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TALL-I-BAKUN A
SEASON OF 1932

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TALL-I-BAKUN A
SEASON OF 1932

*BY ALEXANDER LANGSDORFF
AND DONALD E. MCCOWN*



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EDITORS' PREFACE

Most of the drawings for the plates of this volume were made by Mr. Carl Dinella, an artist of Work Projects Administration Official Project No. 665-54-3-257. A few were made by Mr. Hamilton D. Darby, and Mr. Walter W. Romig also assisted in the preparation of the illustrations. Dr. Erich F. Schmidt kindly furnished some of the drawings which were needed for the plates.

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I

THE COURSE OF THE WORK

By ALEXANDER LANGSDORFF

Two and one-half kilometers south of Persepolis there rise from the plain two flat elongated mounds (Fig. 1). Since numerous prehistoric potsherds were strewn upon their surfaces, Professor Ernst Herzfeld of the University of Berlin decided in the summer of 1928 upon a trial excavation at the western mound, Tall-i-Bakun A. He undertook work in two places (see Fig. 2).¹

I began the Oriental Institute's own excavation of Tall-i-Bakun A² under Professor Herzfeld's direction on March 25, 1932, with a crew of fifty-six Iranian workmen and two Arab foremen. The whole mound was surveyed and staked off in 5-meter squares.³ First an east-west trench (I) 3 meters broad was dug in E-X 26 (Fig. 2). To give the workmen unhindered access and egress, spaces for flights of steps 1 meter broad were provided along the north wall at intervals of 10 meters. The south wall of the trench was left unobstructed so that at all times the profile of the mound could be clearly read and could give us information about the arrangement of the levels.⁴ Later the crew was cut down to thirty or forty men, since it is impossible to oversee a large number of unskilled workmen in the more delicate phases of excavation. The workmen were divided into gangs of ten each, in which two men used pickax and shovel while the rest carried away the sand in baskets. They worked at intervals of 10 meters. The sand was dumped outside the mound and soon mounted to a considerable heap.⁵

The removal of the strata took place from above downward. Every 10 meters cross sections were left standing so that the stratification might be observed in transverse section also. Skeletons were found down to a depth of +2.15 m. They were dated by small glass bottles, glazed pottery, and the like as early Muslim. The skeletons lay on the right side with head toward the northwest. The graves were tublike, built of mud bricks (Fig. 3), and either vaulted or, in some cases, covered with stone slabs placed side by side. Frequently two or three burials lay one above another—an indication that the mound had been used for a rather long period as a cemetery. Even here the earth was thickly intermingled with prehistoric sherds. These had been turned up when the graves were dug, and the prehistoric levels had thus been penetrated and destroyed.

¹ The results of this preliminary work have been published in *Iranische Denkmäler I A* (Lfg. 1-2; Berlin, 1932).

² [Called "PPA" ("Prehistoric Persepolis A") at the time of Dr. Langsdorff's excavations. This designation is retained with the field numbers to avoid confusion with the numbers of objects excavated in 1937.—EDITOR.]

³ I thank my co-workers, the architects Fritz Krefter and Karl Bergner, for their help in surveying and in the drawing of the plans.

⁴ On preparations for a dig cf. Gerhard Bersu in his "Die Ausgrabung vorgeschichtlicher Befestigungen," *Vorgeschichtliches Jahrbuch* II (1926) 1-15, also his example of an analysis of levels *ibid.* pp. 15-22 and Pls. I-VI.

⁵ A similar procedure had been adopted in excavating Ashmunain (Hermopolis) in Egypt; cf. Bersu in *Deutsches Institut für ägyptische Altertumskunde* (Cairo), *Mitteilungen* II (1932) 95 f.

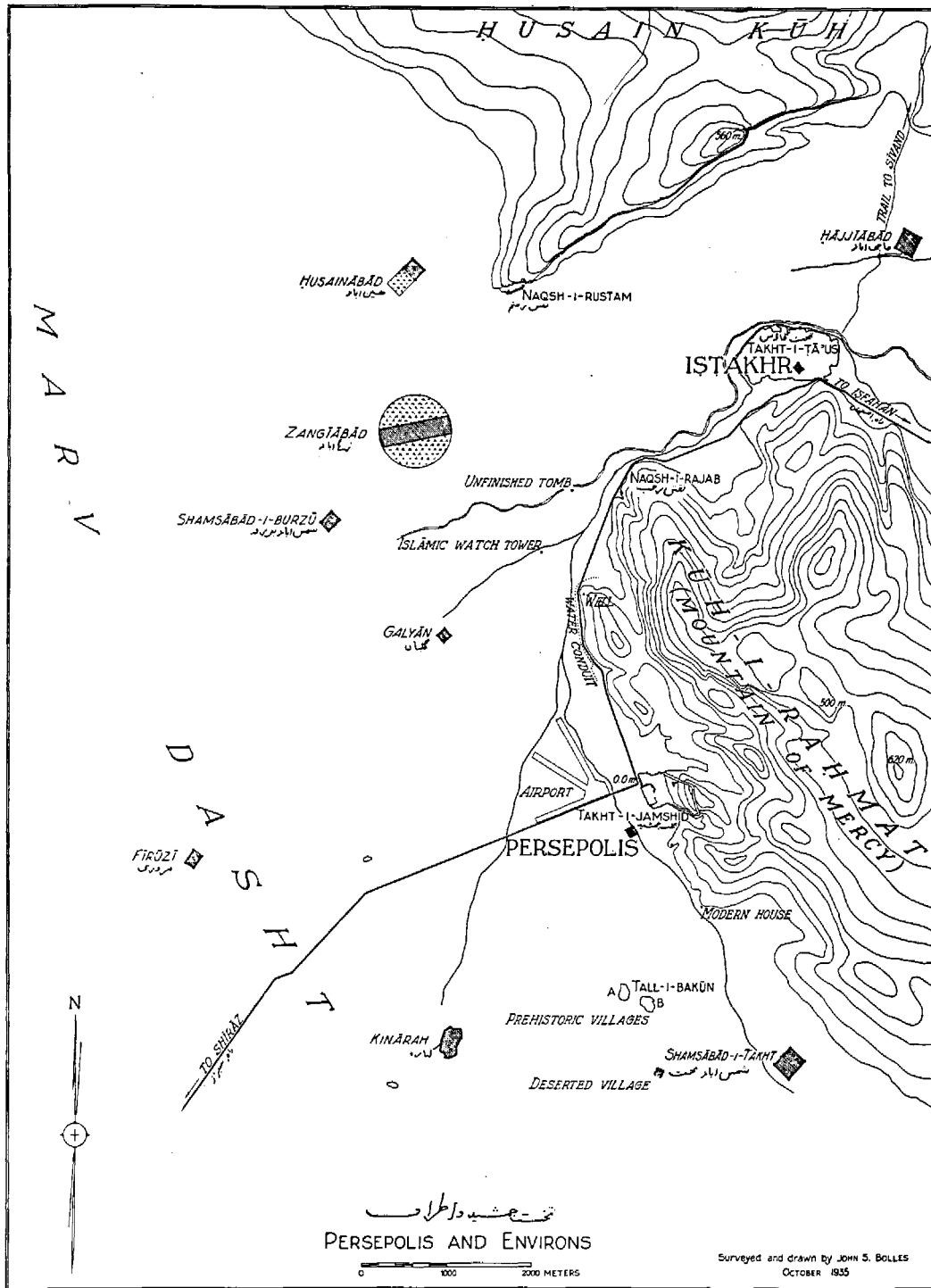


FIG. 1.—MAP OF PERSEPOLIS AND VICINITY. SCALE, 1:80,000

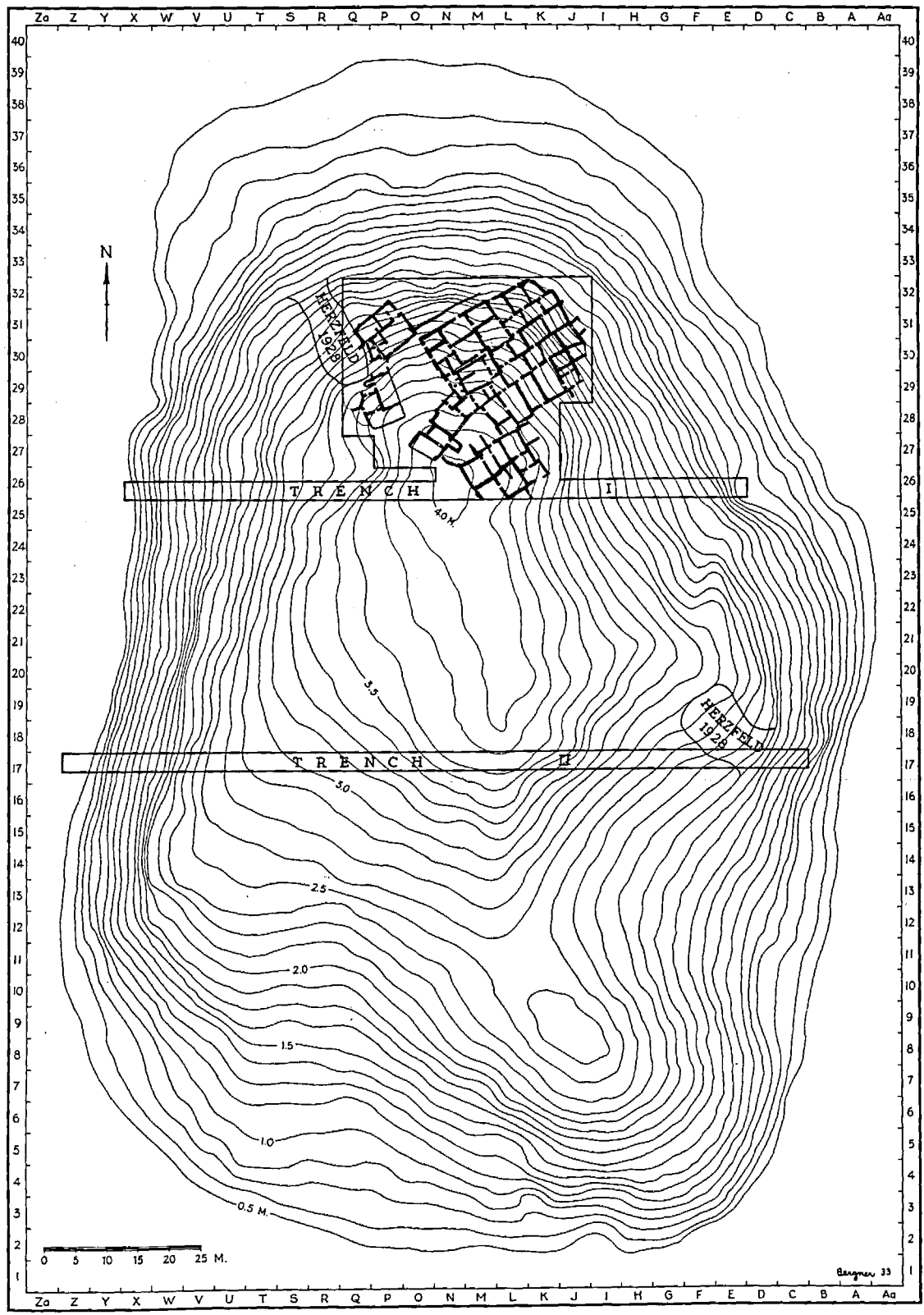


FIG. 2.—CONTOUR MAP OF TALL-I-BAKUN A, SHOWING EXTENT OF EXCAVATIONS. SCALE, 1:1,000

TALL-I-BAKUN A

In K 26 at a depth of +1.81 m. the first bit of wall was found on April 11. It was built of tamped clay without bricks, was 50 cm. broad, and was smoothed outside and in. The clay was mixed with chaff, so that in comparison with the rest of the clay of the mound it was of somewhat firmer consistency. Hence, by very painstaking work, the walls could be laid bare. After the discovery of this piece of wall the procedure required was no longer the removal of debris level by level but rather a pursuit of wall traces.



FIG. 3.—MUSLIM GRAVES

In the course of the investigation, which had to be concluded on July 21, the excavation was extended northward and the area in J-Q 26-32 laid bare (see Figs. 2 and 4). In order to determine the extent of the settlement toward the south also, a second east-west trench (II) was dug in C-Z 17 (see Fig. 2). The excavation there did not penetrate below the Muslim level.

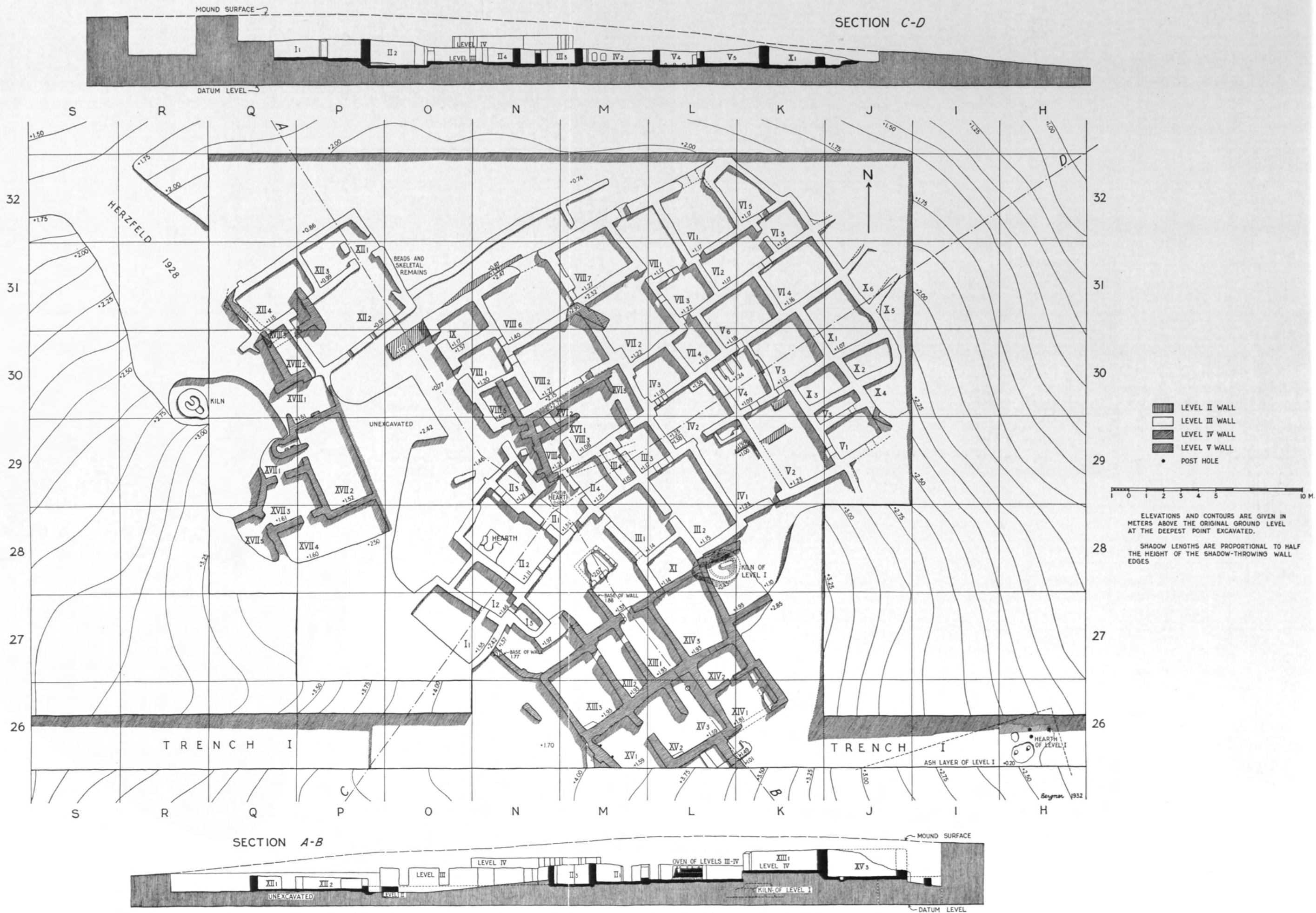


FIG. 4.—PLAN AND SECTIONS OF THE MAIN EXCAVATION. SCALE, 1:200

II

THE BUILDING LEVELS

By ALEXANDER LANGSDORFF

As with most excavations in the Orient, we could determine at Bakun A a succession of several levels. The settlement lasted continuously through several generations. A similar method of settlement can be observed in modern villages. When a house falls to ruin, it is leveled and replaced by a new one which stands somewhat higher. Thus the village rises ever higher above its surroundings. The immense masses of building debris and the human and animal refuse occasion relatively rapid growth.¹

