small "pendant" feature at neck base. (Louvre, CA.1220 8)
- 221,a,b -By far the most successful and striking product of the site. Black to light yellow/brown slip is burnished to a lustrous reflection.

Very large, squat body topped by tall cylindrical neck with slanting spout and flanged rim. Elegant loop handle, rather "metallic" in triangular profile. Ornamentation is plastic; four sets of curving lines; the two front sets are composed of four lines each, while those near the handle are triple. A smaller double chevron at handle base. Then on base of neck a "pendant" like feature suspended from a raised line round base. At the back, below handle, is a "knot" attached to this line. (B.M., inv. 132388)

222. - Fine jug, slipped and burnished. One half is in black, the rest in reddish brown. End of slanting spout and flanged rim is missing. Ornamentation on body in matt white painted chevrons. Three quadruple chevrons, and a fourth triple set at handle base. Small "pendant" feature at neck base. (Istanbul, inv. 3417)
223. - Similar to above jug. More rounded body and lighter grey surface colour. Triple chevrons in matt white painting hardly visible. (Istanbul, inv. 3397)
224. - Fine, large jug. Slipped and burnished surface in black. Only at the tip of spout an oxidised patch of light brown, buff colour. Quadruple chevrons in matt white painting. Its provenance as Yortan is not certain. (Istanbul, inv. 7656)
- 225,a,b Coarse fabric but fired hard. Slipped and burnished in red brown. Some reduced patches of grey. Plastic decoration in the form of three sets of triple lines on upper body. (Louvre, inv. CA. 1220 2)

SHAPE XIII Tankards (Fig. 70; PL. XIV)

226. - Very coarse grey to coffee brown fabric. Hand-made, thick walls. Dull grey surface, smoothed or burnished. Pear shaped body with neck flaring to horizontal mouth. Two loop handles flat in section. Broad, flattened base. (B.M., inv. 132446)
227. - Similar fabric and surface details, It varies in the body shape with round base, and shorter neck. (B.M., inv. 132445)
228. - Similar in the general outline. Also hand-made. But fabric is very fine and light orange in colour. Smooth surface coated in red brown slip. Squat body on round base. Two handles also flat in section. (Louvre, CA.1220 53)

SHAPE XIV Bird-shaped vessels (Fig. 71, 72, 73; Pl. XIV)

229. - Fine, grey fabric. Surface slipped and well burnished in black. Slanting spout partly missing. Flanged rim. Body ornamented with nine plastic ribs, one on front extending from neck base to front feet. The remaining eight on sides, in groups of four. Some of the ribs are missing. There is one projection at handle base representing tail of the bird. Tripod feet partly broken. (Louvre, inv. CA.1220 10)
230. - Burnished surface in black and light brown. Cutaway spout with flanged rim and flat top. Two knobs are on either side of the rim in mid-part of the cutaway spout. Twisted loop handle. Body ornamented with plastic lines; two continuous lines cross over upper and lower register and join at back, below handle base, and on

front a grill-like motif of four vertical short lines or bars. Two knobs, one on either side of mid-body. (B.M., inv. 132404)

231. - Very fine fabric, fired hard. Slipped and highly burnished. One side is in light brown, the other in black. In contrast to refined technical details ornamentation is rather crude in the form of horizontal and vertical (grooved) lines on neck and oblong body. Front spout below neck, the cutaway pouring spout and small loop handle are missing. One of tripod feet restored. Damaged mid body and three holes on belly. (B.M., inv. 132406)
- 232,a,b- Medium fabric, fired hard. Burnished surface (slipped?) in black and grey. Oxidised parts at slightly twisted handle and cutaway spout. Carefully shaped, broad body resembling dumpy figure of a duck. Narrows to a delicate, pointed tail. Between this projection and neck base parallel ribs in plastic. Spout broken and rim chipped. The back tripod feet restored. (B.M., inv. 132405)
233. - Rather fine fabric. Probably slipped and burnished. Mostly in dark grey colour. A large light brown patch on the back. Rather large body on short tripod feet. Two on front are partly broken, also the flat tail at the back. Cutaway spout and loop handle broken in places. Two small knobs on spout below rim, one on either side. (Istanbul, inv. 3431)
- 234,a,b- Miniature vessel. Fine, dark grey fabric. Burnished. Form of spout very similar to that of Shape VI juglets with slanting or oblique profile and narrow channel through neck. Incised decoration. Loop handle is missing. There is a small knob or "tail" at back. Short tripod feet. (Louvre, inv. CA. 1220 38)
235. - Similar to above, no. 234. Spout is more like cutaway type. "Tail" at other end is flat and there is a knob underneath. Two more on the breast, one on either side of neck base. Incised decoration of bands of dots (on either side of handle) and zigzag line on mid-body and front. Loop handle and two of tripod feet missing. (Istanbul, inv. 3430)
236. - See W. Orthmann, 1966, 1st. Mitt. 16: no. 75
- 237,a,b- Very fine vessel. Dark grey, fine fabric coated with lustrous red orange slip. Part of cutaway spout missing. Carinated body with a flat "tail". Plastic ornamentation consists of two rectangles, one on either side of upper half of body, and filled in with parallel lines, also in plastic. There are two miniature "lugs" on spout, one on either side and below flanged rim. One small knob at neck base on front. Both shape and technical details are unusual to Yortan pottery, and museum registration does not specify it as a find from P. Gaudin's excavations. (Istanbul, inv. 3432)

SHAPE XV Triple vessels (Fig. 74; PL. XV)

238. - Quite fine, hard fired fabric, thin walls. Same colour surface which may have been slipped, now worn out. Shape consists of three jars with horizontal mouth joint on triangular plan under a twisted loop handle. Three jars of unequal size ornamented in incision; the largest jar has a quadruple zigzag band round body (or five

chevrons) and a horizontal band on neck; other two jars have hatched lozenges on body, three on each jar. Incision is in thin, fine lines but rather shallow and careless. (B.M., inv. 132442)

239. - Fine dark grey fabric with a soapy texture. Same surface colour, uniform all over. Rather a poor product with the jars not fitting into the desired triple shape. Loop handle and rims are missing. The largest jar has a horn-like pointed knob and two vertically pierced lugs on upper body. Mouth opening is horizontal and large. Incised decoration consists of a hatched band on shoulder, three rectangles on body, one with dotted interior and others latticed, and two strips of perpendicular herring-bone motif. Smallest jar appears to have mouth opening in the form of a narrow spout. One thick stud on base brings the jar to the level of other two. Richly incised with latticed rectangles, circles, and a hatched band at spout base. Third jar has four lugs on body and one foot on base. Incised motifs as above, also a wavy line and two crescent-like incisions on lower body. Lumps of fabric which join jars one to another also decorated in incision, one wavy line on each lump, three altogether. (B.M., inv. 132443)

SHAPE XVI Rare vessels (Fig. 74-76; PL. XV)

240. - Roughly shaped vessel. Black to light brown. Missing upper parts and handles/lugs. A large hole on one side, possibly a side-spout. Uneven surface ornamented with white painted lines that are faded. The shape could be a jar or jug. (Louvre, inv. CA.1220 88)
241. - Restored obscuring details of fabric. Surface in dull dark grey colour, possibly smoothed but not burnished. Slanting spout, flanged rim. In proportion the neck base is much narrower than spout. Plastic ornamentation, three sets of quadruple bars and a pointed knob on neck base. Near rim loop handle is vertically pierced. (St. Ger., inv. 58546)
242. - Heavy black jug with a medium fabric, and slipped and burnished surface. Beak spout is quite horizontal and broad. Handle rectangular in section. Twenty three flutings decorate the body. (B.M., inv. 132407)
243. - Very fine black/dark grey jug. Rather fine fabric and very thin walls. Slipped and burnished. Horizontal spout mostly missing. Short neck and everted rim. There are eight pointed knobs on upper body where there is a broad shoulder. In between knobs are quadruple groups of parallel lines extending from neck base to base of body. (B.M., inv. 132408)
- 244a,b,- See W. Orthmann, 1966, 1st. Mitt. 16: no. 26
- 245a,b,- Fine black/grey fabric. Similar colour of surface, in places lighter grey and buff. Possibly slipped. Double spout, and single loop handle. Body and base are rounded. (Louvre, inv. CA. 1220 25)
- 246a,b - Fine fabric with thin walls. Mostly in dark grey colour. Badly broken. Small flattened base is on tripod feet. Tall, cutaway spout is considerably everted forming broad pouring channel. Unusual decoration consists of a zigzag band of three chevrons. The motif is incised, the only Yortan jug of this shape with this type

of decoration. Inside each chevron and at handle base are large holes enclosed by thin bubble-like features. (St. Ger., inv. 58568)

- 247a,b Rather fine fabric. Very smooth, possibly slipped surface is in dark grey and light brown. Part of cutaway spout missing. Carinated body stands on prominent tripod feet. Two flat lugs on either side of body and small pointed knobs above this protrusion suggest an anthropomorphic shape, possibly a double hedgehog. (Sèvres, inv. 10729 15)

Dark grey/black paste (body sherd)

The matrix is conspicuously micaceous containing very fine, dense spicules of muscovite with smaller quantities of biotite.

Quartz	0.05-0.02 mm rounded and sub-rounded; scattered
Cryptocrystalline calcite	0.05-0.2 mm; scattered
Volcanic glass	0.2 mm; brown, rare
Iron oxide particles	0.1 mm; occasional

CLASS B POTTERY (Fig. 77, 78, 79)

All twenty one vessels under this classification are hand-made, without the use of the fast wheel.

- 248,a,b- Miniature bowl, or a lid. Rather fine fabric. Surface is burnished and brownish. Interior is a little grey. Triple lugs on either side on rim. (Louvre, inv. CA. 1220 30)
249. - Miniature bowl, or dish. Fine fabric, light grey surface colour. Raised base. On one side near rim are a pair of holes. (B.M., inv. 132412)
250. - Rather coarse jar that breaks easily. Probably slipped, surface colour mostly in dark grey. Everted rim, carinated body, and flattened base. On one side trace of a lug or side-spout. (Louvre, inv. CA.1220 82)
251. - See W. Orthmann, 1966, 1st. Mitt. 16: no. 56
252. - Small jar. Surface colour varies between black and reddish brown. Roughly made. Possibly slipped. (B.M., inv. 132377)
253. - Roughly made miniature jar. Surface colour grey to dirty light brown. Two vertically pierced lugs. (Louvre, inv. CA.1220 43)
254. - Small jar in light grey colour. Smoothed surface. Everted rim pierced in two places. (Louvre, inv. CA. 1220 61)
255. - Coarse, grey fabric. Surface coated with thin slip of same colour. Lug and side-spout missing. (Louvre, inv. CA.1220 62)
256. - Coarse, grey fabric. Same colour surface smoothed. Most of neck, and all of loop handles are missing. Also where there is a lid there must have been a single spout. Flat, raised base. (Louvre, inv. CA. 1220 78)

257. - Rather fine fabric in dirty brown colour. Slipped and burnished surface is in black. Horizontal mouth chipped. Two sets of double lugs, one set on either side of body. Lugs are vertically pierced. Rather thick walls, large globular body sits on flattened base. (Louvre, inv. CA. 1220 69)
258. - Light grey and brown fabric. Surface coated with red brown slip, mostly worn out. Vertically pierced lugs are missing. Below flanged rim neck is pierced in three places. Raised, flat base. (Louvre, inv. CA. 1220 47)
259. - Very fine red orange fabric. Surface in the same colour slip coating but mostly worn out. Flanged rim pierced in two places. Two pointed and vertically pierced lugs on mid-body. Flattened base. (St. Ger., inv. 58571)
260. - Red fabric, covered with thin wash of light brown and reddish colour. Five small knobs on body, a sixth is below handle base. Small tripod feet. Rather roughly made vessel. Part of obliquely cut spout is missing. Loop handle slightly twisted. (Louvre, inv. CA. 1220 67)
261. - Rather fine fabric, fired hard. Mostly in light grey without burnishing. Thick, round loop handle. Spout missing. (Louvre, inv. CA.1220 66)
262. - Medium fabric, fired hard and light brown in colour. Smoothed surface of similar colour, grey in places. Possibly had a thin slip. Rather thickly made, heavy jug. Three prominent knobs on body and one on handle. Flattened base set off the centre. (St. Ger., inv. 58566)
263. - Rather fine fabric, fired hard. Uniform dull grey colour. Probably only smoothed. Obliquely cut spout, small twisted loop handle. (Louvre, inv. CA.1220 49)
- 264,a,b- Uncleaned surface obscures details. Overall colour seems to be in a tone of red but with dark grey patches. Probably slipped. Obliquely cut spout, grooved loop handle. (St. Ger., inv. 58557)
265. - Uncleaned surface. Rather fine, hard fired fabric in coffee brown. Surface colour appears to be mostly in dark grey, possibly slipped. Rather thick jug, twisted loop handle partly worn out. There are three knobs round mid-body. At the point where handle joins spout are two pointed knobs, one on either side. Spout is cutaway type with the upper part pressed from sides into a bifoil-like form. (St. Ger., inv. 58551)
266. - Very fine fabric in light red/orange colour. Surface slipped and burnished in red brown. Thin, round basket handle. Side-spout is missing. (Istanbul, inv. 3466)
267. - Fine, light grey fabric. Smooth surface shows traces of a red brown slip. Rather thick "teapot". Thick, round basket handle, and side-spout. Rim lip is flat and slants inward. Flattened base. (Louvre, inc. CA. 1220 5)
268. - Very fine, red orange fabric, slipped and burnished in similar

colour. Very thin walls, shaping is slightly asymmetrical. Tip of side-spout chipped. Also round basket handle is broken in the middle. (Louvre, inv. CA. 1220 51)

CLASS C POTTERY (Fig. 79-83; PL. XV1, XV11)

269. - Fine, hard fired fabric in red orange colour. Surface covered with same colour thin slip. Rather thin walls, thick round handles. Flat, possibly string-cut base. Wheel-made. (Louvre, inv. CA.1220 52)
270. - Very fine light grey fabric, fired hard. Surface probably slipped with same colour and uniform all over. Ring-base slightly sunken in the middle. On body are two pointed lugs with vertically pierced large holes. Everted rim also pierced in two places. Tall neck decorated with shallow grooves. Wheel-made. (Sèvres, inv. 10729 14)
271. - Surface covered with lime encrustation obscuring details. Rather fine fabric, fired hard and in light red colour. Probably surface has slip coating of similar colour. Rather squat body on rounded base. Most of horizontal mouth missing. Also one of loop handles lost. Wheel-made. (St. Ger., inv. 58569)
- 272,a,b- Medium fabric. Surface colour in light grey. Spout bifoil or trefoil in shape, chipped in places. Carinated body, small flat base. Hand-made. (Louvre, inv. CA. 1220 79)
273. - Very fine jug where fabric fired to a metallic hardness in very thin walls. Unburnished surface in dull light grey colour. Possibly slipped. Ring base, round loop handle. Horizontal, bifoil spout. Grooved lines on neck and lower body. Wheel made. Its provenance as Yortan is not certain. (St. Ger., inv. 46390)
274. - Very fine, grey fabric and surface. But shaping is poor with the flattened base lying quite off centre. Bumpy surface. Horizontal spout is cut out above handle. Possibly wheel-made. (Sèvres, inv. 10729 12)
275. - Fine, light grey fabric, fired hard. Without burnishing, but may have had a thin slip coating in light red-brown colour. Roughly shaped. Slightly beak-like spout, partly chipped. The mouth opening is in leaf shape. Grooved and impressed lines and dots. Hand-made. (Louvre, inv. CA. 1220 3)
- 276,a,b- Fine fabric. Surface is coated in a thin red orange slip, mostly worn out. Lower parts of body have black patches. Rather roughly shaped. Bumpy surface, round body sits crooked on flattened base. A very tall and narrow beak spout. Hand made. (B.M., inv. 132409)
277. - Very fine, hard fired fabric in light red colour. Surface coated with a thin red slip. It is a faultless product, shaped to perfection. A tall, round neck has cutaway spout with everted rim. Loop handle is round. It is by far the finest product of the site. Possibly wheel-made. (B.M., inv. 132410)
278. - Very fine fabric, fired hard and light orange red in colour. Similar to above jug, no. 277. Red-brown slip coating. Missing



spout and loop handle can be restored according to no. 277 jug. Probably hand-made. (Sèvres, inv. 10729 10).

279. - Fine, hard fired fabric in orange/red colour. Surface slipped in same colour. Broad, flattened base, round handle. Tall beak spout missing. Hand-made. Its provenance as Yortan is not certain. (Paris Inst., inv. )

Red paste

The matrix is birefringent from orange to red and is very micaceous. The mica appears to be muscovite and the crystals are less well defined than in no. 247, p.107.

Quartz	0.1-0.3 mm sub-angular; scattered
Polycrystalline quartz	0.4 mm; occasional
Muscovite	0.2 mm; scattered
Biotite	0.2 mm; scattered

280. - Coarse fabric in red brown colour. There is a grey core. Surface coated with thin dirty brown slip. Large body, three small knobs on the middle part. Round handle. Spout is missing, but could be restored to the tall beak form as above, no. 276, 279. Hand-made. (Paris Inst., no. 3)

- 281,a,b- Rather fine, light brown, reddish in colour, and fired hard. Surface in red brown slip, now mostly washed off. Very tall neck and beak spout, slightly everted rim. Round loop handle. Flat base. Hand-made. (Louvre, inv. CA. 1220 54)

- 282,a,b- Very fine, hard fired fabric in light grey colour. Some surface colour in slip coating. Tall neck and cutaway spout with flanged rim. Twisted loop handle. Body is lentoid in shape, possibly made in two parts and joined as indicated by line below handle base. Hand-made. (B.M., inv. 132411)

- 283,a,b- See W. Orthmann, 1966, 1st. Mitt. 16: no. 36

284. - Very coarse fabric, and thick walls. There is a reddish centre marked by thin layer of grey on either side. Slipped surface. Base of neck marked by a ridge. Form of spout is uncertain. Hand-made. (Louvre, inv. CA.1220 100)

- 285.- See W. Orthmann, 1966, 1st. Mitt. 16: no. 27.

286. - Coarse fabric in a mixture of grey and dirty brown colour. Surface only roughly smoothed. Tall neck, tip of spout is missing. Handle and neck marked by deep, coarse grooving. There is a pair of knobs on front body. Hand-made. One gets the impression that this is an unfinished product. (Louvre, inv. CA.1220 1)

287. - Very fine fabric. Dark grey surface colour with some oxidised patches in red. Smoothed surface that may have once had slip coating. Rather thin walls, everted rim, carinated body, and flat base. Handle is very broad, and flat in section. Markings of a fine comb-like tool on surface. Wheel-made. (B.M., inv. 132494)

288. - Fine, hard fired fabric. Surface is marked by impression of straw

that may have been in the fabric. Light grey and light brown colours. Surface now covered with some shiny substance, i.e. wax or varnish. Shape consists of a pair of human legs and feet, with toes and ankles indicated. Probably belongs to a vessel with a close rather than open type of upper part. This is indicated by the inner surface which is left untreated, without any smoothing or slip coating. (B.M., inv. 132447; 132448)

#### YORTAN IDOLS (Fig. 84)

289. - Intact. Made of polished white marble. In section it is thickest round base of neck. Thinner towards the edges. (Louvre, inv. CA.1220 1)
290. - Same material. Part of head is broken. A bird-like face depicted by incised eyes and eyebrows. (Louvre, inv. CA.1220 2)
291. - Same material. Poorly preserved, chipped all round the edges. In shape more elongated than no. 290. Incised bird-like face, small dots for eyes are set in circles. Crude zigzag band round neck. (Louvre, inv. CA.1220 3).
- 292,a,b- White marble. The head and most of legs and arms are missing, but can be easily restored from other intact examples. Flipper-like arms. Incised lower body indicates the nature of sex. (Louvre, inv. CA.1220 4)

#### YORTAN SPINDLE WHORLS (Fig. 85-87; PL.III, no. 8)

293-328 All are made of very fine fabric and sometimes burnished. Surface colour varies between grey and reddish or light brown. The shapes are variations of bifoil or truncated bifoil form. Several, no. 323-328, are flat or cylindrical. When ornamented it is in incision, sometimes white filled. All finds belong to the B.M. collection, inv. 132454-132490.

#### YORTAN METAL FINDS (Fig. 88)

329-337 See K. Bittel, 1939, A.f.O. 13: 21. No. 329-334, 336 are made of copper/bronze No. 335, 337, are iron objects. No. 331, has three sets of grooved lines, barely visible. Beneath the mushroom shaped head is a hole but does not go through the pin. The axe, no.336, is badly corroded. The hammer part is octagonal in section. Inside the shaft hole are traces of wood. All metal objects belong to the Louvre collection, CA. 1220 1-9

#### POTTERY FROM BABAKOY (Fig. 89)

For no. 9, 10,11 See, K. Bittel, 1939, A.f.O. 13: Abb. 9, 10. For the rest, See, W. Orthmann, 1966, 1st. Mitt. 16: no. 4, no. 16, 23, 32, 37, 47, 48, 50, 51, 58, 63.

#### POTTERY FROM SOMA (Fig. 90)

See W. Orthmann, op.cit. no.24, 60, 66.

#### POTTERY FROM BERGAMA (Fig. 90)

See, A. Conze (1912) Altertümer von Pergamon I, 2. Berlin,  
P. 157, Fig. 10, 11: p.158, Fig.12.

POTTERY OF UNCERTAIN PROVENANCE (Fig. 91-100; Pl. XVIII - XX)

1. - Black burnished. Incised and white filled ornamentation. Hand-made. Private Collection.
2. - Fine black burnished. Two horizontally pierced lugs. Incised decoration. Hand-made. Private Collection.
3. - Grey/black ware. Ledge handles. Hand-made. Private collection.
4. - Grey burnished. Grooved decoration. Hand-made. Private collection.
5. - Black burnished. Four sets of double knobs on rim. Hand-made. Private collection.
6. - Grey/black ware. Four sets of double knobs on rim. Hand-made. Private collection.
7. - Fine, black burnished. Incised decoration. Hand-made. Private collection.
8. - Very fine black burnished. Incised decoration. Hand-made. Private collection.
- 9,10. - Lid and pyxis in grey ware. Possibly slipped and burnished. Four holes below rim; corresponding four holes on lid. Incised decoration is crude, more like scratching the surface with a fine point. Hand-made. (B.M., inv. 132898)
11. - Very fine black burnished. Incised and white filled decoration. Hand-made. Private collection.
12. - Fine black burnished. Incised and white filled decoration. Hand-made. Private collection.
13. - Fine black burnished. Incised and white filled decoration. Hand-made. Private collection.
14. - Black/grey burnished. Incised and white filled decoration. Hand-made. Private collection.
15. - Fine black burnished. Incised and white filled decoration. Hand-made. Private collection.
16. - Lustrous black burnished juglet. Cutaway type spout, knob at handle base. Incised decoration of triple zigzag band and swastika. White filled incision. Hand-made. (B.M., inv. 135478)
17. - Burnished black jug. White painted chevrons mostly faded. Round base, obliquely cut spout.
18. - Fine burnished surface. Mottled in light brown, buff and light red. Incised decoration. Inside traces of red substance. Hand-made. Private collection.
19. - Fine fabric. Surface colour is dull dirty brown and light grey. Thin walls, but asymmetric shape. One of four loop handles missing.

- Knobs in between handles. Hand-made. (Brussels, inv. P.G. 51.1.13)
20. - Grey/black jar on tall tripod feet. Hand-made. Private collection.
21. - Jet black, and white filled incised decoration. Two pierced lugs and four feet. Hand-made. Private collection.
22. - Grey/black jar. Incised decoration. Hand-made. Private collection.
23. - Grey/black jar. Missing basket handle. Incised decoration. Hand-made. Private collection.
24. - Dark grey ware. Hand-made. Incised decoration on body and on four feet. Private collection. See also, W. Orthmann, 1966, 1st. Mitt. 16; no. 52.
25. - Black/dark grey burnished surface with a reddish brown undertone. Broken spout. Small but well-centred flattened base. Three sets of triple chevrons on body. Hand-made. (Brussels, inv. P.G.51.1.10)
26. - Grey/black burnished jug. Hand-made. Private collection.
27. - Coarse jug with a dull surface colour of black to grey and red brown. Broken spout. Three knobs on body had originally been inside three sets of triple painted chevrons, now almost completely washed out. Roughly twisted handle. Hand-made. (Brussels, inv. P.G.51.1.7)
28. - Well shaped, fine jug. Very smooth surface is in dull grey and red colour. Not burnished. Rather rigid outline. Rim top is flat near handle. Hand-made. (Brussels, inv. A.2389)
29. - Dark grey, medium fabric. Surface colour in reddish orange mixing with light grey. Slipped but not burnished. Three flat knobs and three sets of triple chevrons which in places are in a grey colour darker than the surface of pot. Obliquely cut spout is missing. Hand-made. (Brussels, inv. P.G.51.1.22)
30. - Very thickly made jug. Dull surface colour is dark grey with some reddish patches. Tip of spout missing. Probably quite tall and beak-like. But it could also be cutaway type. Three knobs and three sets of triple chevrons on body. White painted chevrons are largely faded. Small plastic 'pendant' motif at neck base. Hand-made. (Brussels, inv. P.G.51.1.1)
31. - Uniform black surface. Dull colour without burnishing. Three tall feet, shape of missing spout could be cutaway or slanting. Three sets of triple, white painted chevrons on body. Hand-made. (Brussels, inv. P.G.51.1.19)
32. - Burnished surface. Overall colour is reddish brown with little black on dark grey area. Top of cutaway spout worn out. Rather globular body with slightly rounded base. Two knobs on spout, one on either side and below everted rim. Four sets of chevrons; each composed of five parallel lines in matt white painting. Pointed knobs in each chevron. Hand-made. (B.M. inv. 132498).

33. - Heavy, thick jug. Largely restored, concealing fabric. Black with a reddish brown complexion on surface. Burnished. White decoration is mostly faded. Three sets of triple chevrons on body which stands tipped backward on flattened base. Knobs below rim of cutaway spout and one at the neck base. Thick, round rim is slightly everted. Hand-made. (Brussels, inv. P.G.51.1.18)
34. - Coarse, black ware. Hand-made. Private collection.
35. - Small, terracotta object. See H.Th. Bossert, 1960, Or.29: Tab LXXXVI
- 36,a,b - Very fine, jet lustrous surface. Ornamentation incised and white filled. Hand-made (?) Private collection.
37. - Fine fabric. Dark grey surface, possibly slipped and burnished. Largely restored. Main jar consists of a tall cylindrical neck, flanged rim, and a large round body. Round base. On upper body are four small hole-mouth jars and four small loop handles in between jars. Each jar is pierced below rim in two points. Incised decoration. Hand-made. (Cambridge, inv. G.R.2.1948. From Babköy, given by J.R. Stewart)
38. - Triple vessel with a fourth small jar on one side. Fine fabric, possibly coated in thin slip of dark grey colour. All three have horizontal mouth and everted rim. Rim of small fourth jar is missing. Rather worn out surface. White filled incised decoration. Hand-made. (Institute of Archaeology, London).
- 39,a,b - Triple vessel of similar surface as above, no. 38 but without the additional, small jar. Uncleaned surface obscures details. Dark grey/black fabric. Rim and neck in parts, and loop handle are missing. Incised decoration of wavy bands and concentric circles. Hand-made. (Louvre, inv. CA. 1361 1)
- 40,a,b - Very fine jug. Black burnished with little brown patches. Tall, elegant neck with a pointed, leaf shaped spout. Everted rim, with a flat top. Neck grooved in the middle. Double twisted handle. Pear shaped, carinated body with flat base, and on tall, cornered tripod feet. A small loop handle on mid body at front, and two horn-like projections on either side of body. Hand-made. (Brussels, inv. O.3434. border regions?)
41. - Lustrous black jug. Slipped and burnished. Tall cutaway spout, flat, strap handle. Upper part of carinated body is covered with flutings. (Brussels, inv. O.3601)

ABBREVIATIONS

<u>AAA</u>	Annals of Archaeology and Anthropology, Liverpool.
<u>Act. Arch.</u>	Acta Archaeologica, København.
<u>A.f.O.</u>	Archiv für Orientforschung.
<u>AJA</u>	American Journal of Archaeology.
<u>An.St.</u>	Anatolian Studies
<u>Arch.</u>	Archaeology
<u>ASAA</u>	Annuario della (Regia) Scuola archeologica di Atene e delle missioni italiane in Oriente.
<u>Ath.Mitt.</u>	Mitteilungen des Deutschen Archäologischen Instituts, Athenische Abteilung.
<u>B. d A</u>	Bolletino d'arte.
<u>Bell.</u>	Bulleten, Türk Tarih Kurumu.
<u>Beycesultan</u>	S. Lloyd and J. Mellaart, <u>Beycesultan I.</u> , London, 1962
<u>BSA</u>	Annual of the British School of Athens.
<u>CAH</u>	The Cambridge Ancient History.
<u>CRAI</u>	Comptes rendus des Séances de l'Académie des inscriptions et belles-lettres.
<u>CVA</u>	Corpus Vasorum Antiquorum.
<u>FS</u>	Fundberichte aus Schwaben.
<u>Hesp.</u>	Hesperia.
<u>HSCP</u>	Harvard Studies in Classical Philology.
<u>ILN</u>	Illustrated London News.
<u>Ist.Mitt.</u>	Istanbular Mitteilungen.
<u>Or.</u>	Orientalia.
<u>PFS</u>	Proceedings of the Prehistoric Society.
<u>RAIOP</u>	Royal Anthropological Institute of Great Britain and Ireland. Occasional Papers.
<u>St. M.A.</u>	Studies in Mediterranean Archaeology.
<u>St. Bal.</u>	Studia Balcanica.
<u>Thermi I-IV</u>	Lamb, <u>Excavations at Thermi on Lesbos</u> , Cambridge, 1936.
<u>Troy I, II</u>	W. Blegen, J.L. Caskey, M. Rawson, J. Sperling, <u>Troy I. The First and Second Settlements</u> , Princeton, 1950.
<u>Troy III, IV</u>	C.W. Blegen, et al., <u>Troy II. The Third, Fourth and Fifth Settlements</u> , Princeton, 1951.
<u>TAAED</u>	Türk Tarih, Arkeologya ve Etnografya Dergisi.

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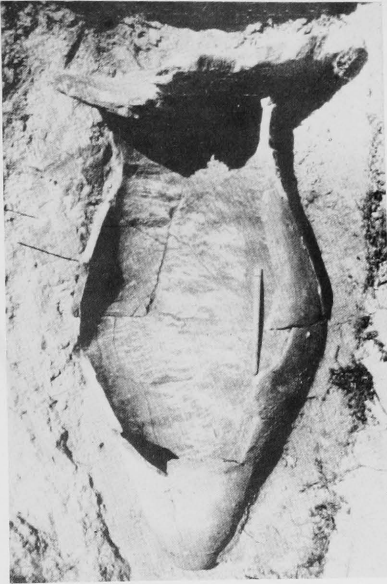
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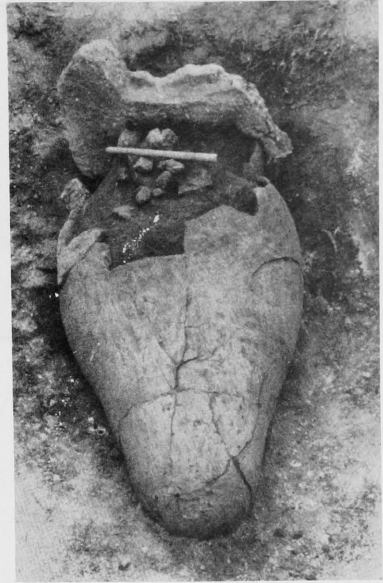
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BABAKÖY BURIAL PITHOI

PL. I



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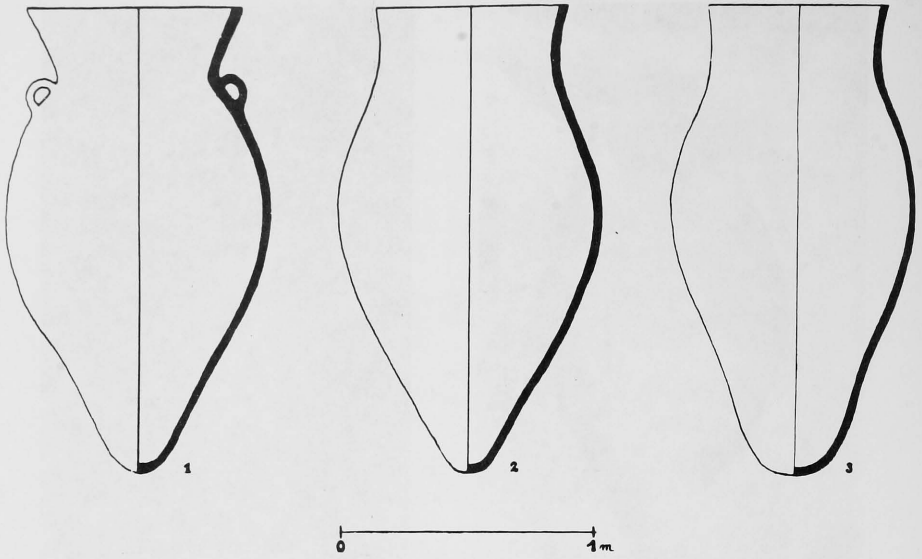
KARATAŞ—SEMAYÜK BURIALS



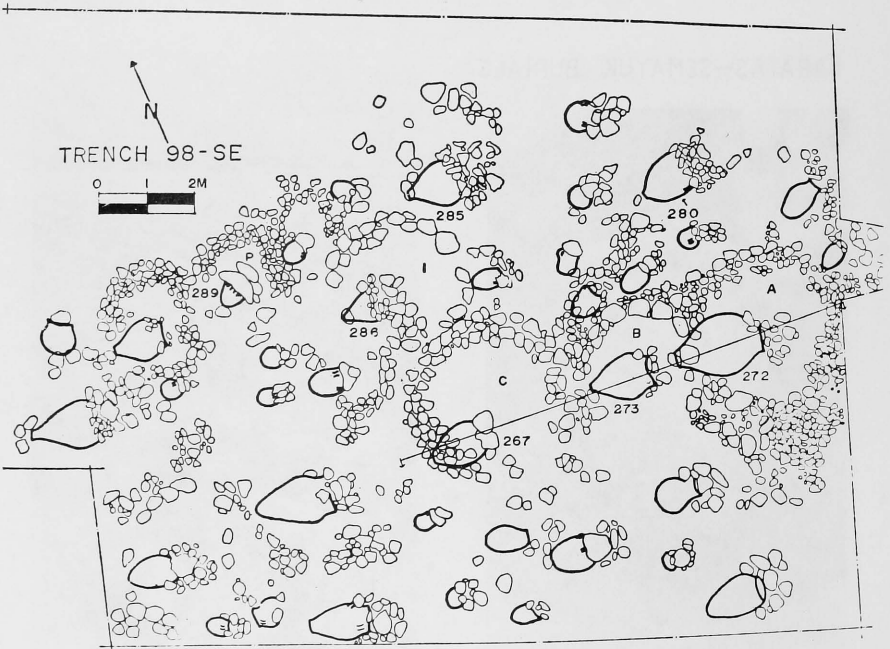
Mound, Middle Bronze burial E



Trench 98. View of SE extension



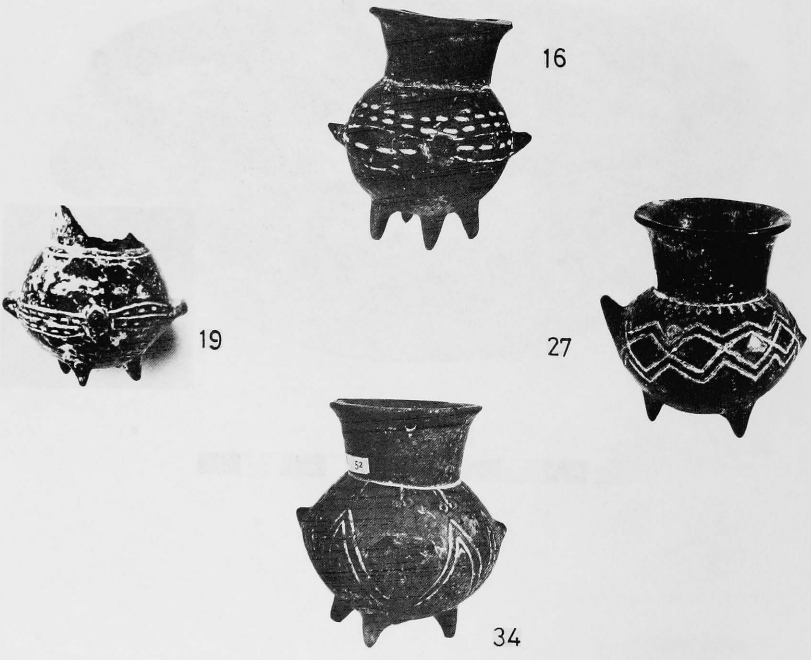
KARATAŞ-SEMAYÜK CEMETERY



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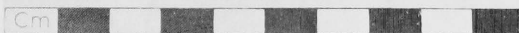








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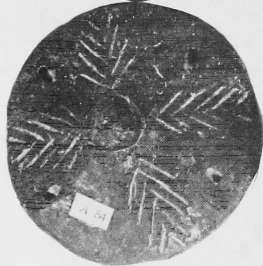
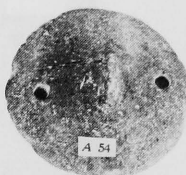
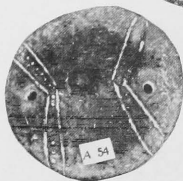
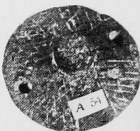
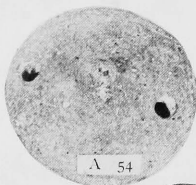
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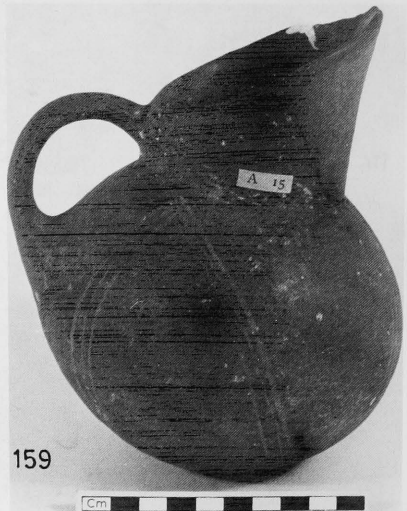




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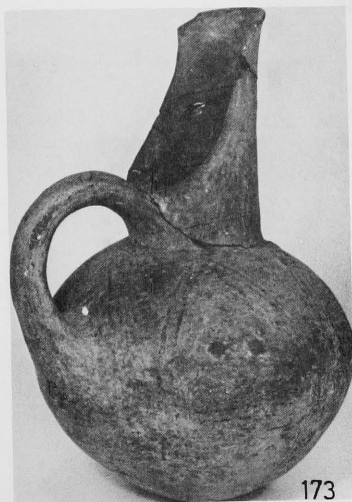
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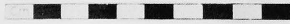




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POTTERY OF UNCERTAIN  
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#### MAP

General map of western Anatolia and the Aegean showing the more important sites mentioned in the text.





