Syria

Report on two sondages on the coast of Syria, south of Tartous "

Robert J. Braidwood

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PAR

ROBERT J. BRAIDWOOD

Between June 14th and July 8th of 1938, the Syrian Expedition of the Oriental Institute of the University of Chicago made two sondages on the Syrian coast south of Tartous. For some time, there has been speculation as to the position of the site of the ancient Simyra. M. Maurice Dunand was convinced that the remains of Simyra would be found in either one of two tells near the village of Manṭar, some 45 kms. north of Tripoli. At one time, M. Dunand had even proposed to dig at these sites himself, but in the spring of 1938, being now committed to a long program at Sidon, he most generously took us to inspect the sites, and waived his claims in our favor[1]. He visited our camp several times during the course of the sondages, and his suggestions and encouragement were highly valued. That the results of the sondages, while gratifying in other ways, still allow no definite statement as to the actual site of ancient Simyra, was as disappointing to M. Dunand as it was to us.

Tabbat al-Hammām with its environs was the site of the first of the sondages (plate XX, 1). The tell lies about one kilometer southwest of the center of the village of Manṭar, which is 45 kms. north of Tripoli on the main

[1] We are indebted to M. and Mme Dunand for more than this—when the po.itical situation n the Sandjak d'Alexandrette made it impossible for us to bring much in the way of equipment, the Dunands kindly supplied anything we required. President and Mrs. Bayard Dodge of the American University of Beirut also gave much appreciated aid, and we received the familiar full-hearted cooperation of the Service des Antiquités. We were aslo shown every kindness by the Captain of the Services Spéciaux and by the staff of the Banque de Syrie, in Tartous. In Chicago, I had the benefit of the cooperation of the staff of the Oriental Institute, especially from Prof. Olmstead, and Drs. Bowman, Gelb, and McEwan. The drawings were prepared by Mr. Harold Hill.

Tripoli-Latakia road (see fig. 1). The tell is easily visible from the road just before one reaches Manṭar village.

Tell Simiriyān, the second site, lies some four kilometers east of Manṭar, and one kilometer beyond it is a village, Simiriyān, from which it may take its name[1]. This tell may also be seen from the main road near Manṭar, since the trees on its slopes are so easily visible[2].

The operations about Tabbat al-Hammām proved that a complete excavation of this site would not be without its difficulties. In the first place, there are indications of occupation over a much larger area than that covered by the tell itself. Part of this area is now covered by Manṭar village, and probably more by the dunes north and northeast of the tell. Even if excavations were restricted to the tell, there would be much unprofitable time spent in moving the great accumulation of dune sand which has been blown on to the top and on the side and landward slopes of the tell. In four different areas, five meter squares were put down into the top of the mound, and these had to be discontinued at a depth of four meters with no result but pure sand, which blew and drifted in almost faster than the workmen could shovel it out. No doubt the tell does have a large core of ancient debris, but with limited time and equipment at our disposal, we finally had to restrict ourselves to the west or seaward slope of the mound where the brisk action of the wind has allowed little sand to be deposited. Several trenches which were put down just beyond the easternmost slopes of the tell were successful, as the dune action has not reached that far, but this area is on the level of the surrounding plain, and not part of the mound proper.

Reference to the map of Tabbat al-Hammām and its environs (fig. 1).

[1] Or did the tell give its name to the village ? See next note.

[2] For the location of these two sites, see especially the maps published by the Service géographique de l'armée (Beyrouth), Carte générale du Levant — 1 : 50.000, Flle NI-36-XVIII-4b, " Hamidieh "; Flle NI-37-XIII-3*a* " Halba ". On this map the village, Manṭar, is not named, it is shown rather by " Ain al-Zarqā ", a spring near by. " Simeriane " evidently refers to the village of that name, not to the tell, which is marked " Cheikh Ali (qḅa) ". The villagers refer to it as Tell Simiriyān however. Both Manṭar (spelled " Muntara ") and Simiriyān (spelled " Semriyān ") appear on the map published by the Geographical Section of the British General Staff, No. 2321, Asia 1 : 250.000, Syria, Tripoli, 1925. On smaller scale maps usually only the larger village of Hamidieh, some five kms south of Manṭar is given.

1. A portion of Tabbat al-Hammam,
from the sea leg of the breakwater.

2. Tell Simiriyan, from the southwest.

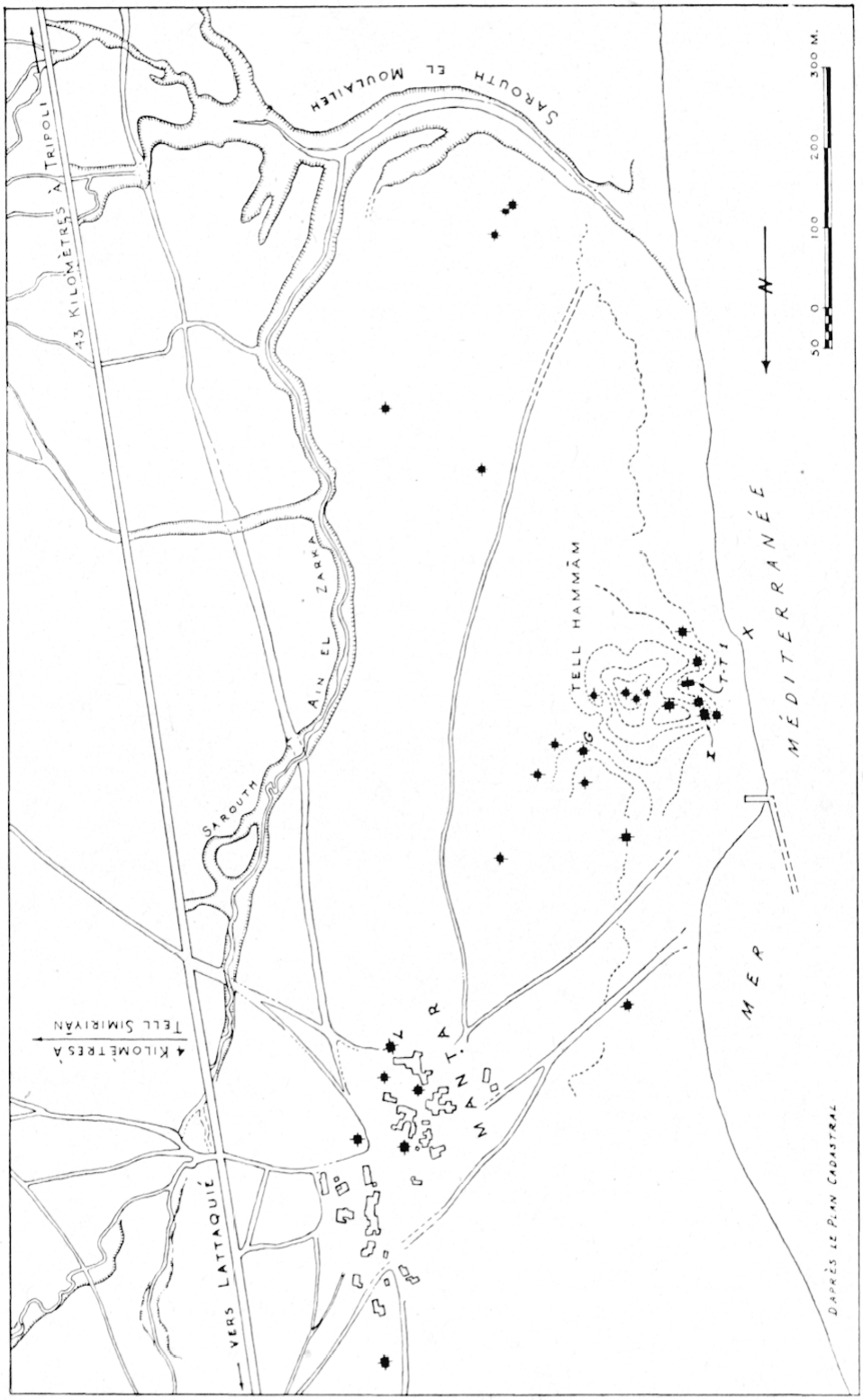


FIG. 1. — Map of Tabbat al-Hammâm and environs.

will show that twenty-nine different test squares were made in this area. The material results from these squares may be conveniently divided into seven parts however, four parts pertaining to the environs and three to the tell proper, since the material from the various squares in each of these parts is uniform for all practical purposes. Hence the material will be described as coming from some one of the parts or areas investigated, and only in one or two cases as from individual squares. The seven areas are : 1. the village of Mantar, 2. the dunes north of the tell, 3. the plain northeast and east of the tell, 4. a cemetery some 1.5 km. southeast of the tell, 5. the east slope of the tell, 6. the center of the tell, and 7. the west slope of the tell (See chronological chart, fig. 22).

Other than sand, there were no real inconveniences to excavation, except in the area of the village, where modern buildings stand. Also, with the exception of the village and some of the plain east of the tell, the whole area is on public land, and none of the usual complications with landowners was experienced. But the great amount of loose sand is certainly a discouraging factor. It is difficult to say just how much is tell, and how much dune, but there must be a mound of ancient debris at least 150 m. in diameter and 12 m. high.

Tell Simiriyān has the familiar contours of almost any Syrian mound (see pl. XX, 2). It is elliptical in plan, with its longer axis (north-south) about 200 m., and its shorter axis (east-west) about 150 m. Seven fine large oaks grow on the mound, and the top is covered by an Arab cemetery, including the tomb of a sheik of some local repute which makes the place a semi-sacred spot. The sondages on Simiriyān lasted only three and one half days, due to the avarice of one of the landowners, who became difficult when the workmen told him of the finding of the bronze figurine (plate XXVI) which they, of course, took for gold. The head landowner was a reasonable man, however, and it would probably have been possible to patch matters up, but we had found enough pot sherds in the course of the short time to establish the range of periods contained in the mound, and, as a long operation was impossible in any case, the matter was allowed to drop.

Five square cuts were put into Tell Simiriyān, four in a line up the southwest slope (see fig. 16) and one at the top of the west slope. This last

square, on the west slope (number V), yielded exactly the same material as that from square IV, at the top of the southwest slope. It does not appear on the section (fig. 16) because it is for all practical purposes equal to square IV.

The reader must be reminded that the sondages at both Tabbat al-Hammām and Tell Simiriyān were for exploratory purposes only—meant to discover what periods were contained in each of the two mounds, and if luck would have it (which it did not), to find some architectural indication in the way of palace or temple to show what the character of the sites may have been in ancient times. In no case is a series of pottery or objects large enough to warrant any new or far-reaching conclusions, and the writer will restrict himself mainly to presenting the material recovered with enough reference to its known relationships so that the chronology will be seen to hold [1].

The periods and their contents at Tabbat al-Hammām [2].

1. *Byzantine.* Surface finds of the Byzantine period seem indicated for the area roughly covered by the village of Manṭar. The villagers showed us numbers of coins, and fragments of mosaic pavement with large tesserae. In the ditch by the side of the main road, to the northeast of Manṭar, fragments of such a mosaic appear *in situ.* None of our squares in the village produced Byzantine architecture, but fragments of building tile, and of pottery appeared (fig. 2, numbers 3 and 6). No Byzantine occupation is indicated for the tell.

2. *Roman.* Surface finds and sherds from the mixed debris of the first meter in the squares in the Manṭar village area show also some Roman occupation. There were also a few sherds from the dunes north of the tell, but

[1] A slightly longer discussion is given of the early material from the base of TT-1, on Tabbat al-Hammām, see below, as this material is enough out of the ordinary to require some special attention. Even in doing this, I am somewhat embarrassed, as the total bulk of sherds from the floor in question was under half a cubic meter — not, in my opinion, a foolproof series.

[2] Since F. O. Waage of the Princeton Expedition at Antioch has agreed to study and publish the four latest periods subsequently, I treat them only superficially here, and leave the definitive treatment to his much more competent hands.

in no place was architecture encountered. However, the remains of a cemetery, in the rocky area 1.5 km. southeast of the tell, gave ample indication of a Roman occupation somewhere near this area. Several roughly cut pits into the rock were cleaned, but all seemed to have been rifled, as the articles remaining were strewn about in complete disorder, many of the pots and bottles having been broken, and the bones scattered. Four typical lamps

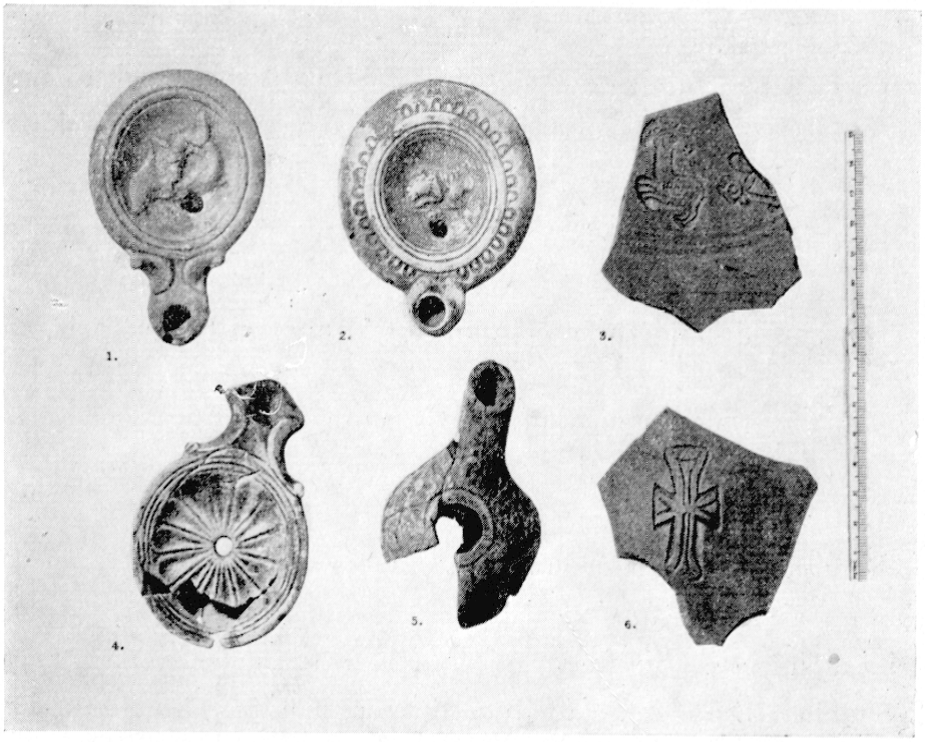
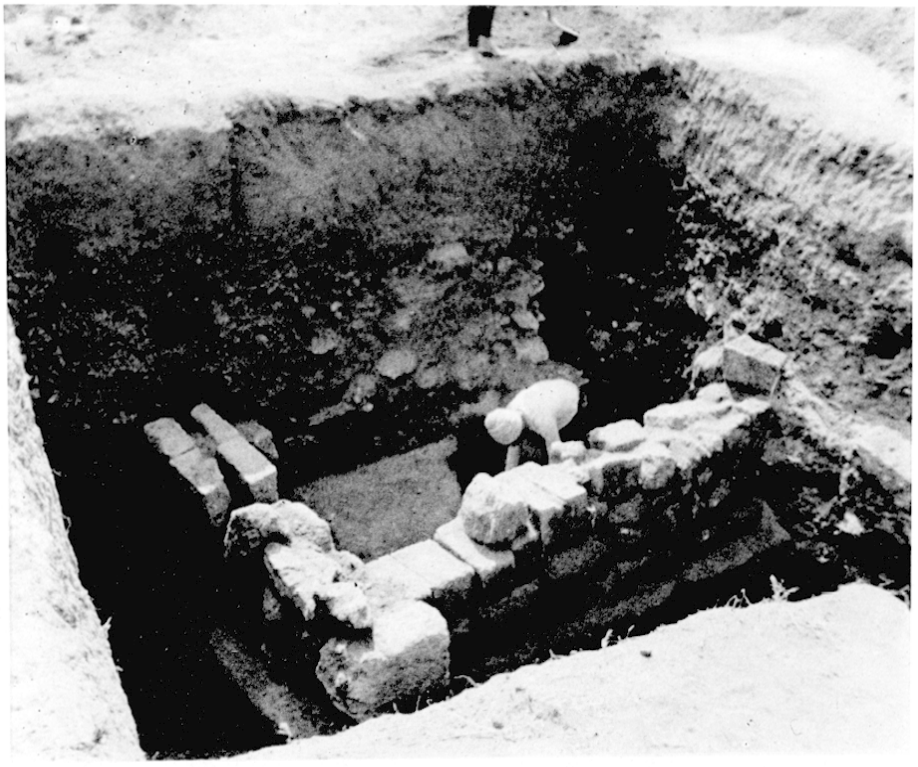


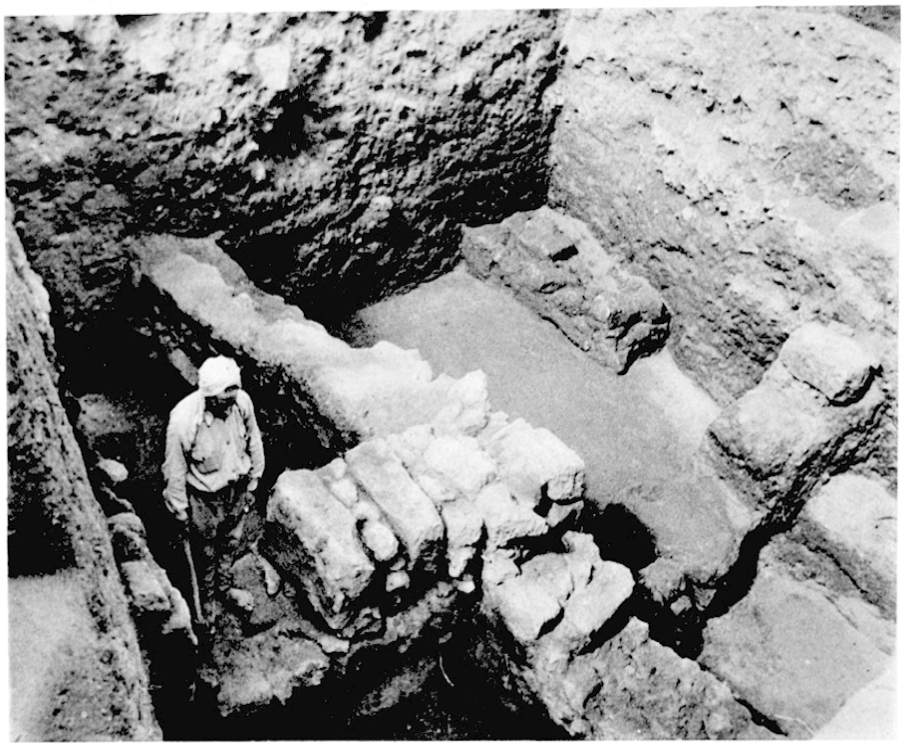
FIG. 2. — Byzantine (3, 6) and Roman (1, 2, 4, 5) pottery.

from these tombs are shown (fig. 2, numbers 1, 2, 4 and 5), one (number 5), probably being earlier than the rest. Except for a few stray sherds, there was no indication of a Roman occupation on the tell.