In Trench I we recognized that the settlement had begun at the level of the plain, which at that time lay 40 cm. deeper than today. In the course of time the mound grew to 4 meters in height and attained an extent of 200 meters from north to south and 100 meters from east to west. The succession of the levels is best preserved toward the center of the mound, since the area of the settlement changed as time passed and the center of the mound was preferred by settlers. Therefore not all the levels are equally well represented throughout the mound, and the absence here and there of one or another explains the different elevations of contemporaneous complexes (cf. e.g. XIII and XVII or VIII and XII in Fig. 4).

The four levels which we could determine (Fig. 4)^{1a} are building levels, not cultural strata. The character of the finds, especially of the pottery, remains alike through all the levels, with slight changes. In M 31, at a depth of +2.80 m., appeared three vessels of different character (Pl. 19:17-19), which probably are due to a later settlement (see p. 32). The building periods change very rapidly on account of the perishable material used for construction; but the character of the structures, like that of their contents, does not change.

LEVEL I

In describing the four building levels we begin with Level I, the earliest and deepest. We possess only scanty remains of this level, owing in part to incomplete excavation, in part to destruction by later structures. In Trench I in H 26 (see Fig. 4), at a level of +20 cm., we came upon layers of ashes 15 cm. thick which contained animal bones, sherds, firedog fragments, blackened stones, and charred wood.² At the bottom of this level appeared in a shallow depression a fireplace on a hard-baked clay floor resembling a threshing-floor. In the center lay two unbaked clay cones which are probably to be considered firedogs. They had fallen over and lay 60 cm. apart. A second, smaller fireplace was close by. At some distance three post holes could be identified, one wedged tightly with stones. Its diameter was 18 cm., its depth 6 cm. The plan of the hut thus presumably indicated could not be determined. Five meters to

¹ Thus also in Egypt; cf. Bersu in Deutsches Institut für ägyptische Altertumskunde (Cairo), *Mitteilungen* II 91 and Pl. XXX a.

^{1a} [Fig. 4 shows at the northwest corner traces of a "Level V" wall. It is uncertain what the draftsman Bergner meant by this, since no "Level V" remains are mentioned by Langsdorff himself.—Editor.]

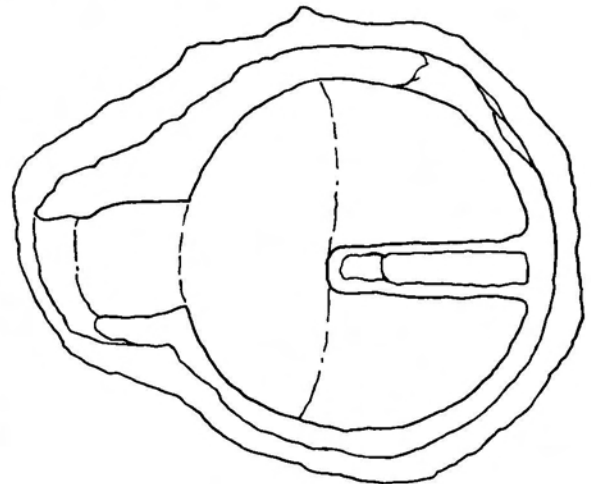
² Similar layers of ashes were found outside the settlement in O-Q 32.

the east, in F 26, a similar construction appeared; but, since for the time being no further digging was done in these deep levels, the extent and character of Level I could not be determined.



FIG. 5.—KILN IN L 28

To the same level (see section *A-B* in Fig. 4) belong two kilns, alike in type, one in L 28 (Fig. 5) and one in R 30 (Fig. 6). The better preserved kiln (that in L 28) lay at an elevation of +43 cm. It consisted of a rather large round compartment, which comprised both furnace and firing-chamber, and a smaller, likewise round, stoking-chamber. Its total length was 2.70 m., its breadth 2 meters. In the furnace a tongue 90 cm. long and 30 cm. broad which projected opposite the opening from the stoking-chamber was preserved in part to a height of 80 cm. It had served as the central support for a horizontal partition or floor plate which had separated the firing-chamber from the furnace below and which was intended to receive the pots. Points for its attachment were still recognizable on the wall. Its fragments lay scattered on the bottom of the kiln. On the wall appeared six vertical flues, each about 12 cm. broad, 45 cm. high, and 10 cm. deep. The top of the wall was smoothed and hard-baked. The kiln must have been vaulted with a muffle which had to be smashed after every firing. In the debris that filled the kiln were some slightly baked hand-sized pieces of clay with several perforations. They had apparently served as supports for pots during the firing; they may,



0 50 100 CM.

FIG. 6.—PLAN OF KILN IN R 30. SCALE, 1:20

THE BUILDING LEVELS

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however, be fragments of the floor of the firing-chamber.³ Such perforated clay pieces were found in quantities also in the vicinity of the kiln. The stoking-chamber had a sloping floor and was connected with the furnace by a fire hole. It too must have been vaulted like a beehive. The kiln was built of clay mixed with chaff; the clay had taken on a greenish yellow color from the firing. On the bottom was found a small ornamented vessel (Pl. 1:15) which must have fallen through the broken floor plate. The bottom of the kiln was discolored by black slag. The kiln was in use until the end of Period III. It finally became a refuse pit, and house XIV was built on top of it (see Fig. 4).



FIG. 7.—TOPS OF HOUSE WALLS OF LEVEL II SHOWING IN THE FLOORS OF ROOMS IV 1 AND V 2

LEVEL II

Only slight traces of Level II could be identified; they appeared in K 29-30 and N-O 31. The tops of walls showed after heavy rain at the floor level (+1.23 m.) of rooms IV 1 and V 2 (Fig. 7). No further excavation of Level II was undertaken. It is possible that more extensive investigation might show that Levels I and II coincide.

LEVEL III

Level III (Figs. 8-9) was the best preserved. The architecture and the culture of the settlement as a whole could be best understood from it. Here we have a unified group of houses; several more such complexes are to be assumed in the unexcavated portion of the mound. Because of incomplete excavation nothing can be said about the general plan and layout of the settlement.

The villagers seem to have avoided houses standing alone and always to have sought the support of earlier walls. The plans of the dwellings vary. The rooms are basically rectangular except in later additions, where they were adjusted to the space available and depart somewhat from the general direction (cf. houses I-II and V-VI).

³ Such holes have been observed in floor plates of Roman kilns; cf. August Stieren, "Römische Töpferöfen im Lager Haltern" (*Germania* XVI [1932] 112-15).

The thickness of the walls varies from 40 to 70 cm.; their preserved height extends to as much as 1.30 m. The floor levels lie between +0.97 m. and +1.55 m., with most of the rooms at a level of +1.15 m.; the floor levels are higher toward the center of the hill. The walls are built of tamped clay with which chaff was mixed for greater firmness. No bricks were identified in the assemblage of the houses.

At seven different points in Level III, all of them on inner wall surfaces, traces of wall-painting were still clearly recognizable. It is best preserved in room XII 2. Above a colorless baseboard stripe 10 cm. high runs a horizontal red stripe 4 cm. broad. Above it comes a

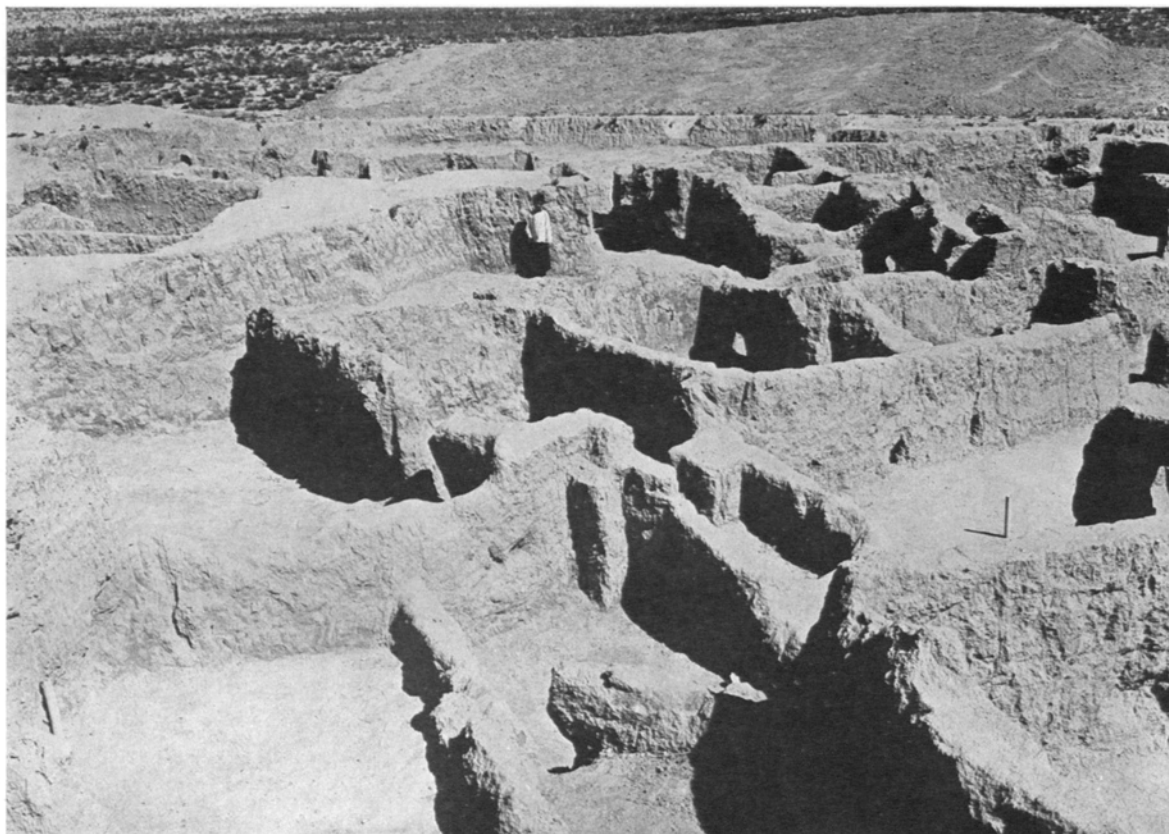


FIG. 8.—THE LEVEL III VILLAGE FROM THE SOUTH. LEFT HALF

yellow stripe of the same breadth, and above that again red is preserved to a height of 10 cm. At the other six points (in rooms V 4, VII 1 and 3, VIII 6, and XII 3-4) red-painted patches were observed on the walls.⁴

At first the whole layout seemed to consist only of a maze of rooms. With study of the exits and of the intercommunications of the various rooms, however, the whole complex may be divided into individual dwellings, each with a separate entrance. They have no connection one with another. We distinguished twelve dwellings, consisting of from one to seven rooms each (see Fig. 4). The largest is house VIII, which includes room IX. Room VIII 7 (east of VIII 6) seems to be a later addition, but that the rest of the house was built as the first part

⁴ Similar wall-painting has been observed in the banded-pottery settlement of Grossgartach near Heilbronn; cf. Alfred Schliz, *Das steinzeitliche Dorf Grossgartach* (Stuttgart, 1901) p. 15 and Pl. IV. The patterns were painted on a yellow ground; they consisted of white and red stripes 1 cm. broad arranged in zigzag fashion.

THE BUILDING LEVELS

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of the whole dwelling complex is to be recognized by a peculiarity of its outer walls, which form a rectangle 8.50×11.50 m. This wall rectangle has, on the outside, niches 1–1.30 m. long and at most 20 cm. deep. They can best be recognized on the east wall in spite of later structures adjoining. Here there were four niches at average intervals of 1.30 m. On the south wall there were two niches, both disfigured by walls built against them at right angles. On the west wall two are still recognizable; on account of the doorways there may have been only these two here. The outer surface of the north wall is so damaged that the two niches which might be assumed by analogy with the south wall are not recognizable.



FIG. 9.—THE LEVEL III VILLAGE FROM THE SOUTH. RIGHT HALF

The rectangle is divided by a lengthwise wall into two unequal portions. The smaller, western part was in turn subdivided into four rooms of relatively equal size, with one corner room (IX) disconnected from the rest and accessible from the outside only. The larger part of the rectangle was divided into three approximately equal sections. None of the rooms VIII 1–6 shows the characteristics of a court. In view of the small dimensions, especially of the doorways (Fig. 10), which, as far as revealed by the lintels still preserved, were not more than 1 meter high, a courtyard in which cattle also could have found shelter is out of the question. One would expect too that, as everywhere in the Orient, living rooms would be grouped about a court and would open into it. There is no such court in this group. Accessible from without are VIII 1, which has two low doorways leading to the large rooms VIII 2 and 6, and VIII 4, from which only VIII 3 and 5 are directly accessible. Room VIII 2, which according to the ground plan would be the only one suitable for a central court, has no open-

ings toward rooms VIII 5 and 6. The small objects found indicate similarity in the use of the rooms.