Gaudin's Illustrations of Yortan Burials

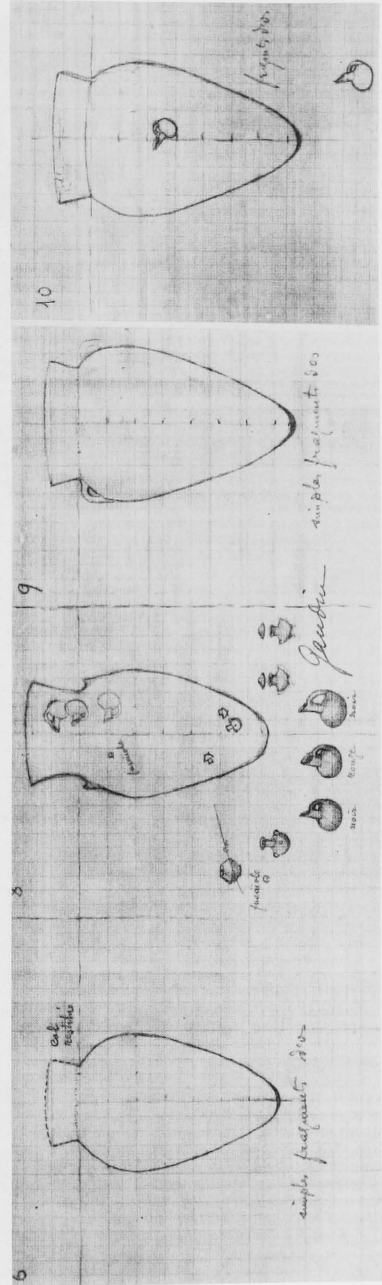
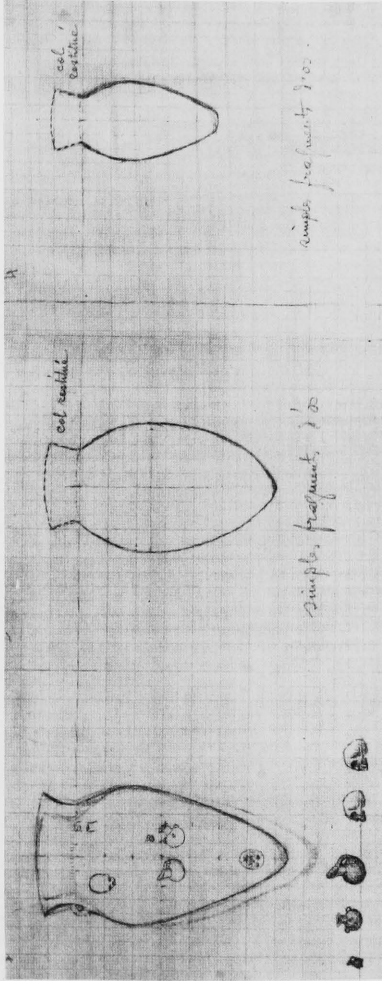


Fig. 1

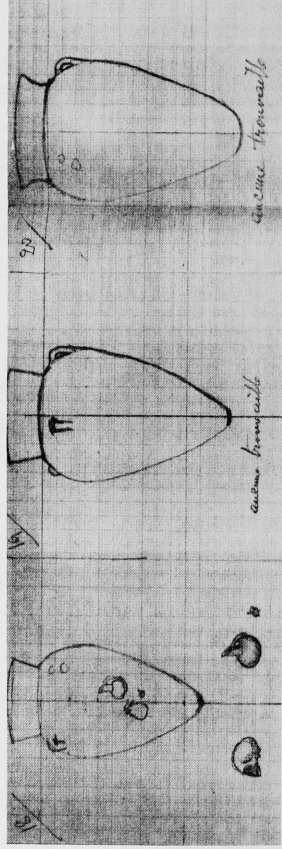
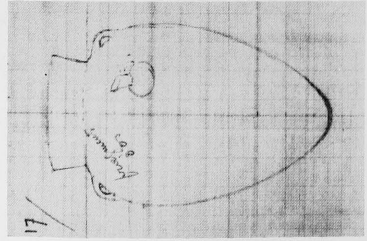
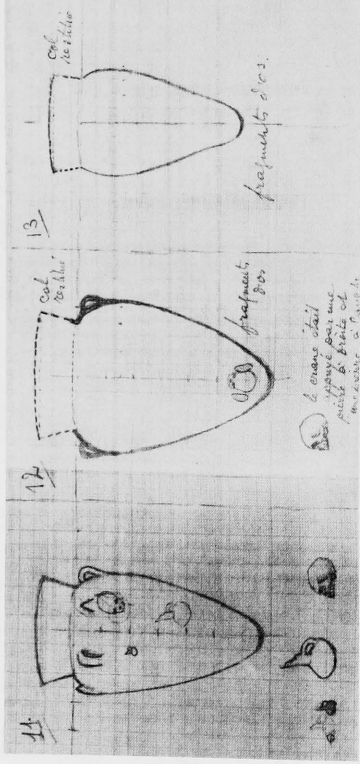
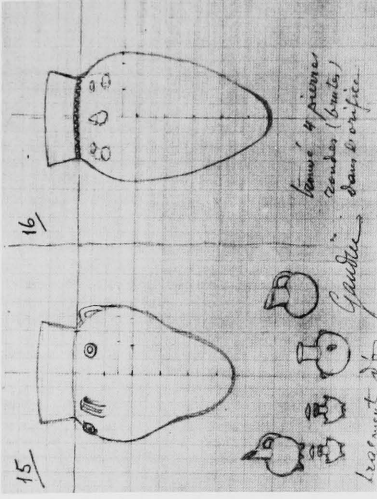


Fig. 2

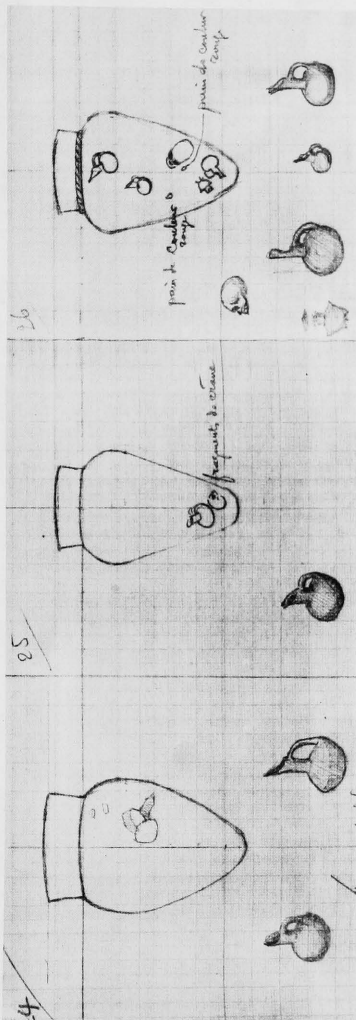
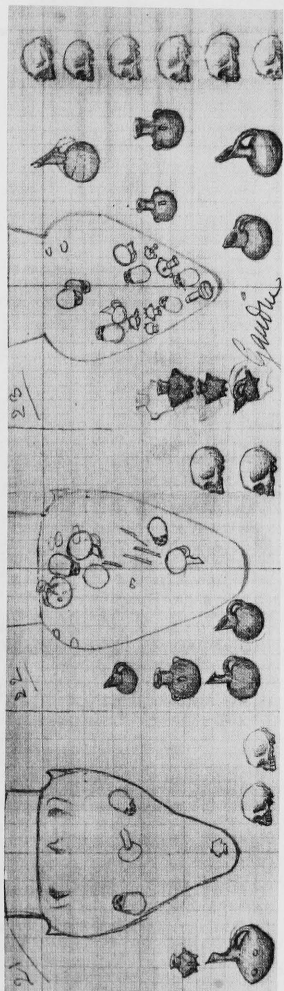


Fig. 3

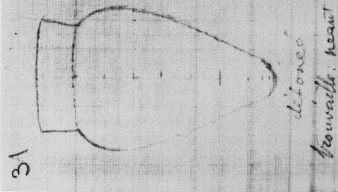
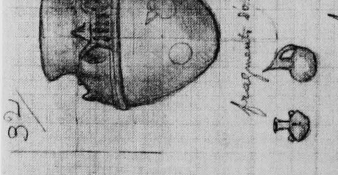
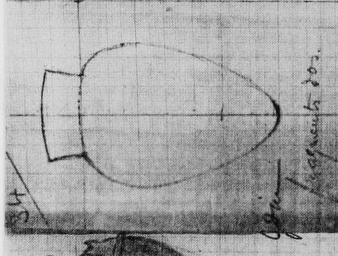
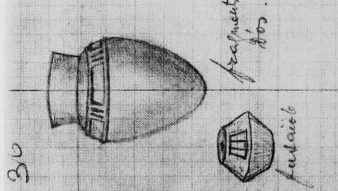
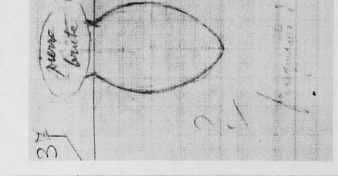
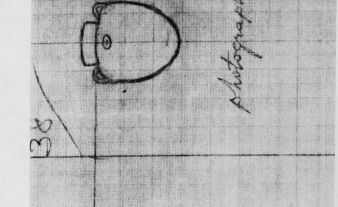
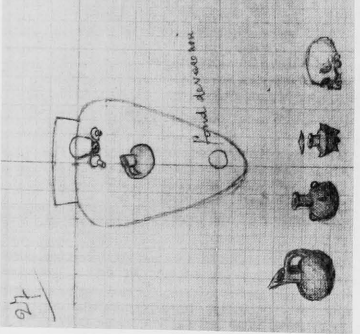
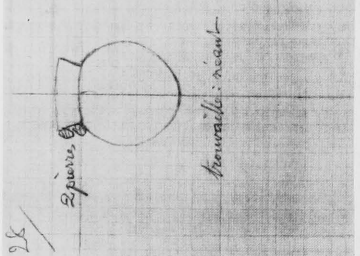
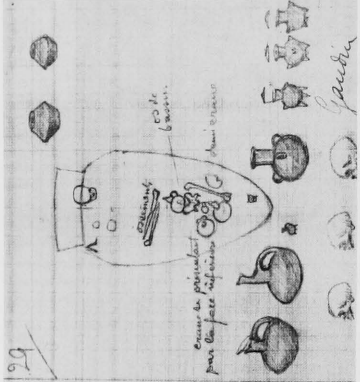
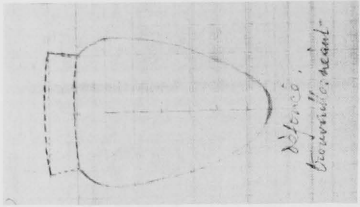


Fig. 4



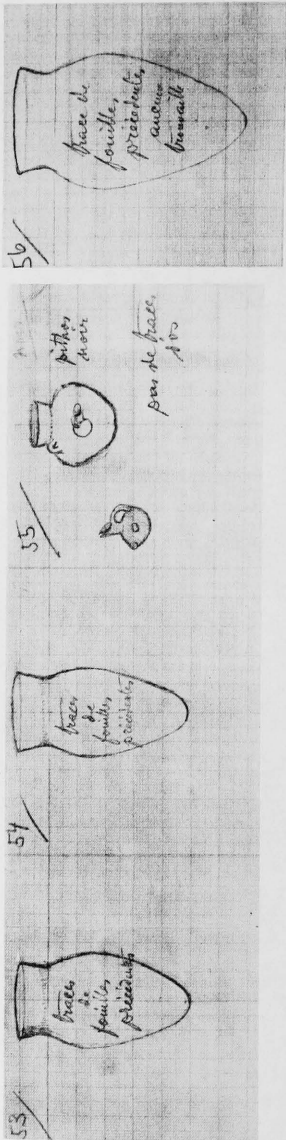
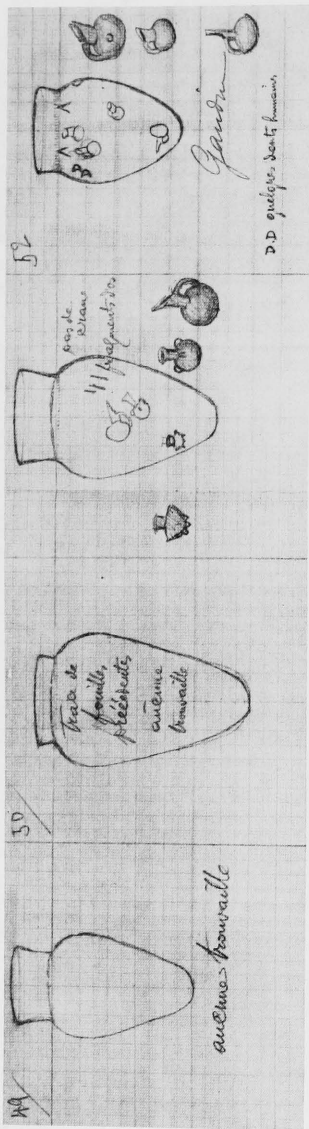


Fig. 6

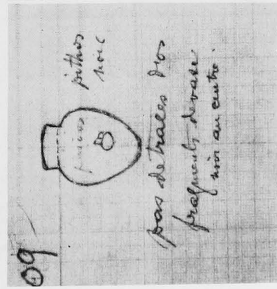
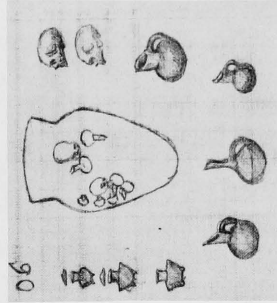
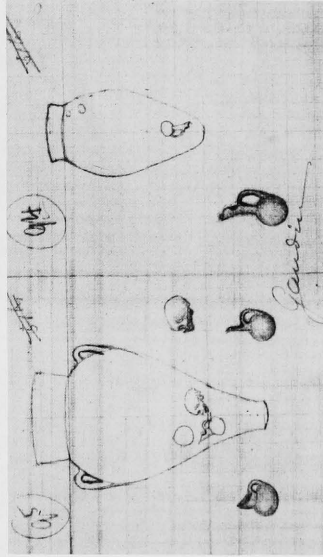
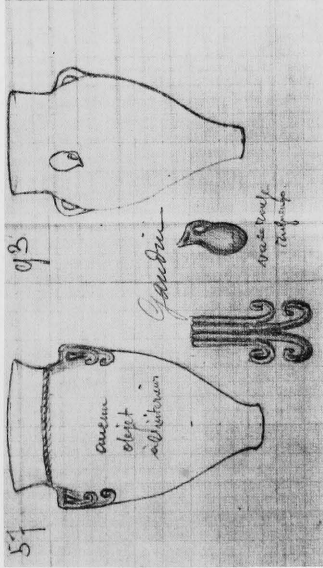
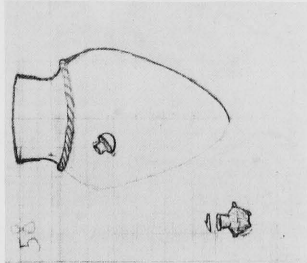
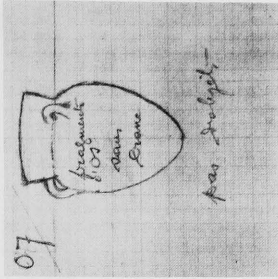


Fig. 7

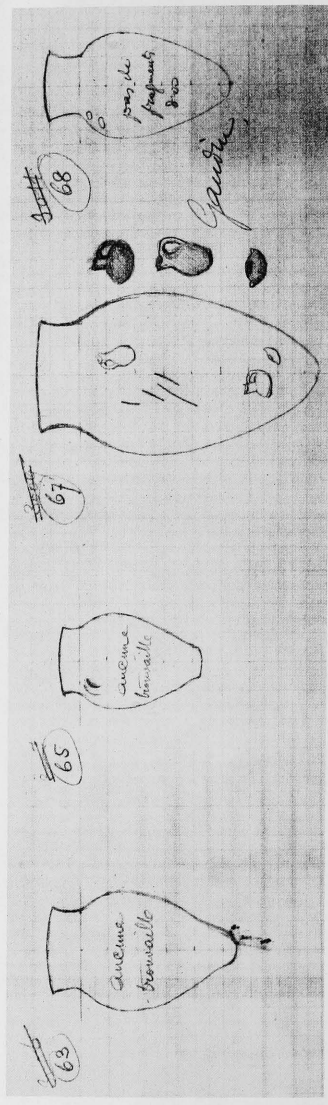
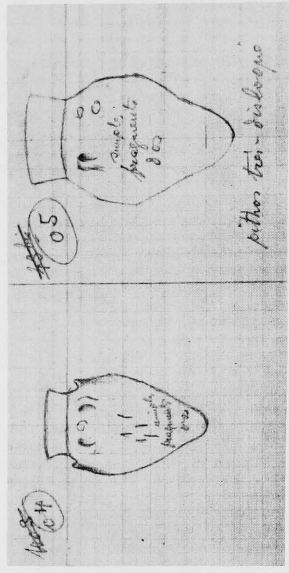
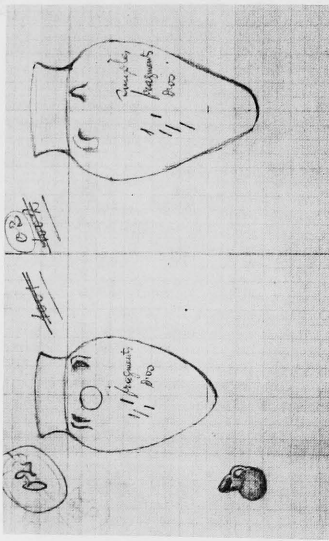


Fig. 8



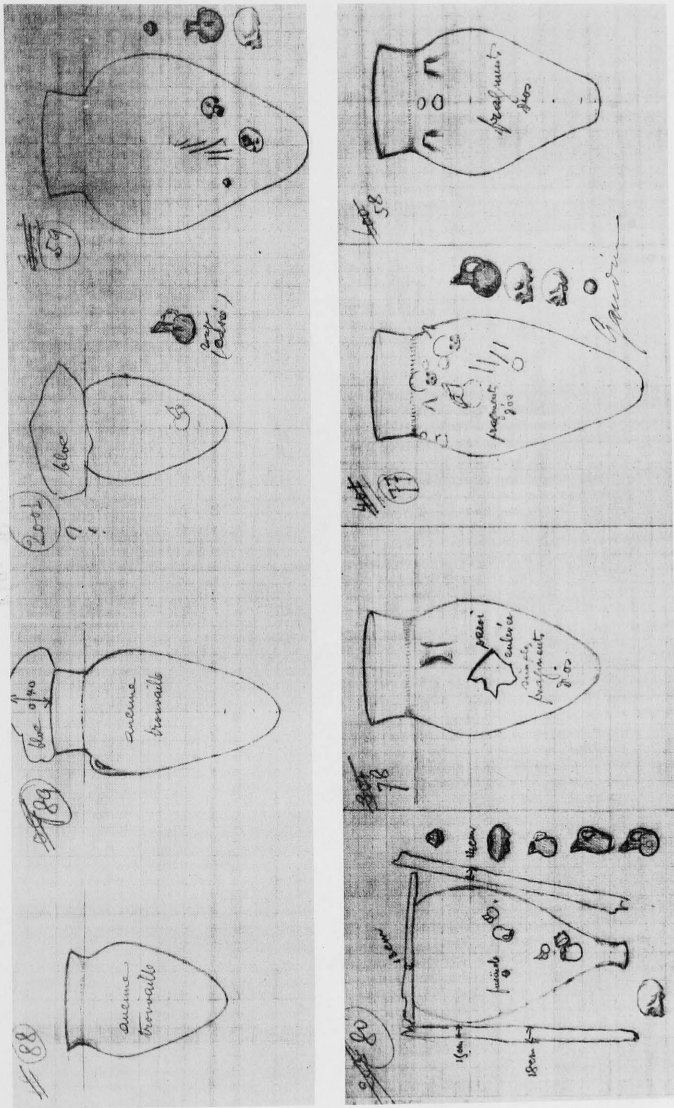


Fig. 9

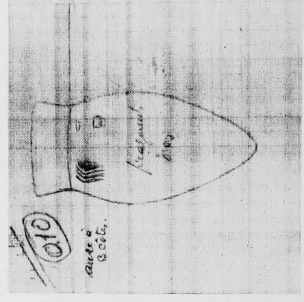
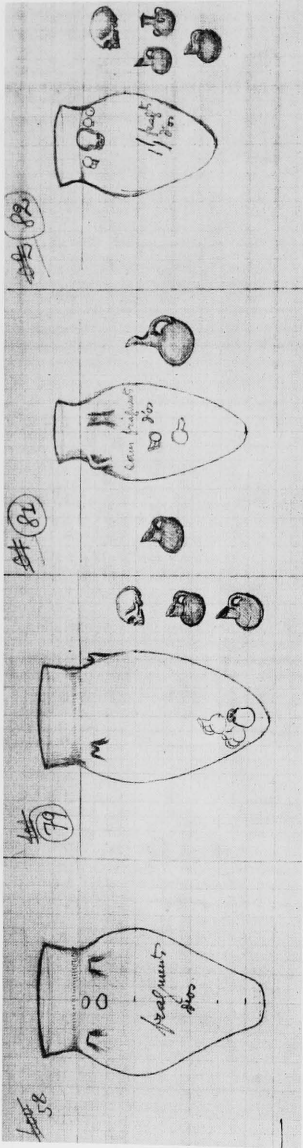


Fig. 10

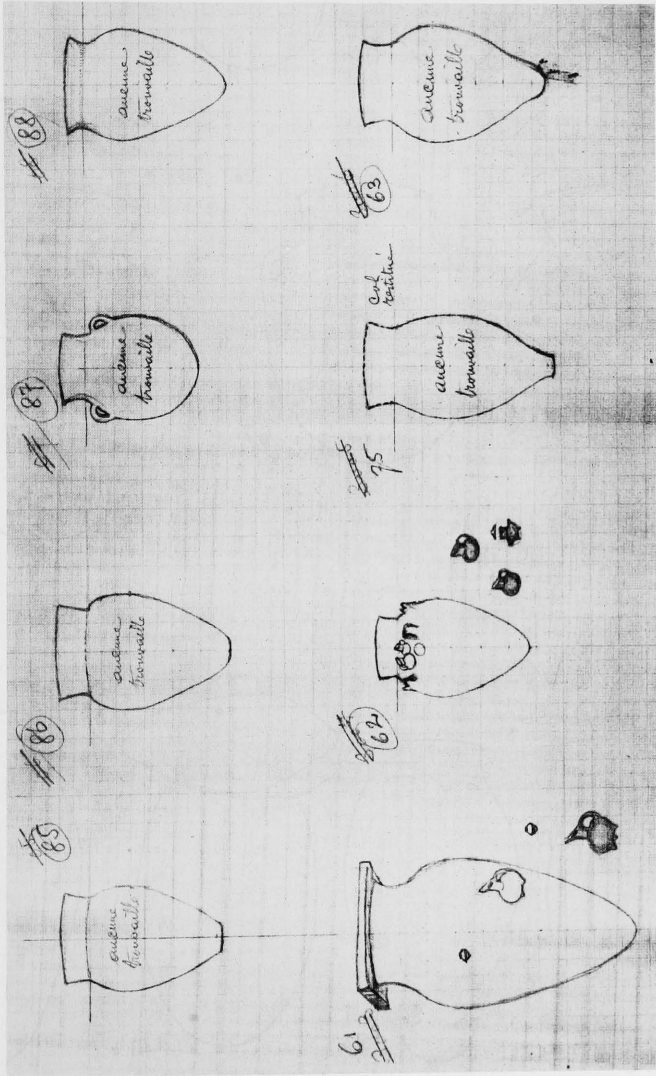
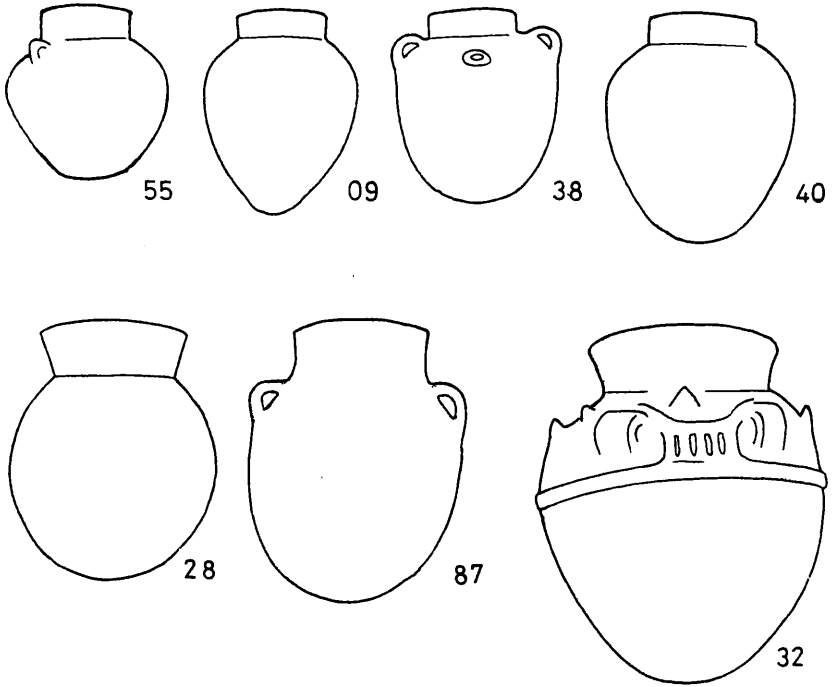


Fig. 11

YORTAN BURIAL PITHOI

SHAPE.1



SHAPE.2

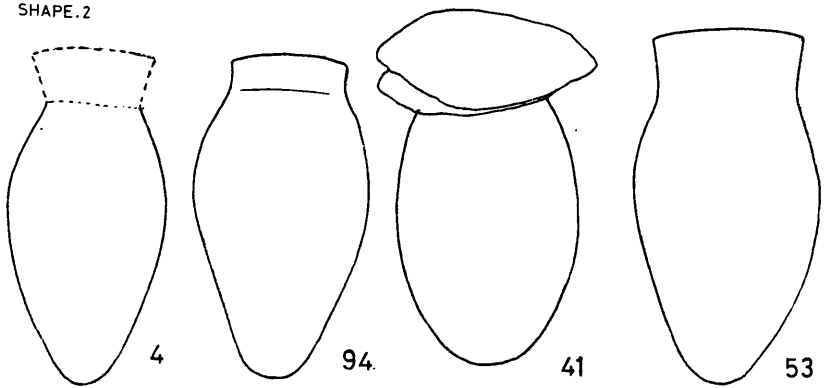
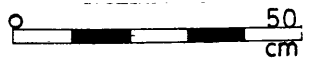


FIG.12



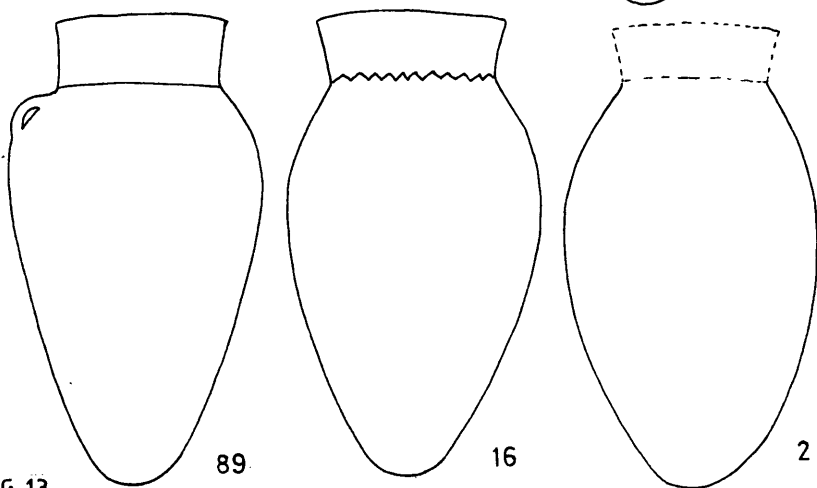
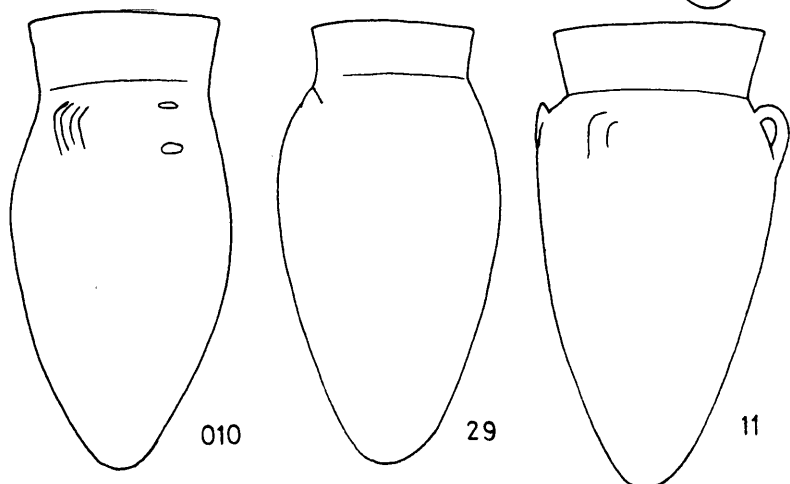
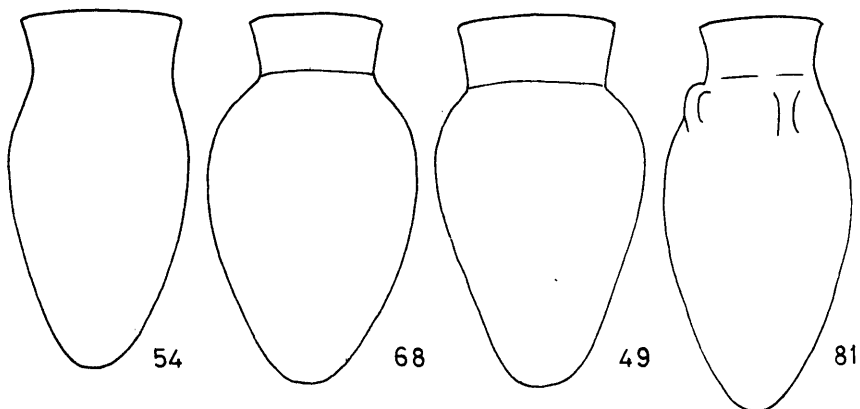
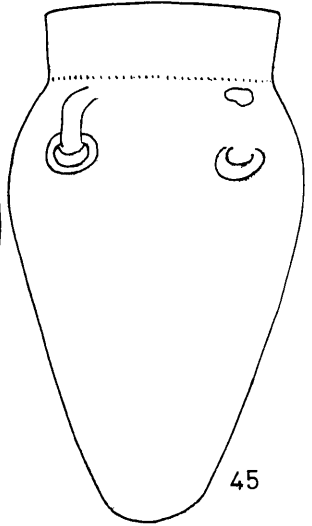
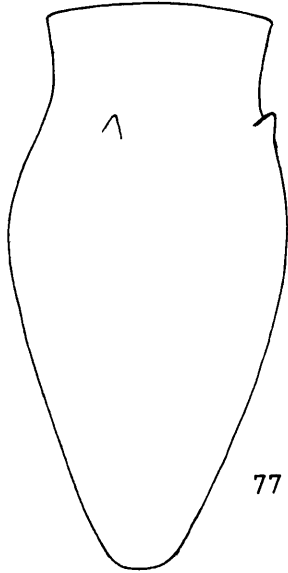
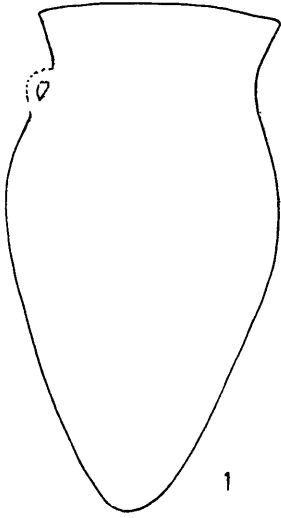
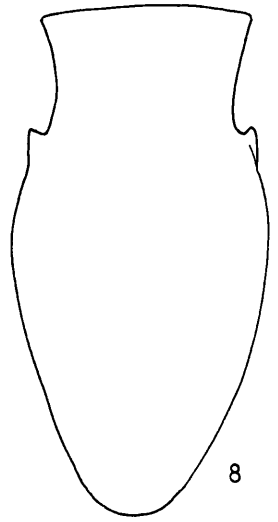
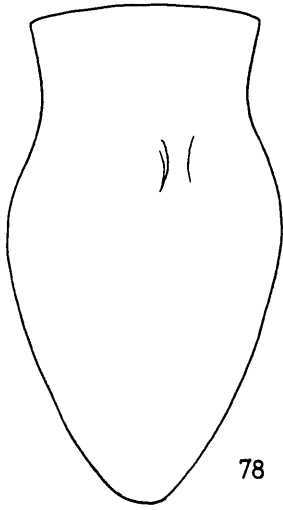
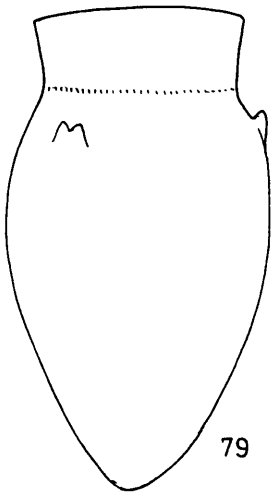


FIG. 13



SHAPE. 3

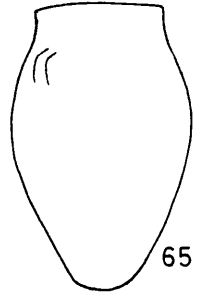
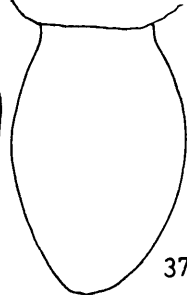
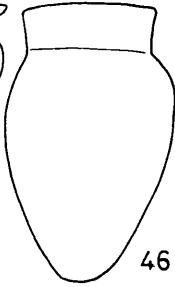
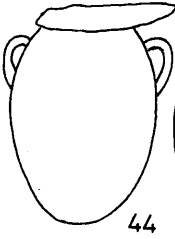
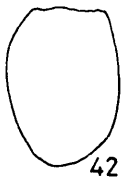


FIG.14

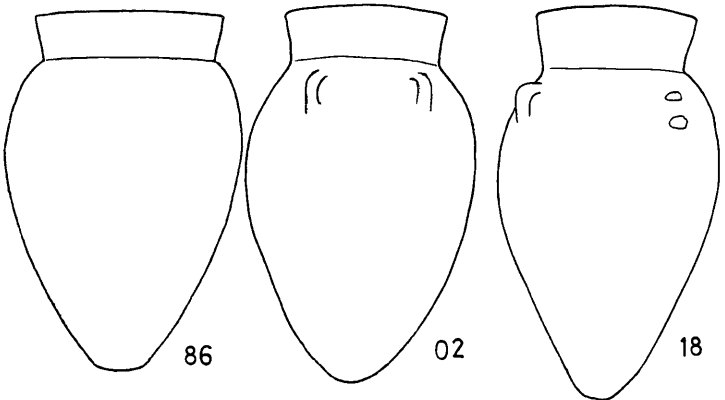
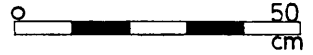
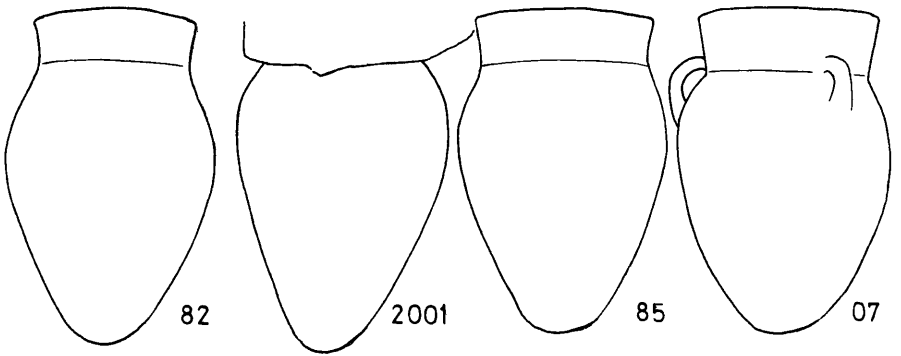
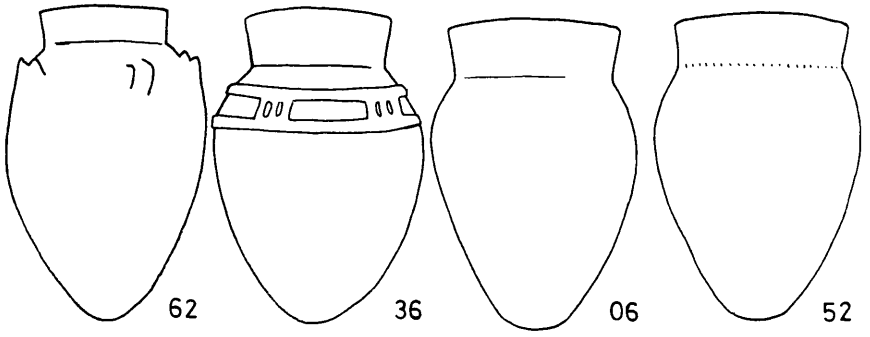


