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EXPLORATIONS IN CILICIA

THE NEILSON EXPEDITION: PRELIMINARY REPORT

By JOHN GARSTANG

WITH PLATES XI-XX

DURING the winter season the Neilson Expedition, working by courtesy of the Turkish Government in collaboration with the Director of the Adana Museum, carried out a survey of the more ancient sites of the Cilician Plain.

A preliminary fortnight spent at Ankara was devoted to a study of the pottery series established by the Chicago Oriental Institute's excavations at Alishar and now exhibited in the Archaeological Museum at Ankara, and also to the examination of a number of prehistoric sites in the vicinity, included among which were Ahlatlibel and an uncharted gravel pit not far from Kalaba. Our observations will be recorded in due course, but one fact is worthy of immediate mention, namely, the location of an extensive outcrop of obsidian, which seems undoubtedly to have been the source of most of the worked obsidian implements so common in the prehistoric sites of Anatolia and northern Syria. This obsidian field lies to the S. of Nevsehr, on the road to Akserai, S. by E. of Karapınar, and relatively near the site of the Hittite inscription of Kara Hüyük: it is reported to be fully three miles wide. Cores and flakes are extremely plentiful, and we have seen one core to which a flake seems to fit. We hope to publish a specialist's opinion on these materials in a subsequent report.

In the museum at Ankara the pottery from Alishar now forms the basis for the study of Anatolian pottery. It is divided into five groups, of which the most ancient is Chalcolithic, and dated c. 3500 B.C. While being archaic in character, comprising a large proportion of black vessels with flat bases, it is distinguished by high burnishing and exceptionally outplayed rims to some of the larger vessels. The second phase is called the Copper Age, ending c. 2400 B.C. The vases still for the most part have flat bases, and the fabrics are mostly red, both

plain and burnished. Handles make their appearance and there is some decoration, both white on red and red on white. Relationship with Troy II is evident. The third group is classed as Early Bronze Age, ending c. 2000 B.C. There has been difficulty in placing this group satisfactorily in the series, but opinion tends to regard it as intruding upon the Copper Age and as overlapping more or less the period which follows. The pottery is unlike all other of the Bronze Age in that it is fully decorated, mostly with linear patterns, some of which are elaborate, black on buff or red, and also dark red on burnished red. Shapes are fully developed, including jugs, spouts and handles. Bases are flat or half-pointed. The pottery, like all that which precedes, is hand-made. The fourth period is called Hittite, and to it is assigned the range 2100-1200 B.C.—that is, to the end of the Imperial period. The pottery is mostly plain, but it is distinguished in technique by being wheel-made, by the variety of form and elegance of the finished products, the rarity—indeed, almost complete absence—of painted decoration which is replaced by high burnish. Tall channel spouts, rising loop handles, strap handles over the mouths of vessels and horizontal handles are all fully illustrated by the series. Pedestals and trefoil spouted rims are also conspicuous. The fifth period is called Post-Hittite. This pottery is also wheel-made, and it includes the highly decorated group called Phrygian, dated approximately 1100-700 B.C. This identification seems to be justified by the most recent excavations at Boghaz Köi, where perhaps an earlier date is to be assigned to this new class of ware. In this, *motifs* include elaborate linear patterns, tending to be square or arranged in panels and to combine with processions of animals, chiefly deer and horses. The shapes are those of the Iron Age.

Further illustrations of the Anatolian wares, surprising in their quality and variety, were found in the Copper Age deposits of Alaya Hüyük, newly excavated by the Turkish Historical Society. An interesting feature is the resemblance of some of the black burnished wares decorated with diagonal flutings, to those found at Judeideh in N. Syria by the Chicago Expedition to Rihanieh and reflected more distantly in a similar class of wares of E.B. iii, which were found in Palestine at Beisan, Jericho, and more plentifully at Kherbet Kerak. The gold jewellery found in the Alaya deposits is beautifully executed. The open-work pattern of the gold tiara recalls strongly the pattern painted

upon sherds from levels 10 and 12 of Tepe Gawra. Similar patterns, as published in the *A.A.S.O.R.*, Vol. IX, Figs. 39 and 76, come from Gawra I—that is, from the earliest period—the numbering being from the lowest stratum.¹

As far as concerns our Cilician researches, we retain for comparison the nomenclature of groups I-IV applied to the Anatolian series. Instead, however, of using the term Post-Hittite in relation to Cilician pottery, we will use the term Late Hittite, since it is well established by our results that there was no sharp break in the Hittite ceramic series at the end of the Imperial period, as there was upon the Plateau. Some change, it may be said, is noticed after the Assyrian invasion, but the break only becomes conspicuous at the time of the Persian conquest.

We arrived in Cilicia after this preliminary work towards the end of November. Our exploring party included Mrs. Garstang, Miss Veronica Seton-Williams, Mr. John Waechter and, later, Miss Alison Dun, all of whom have contributed to the preparation of this interim report. Our investigations extended eastward as far as Missis and Jeiham (Çeyhan), northward as far as Sis (now Kozan) and westward to Mersin. Our sketch-map on Plate XI indicates this area. The immediate district of Tarsus, where the expedition directed by Miss Goldman is at work, was of course excluded, but particular attention was given to the problem of Anchiale, upon which there was fresh light. The heavy rainfall and floods prevented our completing this piece of our investigations.

The old village sites of the Cilician Plain, like those of Syria, are indicated mostly by earth mounds which here, though relatively small, rise for the most part conspicuously from the plain and are visible from afar. The Turkish word equivalent to the Arabic 'tel' is 'hüyük.' More than a hundred such mounds may be counted inside the area investigated; but for one reason or another, such as the presence of graveyards, mediaeval castles or older ruined villas or farmsteads, a large proportion do not lend themselves to superficial investigation. Quite a number, particularly those near the coast, were found to be thickly overlaid with more extensive Graeco-Roman deposits. There is also another factor which is worth noting. The soil of Cilicia is clayey and tenacious, so that even the abundant rainfall has done little to

¹ For this reference I am indebted to Mr. I. Ben Dor.

denude the sites. In Palestine and Syria, by contrast, where the soil is more loamy and the sharp rains of winter are followed by months of drought, denudation has been continuous, so that half an hour spent near the foot of the mound will suffice to secure a broad outline of its history. It was for reasons such as these that only a small proportion of the mounds visited gave us positive results.

Prehistoric remains (Bronze Age and earlier) were found in the north-east on the road to Kozan (Sis), at Imamoglu, on a small mound to the north of Jeiham, and in the extreme west at Çatışli, about six kilometres north of Mersin. Good Hittite deposits were found at Hajilar and Yarim, also on Tilan Hüyük, which lies about fifteen kilometres from Kozan. In these three cases Roman remains were plentiful on the surface. At Yarim the river has cut a section of the mound and the deposits embedded in the side were stratified. They seemed to reach to the earliest Hittite times in the Bronze Age, and the whole deposit was approximately nine metres thick. Late Hittite deposits were present at İnirlik, Körtjular, and Hajilar; but on Merjin Hüyük nothing but Graeco-Roman remains could be found.

These places are indicated on our sketch-map of the area. The notes we have made are available to any interested student, and the potsherds collected have been arranged for study in a room set apart for the purpose by the Director of the Adana Museum, where also may be seen the specimens collected on a similar tour by Miss Goldman. Dr. Gjerstad's instructive notes on potsherds from some of these sites are already published. (*Rev. Arch.*, III, 1934, pp. 155 ff.)

Two considerations seemed to emerge from these preliminary investigations. Most of the old Hittite sites, though occupied for several hundred years longer on the Cilician Plain than upon the Hittite plateau of the interior, seem to have been abandoned finally after the Persian conquest. The intensive revival of Graeco-Roman times bears witness to a different economy and outlook, partly due to prodigious engineering feats which brought water by aqueducts to more favoured places, partly to the relations with the sea. Even where a new settlement sprang up in an old Hittite district it usually avoided the old site, as may be seen at Sirkeli, where abundant Hellenistic traces were found in a low mound, cut through by the railway, not three hundred yards away from the deserted Hittite city by the riverside. Along the coast, from Ayas to Karadivâr, the numerous places that came into being and

prospered in the Greek and Roman periods occupied fresh ground on big rocky promontories, or on sandhills of relatively recent formation. It may be noted, in conclusion, that in the southern plain of Adana, between the Jeihan and the Seyhan Rivers, no ancient mounds telling of a Hittite occupation are to be seen within twenty-five kilometres of the coast. It would appear that all that now fertile area is a more recent gift of those rivers and the sea: the process is still at work, and it accounts for the silting up of the port of Tarsus and the obliteration of the remains of Anchiale.