3. *Hellenistic.* The sondages would seem to show that the Hellenistic occupation was spread over the greatest area of all the periods represented at Tabbat al-Hammām and its surroundings. Potsherds (fig. 3, numbers 3, 6 and 9) and some whole pots of Hellenistic type appeared in the squares on the tell, at Manṭar village, on the dunes north of the tell, a few from the plain northeast of the tell, and quite a number of Hellenistic sherds was found on



1. Architecture of the late Hellenic period in square G.



2. Architecture of the Syro-Phoenician period,
square X, floors 3 and 4.

the surface in the cemetery area. In no place, however, did we find architectural remains *in situ* to be associated with the Hellenistic sherds. In the dunes north of the tell, was a number of roof tile, but no walls appeared, and at the top of the west slope of the tell was found a considerable number of dressed limestone building stones, scattered about in the surface layer of sand, and in no architectural context. The people of Mantar say that up to the

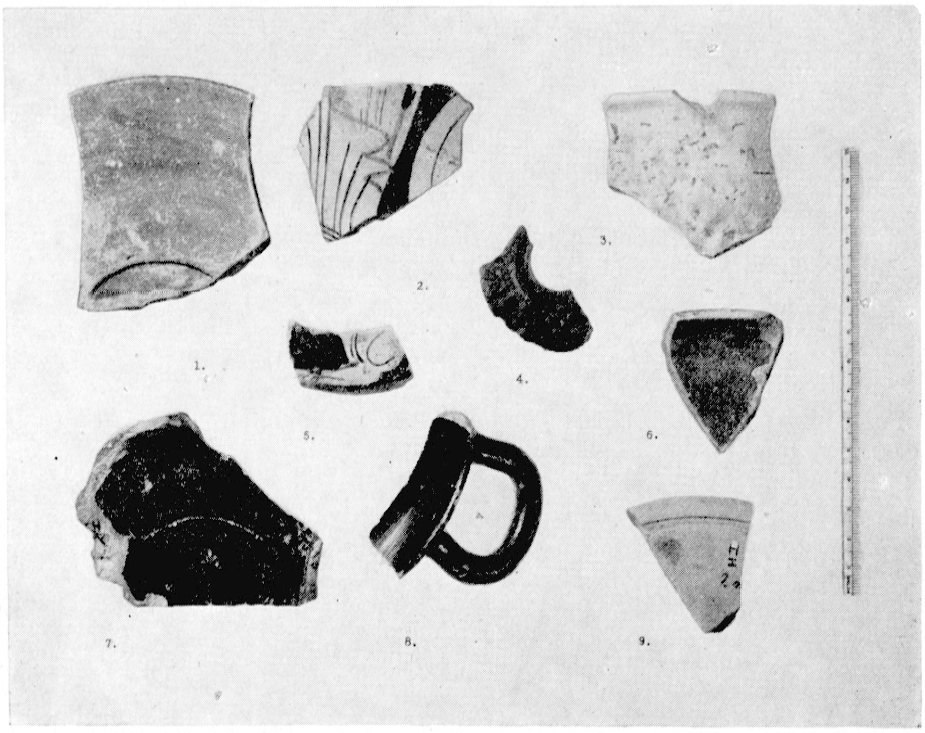


FIG. 3. — Hellenistic (3, 6, 9) and late Hellenic (1, 2, 4, 5, 7, 8) pottery.

War of 1914, the tell served as a source of building stone, which was even carried off in boats to Rouad. Since these stones must belong to the uppermost occupation of the tell, and since no considerable occupation of later than Hellenistic times is apparent in the pottery, it is presumed that there must have been Hellenistic buildings on the mound.

4. *Syro-Hellenic.* This period is the first for which substantial architectural remains were indicated. While fragments of walls were encountered on the west slope of the mound in square X and in TT-1, the square G (see pl. XXI, 1), in the plain east of the tell gave the best preserved architectural

remains. While the whole building was not cleared, two rectangular adjoining rooms, each with an area of at least 10 square meters, were indicated. The walls were built of a combination of ashlar and rubble units, the ashlar evidently being used to reinforce corners and possibly to build piers in the middle of a run of wall, while the remaining parts were filled in with rubble [1]. Only 35 cm. of wall remained above the packed dirt floor, and it is impossible to say how high the ashlar units went originally. Few stones were found in the debris in the rooms, but they probably attracted the eye of later builders and so may have been carried off. No evidence of either *libn*, or of the means of roofing was found.

The typical pottery from this stratum (fig. 3, numbers 1, 2, 4, 5, 7 and 8) appeared in some quantity, and practically half of the sherd sortings were imported pieces from the islands or Greece. The local wares were essentially the same as those found by Sir Leonard Woolley at al-Mina [2] in his level III. One sherd (fig. 3, number 1) shows an example of the red slipped local ware which is so characteristic of the earlier Iron Age in both Syria and Palestine (see below). Had these pieces appeared only on the tell, the writer would have considered them extrusive from the earlier Iron Age levels, but in Square G, where the Syro-Hellenic period rests on bed rock, and where a fair number of the red wares of a late, carelessly slipped, and unburnished variety appears, one is bound to wonder if this red series really lasted as late as the 5th-4th century B. C.

The period is represented by material from the tell, and from the plain just east and northeast of the tell (where square G lies), but did not appear elsewhere.

[1] The architecture in square G, while possibly following the recognized ashlar pier and rubble-fill type of construction, is by no means so clear an example as that published by Hamilton from a contemporaneous period at Tell Abu Hawām, see *Q. D. A. P.*, vol. III, p. 78 (Jerusalem, 1934), and also vol. IV, plate II, fig. 1. While the walls at Tell Abu Hawām make use of relatively little ashlar, which is always built into a single pier, our walls in square G show that almost half of the masonry (at the base of the wall at least) is ashlar with several units running together either parallel or across the axis of the wall, which seems not to have been the case at Tell Abu Hawām.

[2] See his article, *Journal Hellenic Studies*, vol. LVIII (1938), part I, where a superficial description of the pottery of level III is given.

5. *Early Iron Age* (*Phœnician*). The material from this period comes only from the squares on the west slope of the tell, and seems to represent a late phase of Early Iron Age culture. While some fragments of walls were found in TT-1, the best evidences of the architecture of the period was found in square X (see pl. XXI, 2). In this square, the third floor encountered showed parts of two rooms of a house, and upon digging on down to the fourth

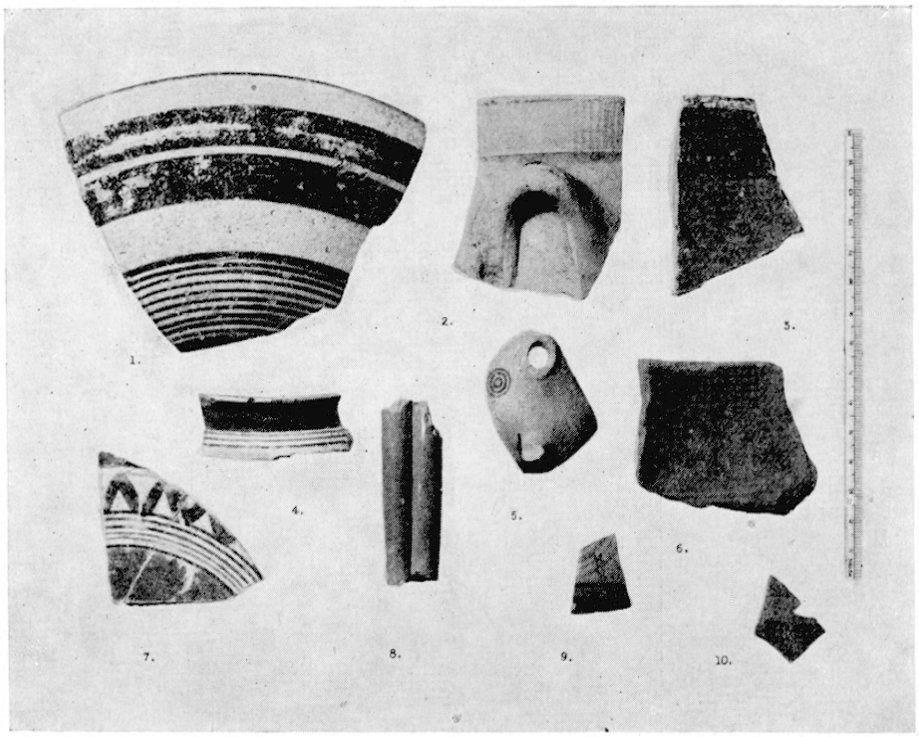


FIG. 4. — Pottery of the Syro-Phœnician Iron Age.

floor, we found that the third was merely a rebuilding of the fourth. Plate XXI, 2 shows the walls of the house, with an open area in the background. The construction of the walls is largely of rubble, with some roughly dressed ashlar blocks on either side of the door opening (in which the workman stands in pl. XXI, 2). But the parts of walls uncovered here do not show the formal alternation of ashlar pier and rubble fill which may have been the intention of the builders of the later building in square G, and which appears so clearly at Tell Abū Hawām[1]. Neither phase of this occupation in square X

[1] See R. W. HAMILTON, *loc. cit.*, also Mr. GUY's building assigned to the Solomonic period, at Megiddo, *C. I. C.*, 9, " New Light on Armageddon ", fig. 23 and 24, where walls

left enough fallen rubble in its debris to account for a full height of stone wall, so one is rather bound to infer from the amount of reddish clay in the debris that mud brick was used over the stones found in place, but no *libn* was found *in situ*[1].

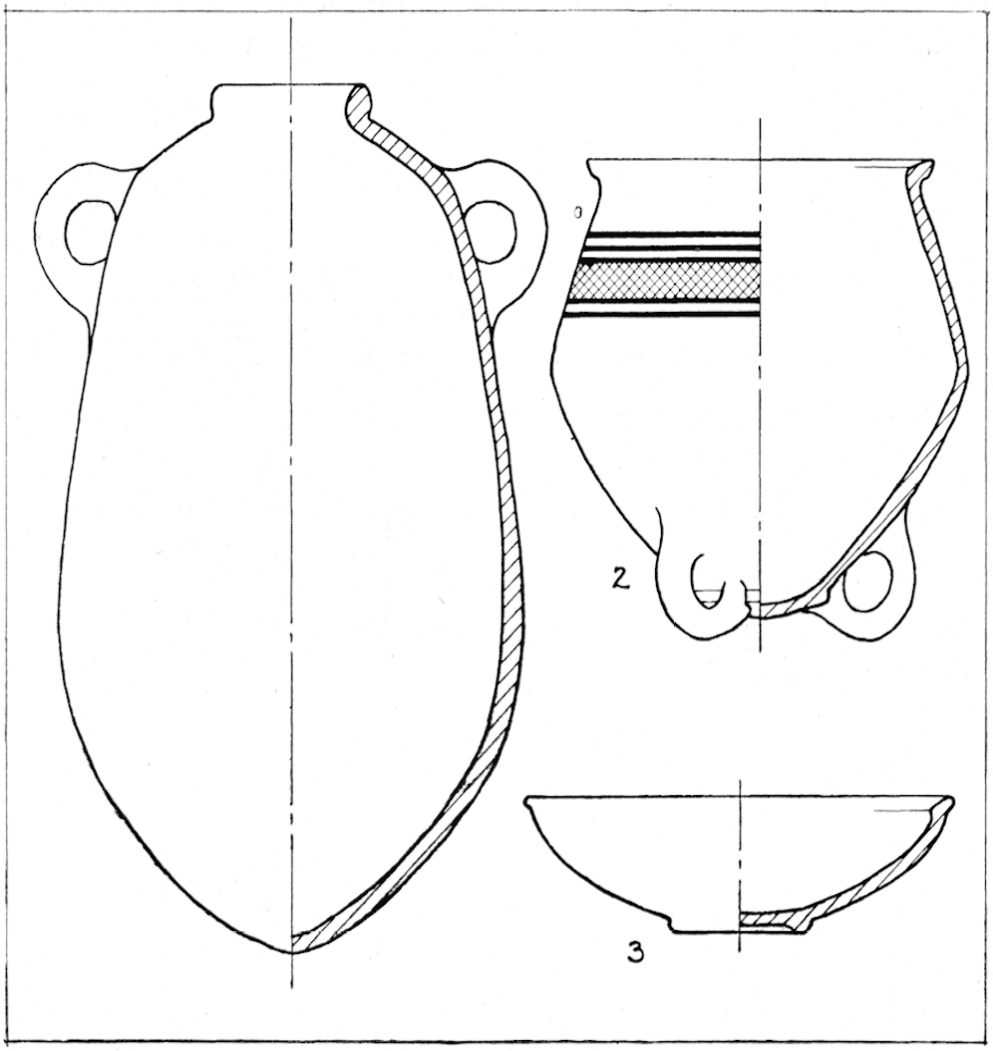


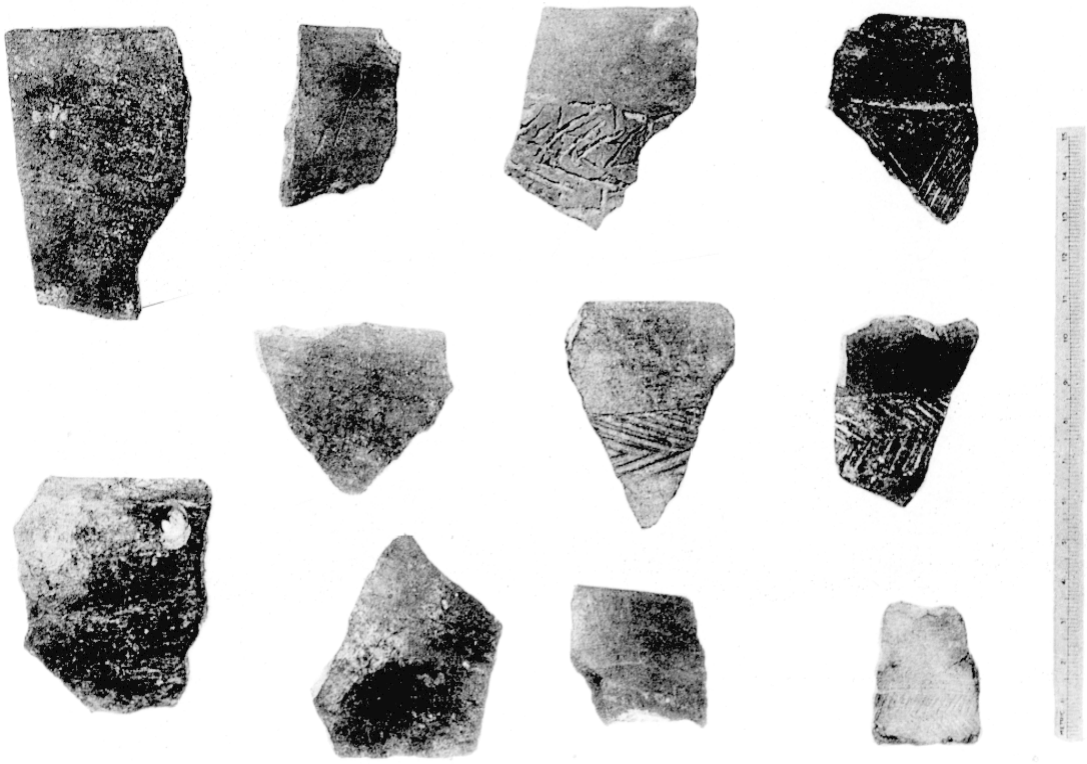
Fig. 5. — Pottery of the Syria-Phœnician Iron Age. Échelle : 1/10.

The pottery of this period falls within that broadly related but locally variant assemblage of wares which appears after the first phase of the Early

approximately contemporary to those in our square X show the alternation of ashlar pier and rubble fill. Smaller buildings on the plan of Megiddo stratum IV seem to be purely of rubble however.

[1] Since none of the squares which encountered architecture in our sondages was enlarged to clear whole buildings, and since the photographs serve to show the type of construction sued, it was not deemed necessary to show plan drawings of the wall fragments.

1. Pottery of the Chalcolithic - « Neolithic » age.



2. Pottery of the Chalcolithic - « Neolithic » age.

BURNISHED WARES.