FIG. 15

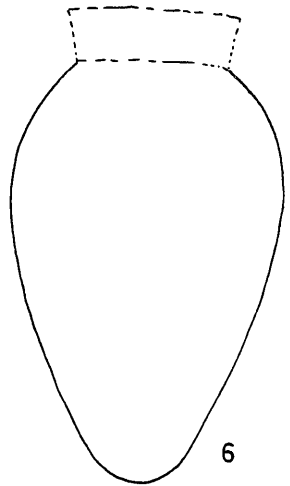
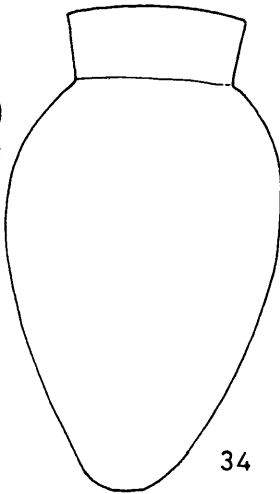
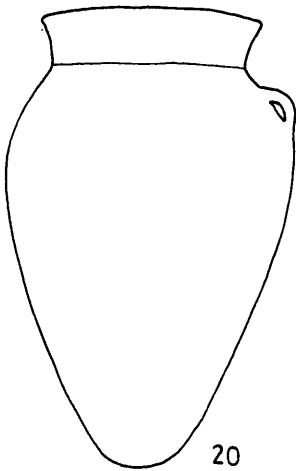
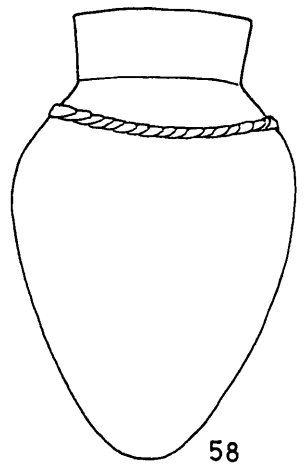
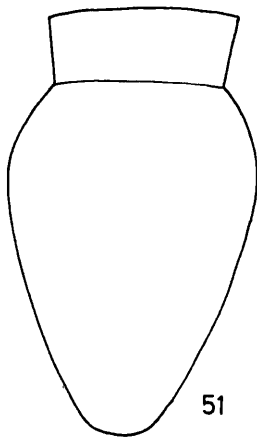
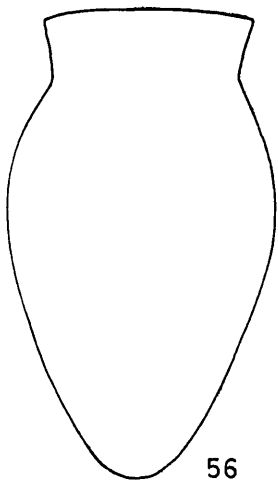
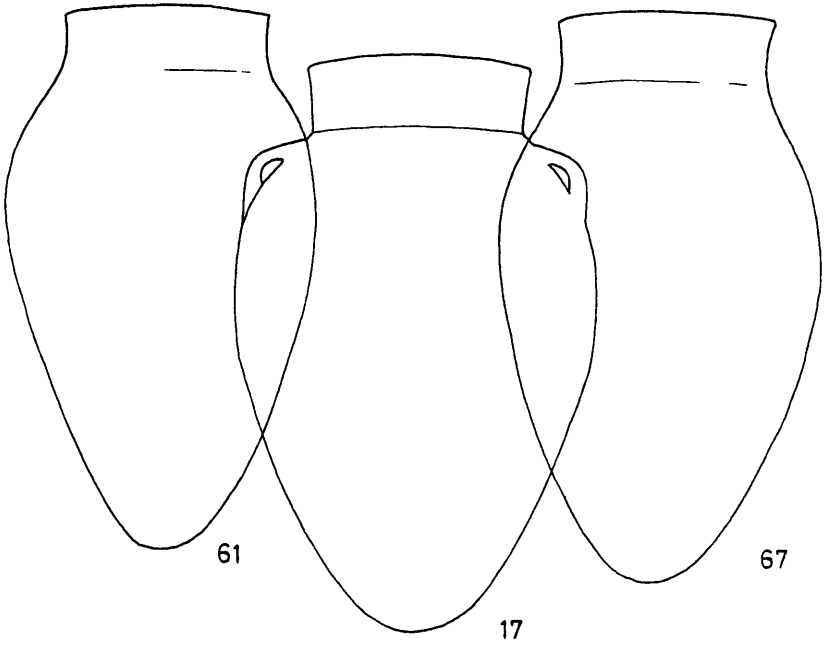


FIG.16





SHAPE. 4

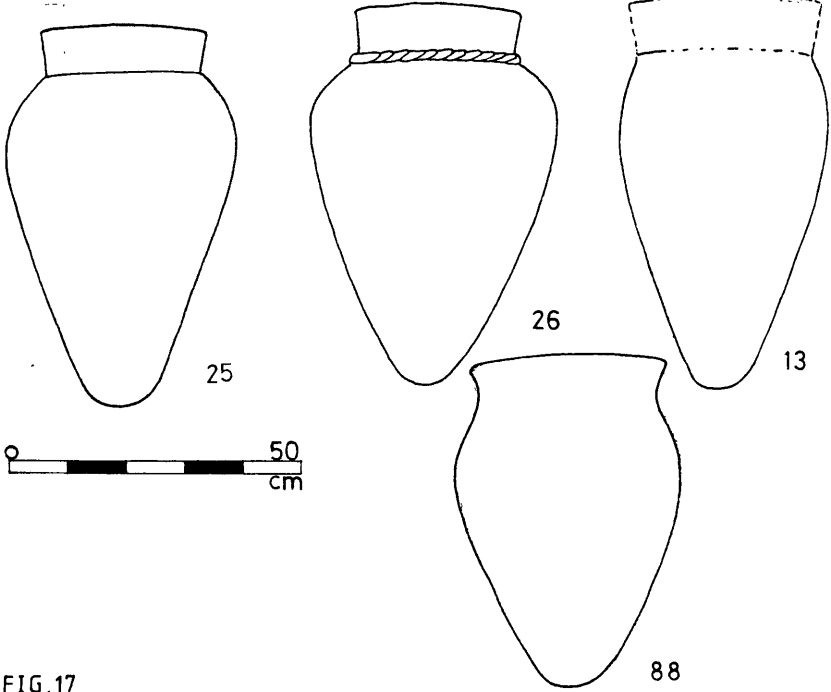


FIG. 17

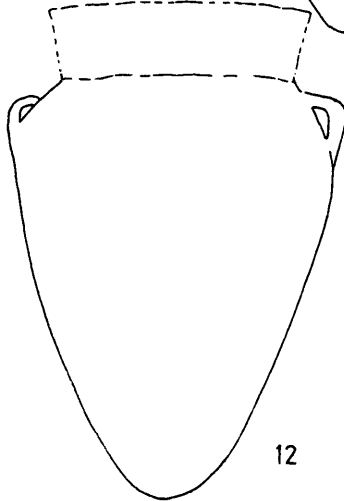
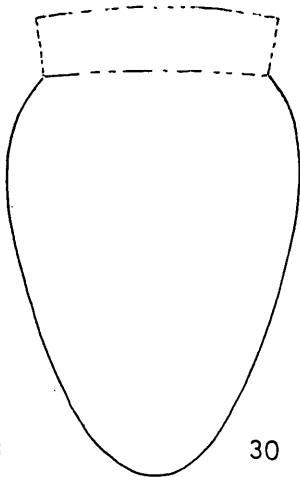
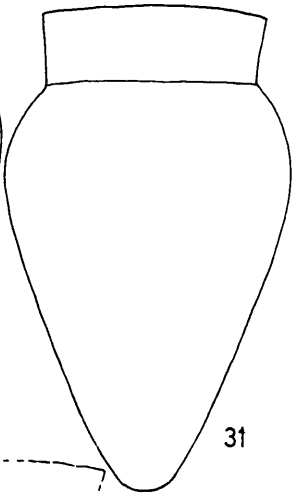
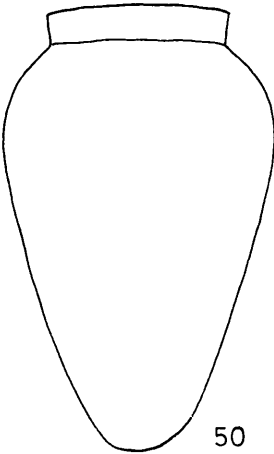
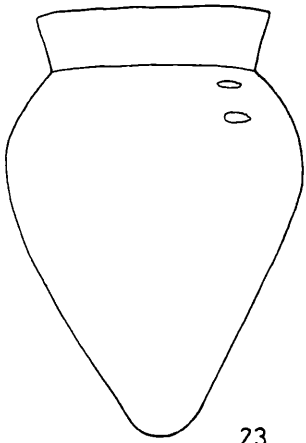
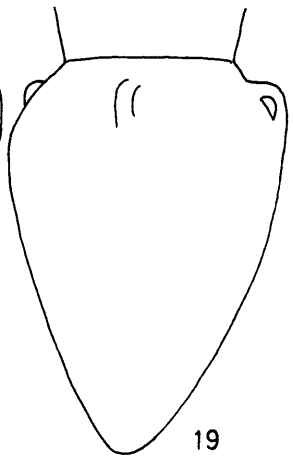
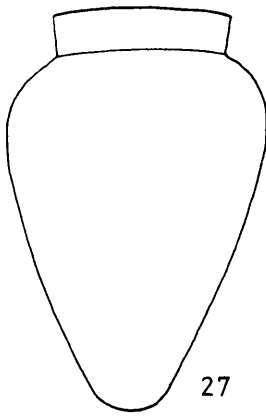
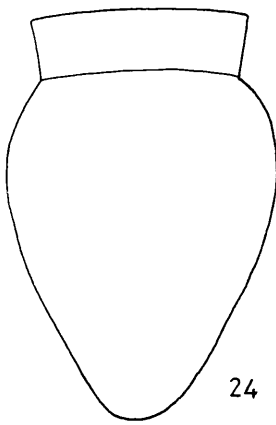
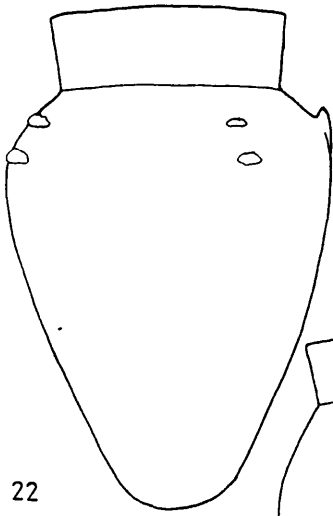
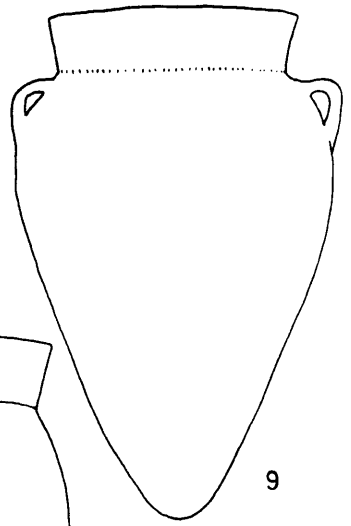


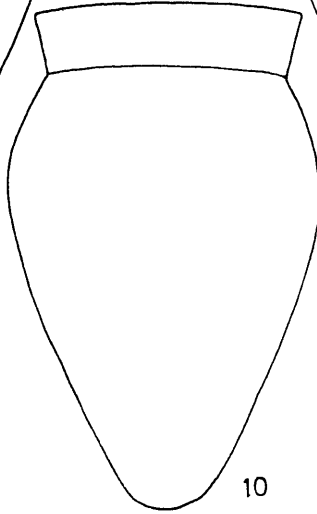
FIG. 18



22

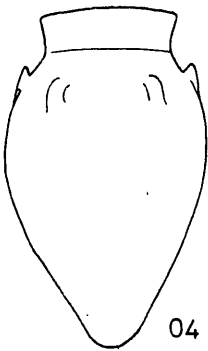


9

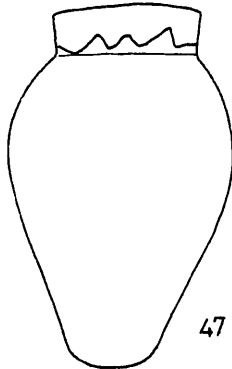


10

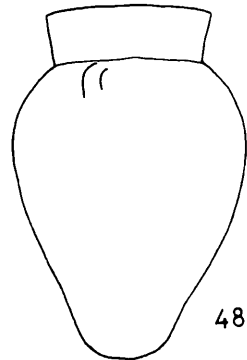
SHAPE.5



04



47



48



FIG.19

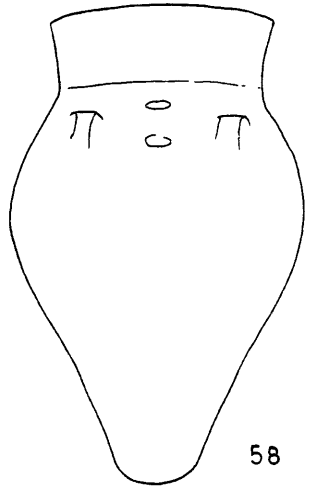
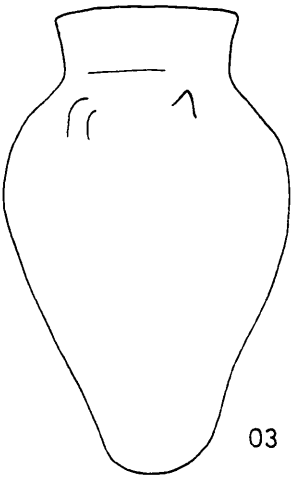
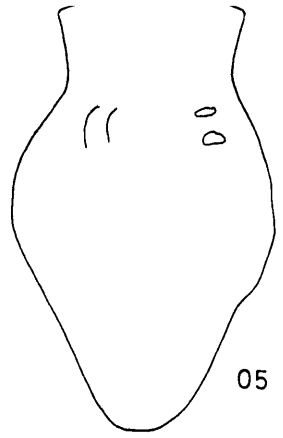
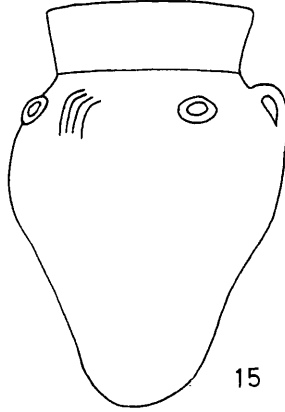
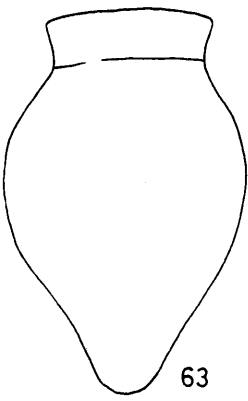
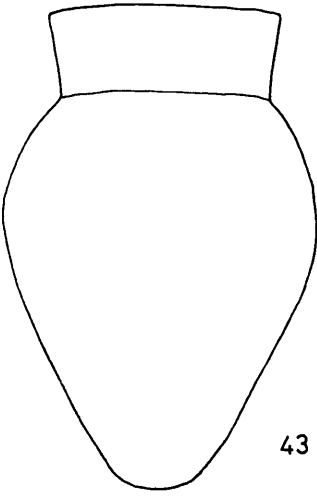
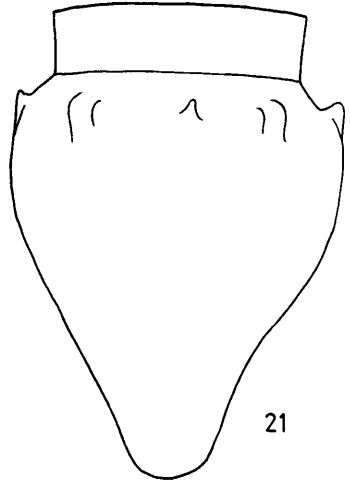


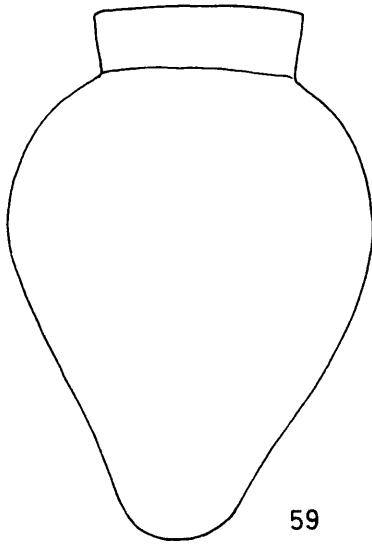
FIG. 20



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21



59



FIG. 21

SHAPE. 6

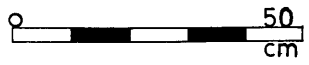
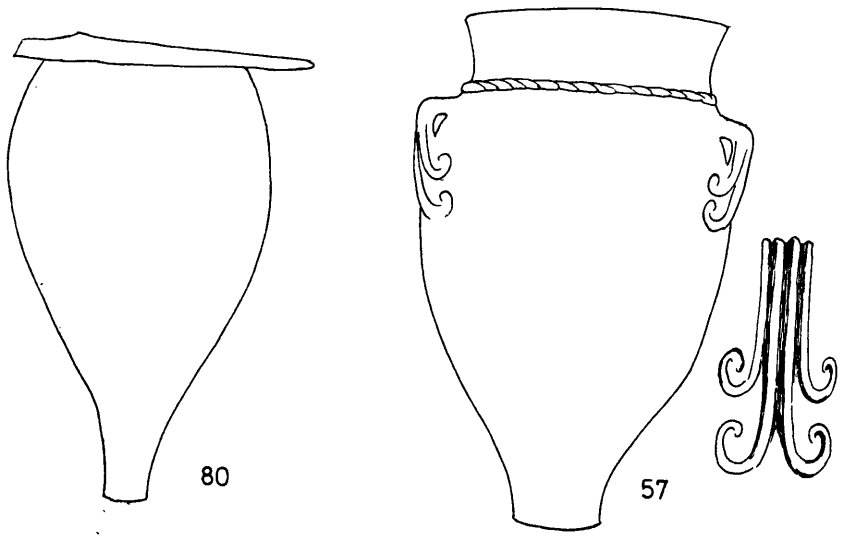
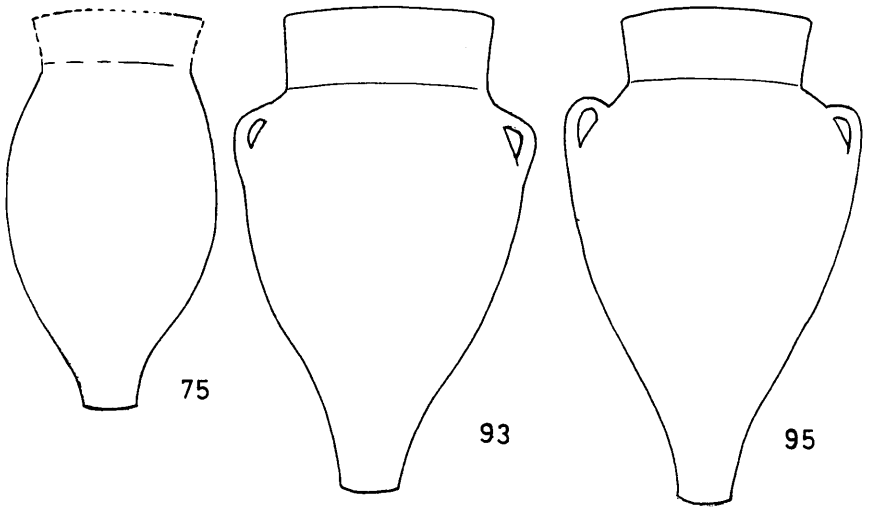


FIG.22

CLASS A POTTERY  
SHAPE I

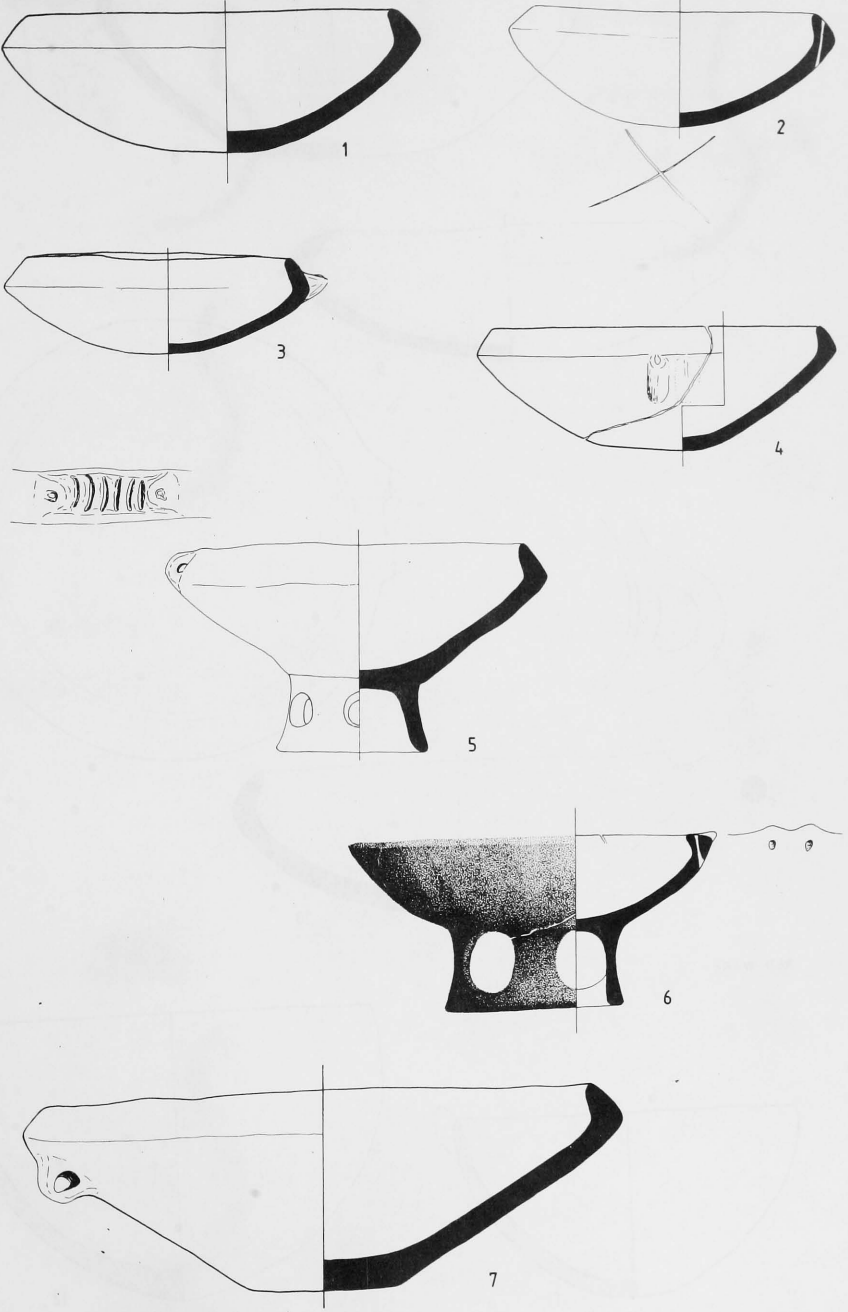
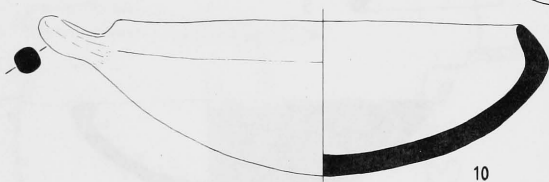
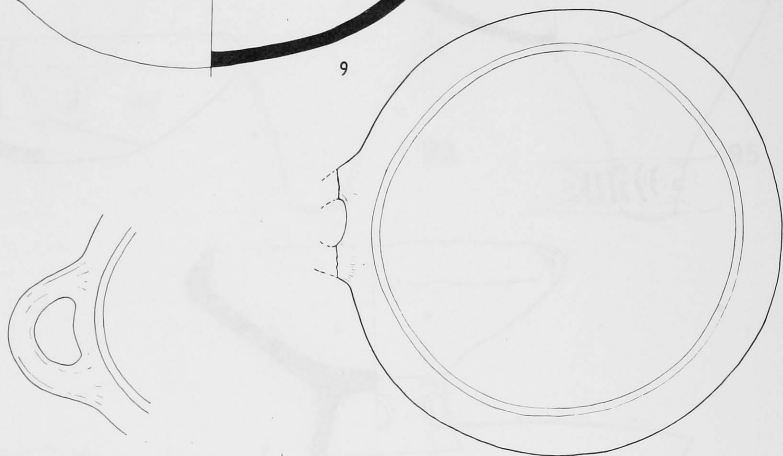
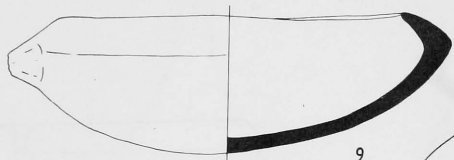
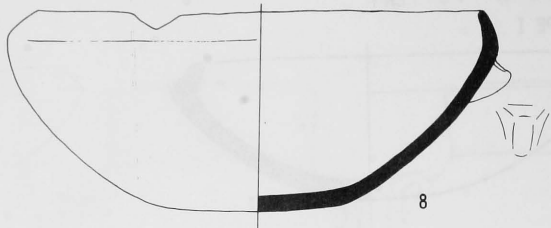


FIG. 23

scale 1:2



RED WARE

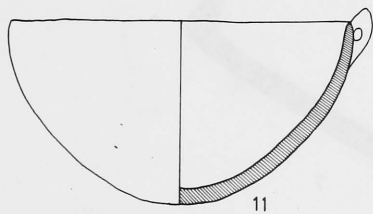


FIG. 24

scale 1:2



SHAPE II

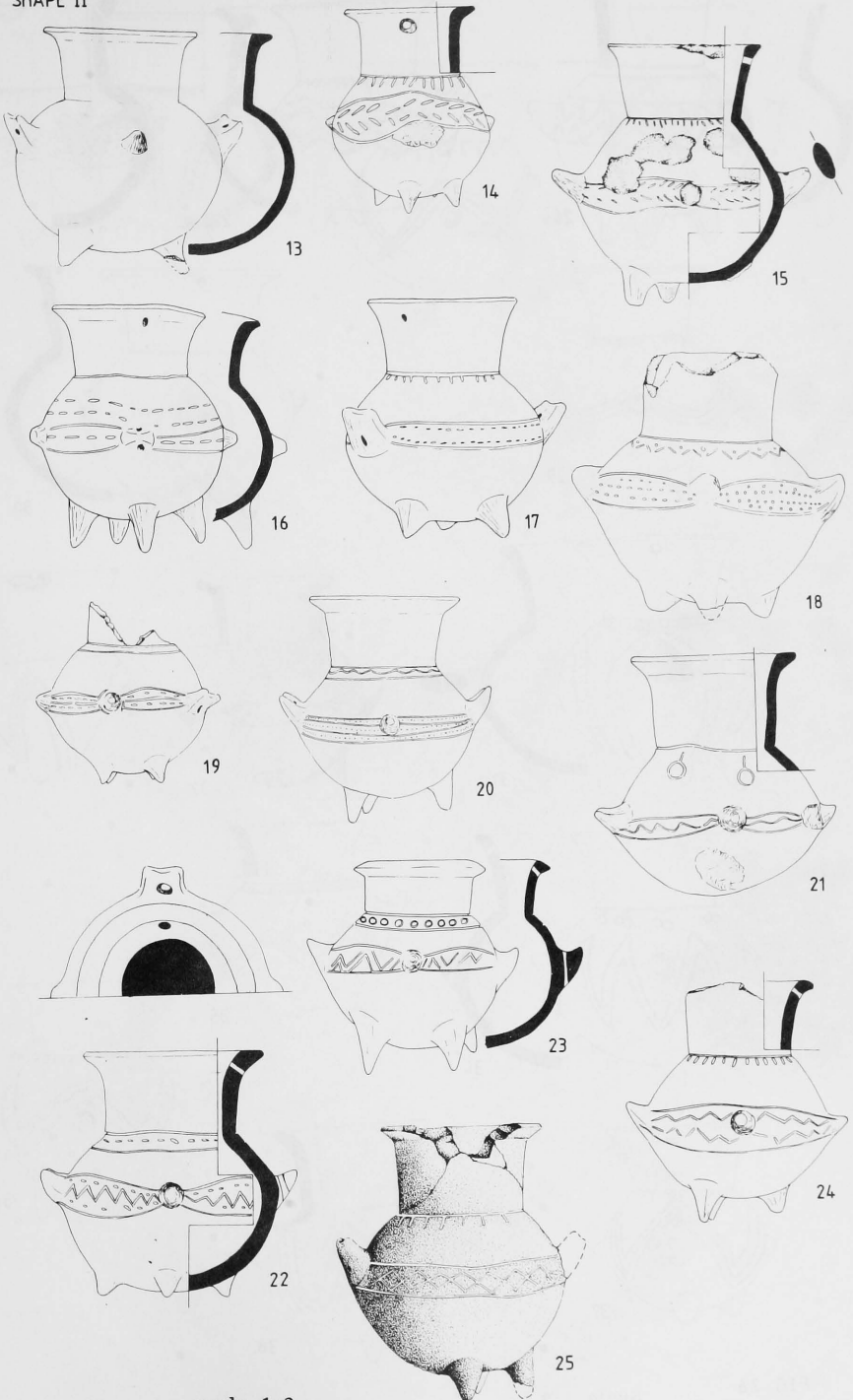


FIG. 25

scale 1:2

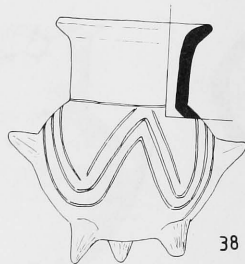
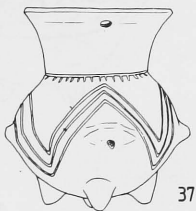
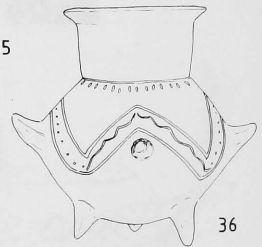
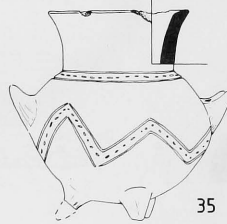
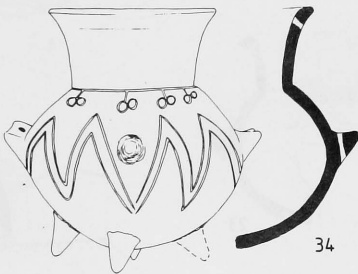
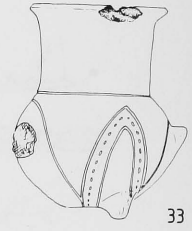
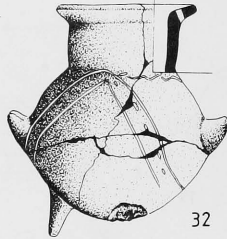
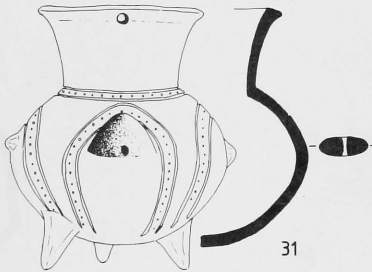
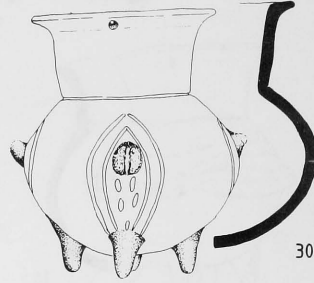
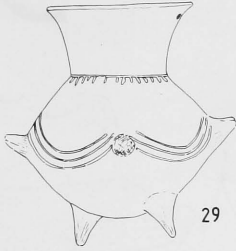
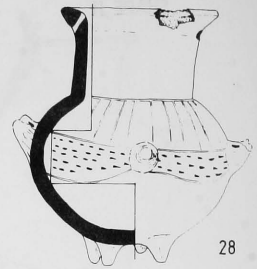
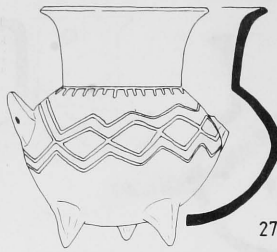
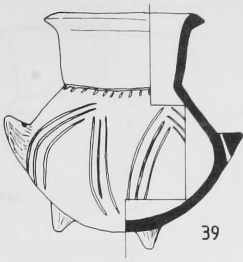
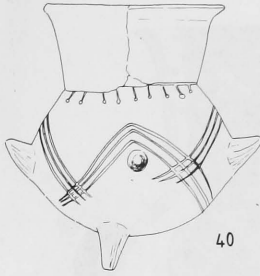


FIG. 26

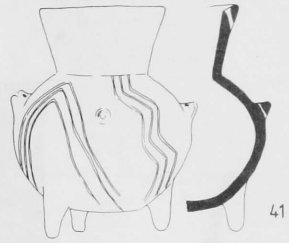
scale 1:2



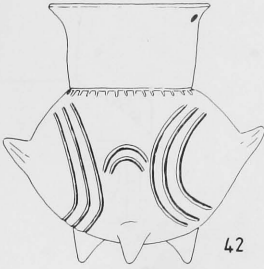
39



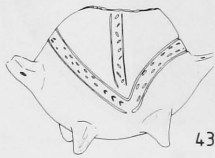
40



41



42



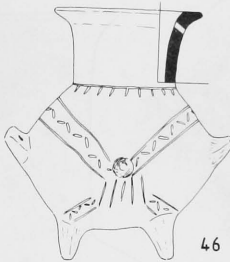
43



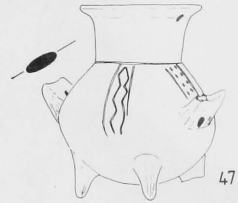
44



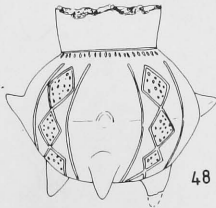
45



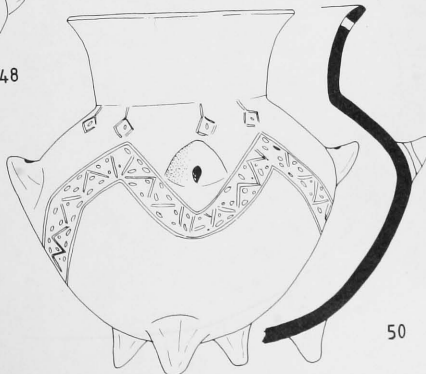
46



47



48



50



49

FIG. 27

scale 1:2

SHAPE III

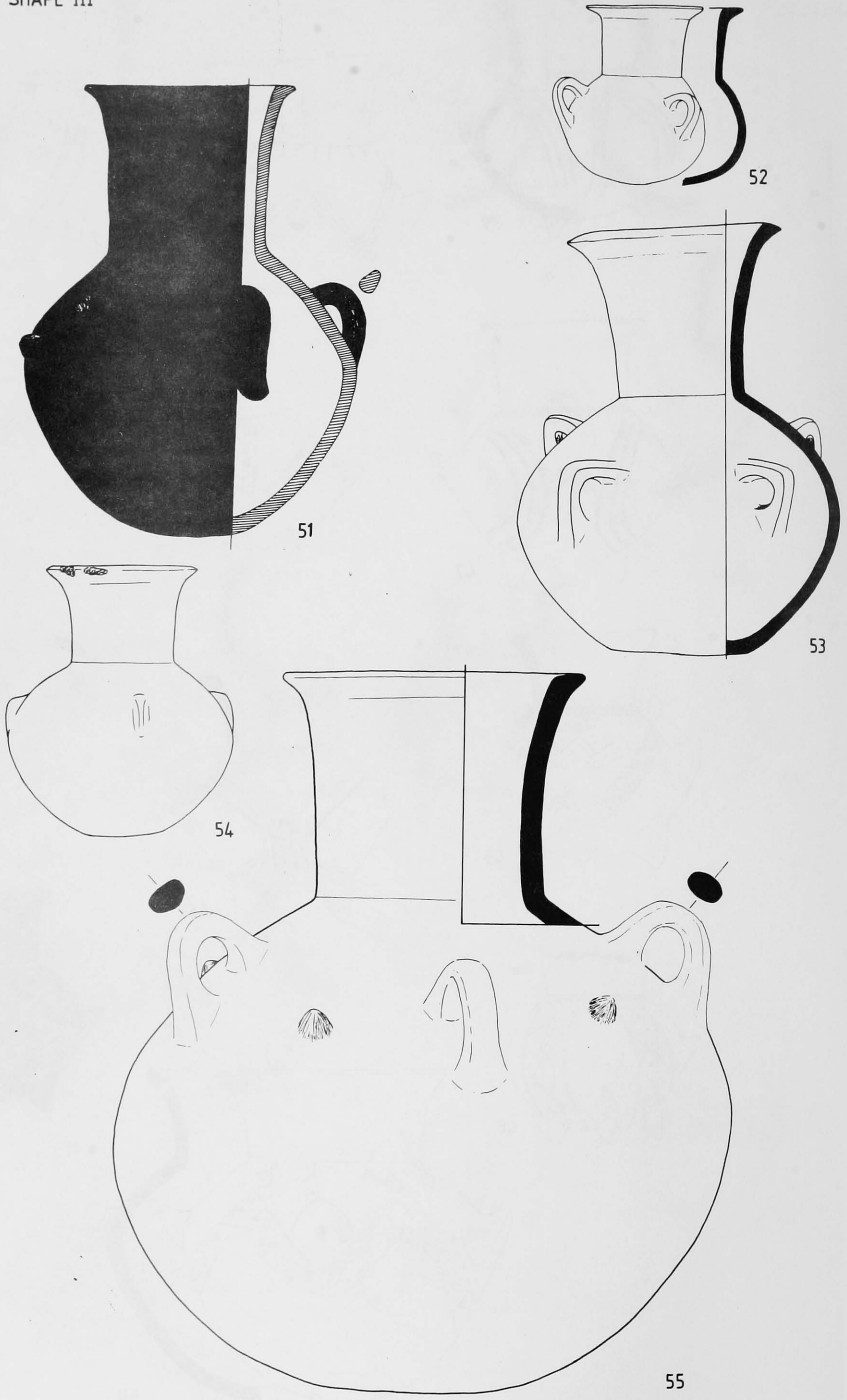
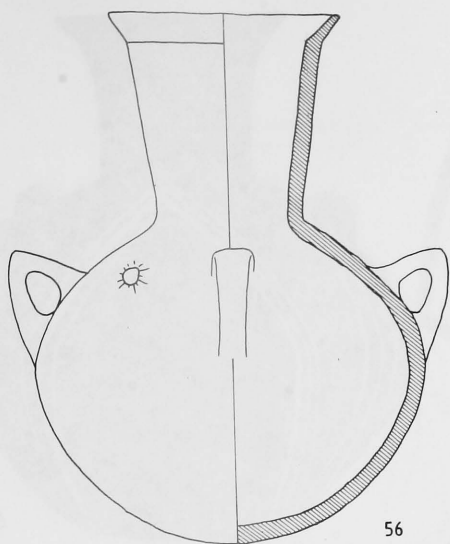
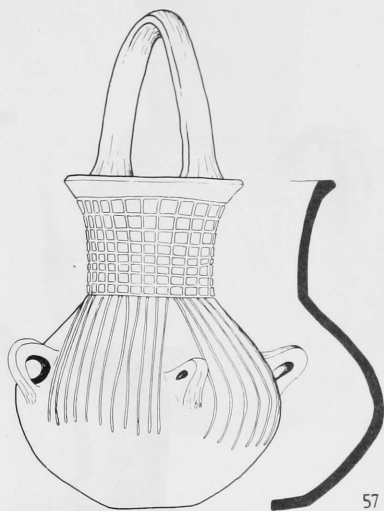