The other fact which had made itself obvious, was that no complete estimate of the historic values of the sites of the plain around Adana could be obtained without removing the surface soil. This, the Director of the Adana Museum was enabled to do, and it is due to this facility that we obtained a much clearer insight into the archaeology of four particularly attractive sites, one of which was selected for further systematic excavation.

CHAÜSHLI HUYÜK

CHAÜSHLI HUYÜK lies about six kilometres to the NW. of Mersin on the east side of the road towards Chaüshli and about one kilometre to the N. of the village of Christian Köi (cf. Plate XII). Standing as it does on the very edge of a scarp which descends steeply to a small stream, the mound, as seen from the other side where runs the road, appears prominent, but from the platform upon which it stands it is seen to rise gently and to be not more than five to six metres in height. The mound consists of a raised but still low area crowned by a small, steep knoll, standing on a low ridge which extends and widens eastward and comprises about two acres of ground.

Pottery was littered over the whole surface of the area, but most thickly in the immediate vicinity of the knoll. It included very few late pieces; we have, in fact, recognised only one Roman fragment. There were numerous Hittite pieces, some, or perhaps most, of an early character, and this is borne out by the scarcity of painted fragments, which were confined to the simple linear decoration or red-wash of the earlier Hittite phase. A curious fabric, which requires further investigation, is a hard, brick-red ware which contains mixed grits and is hand-made, with a rough surface. One specimen of this fabric took the form of a vertical neck, 10 cms. in height, belonging to a jar

the shoulder of which was indicated. The vessel was early in shape, but not primitive in texture or baking. There was also a circular stamp on the inside. The remaining surface fragments included several pieces, obviously of the Iron Age, mixed with the earlier Hittite. There were also numerous sherds of primitive pottery:—

- (1) Black faced wares, burnished on one or both sides.
- (2) Double-burnished brown ware.
- (3) A primitive holed-lug horizontal handle.
- (4) Several pieces of light grey soapy ware.

Other finds included pieces of worked granite in considerable variety, but too broken to give us their original forms; and also a relatively large number of obsidian fragments, both cores and flakes, and a few damaged implements.

Our investigations were directed to determine:—

- (a) The period of the upper part of the knoll.
- (b) The period of the raised platform upon which the knoll stands.
- (c) The extent and character of the prehistoric area of which there was so much superficial indication.

We were not successful in obtaining any conclusive results, but as this site has already attracted attention (Gjerstad, p. 158; also *Annals*, XX, 1933, pp. 46 ff.), and we shall not necessarily do further work upon it, we deal with it in some detail.

Trench A, on the top of the mound, only removed the surface soil, for we came on a large stone wall and the remains of a burnt level, and abandoned the trench.

Trench B, further down the slope, was carried to a depth of 160 cms., but the material it contained was mixed, the only change being a slight increase in burnished wares at the lower levels.

Trench C, on the ridge some distance from the knoll, reached natural rock after only 60 cms. Here Hittite wares predominated with a few hand-made early fabrics.

Trench D had a stone floor at the depth of 80 cms. and an earth floor at 120 cms.; but the pottery remained mixed in character until 160 cms., where there was a sealed deposit of grey clay, 20 cms. thick, overlying the natural rock and containing hand-made fabrics, thick and badly baked, with straw as well as grits.

Trench E, on the other side of the knoll, went to a depth of 250 cms. without reaching natural soil. The pottery was Hittite, and exhibited no earlier characteristics save one piece of red double-burnishing.

The almost complete lack of stratification in these trenches favours the division of the pottery on the broad lines of Hittite, Proto-Hittite, and Prehistoric, rather than by their relative positions in the mound.

HITTITE

Both on the surface and in the trenches Hittite wares predominated—not the late pedestal cups, but plain fabrics, cooking pottery and the metallic wares such as we found at Sirkeli in Trench E, in the fourth metre.

Fabrics. These included most of the common early wares:—

(a) Brick-red ware, with a white gritty core, wheel-made and wet-smoothed on the outside.

(b) Metallic wheel-made wares, common both at Kazanlı and Sirkeli, with grey-brown exterior, rough surface and red or grey gritty core. These occurred in Trenches A, B, and E.

(c) The typical light yellow-to-brown burnished Hittite fabric, with closely packed core of the same material, which was particularly noticeable in Trench B.

(d) The typical Hittite cooking pottery, brown-grey, often unevenly fired, and containing large grey or white grits. This was present in all the trenches.

Rims. (1) The most common rim was that of the everted stumpy-necked globular cooking-pot, which occurred in all the trenches, in varying tones of brown to grey, sometimes hand-burnished, but more often plain, with a gritty brown core.

(2) A single late Hittite shallow dish from Trench E-190. It was of grey gritty compact clay, wheel-made, with traces of paint on the inside of the rim, which was itself inturning and slightly grooved.

(3) Part of a shallow Hittite dish from Trench D-60, with a plain upcurved rim, of yellow paste, close gritless core, and with a wet-smoothed exterior.

(4) A shallow carinated bowl, covered with brown washy paint on a close Hittite brown core without grits, from Trench D-110.

The main types of rim fabrics were thus fairly evenly distributed, although commonest in the trenches in the mound itself.

The only spout was from Trench D-60, a typical Hittite upturned form in reddish brown burnished ware, with a plain light yellow interior paste, which continues through to the core.

Handles. These may be classified into three main divisions:—

(a) The most common, as was to be expected, were the vertical loop handles, circular in section of brown, grey or red half-smoothed ware. These, a typical Hittite form, occurred all over the mound, and in many cases were fastened to the pot by the core, which was formed into a point and pressed into the still wet clay forming the body of the pot.

(b) Another common Hittite form was the strap handle, slightly more oval than usual, and occurring chiefly in Trenches B and D. The ware of which it was made was generally dark red to brown with a grey gritty core.

(c) There was also a single example of the lunate ledge handle, so common at Kazanlı, in Trench D-100/200. This specimen was broken and came from under the earth floor of Trench D-120. A single handle of crater type with a square shoulder was also found, but as this came from Trench A, it is probably of Post-Hittite date.

Bases. These took common Hittite forms, being flat and mostly of yellow gritty or brown gritty ware, though in Trench C-60 a single broken ring base occurred.

Painted Wares. These were very rare and consisted mainly of two types:—

(i) Some brown linear designs on buff paste over a gritty core.

(ii) Red or yellow paint on a buff ground.

A single piece from Trench E-60 had a brown hatched design, and from Trench B there was a painted vertical loop handle of usual shape.

Incised Ware. The only incised ware worthy of notice was a comb design from Trench B-30, of brown paste on a grey core. A similar ware occurred at Kazanlı in a Hittite context.

PROTO-HITTITE (OR BRONZE AGE)

The only wares which may be regarded as Proto-Hittite or even earlier, but which look like forerunners of the later wares, were a series of red double-burnished fabrics, on a grey core, often mottled through being unevenly fired. These occurred throughout Trenches B, E, and to D-120. These wares resembled those found at Kazanlı at the base of the rampart in Trench A-400.

PREHISTORIC

This may be divided into two main classes :—

(1) The burnished wares, which are grey, black or brown, are usually thin, well baked, hard and compact with a gritty grey core. The texture of this ware is very fine and the burnish high, so that it compares favourably with other early fabrics. The forms are usually the straight rims of 'flower-pot' vessels with flat bases. Its closest resemblance is to the grey wares of Sakjegeuzi, but the other wares usually associated with it are absent.

(2) The second type is much more unsophisticated and primitive in appearance. It consists of thick hand-made pottery, the exterior of which is yellow or brown over a grey core, containing both grits and straw. As no large fragments have been found, the forms are difficult to reconstruct, though it would seem, from the absence of flat bases, that the vessels were crude 'hole-mouthed' jars with rounded bases.