Iron Age, from southern Palestine to northern Syria. Square X, TT-1, and the other squares on the west side of the tell produced some quantity of these wares, see figure 10. Being used to the pottery of an inland site, we found the proportion of painted Cypriote pottery high, approximately 35 p. 100 of the total bulk [1]. Most of these sherds seem to fall in Gjerstad's White-Painted III,

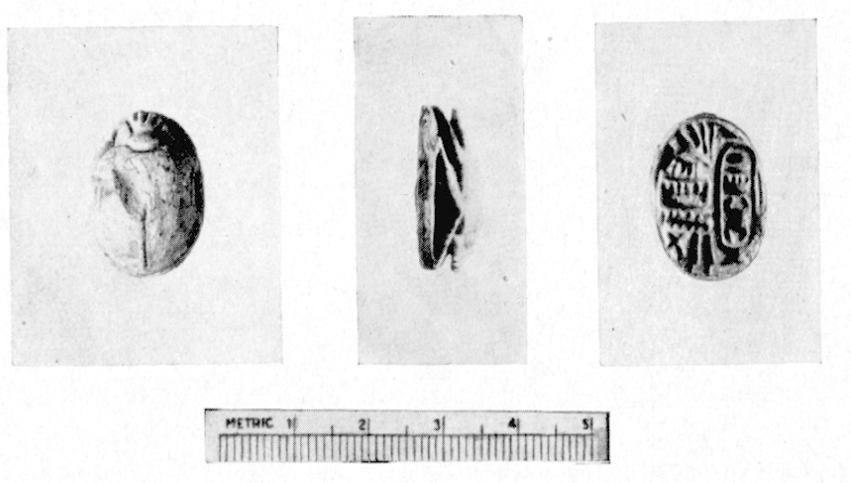


FIG. 6. — A scarab found in Syro-Phœnician Iron Age deposits.

Bichrome III, and Red-on-Black I groups (See fig. 4, numbers 1, 2, 4, 5 and 7). A few odd sherds of Greek bowls with concentric semi-circle ornament appeared (fig. 4, number 9). The local painted wares resemble those of the Judaidah IV period in north Syria [2], as well as those of the Early Iron Age in Palestine [3]; the motifs are usually a simple red band surrounded by nar-

[1] Evidently, increasing care must be taken against calling even the technically better made pieces of this series " imported " Cypriote. Shortly after visiting Tarsus (cf. Hetty GOLDMAN, " Excavations at Gözlu Kule, Tarsus ", *A. J. A.*, vol. XLII (1938), p. 41), and seeing the pottery kilns containing Cypriote Black-on-Red and White-Painted styles *in situ*, Mr. Erik Sjöqvist of the Swedish Cyprus Expedition told me that he would have insisted that a number of the pieces were imports from Cyprus, had they not been found in their very kilns. During the course of this publication however, we had the good fortune of a visit by Dr. Alfred Westholm, of the Swedish Cyprus Expedition, who kindly examined the material in question. In his opinion most of it is truly Cypriote, of the period called Cypro-Geometric III.

[2] It is hoped that the full publication of the Syrian Expedition's work in the plain of Antioch will soon be ready for publication. In the meantime, see my chronological scheme in C. W. Mc EWAN, " The Syrian Expedition of the Oriental Institute of the University of Chicago ", *A. J. A.*, vol. XLI (1937), p. 10 f. and *O. I. P.*, XLVIII, p. 6-7.

[3] *e. g.*, stratum III et Tell Abu Hawām. In Palestine, this ware is included in the term " Cypro-Phœnician ".

rower black bands (fig. 5, number 2). The greatest proportion of local decorated ware was made up of the red slipped and burnished series (see fig. 5, number 3, and fig. 4, numbers 3, 6, 8 and 10)[1]. Most of the forms appear from the sherds to have been bowls or plates, but occasional handles (fig. 4, number 8) and some rim sherds indicate jars and even pitchers. Sherds of several fine bowls where the red slip was " reserved, " so as to allow bands of the normal body clay to show through[2], were found (fig. 4, number 10). The simple wares take their place with those usual for this period in Palestine and Syria (fig. 5, number 1).

A few classes of small objects of this period deserve mention. On figure 6 is shown a scarab from the uppermost debris, perhaps completely out of context, although this type runs on for a long time[3]. While no seals were

[1] See ALBRIGHT's treatment of these red wares for Palestine, *A. A. S. O. R.*, vol. IV (1922-1923), p. 22, and vol. XII (1930-1931), p. 67 and 85. He details the evolution of the burnish technique, from an open application of strokes by hand to a fine closed spiral done with the pot returned to the wheel. The red wares have not yet received such full publication from Syrian sites. They appear in quantity at Hama, and our excavations in the Antioch plain produced a great number of them. Through the kindness of the respective authorities, I have also seen the ware in question from : Tell Halaf, now in Berlin; Zincirli, now in Berlin (the Zincirli wares agree as to form and burnish, but do not have the red slip); Tell Sukas, now in Bryn Mawr; Carchemish, now in the British Museum (this only on the basis of photographic negatives in an old file of Woolley's, but the series is undoubtedly there); al-Mina (Soueidiyé) now in the Antioch Museum. At present the dating of the ware seems earlier in the south, i. e., while Albright finds his earliest examples associated with Philistine pottery (*op. cit.*, vol. XII, p. 63), they never occur in the Antioch plain until Judaidah V period is finished (ca. 1000 B. C.). On the other hand, they may be associated with an earlier red burnished ware in Jud. VI (see below), which is not used in Jud. V. If this is the case, and they disappear only temporarily during Jud. V, then they would be earlier in the north than any which appear in Palestine or in Glueck's survey material from Transjordan (*A. A. S. O. R.*, vol. XIV [1933-1934], esp. p. 22). On the basis of this pottery, found all over the area inhabited by the peoples speaking west Semitic languages (Aramaic, Phœnician, Hebrew, etc.) one is tempted to see a more or less common material culture which became quite standardized after the first phase of the Iron Age. So, while we may never speak of an " Aramaic " pottery, it does appear that the Aramaic speaking peoples had at least one common ware, and possibly two, if the " Cypro-Phœnician " painted series be included. And if this be true, the use of the term " Syro-Hittite " to describe a culture will be more useless than ever.

[2] There are unpublished sherds of this type from Samaria in the Palestine Museum, which Iliffe and Ben Dor kindly showed me. In our Jud. IV period, this type constitutes a kind of " luxury ware " variant of the regular red series.

[3] J. A. Wilson described this scarab for me as having " an ignorant copy of an Egyptian

found, there is an impression of a stamp seal on a bulla, the subject of which is not clear (fig. 7). A seated figure faces right, and probably receives adoration from another figure, but the outline is too blurred to make further description possible. A gaming piece in steatite is carved in the form of a knuckle bone, and carries a few strange scratchings (fig. 8). Figurines were recovered in sufficient quantity to allow the differentiation of at least three types of headdress; a kind of peaked cap (fig. 9, numbers 2 and 3), a cylindrical cap (numbers 4 and 5), and a bare headed type, which seems to have had a coiffure which used a braid about the forehead (numbers 8 and 9). The last type is evidently female, and probably belongs to the category of " mother goddesses " (numbers 1 and 6). These examples are all of solid clay, and only the front part of the body was cast in a mould, the back being smoothed off. One smaller example (number 7) shows a figure seated on a kind of chair or throne, dressed in a long skirt, with the hands resting on the knees. This, and two of the (male ?) heads (numbers 3 and 5), are painted. One sherd of a red burnished bowl has a roughly scratched inscription in Phœnician letters [1].

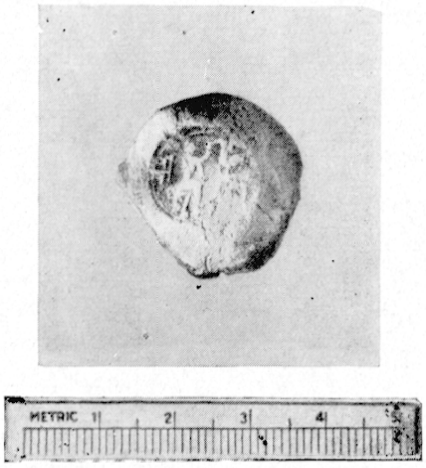


FIG. 7. — A clay sealing found in Syro-Phœnician Iron Age deposits.

6. *The Bronze Age.* In the Late Bronze Age, there seems to have been no occupation of the tell, or else its remains lie so far within the core of the mound that our sondages did not reach them. This alternative seems unlikely

inscription", reading " Menkheperre'-King[of Upper and] of Lower Egypt, beloved of [A]-mon ". Since the name Menkheperre' occurs on scarabs running on for many centuries, this piece has no value for dating to the reign of Thutmose III.

[1] R. A. Bowman has kindly supplied the following information with regard to the inscription scratched on the sherd : " In this bowl fragment three letters, *beth aleph beth*, are incised in characters of Phœnician type; an archaic *aleph* and the *beth* with closed head. The initial *beth*, very lightly incised, has apparently no further traces in the space before it. About a space and a half separates this initial *beth* from the deeply incised *aleph* which follows it. "

however, for in all the sherd sortings from the tell only two small fragments of Cypriote " milk bowls," and none of the other characteristic late Bronze wares, appeared. The Middle Bronze Age is not represented on either the tell or its environs, except in its earliest phase. Two squares in Mantar village, especially square L, produced a small but unmixed collection of sherds of the " caliciform series," two of which are shown on figure 20, numbers 2 and 3. This culture will be described below, under Tell Simiriyān, where substantially more material of this period appeared. The occupation of this period about square L cannot have been large, for squares to the north of L went to bed rock without encountering it, and immediately to the south of L is exposed rocky ground. At Tell Judaidah, we consider this material to belong to the very end of the Early Bronze Age; in Palestine it is placed in the Middle Bronze Age [1]. None of this material was found on the tell, but in TT-1, section I, floor 2 (fig. 10), a small layer of fertile dirt was found which produced a few worn sherds, probably to be assigned to the beginning of Early Bronze. This layer did not even continue on into the mound however, and except for several fragments of the comb impressed type of pottery (see below) nothing recognizable came from it. Taken as a whole, the complete Bronze Age, with the exception of a small occupation about square L, does not seem to exist in the Tabbat al-Hammām area.

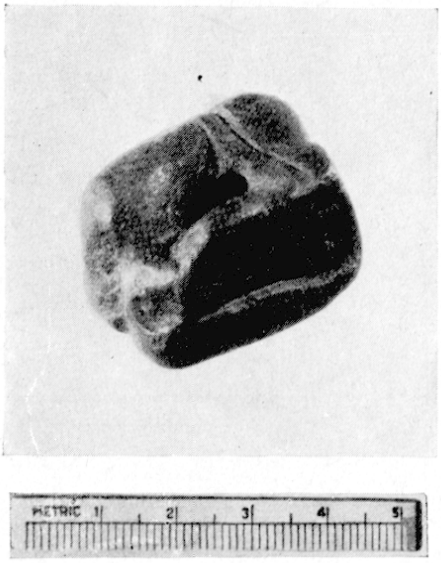
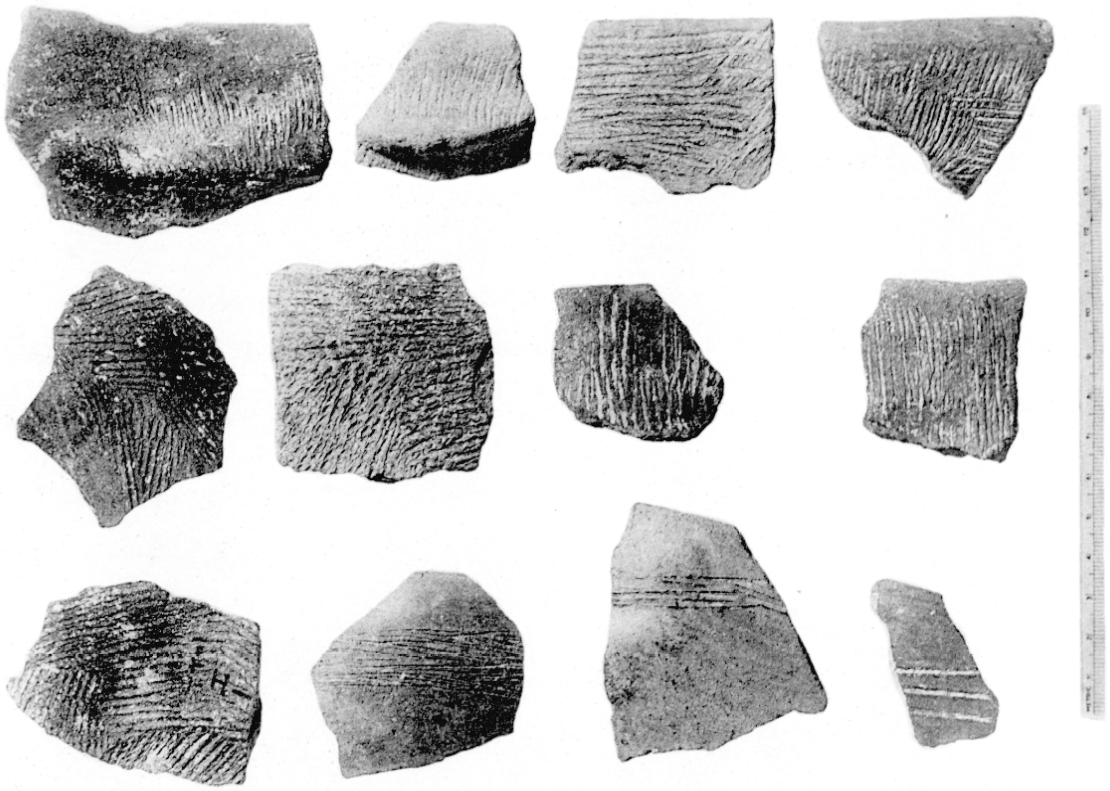


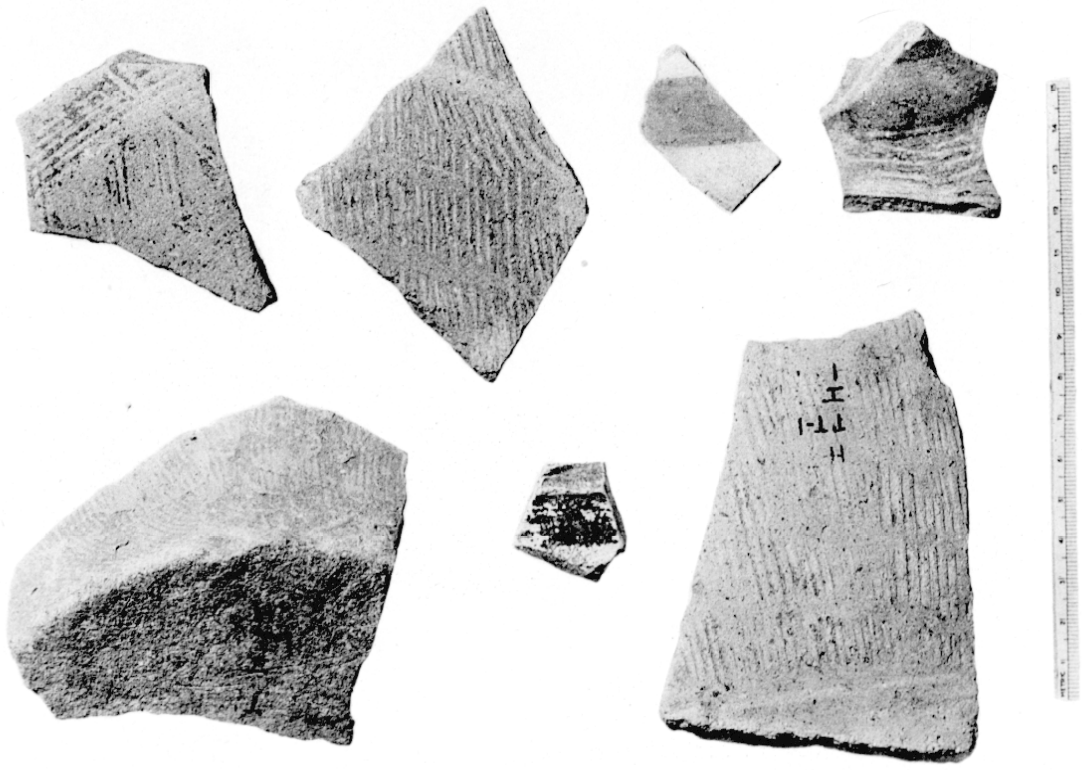
FIG. 8. — A steatite « knuckle bone » found in Syro-Phœnician Iron Age deposits.

7. *Chalcolithic-" Neolithic."* All material from the pre-Bronze Age periods at Tabbat al-Hammām comes from the bottom of the step-trench TT-1,

[1] See Judaidah IX in my table, *loc. cit.*, also ALBRIGHT, *A. A. S. O. R.*, vol. XVII (1936-1937), p. 15 (where Tell Beit Mirsim stratum H is considered Middle Bronze I.) For whole forms of this series, see, *e. g.*, ENGBERG and SHIPTON, *S. A. O.* C. 10, " Notes on the Chalcolithic and Early Bronze Pottery of Megiddo ", fig. 19.