FIG. 28

scale 1:2



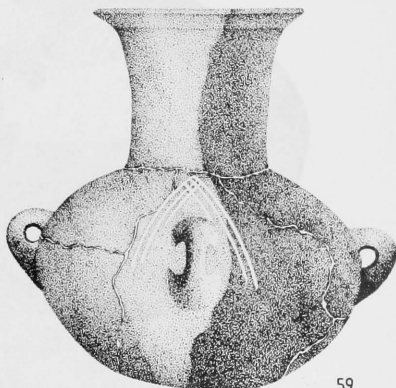
56



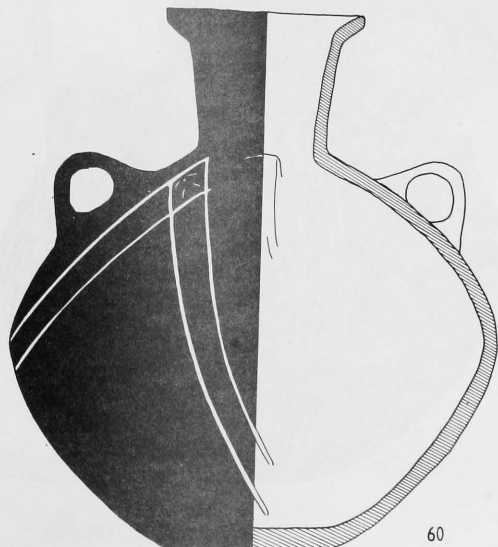
57



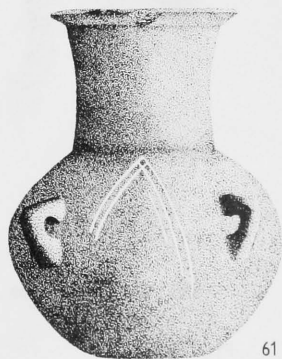
58



59



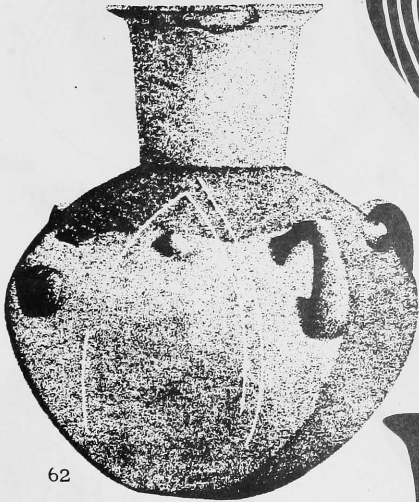
60



61

FIG. 29

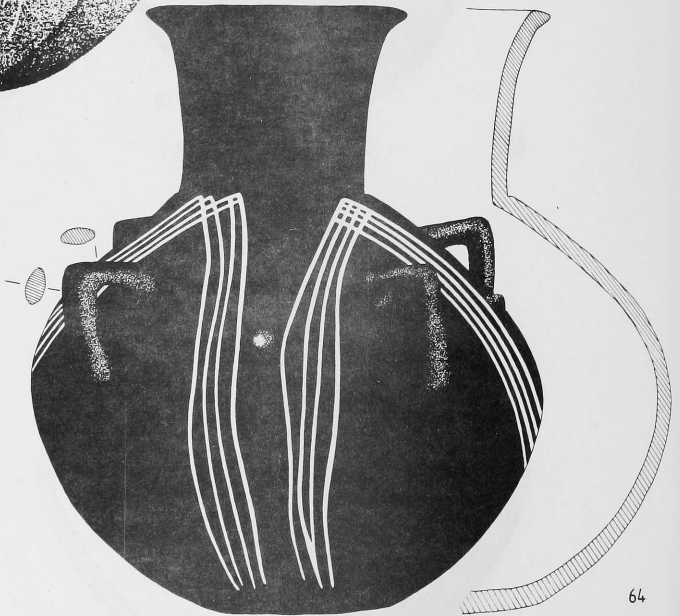
scale 1:2



62



63



64



FIG. 30

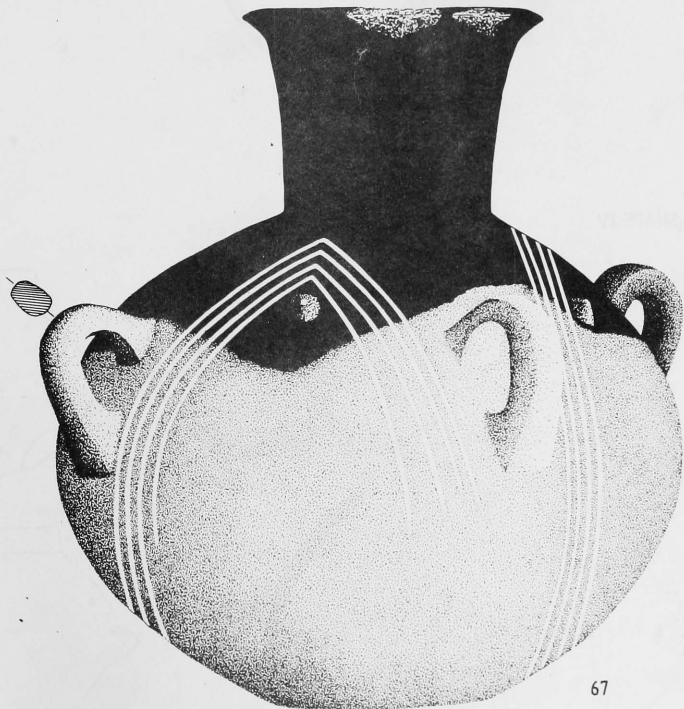
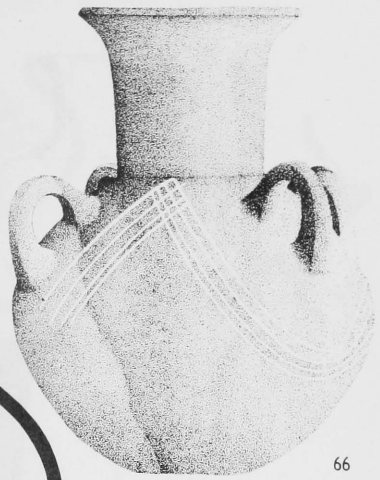
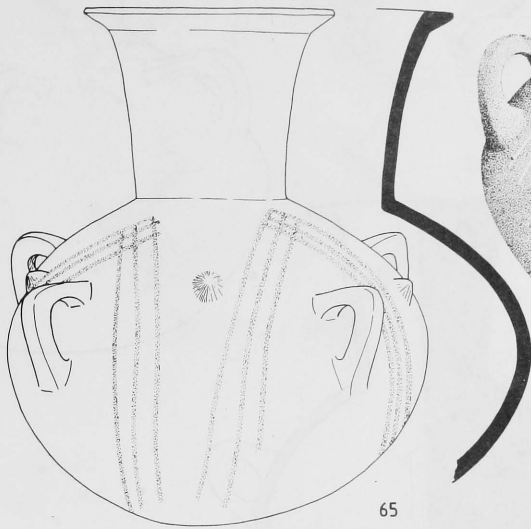
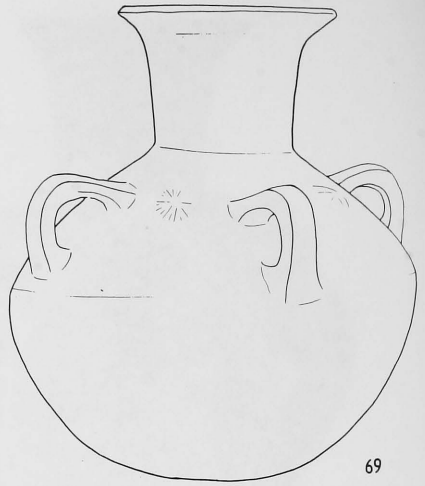
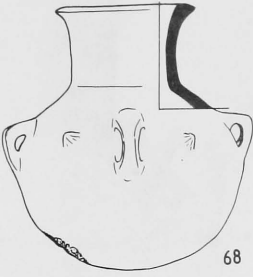


FIG. 31

scale 1:2

RED WARE



SHAPE IV

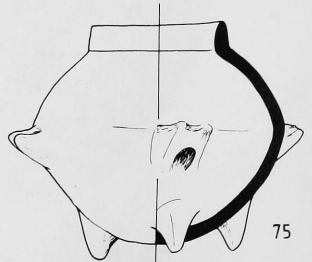
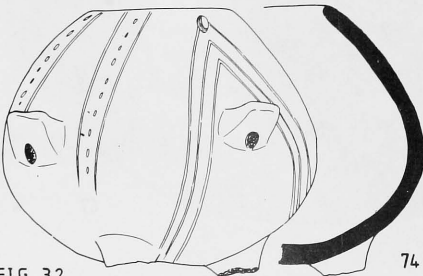
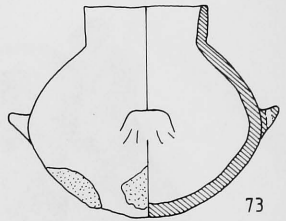
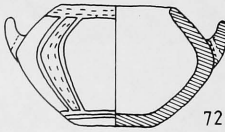
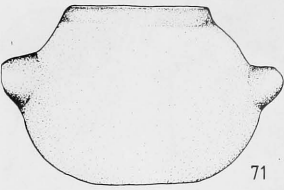
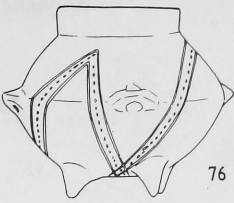


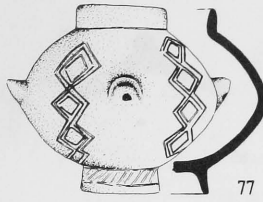
FIG. 32

scale 1:2

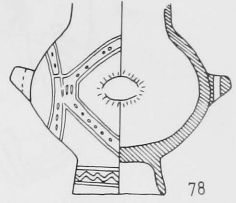




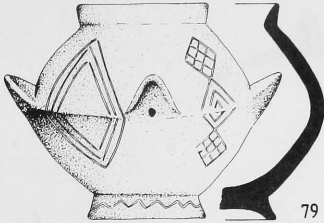
76



77



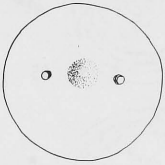
78



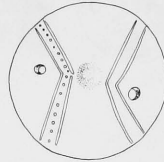
79

SHAPE V

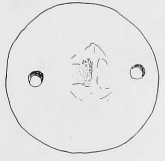
TYPE (A)



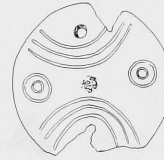
80



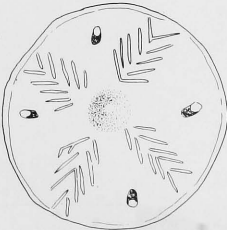
84



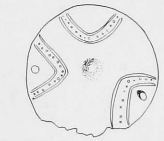
81



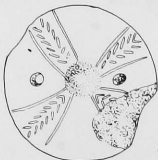
85



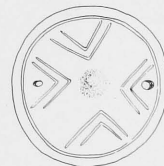
82



86



83

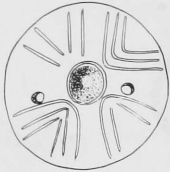


87

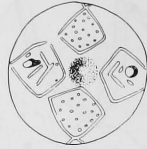


FIG. 33

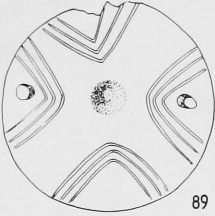
scale 1:2



88



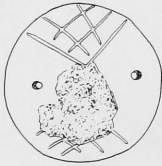
92



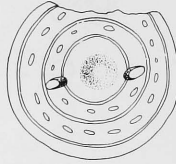
89



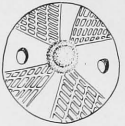
93



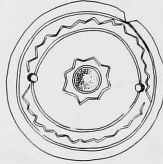
90



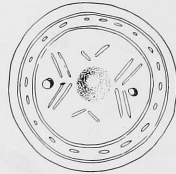
94



91



95



96



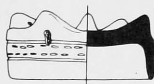
TYPE (B)



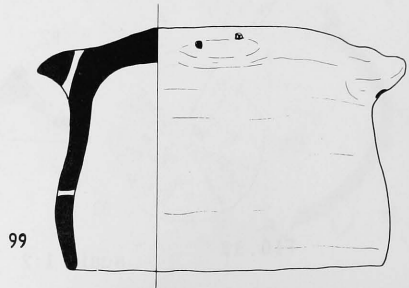
97



98

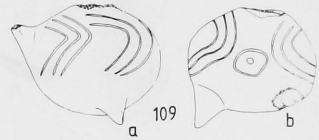
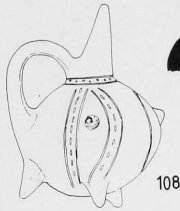
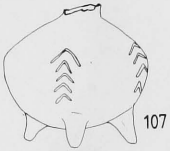
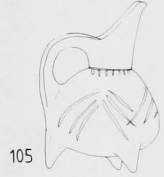
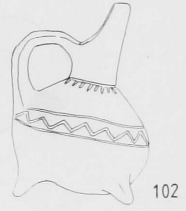
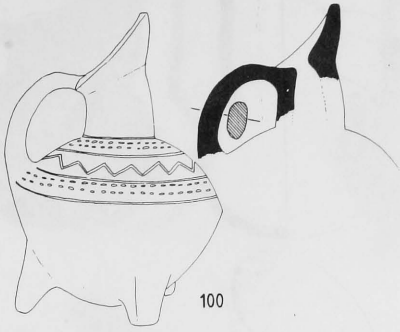


TYPE (C)



99

SHAPE VI



RED WARE



FIG. 35

scale 1:2

SHAPE VII

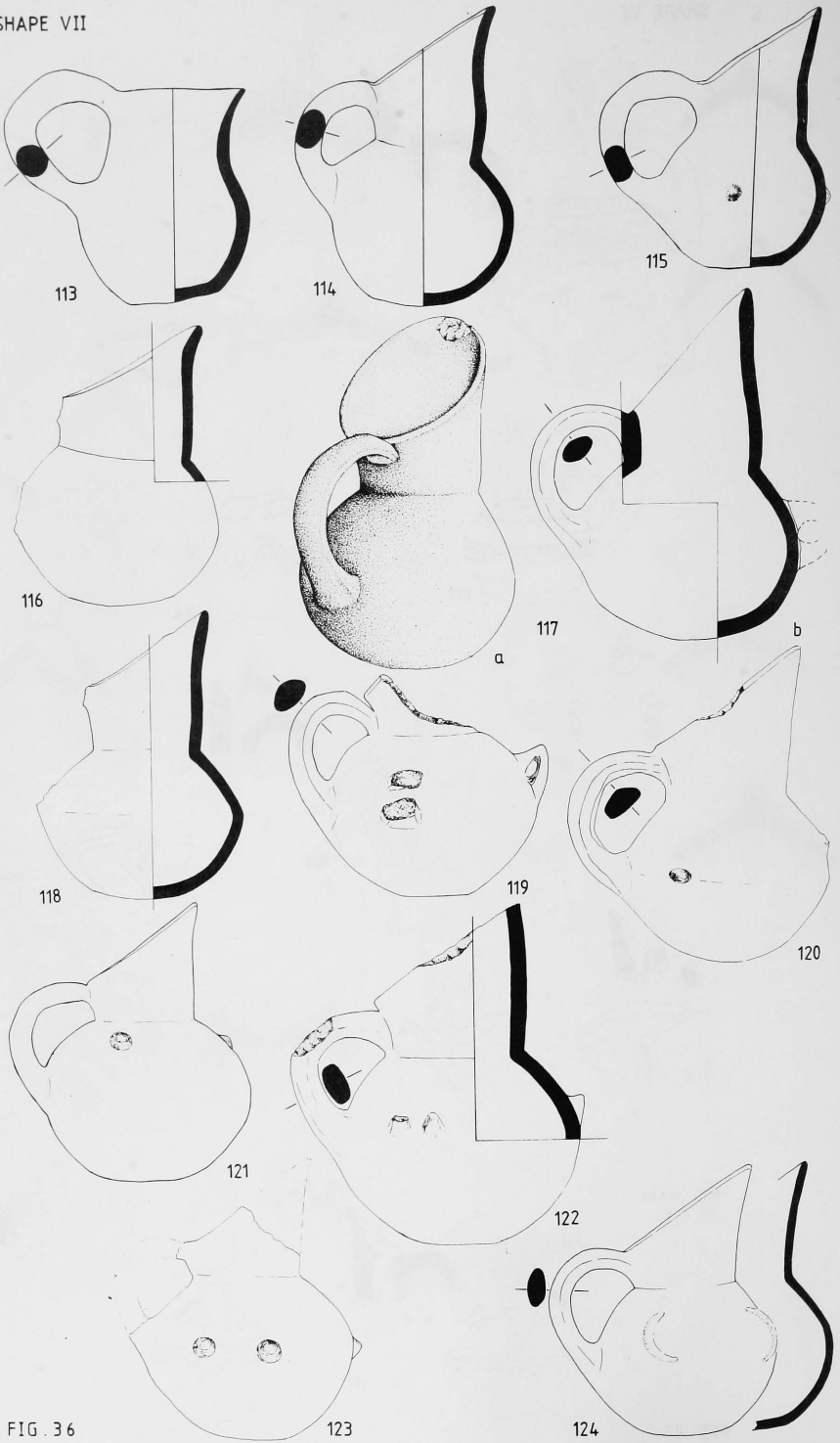
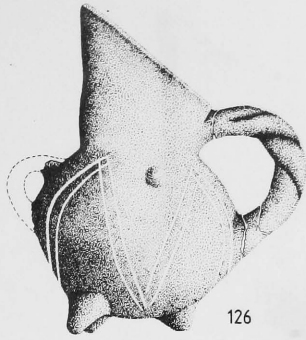


FIG. 36

scale 1:2



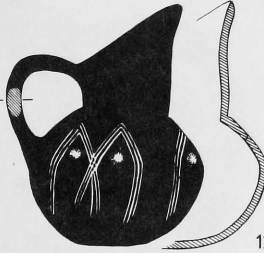
125



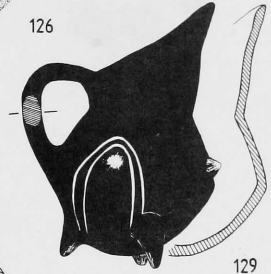
126



127



128



129

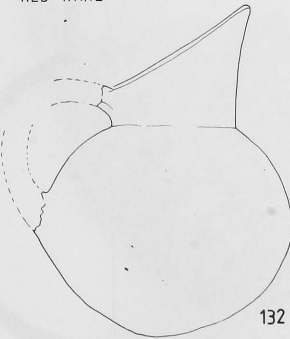


130

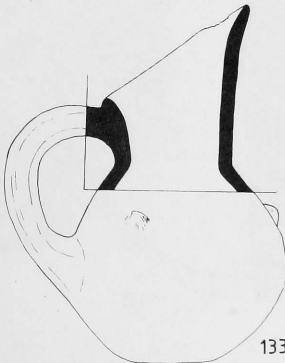


131

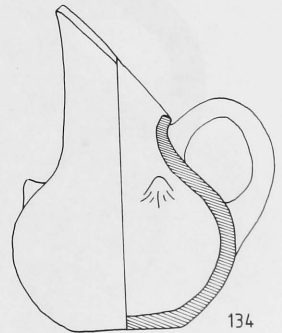
RED WARE



132



133

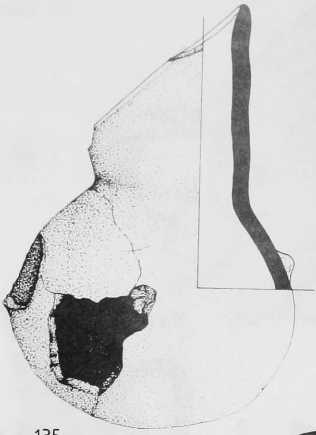


134

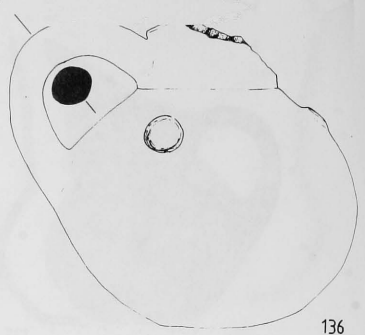
FIG. 37

scale 1:2

SHAPE VIII



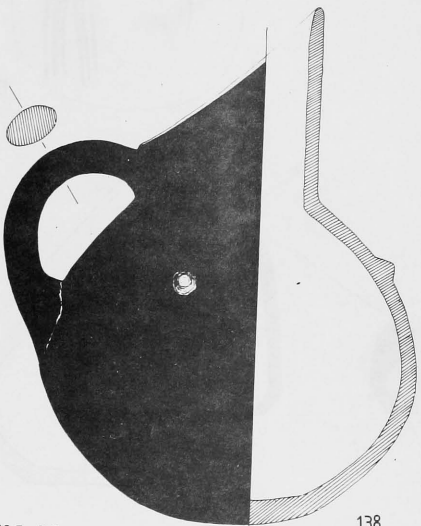
135



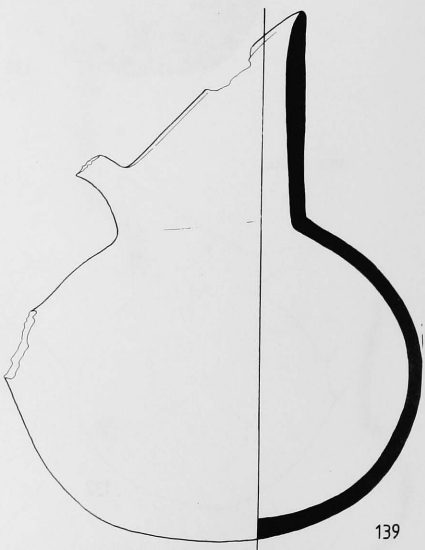
136



137



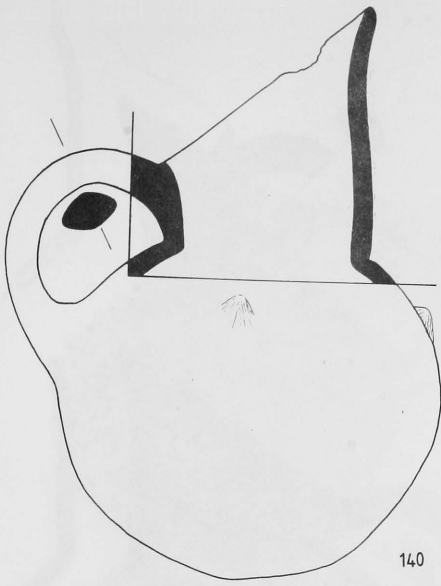
138



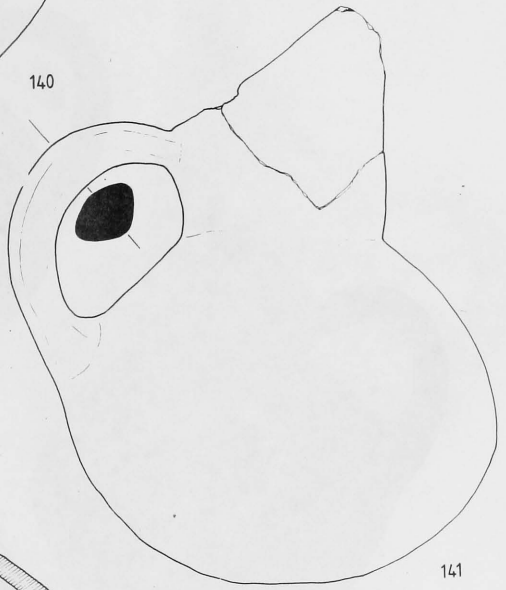
139

FIG. 38

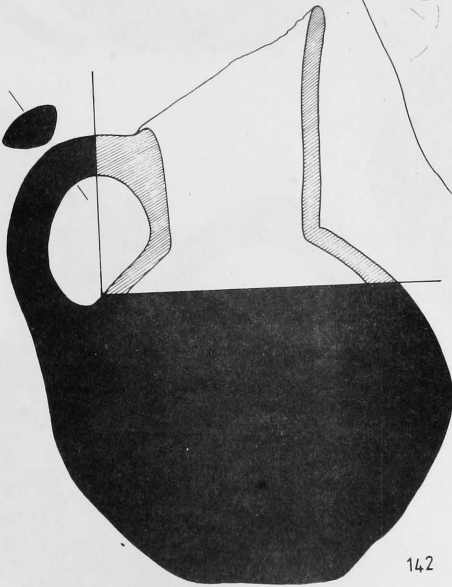
scale 1:2



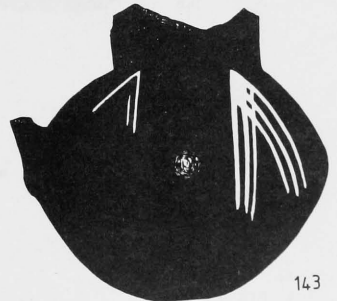
140



141



142



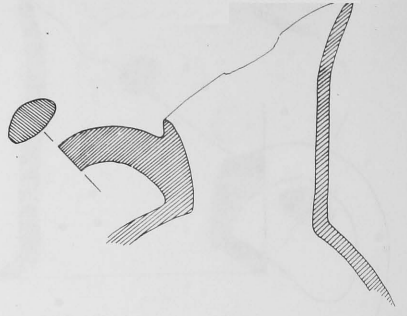
143

FIG . 39

scale 1:2



144



146

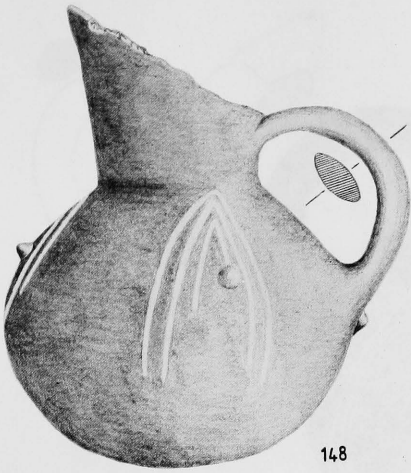


145

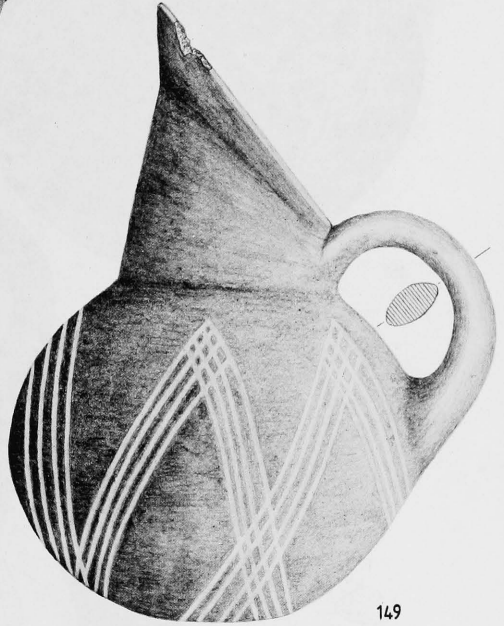


147





148



149



150

FIG. 41



151



152

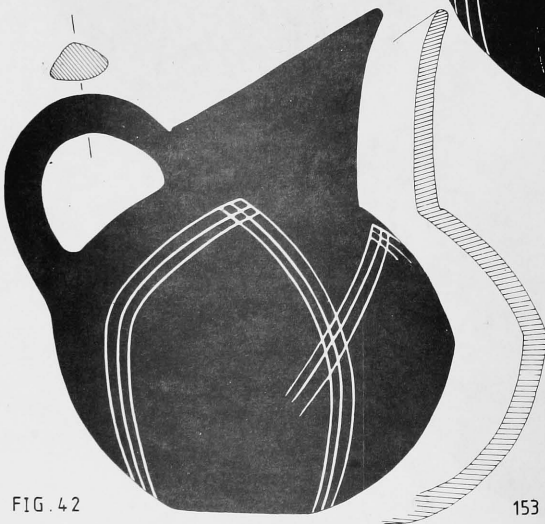


FIG. 42

153

scale 1:2

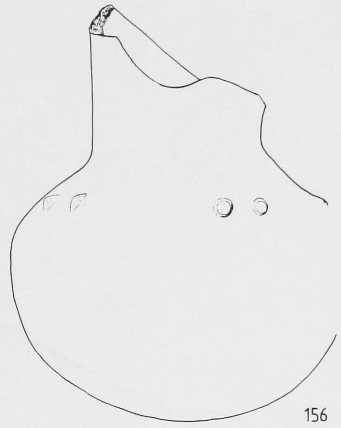
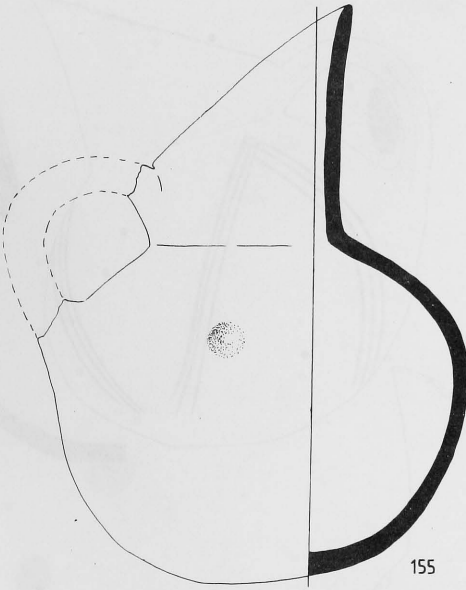
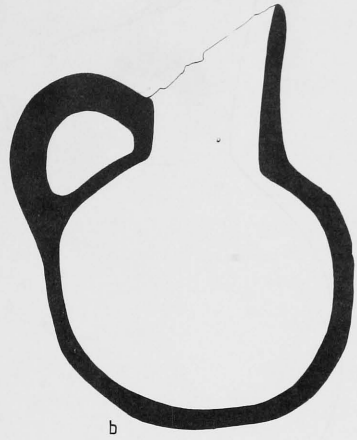
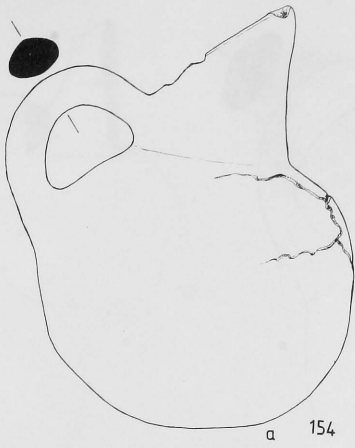
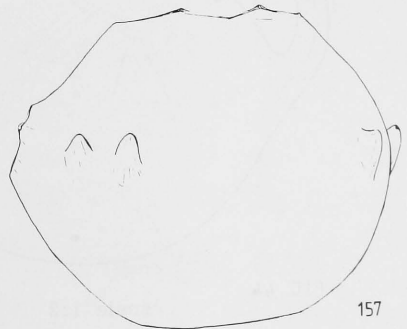
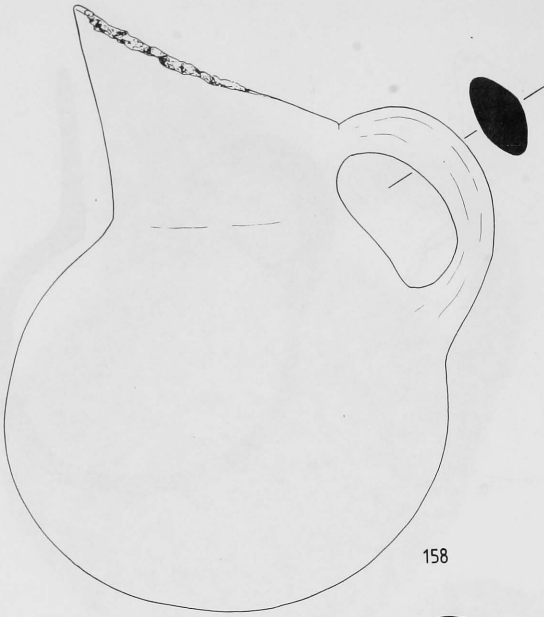
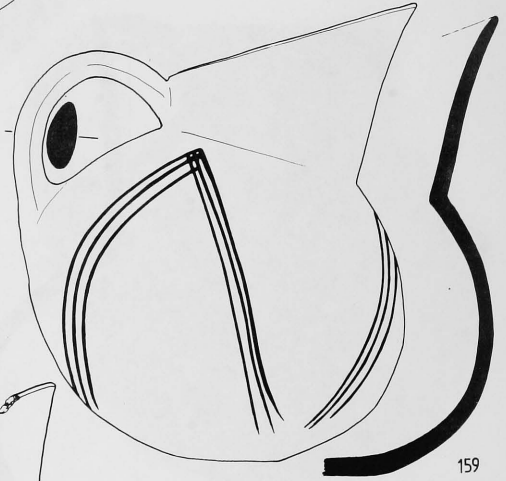


FIG. 43

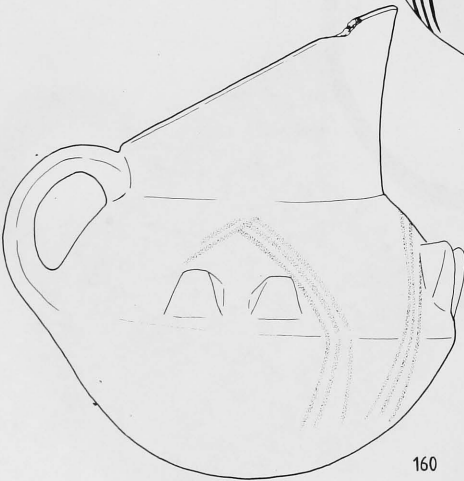




158



159



160

FIG. 44

scale 1:2

SHAPE IX

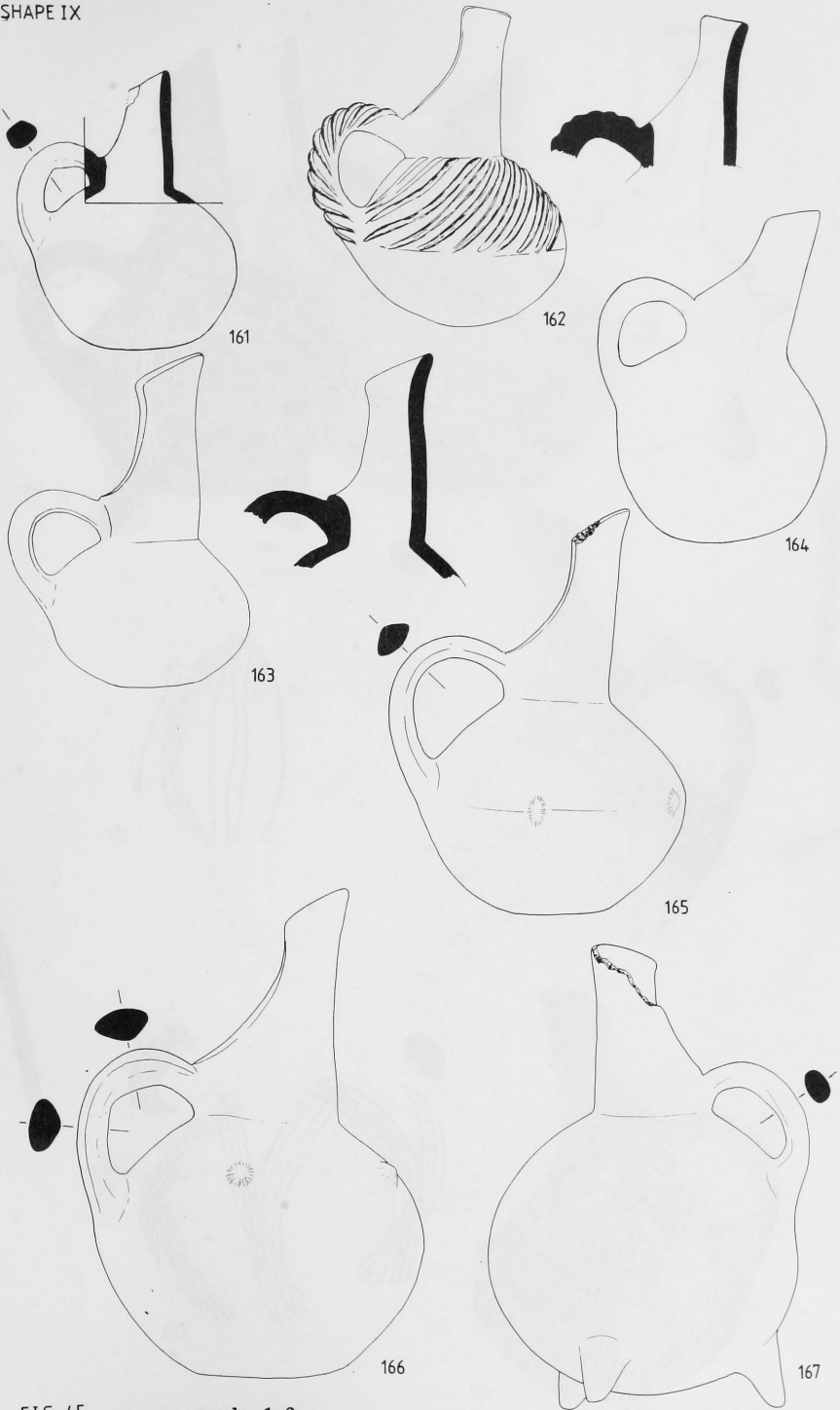
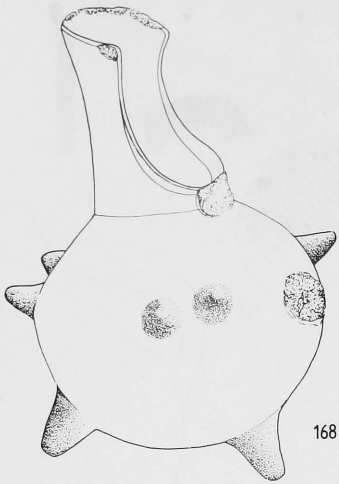
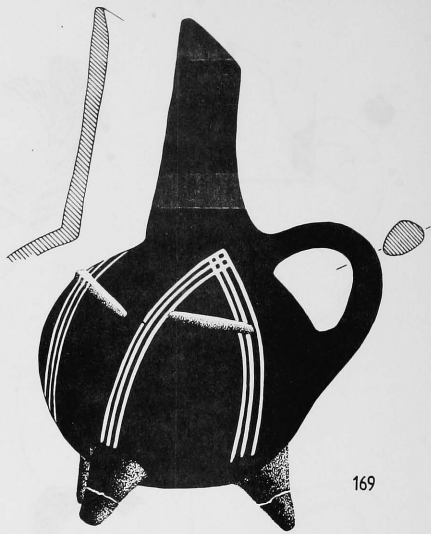