No traces of roof bearings were to be recognized on even the highest wall remains of house VIII, but such traces would have appeared a little higher. Since the largest room (VIII 3) has a clear span of only 3.40 m., there would have been no difficulty in covering the whole house with a flat roof of beams, mats, and clay.

There are no windows in the outer walls up to the preserved height. Either the windows were small slits close to the roof or the roof itself had openings which could serve at the same time as flues. In some of the inner walls of other buildings (e.g. in rooms III 3 and VII 1) a

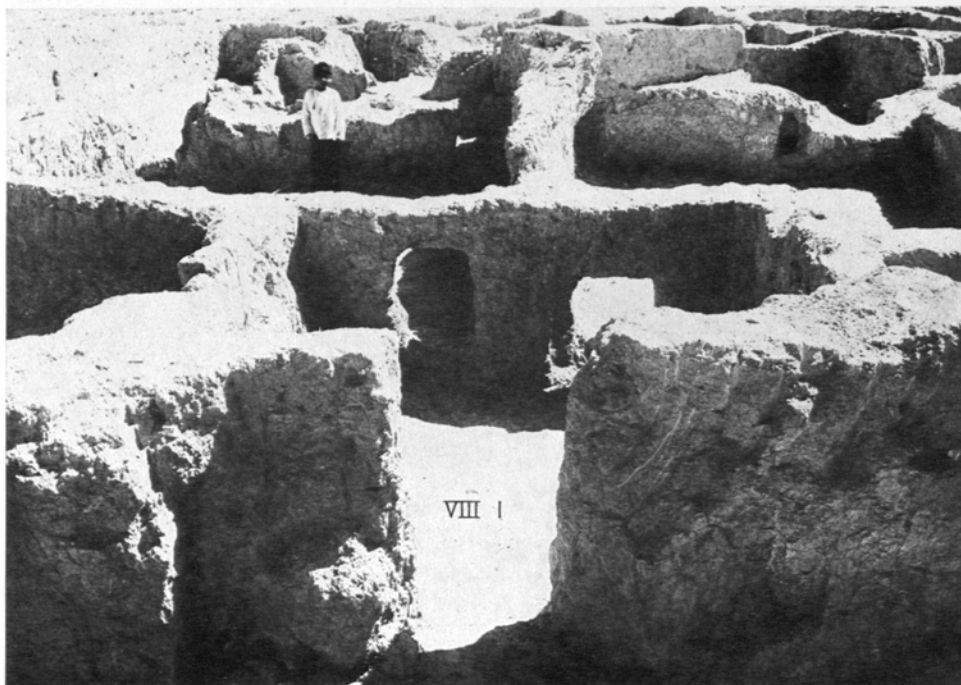


FIG. 10.—DOORWAYS IN HOUSE VIII

doorway is accompanied by a smaller opening. Such small openings can scarcely have served for illumination; they were rather in the nature of wall cupboards.

Other houses were soon built onto the east and south sides of house VIII, but on account of the jointless building material and the involved ground plans their chronological sequence is not determinable in detail. The dwelling type is more clearly recognizable in the small houses, for example III or IV, than in VIII. A storeroom in a well protected place seems to have belonged to each house. These storerooms are usually the smallest rooms; in houses III and V they measure only 1×3 meters. When excavated they were still full of vessels (e.g. Fig. 11), by the presence of which their function was indubitably recognizable. Somewhat larger, but only 6–8 square meters in area, are rooms IV 3 and VII 4, which in view of the pottery *in situ* are surely storerooms, and room XI (Fig. 12). The latter apparently formed part of house III. Its south wall was not found, but it is scarcely conceivable that other rooms to be thought of as composing a house XI abutted on the south. At any rate, there had been extensive destruction of Level III below the late house XIV. House III has, to be sure, one certain storeroom (III 4); yet XI also may have belonged to it, especially since there seemed to be a window

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opening in the wall between III 1 and XI. For the storeroom V 3 too no certain entrance—which would probably have been from V 1—was demonstrable. In the northwest corner of

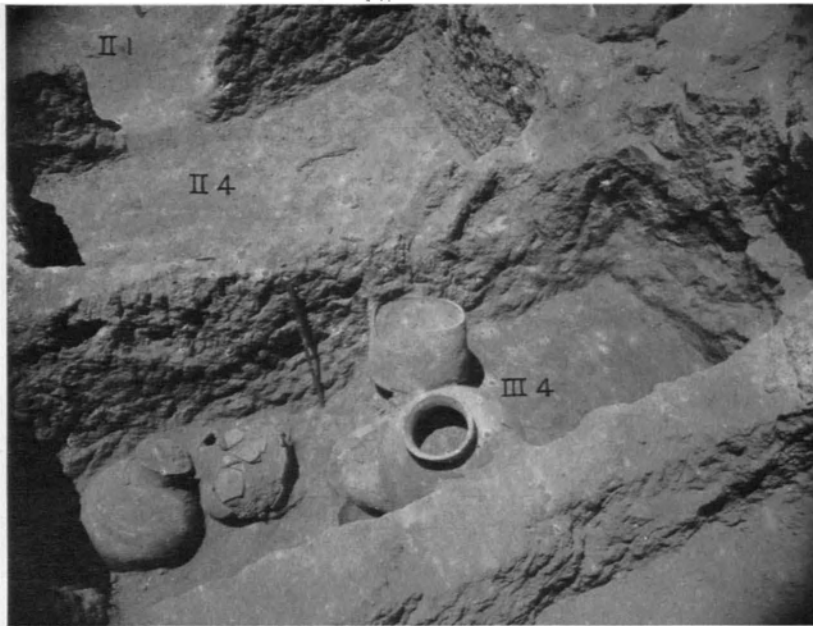


FIG. 11.—POTTERY *in situ* IN STOREROOM III 4



FIG. 12.—POTTERY *in situ* IN ROOM XI

IV 2 a small double window leads to the storeroom IV 3; in III 4 the narrow entrance was blocked by two slabs placed on edge and coated with clay. The storage vessels are regularly so large that they could not be brought in and out through such small openings but apparently

stayed permanently in the rooms, which were kept closed tight until the supplies were needed.

That the rooms, in spite of their smallness, served not only as bedrooms and for the keeping of supplies but also as living-rooms is assured by numerous individual finds, by the wall-painting, and especially by fireplaces and cooking-holes.

The following peculiarities of the individual houses remain to be mentioned:

- I. Only three rooms were excavated. Room I 3, only 0.80×1.60 m., was either a store chamber or a stable for small cattle; its segregated position would speak for the latter use.



FIG. 13.—ROOM II 2, SHOWING TWO NARROW WINDOW OPENINGS OR AIR HOLES IN THE SOUTHEAST WALL, A PLATFORM AGAINST THE SOUTHWEST WALL, AND THE CAST OF A MUD-PLASTERED WOODEN COLUMN AGAINST THE NORTHWEST WALL

- II. Room II 2 (Fig. 13), the largest, has in its southeast wall two window openings or air holes close to the floor. The northwest wall had been divided into two unequal parts by a mud-plastered wooden column the hollow mud cast of which (15–17 cm. in diameter) was well preserved and formed the head of the southerly section of that wall. From this point the wall jogged outward to the extent of the diameter of the column. The inside of the northerly section was thus brought into line with the outside of the southerly section.⁵ On the long southwest wall of this same room there is a mud platform 15 cm. high and $1\frac{1}{2}$ sq. m. in area. If we judge by the yellowish-green clay heaped up there, it was perhaps used by a potter.

The vestibule (II 1) served likewise as a kitchen.

- IV. In the northeast corner of the entrance room (IV 1) is a mud chest (originally 0.80×1.50 m., now 0.70 m. high, with walls 0.10 m. thick) completely filled with ashes. It was

⁵ For similar mud plastering of wooden supports cf. Carl Schuchhardt in his "Cernavoda, eine Steinzeitsiedlung in Thrakien," *Praehistorische Zeitschrift* XV (1924) 15 and Fig. 15.

THE BUILDING LEVELS

probably not a hearth, since, if it were, remains of similar chests would have been found in other houses also; but similar remains were found only in O 29, where they lay outside the houses, near house II (see Fig. 4). Apparently ashes were gathered in such chests for purposes unknown to us. A similar custom was in vogue in Level IV, where ashes were gathered in large pots at the entrances of houses (in XIII 2 and XV 2).

In the northeast corner of IV 2 a mud bench was preserved. In the southwest corner was a platform (Fig. 14) similar to, but smaller than, that in II 2. Some irregular ash-filled depressions in the floor may have been cooking-holes.

V. The entrance was not definitely located but was presumably in V 1.

Three narrow mud projections 90 cm. long and now 15 high (Fig. 15) extended from the north wall of V 4. These too presumably were connected with the occupant's trade.



FIG. 14.—CLAY PLATFORM IN THE SOUTHWEST CORNER OF ROOM IV 2

- X. This house was so badly damaged by the Muslim cemetery that the purposes of the individual rooms could not be recognized.
- XII. This house likewise had been destroyed by later building. Room XII 2 had perhaps been divided. Its south wall had three window openings like those in II 2 and hence must have been an outer wall.

To Level III belongs also an oven (Fig. 16) located in the open space between houses II and III (in M 28; see Fig. 4). It seems to have been used to bake bread for the whole complex. Its ground plan is rectangular (2.30×2.10 m.), and it is constructed on a refuse layer 50 cm. high. The western part of the oven is destroyed. The oven consists of a baking-plate of burnt clay 5 cm. thick with an ash box 1.60 m. long and 25 cm. in width as well as in depth situated at its east side. The plate is reddened by fire and has a very smooth blackish-gray surface. It is slightly raised along the sides and slopes gently downward toward the ash box. Along the edges of the plate and on the outer wall of the ash box are remains of an inclosing wall 30 cm. thick on which the cupola-like top rested. The stoking-hole for the plate and the opening for

emptying the ash box were on the south side. The lower margins and parts of the sides of these openings are preserved. The fire was made on the baking-plate, and after the plate had been

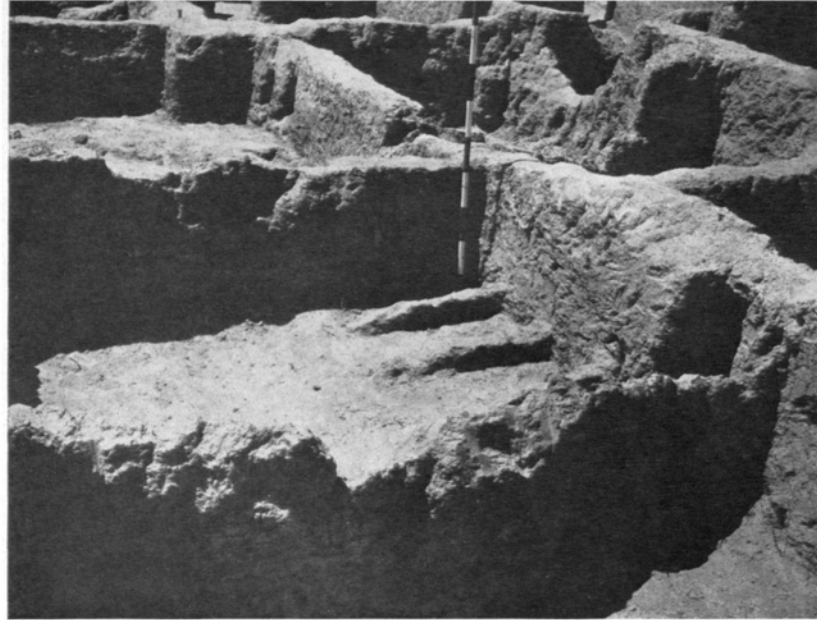


FIG. 15.—ROOM V 4, SHOWING MUD PROJECTIONS



FIG. 16.—REMAINS OF AN OVEN IN THE OPEN SPACE BETWEEN HOUSES II AND III

heated the ashes were swept into the adjoining box. The bread was then baked on the hot plate. Clay slabs ($42 \times 27 \times 8$ cm.) found east of the oven no doubt served to close the openings during the heating and baking process.

THE BUILDING LEVELS

On the north side of the settlement the outer wall was especially thick. Along it led a lane 1.20-1.50 m. broad. Its surface was of the hard-packed consistency of the floors of the rooms. The lane was bounded on the north by a wall which was preserved to a maximum height of 50 cm. This wall evidently belonged to a somewhat later period, since it stood on a layer of rubbish 15 cm. thick. The northeast corner and the east side of the settlement are badly damaged, so that there no outer wall could be determined. But the settlement could not have extended much farther at this point, at most not more than the breadth of one room.

Toward the west was what seemed to be an open space, bounded on three sides by houses XII, VIII-IX, II, and I. Here too the outer wall, particularly that of house VIII-IX, was especially thick. Unfortunately we could not locate the western boundary of the open space. A similar open space occurred toward the south, partly inclosed by the outer walls of houses I-III. On the southeast likewise there seemed to be an open space, bounded in part by XI, III 2, IV 1, and V 2. The chief exits of the dwellings led to these open spaces.

The surprisingly good preservation of Level III, especially of the storerooms that survived undamaged, suggests a sudden and unnatural end. At one point, about in the center, inside and above rooms IV 2-3, V 4 and 6, and VII 2-4, especially thick remains of ashes and some clay burned to a reddish color indicate a conflagration. At any rate the mound must have lain abandoned for a short time, until the returned inhabitants erected upon the ruins the new houses of Level IV. Those who reoccupied the site after a relatively short interval seem to have been the same people or at least to have belonged to the same race, for both the houses and their contents show only slight variations.