1. Pottery of the Chalcolithic - « Neolithic » age. « Schnurkeramik », etc.



2. Pottery of the Chalcolithic - « Neolithic » age,
the painted pieces, and intrusive Early Bronze Age pottery.

from section I, floor 1 (fig. 11 and fig. 12). It lies immediately over bed rock for the most part, and some of the dirt containing sherds of this period extended, in part, out over a kind of quarry, which will be discussed below. The earth containing the material of this period was covered by a generous layer of clean blown sand, which separated it from the material of the Iron Age. Nevertheless, the sherd sortings from the first meter and a half of earth in section I, floor 1 (as the trench was worked eastward into the mound) showed a conta-

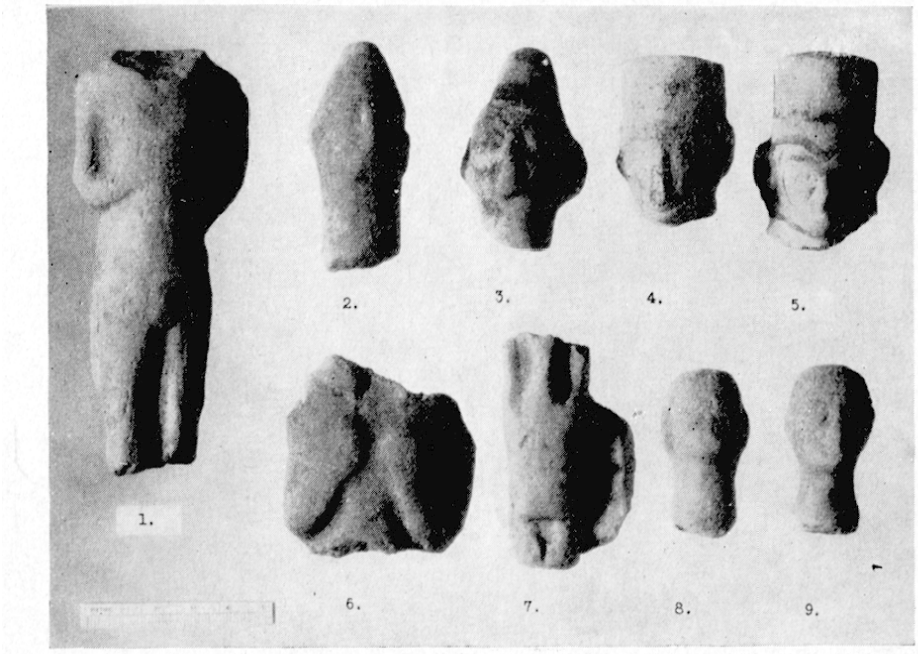


FIG. 9. — Clay figurines found in Syro-Phœnician Iron Age deposits.

mination of Early Iron Age pottery [1]. For the rest of the operation, however the sherd sortings were uniform. Fortunately, also, a fair sized bulk of sherds were recovered, as well as a number of flints which Mrs. Braidwood describes in an appendix, but no whole forms of pottery and no examples of other classes of artifacts appeared. Furthermore, no single floor ran through the layer, although local blackened areas showed where fires had been built, and no sign of any kind of architectural activity was apparent. Reference to the plan of the trench (fig. 12 and especially fig. 11) shows that part of the rock

[1] I shall attempt to explain the reason for this below, in the discussion on the quarry, see below.

floor was smoothed off, and in the unsmoothed part, natural concavities seem in several cases to have been smoothed out for " cup holes. "

The pottery from this stratum may be divided into five families of wares. The first of these is the hand-made, burnished series shown in plates XXII, 1 and XXII, 2, which corresponds to Ras Shamra V and Judaidah XIV wares. This ware is made of a hematite-bearing clay of medium texture, tempered

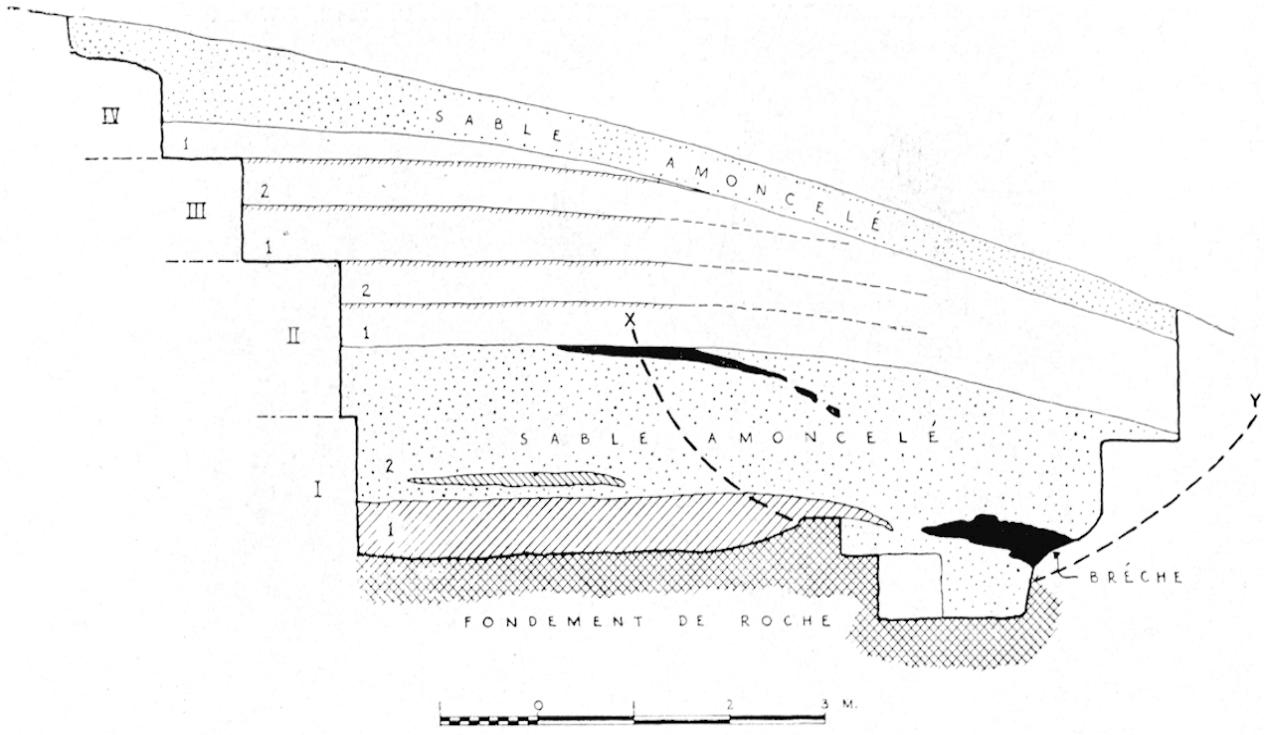


FIG. 10. — A section, showing the south wall of trench TT-I (section along A-A′ of figure 12).

with fair sized white grit. The surface is completely burnished with irregular strokes, and the color varies from a red orange buff through brown to black, depending on the reaction of the hematite clay to the individual conditions of the fire. The rim forms (see fig. 13, numbers 5, through 13) indicate a predominance of hemispherical bowls, and some squat collared pots. That some of the bases were flattened is certain, see e. g. plate XXII, 2, number 9. Secondary features include flat ledge handles (plate XXII, 1, numbers 1, 2 and 3), rare examples of small tight loop handles (plate XXII, 1, number 6), and raised blobs of clay, sometimes pierced (to serve as string attachments ?) (plate XXII, 1, numbers 4 and 5). On one example (plate XXII, 2, num-

ber 5), a hole was made just under the lip. The characteristic decoration may appear on either bowl or pot forms, on about one third of the bulk of the series, and consists of incised or impressed unilinear motifs, evidently always about the rim or shoulder. Plate XXII, 2, numbers 3, 4, 7, 8 and 11, and plate XXIII, 1, numbers 10, 11 and 12, show the usual motifs, consisting of chevrons

FIG. 11. — The base of the trench TT-1, showing the quarry with three stones in place.

or hatched triangles, and even simple or depressed zigzag bands of plain incisions. There is no sign of white filling in the incisions. This series of wares has exact parallels in every detail except incised decoration in the " pattern burnished " ware of Judaidah XIV, and the motifs which are incised on this pottery from Tabbat al-Hammām find their counterpart in the motifs of the " pattern burnish " decoration at Judaidah[1]. To the south, we find fewer certain parallels. Woolley and Lawrence picked a few pieces of a

[1] I have not seen a great quantity of the Ras Shamra V material, but I believe the same would hold true. In the collection at the Musée de St-Germain, there were pattern burnished sherds, but I cannot recall any number of sherds with incised decoration. Cf., however, *Syria*, vol. XVI (1935), p. 164, where Schaeffer mentions " un décor très simple de piquetage ".

comparable ware out of the sea cliffs at Byblos [1], and M. Dunand, while he is familiar with the ware, has evidently not found any great quantity of it. There are a few suggestive sherds from Palestine [2] but one is more tempted to look to the north and west for the origin of this ware.

The second series of wares seems to follow the first in every detail except the treatment of the exterior surface; rim forms, occasional flattened bases, ledge handles, and clay resemble those of the above described burnished wares exactly, and the second series is burnished inside and over the lip. Since the outside is not burnished, the series gives the impression of being more drab in color, although the colors pass through approximately the same range as seen in the first series.

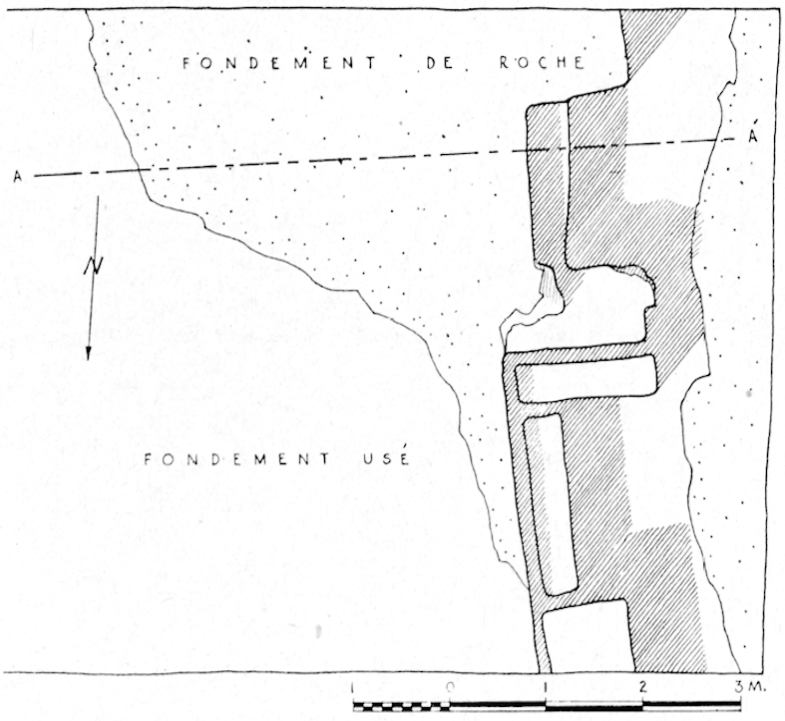


FIG. 12. — Plan of the trench TT-1, showing quarry.

The remarkable feature about this second series is the decorative treatment of the outer surface (plate XXIII, 1) which carries the impressions of some kind of rope mat, applied before the pot was fired. The marks of the individual, twisted, cords are visible, and seem to run for short distances in short parallel groups, but there is no particular attempt to keep the lines

[1] *A. A. A.*, vol. X, (1923), p. 36, and especially plate IX. I presume that some of this material, including the pot burial from the next upper stratum, are of Dunand's " énéolithique " period.

[2] In the late neolithic of Jericho, see *A. A. A.*, vol. XXIII (1936), plate XXXIII, esp. 13 and 16; in certain ledge handles and blobs at Ghassūl, see *Teleilāt Ghassūl*, I, p. 93, fig. 41, numbers 1-7; a few as yet unpublished sherds from Megiddo which Mr. Shipton showed me.

1. The breakwater as seen from the top of the tell.

2. Looking seaward along the sea leg of the breakwater

TABBAT AL-HAMMĀM.

of these impressions either vertical or horizontal, or to make any particular pattern [1]. We seem to have an example of the *Schnurkeramik* so usual in prehistoric Europe, but unusual in the Near East. Pertinent parallels to this ware are not at hand, but its association to the first series is certain, hence we may consider it contemporaneous to Judaidah XIV and Ras Shamra V.

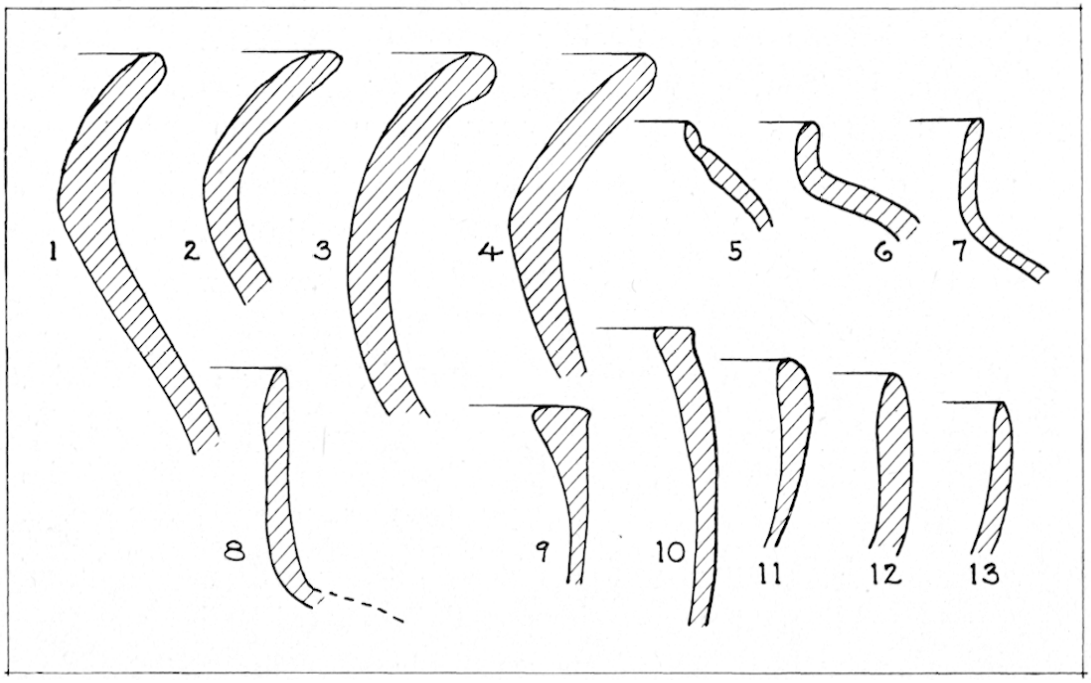


FIG. 13. — Pottery of the Chalcolithic-Neolithic Age. Échelle : 1/2.

Three pieces of painted pottery were found in the stratum. One of these (plate XXIII, 2 number 6) is almost certainly of the Tell Halaf type, and has a glaze-like paint and fine light buff body clay. On the outside, a band appears under the rim; the lip, although partially broken, was flattened, and painted with repeating short radial strokes; and the inside has paint down as far as is preserved. The second sherd (plate XXIII, 2 number 4) was in all probability also of Tell Halaf type, but the surface has been badly eroded, and the paint has kept its glaze-like texture only in one place on the inner surface. On the outside, two plain bands, and a series of wavy bands appears

[1] Perhaps better than mats, it might be assumed that a stick was wound with cord, and that this was then used to make the impressions.

to have been used. The third sherd (plate XXIII, 2 number 3) has a matt red band over a surface covered with a fine white slip; it is certainly not a Tell Halaf sherd and was probably wheel-made, it should be considered as probably out of context. No other painted sherds appeared. The appearance of the Tell Halaf wares in this stratum is not extraordinary, as they appear immediately above the " pattern burnished " wares at Ras Shamra and seem to have come into use at the very end of Judaidah XIV. M. Dunand informed us that Tell Halaf wares have not been found at Byblos, but Wright connects the painted wares of Ghassūl with those of Tell Halaf [1]. The minute proportion of painted wares in relation to the bulk of sherds in the stratum, would indicate either that the wares came into vogue just as the site was abandoned, or, as is more probable, the Tell Halaf wares were imported towards the end of the period.

The fourth family of wares in this stratum is the larger simple series. These coarse hand-made wares use a medium textured (dirty colored) orange buff clay, and were incompletely fired, so that the core of the pots remains black. The most characteristic feature of this fabric is the large soft grey crystals (probably gypsum) used as dégraissant; the body is quite full of these grits, and they appear sporadically on the surface. The sherds indicate flared and even collar-like rims for large pots (fig. 13 numbers 1, 2, 3 and 4). No secondary features appeared on sherds of this ware, nor even base sherds. and it is assumed that the pots were probably handleless and had rounded bottoms. Since the forms of whole pots of this ware were not reconstructable, and must have lacked distinguishing features at best, it seems too early to hunt for their analogies.

The fifth and last family of wares represented in the stratum presents a disturbing factor in the otherwise uniformly primitive character of the pottery from TT—1, I, 1. The sherds of this fifth group, with two exceptions, all come from what was evidently one pot, but even with the exceptions, it seems impossible to consider these sherds as in context. While a smaller number of sherds of the same type (and probably even from the same pot) appeared from the scanty remains of the stratum just above, TT—1, I, 2 (see above),

[1] *The Pottery of Palestine from the Earliest Times to the End of the Early Bronze Age*, New Haven, 1937, page 30.

we feel justified in refering this fifth group to that floor rather than to the lower one, and considering the material as intrusive. On Tell Tayinat, we found several cases of large pots of the type in question being set down into a specially dug hole in their floor, so that only their rims projected above the floor, and such a condition would explain the contamination of the lower floor by these sherds. Hence, although the greatest bulk of these sherds was found in the lower floor, TT—1, I, 1, and must justly be considered there, they shall be regarded as intrusive to the Chalcolithic - " Neolithic " material, and really Early Bronze.