FIG. 45

scale 1:2



168



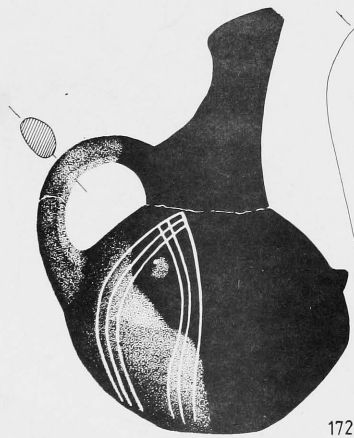
169



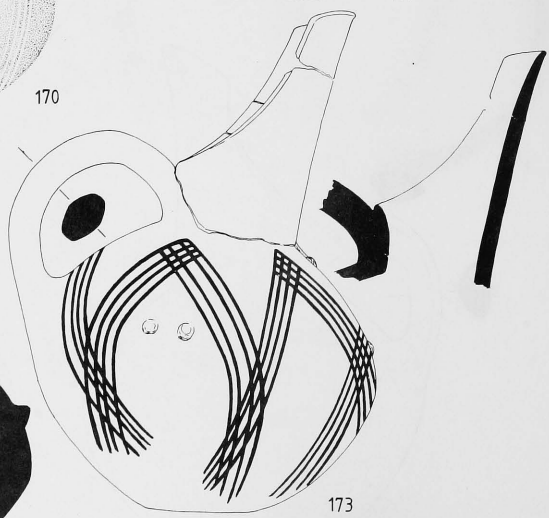
170



171



172



173

FIG. 46

scale 1:2



RED WARE

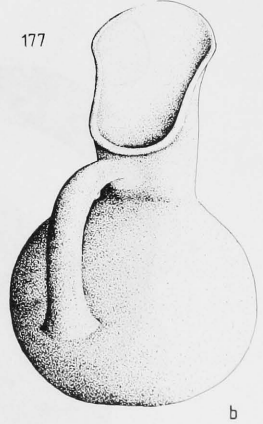
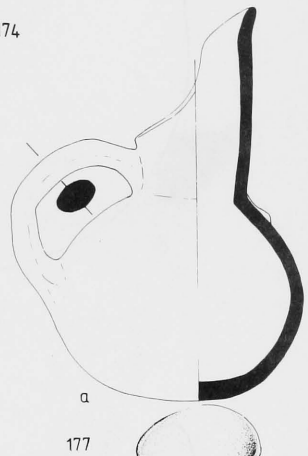
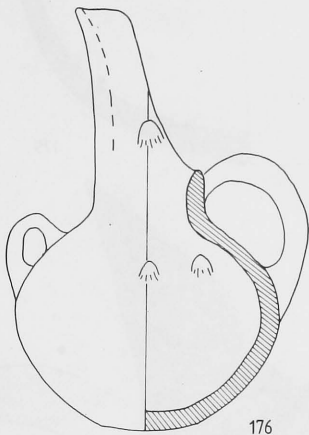
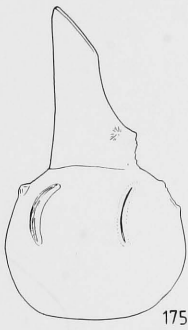
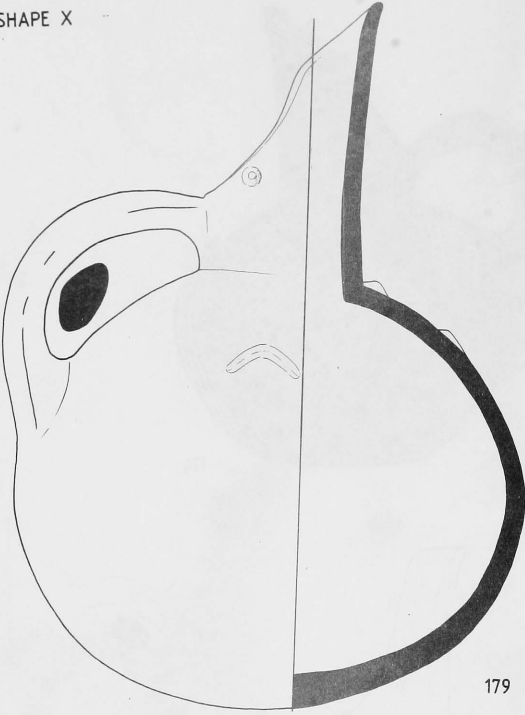


FIG. 47

scale 1:2

SHAPE X



179

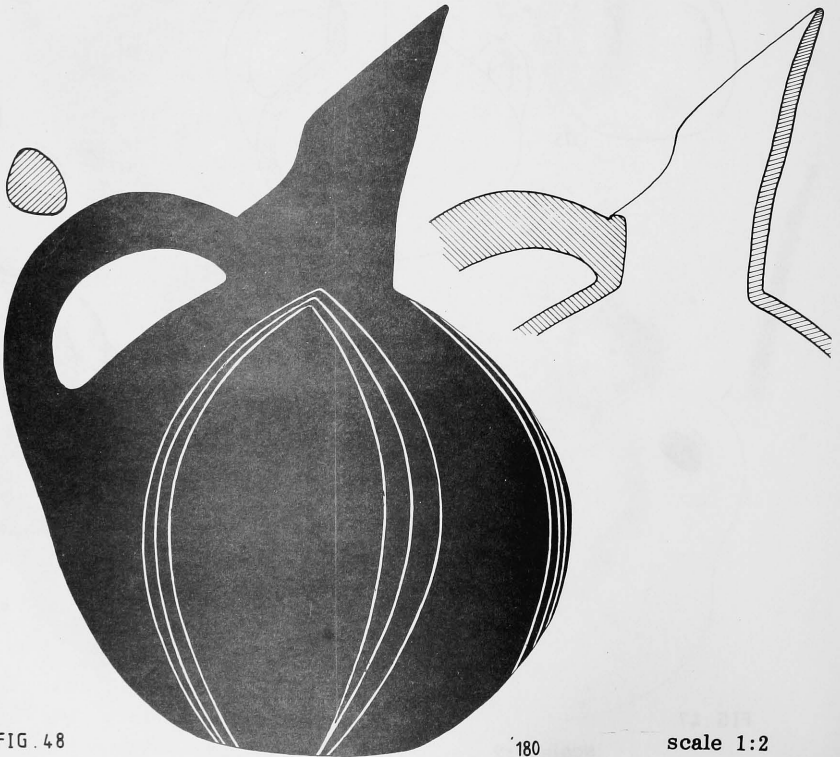
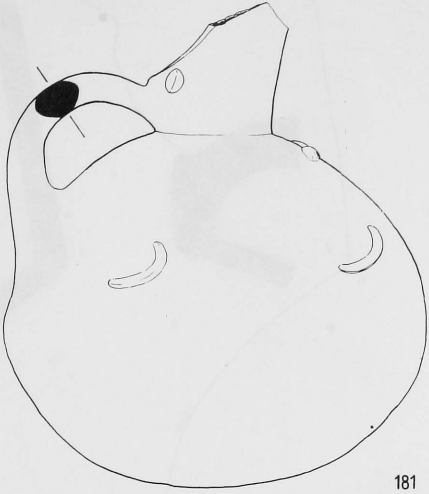


FIG. 48

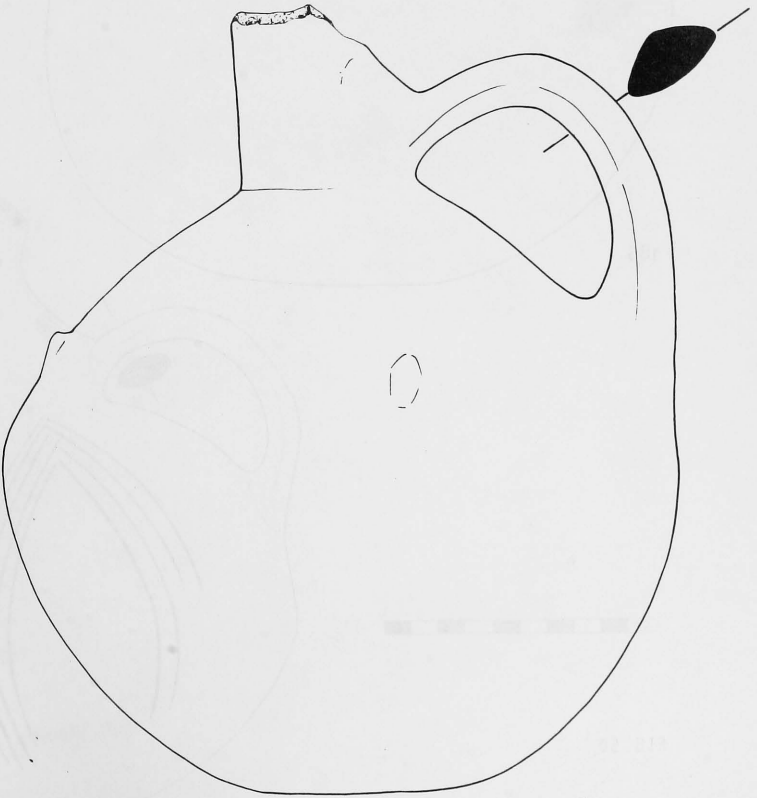
180

scale 1:2





181



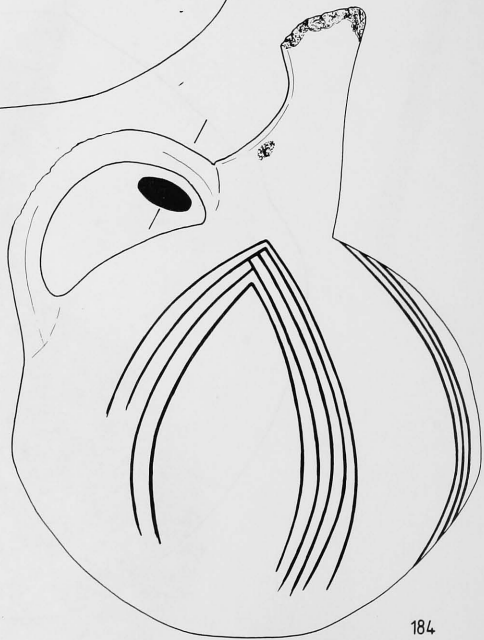
182



FIG. 49



183



184

FIG 50.

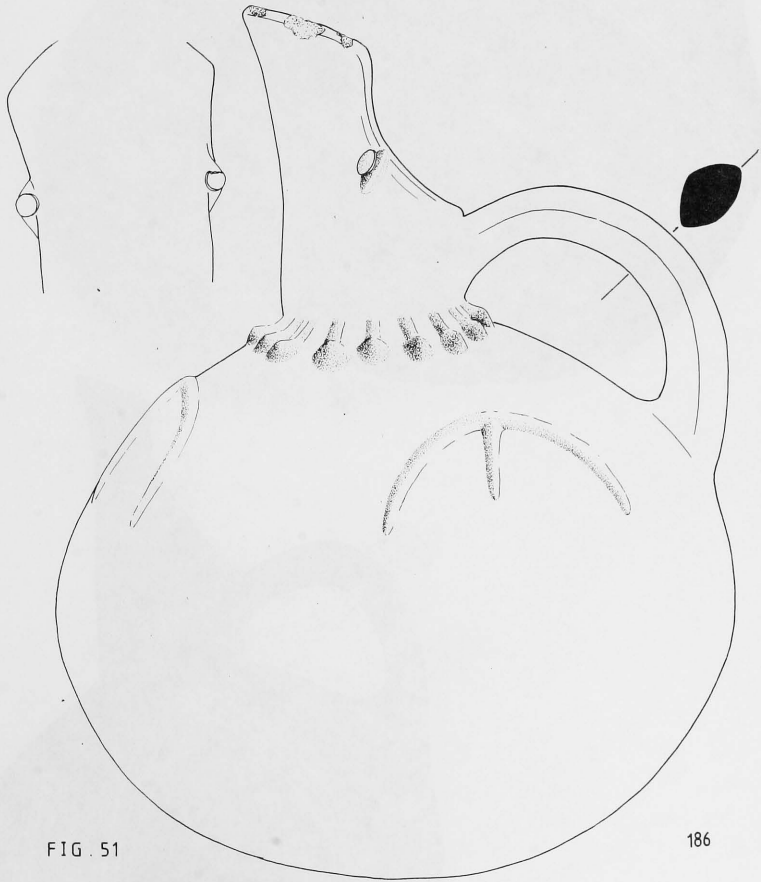
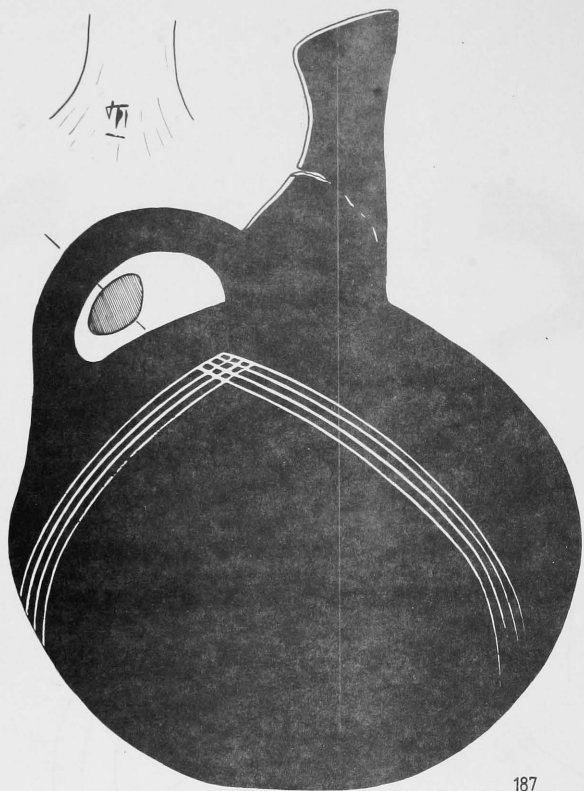


FIG. 51

186

scale 1:2



187

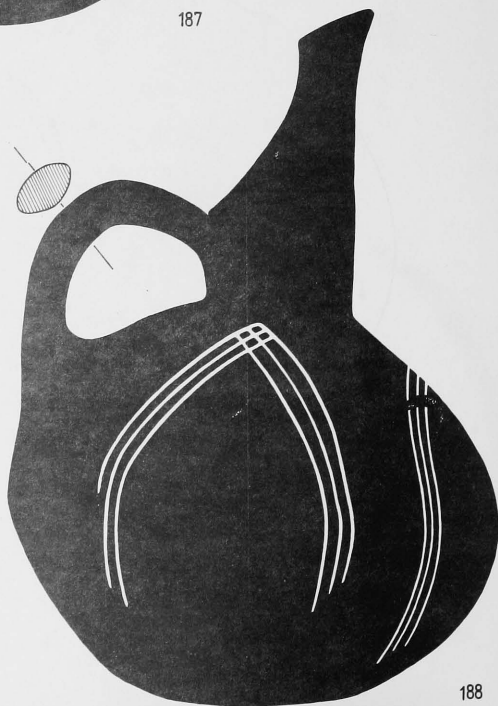


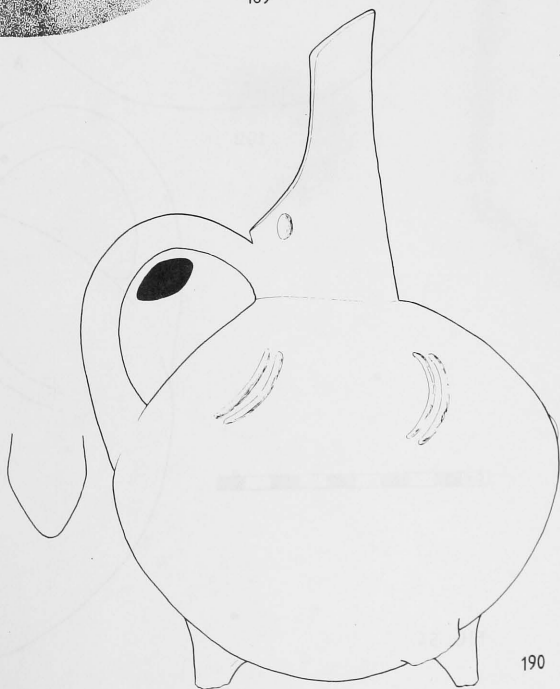
FIG. 52

scale 1:2

188

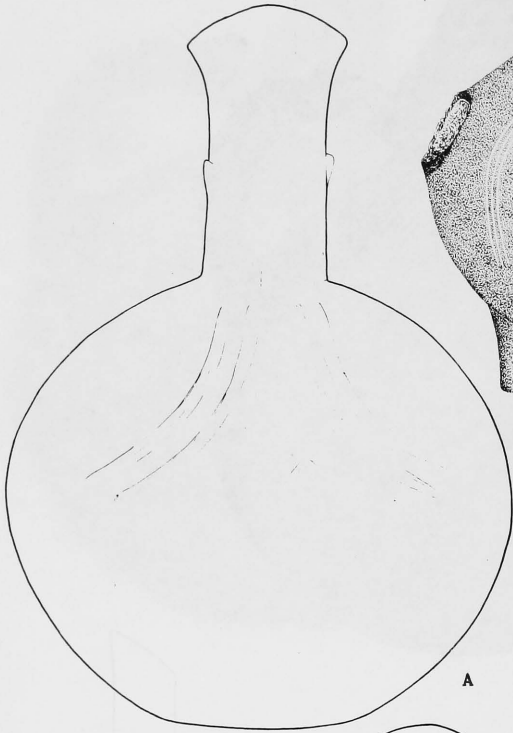


189



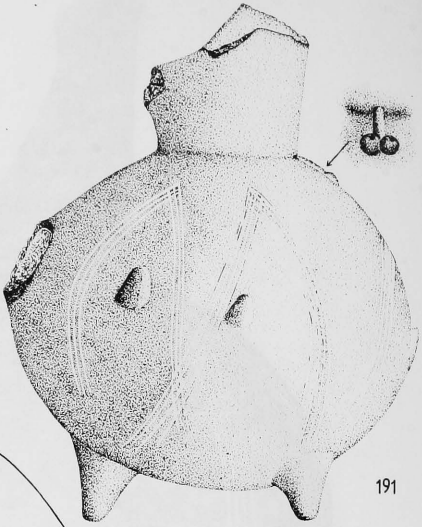
190

FIG. 53 scale 1:2

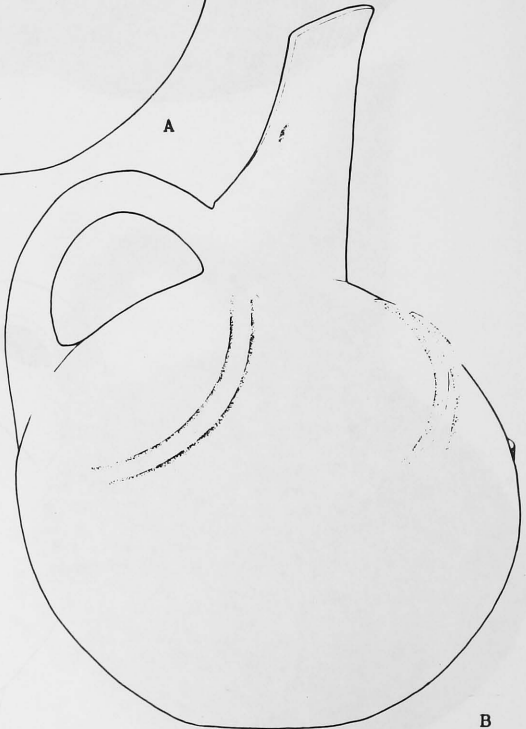


192

A



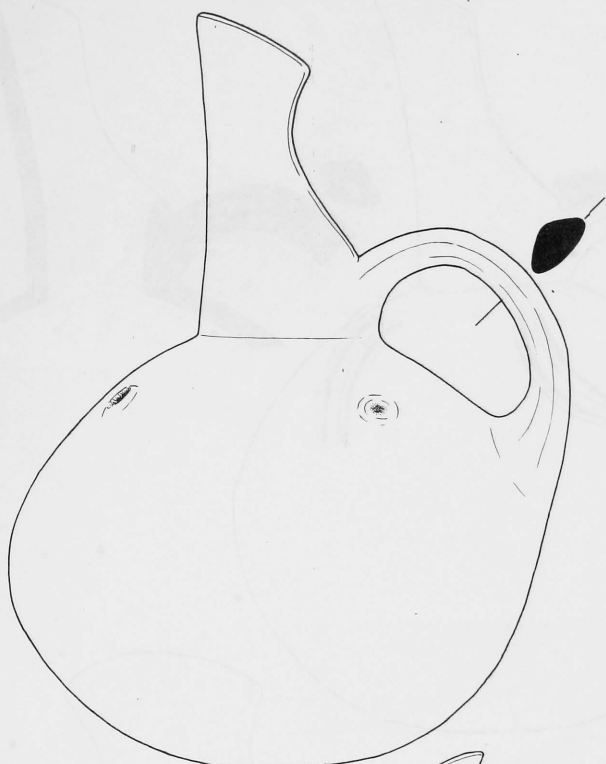
191



B



FIG. 54



193



194



195

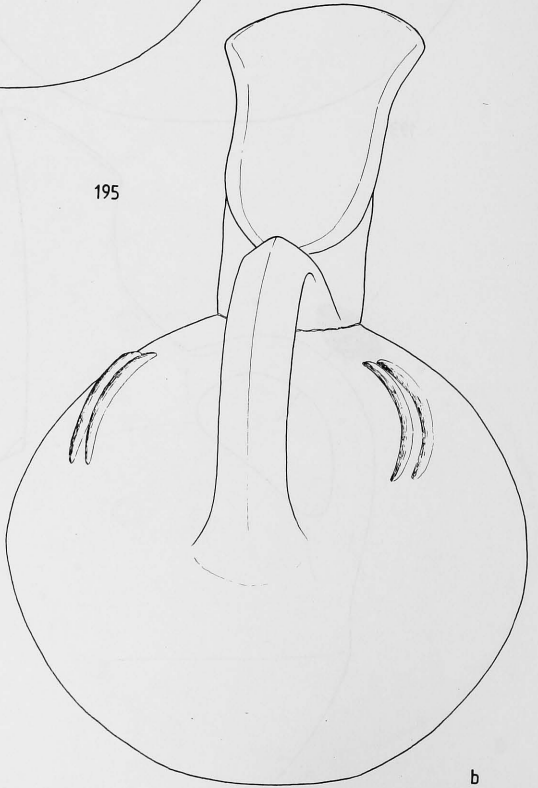
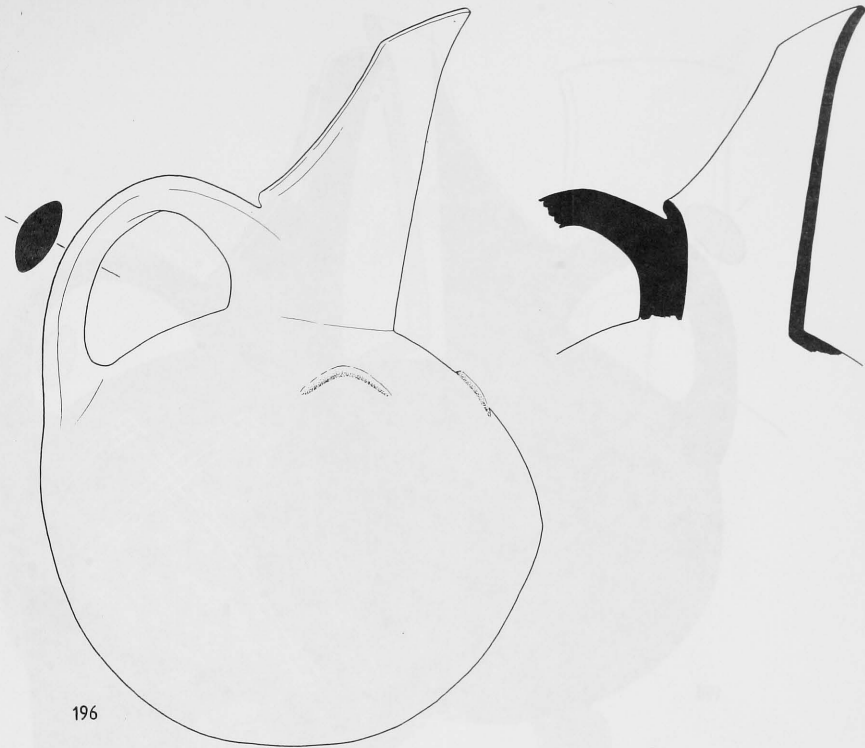


FIG. 56

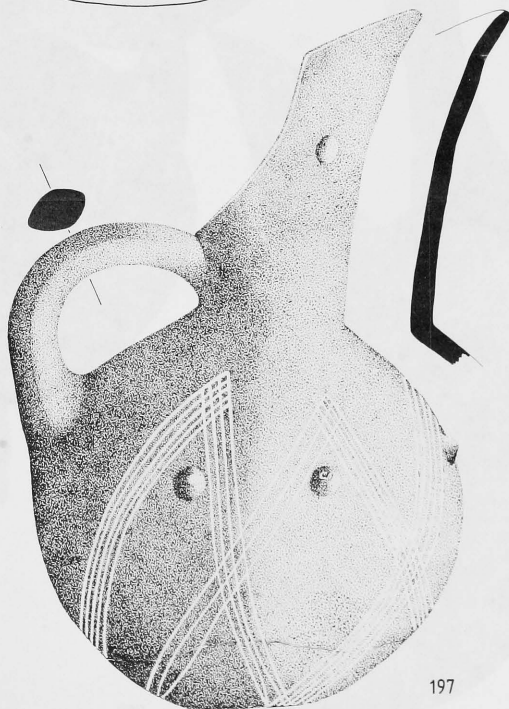
scale 1:2

b





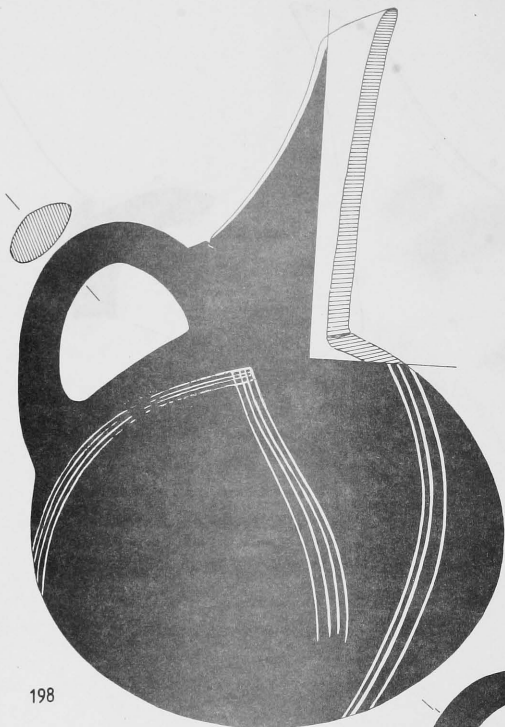
196

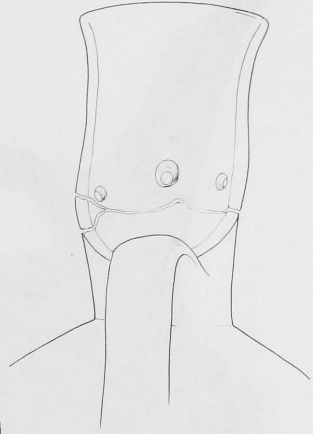
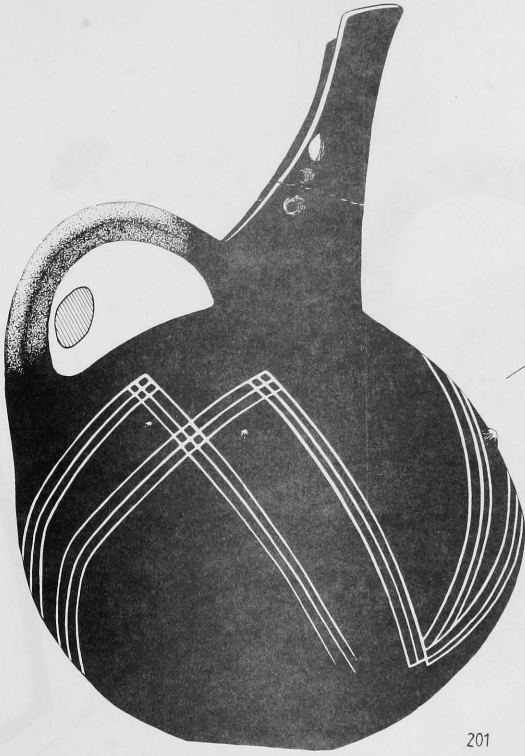