The following objects were among those found *in situ* in rooms of Level III:

- | | |
|---|---|
| <p>I 1 (IN N-O 27; SEE FIG. 4)
Vessel by west wall</p> | <p>Jar with apotropaic design (Pl. 3:9) containing animal bones, 2 base sherds, and 2 rim sherds; bowl fragments under jar</p> |
| <p>II 2 (IN N 28)
Bowl (Pl. 11:10)</p> | <p>Bowl (Pl. 9:12) lying aslant beside preceding jar and containing bones and 2 flint knives (PPA 1493-94)</p> |
| <p>III 1 (IN L-M 28-29)
Small bowl (Pl. 2:3)</p> | <p>Wide-mouthed bowl upside down near 2 stone implements</p> |
| <p>III 2 (IN L 28-29), NORTHWEST CORNER
Two conical beakers (Pl. 16:7 and PPA 2061) with their points sunk into floor
Conical beaker (PPA 3575) inside PPA 2061
Large conical beaker (PPA 3574) containing 2 small conical beakers (Pl. 36:13 and PPA 2063)
Conical beaker (PPA 2062) supported by a large sherd against wall
Miniature conical bowl (Pl. 17:12) under PPA 2062 with its point sunk into floor
Flint knife (Pls. 8:20 and 85:12) showing remains of bitumen and of a wooden handle
Whorl (PPA 502)
Pawn (PPA 486)</p> | <p>Whorl (PPA 83) beside preceding bowl
Red cooking-pot (Pl. 1:1) above a soot-blackened stone and bones
Large pot (Pl. 31:1) containing animal bones</p> |
| <p>III 4 (IN M 29), A STOREROOM
Large-bellied pot with flat base (PPA 3561) containing bones and a flint knife (PPA 1492); fragment of a painted bowl below pot</p> | <p>IV 1 (IN K-L 30)
Large jar</p> |
| | <p>IV 2 (IN L 29-30), NORTHEAST CORNER
Two conical beakers, one within the other, and a bowl (Pl. 1:8), all wedged tight with stones</p> |
| | <p>IV 3 (IN L-M 30)⁶
Two wide-mouthed bowls standing against west wall
Cooking-pot leaning against west wall
Cooking-pot 20 cm. away from preceding pot
Conical bowl beside preceding pot
Seven flint knives (PPA 1501-11) beside preceding bowl
Cooking-pot
Bowl upside down beside preceding pot</p> |

⁶ Some of the vessels in this room were propped up by stones.

- V 2 (IN K 29-30)
Two conical beakers, one within the other, near north-east corner, with another conical beaker to right of them by east wall, all three upside down
- V 3 (IN J 30)
Crushed vessels by west wall
- V 4 (IN K-L 30)
Two vessels at south wall
- V 6 (IN K-L 30-31)
Two pots (Pl. 13:9 and PPA 2071)
- VI 2 (K-L 31)
Large vessel in southwest corner
- VI 4 (IN K 31)
Large vessel at west wall
- VII 4 (IN L 30)
Two cooking-pots along west wall
Coarse vessel against east wall
Large pot containing many bones
- VIII 3 (IN M 29-30), NORTHEAST CORNER
Conical bowl (PPA 2502) lying in fragments on a conical beaker (PPA 2068)
Conical beaker
Conical bowl
Pot (PPA 2067), the only one standing unbroken on floor
Pot with small pedestal base lying completely crushed beneath PPA 2067
Conical beaker (PPA 3566) beside PPA 2067
Conical beaker broken in fragments
Pawn (PPA 498)
- X 6 (IN J 31)
Cylindrical beaker (Pl. 15:9)
- XI (IN L 28)
Two large storage jars (Pl. 2:1 and PPA 2048), the first supported by a cylindrical beaker (Pl. 16:1) at its base and lower part of a conical beaker (PPA 2045) and containing 4 perforated shells (Pl. 8:18 and PPA 66, 567, 571) and sherds; bowl (PPA 2046) between jars
Two cooking-pots (Pl. 17:27 and PPA 2050) one above the other
Small conical beaker (PPA 2044) somewhat apart from the rest near south wall
Pot (Pl. 3:8) lying horizontally with stone propping
Bowl (Pl. 12:10) with stone propping standing on a metate (PPA 2052)
Spouted pot (Pl. 15:6) behind preceding bowl
Pot cover made from a thick sherd (PPA 470)
Behind these vessels, near north wall, lay also
Cooking-pot (PPA 2051)
Bowl (Pl. 3:2) upside down and containing 2 conical bowls (Pls. 2:6 and 3:7)
Painted bowl (Pl. 9:3) upright beside preceding bowl and containing a bowl (Pl. 62:1), which in turn contained 3 shells (PPA 572-74), remains of fish (PPA 655), 4 flint implements (PPA 1497-1500), 2 fragments of white alabaster vases (Pl. 5:3 and PPA 598), and a stone with remains of red color
Pestle-shaped rubbing-stone (PPA 116) against wall beside last bowl (Pl. 9:3)
- XII 1 (IN P 31-32)
Vessel at east wall

Additional objects found in the various rooms, either on the floors or in the fill, were:

- I 1
Grooved polisher (Pl. 83:20)
Rubbing-stones (PPA 182 and 191)
Obsidian flake (PPA 658)
Flint flakes (PPA 1817-36)
- I 2
Macehead (PPA 115)
Rubbing-stones (PPA 129 and 179)
Pawn (PPA 525)
Obsidian flakes (PPA 656-57)
Flint implements (PPA 1805-16)
Cooking-pot fragments
- II 1
Label? (Pl. 7:17)
Jar-stopper (PPA 14)
Labels (Pls. 81:24 and 33 and 82:1, 4, 6, and 8 and PPA 18, 22, and 25)
Sherd disks (PPA 68-69)
Macehead (PPA 104)
- Rubbing-stone (PPA 133)
Metate (PPA 233)
Bone awl (PPA 589)
White coloring material (PPA 653)
- II 2
Rubbing-stone (PPA 161)
Metate (PPA 225)
Animal figurines (Pl. 6:5 and 8)
Bowl (Pl. 71:15)
- II 3
Grooved polisher (Pl. 83:21)
Bowl (Pl. 75:6)
- II 4
Label (Pl. 81:33)
- III 1
Pierced shells (PPA 63-64)
Rubbing-stone (PPA 162)

THE BUILDING LEVELS

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- Palette (PPA 201)
 Metate (PPA 227)
 Cooking-pot
 III 2
 Stamp seals (Pl. 81:29 and PPA 41)
 Palette (PPA 199)
 Pawns (PPA 487-89)
 III 3
 Palette (PPA 174)
 Labels (Pl. 7:13, 18, and 19 and PPA 338 and 340-46)
 Stirrup-shaped scraper (Pl. 83:1)
 Animal figurines (PPA 434-36)
 Bone awl (Pl. 85:3)
 III 4
 Label? (PPA 31)
 Labels (Pls. 81:20, 21, and 23 and 82:2 and PPA 26-
 28, 257-58, 261, and 263)
 Palette (PPA 196)
 Whorls (PPA 504-5)
 IV 1
 Whorls (PPA 87 and 512)
 Metate (PPA 231)
 Rubbing-stone (PPA 253)
 Alabaster vessel fragment (Pl. 81:4)
 Flint implements (PPA 1695-1710)
 Animal figurine
 IV 2
 Pestle-shaped rubbing-stones (PPA 141-42)
 Metate (PPA 245)
 Jar lid (PPA 264)
 Labels (Pl. 81:21 and PPA 290-316, 320-35, 636-46)
 Stirrup-shaped scraper (Pl. 8:14)
 Animal figurines (Pls. 5:10, 6:13, and 81:14 and PPA
 437-39, 441-43, and 445-47)
 Pawn (PPA 495)
 Firedog (Pl. 83:10)
 Flint blade (PPA 1495)
 Bowl (Pl. 59:7)
 IV 3
 Sherd disk (PPA 72)
 Grooved polisher (PPA 195)
 Palette (PPA 200)
 Metates (PPA 221, 226, and 251)
 Labels (Pls. 7:12 and 81:23 and PPA 267-68, 270-71,
 and 273-88)
 Small clay cone (PPA 289)
 Pottery scraper? (Pl. 82:42)
 Stirrup-shaped scrapers (PPA 368-69)
 Bird figurine (Pl. 5:5)
 Animal figurines
 Perforated pottery disk (Pl. 82:32)
 Pawns (PPA 471-84)
 Whorls (PPA 503 and 545)
 Firedog (PPA 514)
 Pottery plaque (Pl. 83:4)
 Perforated horn (PPA 587)
 Stone bowl fragment (Pl. 81:2)
 Red coloring material (PPA 647)
 Flint implements (PPA 1512-34)
 Miniature cone (Pl. 17:22)
 V 1
 Whorls (Pl. 82:31 and PPA 85)
 Metate (PPA 238)
 Female figurine (Pl. 7:1)
 Pawn (PPA 529)
 Bowl (PPA 2076)
 V 2
 Bowl rim (Pl. 73:11)
 V 3
 Rubbing-stones (PPA 163, 183, and 185)
 Manos (PPA 215 and 217)
 Metates (PPA 235-37)
 Firedogs (Pl. 83:6 and PPA 635)
 Bowl (Pl. 2:8)
 Cooking-pot
 V 4
 Whorls with scalloped edges (PPA 80 and 540)
 Metate (PPA 248)
 Flint implements (PPA 1563-73)
 V 5
 Metate (PPA 246)
 Flint implements (PPA 1658-69)
 Bowl (Pl. 25:11)
 V 6
 Pierced mussel shells (PPA 65 and 568)
 Clay cone (PPA 143)
 Animal figurine (Pl. 6:12)
 Whorl with scalloped edge (PPA 538)
 Flint implements (PPA 1606-30)
 Conical beaker (Pl. 16:8)
 VI 1
 Whorls (PPA 81, 543, and 553)
 Flint flakes (PPA 1637-39)
 VI 2
 Rubbing-stones (PPA 172-73)
 Palette (PPA 198)
 Metate (PPA 247)
 Flint implements (PPA 1640-57)
 VI 4
 Rubbing-stones (PPA 148-49 and 159-60)
 Token? (Pl. 7:14)
 Human figurine head (Pl. 6:25)
 Animal figurine (PPA 426)
 Sherd disk (PPA 518)
 Pierced mussel shell (PPA 569)
 Shell palette (PPA 570)
 Calcite vessel base (Pl. 81:1)
 Flint implements (PPA 1670-94)
 Bowl (Pl. 40:9)
 VI 5
 Mano (PPA 208)
 Flint implements (PPA 1711-22)

	VII 1		VIII 6
Pawn (PPA 499)			Rubbing-stone (PPA 132)
Whorl (PPA 546)			Metate (PPA 244)
Flint implements (PPA 1631-36)			Female figurine (Pl. 7:10)
Pot (Pl. 4:7)			Perforated sherd disks (PPA 464 and 523)
	VII 2		Whorl (Pl. 82:28)
Whorls (Pl. 82:30 and PPA 537, 541, and 550)			Flint implements (PPA 1774-94)
Pestle-shaped rubbing-stones (PPA 137-38)			VIII 7
Mano (PPA 214)			Pawns (PPA 53 and 500)
Metate (PPA 243)			Metate (PPA 239)
Calcite bowl fragment (Pl. 81:3)			Pottery horn of an animal figurine (PPA 533)
Shell (PPA 576)			Flint implements (PPA 1767-73)
Flint implements (PPA 1746-66)			IX
Small cone (Pl. 17:21)			Perforated sherd disk (PPA 44)
Conical bowl (PPA 2098)			Rubbing-stones (PPA 155 and 177)
Bowl (Pl. 9:11)			Metate (PPA 240)
	VII 3		Animal figurine (PPA 401)
Pawn (PPA 54)			Horn of an animal figurine (Pl. 5:18)
Pottery object (Pl. 85:8)			Hemispherical bowl, fragment (PPA 2157)
Animal figurines (PPA 430 and 432)			Large vessel, stone-supported
Flint implements (PPA 1574-1605)			X 1
	VII 4		Pestle-shaped rubbing-stone (Pl. 84:8)
Metates (PPA 228 and 241)			Rubbing-stones (PPA 154 and 157)
Labels (Pl. 81:19, 25, and 30 and PPA 350-57)			Mano (PPA 219)
Label? (PPA 359)			Pot (Pl. 69:16)
Female figurine (PPA 377)			Bowl
Pawns (PPA 490-92 and 526-27)			X 2
Whorl (PPA 506)			Rubbing-stone (PPA 150)
Shell (PPA 575)			Metate (PPA 234)
Stone sherd (PPA 610)			Pierced pottery disk (PPA 522)
Flint implements (PPA 1539-62)			Flint implements (PPA 1723-30)
Vessel with horn design, found 20 cm. below wall tops (Pl. 4:4?)			X 3
Small jar			Macehead (PPA 114)
	VIII 1		Rubbing-stone (PPA 178)
Perforated sherd disks (PPA 77 and 517)			X 4
Rubbing-stone (PPA 171)			Mano (PPA 203)
Mano (PPA 209)			Metate (PPA 242)
Flint implements (PPA 1731-45)			X 6
One vessel			Whorl (PPA 551)
	VIII 2		XII 1 OR 3
Metates (PPA 249-50)			Metate (PPA 232)
Flint flakes (PPA 1535-38)			Button seal (Pl. 8:6)
Pot fragment (Pl. 12:12)			XII 2
	VIII 3		Mano (PPA 202)
Palette (PPA 197)			Human figurine head (Pl. 6:24)
Pounding-stone (PPA 218)			Flint implements (PPA 1868-84)
Stone bead (Pl. 84:11)			XII 4
	VIII 4		Pawn (PPA 55)
Pottery tube (PPA 93)			Whorls (PPA 84 and 549)
	VIII 5		
Rubbing-stones (PPA 168-70)			

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LEVEL IV

The floors of Level IV (see Fig. 4) lie at +1.52-1.93 m., that is, about 75 cm. higher than most of Level III. Level IV survives in patches only. The dwelling complex formed by houses XIII-XV is the best preserved. House XVI lies above VIII (Fig. 17) and has been badly broken up by Muslim graves. House XVIII lies above XII and adjoins XVII. Complete dwellings such as those in Level III are not preserved; only now and then did we succeed in determining the connections of some rooms. The complex formed by houses XIII-XV is oriented like the structures of Level III, whereas XVI and XVIII rest at an angle on walls of Level III. The method of building is the same as that of Level III. Five houses (XIII-XVI and XVIII) have three rooms each; one house (XVII) has five rooms. Remains of red

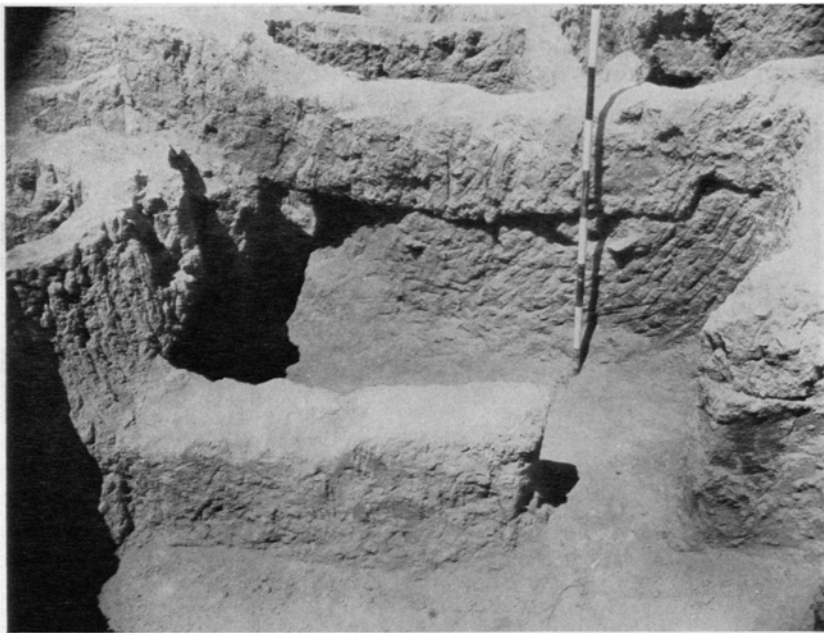


FIG. 17.—WALL OF HOUSE XVI RESTING ON REFUSE OF ROOM VIII 4

color were found on the walls of rooms XIV 3 and XVII 2-3; XVI 2 had been painted red, then later covered with yellow. An arrangement in stripes as in room XII 2 of Level III could not be demonstrated.