These wares were both present in the stratified area in Trench D, although only the more primitive type occurred at the very bottom of Trench D-160/180, accompanied by one painted fragment with black bands on a light buff burnished slip over a gritty yellow paste. No handles were discovered stratified. The only ones which may belong to the earlier period are several incipient ledge handles discovered in Trenches A-30, B and D, but these are too mixed with later material to be of much value.

In conclusion, the pottery of Chaiishli must be regarded in the following light. It points to an early settlement with hand-made fabrics and burnished wares, dating probably from the late Neolithic to Chalcolithic periods, an individual culture without connection with the Anatolian plateau, but with probable connections eastwards. No definite Bronze Age culture was apparent, the few fragments of double-red burnish which we found being too scarce to admit of a settlement of that period. It seems, then, that the area was deserted from prehistoric times until the Hittite period, when possibly a small fort was placed on the knoll. The position was apparently relinquished before the Imperial Hittite period, as none of the well-known late forms of Hittite ware were present. The absence, however, of painted wares, and the preponderance of plain pottery, would probably be explained by the fact of it being a garrison post rather than a settlement, and

the discovery of the thick stone wall in Trench A, at the top of the mound, seems to bear out this theory. Our investigations were not extensive enough to enable us to form any definite conclusions about Chaiishli, but indications make it possible that the prehistoric settlement will be discovered by trenching more deeply along the edge of the scarp. It may indeed be underneath the knoll itself, but in that case it would be difficult to account for the obsidian and prehistoric fragments found scattered over the wider area.

THE OBSIDIAN INDUSTRY AT CHAIISHLI HÜYÜK

The following notes are supplied by Miss Seton-Williams :—

Obsidian was discovered lying about the surface in quite large amounts. It consisted mostly of chips and flakes with a few worked implements. The preponderance of fragments and flakes suggests the proximity of an ancient working floor, as unfinished tools would be unlikely to be removed purposely from their place of origin. The material of which the tools are made consists usually of black transparent obsidian with a highly glassy surface. In some cases, owing to weathering and the chemical action of the soil, this has become opaque, while the surface has assumed a dull grey appearance. There also occurred several fragments of brown flint, and brownish grey chert in various trenches, usually in the form of sickle-blades.

Owing to the disturbed nature of the soil, due to ploughing and erosion, there was no stratification except in one trench, which did not yield obsidian in its stratified layers; we are therefore treating the whole of the obsidian found together as one entity, since the workmanship is all of one period.

Blades. These were by far the most common obsidian tools found. No whole blades remain, the average length of the blade section being about 2 cms. The secondary working is in all cases poor and the flat retouch absent. The blades are usually worked upon both edges, and the presence of a slight lustre on several suggests their use as sickle-blades. In some cases the working is so slight as to be a mere bevelling along the edge, while in others it exhibits a coarse denticulation.

Gravers. These are usually made at the end of broken blades, usually single faceted, and fairly well made.

Borers. Of these, there were only three, which are also portions of reworked blades. One found near the surface was rechipped after

the implement had been exposed to severe weathering, as the retouched end defining the point is the only part of the tool showing the glassy obsidian surface.

Scrapers. A broken end scraper, $4\frac{1}{2}$ cms. in diameter, is the largest. It is steeply worked on the end and sides, while the surface is much weathered and scratched. There is also a small hollow scraper of clear obsidian, very evenly flaked, at right angles to the bulbar face, and some $2\frac{1}{2}$ cms. long. The other scrapers are small converted blades, poorly worked.

Cores. These are usually small and rather battered.

Conclusion. There are not really enough worked artifacts at Çaiuşli to allow a satisfactory classification, and on the whole the industry exhibits a very poor workmanship. The absence of flat retouch, the paucity of arrowheads, and the general unfinished appearance of the obsidian work, suggests that it belongs either to a poor local culture, or to the late Neolithic or Chalcolithic period: a transitional phase after the introduction of metal had spoilt and degenerated, though not ended, the art of stone working.

MERSIN

Souk Sü. Mersin Hüyük stands attractively at the bend of the Souk Sü (Cold Water), not more than a mile outside Mersin towards the NW. It is a bold mound, possibly twenty metres high, but it stands on low ground, and for this reason, possibly, has not attracted much attention, though Dr. Gjerstad recognised the interest of its surface pottery (*op. cit.*, pp. 164 ff.). The river is encroaching upon the mound, and although there is no bared section as at Yarim Hüyük, the result of the constant erosion has been to bare the ends of the different strata, so that in digging on that side we were able rapidly to ascertain the nature of the stratification and to collect some very informative pottery fragments. These are illustrated on our Plates XIII-XVII, where also may be seen diagrams showing the sections cut, which illustrate the relative positions of the fragments in the ground.

Four trenches were cut in all: A, B, C and D; A being at the foot and D nearing the top. The two uppermost trenches illustrated the Hittite period; and, as we have applied for permission to excavate this site, we confine our present notes and illustrations to the pottery found in the lower half of the mound, which is unique amongst those

which we have examined. Time has not permitted a comparison of the fabrics and decorations, but at first sight it would seem that the culture illustrated by the painted pottery from the lower part of Trench B finds resemblances in the middle levels of Arpachiyah. The pottery found in the upper part of Trench A, though not stratified, is so much more rudimentary in character, particularly in the early attempts at decoration, that it seems indubitably to belong to an earlier period than that of Trench B. It is to be noted that, as shown in the diagrams on Plate XIII, the stratification was relatively intact in Trench B below the 2-metre line, and in Trench A below 1.70 m., these depths being taken from the head of the trench in each case.

In the depths of Trench A a more primitive culture is illustrated (Pl. XIII), and, with one exception (which may be regarded as doubtful), it contains no painted fabrics. This culture seems to have affinity with the earliest levels of Sakjegeuzi, and doubtless will be traced through a wider area,¹ though it seems in several ways to be distinct from the earliest culture of the plateau. Subsequent investigations showed that this earlier culture extended beyond the confines of the Hüyük proper, and it thus lends itself to ready investigation in the coming season. As the materials are fragmentary, we limit our notes in this report to the description of the fabrics which may enable the character of the pottery to be recognised. These will be found opposite their respective Plates. Miss Seton-Williams kindly supplies the following notes upon

THE OBSIDIAN AND FLINT INDUSTRY AT MERSIN HÜYÜK

Both flint and obsidian appeared in small quantities on the surface of the mound, the obsidian being of a particularly transparent variety. No tools except a few sickle-blades of brown flint were visible on the surface.

The lowest trench in the mound, Trench A, had at its deepest point, A-320—I-30, a solitary buff chert sickle-blade, with rough denticulation upon both edges, which were slightly lustrous. The obsidian from the level above this, A-240/300 cms., had a curious clouded effect on its surface, due probably to the effects of burning, of which traces appear in the section as the white ash level. The only tools here were three fragments of blade sections some 2 cms. long, one of which was slightly

¹ Dr. Sidney Smith aptly indicates a close relation between some of the hard burnished fabrics with those of Uruk.

notched at one end, perhaps for hafting. The flaking in all cases was confined to the edge of the tool and did not cover either face. Above A-120 the soil was unstratified, and the flint flake and broken sickle-blade discovered there cannot be regarded as *in situ*.

In the next trench, B, at a depth of 300 cms., the lowest piece was found, a broken blade $4\frac{1}{2}$ cms. long. This was also notched at the bottom end, the obsidian being grey and slightly opaque. The rest of the obsidian in the trench consisted of a few unworked flakes, while the two upper trenches, C and D, contained no obsidian of any description.

From the above account two things become clear. In the first place, type tools have not been found in sufficient numbers at Mersin to make possible a satisfactory statement about the industry. Secondly, the obsidian occurred only at the base of the mound in the prehistoric levels, in association with the painted and plain wares already described. From this it may be inferred that the industry itself was an early one, but until further investigations are made, no definite conclusion as to its date and its affinities can be formed.

KAZANLI

Kazanli Hüyük, a medium-sized, isolated mound rising conspicuously from the alluvial plain between Mersin and Tarsus, about sixteen kilometres from the former, gave rich evidence, in the course of a few days' work, of a long range of Hittite cultures from 2500 B.C. (E.M. ii) down to an advanced date in the Iron Age, when it may be supposed Hittite political history closed. Graeco-Roman remains were sparse, and this fact, coupled with its distance from the sea (now about two miles), seems to preclude all possibility of identifying it with Anchiale or a later port of Tarsus, as has sometimes been surmised. Valuable materials were obtained, and these will be published in our next report.