197

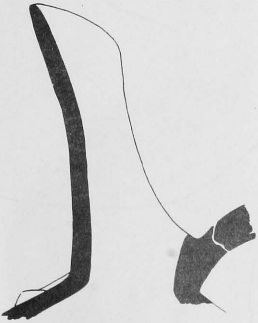
FIG 57

scale 1:2

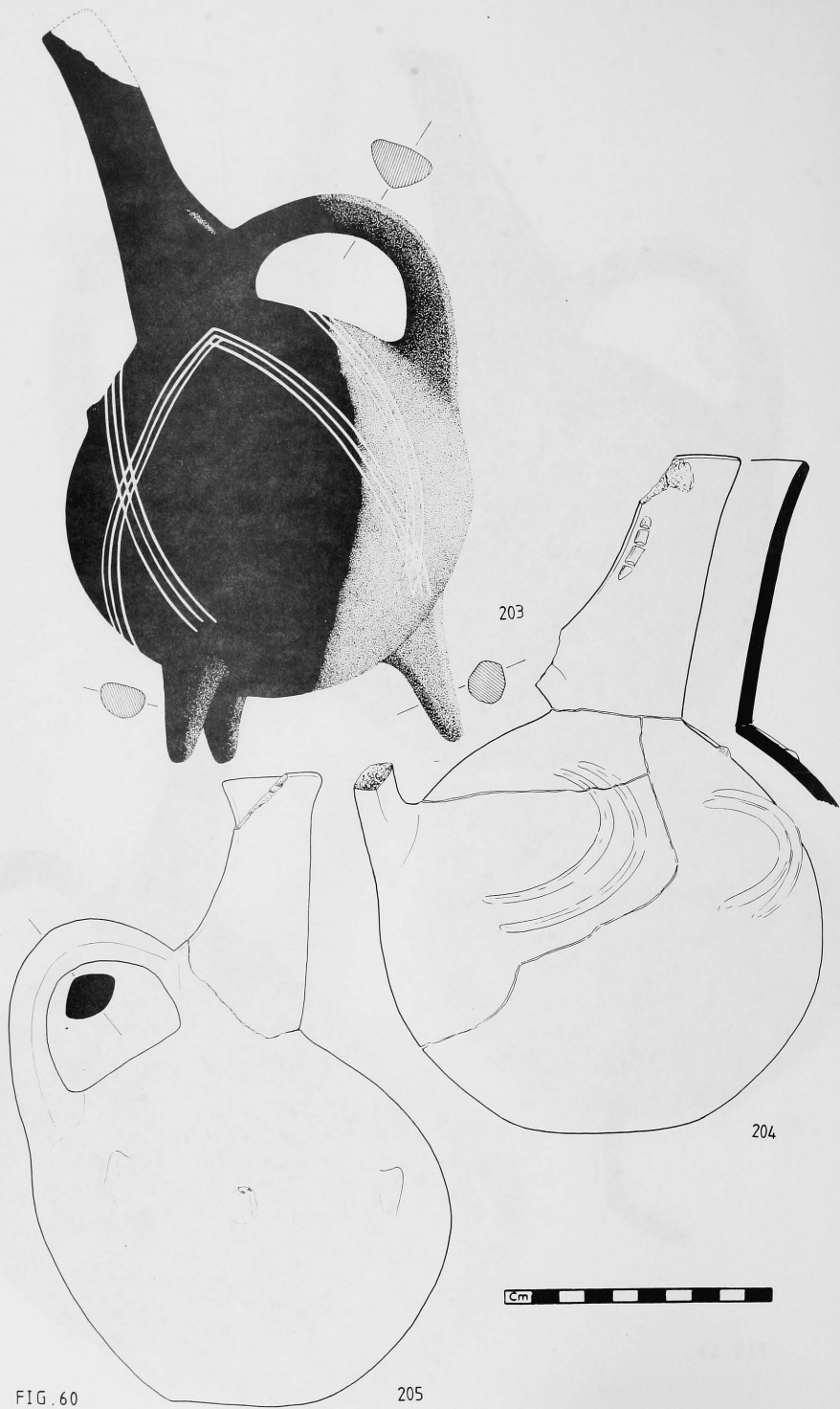




201



202

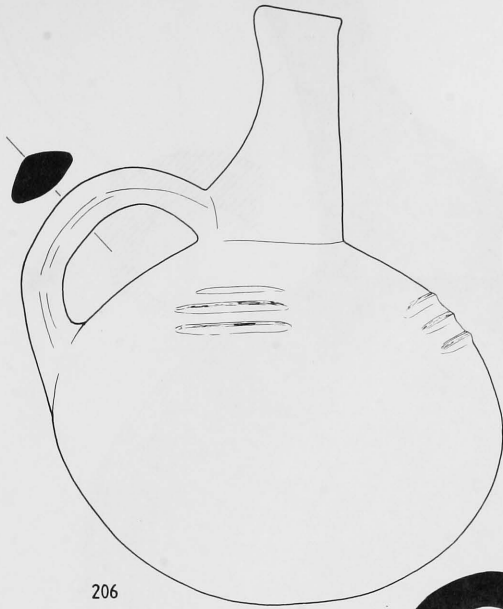


203

204

205

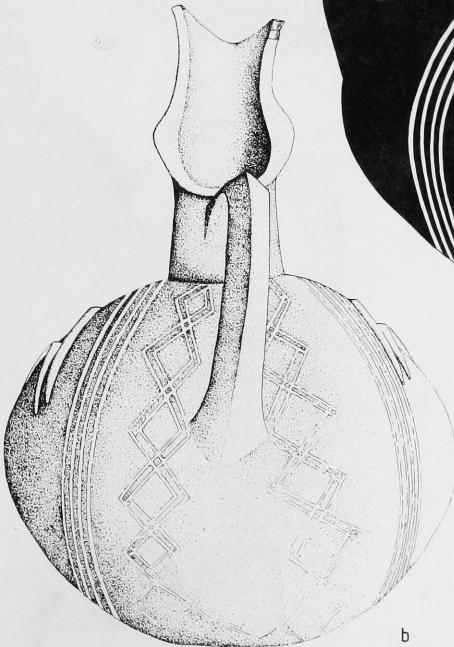
FIG. 60



206

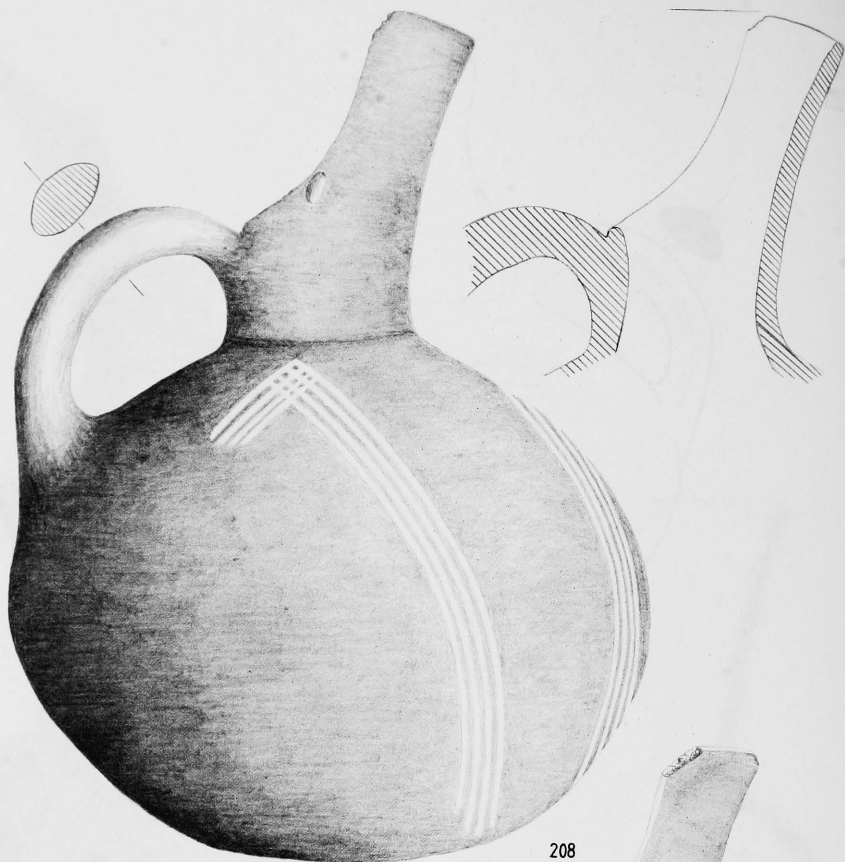


a

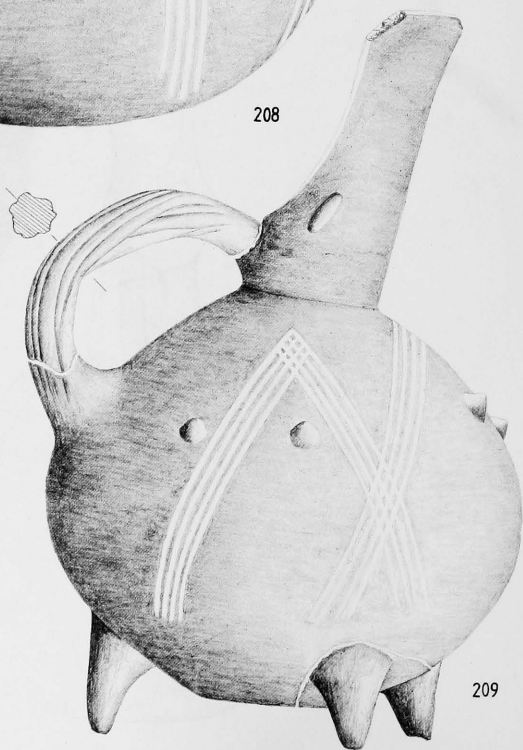


b

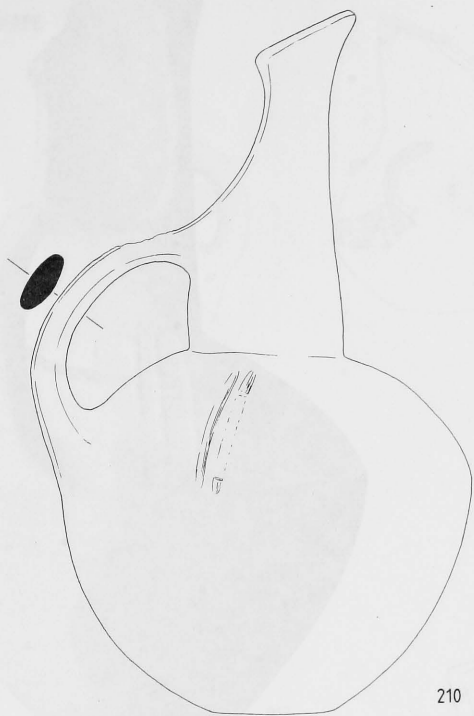
207



208



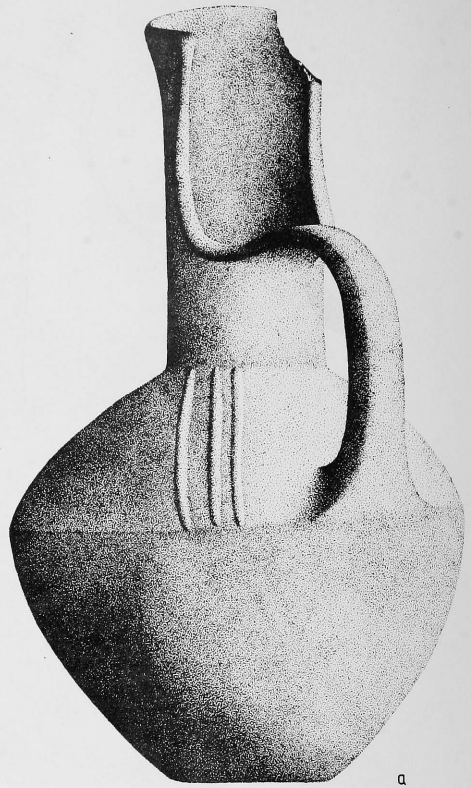
209



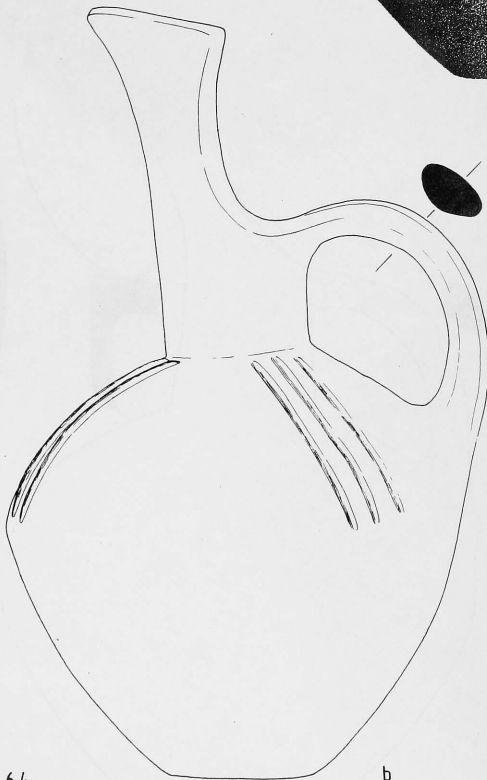
210



211



a



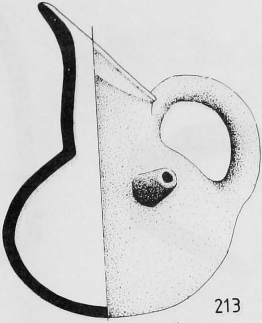
212

FIG. 64

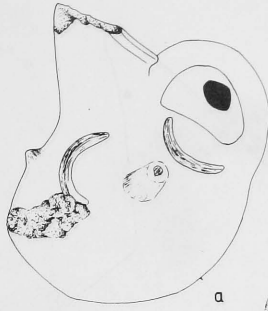
b



SHAPE XI

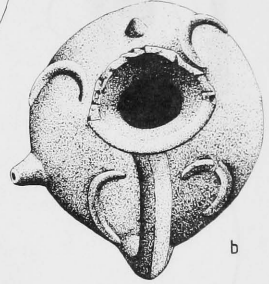


213



a

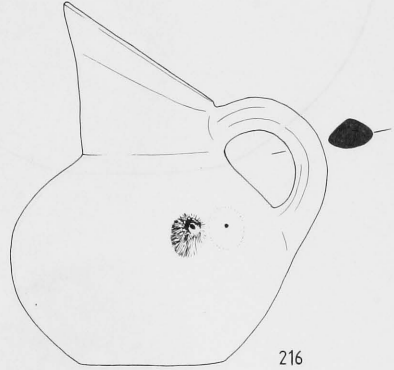
214



b

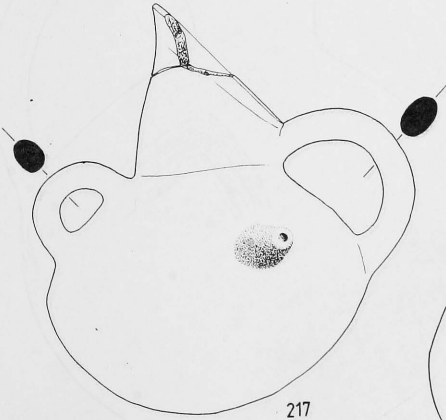


215



216

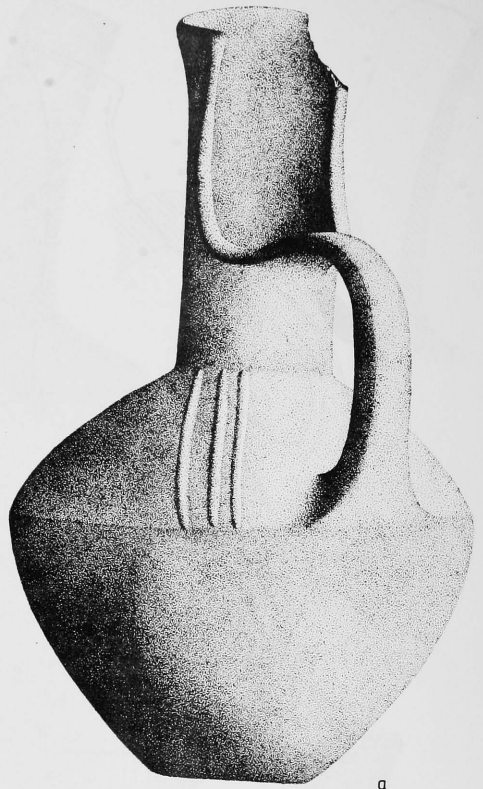
RED WARE.



217



218



a



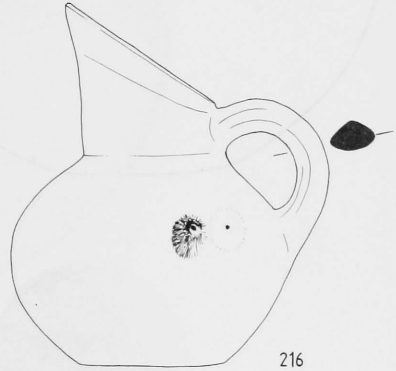
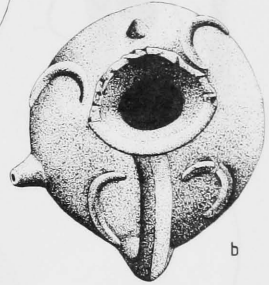
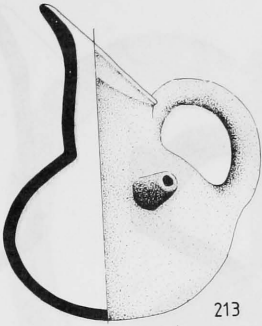
212

FIG. 64

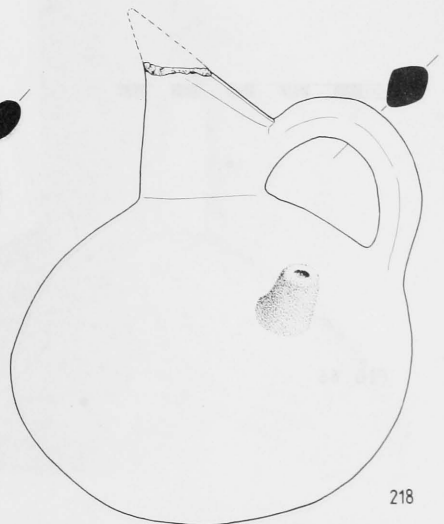
scale 1:2

b

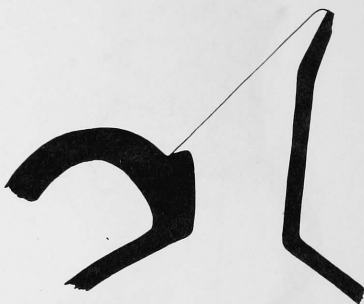
SHAPE XI



RED WARE.



SHAPE XII



219

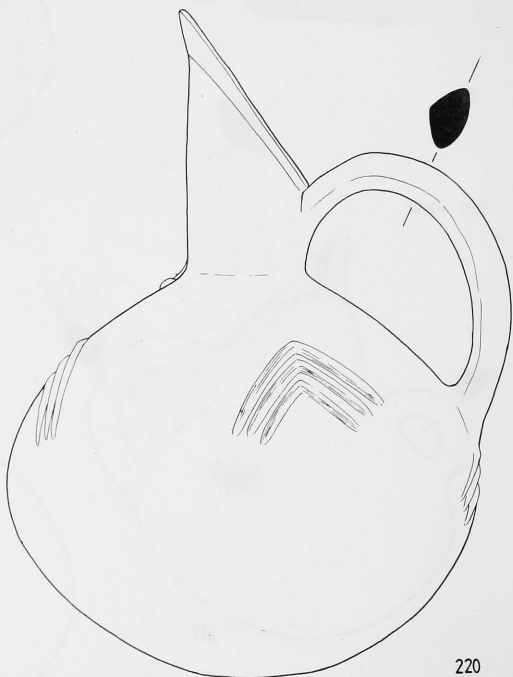


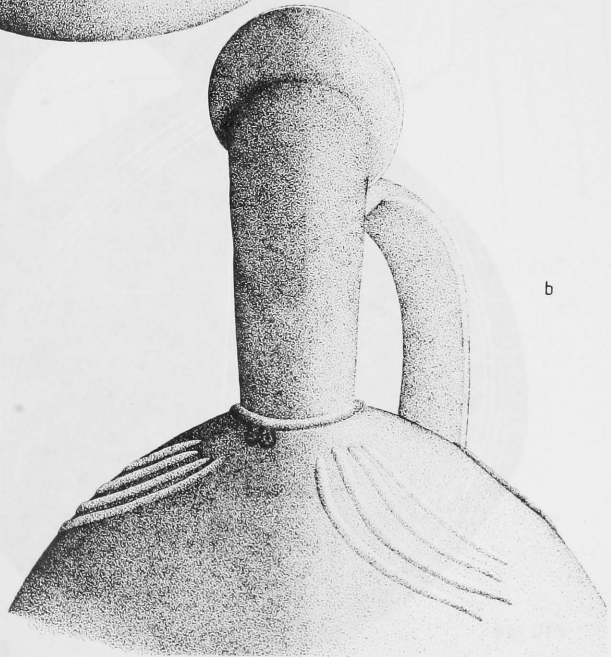
FIG. 66

220



221

a



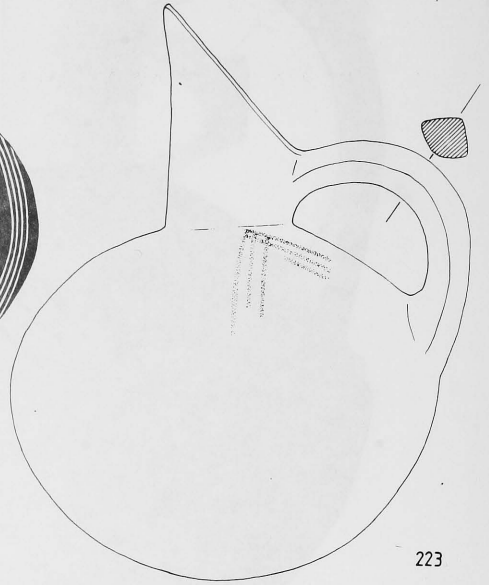
b

FIG. 67

scale 1:2



222



223

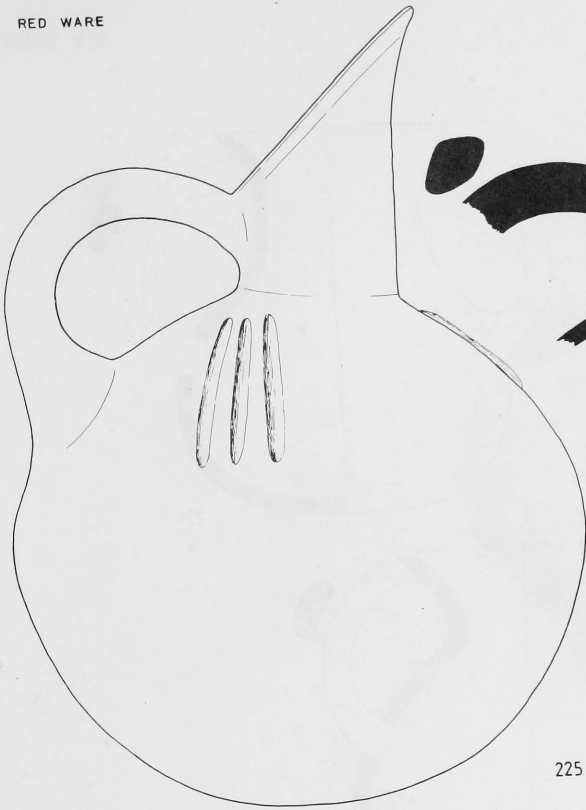


224

FIG. 68

scale 1:2

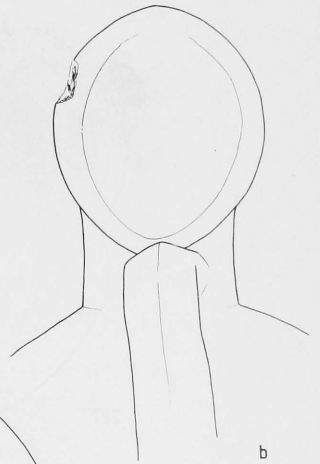
RED WARE



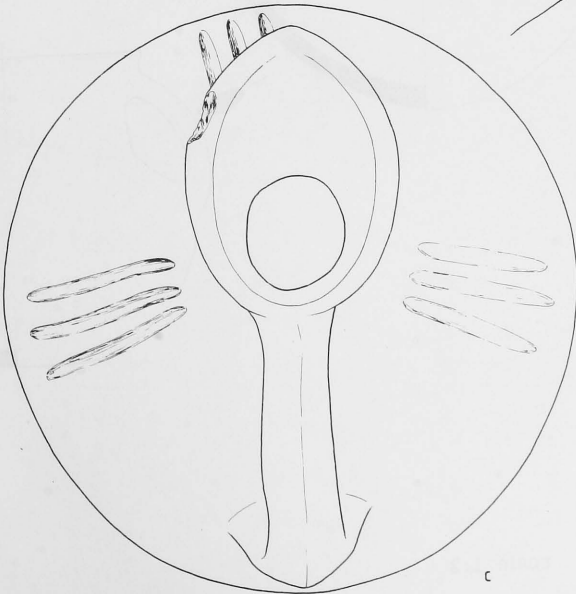
a



225



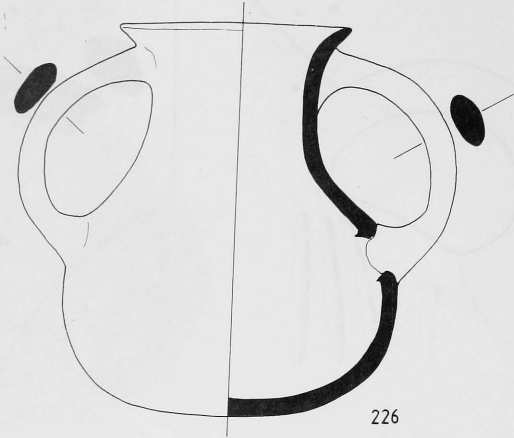
b



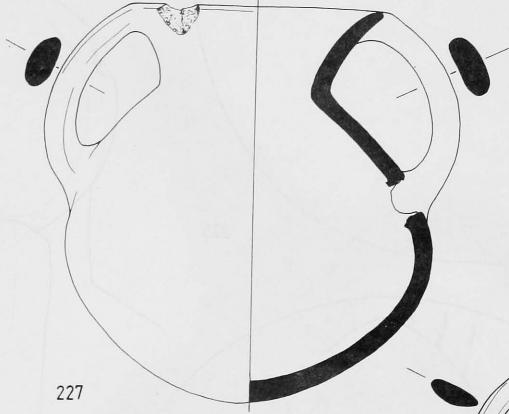
c

SHAPE XIII

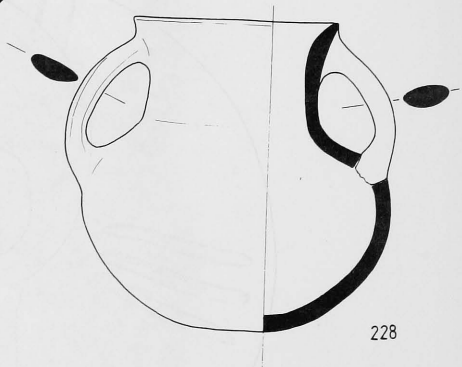
BRITISH MUSE



226



227



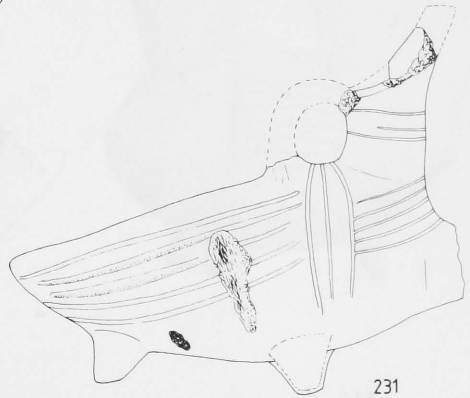
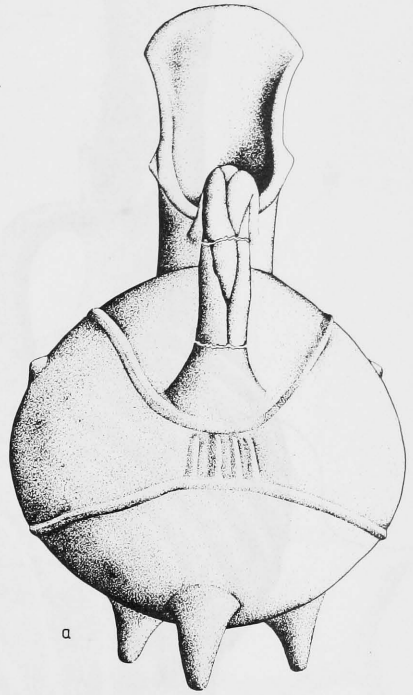
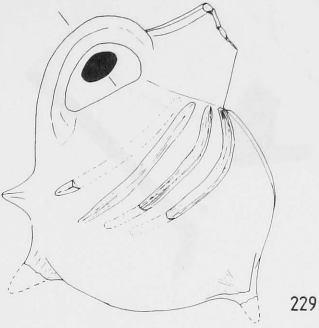
228

FIG. 70

scale 1:2



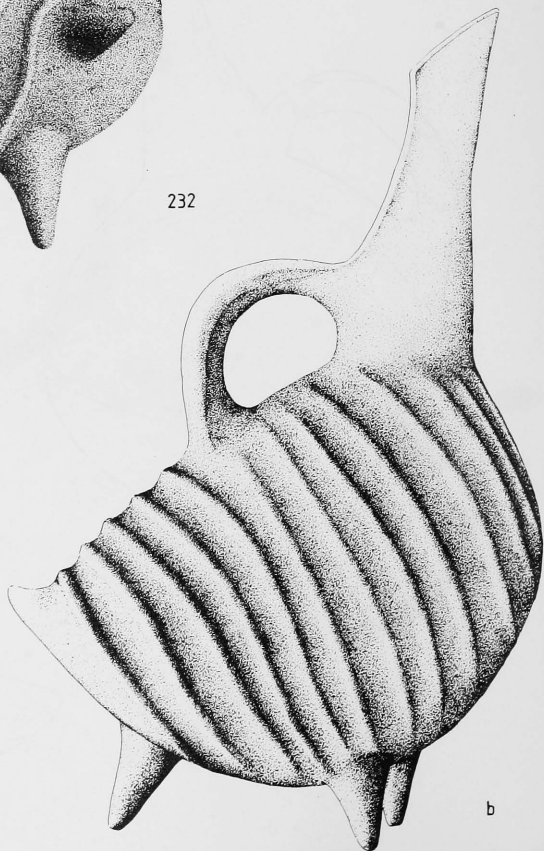
SHAPE XIV





a

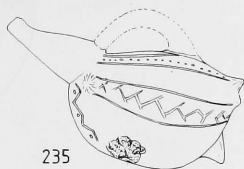
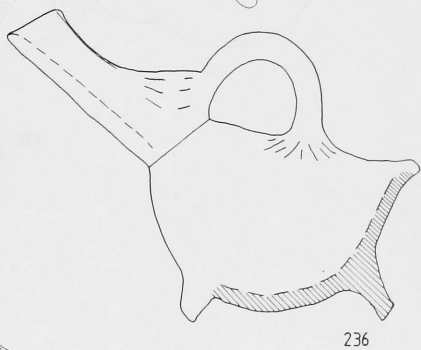
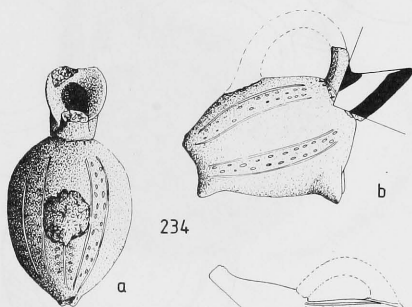
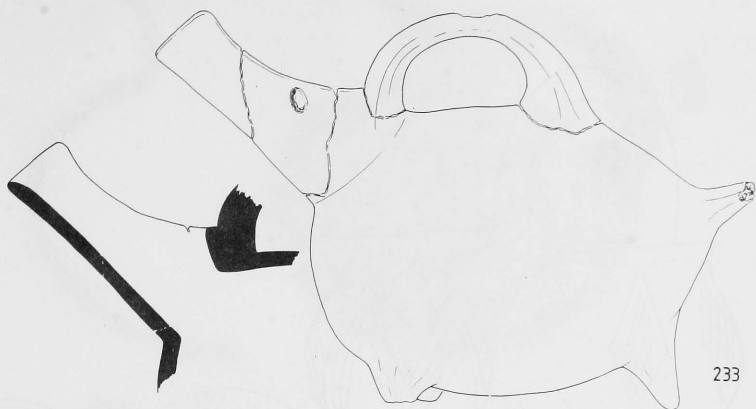
232



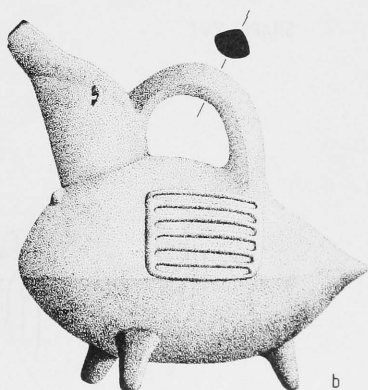
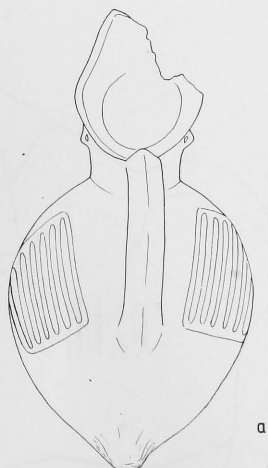
b

FIG. 72

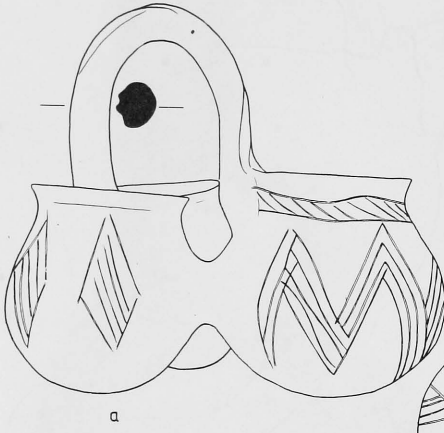
scale 1:2



RED WARE

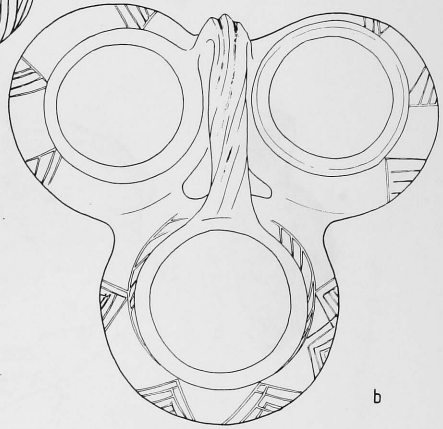


SHAPE XV



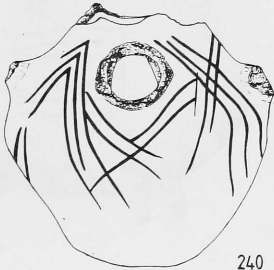
a

238

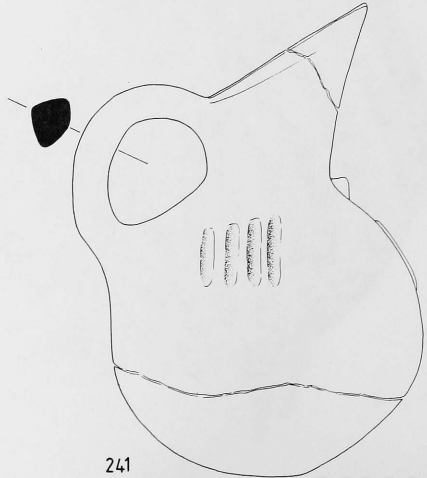


b

SHAPE XVI



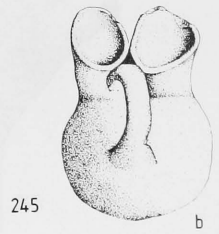
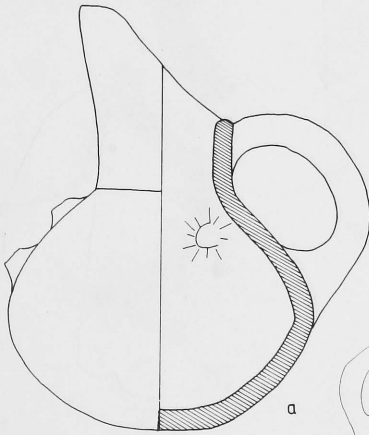
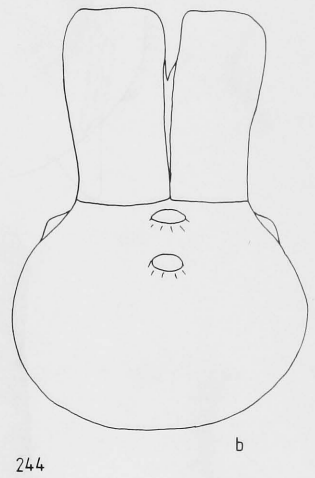
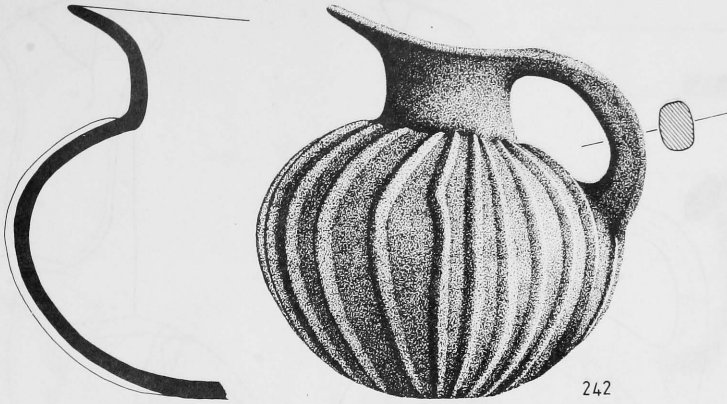
240

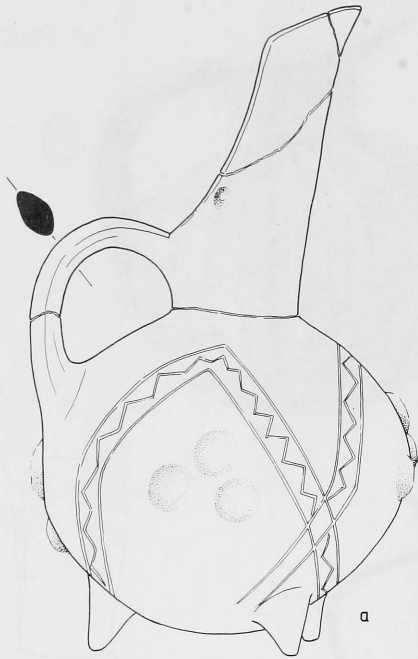


241

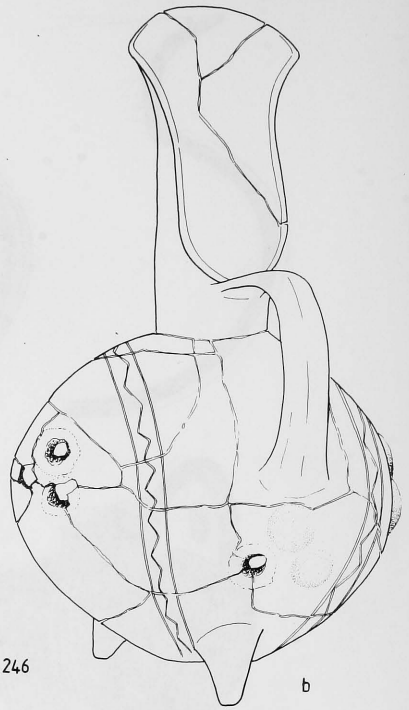
FIG. 74

scale 1:2



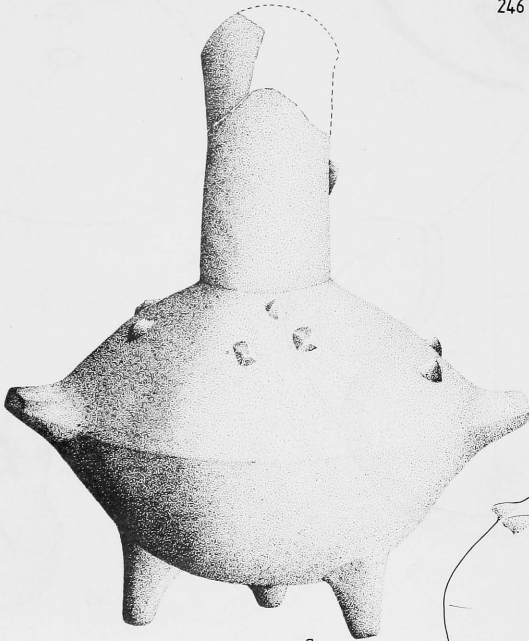


a

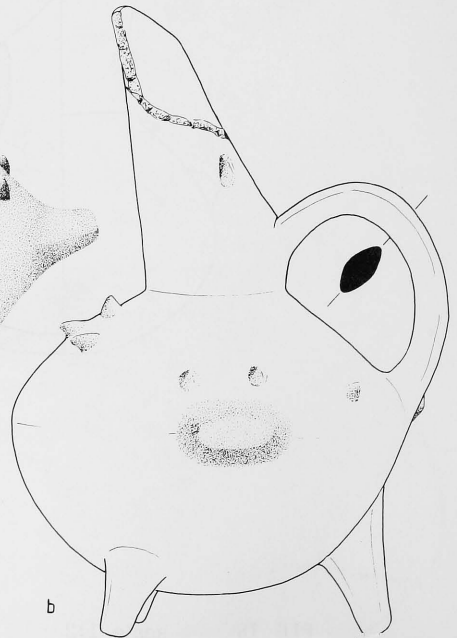


b

246



a



b

247

FIG. 76

scale 1:2

CLASS B POTTERY

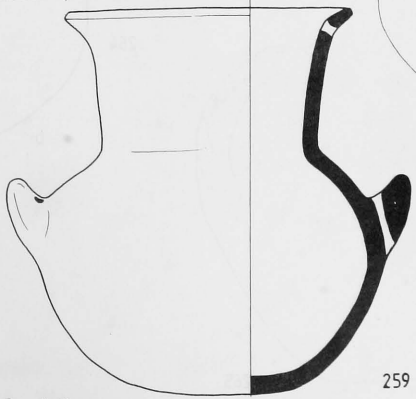
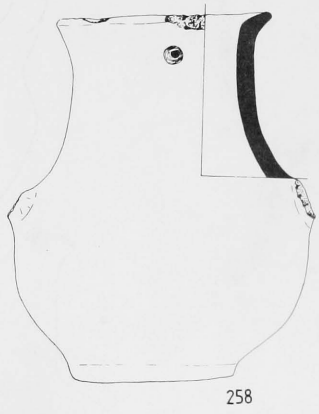
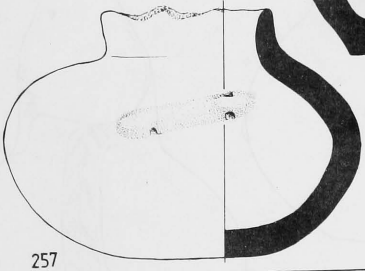
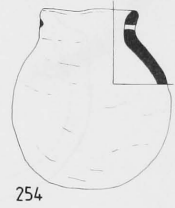
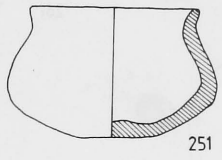
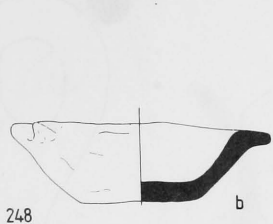
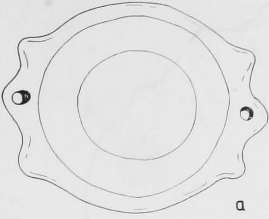
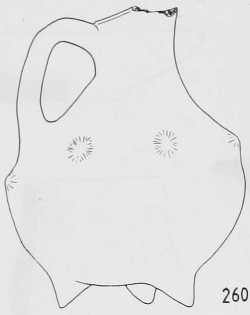
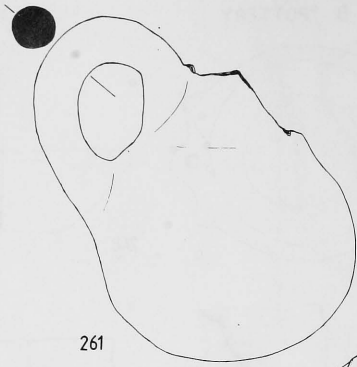