The pottery in question is of the so called comb impressed type (plate XXIII, 2 numbers 1, 2, 5 and 7), of which more appears from Tell Simiriyān (see plate XXVII, 2 numbers 1 and 4). Here, a red orange clay of medium texture is tempered with vari-colored grit and occasional fine vegetable fibres, and the resulting fabric is hard and brittle. The body sherds, at least, indicate that the pots were hand made, and a broad flat base was used. The decoration is effected by strokes with the tines of a comb, usually but not always vertically, and then the all-over pattern was interrupted by smearing horizontal bands through the combing with the finger. This ware appears on Tell Judaidah at the end of period XI, it is known on the coast at Byblos and Tell Sukas, and is a feature of the latter phase of the Early Bronze Age in Palestine [1].

Discounting this fifth ware from the bottom of TT—1, we may consider the other wares as contemporaneous, and to be assigned to a period before the Tell Halaf painted wares, that is, extending from the earlier part of the Chalcolithic period back probably into the preceding period—for want of a better term, still " Neolithic ".

The Breakwater and Quarry at Tabbat al-Hammām.

There remain for discussion two singular features at Tabbat al-Hammam, the breakwater and the quarry. The breakwater, which first attracted

[1] For Judaidah, *op. cit.*, p. 11, period XI, " brittle red cored wares "; for the distribution in Palestine, see *Sonderabdruck aus der Zeitschrift des Deutschen Palâstina Vereins*, 1938, H. Otto, " Studien zur Keramik der mittleren Bronzezeit in Palästina ", p. 151.

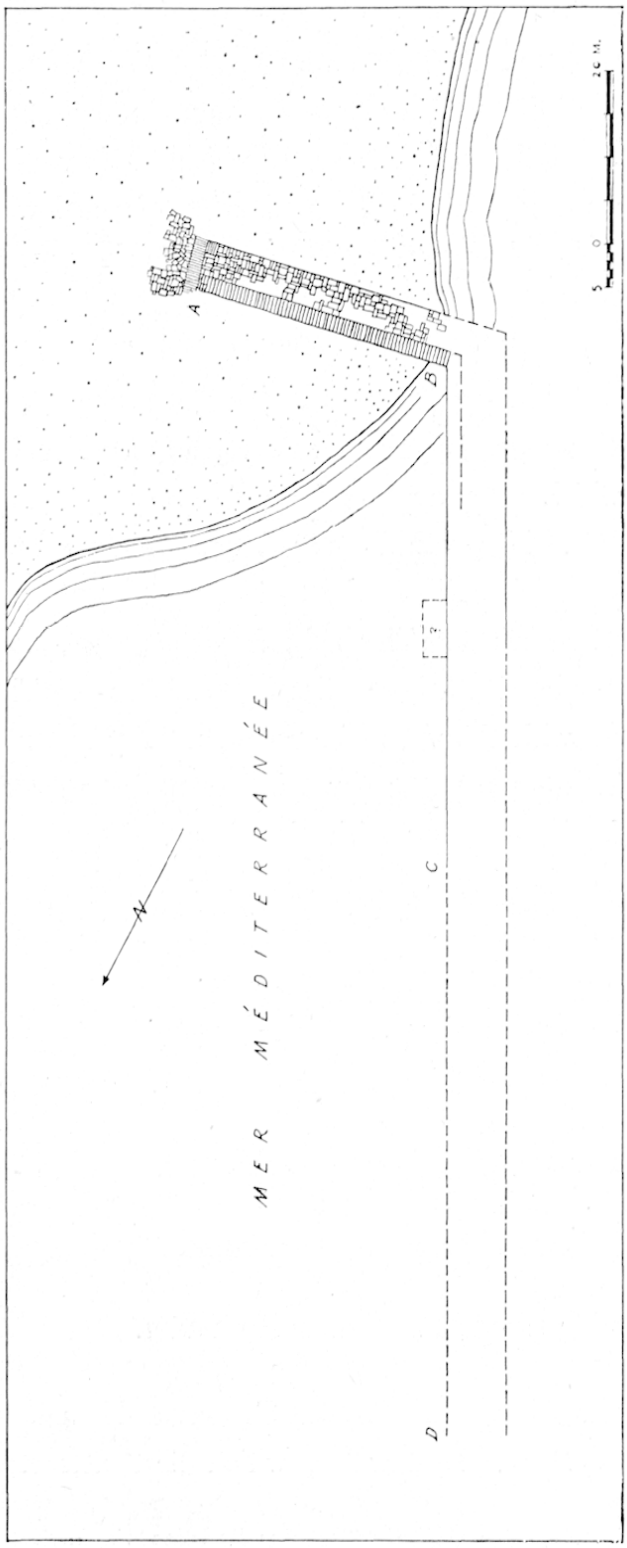


FIG. 14. — Plan of the Breakwater at Tabbat al-Hammâm.

attention to the mound, is an L-shaped structure with its longer leg projecting out into the sea (fig. 14 and plate XXIV, 1). By means of this breakwater, a small bay was protected from the prevailing winds from the southwest, and at least part of the lee side of the structure included a broad step, probably so that some larger ships could be loaded or unloaded without being beached. Unfortunately, wave action has all but demolished the structure, in no place is it preserved more than 25 cm. above sea level, and the sea leg (fig. 14, B-D) is so ruined that one is able to ascertain little more than its direction (see plate XX, 1). For the most part, the construction is of dressed porous yellow limestone, badly weathered by the sea and sand. If mortar was used, all trace of it is gone.

On the sea leg of the breakwater, it is possible to discover the edges of the original wall only

1. Attempt to find the depth of the foundation
of the land leg of the breakwater.

2. The land leg of the breakwater,
with the smoothed tumbled stones in the foreground.

between points B and C on fig. 6. The portion from points C to D is submerged for the most part, and its stones, allowing even for the destructive action of the sea and marine algae, seem never to have been worked. Hence this part of the breakwater must have been merely an addition of large rough rocks piled on out to give protection to more of the bay. The inner portion of the sea leg, B to C, was formed of ashlar blocks, but one is not able to discover exactly how the masonry was laid except that the edges

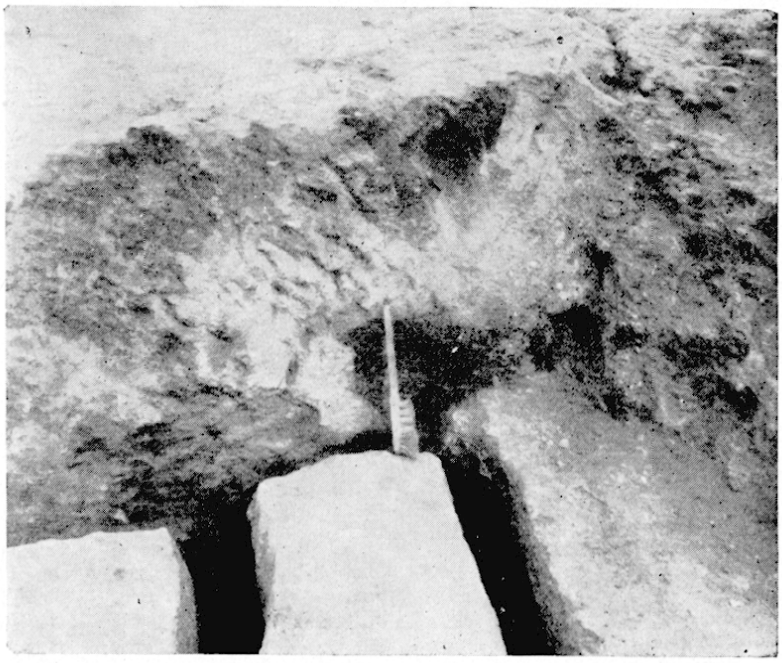


FIG. 15. — Parts of the stones which were left in the quarry, and the marks left by the tools of the original quarrymen.

and an occasional joint may be determined here and there. Some twenty-six meters out from the corner B, on the lee side, we found several stones in line, parallel to the axis of the main structure, but just inside it; this is indicated on the plan with a question. Whether it marks the place of some construction, or is merely a section of masonry fallen down *en masse*, it is impossible to say (see plate XXIV, 2).

The masonry construction at the corner of the sea leg and the land leg (at B) is too ruined to allow description, but the land leg itself (A to B) is fairly well preserved. On its lee side runs a course of long dressed blocks set side by side to form the landing step. These stones average 1.90 m. by 0.43 m.

in size, and are founded on at least two lower courses (plate XXV, 1). The upper surface and outer edge of the step is smoothed off as if by much use. Behind this step, on the windward side of the structure, is the remains of what must have been a considerably higher sea wall. This was also constructed of ashlar blocks, of various sizes, and we have approximately indicated the masonry pattern on the plan (fig. 14). It is not preserved throughout. East of point A, the long stones of the landing step turn, and run across the breakwater, and beyond them is a jumbled mass of smoothed ashlar blocks (plate XXV, 2). These extend on all sides beyond the limits of our excavation; it is possible that we have to do here with some kind of water gate, but lack of time and of heavy equipment made it necessary to postpone the clearance in this area. A complete investigation of the breakwater would involve submarine operations, and the removal of considerable quantities of sand; that there may have been much more to the whole harbor complex is indicated by a small group of ashlar blocks visible at low tide some 200 m. south of the breakwater (see the plan, fig. 1, point X).

Before discussing the probably date of the breakwater, we must turn our attention to the possibly connected quarry. At the base of TT—1, in bed rock of the same porous limestone as that used in the breakwater, we found the remains of a quarry. Three stones remain not yet knocked off their bases, although they have been completely worked about (fig. 11), and the marks of what must certainly have been a metal chisel show on the stones, and even better on the walls of the quarry (fig. 15). Any of the stones found in the quarry is of such a size that it might have been used in the breakwater, where the variation of individual stone sizes is rather great.

But before assigning the quarry directly to the breakwater, we have a rather complicated stratigraphical problem to explain. Reference to the section (fig. 10) of TT—1 shows the quarry, in the bed rock to the right, covered by a considerable depth of blown sand and mixed Iron Age debris. Furthermore, there was even an extension of section I—1 material (Chalcolithic-" Neolithic ") over the inner part of the quarry, and over the outer part, an accumulation of what we call for want of a better term, "breccia", and more of this material appeared higher up in the covering sand layer.

Putting aside the impossible thesis that the quarry should be Chalcolithic [1], we must assume that the quarrymen dug a hole roughly like that suggested on the section by the dotted line X—Y, throwing a small part of the dirt of section I—1 up on the sand on the edge, from where it later slid back more or less into place, as sand blew back into the disused hole. The breccia must be nothing more than a consolidated mass of stone chips, thrown up and back by the quarrymen. Then, before the Iron Age village, or at least before it extended out over this part of the mound, the quarry was filled in again by blowing sand. The whole thing was then finally sealed by the Iron Age debris, but, to the right of point X, in the section, no distinguishable floors were found. It seems impossible that the quarry operations could have gone on later than floor II—1, or even contemporary with it if it extended out as far as point X, for then the hole left by the quarrymen would have filled with Iron Age debris rather than blown sand [2].

This brings us to the conclusion that the quarry must have been worked before, or at the latest, contemporary with the lowest floor of the Iron Age strata, section II — 1, which produced clear Early Iron Age (Phœnician) sherd sortings, inwards from point X. But since the sum total of digging at Tabbat al-Hammām indicates no occupation from Early Bronze to Early Iron, and since there is no evidence to assign the quarry to Early Bronze, the quarry must have been made by the people of the first Iron Age occupation on Tabbat al-Hammām, before the village extended out to the scene of the quarrying [3].

From this, we arrive at the following equation : if the quarry is to be dated to the Early Iron Age, and the stones of the quarry are of such sizes and kind of limestone that they could have been used in the breakwater without incongruity, then the quarrying was probably done for the breakwater and the

[1] See the remark, above, with reference to the contamination of the first meter and a half in section I-1.

[2] Reference to the left side of the cut, on fig. 10, shows the stratification in question. Above the bed rock floor is the compact earth mass of section I-1. Immediately above this is the blown sand layer, especially clear in the deep shadow where it has drifted down as it dried. Above this, again, is the compact mass of Iron Age debris.

[3] I admit that the reasoning is complicated, but the stratigraphy was not as simple as one might have wished for. I present my theory in such detail on the assumption that the conclusions reached by the excavator as the digging is in process must be of some weight.

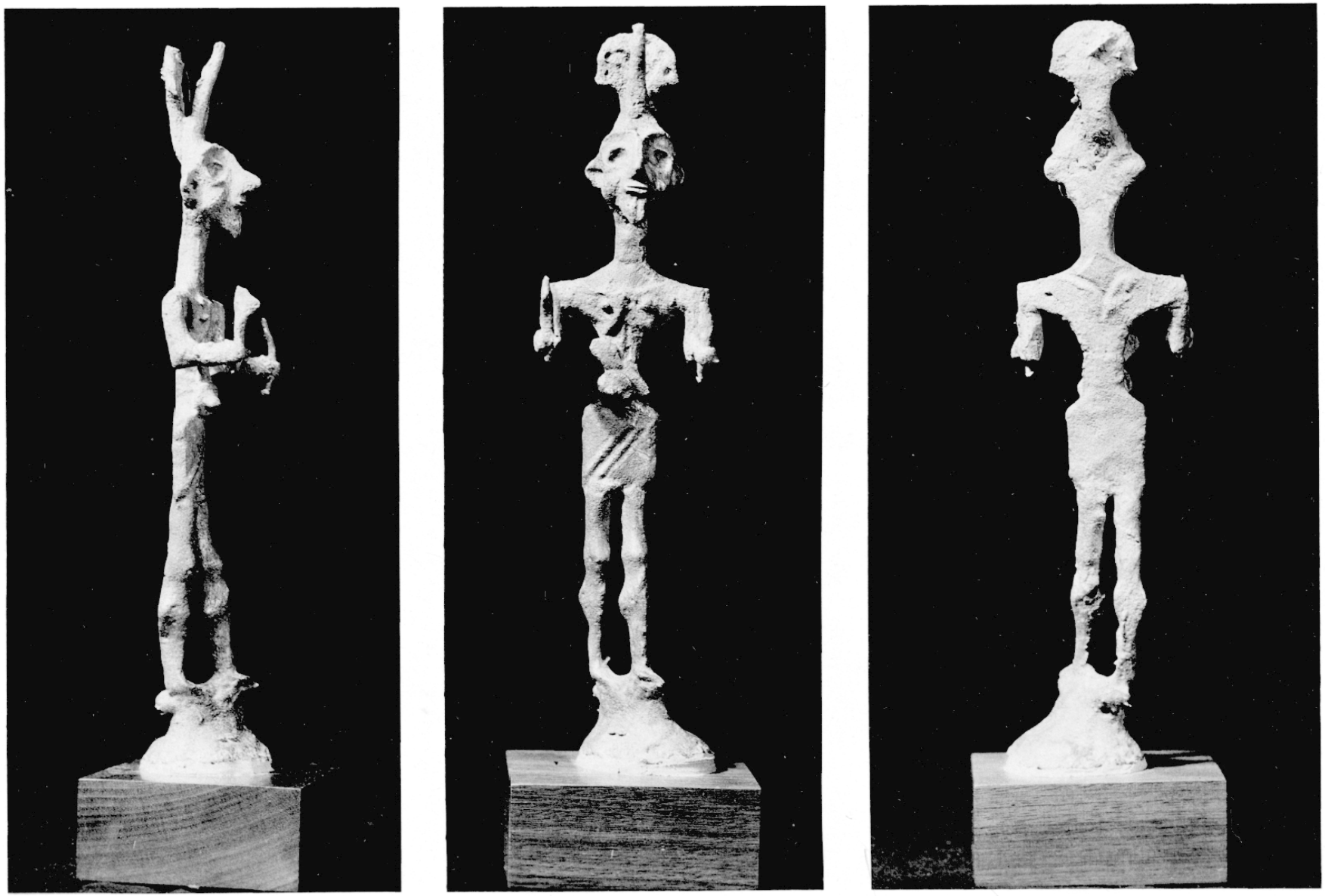
breakwater was built in the Early Iron Age as well. As far as we know, there is no other evidence for dating the breakwater. While attempting to find the depth of the land leg (see plate XXV, 1), we found, at the lowest depth we were able to reach, a brass rifle cartridge in a mixture of almost unrecognizably eroded sherds. All attempts to find parallels for the technique of construction of the breakwater have been futile. Hence we must tentatively make use of the only evidence we have, the breakwater-quarry equation, and assign the breakwater to the 9th-8th century B. C. [1].

The periods and their contents at Tell Simiriyān.

On Tell Simiriyān, four 4.0 m. squares were put into the southwest slope, and one more square (V) on the top edge of the mound on the west (see above). Square V, on the west, was at the same level as square IV on the southwest slope (see the section, fig. 16), and produced the same material. Squares III and II produced successively earlier material, but square I, at the bottom of the tell, in the talus, showed only debris without context. From the two upper squares, IV and V, the first 0.25 m. yielded a mixture of Late Bronze Age and Byzantine sherds, but no signs of Byzantine architecture appeared, so the mound has, to all intents and purposes, not been inhabited since the Late Bronze Age.

1. *The Late Bronze Age.* By the time operations were discontinued at Tell Simiriyān (at the end of the third day), square IV had encountered two

[1] In response to questions, I have had the good fortune to receive a very interesting letter with reference to the breakwater from Prof. Karl Lehmann-Hartleben. In his exhaustive work, " Die Antiken Hafenanlagen des Mittelmeeres ", *Klio*, Beiheft XIV (Neue Folge, Heft D), 1923, there are no analogies for this type of breakwater construction, and Prof. Lehmann-Hartleben informed me in his letter that he still does not know of any. He feels, however, that there is nothing which would stand in the way of the suggested 9th-8th century date for the building of the structure. He also made the interesting suggestion that the whole complex may anticipate the Greek scheme of an inner northern and outer southern harbor, in which case the southern leg would run from near point A southward to point X (plan, fig. 1). As I have mentioned above, there is a probability that some kind of water gate, and a construction running from near A southward to X did exist.