The following special features of individual houses should be mentioned:

XIII. Room XIII 2 was a kitchen, as evidenced by two soot-blackened cooking-pots found *in situ* and by an ash pot in the northeast corner.

North of XIII 2 is a destroyed room in the west wall of which a small well preserved doorway is situated. The doorjambs are wedged tight with old manos.

XV. The dividing wall between XV 2 and 3 is destroyed in part. In the northwest corner of XV 2, near the doorway, is an ash pot. In XV 1, close against the west wall, 1 meter apart, are two post holes, each 15 cm. in diameter. The function of the posts is not determinable.

XVII. In XVII 2, next to the doorway, a kiln projected beyond the west wall like an apse (see Figs. 4 and 18). Its over-all length was 2 meters, its breadth about 1 meter. Its floor lay 35 cm. above the floor of the room. The total length of the kiln chamber

was 1.30 m. Within, along the south wall of the chamber, were several projections and recesses. A broken clay slab lay on the floor. The interior of the kiln is burnt red. Perhaps it was used as a firing-chamber for small clay objects. Room XVII 2 was obviously a workroom, for masses of flake refuse and cores were found on the floor.

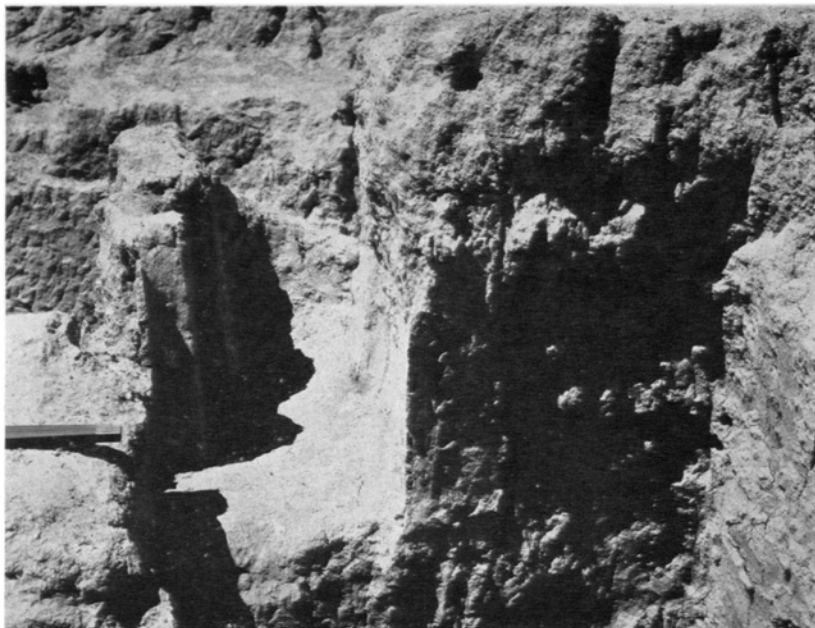


FIG. 18.—REMAINS OF KILN IN ROOM XVII 2, SHOWING PROJECTIONS AND RECESSES IN ITS SOUTH WALL

The following objects were among those found *in situ* in rooms of Level IV:

XIII 2 (IN M 26-27)
Ash pot by north wall, with a bowl inside it
Two cooking-pots in south part of room

XV 1 (IN L-M 26)
Conical beaker (PPA 2078)

XVI 3 (IN M 30)
Six conical beakers and 1 miniature vessel (Pls. 16:11
and 17:19 and PPA 2053-57), all bottom up;

beakers surrounded by stones, with some resting on
older sherds

XVII 2 (IN P 29), SOUTHEAST CORNER⁷
Seven conical beakers, the 1st, 2d, 4th, and 7th lying
horizontally (the 7th above the 4th), the 5th within
the 6th, and the 3d stuck in neck of a bulging jar
standing upright. Two of these vessels are registered
as PPA 2065 and 2066 (Pl. 14:10).

Additional objects found in Level IV, either on floors or in fill, were:

XIII 1
Pestle-shaped rubbing-stone (PPA 139)
Labels (Pls. 81:23 and 82:15 and PPA 4, 6, 8, and 9)
Label? (Pl. 7:16)
Jar-stoppers (Pls. 7:15 and 82:11)
Flint blade (PPA 681)
Bowls (Pls. 28:2, 70:8, and 77:2)

XIII 2
Macehead (Pl. 84:19)
Flint blade (PPA 679) and other flints
Vessels (Pls. 17:1, 38:7, 70:1 and 4, and 73:17 and
PPA 2121 and 2166)

XIII 3
Perforated sherd disk (PPA 45)
Rubbing-stones (PPA 166-67)
Bowls (Pls. 71:11 and 74:3)

XIV 1
Bowl (Pl. 43:1)

XIV 3
Perforated sherd disk (PPA 46)
Sherd disk (PPA 74)
Animal figurines (Pl. 6:9 and 15 and PPA 448-50 and
453-61)
Bowl fragments (Pls. 69:2 and 74:7)

⁷ All vessels in this room had been propped in front with stones.

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	XV 1	Clay jar lid (Pl. 83:12)
Pottery stamp seal (Pl. 8:8)		Flint implements (PPA 1885-95)
Turquoise beads (Pl. 84:15 and PPA 579)		
Alabaster bowl fragment (Pl. 81:10)		XVII 4
Calcite cone (Pl. 81:13)		Alabaster bowl fragment (Pl. 81:9)
Flint blades (PPA 670-71 and 694-95)		Flint blades (PPA 1896-1900)
Small jar (Pl. 4:1)		Flint flakes (PPA 2031)
Bowl (Pl. 46:1)		
Two conical beakers		XVII 5
	XV	Mano (PPA 211)
Beaker (Pl. 15:7)		Pot (Pl. 14:9)
	XV 2-3	
Two bowls (Pls. 12:4 and 74:8)		XVIII
Large jar		Pawn (PPA 501)
	XVI	Obsidian flake (PPA 665)
Metate (PPA 220)		Flint implements (PPA 1856-67 and 1932-42)
Animal figurine (Pl. 6:10)		
Stone sherd (PPA 603)		XVIII 1
	XVII 2	Perforated pottery disk (Pl. 82:33)
Macehead (Pl. 84:22)		
Rubbing-stone (PPA 180)		BELOW XVIII 2
Bowl fragment (Pl. 74:6)		Rubbing-stones (PPA 165 and 181)
	XVII 3	Pounding-stone (PPA 194)
Calcite bead (Pl. 84:16)		Mano (PPA 206)
Whorl (PPA 632)		Whorl with scalloped edge (Pl. 82:35)
		Flint implements (PPA 1837-55)

III

THE CULTURE

By ALEXANDER LANGSDORFF

Finds extended quite uniformly over the whole of the settlement. There were some rooms with scanty finds and others which contained almost the whole inventory of the culture, but none was completely empty. The storerooms were of course particularly rich sources. They were in part preserved just as they had been abandoned. The pottery vessels were unbroken; they stood on the floor, supported by stones or sherds, and some of them still contained supplies. Often whole sets of vessels were found together; for example room XVII 2 contained a set of conical beakers, some of them nested one in another. Vessels with pointed bottoms were often sunk into the floor. All sorts of vessels occurred contemporaneously: large, amphora-like storage jars, coarse red cooking-pots, and along with them delicately painted dishes almost as thin as eggshells. Large vessels contained smaller ones. Sometimes the vessels were covered with sherds broken to fit, but stoppers consisting of big lumps of clay also occurred. In room XI there were found in a very fine vessel (Pl. 62:1) the remains of a meal of fish; other vessels were full of bones. Some contained shells. Metates and manos occurred in the storerooms, also slabs with incisions, palettes, and in addition rubbing-stones and lumps of color. Cosmetic shells too were found which still contained color. The objects as a whole are dealt with by Dr. McCown in the next chapter.¹

All the delight in ornament and all the artistic activity are devoted, as is to be expected of this period, to the pottery. An inexhaustible variety of patterns and motives is created in most lively fashion. Complicated and simpler geometric forms as well as numerous representations of animals occur. Plant motives are rare, though not completely lacking. None of these motives ever occurs as pure decoration. One regularly gains the impression that they are symbolic, often even that they embody a picture language that could be read by these people. This wealth of symbolism indicates a highly developed realm of religious ideas, to which the numerous painted idols in human and animal forms also bear witness. Artistically considered, these represent the very beginning of plastic activity in clay. Unfinished and playful attempts in unbaked clay stand alongside baked and painted forms which show great ability and speak to us in a very impressive language of form. All sorts of tools also were modeled of clay: stirrup-like polishers and variously shaped disks for working clay. Several game pieces, some of them painted, were found.

Flint implements—knives, blades, borers, saws, and scrapers—occurred in large quantities. Obsidian too was represented. That the inhabitants understood how to grind and bore stone is proved by beautifully polished maces. Aside from slingballs of clay, they were the only weapons found. There were multitudes of stone implements, such as metates, manos, polishers, and work-slabs. Stone vessels were rare; from various fragments we were able to put together a single alabaster vase.

¹ [For later Oriental Institute finds at this site see Erich F. Schmidt, *The Treasury of Persepolis and Other Discoveries in the Homeland of the Achaemenians* ("Oriental Institute Communications," No. 21 [Chicago, 1939]) pp. 121–29. See also Donald E. McCown, *The Comparative Stratigraphy of Early Iran* ("Studies in Ancient Oriental Civilization," No. 23 [Chicago, 1942]).—EDITOR.]

Ornaments were astonishingly scarce. We found a single turquoise pendant and some sherds ground round and perforated which, like the few perforated shells, had probably been used as neck ornaments. The bone objects comprised only two awls and a point. Precious stones did not occur.

Beautifully cut stone buttons, carefully perforated, in the most varied sizes and kinds of stone, served presumably as stamps and seals.² They are all thoroughly individual in design, a fact which indicates their use for denoting ownership.³ The jar-stoppers of clay found in large numbers show positive seal impressions. Unfortunately not a single jar-stopper was found *in situ*, nor did any button seal exactly match any impression. These jar-stoppers may have secured vessels containing oil, grain, and the like. Labels probably sealed tied-up objects such as mats or bundles of skins.

That the inhabitants of the settlement knew how to spin, weave, and plait is proved by numerous whorls of clay and by the impressions of woven stuffs and mats on jar-stoppers and labels. They crushed and ground grain, hence were clearly peasants who cultivated their fields. That they were also hunters and cattle-raisers is clear from the numerous representations of mouflons and bezoar goats and the many slingballs, which were probably used in hunting.⁴

Comparisons with results obtained at other early sites show the importance of our finds at Tall-i-Bakun. The excavations in Susa did not bring to light any houses. At al-'Ubaid the briefness of the excavation permitted finding no more than a burned layer of huts of matting(?). In Warka the *sondage* merely cut some walls but laid bare no ground plans; the immensely deep deposit of later strata prevented this. At Tell Arpachiyah unusual and hitherto unobserved types of structures have been found.⁵ At Tell al-Halaf nothing is known about the settlements to which the ancient pottery belongs.

Of the wealth of forms and motives present in the pottery of Tall-i-Bakun, only a few are continued at Susa. There all the technical finesses are known, but the step toward rigidity has already been taken. In the plain between the Euphrates and the Tigris a comparable ware, but less imaginative and visibly decadent, occurs in sherds only. We meet this early culture in its complete purity and originality only in the region of its origin, the highland of Iran.

² Cf. Herzfeld in *Archaeologische Mitteilungen aus Iran* V (1933) 52 f.

³ *Ibid.*

⁴ On the contemporaneous rise of agriculture and cattle-breeding cf. Eduard Hahn, *Von der Hacke zum Pflug* (2d ed.; Leipzig, 1919) pp. 57-80.

⁵ See M. E. L. Mallowan and J. Cruikshank Rose, "Excavations at Tall Arpachiyah, 1933" (*Iraq* II [1935] 1-178).

IV

MATERIAL REMAINS

By DONALD E. McCOWN

POTTERY VESSELS

TECHNICAL DETAILS

The clay is always fine and well washed, but medium-sized grits or inclusions of chalk are occasionally to be found in the paste of large jars. The color of the clay, though usually a cream tone throughout, varies considerably with the firing. Underfiring produced a tan-buff shade which is at times quite reddish. Jars and other thick-walled vessels occasionally have a tan core shading into the usual cream color toward the surfaces; or firing may produce a vessel with core and inside surface tan in color while the outside surface is cream-colored. In a few fragments the entire core is tan while the surfaces are cream. This is not a slip but is caused either by a trick of firing which burns out the iron salts on the surfaces or by a deposition of finer clay particles at the surfaces. The cream color may vary from a light yellowish to a very pale gray or light greenish tone, and with overfiring the ware turns greenish gray. All these shades are light, except occasionally the tan-buff. Bowls, particularly the smaller ones, frequently were fired in nests, and the paint often vaporized from one bowl onto the interior of the next, leaving a faint pattern there.

The ware is soft to medium hard and quite porous; but it is well baked and gives a ringing sound when struck, probably because of its very fine consistency.