FIG. 77

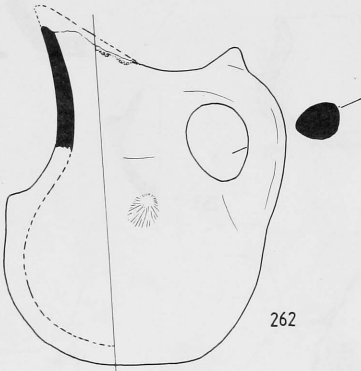
scale 1:2



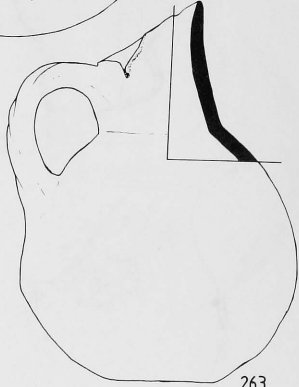
260



261



262

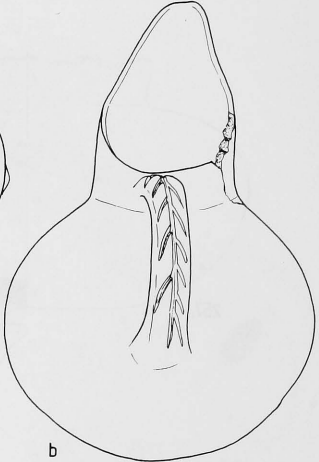


263

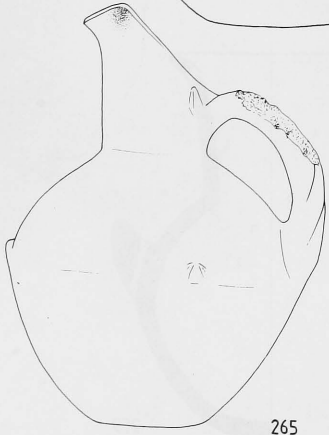


a

264



b

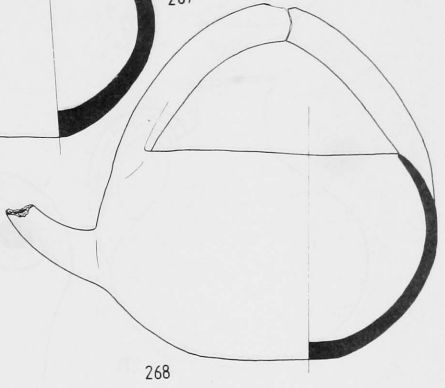
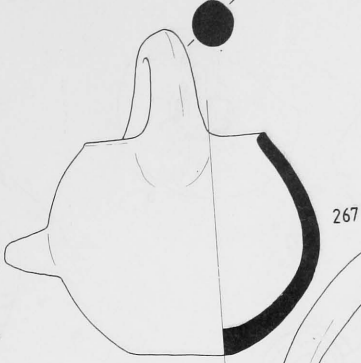
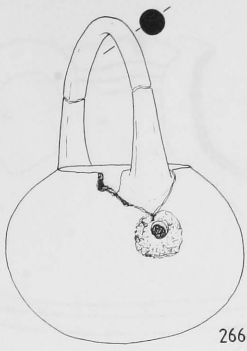


265

FIG. 78

scale 1:2





CLASS C POTTERY

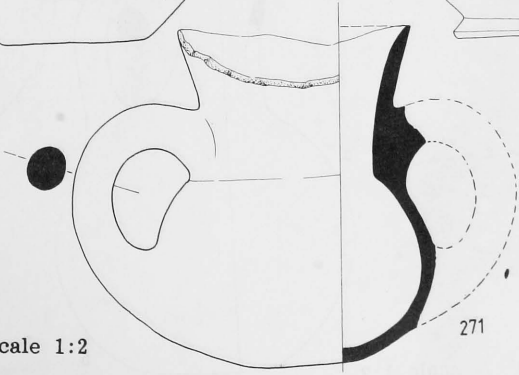
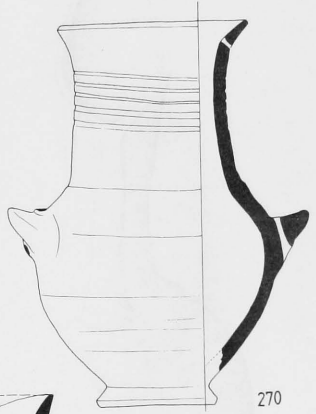


FIG. 79 scale 1:2

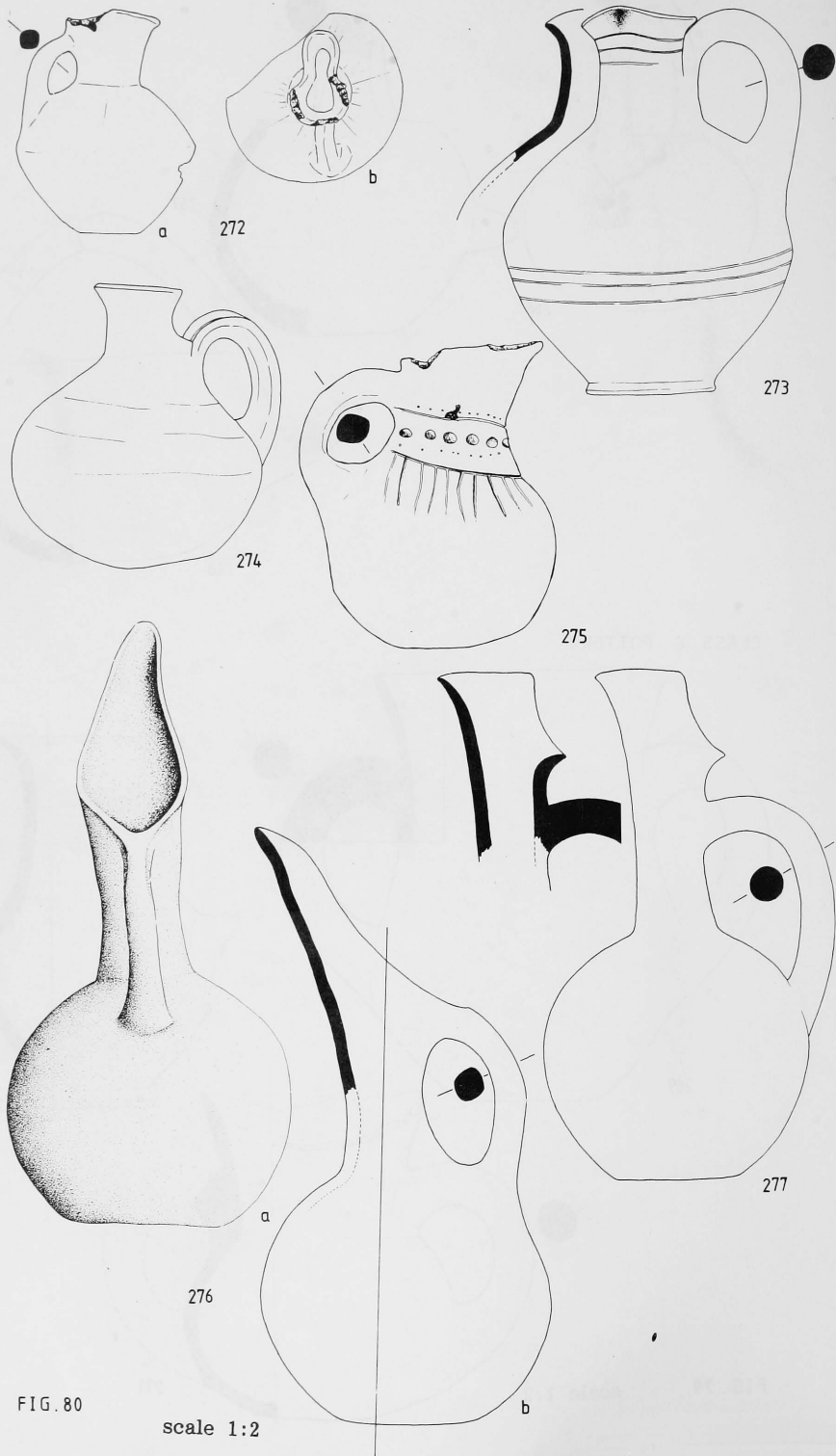
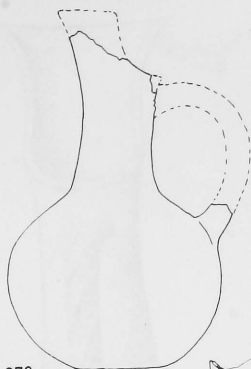
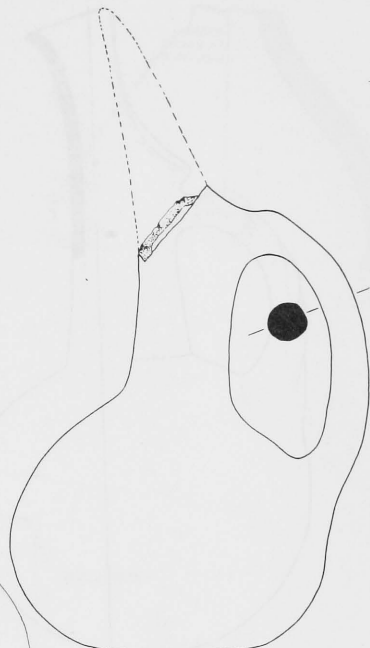


FIG. 80

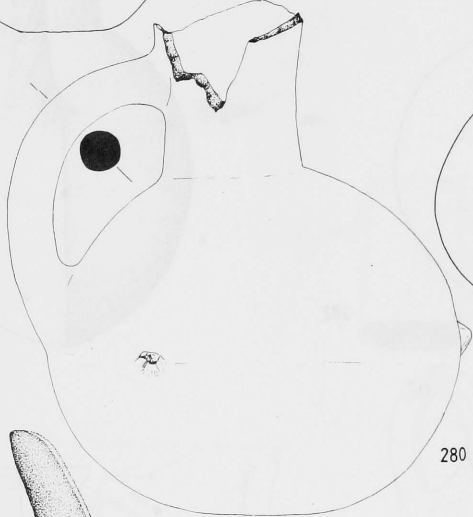
scale 1:2



278



279

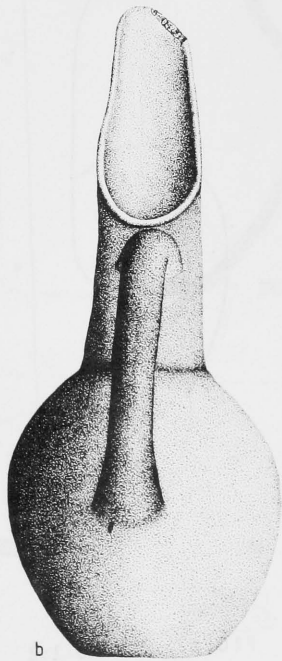


280



a

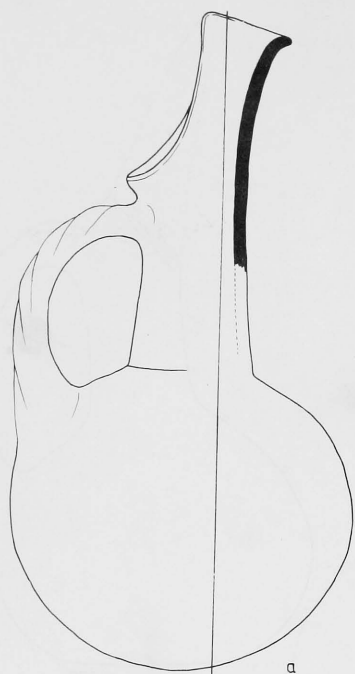
281



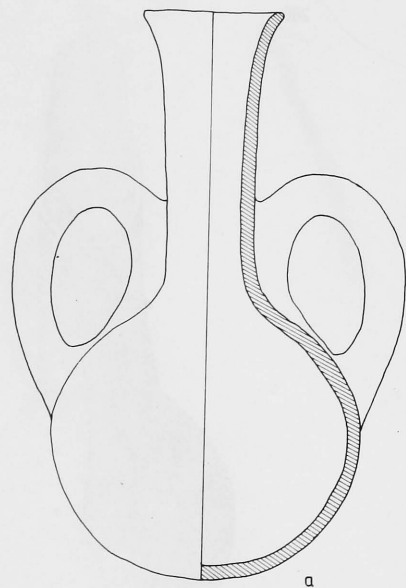
b

FIG. 81

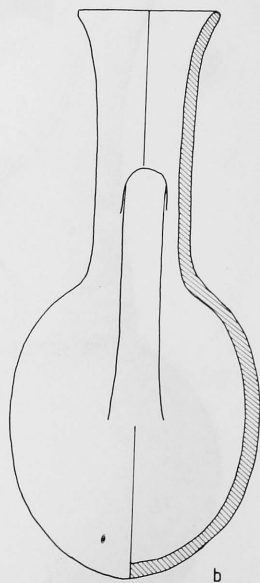
scale 1:2



282



283



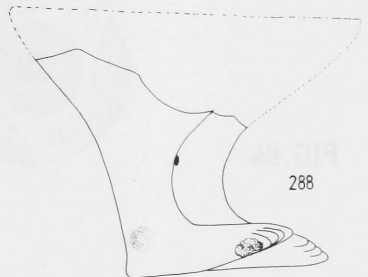
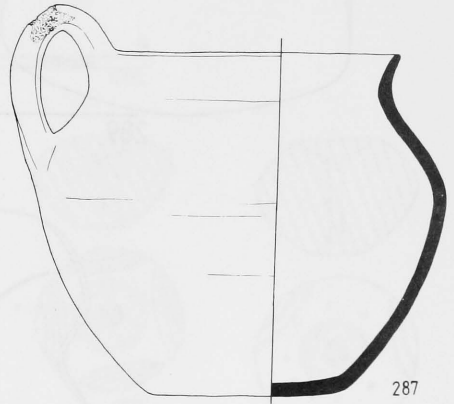
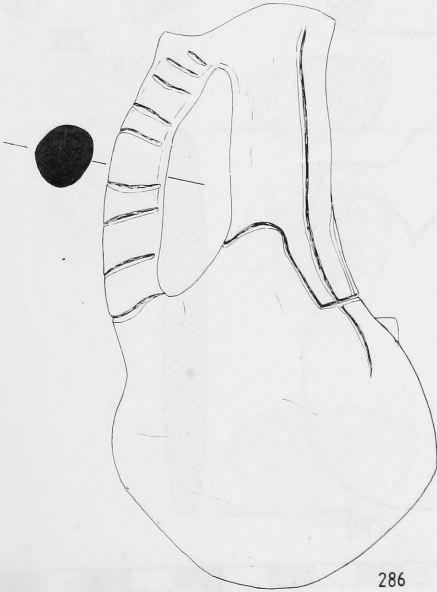
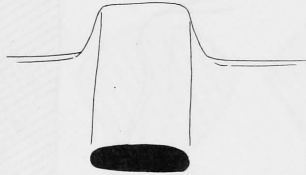
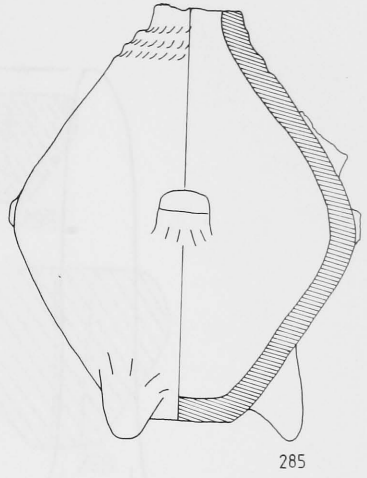
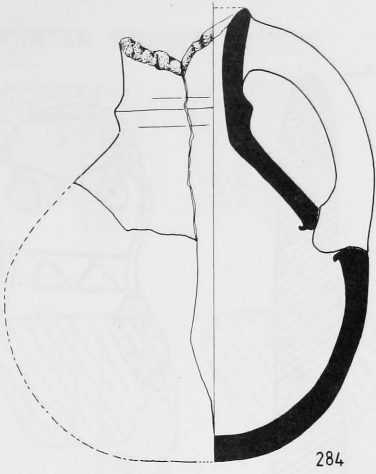


FIG. 83 scale 1:2

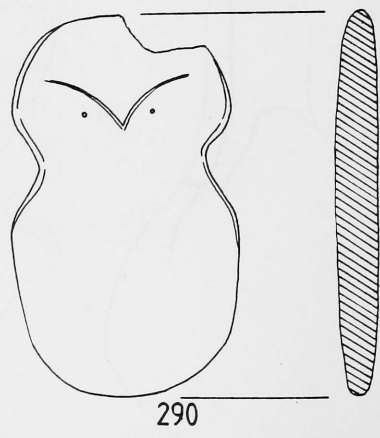
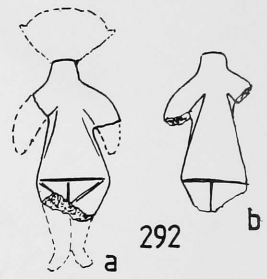
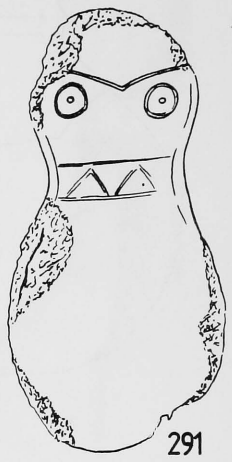
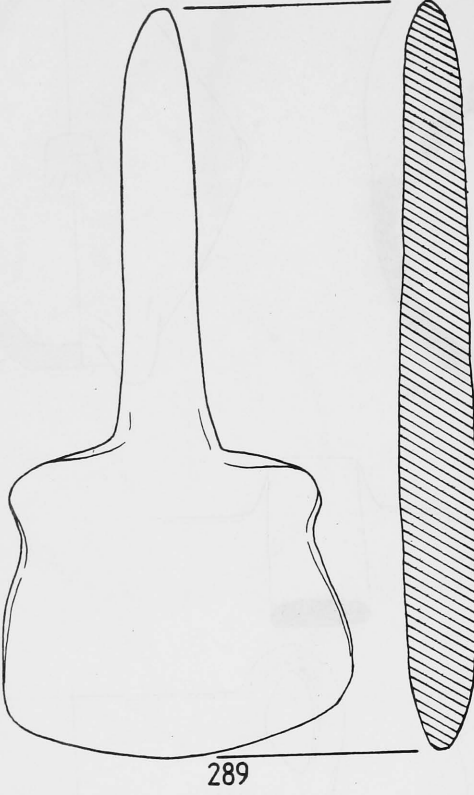


FIG. 84



YORTAN SPINDLE WHORLS

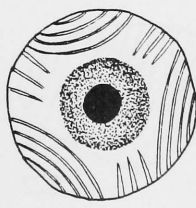
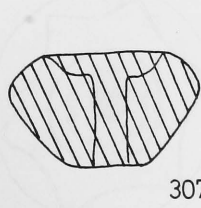
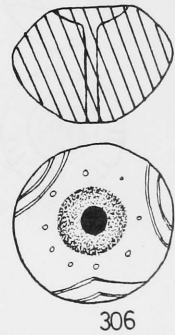
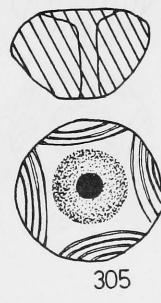
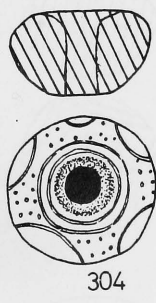
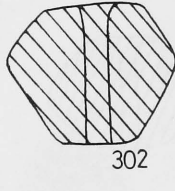
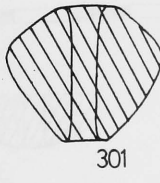
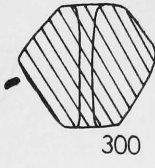
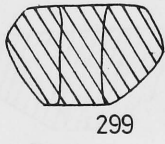
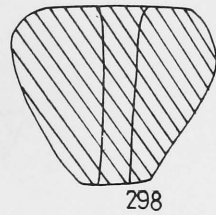
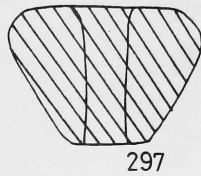
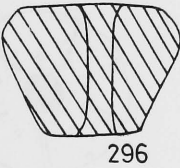
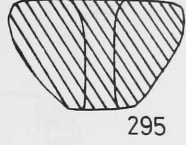
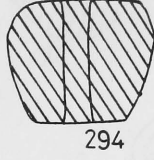
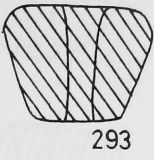


FIG.85

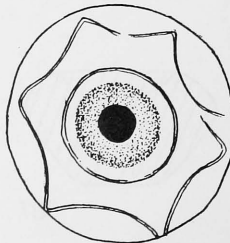
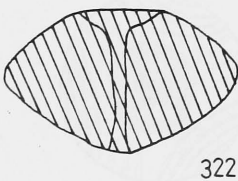
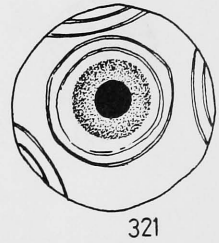
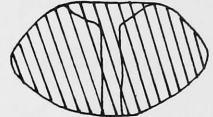
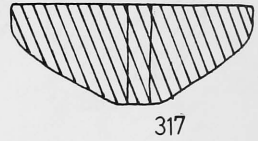
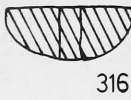
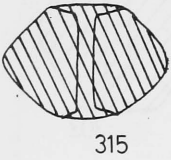
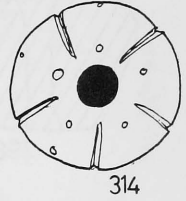
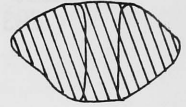
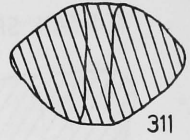
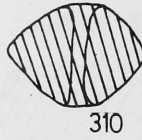
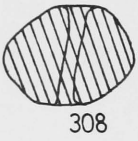
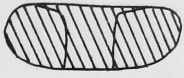
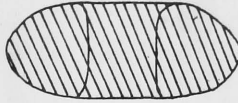


FIG. 86

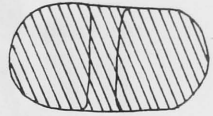




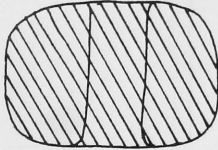
323



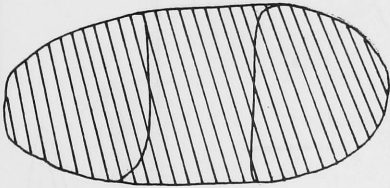
324



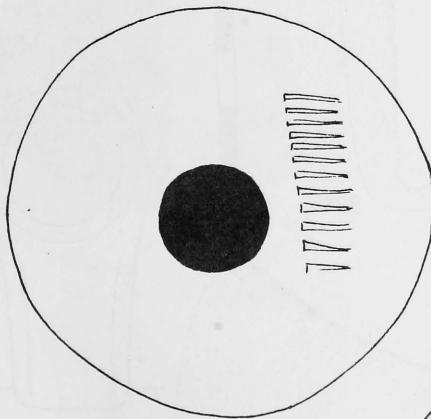
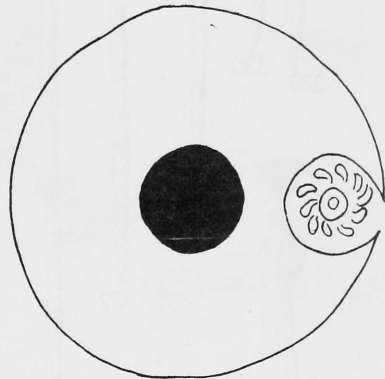
325



326



327



328



FIG.87

YORTAN METAL FINDS

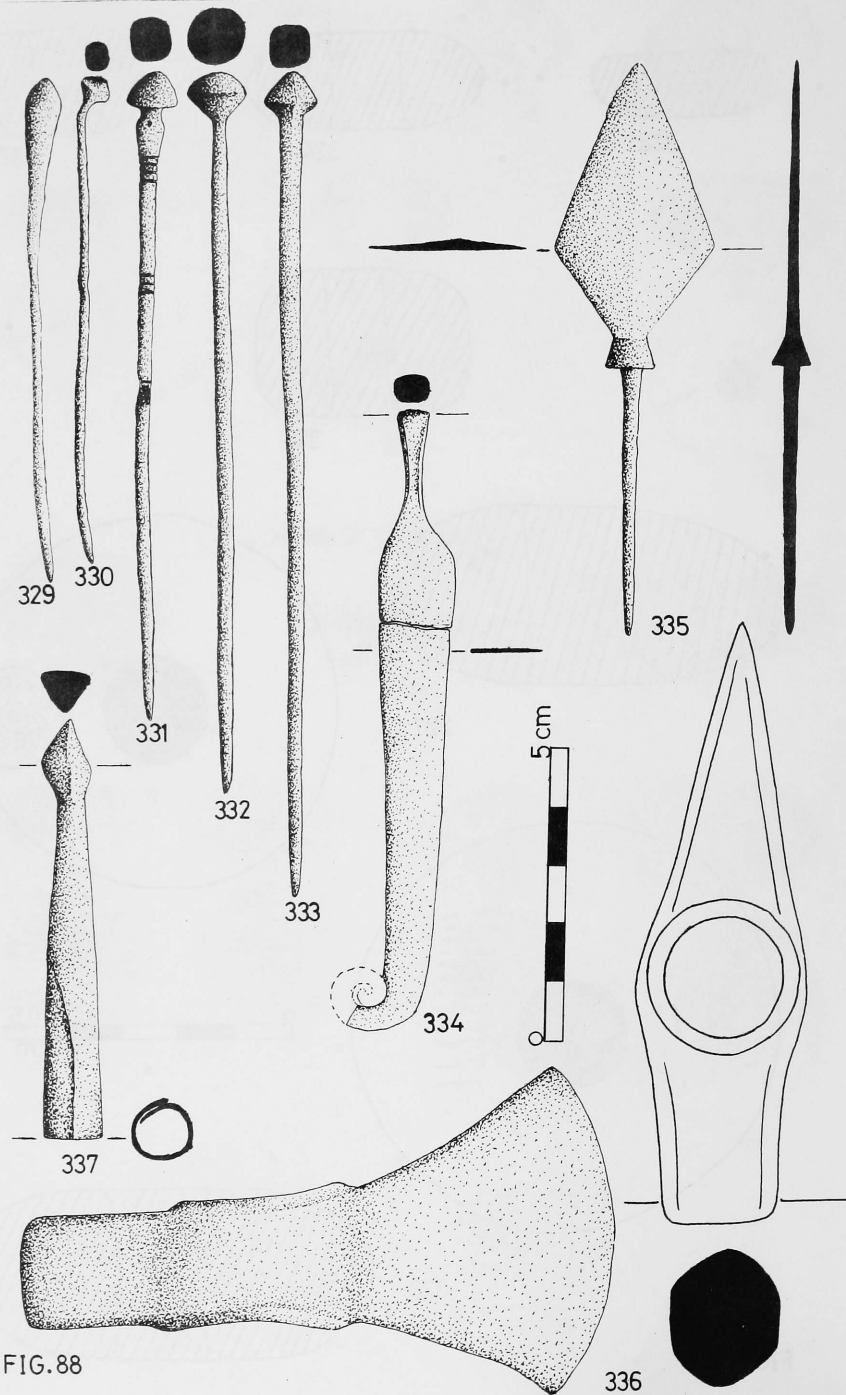


FIG. 88

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POTTERY FROM BABAKÖY

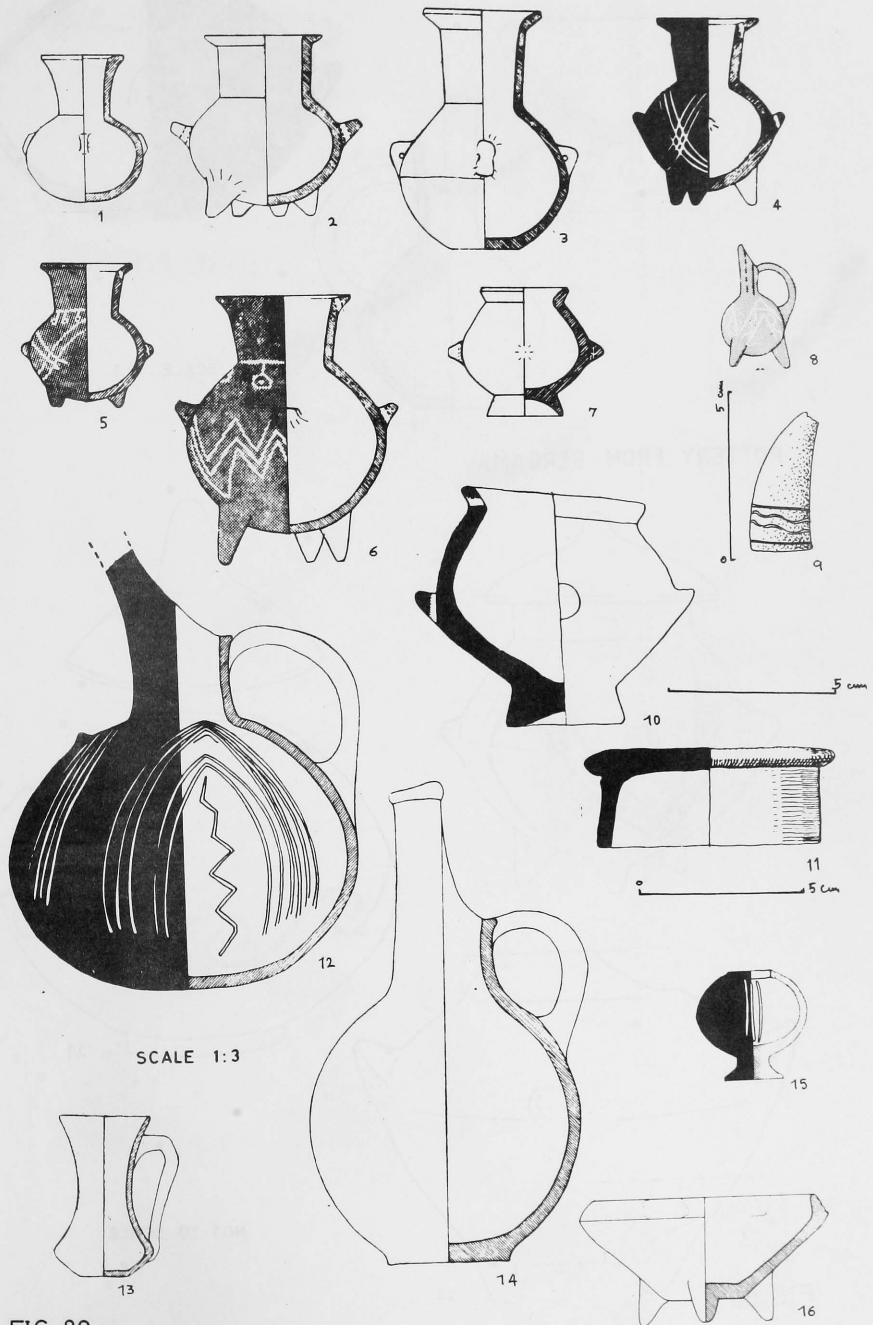
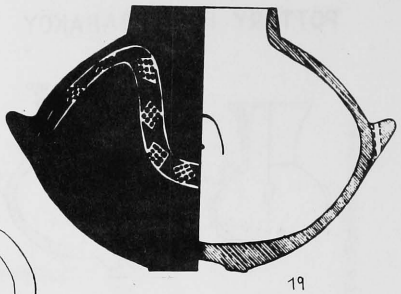
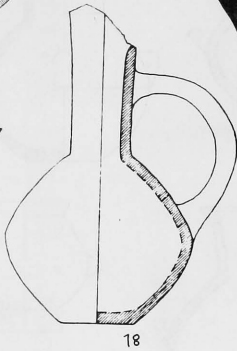
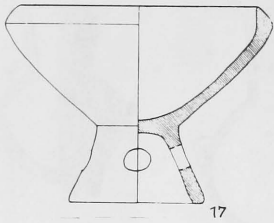


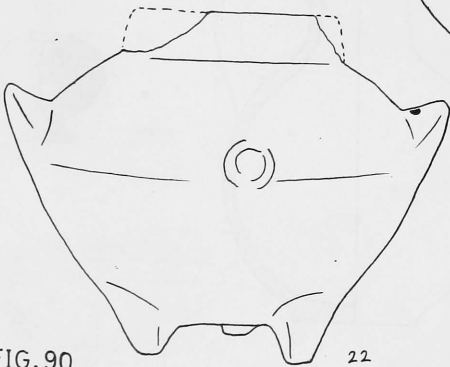
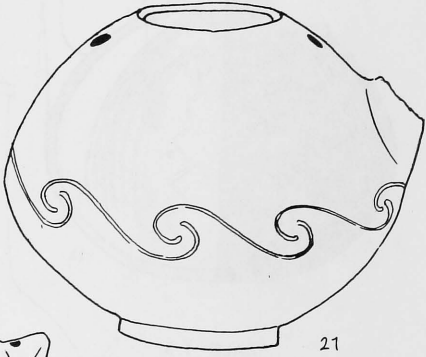
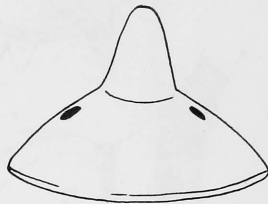
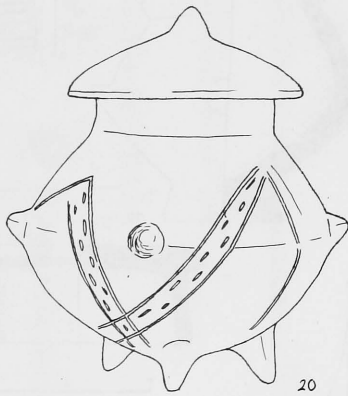
FIG. 89

POTTERY FROM SOMA



SCALE 1:3

POTTERY FROM BERGAMA



NOT TO SCALE

FIG. 90

22

POTTERY OF UNCERTAIN PROVENANCE

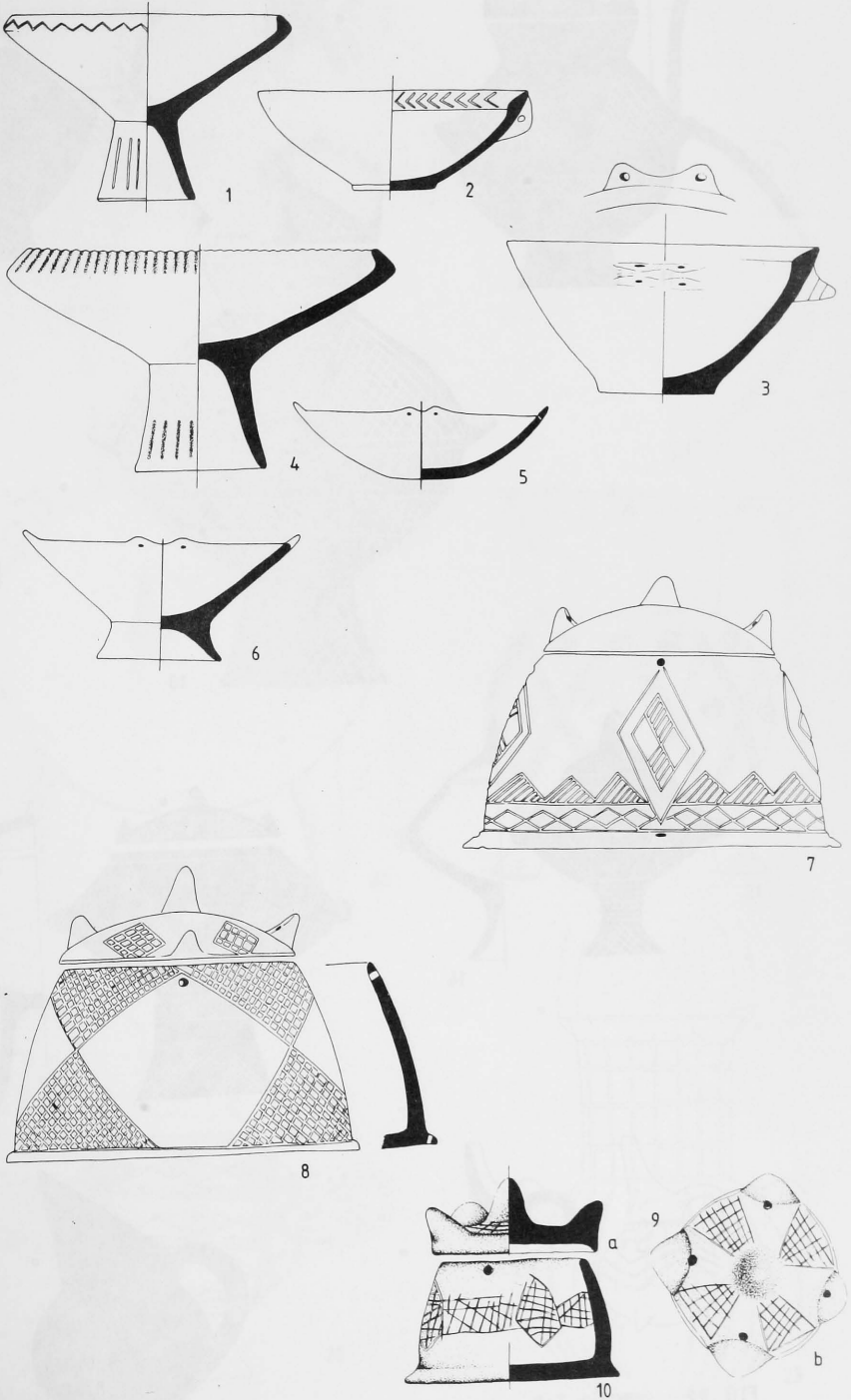
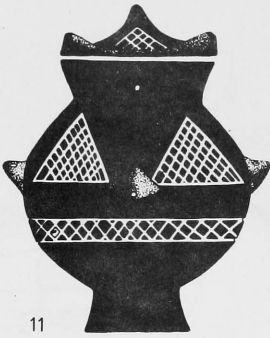