Bronze figurine of a god from the Middle Bronze Age deposits.

TELL SIMIRIYAN.

floors and was approaching its third, while square V had reached its first floor. The second floor in IV and the first in V were associated with mud brick walls, which had been baked in place by a fire which must have destroyed the whole town. In neither square was a complete room encountered. The *libn* of the walls was straw tempered and of average size (about 35 cm. × 35 cm.

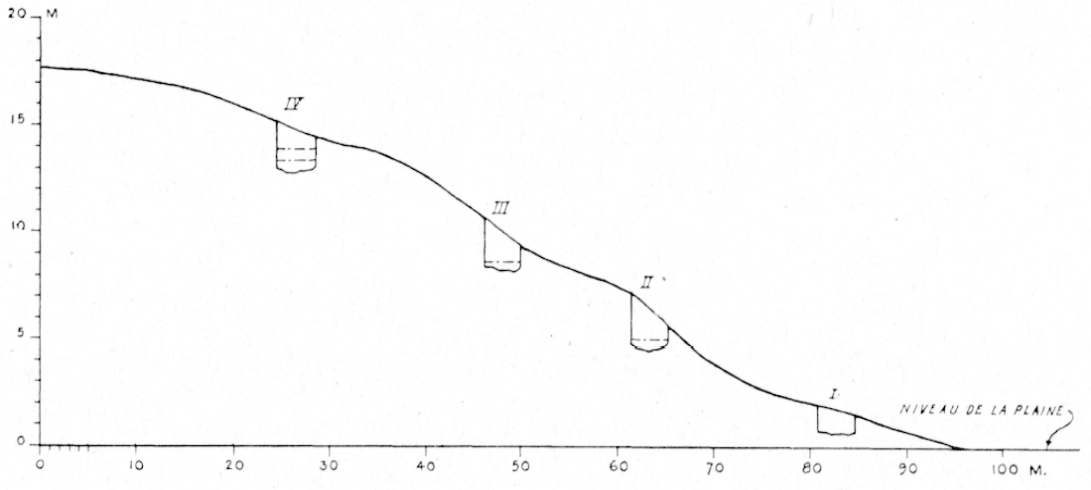


FIG. 16. — A section on the southwest slope of Tell Simiriyān.

× 10 cm.) and had been either blackened or cooked to a red-orange color by the fire. There were numerous stones in the debris of these floors, but the architecture was brick throughout.

The pottery from these floors in squares IV and V was uniform and so typical of the Late Bronze period of coastal Syria that little discussion seems necessary. The bilbil wares, the Cypriote " milk bowls " with their crude native copies (fig. 17, numbers 2-4, 8-11) and the more local painted wares (fig. 17, numbers 5 and 7) are easily recognized by anyone familiar with the great Ras Shamra series [1]. One ware found in this stratum deserves our attention (fig. 17, number 6) : a red slipped and burnished group of plates, which appears in the comparable period at Tell Judaidah [2] and which we

[1] See, *e. g.*, *Syria*, vol. XVII (1936), p. 121, fig. 13.

[2] *A. J. A.*, vol. XLI (1937), p. 10, Jud. VI " red slipped and occasionally burnished wares. " I have seen them in quantity at Tell Atchana, but they have so far not been fully described ; cf. *Antiquaries Journal*, vol. XIX (1939), no. 1, bottom of page 12, "..... hundreds of large plates, often still in piles of ten or a dozen, mostly of plain local ware, but sometimes burnished or decorated with concentric circles of red paint,....," includes the ware in question.

have already mentioned as a possible predecessor to the red slipped and burnished wares of the Iron Age (see note 13, page 9). Often, the hematite slip is applied only as a band about the rim (hence, I suppose, Woolley's " concentric circles of red paint ") but the slip may also be used all over on the inside and over the outer rim. But, although the general form is the same,

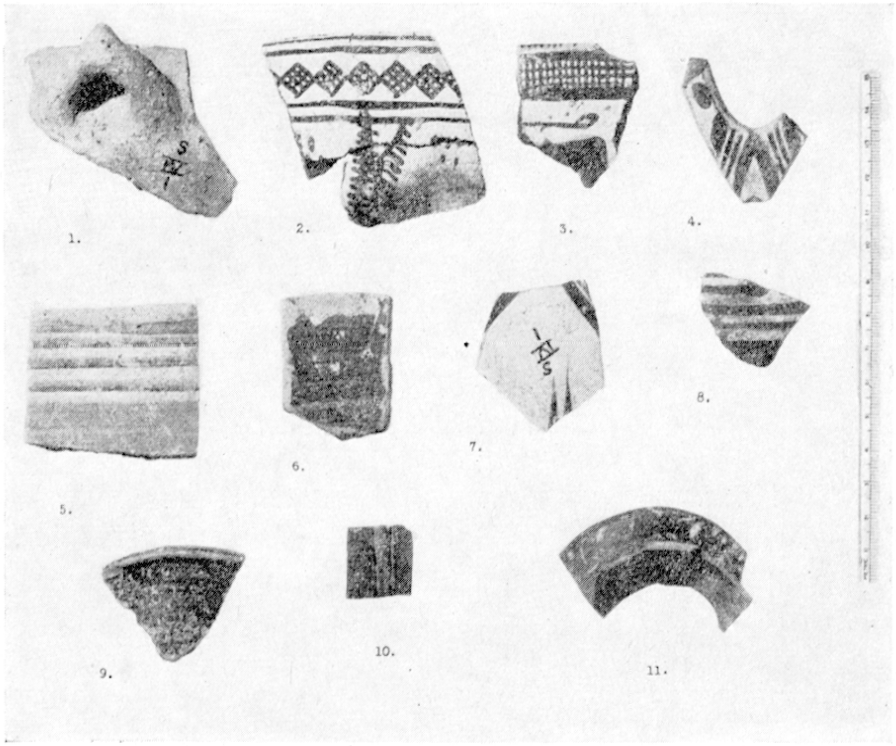


Fig. 17. — Pottery of the Late Bronze Age. Tell Simiriyan.

the ring base is relatively greater in diameter than in the Iron Age, and strangely enough, wheel burnishing is already used [1].

The only other object of interest from this period is a bronze axe from the second floor of square IV. This axe is of the usual shaft hole type, with a simple profile, and of considerable size.

The forms certainly appear at Ras Shamra, and even the " horizontal bar handle " which is also a feature on the Iron Age wares, cf. *Syria*, vol. XVII (1936), p. 123, fig. 14, I and esp. B, but I am not sure if the red slip and burnish is common.

[1] Full discussion of this problem must be postponed until the forthcoming report on Tell Judaidah. I only suggest it here, as the ware in question does appear on Tell Simiyirān.

2. *The Middle Bronze Age.* Square III, on the southwest slope of Tell Simiriyān, produced material of the Middle Bronze Age. The first floor in the square appeared as a thin burned line, a meter under the surface, having been overlaid by a mixture of hard buff clay and stones. Operations were continued to a depth of forty centimeters below the first floor, but a second

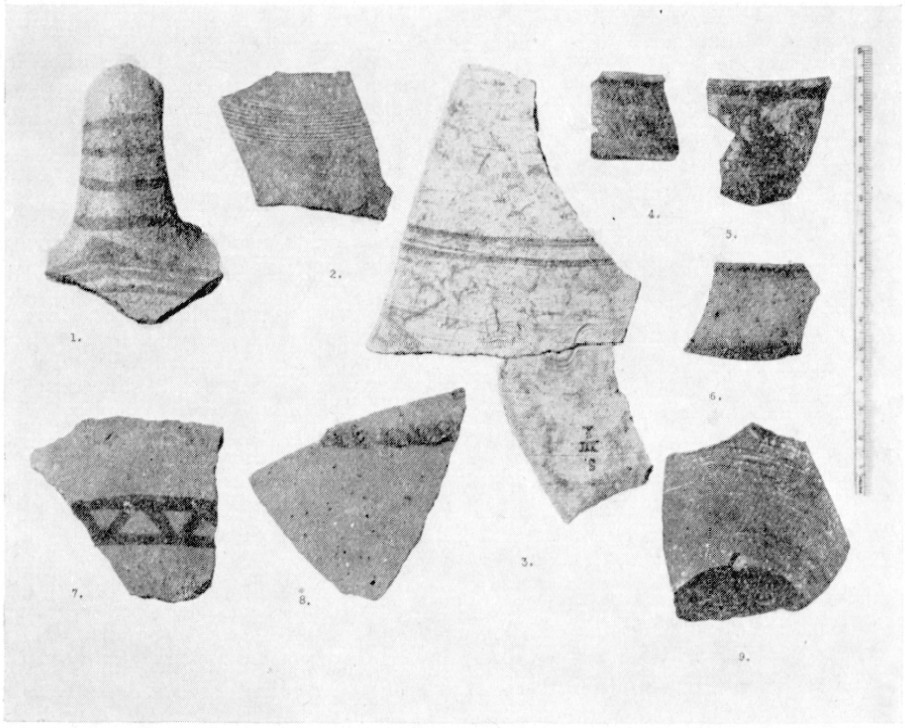


FIG. 18. — Pottery of the Middle Bronze Age. Tell Simiriyān.

floor was not uncovered in this depth. No walls or other architectural features beside the one burned floor appeared.

The pottery from this square was uniformly Middle Bronze in character. The medium-textured clay was well supplied with coarse vari-colored grit; the resulting fabric was hard, and sharp on the broken edges. The color varied from a light greenish buff through orange buff to a dirty red brown. A flat based, carinated bowl, sometimes roughly burnished, seemed the usual small form (fig. 18, numbers 4, 5, 6, and 9, and figure 19, numbers 11 and 12), and the sherds indicated large coarse bowls (figure 4, numbers 1 and 2) and various well made pots and jars (figure 19, numbers 3-10) for the large forms. Painted decoration appeared but in no great quantity; the paint was a thin

and matt brownish black, but that some bichrome decoration may have existed is shown by a red orange band under the handle on one example (fig. 18, number 1). A favorite decoration on simple wares is the comb-incised straight and wavy bands (fig. 18, numbers 2 and 3) and the raised ropes (fig. 18), number 8). While the series of pottery from this square is not large, we can assign it without hesitation to the Middle Bronze Age [1].

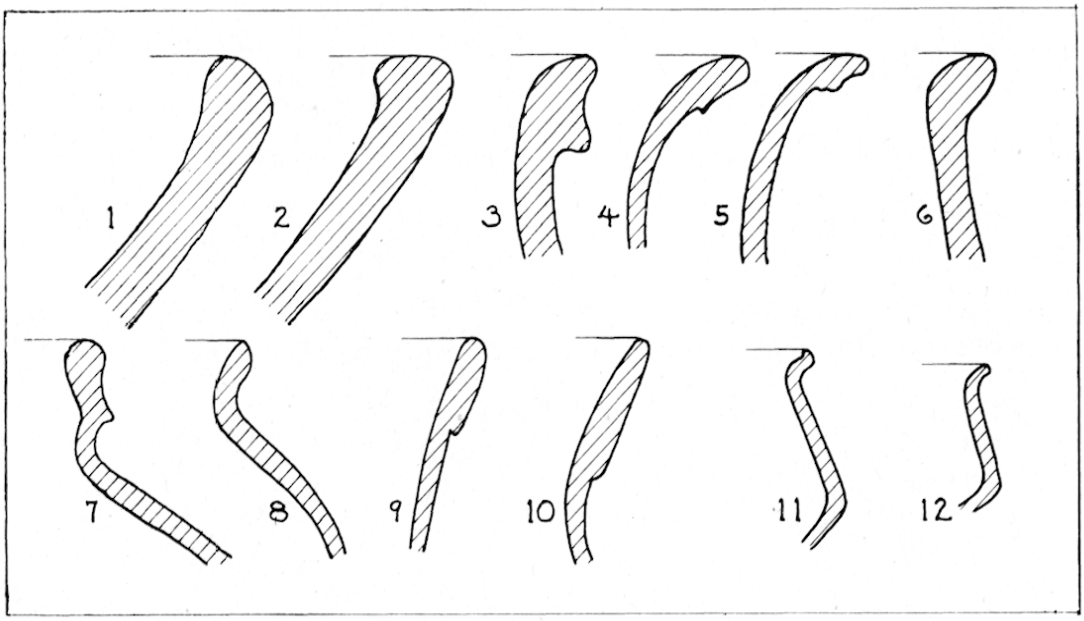


FIG. 19. — Pottery of the Middle Bronze Age. Échelle : 1/2.

The fine bronze figure, plate XXVI, was found 20 cms. below the first floor is square III. It was cast in a mould, and has an overall height of 209 mm. and an average body thickness of 7 mm. The figure is evidently that of a male god, represented in a style that is essentially Syrian. The figure stands on a small mound-like base of bronze, which is part of the whole cast. The feet are very crude, but an attempt has been made to render the musculature of the legs. The left leg is set out in front of the right, giving the figure a striding attitude. About the waist is shown a short tight-fitting skirt, with

[1] The series represented here is certainly contemporary to Judaidah VII, *A. J. A.*, vol. XLI (1937), p. 10; in Palestine, the culture represented by, *e. g.* stratum G of Tell Beit Mirsim seems approximately similar. See H. OTTO, *op. cit.*, on the Middle Bronze Age in Palestine.

folds indicated diagonally from upper left to lower right. Above the skirt, the waist is very narrow, and a broad belt shows faintly behind. At the waist, on the front, a round nobbed object is worn, which is possibly a buckle for the belt, and behind this appears a short dagger with the handle slanting upwards to the right. The form of the thorax and the breasts are sharply indicated in front, and the musculature of the shoulders appears on the individual's back. Both arms are extended forward from the elbows, and each hand holds what is evidently an attribute; in the right hand is an axe, and in the left hand is a cylindrical object with flared and flattened top which might be a highly conventionalized thunderbolt. Above a long thin neck, the face is modeled with sharp lines so that each feature is unmistakable. There is a thin low-bridged but projecting nose, high cheeks, deep set eyes covered by a heavy ridge, and what is either a long and cleft chin or a goatee type of beard. Off the crown of the head rises a long spike-like projection, behind which is fixed a semi-circular disc. About the arc of this semi-circle are circular impressions, which may have been the settings for further decoration of another material.

Metal figurines of this type, although not common, are already known from Syria. Two groups have been published [1], both, strangely enough, having been found either in the Orontes River or in the lakes about it near Homs. Neither group had any archaeological context. One wonders if the figurine shown in figure 1 in Ménant's article is not the closest parallel; although Ménant describes it as having a conical cap out of which a plume develops, it appears to be either very badly disintegrated or else insufficiently cleaned. It seems to carry a short dagger at the waist. On the whole, however, this type of figurine is the exception rather than the rule; the great mass of bronzes from Byblos and Ras Shamra [2] are of a different type,

[1] The first group appeared in an article by MÉNANT, *Rev. Arch.* (3. serie), XXVI (1895), p. 31 ff., the second group was described by SPELEERS, *Syria*, vol. III (1922), p. 134 ff. Both writers hold that the figurines they describe show strong Hittite influences, but one is not inclined to take this very seriously, especially since our figurine, which is certainly of the same type and must roughly date the other two groups, comes from a time before any appreciable Hittite influence in Syria.

[2] Attention might be called to the larger of two fine silver figures from Ras Shamra, *Syria*, vol. XIV (1933), pl. XVII, which has the same type of base, and seems to have a cleft chin (?) as well.

especially as regards head covering and base, and the dagger and buckle. Any temptation to see an Egyptianizing influence in the plume-like element of the headdress is hard to justify chronologically. For the same reason, we are not inclined to assign the names of any of the later gods to our figure, much as its attributes may recall those of either Semitic or Hittite weather gods.

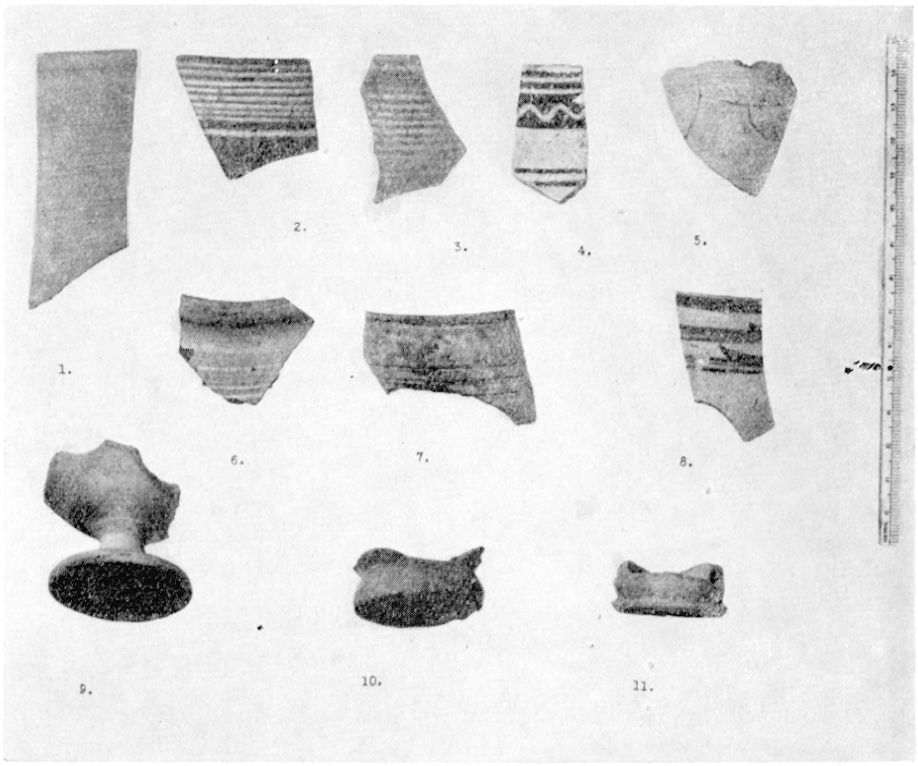


FIG. 20. — Pottery of the end of the Early Bronze Age. Tell Simiriyān.