SIRKELI

Sirkeli Hüyük, a very large site, placed in a bend of the Jeihan Sü (the Pyramus), seven kilometres from Missis in the eastern plain, comprised two main features: a high mound abutting on a rocky point, and a lower extensive terrace flanking its western side. The terrace contains four and a half metres of stratification representing

Hittite history, from an early date in the Imperial period down to the bucchero period of the Cypriote Iron Age. On the hill proper, settlement seems to have continued through the Cypriote geometric period. Possibly on the terrace itself the later element was originally present, but we have no evidence as to the origin of the terrace, which may be due to relatively modern agriculture. At its southern end the discovery of a somewhat crude stone lion suggests a late Hittite survival, while a rock carving and inscription, described by Dr. Güterbock in this report, bear witness to some special activity in the Imperial period.

Our copies of this carving were made under conditions of considerable difficulty owing to the flooded state of the river, and it may therefore be necessary to publish a revised copy; but, in the main, they may be regarded as substantially correct.¹ There is some suggestion of an emblem, possibly a winged solar disc, centred over the dagger (no. 8) and reaching as far as the signs numbered 5 and 9. At the very beginning, between 1 and the royal head, there may also be something to add, while at the very end, after number 11, the markings are indefinite, as we were unable to see them, our precarious platform not extending far enough. The reading of number 1 as a bull's head is due to Dr. Güterbock and is based upon his incomparable knowledge of the contemporary hieroglyphs of Bogazköi.

The presence of an Imperial Hittite monument south of Taurus is a welcome light upon the military and political organisation of the Hittite Imperial line. If Dr. Güterbock is right in assigning this monument to the period of Muwatalli, and all agree with him, then it would appear that, for the conquest and organisation of Syria, the Hittite kings adopted the road through this site as one of their strategic lines of communication. This road leads directly northwards by way of Feke and the defile of the Geuz Sü through Taurus to Kaisaria, so connecting directly with the Hittite capital; while to the east and south-east it leads by the pass of Bogche over Amanus and around the coast into the plains of northern Syria. The site itself indicates the most imposing Hittite city on the coastal highway, which has led through all time by way of Mersin, Tarsus, Adana, and Missis, towards the east.

We have received much help in the course of our investigations

1. Cf. Plates XVIII, XIX, and the fig. on p. 67.

from the Director of the Museum at Adana, Ali Riza Yalgan, who also secured plasticine impressions of the hieroglyphs at Sirkeli, by which our copies have been checked. It is a pleasure, also, to recall the help and unvarying courtesy extended to our expedition by all the Turkish authorities with whom we were brought into contact.

BEMERKUNGEN ZU DER HETHITISCHEN HIERO- GLYPHENINSCHRIFT VON SIRKELI

VON HANS GUSTAV GÜTERBOCK, ANKARA

1. *Identifikation der Zeichen.* Ohne weiteres klar sind die Zeichen Nr. 5-11:—

Nr. 5: 'Grosskönig';

Nr. 6: 'Gesicht' (Profil, nur die Kontur);

Nr. 7: 'Vase'; Nr. 6 und 7 bilden zusammen eine häufig belegte Gruppe;

Nr. 8: Ligatur aus einem Dreieck mit unten angesetztem kleinem Strich und 'Messer';

Nr. 9: Wieder Königszeichen, aber ohne Volute;

Nr. 10-11: Wieder 'Gesicht' und 'Vase.'

Rechts von Nr. 11 biegt die Felswand nach hinten um und war daher nicht erreichbar; daher konnte nicht festgestellt werden, ob die Inschrift sich noch weiter fortsetzt.

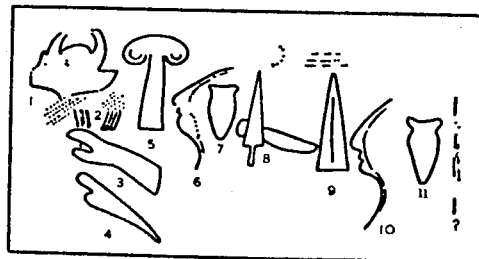
Schwieriger war die Identifikation von Nr. 1-4, und bevor wir auf diese eingehen können, müssen wir eine Deutung des eben besprochenen Teils der Inschrift versuchen.

2. *Erklärung von Nr. 5-11.* Die beiden Königszeichen Nr. 5 und 9 bilden nicht, wie man zunächst denken könnte, die sog. Aedicula; das ergibt sich nicht allein aus dem Fehlen der Volute bei Nr. 9 (sie könnte auch nur durch Verwitterung verschwunden sein) sondern vor allem daraus, dass die Gruppe 6-7 nicht in der Aedicula stehen kann, sondern stets dem Königsnamen folgt. Sie bezeichnet einen Titel oder ein ständiges Beiwort der Könige, dessen nähere Bedeutungsbestimmung noch nicht gelungen ist.¹ Die Blickrichtung von Nr. 6 und 10, die

mit der des Reliefs übereinstimmt, zeigt an, dass die Inschrift von links nach rechts zu lesen ist. Die Ligatur Nr. 8 ist auch in einer Inschrift am Karadağ¹ belegt und repräsentiert sicher einen Königsnamen. Da nun Nr. 5-7 und Nr. 9-11 übereinstimmen, muss das, was links von Nr. 5 steht, entsprechend Nr. 8 ebenfalls ein Königsname sein. Danach können wir die ganze Inschrift analysieren:—

Erster Name (Nr. 1-4), 'Grosskönig' (5), Titel (6-7), zweiter Name (8), 'König' (9), Titel (10-11).

In welchem Verhältnis die beiden Könige zueinander stehen, ist



zunächst nicht klar; am nächsten läge, dass der erste als Sohn des zweiten bezeichnet wird; dann müsste das Zeichen 'Sohn' in der, wie gesagt, unzugänglichen rechten Verlängerung der Inschrift gestanden haben. Aber das bleibt unsicher, und wir werden auf diese Frage noch zurückzukommen haben.

3. *Zu den Zeichen Nr. 1-4.* Nachdem sich aus der Analyse des klaren Teils der Inschrift ergeben hat, dass diese vier Zeichen einen Königsnamen enthalten müssen, kommt uns nun für ihre Identifikation ein 1936 in Boğazköy gefundenes Königssiegel² zu Hilfe. Dass die ersten Zeichen der Inschrift mit den vier Zeichen auf diesem Siegel übereinstimmen, fiel mir bei Betrachtung von Photographien auf, die mir Prof. Garstang freundlicherweise geschickt hatte, und bei einem gemeinsamen Besuch in Sirkeli konnte ich mich von der Richtigkeit der Identifikation überzeugen. In der obigen Zeichnung sind die Zeichen so wiedergegeben, wie ich sie am Original gesehen habe. Dass

1. Literatur bei: Bittel und Güterbock, Boğazköy (*Abhandlungen der Preussischen Akademie d. Wiss.*, 1935, Nr. 1), p. 68, n. 2.

1. Letzte Edition: Hrozný, *Archiv Orientalni*, VIII (1936), Pl. 29.

2. Veröffentlicht in *Mitteilungen der Deutschen Orient-Gesellschaft*, Nr. 75 (1937).

bei eine so stark verwitterten Inschrift die Kenntnis dessen, was dastehen muss, nicht nur eine Hilfe, sondern auch eine gewisse Gefahr bedeutet, darüber bin ich mir durchaus klar; ich glaube aber trotzdem mit gutem Gewissen sagen zu dürfen, dass die vier Zeichen so dastehen: 1: Stierkopf; 2: vier Striche, von denen je zwei parallel sind, die beiden Paare aber nach unten zusammenlaufen; 3: Unterarm mit Hand; 4: Messer.