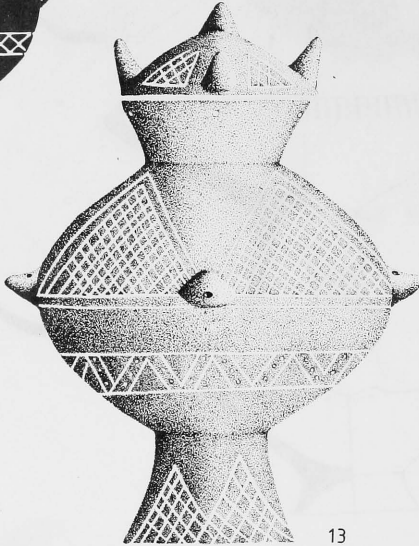
FIG. 91 scale 1:2



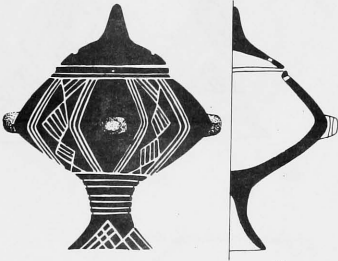
11



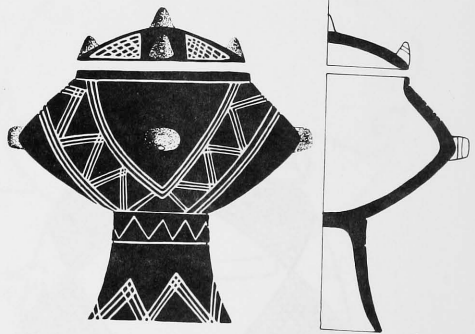
12



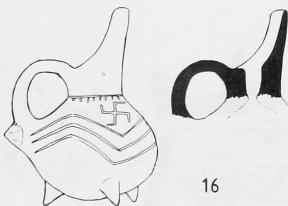
13



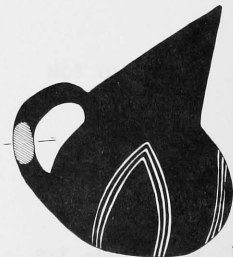
14



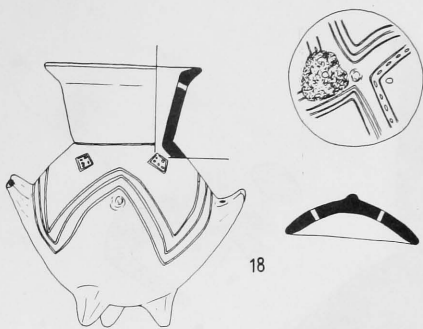
15



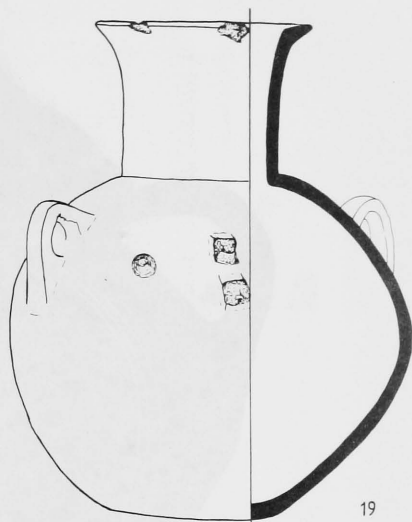
16



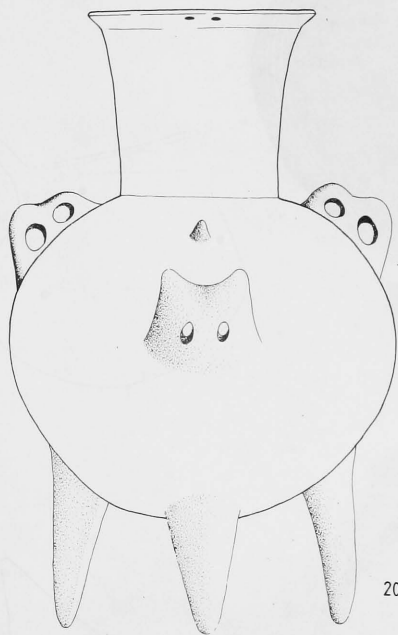
17



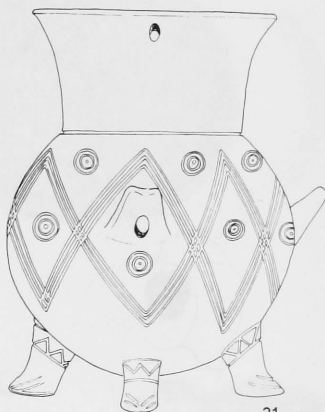
18



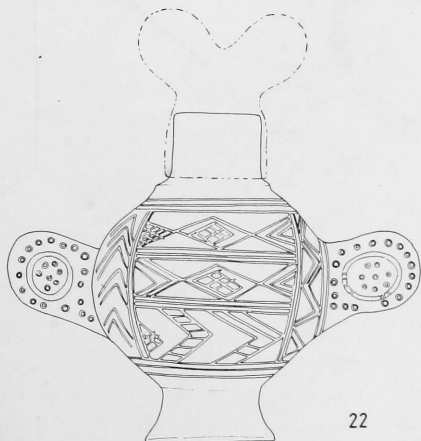
19



20



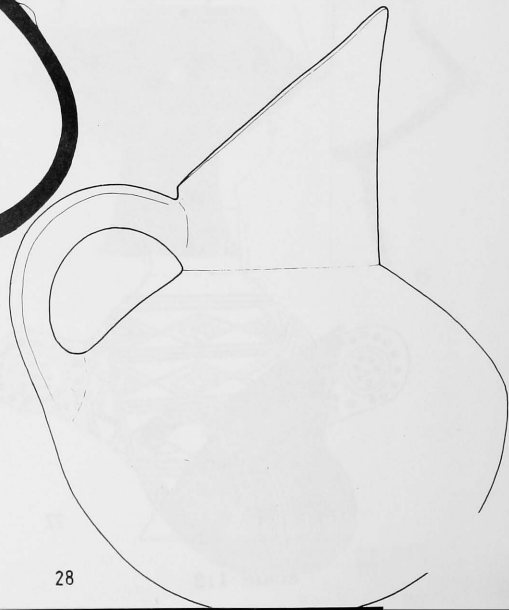
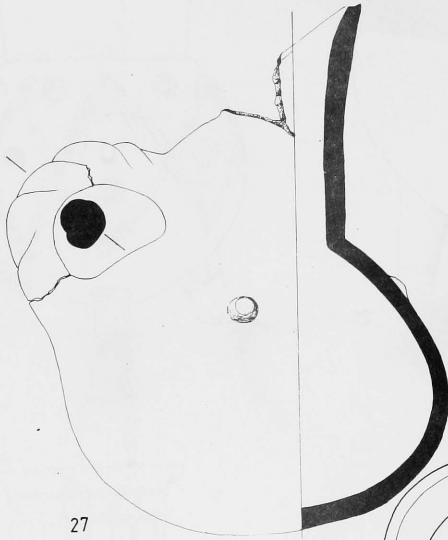
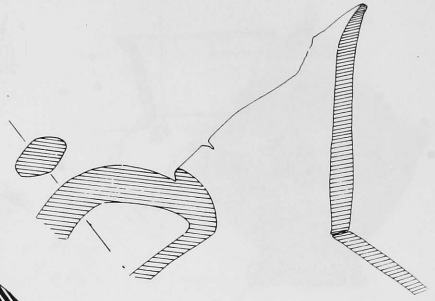
21



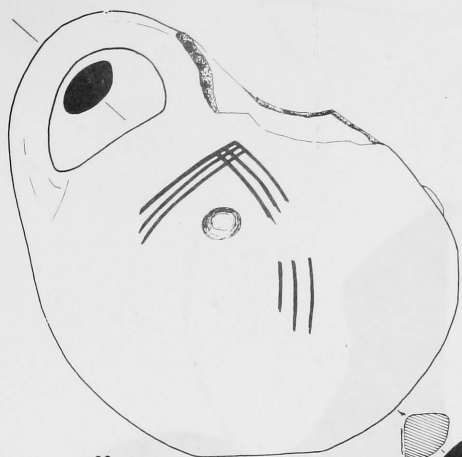
22



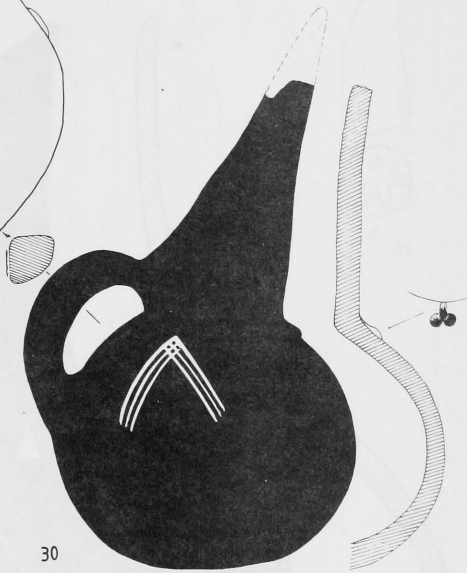
23



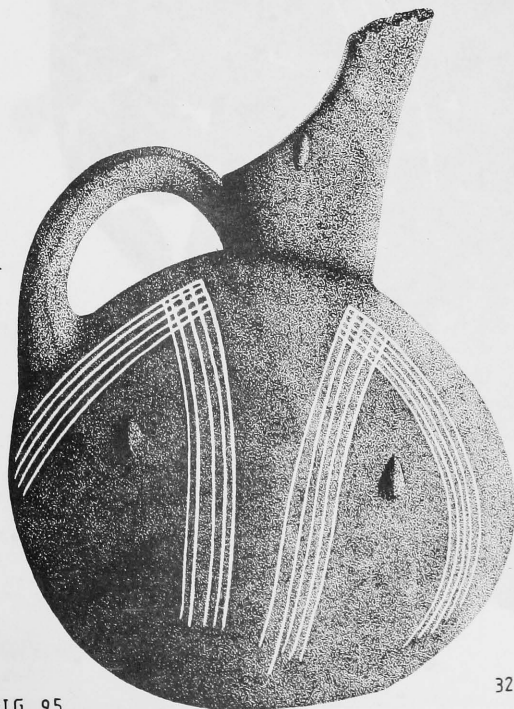




29



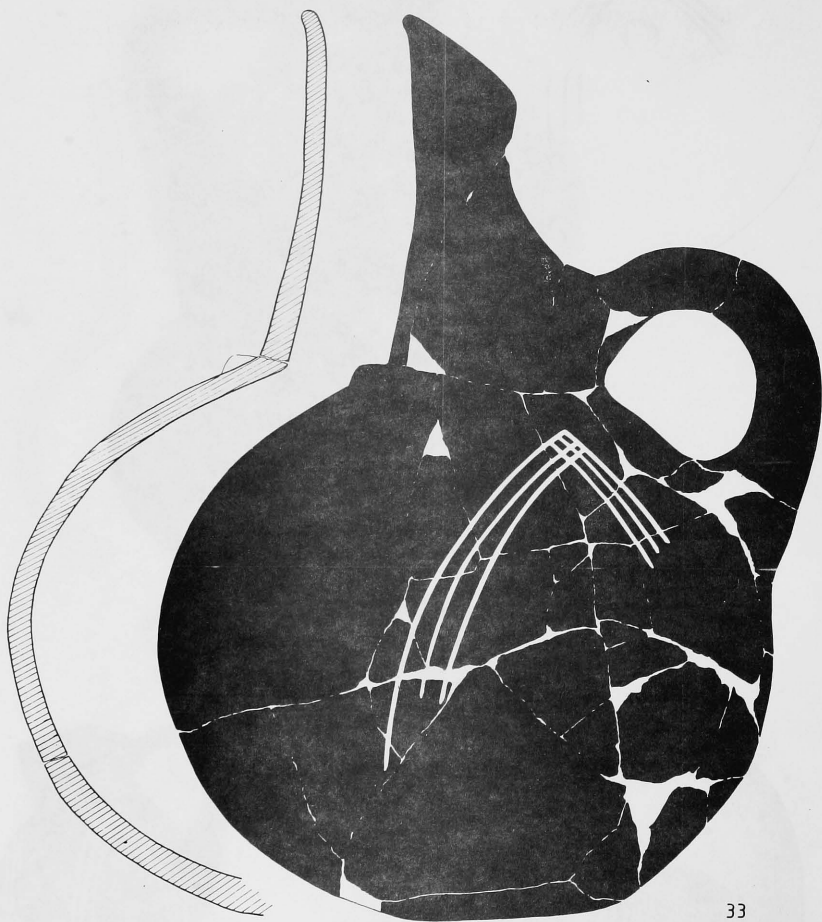
30



32



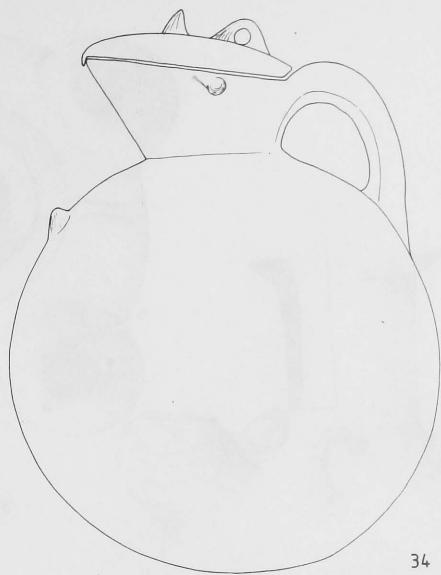
31



33

FIG. 96

scale 1:2



34



35



36

FIG.97

Nos.34, 36 - scale 1:2

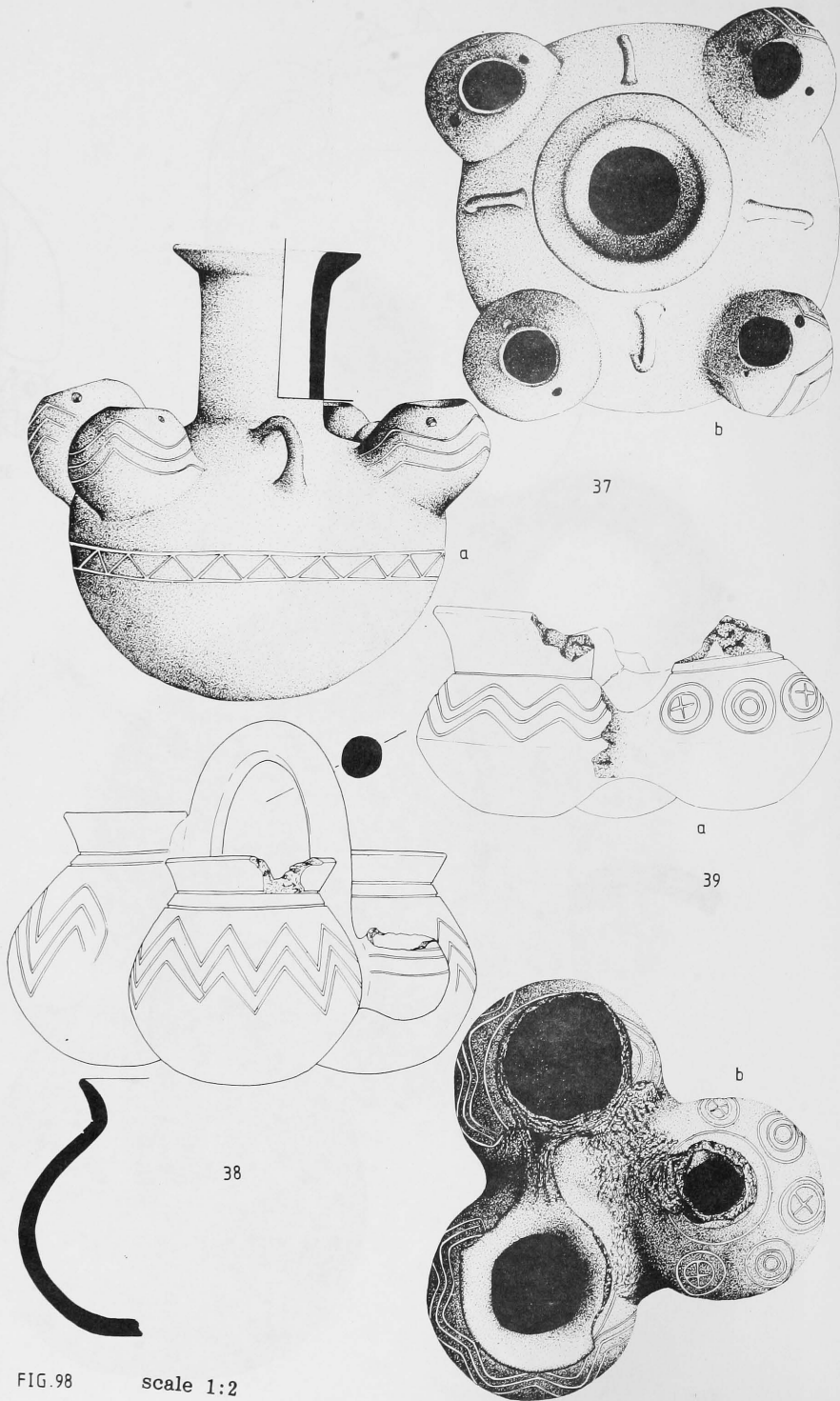


FIG. 98

scale 1:2

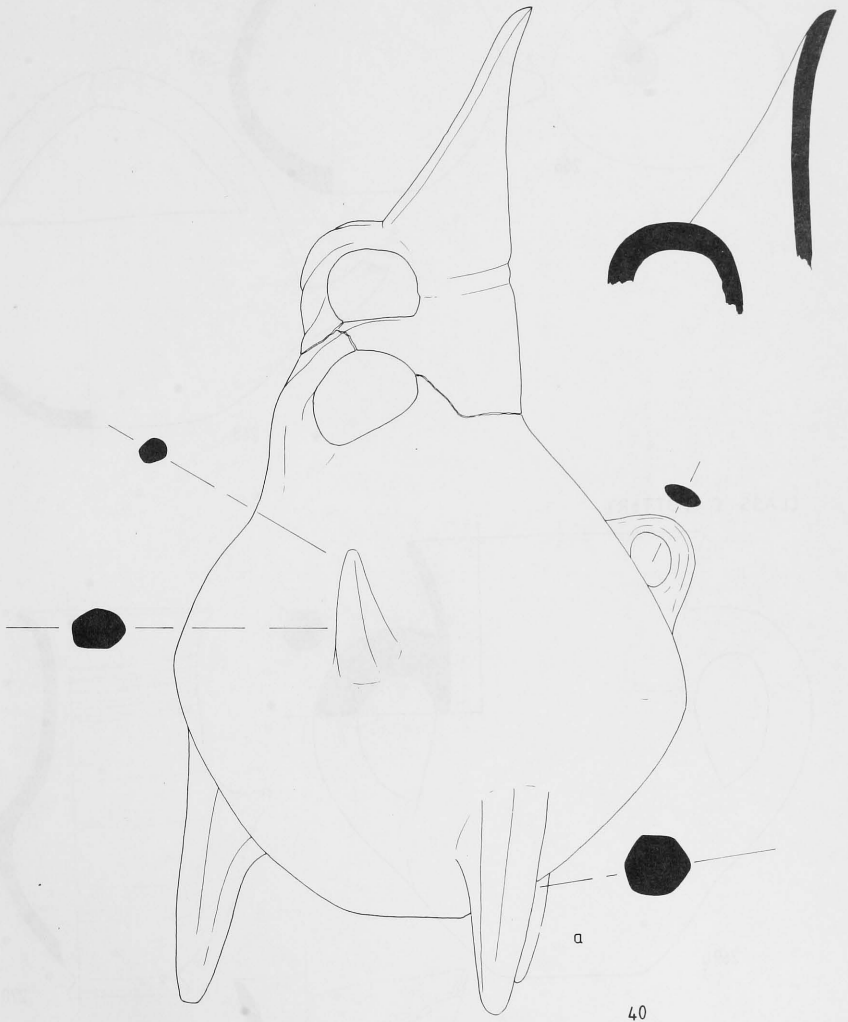
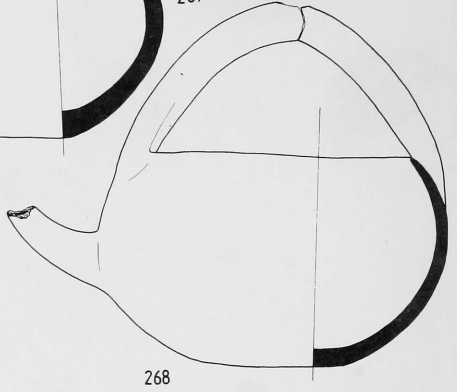
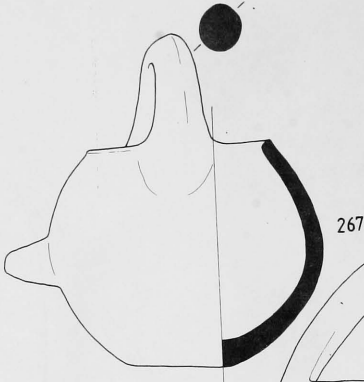
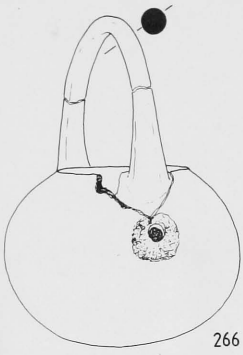


FIG . 99

scale 1:2



CLASS C POTTERY

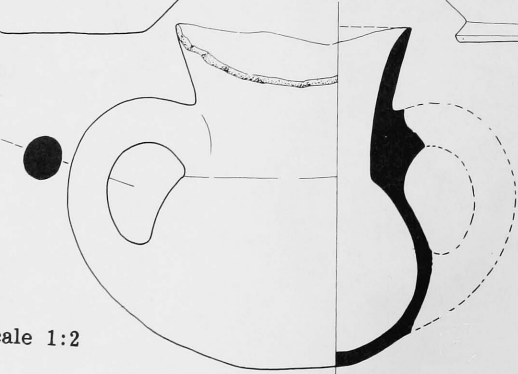
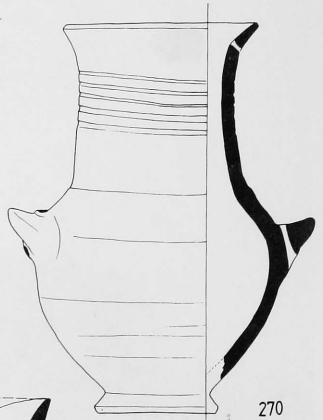


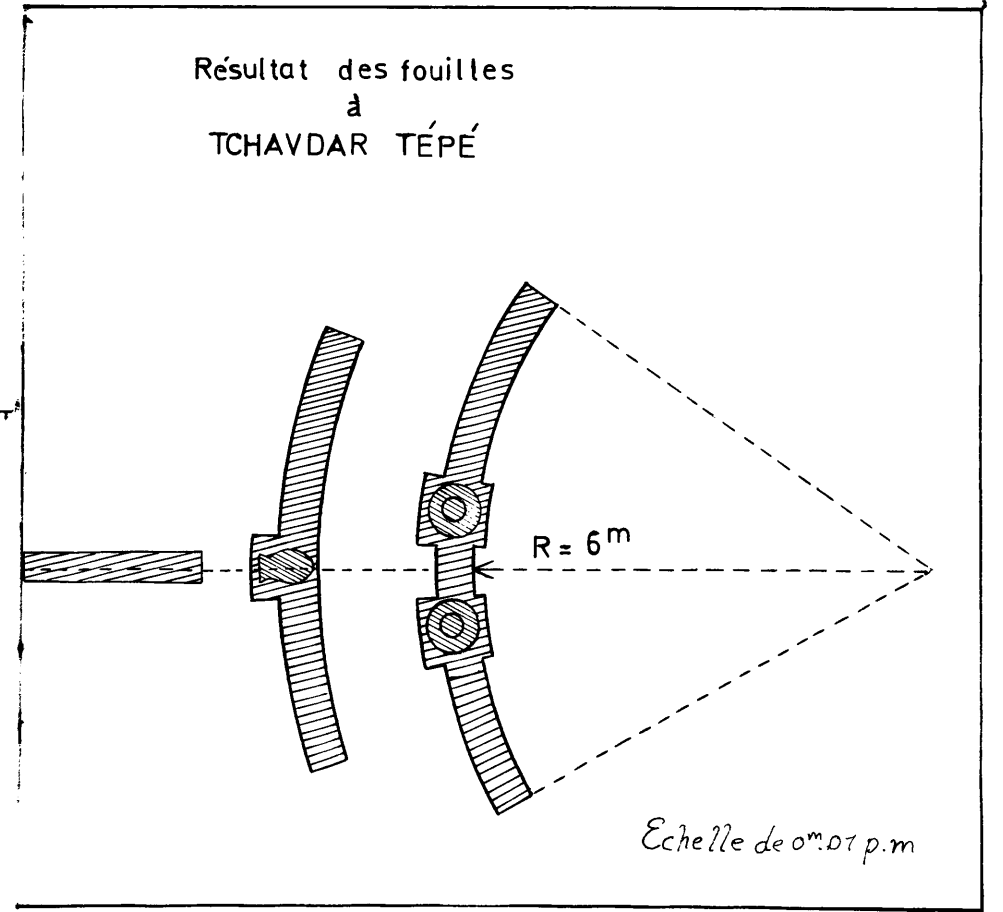
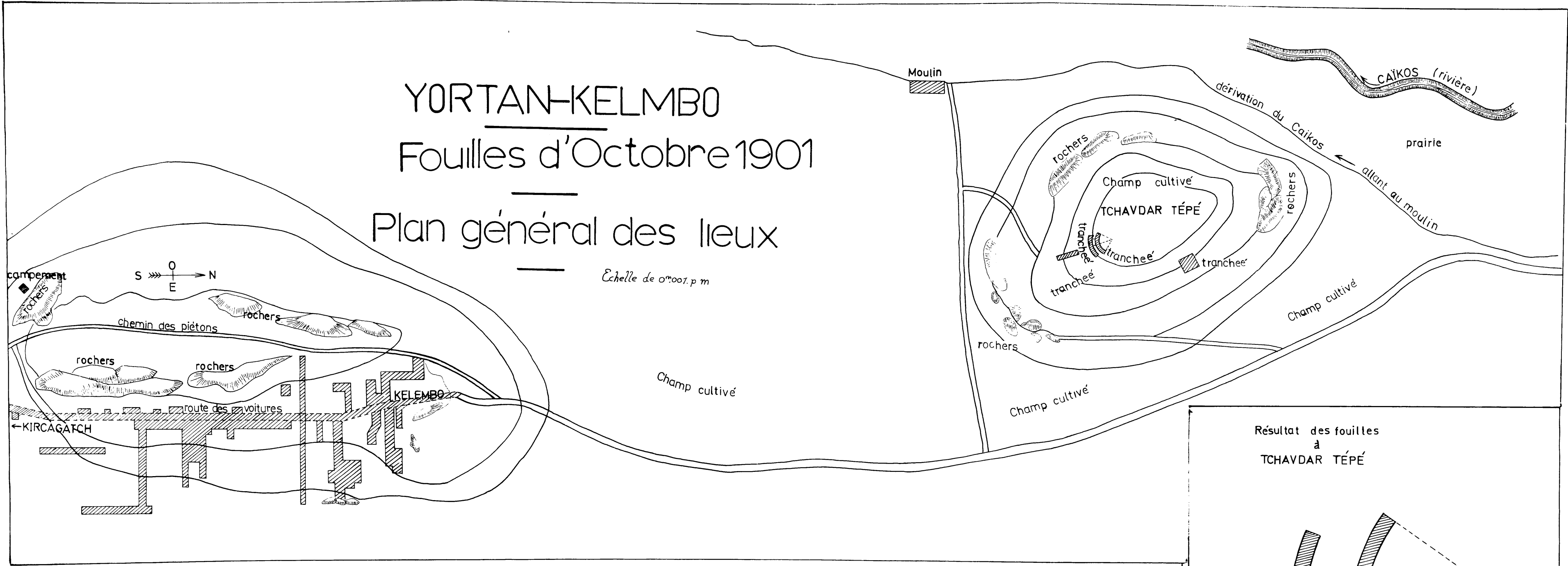
FIG.100

# YORTAN-KELMBO

## Fouilles d'Octobre 1901

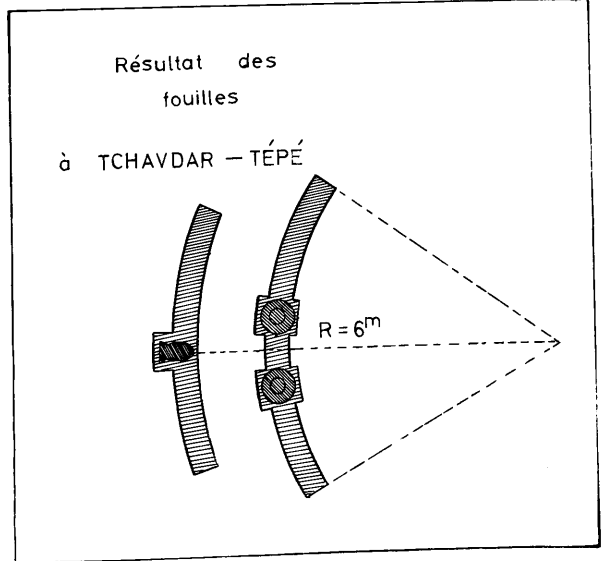
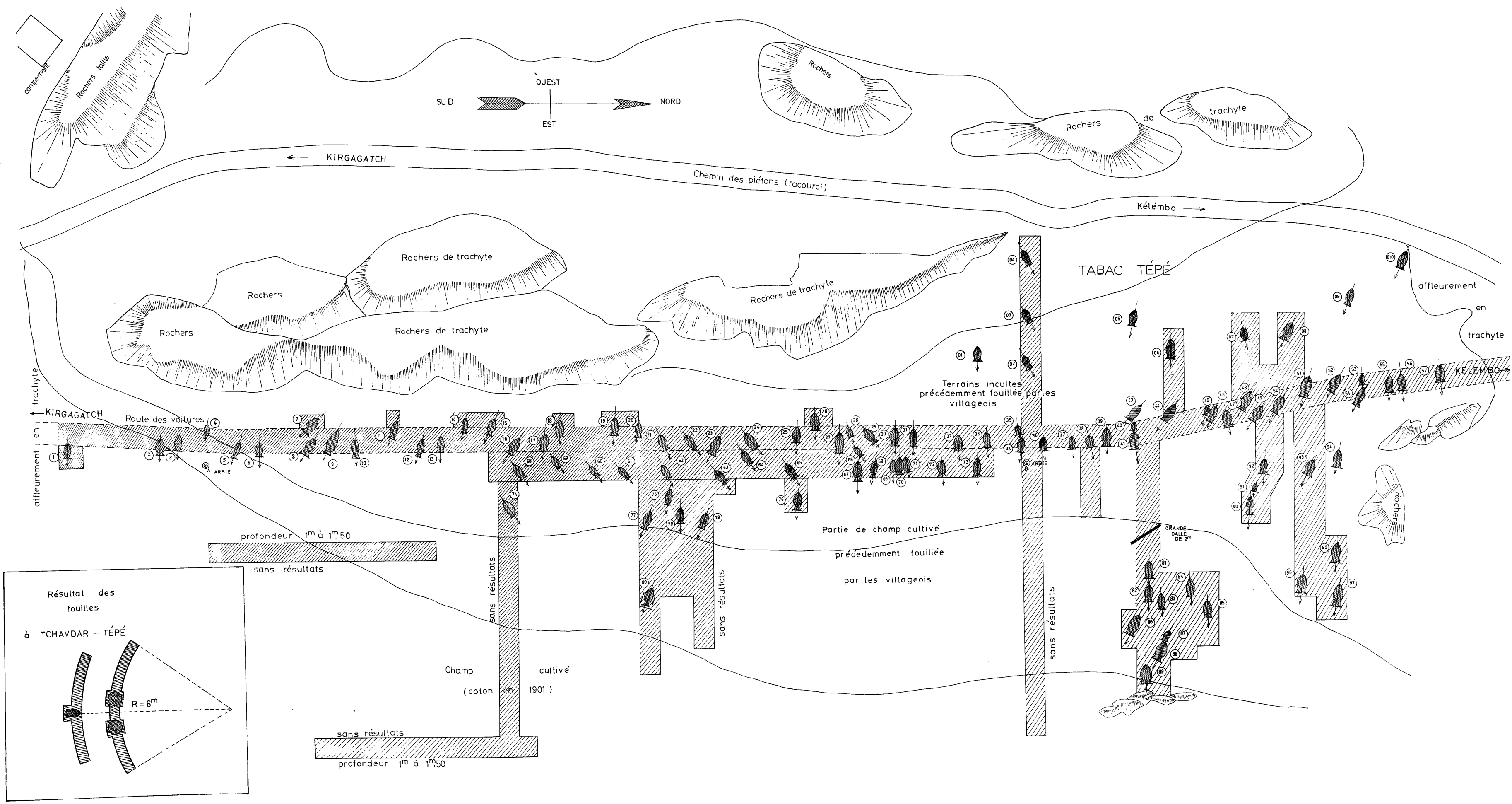
### Plan général des lieux

Echelle de 0<sup>m</sup>007, p. m

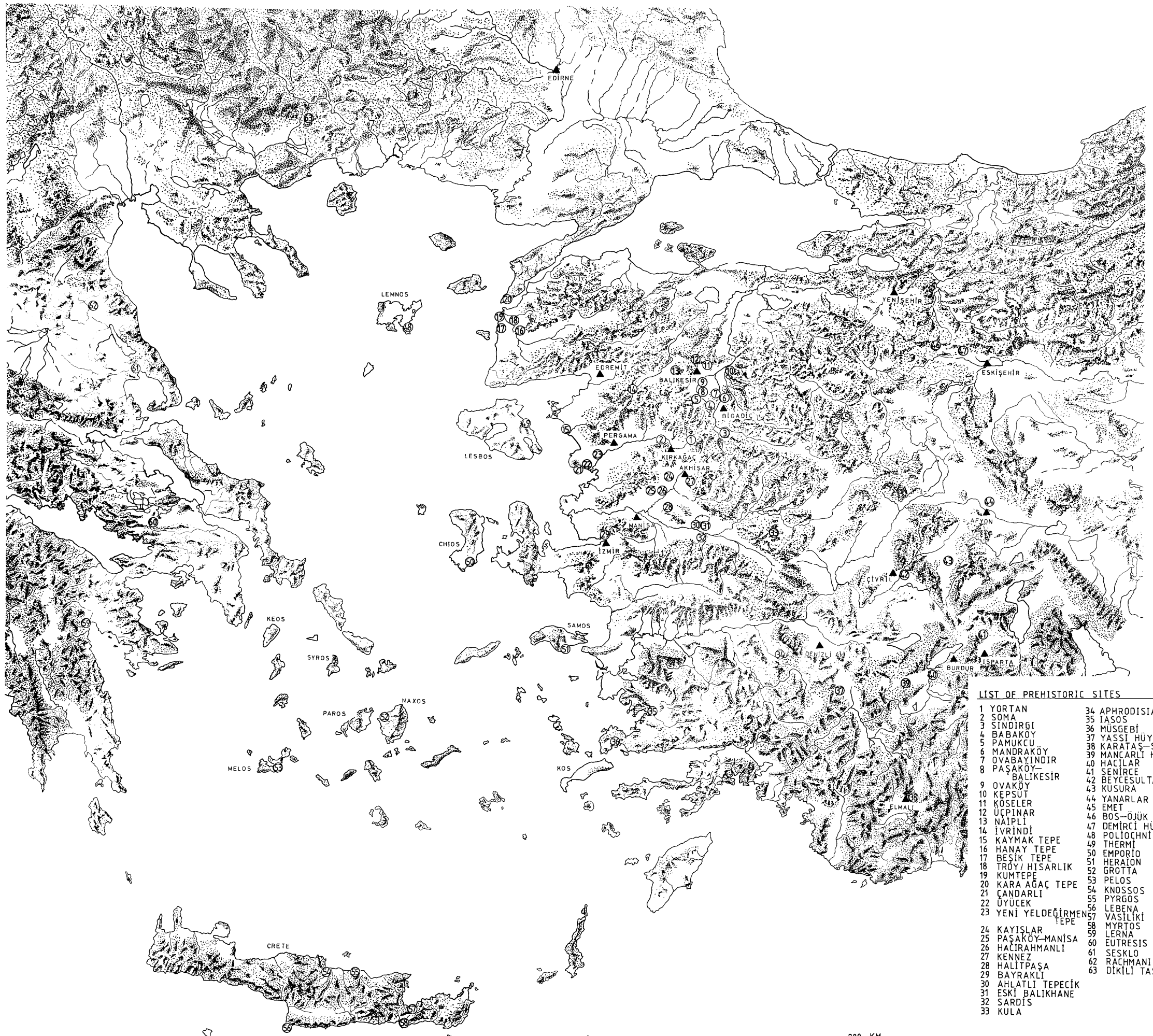












- LIST OF PREHISTORIC SITES**
- |                      |                    |
|----------------------|--------------------|
| 1 YORTAN             | 34 APHRODISIAS     |
| 2 SOMA               | 35 İASOS           |
| 3 SINDIRGI           | 36 MÜSGEBİ         |
| 4 BABAKÖY            | 37 YASSI HÜYÜK     |
| 5 PAMUKÇU            | 38 KARATAŞ-SEMAYÜK |
| 6 MANDRAKÖY          | 39 MANÇARLI HÜYÜK  |
| 7 OVABAYINDIR        | 40 HAÇILAR         |
| 8 PAŞAKÖY-           | 41 SENİRCE         |
| BALIKESİR            | 42 BEYCESULTAN     |
| 9 OVAKÖY             | 43 KUSURA          |
| 10 KEPSUT            | 44 YANARLAR        |
| 11 KÖSELER           | 45 EMET            |
| 12 ÜÇPINAR           | 46 BOS-ÖJÜK        |
| 13 NAİPLİ            | 47 DEMİRCİ HÜYÜK   |
| 14 İVRİNDİ           | 48 POLIOCHNI       |
| 15 KAYMAK TEPE       | 49 THERMİ          |
| 16 HANAY TEPE        | 50 EMPORİO         |
| 17 BEŞİK TEPE        | 51 HERAİON         |
| 18 TRÖY/ HİSARLIK    | 52 GROTTA          |
| 19 KUMTEPE           | 53 PELOS           |
| 20 KARA AĞAÇ TEPE    | 54 KNOSSOS         |
| 21 ÇANDARLI          | 55 PYRGOS          |
| 22 ÜYÜCEK            | 56 LEBENA          |
| 23 YENİ YELDEĞİRMEN- | 57 VASILIKI        |
| TEPE                 | 58 MYRTOS          |
| 24 KAYISLAR          | 59 LERNA           |
| 25 PAŞAKÖY-MANİSA    | 60 EUTRESİS        |
| 26 HAÇİRAHMANLI      | 61 SESKLO          |
| 27 KENNEZ            | 62 RACHMANI        |
| 28 HALİTPAŞA         | 63 DİKİLİ TAŞ      |
| 29 BAYRAKLI          |                    |
| 30 AHLATLI TEPECİK   |                    |
| 31 ESKİ BALIKHANE    |                    |
| 32 SARDİS            |                    |
| 33 KULA              |                    |

WESTERN ANATOLIA AND THE AEGEAN

0 200 KM