3. *The Early Bronze Age.* Square II on the southwest slope of Tell Simiriyān yielded material of Early Bronze date. The stratification was much like that of square III, a floor being encountered slightly over one meter below the surface. Operations proceeded to 50 cm. below the first floor without encountering another, and here, also, no traces of walls were observed, although a few burned areas appeared below the first floor.

The sherd sortings for the material from above, on, and below the floor were uniform, *i. e.*, sherds of all the various families of wares appeared in each position, but there is probably reason to believe that not all of these wares can have been in use simultaneously. The first group for consideration are

sherds of the so called " caliciform series " (fig. 20, numbers 1, 4, 6-11) and the associated squat pots (plate XXVII, 1, numbers 6 and 9, and figure 21, numbers 6 and 8) called " teapots " at Megiddo [1] which, in Palestine, are dated to the beginning of Middle Bronze. The assemblage of sherds on figure 20 shows about an even proportion of these wares with and without black wash; in

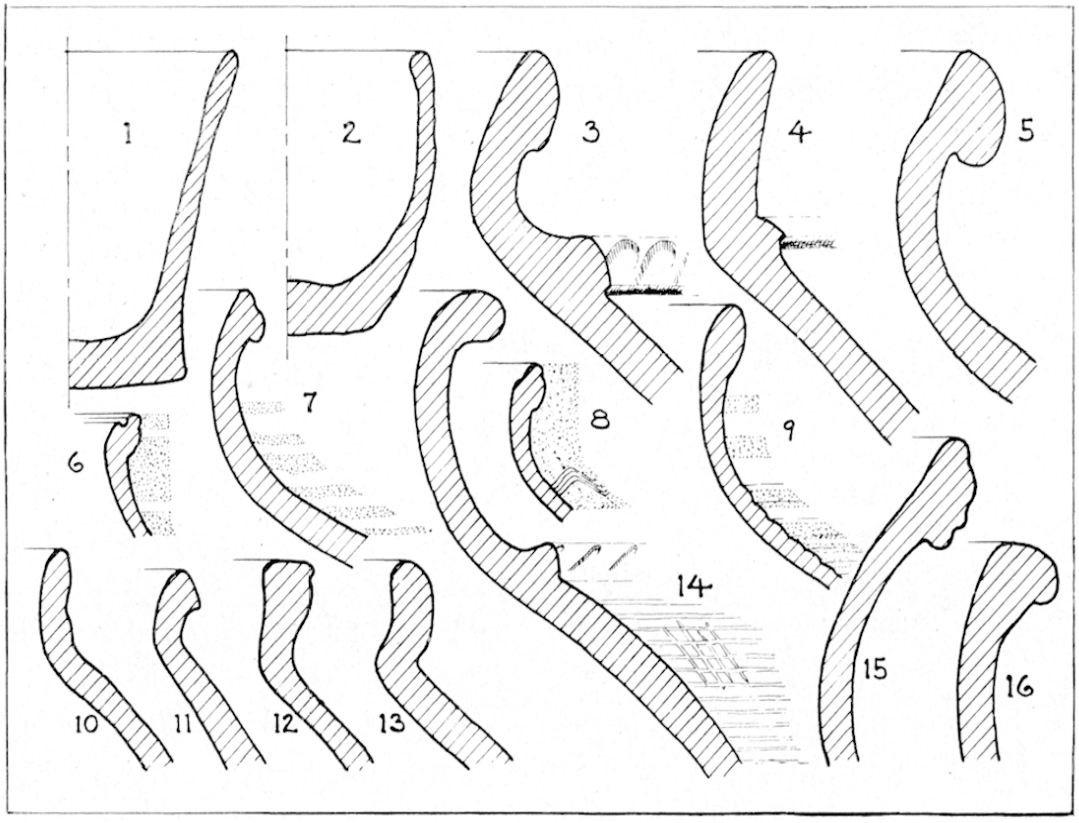


FIG. 21. — Pottery of the Early Bronze Age. Échelle : 1/2.

Jud. IX the black wash is very rare, in Palestine it is most common. Perhaps the phase of the caliciform wares we have here should be assigned to Middle Bronze, but the associated wares are certainly Early Bronze.

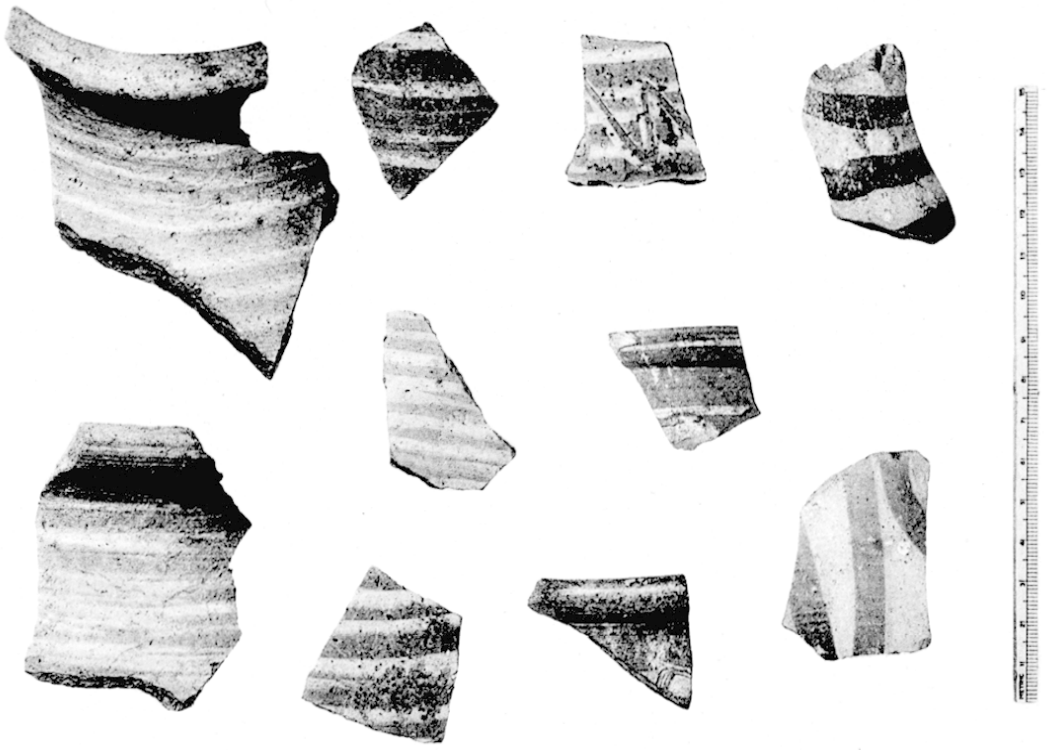
[1] The " caliciform series " is the ceramic *pièce de résistance* of Jud. IX period, *A. J. A.*, vol. XLI (1937), p. 10. It appears in Syria also at Hama (I understand the Hama publications are to be expected immediately) and Mishrifé-Qatna, cf. DU MESNIL DU BUISSON, *Le site archéologique de Mishrifé-Qatna*, 1935, esp. chapter VI, " Le tombeau IV ", as well as on various smaller sites. In Palestine, the ware appears somewhat later, see ALBRIGHT, *A. A. S. O. R.*, XVII (1936-1937), p. 15, and ENGBERG-SHIPTON, *S. A. O. C.* 10, " Notes on the Chalcolithic and Early Bronze Age pottery of Megiddo, " p. 71 ff. I believe the earlier dating in north Syria can be maintained.

The second group of sherds for discussion are those which resemble the white reserved-slip wares of Judaidah XII (plate XXVII, 1, numbers 1-3, 5, 7, 8, and fig. 21, numbers 7 and 9). On these examples, however, the " slip " has been painted on, and not wiped off in bands in the true reserved-slip technique. These wares are hand made except for the rim, which seems to have been turned; they are made of a medium-textured orange-buff clay, generously tempered with large vari-colored grit, and the color of the surface varies from a dirty orange-buff to a purplish grey-buff. The color of the " slip " paint runs from creamy-buff to light orange-buff, and the forms all seem to belong to larger jars. With regard to their chronological position : even if they do bear a resemblance to the wares of Judaidah XII, and to the " trickle-painted " wares of Megiddo [1], we do not feel justified in assigning them to so early a date (end of Chalcolithic). We seem to have to do here with a type of decoration whose evolution and distribution we have so far caught only glimpses of—in fact we may connect the reserved-slip technique and the trickle-painted technique only on the questionable ground that the resulting appearance of the designgives the same effect. That the decoration lasts for some while is proved by occasional examples on Judaidah as late as the beginning of period X, and by the group from Mishrifé-Qatna [2] contemporary to the caliciform series. These last seem to be wheel made pots however, with the " slip " applied in a close spiral after the pot has been returned to the wheel, and would thus be technologically later than the wares in question from Tell Simiriyān. Note however the incised squiggle on one Simiriyan example (plate XXVII, 1, number 3) which was a favorite device of the caliciform pottery makers.

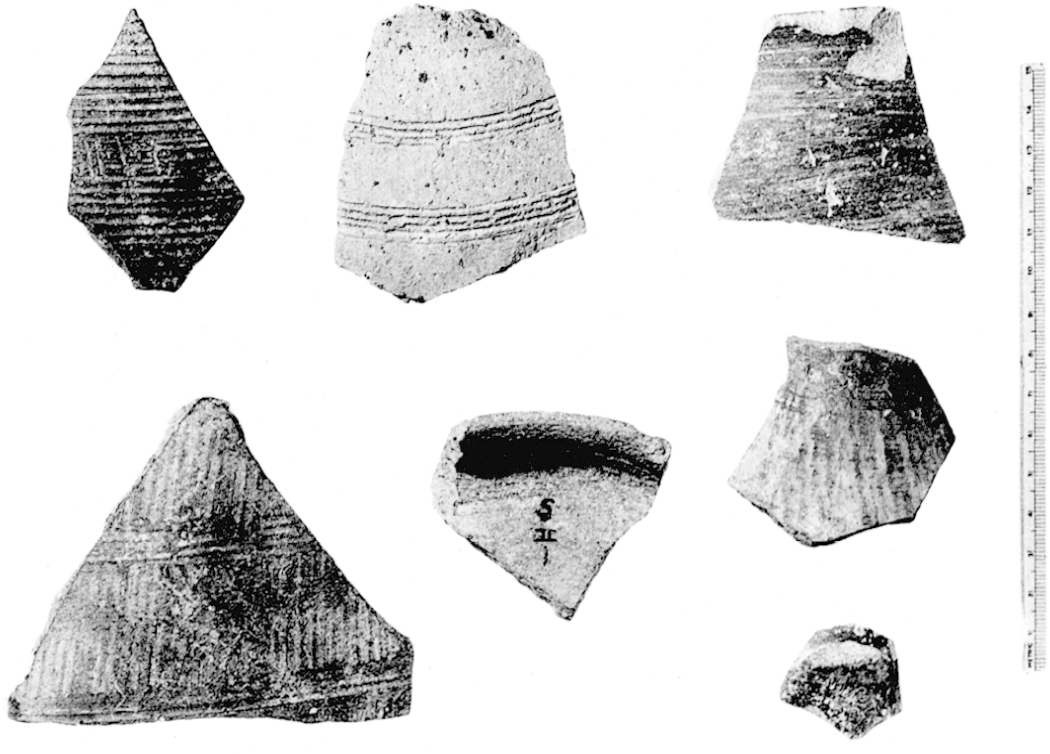
The last important group of sherds from square II was the comb impressed wares, already described on page 17 in connection with the base of the TT—1, trench on Tabbat al-Hammām. They are shown here on plate XXVII, 2, numbers 1 and 4, and figure 21, number 14, it only remains to repeat here that they are certainly to be dated to the Early Bronze Age. A few other sherds seem recognizable : figure 20, 5, shows an example of a small trun-

[1] See ENGBERG-SHIPTON, *op. cit.*, p. 25 ff.

[2] See DU MESNIL DU BUISSON, *op. cit.*, pl. XLIII.



1. Pottery of the Early Bronze Age.



2. Pottery of the Early Bronze Age.

TELL SIMIRIYAN.

cated conical cup which is common in Judaidah X, and figure 21, numbers 1 and 2 are examples of rough cups in simple ware which appear with the

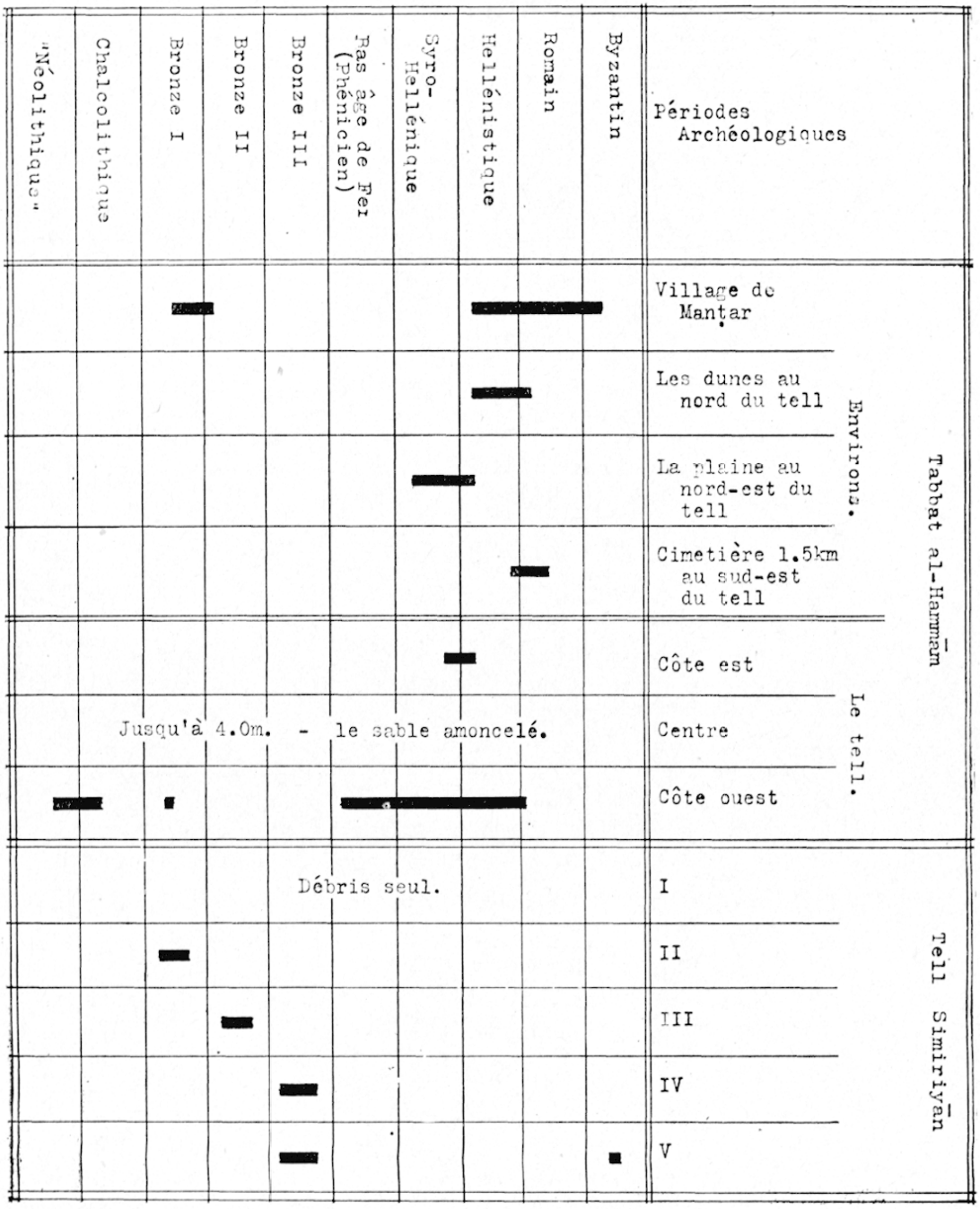


FIG. 21. — Chronological scheme of the *indications* of periods found in these sondages.

above mentioned conical one, but are more rare. The two roughly burnished fragments, plate XXVIII, numbers 3 and 6 have also a brownish wash, and

may be local examples of the Judaidah X brittle smeared-wash series, the two painted pieces XXVII, 1, numbers 4 and 10 are too small to be definitive, the comb-incised sherd belongs to a class with a long range in date.

We are left with the conclusion that even if we consider the caliciform sherds to belong to the end of Early Bronze, it is hard to consider all the wares from this square to have been in use contemporaneously. Therefore, we shall have to allow for some disturbance in the stratigraphy, and to consider that the assemblage of sherds shown from this square probably represents several hundred years of occupation within the Early Bronze Age.

A note on the identification of Simyra [1].

While our sondages produced no material which would allow either Tabbat al-Hammām or Tell Simiriyān to be absolutely identified with any known ancient site, the results call for a few remarks on the location of Simyra. Dunand's suggestion of Tabbat al-Hammām as the probable site of the harbor follows Dussaud, who first noticed the breakwater in 1896. Dunand, however, takes precedence in the identification of Simyra with Tell Simiriyān. As well as noting the harbor at Manṭar, Dussaud makes two suggestions as to the site of the ancient town : in associating it " avec le bourg actuel de Sumra, près de l'Éleuthère ", he follows Thomson and Renan; he also suggests Qal'at Yaḥmour mainly on philological grounds [2]. Honigmann reviews these suggestions in his article in *P. W.*, but comes to the conclusion that Simyra probably lay directly on the Eleutheros (Nahr al-Kebir). Certainly no positive identification has been made as yet.