4. Zur Interpretation der ganzen Inschrift. Obwohl alle Zeichen klar und beide Königsnamen auch sonst belegt sind, bereitet die Inschrift doch Schwierigkeiten. Für den ersten Namen habe ich auf Grund der Siegel aus Boğazköy die Lesung Muvatalli vermutet, ohne sie jedoch beweisen zu können; und bei Nr. 8 ist die Frage offen, ob die beiden Zeichen in Ligatur dasselbe bedeuten, wie untereinander stehend. Untereinander geschrieben stehen sie für Urḫi-Tešup.¹ Wenn man einmal versuchsweise annimmt, dass Nr. 1-4 Muvatalli und Nr. 8 Urḫi-Tešup heisst, dann kann der erste König nicht als Sohn des zweiten bezeichnet werden (Muvatalli war der Vater des Urḫi-Tešup I); in diesem Falle wäre also *nicht* am Ende der Inschrift 'Sohn' zu ergänzen, sondern die beiden Namen ständen nebeneinander, ähnlich wie auf den Siegeln aus Boğazköy, und man müsste wie dort annehmen, dass Muvatalli als Grosskönig und Urḫi-Tešup als Mitregent nebeneinander genannt wären.² Da in dem Relief nur eine Person dargestellt ist, wäre das immerhin auffällig. Hält man dagegen daran fest, dass die Inschrift nach dem Schema 'X, Sohn des Y' gebaut ist, dann wäre die Ligatur Nr. 8 das bisher unbekannte Zeichen für Muršili—vorausgesetzt wiederum, dass die Gleichsetzung von Nr. 1-4 mit Muvatalli stimmt!— Denkbar wäre endlich auch die folgende Auffassung: 'Dem Muvatalli, dem Grosskönig (hat) X, der Unterkönig (dies geweiht).'

Aber genug von solchen Spekulationen über eine Gleichung mit zu vielen Unbekannten! Begnügen wir uns mit der Feststellung, dass das Relief von Sirkeli, das schon nach seinem Stil in die Zeit des Grossreichs gehört, einen König nennt, der auch auf den Siegeln von Boğazköy vorkommt und dass dieser König mit einiger Wahrscheinlichkeit Muvatalli ist. Eine Antwort auf die offenen Fragen kann nur von neuem Material erwartet werden.

1. Vgl. Bittel und Güterbock, *l.c.*, pp. 64 f.
2. Vgl. *Mitt. d. Deutsch. Orient-Ges.*, 75 (1937).

STUDIES IN THE LATER HISTORY OF NUBIA

By L. P. KIRWAN, B.Litt., F.S.A.

I

THE BLEMMYES OR BEJA

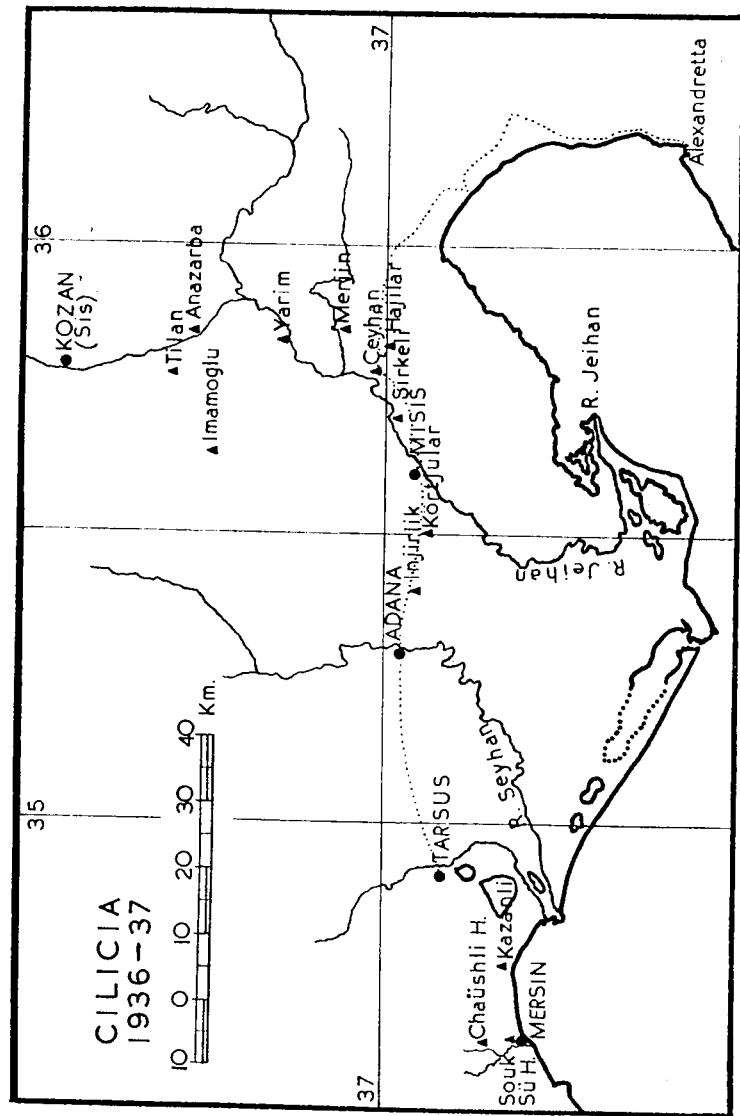
THE passages from the classical historians and geographers which mention the Blemmyes¹ leave little doubt as to the nomadic characteristics of these tribes who were scattered over the Eastern Desert between Egypt, Abyssinia, and the Red Sea. Now this is precisely the area occupied at the present day by the collection of nomad peoples grouped under the general name, Beja. In the light of such a superficial resemblance, the probable identity of the Blemmyes with the Beja has more than once been suggested by modern writers, but hitherto no very specific proof has been put forward. Yet it appears that at least as early as the sixth century A.D. the identity of the Blemmyes with a people called the Beja was recognised by travellers and scholars.

Cosmas 'Indicopleustes,' an Egyptian merchant, has left in his *Χριστιανική Τοπογραφία*, composed at least as early as A.D. 535 and probably not later than A.D. 547, an account of the history, topography, and antiquities of the countries he visited in the course of his trade.² Among these was the Kingdom of Axūm. At Adūlis he discovered a white marble base or pedestal of a throne, inscribed on the back with a Greek text.³ This he copied, but according to the copy of Cosmas, the first part of this inscription was in the third person while the second part was in the first person. It was not, indeed, until Henry Salt

1. See Sethe in Pauly-Wissowa, *Real-Encyclopädie*, under Blemmyes; Woolley and MacIver, *Karanog Cemetery*, Appendix I; Bréhier in *Dict. d'hist. et de géograph. ecclési.*, XLIV-L (Paris, 1935), 183-5.

2. Trans. McCrindle, Hakluyt Soc., 1897; the best edition of the Greek text is that of E. O. Winstedt, Cambridge, 1909. 547 is the probable date of the last recension made by Cosmas. See McCrindle, Introduction, xi.

3. Littmann, *Deutsche Aksum Expedition*, Bd. I, 42; Dittenberger, *Orientalis Inscriptiones*, I, 284. Littmann (*op. cit.*, 43) dates the inscription to the first half of the first century A.D.



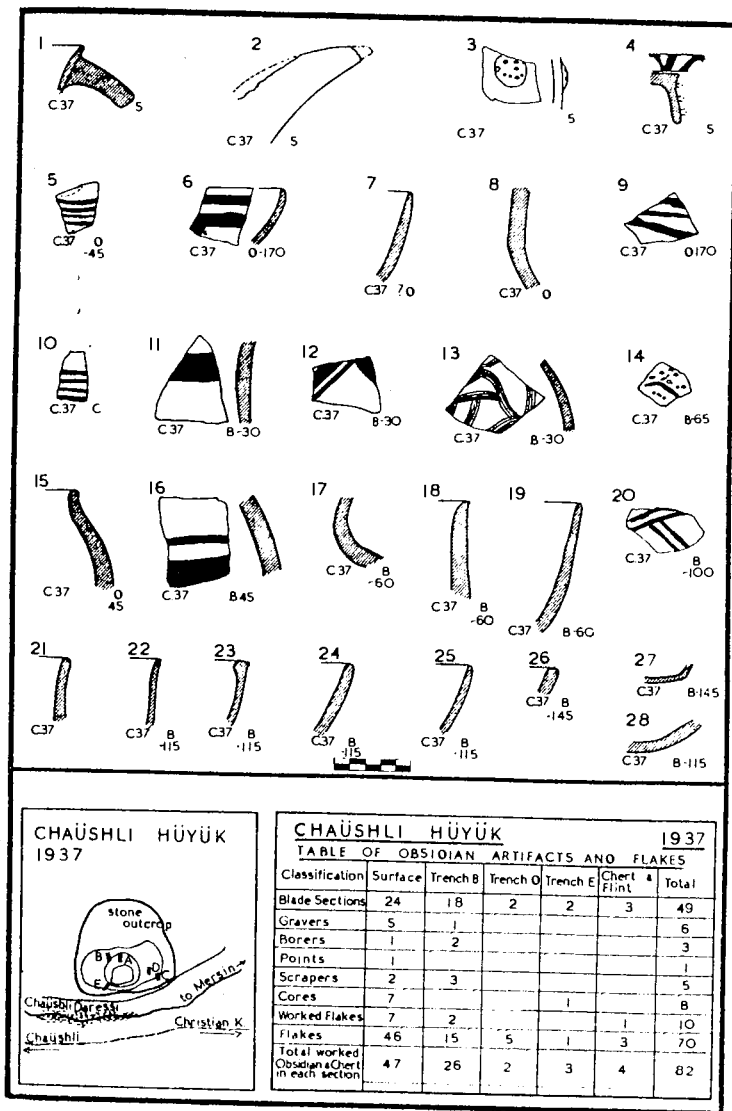
CILICIA, 1936-37.
AREA EXPLORED BY THE NEILSON EXPEDITION.