Most of the vessels were formed by intermittent rotation. The potter could turn his product, but always less than one complete revolution. Small sherds show horizontal finger lines which could be confused with wheel marks; but the moderate irregularity of the walls and the frequent off-centering of the interior bottom confirm that the wheel was not known. Impressions on the bases of some jars (Pl. 1:3) show that they were placed on coiled matting or loose-meshed cloth either before or after hand-turning.

Large jars were made by hand and at least sometimes in two sections. It is uncertain whether the latter is generally true, because the walls have fired excellently and care has been taken to leave no external traces of joins. It is clear, however, that the inner side at the middle of the body was often smeared with an extra layer of clay, possibly to cover up a join or to give added strength. The cooking-pots (see p. 26), which are of coarser clay and not as well fired, show breaks revealing an upper edge deeply concave into which a rounded lower edge fits just below the bend of the side (Pl. 1:1, 2). A few sherds establish that the same method was used with the vessels of cream ware. The edges which were to fit together were notched, scalloped, or beveled to give a firm join (Pl. 1:4-6). Fragments of inner-ledge rimmed bowls (Pl. 12:9-11) and jars show that at times the neck was added and the hole mouth was an integral part of the body and that in other cases the inner mouth was added as a horizontal ledge. Where it is observable it is clear that suspension holes always pierce that part of the rim which is an integral part of the vessel.

The walls of the vessels, with the exception of jars, are very even. The thinness of many of the hemispherical bowls (form IV; see p. 28) is exceptional. They often vary from a millimeter to a millimeter and a half at the side, though thickening toward the base. Cones (form XI C) are sometimes almost as thin as these very fine bowls. Larger bowls and the other vessels are of a more serviceable thickness, though occasionally the former, in spite of greater absolute wall thickness, are relatively as thin as the small hemispherical bowls.

The surface is usually smooth, either purposely wet-smoothed or molded with wet hands. Raised veins on the surface occasionally show where the clay adhered to the fingers. To achieve evenness of body and thinness the vessels were often scraped obliquely, horizontally, or vertically, the last particularly on cones. Not infrequently on large jars this has left rippled areas (Pl. 1:7). When the paring instrument adhered to the clay this also sometimes produced a rugose surface. The interiors of jars and pots may be quite uneven, as are the bases of conical beakers, which must have been hollowed with a thin instrument, for the bottom is often narrower than the little finger. Cracks which must have been produced by unequal expansion or contraction in firing occasionally appear in the bases or thicker parts of vessels, but they do not pierce both surfaces.

The mat paint used for decoration is generally a very dark brown. Firing, however, has produced many shades of this varying from reddish brown on tan-buff clay through chocolate brown to a blackish gray on the light greenish-gray clay of overfired vessels. The paint was applied quite thickly and in a great many cases has not adhered well, having flaked off partly or almost completely disappeared in the soil. On overfired pieces the paint has etched quite appreciably into the clay and left the painted surface somewhat granular.

In one unique case (Pl. 16:9) a design in two colors has been produced, horizontal bands in black-brown and vertical zigzags in red-brown. The pigment of both colors is the same, however. Probably the vertical zigzags were painted after firing, for the reddish paint is not fast like the black-brown. It is improbable that this effect was intentionally produced.

A few observations may be made on the technique of painting. In many cases the outline of the design, drawn with thinner paint than the interior, may be clearly distinguished, particularly if the vessel has been overfired, when almost every brush stroke stands out plainly (Pl. 1:9). It is hardly necessary to remark that much of the painting was done by highly competent artists with exceptional draftsmanship. A soft brush was used, the minimum and maximum ascertainable widths of which were respectively 0.1 and 1.0 cm. It is interesting to note that on several border bands the brush strokes can be seen to have been not more than 5 cm. long before more paint was taken on the brush. However, it is most likely that this is due to the intermittent turning, for the wavy-line design inside bowls (design VI C; see p. 38) shows a single stroke from start to finish. In many cases it is clear that the pattern was outlined and then filled in thickly with paint. This means that the artist saw many of the designs in line form before the interior was filled and justifies the analysis of designs such as IV C 2 (see p. 37) as a zigzag cutting each side of a meander (cf. also the line designs discussed on p. 53).

Particularly interesting is the drawing of animals, especially the ibex and mouflon since we possess so many designs of them. In most cases the outline of belly and legs was drawn with one stroke (Fig. 19 *b*). Where only two legs are shown the outline of the hind leg, rump, and back was made in another sweep which often continues upward into the fore horn. The tail was often added separately. The foreleg and chest were formed by one stroke, the nose and forehead by a separate stroke often carrying back to form one of the ears (*e*) or, depending on the angle of the forehead, up into the fore horn (*c*). The rear horn was added separately. When four legs are indicated the added legs were usually placed before and behind the belly line (*f*), though this varies as may be seen in *a* and *c-d*. It is not unlikely that generally the

drawing of an ibex or mouflon began with the tip of the fore and upper horn, the stroke continuing down through the back and hind leg, after which the belly line and other outlines were completed, for the horns are usually the most important element in the design. Plate 71:3 shows clearly that the foremost and rearmost legs were simply appended to the body.

No indication, unfortunately, was found to suggest how the artists achieved the excellent spacing of elements in the design zone. The artists of Tall-i-Bakun, then, used a system of drawing in sweeping lines. They did not draw compositely, as is elsewhere frequently the case, with the body drawn as a unit to which the extremities were appended.

The painted, cream-toned pottery just described is the usual product of these early potters. However, another ware was produced. It has a very thick black core and light red surfaces. It is relatively coarse with some small grits and a considerable amount of straw temper. The outside is burnished but not very closely sometimes, and though this burnish may be quite high the surface is left pitted by the burning-out of the vegetal temper. This handmade pot-

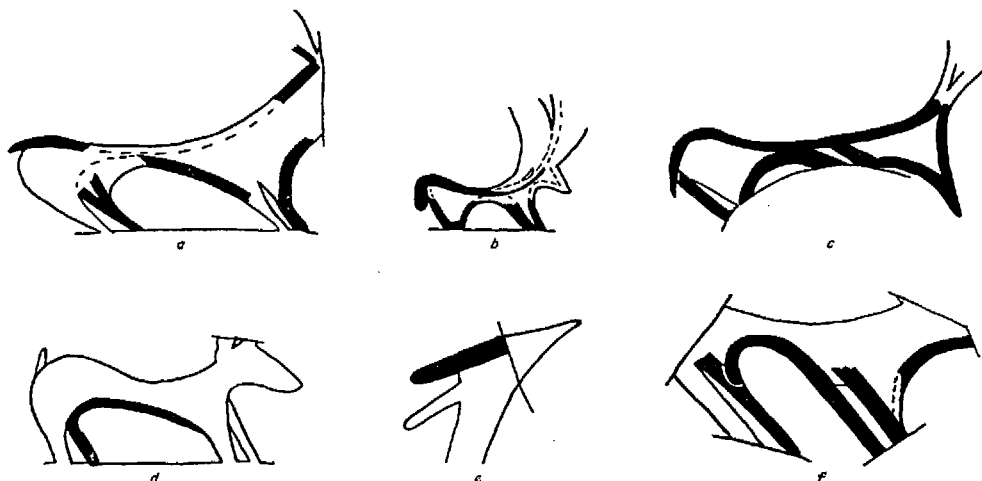


FIG. 19.—BRUSH STROKES IN ANIMAL DRAWINGS. SCALE, 1:2

tery (see p. 24) is relatively crumbly and probably not so highly fired as the cream ware. Vessels of this ware are never decorated, for in general they were used for cooking, as the traces of burning on them prove. Such treatment would have ruined or effaced any painted ornament.

FORMS

The repertoire of vessel forms is considerably more varied at Tall-i-Bakun than at other Iranian sites of similar age. Fourteen different forms have been distinguished besides unusual types.

I. DEEP BOWLS

One of the commonest bowl forms is that of steep-sided high bowls with disk or low ring bases, which are found in all levels.

A. In one type the side slopes steeply from the base, becoming almost vertical at the rim (Pl. 9:1, 2). There may or may not be a "body break" low down on the side. The diameter is about equal to the height, which is often 22 cm. though it may be as great as 26 cm.

B. A slightly different type is produced by a lower slope from the base, the side being either smoothly convex or with a body break to the vertical upper side (Pl. 9:3). This type has a somewhat greater diameter than A, though the height usually remains about 22 cm.

C. Probably the commonest of the deep high bowls is one somewhat wider-mouthed than either of those mentioned above. The side may show greater convexity (Pl. 9:4) or may slope in a straighter line directly to the oblique rim, producing a more conical form (Pl. 9:5, 7). The height may be somewhat greater than 23 cm., while the diameter ranges from 28 to 36 cm. A rather extreme specimen of this conical type from Level I is seen on Plate 76:16. Plate 9:8 shows an unusually high ring base, while No. 6 reveals a grooving below the rim.

Both this and form II may have unequally round rim circumference tending toward the ovoid, with one side somewhat higher than the other. Note Plate 9:7, where maximum and minimum rim diameters are 34 and 30 cm. respectively.

II. BROAD BOWLS

A series of big broad bowls exists with differences in profile but with much the same proportions. The height varies from about 18 to 20 cm., while the diameter ranges within 2 cm. of 30 cm. Rarely the diameter may be as great as 40 cm., though such bowls where the profile is completely preserved show no increase in height. These usually have low ring bases, though rarely the base may be as high as that of Plate 9:13. As noted above, the rim circumference may be slightly ovoid.

A. One type has a convex lower side which becomes almost vertical at the simple rim (Pl. 9:9, 10).

B. The side may also slope up with less curve from the usually low ring base in a more conical form to a simple almost vertical or slightly inturned rim (Pl. 9:12, 13). Plate 9:12 is unusual for the slight ridge below the rim, No. 11 because of the somewhat sinuous profile.

C. Certain bowls with the same general shape are distinguished by a ridge well down the side below the main design zone (Pl. 9:14). Plate 10:1 and 2 show less usual profiles of shallower bowls. The ridge is usually of moderately sharp triangular profile, though it may also be rectangular as in Plate 10:2.

D. In addition there is a group of somewhat shallower bowls with much the same diameter, within 2 cm. of 28 cm., but with a height close to 16 cm. These may have conical (Pl. 10:3) or more upturned profile (Pls. 43:12, whose slight lip is unusual, and 10:4) or straighter upper side similar to that of Plate 9:10.

It is likely that the more globular and conical bowls are more typical of Level III than of Level IV. The ridged type is found in both levels, though only in house filling in Level III. The shallower bowls seem more prevalent in IV than in III.

III. SMALL BOWLS

Two groups of small bowls of slightly varying size but similar in form are found in both Levels III and IV. In one the diameter varies between 15 and 20 cm. and the height between 10 and 13 cm., while in the other the diameter lies between 20 and 22 cm. and the height between 10 and 14 cm. They have in general very narrow ring bases and fairly steep conical lower sides giving moderately deep to slightly shallower bowls. The side turns up gradually (Pls. 10:5, 6 and 1:8) or more sharply (Pl. 10:7) to an almost vertical rim or to a slightly inturned rim (Pl. 10:8-10).

Unusual small bowls are shown by Plate 10:11-13. Plate 10:14 shows the rim of what must have been a unique saucer. Both Plates 10:15 and 11:1 with atypical rims represent bowls unusually low for their diameters.

Similar to the two groups of small bowls mentioned above is a diminutive series, found in both Levels III and IV, which probably served as cups. They differ somewhat from the larger

types by broader bases, which are relatively high, though unfooted specimens are rarely found in Level IV. Plate 11:2 and 3 show simple upcurving sides. Plate 11:4 has the rim more sharply upturned from the conical lower side, while No. 5 illustrates the unfooted type.

IV. HEMISPHERICAL BOWLS

Approaching a hemispherical or semiovoid shape is a considerable series of small bowls which are on the whole more typical of Level III than of Level IV.

A. Very rarely the vessel is flat enough to make less than a hemisphere (Pl. 11:6), with diameter ordinarily 20 cm., the height somewhat less than 10 cm. This type is found in both Levels III and IV.

B. Much more frequently (in Level III mainly) the shape is nearly hemispherical (Pl. 11:7). Often the diameter is 20 cm. and the height 10 cm., though the majority of the series show the height remaining at 10 cm. while the diameter varies between 14 and 18 cm. There is also a smaller group with diameter 14 cm. and height 7 cm. No sharp distinction may be drawn between the two main variants. Three stages of deepening are shown by Plate 11:8-10, while occasionally the side may curve into the base more quickly, giving a profile approaching that of an inverted pointed arch. The base is usually rounded, though rarely there may be a small flat area. The rim always has the simple profile already illustrated. Many of these bowls are not more than 3 mm. thick and at times only 1 mm., though there is often some thickening toward the base.

C. Another small series with much the same proportions (d. 17-18 cm., h. 8-10 cm.) and thinness differs in having a very small ring base and often a body break, that is, a sharp transition from the more vertical side to the belly. Plate 40:5 shows this type, while Plate 11:12 illustrates the body break.

V. CONICAL BOWLS

A series of conical bowls shares much in common with the semiglobular bowls (form IV) in both general absolute dimensions and thinness of the pottery. This form is found mainly in Level III, though rarely in the other levels also. The shape is conical with the tip pointed or slightly truncated, the latter being most usual. The rim curves up to the vertical or may be somewhat incurved. The main variation comes in the side. In one type this is somewhat concave (Pl. 11:13), in the other straight or very slightly convex (Pl. 11:11). Usually the diameter is 17 cm. and the height 8 to 13 cm., though 10 cm. is most frequent for the latter dimension. There is greater variability in size than was noted with the semiglobular bowls. Quite rarely larger forms occur (Pl. 11:14, 15), with diameter greater than 22 cm. and height exceeding 15 cm.

With the conical bowls may be grouped deep oval bowls with a spike at the bottom (Pl. 12:1). These are very rare and are grouped here because the spike is usually solid. It may be somewhat larger and hollow (Pl. 12:2), in which case the vessel approaches the true cones (form XI C) in form. Such bowls were found in both Levels III and IV, and spikes in Level I.

VI. CAMPANIFORM BOWLS

A few examples of campaniform bowls have been found in the various levels. In one type the diameter and height are about equal (Pl. 12:3); this may be a beaker. But with slightly greater diameter and about the same height, 15-16 cm., a more bowl-like type is approached (Pl. 12:4). These two variants are also found with the same proportions but only 12 cm. high.