If it were to be assumed that Simyra must have been immediately on the seashore, then Tabbat al-Hammām would be the only possibility unless the mound were much smaller even than Hammām. As Dussaud remarks, it is

[1] For a résumé of the historical role of Simyra, see the article by Honigmann in *Pauly-Wissowa*, under Σιμυρα.

[2] Cf. Dussaud, *Topographie historique de la Syrie Antique et Médiévale*, 1927, p. 117 ff. The site of Ṣumra is shown on a map published by Dussaud in the *Revue Archéologique*, IIIe série, XXXI (1897), pl. VII *bis*. Forrer also accepts the Ṣumra identification in *Die Provinzeinteilung des Assyrischen Reiches*, 1921, p. 57, where he places " jetziges Ṣumra, 19 km im SO von Aradus. "

the only point between Orthosia (at the mouth of the Nahr al-Barid) and Marathus where small boats may land today. However, our sondages almost conclusively prove that Tabbat al-Hammām is without Bronze Age occupation, hence we must dismiss the possibility that it was the site of the Simyra of the Amarna letters, and seek that site some distance inland, as is the case with Ras Shamra-Ugarit.

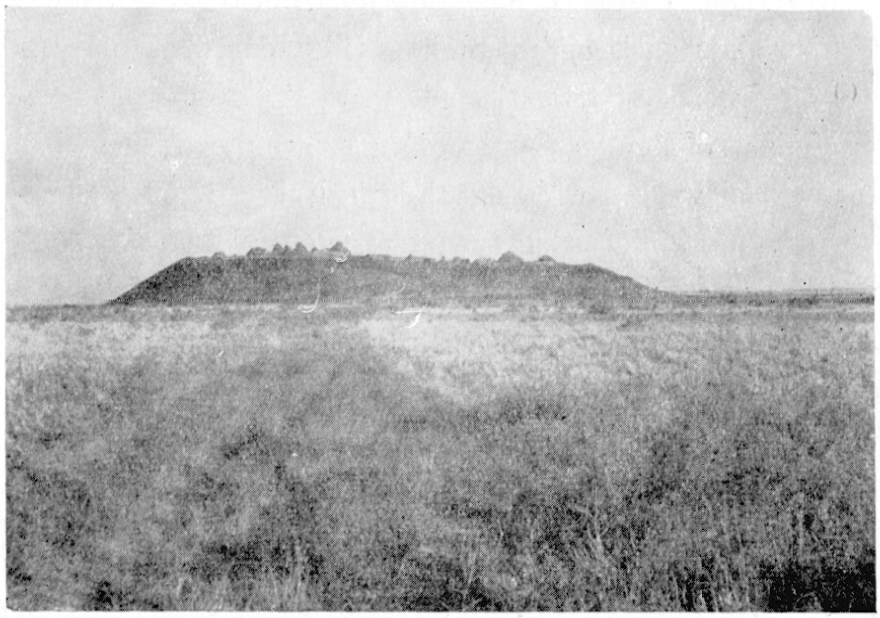


FIG. 22. — Tell Kazel, 4 km. inland from Hamidieh, on the Nahr al-Abrash.

With regard to the suggested inland sites, it would seem that Qal'at Yaḥmour is too far inland, and too near Marathus-Amrit to fit the requirements for a great seafaring town. Ṣumra we could not find, neither on the spot nor on the post war maps [1]. South of the Nahr al-Abrash, where Dussaud's old map shows the village Ṣumra, are few tells of any size. Along the banks of the Nahr al-Kebir, where Honigmann suggests Simyra might be found, there are no sizable tells at all [2]. The two most likely tells would seem

[1] Prof. Olmstead pointed out to me that Ṣumra existed at the time of his first trip in 1904, cf. A. T. OLMSTEAD, *Western Asia in the Days of Sargon of Assyria*, 1908, p. 49. Olmstead's identification of Simyra as " more probably where we now have the Bedawin town of Shakka, near the mouth of the Nahr el'Abrash, " is complicated by the fact that Shakka too seems to have disappeared.

[2] For all this region, see the excellent maps (already cited above) by the Service Géographique : " Hamidieh, " and " Halba. "

to be Tell Simiriyān, and the large Tell Kazel 4 km. inland and on the north bank of the Nahr al-Abrash. This Tell Kazel (fig. 23) is covered on top with a modern village; we spent several hours there collecting surface sherds, but the early July vegetation made difficulties, and we were only able to isolate a few Roman and post-Roman sherds from the top, and some Early Bronze sherds from the slopes.

Perhaps the best contemporary source for the location of Simyra is in a passage from the annals of Tiglath-Pileser I., who went from Arvad to Simyra [1], a distance of three " double-hours ". Honigmann assumes a distance of about 32 km. for the three double-hours, as an upper limit—this distance would fall well below the mouth of the Nahr al-Kebir. As we remark above, there are few tells of any size in all this area south of the Nahr al-Abrash, except considerably inland. On the other hand, the natives in the village of Tell Kazel told us that a " strong man " would need five hours to walk from there to Tartous, just north of the island of Ruad-Arvad. While we cannot definitely assume from the text that the army itself required only six (*i. e.*, three double) hours for the journey, we can be quite certain that if the army had marched an actual six hours from Arvad to Simyra, then Simyra could not be as far as 32 km. from Arvad. Be this as it may, it seems inconceivable that Simyra would not have left a considerable mound, and the last large mound within the distance and direction required from Arvad is Tell Kazel.

Which of the two, Tell Kazel of Tell Simiriyān, may have been Bronze Age Simyra, it is difficult to say. Tell Simiriyān is proved by our sondages to have had a Bronze Age occupation, it is just an hour's walk directly inland from the bay at Mantar. It seems to show a certain similitary of name [2].

[1] Cf. D. Luckenbill, *Ancient Records of Assyria and Babylonia*, 1926, vol. I, p. 98; " I crossed over in ships of Arvad, from Arvad, which is on the sea shore, to Samuri of the land of Amurru, a journey of 3 'double-hours' (*beru*) by land. " With the sea so strange an element to the Assyrians, it seems a reasonable assumption that they did not go all the way by ship, but rather crossed to the mainland as quickly as possible and continued on foot.

[2] It is difficult to know just how much stress to put on this point. The people in the village of Simiriyān insist that the name comes from that of the ancient town of Simyra, but I strongly suspect they have only recently learned this from some foreigner and hope to profit by the seeming importance it gives their tell. One explanation for the name given by the people in Mantar was that is came from " thamariyyah, " but just how this is arrived

On the other hand, it is a small tell to be the site of a town so often mentioned in the ancient records. Tell Kazel has principally its greater size to recommend it, it is farther away from the bay at Manṭar, although the less sheltered mouth of the Nahr al-Abrash might have been used as a port for small ships. We do not know what periods it contains. Hence, in the present state of our knowledge, it would seem that Tell Simiriyān is the most likely candidate. There is also the very good probability that Tabbat al-Hammām was Iron Age Simyra [1], mainly on the negative evidence that we would not otherwise know what to call such an elaborate harbor town in just this region. If this is the case, the uppermost burned strata of Tell Simiriyān (see p. 22) show the end of Bronze Age Simyra. The inhabitants then moved to the seashore, at the bay at Manṭar, which had probably already served as their harbor, and built the Iron Age town and the breakwater. Such an explanation would agree with the results of our sondages, except that we would have to suppose that the transitional phase of the very earliest Iron Age is deep in the core of Tabbat al-Hammām. But the proof or disproof of the theory rests with further excavation at Hammām, Simiriyān, and Tell Kazel.

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The Oriental Institute.

May 1939.

at is very uncertain. But in any case, the name Simiriyān is closer to Simyra than anything else in the district but Ṣumra, which seems to have disappeared.

[1] This ignores, of course, the position for Simyra given by Ptolemy as southwest of the mouth of the Eleutheros, which Honigmann takes as a mistake—see his article in *P. W.*

NOTES ON THE FLINT IMPLEMENTS OF TABBAT AL-HAMMĀM

A small group of stone implements was found at Tabbat al-Hammām in TT-1, I, 1, associated with the primitive pottery described on page 13. The implements are made of chert, usually fine grained and buff or gray in color, with an occasional brown specimen. A few obsidian implements and objects in stone other than chert were also found, and are included (1).

Chert implements.

Arrowheads (Plate XXVIII, 1, No. 1). Only two complete specimens were found, both leaf shaped. One (No. 1) has flat retouch on the upper face on either side of the tang, extending slightly up the sides. On the bulbar face, flat retouch is used over the tang and tip, extending well down the sides. The second arrowhead has the same treatment, but no retouch on the bulbar face of the tang. Its wings are slightly more pronounced. Of the incomplete specimens, one, with the tip missing, is a much larger version of the leaf shaped type. The retouch is the same as in the first described. Two other specimens have very fine fluting retouch, one on the upper face, the other on the bulbar face, but since both tip and tang are missing, no conjecture can be made as to their shape.

Borers (Plate XXVIII, 1, Nos. 2, 3). Most of the borers are made on large blade sections. The usual trimming consists of rough retouch on one side of the point on the bulbar face, and on the other side of the point on the upper face. This retouch can extend a bit down the sides. One borer (No. 3), made on a blade, has flat, almost fluting, retouch on the upper face on either side of the point, extending down the sides two-thirds of the total length of the implement. Here it is terminated by two opposing notches, presumably for hafting purposes. On the bulbar face, steep retouch is used on one side, extending from the point to the notch.

Gravers (Plate XXVIII, Nos. 4, 5, 6). These are usually made on blade sections. Bec-de-flûte : 4. One is made on a large flake, three are on blade sections, one of

(1) D. Jerome Fisher, Associate Professor of Geology and Mineralogy at the University of Chicago, has been so kind as to identify all the materials used.

which has had the working edge resharpened by the removal of facets on opposing sides of the edge.

Single facetted : 1. It is on a blade section (No. 4). The central rib is battered as in the " lames de dégagement. "

Angle gravers : 2. Both are on blade sections. One is an oblique straight angle, the other an oblique concave angle (No. 5).

Gouge single blow : 1. This is on a blade section (No. 6).

" *Lames de dégagement* " (Plate XXVIII, 1, No. 7). These are very numerous. They are triangular in cross section, battered on either one or both sides of the central rib. A few are long narrow blades, but the majority are rather short broad blades or blade sections.

Sickle blades (Plate XXVIII, 2 Nos. 1-3). The majority are made on narrow blade sections averaging 47 by 12 by 5 mms (No. 1). A few are on slightly longer narrow blades (No. 2). The denticulation is irregular, tending towards fineness. Most of the sickle blades are retouched only along the working edge, usually on the upper surface. Only a few have retouch along the back and ends. Eight specimens have two working edges, both edges showing equally well defined lustre (No. 3).

Unworked Blades (Plate XXVIII, 2 Nos. 4, 5). The blades are usually quite narrow and short, averaging 64 by 19 mms. A few are broader and longer, but there are no Cananean blades present. In most cases the core has been battered before the blade was struck off. As a result the striking platform, if it exists at all, is extremely small. Most of the blades have been used.

Worked blades (Plate XXVIII, 2, No. 6). Most of these blades have nibbling retouch, usually only along one side. Half of these have a notch or slight indentation near one end of the blade. A few have an unworked notch, but in most cases the indentation is formed by smooth retouch, usually on the bulbar face (No. 6). It seems quite likely that the indentation served to facilitate hafting, or in some cases to allow the forefinger to get a good grasp on the implement.

Blade sections. The blade sections all show signs of use. The majority have nibbling retouch along one or both sides. A few have opposing notches near one end.

Chisel (Plate XXVIII, 2, No. 7). This implement is roughly trimmed all over the surface. It measures 68 by 22 by 17 mms. The flakes have been removed parallel to the axis and also at right angles to the sides. The cross section is roughly semi-ellip-

tical. The sides are parallel, converging slightly towards the butt end. The working edge, which is slightly convex, has been ground and polished. Three prominent ridges parallel to the axis, have been battered two-thirds of the length of the implement for hafting purposes. Lesser ridges and high spots on the butt end show signs of polish received from rubbing within the handle.

Scrapers (Plate XXVIII, 3, Nos. 1-3). These are abundant and are usually made on large flakes with rough trimming. There are no end scrapers. One core has been made into a discoidal scraper (No. 2.). A piece of tabular chert has the working edge carefully trimmed on both faces with fine flat retouch, making a very useful tool (No. 3).

Flakes. All the flakes show signs of use.

Core tablet. The flake is rectangular in section. Flake scars run down one edge from the upper surface and are truncated by the bulbar face.

Cores (Plate XXVIII, 4, No. 2). Two are large double ended blade cores with plain striking platforms (No. 2). Another core has a battered ridge along one side as in the " lames de dégagement. " The remainder are rough cores with flakes struck off in any direction.

Miscellaneous. The majority are blade sections, a few with rough steep retouch on one side or all around, several with fine fluting retouch along both sides. Three are wedge shaped with cortex still adhering to the base side, and the opposing edge showing signs of use.

Obsidian implements.

Few obsidian implements were found. Only one specimen, an arrowhead, is well trimmed. A few have cursory nibbling, but all show signs of much use.

Arrowhead. Only the tip remains. The bulbar face is completely covered with flat retouch. The upper surface has fluting retouch covering the tip and sides.

Blade sections. There are thirteen blade sections. The striking platforms are battered. Four have nibbling retouch along one side.

Flakes. Two rough small flakes show signs of use.

1. Chert implements from the Chalcolithic - « Neolithic » deposits.

2. Chert implements from the Chalcolithic - « Neolithic » deposits.

3. Chert implements from the Chalcolithic - « Neolithic » deposits.

4. Chert and stone implements from the Chalcolithic « Neolithic » deposits.

TABBAT AL-HAMMĀM.

Other stone implements.

Celt (Plate XXVIII, 4, No. 1). This is made of siliceous limestone. Its measurements are 81 by 37 by 15 mms. It has a lenticular cross section. The sides are slightly convex, converging towards the butt end. The implement has been roughly chipped all over. The working edge has been ground and polished. The only possible indication as to hafting is a slight hollow on one face near the butt end.

Chisel (Plate XXVIII, 4, No. 4). The material used is siliceous limestone. The chisel measures 67 by 17 by 17 mms. The cross section is roughly semi-elliptical. The sides are parallel, converging slightly towards the butt end. The object was formed by the removal of flakes parallel to its axis, and then by minor chipping at right angles to the sides. The working edge and flat side have been ground and polished.

Macehead (Plate XXVIII, 4, No. 3). This is made of fine green limestone. It is globular in shape and has been ground and polished all over. Its diameter is 62 mms, its length 57 mms. The perforation, formed by boring from both ends, forms a double truncated cone.

Points of similarity between this industry and those of Judaidah are to be found in the blades and sickle of the Jud. XIV industry (1). In both cases the blades are predominantly small and narrow with unfaceted striking platform. There is no sign in either industry of the Cananean blade which begins to appear at Judaidah in Jud. XIII. The sickle blades in both instances are small and narrow and of almost the same average lenght. The Jud. XIV sickle blades have slightly finer and more regular denticulation, but the backs are untrimmed as at Tabbat al-Hammām. On the other hand, the javelin head with fine fluting retouch and long tang with definite expansion at the very end, characteristic of the Jud. XIV industry, is completely missing in this industry. There is also a great difference between the polished stone implements of both sites, those of Jud. XIV being ground and polished all over, those of Hammām chipped all over with grinding and polishing reserved for the working edge alone. The macehead of Jud. XIV is pear-shaped, whereas the one specimen found at Tabbat al-Hammām is globular.

It is impossible at this time to make comparisons with the flints of Ras Shamra and Byblos, which are as yet not fully published.

The Tabbat al-Hammām industry also seems to be similar in some respects to the

(1) The Judaidah flints have been studied by Joan Crowfoot Payne and are soon to be published. The material here used is based on her report, which was most helpful.

Tahunian II of Jericho (1). The sickle blades are of a similar type, although somewhat longer at Jericho. The same type of blades and double ended blade cores are typical of both industries. The type of arrowhead used at Hammām is also used in Tahunian II of Jericho.

It is unfortunate that so few chisels and celts were found at Tabbat al-Hammām. Those found, however, all correspond in type and workmanship to the same implements at Ghassûl, where the flint chisel is typical of the industry (2). The globular macehead is also represented in the Ghassulian. In addition the arrowheads of the two sites are similar. The industries differ in that the Ghassulian fan scraper is not represented at Tabbat al-Hammām, and the sickle blades of both sites are dissimilar (3).

In conclusion, it may be said that the flint industry of Tabbat al-Hammām, while far from being identical with those of Jud. XIV, Tahunian II of Jericho, or Ghassûl, does indeed bear some resemblance to each of these three industries.

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(1) Joan CROWFOOT in *A. A. A.*, XXII, p. 176-181, and XXIV, p. 46-49. There are no similarities with the Tahunian II implements found in other parts of Palestine, described by D. BUZY, in *Revue Biblique*, vol. XXXVII (1928), p. 558-578, except perhaps with the blades which are trimmed at one side of the end to facilitate hafting.

(2) R. NEUVILLE in *Teleitat Ghassul*, 1934, p. 55-65, and the same author, in *Revue Biblique*, vol. XLIII (1934), p. 202-205.

(3) *Classification of Implements.*

Chert.

Arrowheads	8
Borers	10
Gravers	7
Lames de dégagement	19
Sickle blades	63
Unworked blades	24
Worked blades	22
Blade sections	65
Scrapers	24
Chisel	1
Flakes	41
Core tablet	1
Cores	6
Miscellaneous	13
	304

Obsidian.

Arrowhead	1
Blade sections	13
Flakes	2
	16

Other Stone.

Celt	1
Chisel	1
Macehead	1
	3