CHAÜSHLI, 1937.

DESCRIPTION OF FRAGMENTS ON PLATE XII.

1. Bricky clay ; roughish. S.
2. Brick ware. S.
3. Buff ware. S.
4. Buff ; dark red paint. S.
5. Yellow almost gritless. D. 45.
6. Yellow gritless ; smooth yellow surface ; black paint. D. 170.
7. Grey gritless ; grey surface ; bnd. ext. D. 160.
8. Rough ware ; gets thin towards the bottom. D. 170.
9. Grey fine grits ; buff surface ; dull int. ; smooth ext. D. 170.
10. Warm buff ; dark brown paint. B. 30.
11. Almost gritless ; rough holey int. ; yellow wet-sm. ext. ; dark red paint. B. 30.
12. Buff gritless ; rough int. ; yellow slip bnd. ext. ; dark red paint ; tiny holes. B. 30.
13. Dark grey, some grits ; slip-sm. ; baked brick red ; incised lines. B. 30.
14. Dark, rough ; punctuated ; and incised. B. 65.
15. Black, red surface ; gritty ; bnd. int. and ext. ; h.m. ; uneven. D. 45.
16. Grey, some small grits ; rough pinky int. ; yellow slip, dark chocolate paint ext. B. 45.
17. Black ; half sm. int. ; cream yellow slip bnd. ext. ; h.m. B. 60.
18. Black, gritty ; reddened surface ; pinky cream wet-sm. ext. B. 60.
19. Black ; dull bnd. ; h.m. B. 60.
20. Buff, gritless, tiny holes ; yellow slip surface ; very dark red paint. B. 100.
21. Black, grits ; washed on both surfaces ; bnd. ext. but encrusted. B. 100.
22. Black, almost gritless ; black at top getting brown lower down. B. 115.
23. Brown with grits ; dull black surface int. and ext. B. 115.
24. Black, grits and straws ; softer to surface ; black int. ; creamy yellow bnd. ext. B. 115.
25. Black ; red brown slip ; bnd. int. and ext. ; patch of dark brown. B. 115.
26. Yellow, gritty, with straws. B. 145.
27. Black ; bnd. int. and ext. B. 145.
28. Brown gritty ; black and brown int. ; black bnd. ext. B. 115.

For convenience, the depths below local datum indicated at the bottom right of the fragments in this and the following Plates have been averaged from a range rarely exceeding half a metre.



CHAÜSHLI HÜYÜK, 1937.
SELECTED POTSDHERDS, SKETCH PLAN AND CHART OF ARTIFACTS.

MERSIN, 1937.

TRENCH A. -350 TO -220 CMS.

DESCRIPTION OF FRAGMENTS ON PLATE XIII.

1. Grey, gritty; sandy yellow int. and ext.; red paint. A. 220.
2. Grey, gritless; lighter on surfaces; black slip bnd. int. and ext. A. 220.
3. Dark brown, almost gritless; brown black band.; uneven. A. 220.
4. Brown-grey, some grits; grey int.; brown ext.; red slip bnd.; uneven. A. 220.
5. Buff gritty; warm yellow surface; few vert. incisions on shoulder. A. 220.
6. Brown gritty; baked brick red int. and ext.; both surfaces wet-sm. A. 220.
7. Brown; black slip bnd. int. and ext.; incised ext. A. 220.
8. Dark grey, fine white grits; dark grey slip ext.; hard baked. A. 350.
9. Brown, fine grits; dark surface int. and ext. A. 350.
10. Brown, small grits; dark brown slip bnd. int. and ext.; streaky. A. 350.
11. Yellow grey; yellow grey bnd. int.; black slip bnd. ext. A. 350.
12. Brown grey; black slip bnd. int. and ext. A. 350.
13. Dark brown, gritty; wet-sm.; pinky int.; black brown ext. A. 350.
14. Brown black, very small grits; brown slip int. and ext. A. 350.
15. Grey, grits; wet-sm.; pinky buff surface. A. 350.
16. Dark drab gritty; pinky red surface. A. 350.
17. Grey, gritty, baked reddish; dull pinky drab slip int. and ext. A. 320.
18. Dark, some grits; irregular varying outline. A. 350.
19. Pink-red, baked reddish; warm yellow surface; rough finish. A. 350.
20. Grey, small grits; rough int.; yellow brown slip bnd. ext. A. 350.
21. Grey brown, gritty; pinky surface; wet-sm.; dark red int.; uneven. A. 350.

[The sequence reads from the bottom upwards throughout the successive plates. Thus, A-350 represents the lowest level and B-30 the highest level in trenches A and B.]

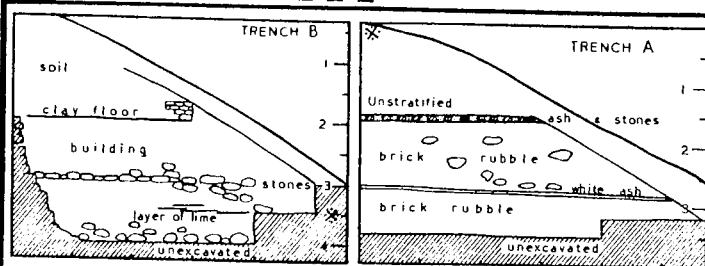
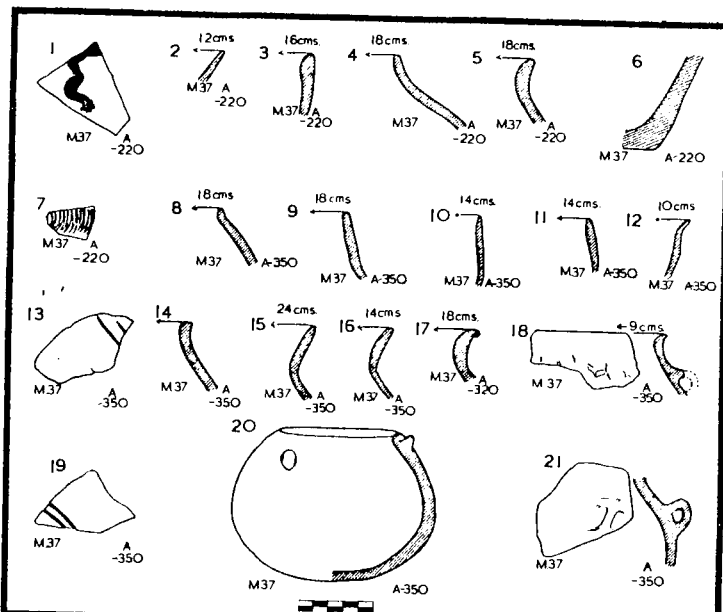