MATERIAL REMAINS

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VII. INVERTED-RIM BOWLS

A few bowls with the rim inverted sufficiently to approach a hole-mouth shape were found mainly in Levels III–IV. In most cases they are fairly small and do not more than approach the hole-mouth form (Pl. 12:5), but one (Pl. 12:6) is closer to a true hole-mouth bowl and has suspension holes. Plate 12:7 represents an unusually large bowl of this type. Here may also be mentioned an unusual fragment with a disk knob below the rim (Pl. 12:8).

Several bowls with suspension holes are similar to hole-mouth bowls except for a slightly everted cylindrical neck close outside the hole mouth. Variations in rim, suspension holes, and body are shown by Plate 12:9–11. This form is found in large jars also (Pl. 15:5). It is somewhat rarely represented in both Levels III and IV.

VIII. SQUAT POTS

A. This type of pot, found in both Levels III and IV, has a body break at the maximum diameter, which is usually at mid body (Pl. 12:12, 13) or higher (Pls. 13:1 and 58:4). The base, as on all pots, is either flat or furnished with a low ring. The height may be 8 cm. or more but always less than the diameter, which varies from 14 to 18 cm. The neck is a moderately high cylinder, sometimes slightly concave or everted, with a horizontal or down-turned ledge rim. Plate 13:2 is unusual because of its rim as well as its large size, which approaches that of the smaller jars (form X).

Of much the same shape is a series of miniature pots (Pl. 13:3, 7) which usually have a diameter of about 12 cm. and a height of about 8 cm.

B. A slightly different shape, which seems to belong mainly to Level III, is produced by elongation of the body. The height thus approaches the diameter, which stays close to 15 cm. The orifice is of somewhat reduced diameter, and the cylindrical neck has a plain (Pl. 13:4) or ledge (Pl. 13:5, 6) rim. This shape is closely imitated by pots with diameter of only 8 to 10 cm. (Pl. 13:8).

C. Very similar to form VIII *A*, but found in Level III only, is a type in which the body break comes somewhat below the maximum diameter (Pl. 13:9). It thus gives a squatter appearance (Pl. 13:10) than type *A*, though of the same dimensions. It is found in miniature size also, with diameter ranging from 8 to 10 cm. (Pl. 13:11, 12). Plate 13:12 has an unusual button base.

Rim forms differing from those of pots already mentioned are seen on Plate 13:13–16.

IX. GLOBULAR AND OVOID POTS

Pots with globular or ovoid bodies differ from those just described in their lack of body breaks and their simple rims. All the pots of this series have short necks, either everted or concave cylinders, terminating in simple rims, and flat or low ring bases. They are found in Levels III–IV. Miniature pots of this class, one in cooking-pot ware, are shown by Plate 14:6–9.

A. These pots vary mainly as to width of orifice. Those with narrower necks are represented by Plate 13:17, 18. Plate 13:19 shows a somewhat broader neck, and Plate 13:22 a unique rim form. The diameter ranges from 10 to 17 cm. and the height, never greater than the diameter, from 10 to 16 cm.

B. Examples in which the neck is so broad as to produce what is really a bowl shape are rare (Pl. 13:20, 21). A unique wide-mouthed specimen (Pl. 14:1) is similar in this respect only. The height range is within that of *A*, but the diameter is considerably larger.

C. Pots with ovoid bodies are rarer. They usually have fairly high cylindrical rims slanting obliquely outward (Pl. 14:2, 3). Two unusual specimens are represented by Plate 14:4, 5.

X. JARS

There is no abrupt change from small jars, here called pots (forms VIII–IX), to larger forms, which are found in all levels. One group with diameter and height about the same varies from 20 to 30 cm. The big jars range all the way up to 57 cm. in diameter, and their height is generally equal to or greater than the diameter, though rarely it may be less. Jars are never truly slender, however. Such a type as is seen in Plate 14:10, of the smaller size, comes closest to it. Plate 14:11 is quite globular, but more usual is a sharply inturned (Pl. 14:12) or even concave (Pl. 14:13) side. This latter feature is more pronounced in jars whose maximum diameter is below the middle of the body. These further often show a body break below the maximum diameter. Examples of this type are seen on Plate 15:1, slenderer on Plate 15:2, and smaller on Plate 15:3. Bases are flat, except for occasional rings on smaller jars, and usually slightly smaller than the rims. Necks are of the height of the examples shown and are true or slightly everted cylinders. Rims like that of Plate 15:3 are exceptional and are another feature shared by smaller jars with certain of the large pots. Both Plate 15:4 and 6 are unusual, the former for its high shoulder and the latter especially because of its tubular spout. Plate 15:5 has suspension holes, which are commoner in a rare type of bowl (form VII).

XI. BEAKERS

There are three general shapes of beakers—conical, cylindrical, and true or truncated cones.

A. To the first class belongs Plate 15:7, which seems typical of Levels I–II. In Levels III–IV a type with rounded base and sometimes a slightly everted rim is found (Pl. 15:8).

B. The cylindrical type is found in all levels. The side curves in to a rounded (Pl. 15:9) or small flat (Pl. 16:1) base, which in Levels III–IV sometimes has a small ring (Pl. 16:2). Unusual rims are shown by Plate 16:3, 4. A somewhat irregular shape (Pl. 16:5) with a special type of decoration (design VI D 3; see p. 39) is found predominantly in Level IV.

C. Cones were found in the rooms of both Levels III and IV, though many more occurred in III than in IV. True cones (Pl. 16:6) occur sometimes with walls as thin as 2 mm. The largest is 24 cm. high. Somewhat commoner are truncated cones. These often have somewhat convex sides (Pl. 16:7), or sinuous profiles (Pl. 16:8) when the proportions are rather squat. The examples shown represent the normal variations in size. Somewhat rare are considerably higher cones with everted rims (Pl. 16:9, 10). A variant of these shows the everted rim turned up again almost to the vertical, producing a somewhat cupped top, the most extreme example of which is shown by Plate 16:11. The height (19–20 cm.) is somewhat greater than that of the more usual types.

XII. CUPS

The numerous small cups which were found show a variety of shapes.

A. One group is somewhat globular. They are all much the same in height, 5–6 cm., but fluctuate from 8 cm. (Pl. 16:12) to 12 cm. (Pl. 16:13) in diameter. This type is much commoner in Level III than in the other strata. Several small vessels (Pl. 16:14) with the same shape but decorated as bowls rather than as cups come from Level IV.

B. Cups with conical lower side, a body break to an almost vertical upper side, and slightly inverted simple rim are commonest. They all keep much the same size, height 6–8 cm. and diameter 10–12 cm. The lower type (Pl. 16:15, 16, the latter with unusual rim) is commoner than the somewhat higher type (Pl. 16:17). Usually they have pointed or tiny flat bases. This form is most typical of Level III. The few examples from Level IV have greater dimensions, flat bases (Pl. 16:18), or somewhat changed shape (Pl. 17:1). A very few examples have been found in which the upper side is slightly oblique outward (Pl. 17:2).

C. Not as common as *A* and *B* are deeper cups with convex side rising to an almost vertical rim (Pl. 17:3-5), from both Levels III and IV. Plate 17:5 has an unusual rim. Somewhat commoner is a similar shape, like XII *B* also, though without body break, in which the rim is inverted somewhat. The dimensions vary more than in the other types, height 6-9 cm. and diameter 7-11 cm. Within these dimensions the shape varies as to position of the maximum diameter, high as on Plate 17:6 or low as on Plate 17:7. The shape with high maximum diameter is commoner and occurs in a series of decreasing dimensions (Pl. 17:8, 9). Various unusual types are shown on Plate 17:10-18, of which No. 12 is a miniature conical bowl.

XIII. MINIATURE CONES AND SAUCERS

Aside from the miniature forms already mentioned, in Levels III and occasionally IV are found miniature cones (Pl. 17:19-22). Their small capacity would limit their usefulness.

In addition, small crude saucers of both the usual cream ware and the coarse ware used for cooking-pots are found in both Levels III and IV. One (Pl. 17:23) is really a minuscule cup, but others (Pl. 17:24-26) served as either toys or minute saucers. Two of these (Pl. 17:24, 25) are in the cooking-pot ware.

XIV. COOKING-VESSELS

Differing in ware, as already described (p. 26), is a series of cooking-vessels which almost always shows signs of burning. The typical shape, found mainly in Levels III-IV, is that of Plate 17:27. Large cauldrons (Pls. 17:28, 18:1) may have served as storage containers. Plate 18:2, of the usual cream ware, probably belonged to a similar cauldron. A coarse-ware bowl (Pl. 18:4) shows no sign of burning.

VARIA

Pot-stands are rare. The only one whose provenance is sure comes from Level IV, but it is uncertain that they belong to this level only. The profile is usually hourglass-shaped (Pl. 18:3, 5, and the very big 6). There is but one example of a plain ring (Pl. 18:7). With the exception of Plate 18:6, 7 usually they were decorated with plain horizontal bands of equal width. See page 70 for other possible pot-stands.

A spout has already been noted on one pot (Pl. 15:6). Four other fragments showing remains of tubular spouts were preserved (Pl. 18:8-10). Those of certain provenance are from Level III. One tubular spout (not shown) has a length of 7 cm. and a diameter of 2.5 cm. From Level IV comes a fragment of a decorated bowl rim with a small lip (Pl. 18:11).

A few fragments of crude flat platters with cylindrical rim sides were found. Plate 18:12 shows a fragment of a peculiar vessel (d. 20 cm.) whose use as a platter is uncertain. Plate 18:13 is in the gritty red ware of the cooking-pots. Plate 18:16, of uncertain but very large diameter (toward 50 cm.), is of coarse tan clay. A cream-ware fragment (d. ca. 36 cm.) similar to that of Plate 18:16 but without the external base ledge was found in Level IV.

Several vessels of unusual shape were found. Fragments of several with flat oval base, semi-ovoid body, and the orifice well up on the side at one end (Pl. 18:15) were found in Levels III-IV. One of these from Level III (PPA 2890) has a slightly everted cylindrical neck at the opening. Only one is painted (Pl. 49:21). In addition, fragments of a small low trough (Pl. 18:14) were found. Another peculiar fragment, with flat rectangular base or end, had a niche in one side (Pl. 18:18).

Here may be mentioned small theriomorphic vessels. The most complete specimen (Pls. 1:10 and 18:17) is from Level III, though fragments were found in Levels II and IV also. One example may have a cylindrical neck and ledge rim, though this is not completely certain.

The unusual disk knob on a bowl with inverted rim (Pl. 12:8) has already been noted. A small hook on the side of a pot or bowl (Pls. 1:14 and 18:21) may be a handle. A more curious projection is seen on Plates 1:13 and 18:22. A pierced lug handle of typical cream ware (Pl. 18:19) and a brown-painted knob handle (Pl. 18:20) shaped like those of cooking-pots (cf. Pl. 17:27) are unique.

Further unusual sherds include two with odd profiles (Pl. 18:23, 24). They may be conical bases, though it is more probable that one (Pl. 18:24) is a pot rim. Very peculiar are the fragments shown on Plate 18:25, 26, both of which perhaps should be oriented vertically since No. 26 has a finished edge at the top. Two unusual tubular rings with opening along the ring (Pl. 85:9, 10) are of uncertain nature. Plate 85:11 may show part of a dipper.

A great many more ring and cone bases were found broken off than attached to vessels. Simple concave, "dished," bases were rare and mainly from cooking-pots. Very low rings in which the end is rounded (Pl. 19:1, 2) have already been seen on various vessels. Low rings rarely show a flat area of rest but usually curve up toward the inside (Pl. 19:3) or often have smaller inner rings (Pl. 19:4-6). Plate 19:7 and 8 are interesting because the main ring is slightly higher than the inner ring—not that this would affect stability on a dusty floor. A higher ring (Pl. 19:16) is of cooking-pot ware.

Low cone bases usually present a convex profile outward (Pl. 19:9) or a straighter outline (Pl. 19:10) which with the curve from the side of the vessel looks concave. They are often square-ended (Pl. 19:12). Plate 19:13 is interesting because of its primitive appearance due to the attachment of the foot to the side above the body bottom, but the only two fragments of this sort found came from Level IV. With this exception the above-mentioned types were found in all levels. High cone bases though found in Level III seem to be commoner in Level IV. They are usually straight-profiled (Pl. 19:14) or slightly concave with square end (Pl. 19:15).

The only solid cylindrical base (Pl. 19:11) is of cooking-pot ware and was found in Level IV.

POTTERY LATER THAN LEVEL IV

Just above the ruined walls of Level IV in M 31 (see p. 5) three vessels were found together which differ completely from any other ware found at Tall-i-Bakun A. The ware is light red and very full of small grits. It is not well baked and is somewhat crumbly and flaky. The surface had been covered with a thin white slip on which were simple geometric designs in black paint, nearly effaced on two of the vessels. Two are pots (Pl. 19:17, 18), and the third is a cylindrical beaker (Pl. 19:19). Sherds of this ware are quite common on the surface of Tall-i-Jangal, about five miles south of Tall-i-Bakun near the village of Gashak. It is of interest to note that a surface sherd from this site bears a design composed of long-necked birds of Susa I type. These vessels might be contemporary with the fine red ware to be described next. However, they were found only 20 cm. under the surface, so their exact relation to the other remains is uncertain.

Numerous fragments of unpainted red pottery which was plentiful on the surface of the mound were found in the top layer of the excavation. They were not stratified in relation to the buildings and because of disturbance by the Muslim burials (see p. 1) occurred from the surface down through Level IV. The excavations of 1937 disclosed that they belong to a stage of occupation later than any preserved on this lower slope of the tepe.¹ The ware is very fine,

¹On the plan (Fig. 4) a wall fragment assigned to a "Level V" is shown above a wall of Level III. Dr. Langsdorff does not mention a "Level V," and this wall fragment should not be confused with the habitations of the makers of red pottery. It is unlikely that on the edge of the mound, where the surface level is under +2.5 m., dwellings of the makers of red pottery should be preserved; this wall fragment probably should be assigned to Level IV.

light red or orange-red, and well fired. The surface is usually burnished. Some pieces have a red slip, darker than the body clay, though this is uncertain in many cases because of the burnish. The vessels are probably handmade.