CHART OF OBSIDIAN AND CHERT ARTIFACTS AND FLAKES									
MERSIN HUYUK January 1937	Obsidian			Obsidian			Chert		
	Blade Sections	Sickle Blades	Worked Flakes	Cores	Flakes	Total Worked	Sickle Blades	Worked Flakes	Total Worked
Surface					10	3	1		1
B. 130-200				3	4	1		2	1
B. 230-320		1	1		7	2	1		1
A-120					2	1		1	1
A-200	2				2	2			
A. 240-300	4				4	4			
A-350							1		1
Total	6	1	1	3	27	11	4	3	4

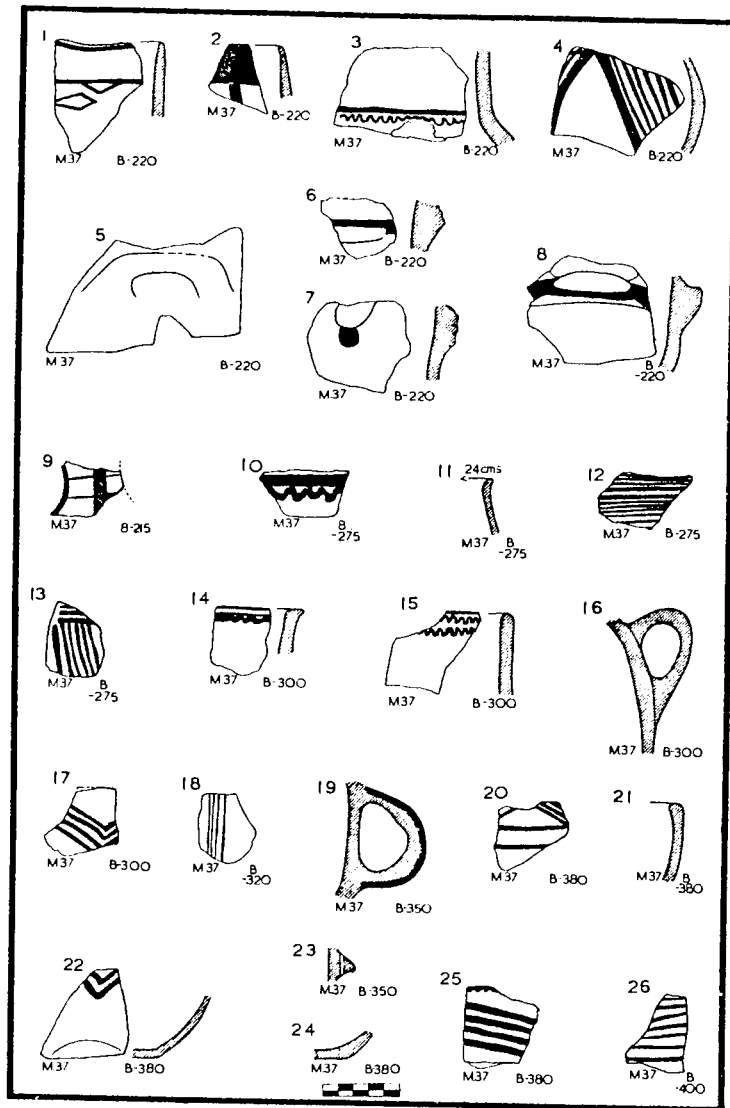
MERSIN, 1937. SOUK SÜ HUYÜK.
SHERDS FROM LOWEST LEVELS AND DIAGRAMS. THE ASTERISK IN SECTION OF TRENCH B
MAY BE EQUATED APPROXIMATELY WITH THAT IN SECTION OF TRENCH A.

MERSIN, 1937.

TRENCH B. -400 TO -220 CMS.

DESCRIPTION OF FRAGMENTS ON PLATE XV.

1. Red brown, gritty; wet-sm. int. and ext.; black paint ext. B. 220.
2. Grey-yellow, small grits; band pink-red slip bnd. int.; lt. red band ext. with red brown paint. B. 220.
3. Coarse, gritty; yellow int.; white slip bnd. black paint ext. B. 220.
4. close yellow, gritty; white slip int. and ext.; black paint ext. B. 220.
5. Brown red, large white grits; lt. brown wet-sm. int.; and ext.; h.m. B. 220.
6. Dark grey, gritty; yellow int.; yellow white slip ext.; black paint. B. 220.
7. Brown gritty; yellow buff sm. int.; buff slip bnd. ext.; black paint; h.m. B. 220.
8. Biscuit, grey large grits; brownish yellow int.; white slip bnd. ext.; worn; black paint. B. 220.
9. Dark grey; white slip bnd. brown paint with bands of red and black. B. 215.
10. Yellow, gritty; yellow-sm. int.; white slip bnd. with black paint ext. B. 275.
11. Grey, small grits; bnd. int.; black slip bnd. ext. B. 275.
12. Yellow gritty; yellow sm. surfaces; red paint ext.; h.m. B. 275.
13. Pinky grey large grits; white slip with black paint ext. B. 275.
14. Yellow gritty; lt. yellow int.; buff slip bnd. ext. with black paint; h.m. B. 300.
15. Pinky yellow; yellow slip bnd. int. and ext.; matt black paint. B. 300.
16. Brown gritty; red brown int.; brown and black bnd.; unevenly fired. B. 300.
17. Pinky red; roughly washed int.; yellow slip bnd.; black paint bnd. ext. B. 300.
18. Brown grey, gritless; lt. yellow int.; dark brown slip bnd. ext. red paint; h.m. B. 320.
19. Red brown, large grits; brown buff slip bnd. int. and ext.; black paint. B. 350.
20. Warm grey gritless; lt. grey sm. int.; grey slip bnd. black paint ext.; h.m. B. 350.
21. Grey, white grits; grey unsm. int. and ext.; h.m. B. 350.
22. Dark grey, gritless; buff with red bnd. paint ext. B. 380.
23. Grey, white grits; brown bnd. int. and ext.; h.m. B. 350.
24. Yellow, gritless; yellow int.; pink sm. ext.; h.m. B. 380.
25. Coarse grits; whitish yellow int.; yellow white slip ext.; black paint. B. 380.
26. Pink, gritty, thin; pink red with red paint ext. B. 400.



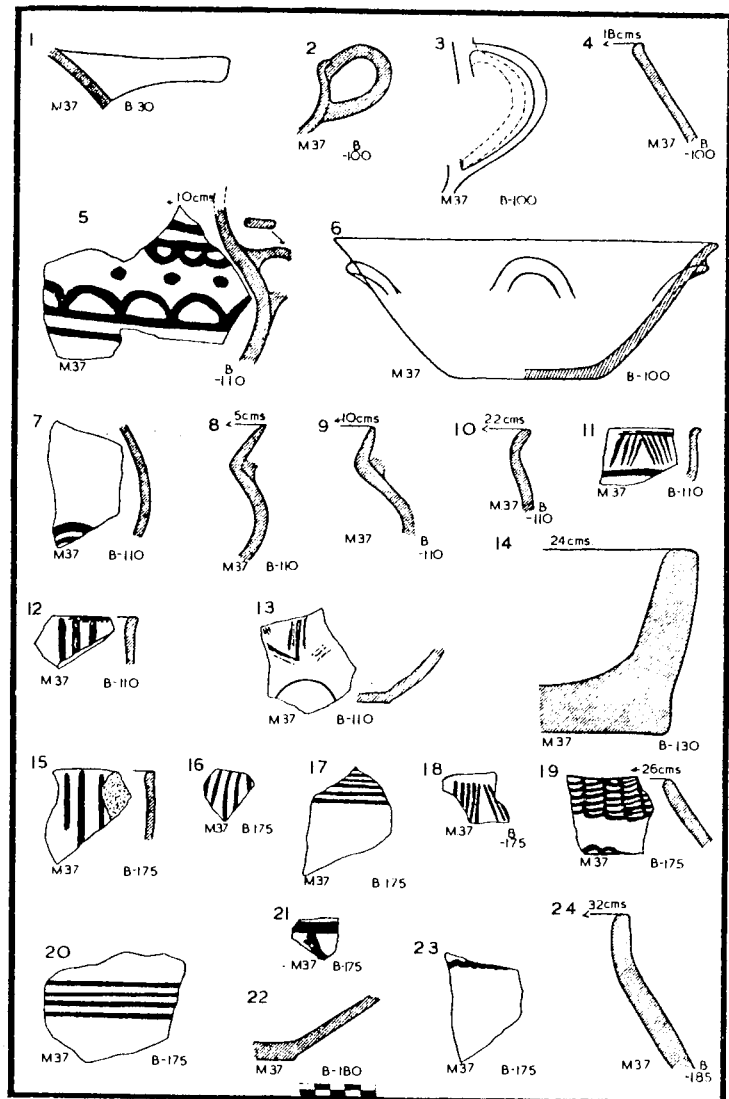
MERSIN, 1937, SOUK SÜ HÜYÜK.
SHERDS FROM THE LOWEST LEVELS OF CUTTING B.

MERSIN, 1937.

TRENCH B. -185 TO -30 CMS.

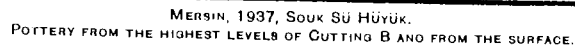
DESCRIPTION OF FRAGMENTS ON PLATE XVI.

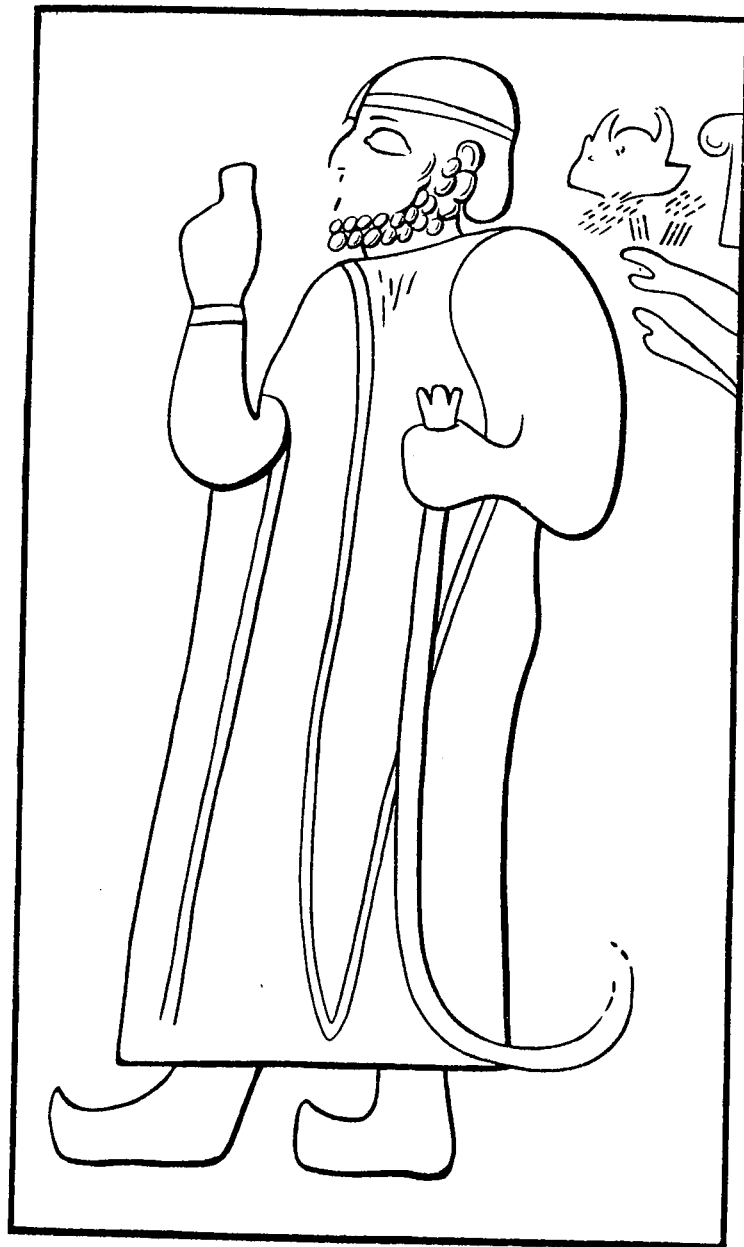
1. Dark grey, gritty; brown fairly sm. int. and ext.; wh.m. B. 30.
2. Yellow gritless; yellow int.; brown slip bnd. ext. B. 100.
3. Yellow brown, large grits; unsm. int.; buff bnd. ext. B. 100.
4. Lt. yellow, large grits; yellow rough int.; buff bnd. ext.; h.m. B. 100.
5. Dark gritty, baked brown; brown rough int.; matt ext.; very dark red. B. 110.
6. Warm brown grey with grits; black bnd. int. and ext.; 4 lunate handles. B. 100.
7. Brown, fine grits; yellow slip bnd. ext.; black painted dec. B. 110.
8. Dark grey-yellow, small grits; sandy yellow unsm. surfaces. B. 110.
9. Yellow brown, fine grits; yellow wet-sm.; faint traces dull red paint. B. 110.
10. Dark red, grey grits; red brown fairly sm. surfaces; wh.m. B. 110.
11. Buff gritty; buff int.; white slip bnd. ext. with black paint. B. 110.
12. Red small grits; yellow wet-sm. int.; red-sm. ext.; black-red lines. B. 110.
13. Brown gritty; red brown surfaces unsm.; traces black paint; ? wh.m. B. 110.
14. Yellow pink, almost unbaked; large straw holes; rough buff un-sm.; h.m. B. 130.
15. Red brown large grits; buff bnd. int.; red bnd. ext.; black paint. B. 175.
16. Dark yellow, large grits; rough int.; yellow-white slip bnd. with dark red paint ext.; h.m. B. 175.
17. Yellow gritty; grey int.; white slip, dark red paint ext. B. 175.
18. Pinky large grits; wet-sm. int.; lt. brown bnd. ext.; dark brown paint. B. 175.
19. Reddish, gritty; rough int.; white yellow slip ext. B. 175.
20. Yellow gritless; yellow int.; yellow-white slip ext. with black bnd. paint. B. 180.
21. Lt. brown large grits; rough int.; lt. brown hard bnd. slip ext. B. 175.
22. Yellow-brown, few grits; yellow sm. int.; white slip bnd. ext. B. 185.
23. Brown red, white grits; wet-sm. int. and ext. B. 185.



MERSIN, 1937. SOUK SÜ HÜYÜK.
POTTERY FRAGMENTS FROM THE UPPER LEVELS OF CUTTING B.

1. S.
2. Brown gritless ; black painted int. ; brown with black lines ext. S.
3. Buff, few grits ; yellow buff bnd. int. and ext. ; brown matt paint ; wh.m. S.
4. Pinky yellow, white grits ; pink rough int. ; white slip dark brown paint ext. S.
5. Yellow gritless ; bnd. int. and ext. ; brown lustrous paint. S.
6. Buff, white grits ; yellow sm. int. ; white slip bnd. with red paint ext. S.
7. Red brown ; lt. buff int. ; grey slip bnd. ext. S.
8. Grey gritty ; grey int. ; grey bnd. ext. ; weathered, punctuations filled white. S.
9. Buff gritless ; buff sm. int. and ext. ; one red three brown lines matt paint ; wh.m. S.
10. Drab gritty ; black paint, irregularly drawn. S.
11. Brown, grey grits ; buff wet-sm. int. ; white slip, red brown paint ext. B. 60.
12. Brown gritty ; yellow slip wearing off ; h.m. B. 75.
13. Purple red, dark grits ; half sm. buff int. and ext. ; wh.m. B. 75.
14. Red fine grits ; yellow-red sm. surface ; perhaps bnd. dull red paint. B. 80.
15. Pinky yellow, small grits ; surfaces same ; dark red purple paint. B. 75.
16. Grey, baked red ; small grits ; yellow slip int. and ext. ; dark red to black paint ext. ; wh.m. B. 75.
17. Fine pinky yellow ; yellow surface ; wet-sm. ; dull red paint. B. 75.
18. Dark grey ; dark grey slip bnd. int. and ext. ; h.m. B. 75.
19. Pinky yellow, fine grits ; red int. and on rim ; buff slip-sm. ext. B. 75.
20. Grey yellow ; slip bnd. same ; dark red paint. B. 75.
21. Red brown with grits ; half-sm.
22. Brown gritty ; yellow slip dull int. and ext. ; dark red-black paint. B. 75.





SIRKELI, 1936.
IMPERIAL HITTITE RELIEF ON A ROCK FACING THE PYRAMUS. HT. 173 CMS.



SIRKELI, CILICIA: IMPERIAL HITTITE RELIEF.