Complete pieces were rare, but the forms given here will be supplemented when the finds of 1937 are published. Bowls are often shallow with slightly everted rims (Pl. 20:1, 3, 5) but sometimes deeper (Pl. 20:6, 9). Still deeper bowls with rims tending toward the vertical or slightly incurved are represented by Plate 20:10, 14, 17. Deep bowls with incurving upper sides and rims may be seen on Plate 20:2, 19. Others (Pl. 20:4, 7, 8) have the profile of hole-mouth bowls. Plate 20:7 has a grooved rim. Pots of various sizes with broad mouths (Pl. 20:11) or narrower mouths and more sharply everted rim-necks (Pl. 20:12, 13, 15) as well as flasks (Pl. 20:16) were found. This last form is close to a series of beakers with fairly small flat bases, high slightly convex sides, and slightly everted rims. The degree of constriction just below the rims produced bottle-like profiles (Pl. 20:18, 20) or more beaker-like forms (Pls. 20:21 and 21:1). A series of bases illustrates other forms. Plate 21:3 probably belonged to a jar whose rim was similar to that on Plate 21:2. Plate 21:4 shows the lower part of a very large bowl. Plate 21:5 and 7 are fragments of ring bases. Plate 21:9 is a peculiar footlike object with oval section.

The only decorated fragment (Pl. 21:13) has a row of vertical incisions on a slightly raised band.

A few fragments might possibly represent a transitional phase between the periods of the painted cream ware and this plain red pottery, but the existence of such a phase here is still open to serious doubt. A base of typical fine red ware is decorated with a brown-painted band (Pl. 21:8). A miniature pot of light red ware has a cream-tan slip, possibly, and a band of brown paint around the base (Pl. 21:6). A large bowl of light red ware with possibly a whitish slip (Pl. 21:12) might be from a later period. Until painted vessels of the burnished or slipped red pottery are found we cannot be sure that this ware was painted during a transitional period, for the deeper shades of the tan-toned cream ware approach the lighter tones of the red ware.

A very few fragments of gray ware were found. A miniature pot of gritty black ware has a light gray slip (Pl. 21:10), and a small gray bowl has remains of a black burnished slip preserved inside (Pl. 21:11).

DESIGNS

Before considering the designs it will be well to look at the framework into which they fit.² Since the treatment of the surface as a whole depends on the form (see pp. 57-59), the variations in banding differ with the shape. Except on globular pots, where there are no distinct body divisions, the tectonic application is practically always excellent.

Large bowls are most commonly decorated with one band at the rim and another at the body break (Pl. 4:4) or, if the body is rounded (Pl. 4:5), where the side curves more sharply to the base. Bordering each band and between each band and the design zone are lines. Rarely, but not exceptionally, there may be two lines above the lower band, while it is more unusual to find more than one line below the rim band. Occasionally the lines may be omitted or retained at one border only. Not infrequently the rim band may be reinforced by a row of small elements used otherwise only in the main design zones on cups or more rarely on small pots. Most frequently they consist of isosceles triangles with apex up (Pl. 27:13) or more often down (Pl. 26:8) or dots (Pl. 27:18). Less frequently used elements include pairs of horizontal right triangles (Pl. 37:1) or the same with long sides opposed (Pl. 60:2), unattached cross-

² In this discussion a brush width is called a line and anything wider a band. A subsidiary design zone is a narrower one which may lie above the main design zone.

hatch (Pl. 57:11), reversing rectangles or triangles (Pl. 33:2), stylized horns (Pl. 80:11), and others. These, though in a way forming a subsidiary design zone, reinforce the rim band, particularly when they are attached to that band. Very rarely such a row of elements is separated from the rim band by lines to form a true minor design zone. In a few cases the main design zone has as its border a checkered band (Pls. 42:19 and 54:7). A minor design zone above the bottom band is unusual. Bowls with a ridge below the main design zone (form II *C*) always have a subsidiary zone below the ridge. So far as could be discovered there is no distinction in the above-mentioned features between Levels III and IV.

The low ring bases or feet are almost always painted solid. Very exceptionally a ring foot may be banded or have a triangle design. Plate 80:24 is unique. Such decorated ring feet are found in Level IV only. On high ring or cone feet series of bands are occasionally found. In one unusual case (Pl. 22:21) three suspended curved triangles were painted inside a high conical base.

When the interior of a bowl is decorated, predominantly there is a band at the rim only. Lines below the design zone are exceptional, but a line bordering the lower edge of the design zone is rarely found in the bottom (Pl. 80:23).

Thin hemispherical bowls (form IV *B*) usually have only a line or a thin band at the rim (Pls. 2:9 and 25:13). This is also usually true of cones with design VI *D* 2 (Pl. 2:7). In the case of beakers (Pls. 36:14 and 54:15) and conical (Pls. 1:11 and 71:12) and campaniform (Pls. 26:8 and 59:11) bowls, whose banding is similar to that of large bowls, the bottom is usually painted solid. Very exceptionally this may form the lower edge of the design zone (Pl. 27:13).

With jars the neck is usually painted solid (Pl. 2:2), though occasionally it may be banded (Pl. 5:1). Between the neck and the design zone is a band, and below the design zone further bands at the maximum diameter complete the lower border (Pl. 3:8).

Pots, though treated similarly to jars, rarely have on the neck a minor design zone of panels (Pl. 32:9), connected (Pl. 5:2) or unconnected elements (designs XI and X), or reversing triangles (design XV). Usually there is a line between the neck and the design zone (Pl. 53:4). The bottom border, at the break from shoulder to belly or below the maximum diameter if the body is globular, is treated as on large bowls. A minor design zone between the neck and the main design zone is very rare. Where there is no design zone on the shoulder small elements may be suspended from the neck, or the neck may bear a design zone and be bordered by fringe (Pl. 44:4) in Level IV or by an unattached row of dots. Such fringe below the main design zone of bowls is found rarely in Level IV only (Pl. 27:12).

In a few cases a series of small elements or a suspended group is to be seen inside a pot rim, or groups of strokes may ornament the top of a ledge rim (Pl. 53:8).

In classifying the amazing wealth of designs it soon became obvious that the only satisfactory method of doing so was to analyze them according to the composition of the elements or the syntax and classify the various elements inside that framework. But such classification strictly followed would scatter exceptional elements: animals (XIX), men (XVIII), and a unit composed of triangles and rhomboids (XVII) which was unique until found elsewhere in Fars by Sir Aurel Stein. These, therefore, with elements on sherds too fragmentary to place according to their syntax are treated last.³

The designs fall into two very general groups, those not between bands and those forming a design zone. Of the former type two varieties may be distinguished: overall patterns (I) and

³ The scheme followed is as objective as possible; but in the necessarily arbitrary division into categories subjective feeling naturally enters at times.

suspended elements (II). The second general group comprises the bulk of the designs. Here we have vertical designs (III, IV), zones divided into fields or panels (VI–VIII), checkered zones (IX), joined or unjoined elements (V, X, XI), plain horizontal bands (XII), elements on a central line (XIII), horizontal zigzags (XIV), reversing triangles (XV), and meanders or wavy bands (XVI) as the compositional schemes.

I. OVERALL PATTERNS

Filled areas between elements or zones filled with multiple, unseparated rows of small elements are not included here. Some of the following examples may belong to that type, but as far as could be seen the sherds showed only an upper band.

In all levels overall designs are rare⁴ and used to a large extent inside bowls or on cups. Elements used in Level I are the Jerusalem cross (Pl. 22:1), eight-pointed line “stars,” and “fans” (Pl. 22:6). In Level III plain crosses and a type of crosslet (Pl. 22:2), dots or blobs singly (Pl. 22:4) or joined in pairs, and circles variously filled (e.g. Pl. 22:3) are used, and in Level IV dots or blobs (Pl. 22:4), line lentoids (Pl. 22:7, 8), V's (Pl. 22:5), and rarely arcs (Pl. 1:12).

II. SUSPENDED ELEMENTS

A. Various types of loops are suspended from a band.

1. Simple or multiple parallel loops are found on jars, pots, and cups. They are rare in Levels II (Pl. 22:9, which might well have had a lower band), III (Pl. 22:12), and IV (Pl. 22:10).

2. Loop bands with wavy edges (Pl. 22:11) occur occasionally in Levels III–IV. This form of design is always found inside bowls except in the case of a beaker (Pl. 22:13) and a bowl or pot (Pl. 22:14). In one variant a divided isosceles triangle (cf. Pl. 46:10) replaces the inner arc.

3. Loops opposed from rim and base are found on bowls. Because of their rarity they are included here, though of a different compositional scheme. All examples came from Level III except one from Level IV. The simple form of this design (Pl. 22:19) is commoner than more elaborate ones (Pl. 1:11). Loops from the base are very rarely found below the main design zone (Pl. 54:10).

B. In a second main type, found occasionally in Levels III–IV, small elements are suspended from a band.

1. These may be in groups or intermittent. In Level III long or short fringe in intermittent groups is commonest and may have loops between the groups (Pl. 1:15). Fragments of two jars each show a single suspended element on the shoulder (Pl. 22:15, 22). A pot fragment from Level IV shows elements suspended from the rim (Pl. 22:16), while two small triangles such as those of Plate 22:17 are suspended inside a pot neck and three inside a conical ring base (Pl. 22:21).

2. Continuous series of unconnected elements are very rare. One Level III bowl has fringe inside, another unilaterally scalloped bands (Pl. 22:20). Again, in Level IV short fringe occurs, and different elements alternate on a small jar (Pl. 22:18).

C. A third group shows vertical or horizontal zigzags suspended inside bowls mainly.

1. Columns of triangles such as those on Plate 22:24 are rarely found in Levels III–IV.

⁴ “Rare” and “moderately rare” are used to indicate frequency of occurrence and do not imply atypical features. Such terms are relative and quite approximate. They are based on the very considerable quantity of registered sherds and except for “moderately common” and “common” need further confirmation.

2. In Level IV inside bowls were found the designs shown on Plate 22:23 (probably suspended) and Plates 22:25 and 23:1 (unusual because of the asymmetry). A design on the outside of a bowl (Pl. 23:2) approaches the category of loop bands (design II A 2).

III. VERTICAL PATTERNS

A. Zones with the purest vertical effect, except for design III A 7, occur usually on beakers. Between vertical zones there is often fill of fringe, strokes, short zigzags, or toothed crescents (Pl. 23:6).

1. Unusual in Level III are plain crosshatched zones with S's between them or plain vertical bands (Pl. 23:3).

2. Series of unconnected elements in vertical zones, though fairly rare, show several unusual figures in Levels II-IV: oblique quartered rectangles (Pl. 23:5), oblique rectangles containing negative zigzags (Pl. 23:4), toothed crescents (Pl. 23:6), scalloped rectangles (Pl. 23:7, which possibly may be considered as a form of design III C), and apparently in one case vertical birds like those of Plate 76:10, 11.

3. In Levels III-IV there are rare occurrences of vertical zones consisting of apex-opposed triangles separated by diagonally hatched (Pl. 23:8), crosshatched (Pl. 23:9), or solid diamonds. In Level IV fringe is found between the vertical zones and between the triangles and the diamonds.

4. Opposed dovetailed triangles produce a negative zigzag between them. This type of design occurs in Level II (Pl. 23:10), where it may have oblique strokes between the vertical zones. It is rare in Level III, where various elements fill the triangles (Pl. 23:11, 12). Plate 23:13 is unusual, for the identity of the vertical zones is obscured. This design is found rarely in Level IV but as commonly as in Level III. Often solid triangles contrast with stroke-filled zigzags (Pl. 23:18), a feature not found in the previous levels. The triangles again may be filled variously (Pl. 23:14, 15). Oblique strokes are commonest between the vertical zones, though other fills occur (Pl. 23:20).

5. Joined elements in the vertical zones (Pl. 23:16, 24) are rare in Levels I-II, and sometimes toothed crescents occur between the zones. Plate 23:17, with pairs of connecting crosshatched squares, is the only example from Level III. In Level IV crosshatched diamonds occur as well as the diamond of Plate 23:19.

6. Solid zones containing negative areas with or without fill are barely represented in Level III by zones with vertical lentoid areas which may be filled as in Plate 23:15. Though rare, this class is commoner in Level IV than in Level III. Plate 23:23 shows diamond fill. Lentoid areas in vertical pairs (Pl. 23:21) and single oblique lentoid areas, blank or filled as on Plate 23:11, or alternating with negative wedges (Pl. 23:22), occur. Sometimes the solid zones are divided and the negative areas paired (Pl. 23:22). Filled circles also occur, as on Plate 23:25, which is unusual because the vertical zones are alternately different.

7. Elements paired from the borders of vertical zones leave a negative design which was surely recognized as such by the painters. This type of design forms a small and unusual series predominantly from Level III. One of the finest vessels found (Pl. 24:1) shows what clearly represents a plant motive, while Plate 24:5 is almost identical except for the zigzag edges of the vertical zone. A more angular treatment of the same motive also was used (Pls. 23:26 and 24:2). From near the surface, presumably Level IV, came a beaker sherd (Pl. 24:4) with probably this type of design, though the negative effect is obscured by stroke fill. The design is usually found on deep bowls.

B. There are a few bowls showing columns of joined elements which are not in vertical

zones. Such elements include birds of the type seen on Plate 76:9 and diamonds (divided on Pl. 24:3). Plate 24:6 shows unusual interlocking diamonds with far from purely vertical effect, while No. 8, the only example of this type of design surely from Level III, shows a combination of triangles.

C. Clarity is produced by combinations of vertical zones alternating with vertical elements, coming close at times to vertical panels. Such a pattern is found in Level III rarely on bowls (Pl. 24:9) and quite commonly on jars (Pls. 2:1 and 24:7). Plate 24:15 shows a peculiar design which may fit into this category. Some of the columns of joined elements of design III *B* may have formed parts of such compositions. In Level IV the same treatment, though rarely found on jars, is seen on bowls. Plate 25:1 and 5 show interesting parallel bands with side elements. Plate 24:14 probably represents a fragment of a similar pattern. Other variants are shown on Plate 24:10-13. The peculiar element (branch?) of Plate 25:2 probably alternated with another motive.

IV. VERTICAL ZIGZAGS

This heading does not too appropriately fit all the compositions included under it. Combinations of zigzags and vertical lines or meanders painted solid to form triangles produce, by a contrast of verticals and horizontals, a torsional effect which strictly speaking is neither purely zigzag nor vertical. This class is discussed under IV *B-C*. It was used mainly on bowls, though also on pots. The characteristic effect is present in an example already noted (Pl. 24:6).

A. Vertical line zigzags or wavy lines are almost nonexistent. Both Plate 25:3, showing a motive used commonly horizontally, and Plate 25:4, showing a wavy ribbon, from Level III, are unique as are Nos. 7-8. See also design VI *E* 1.

B 1. Columns of reversing triangles, the simple effect of which is given by Plate 25:9, are found from Level II to Level IV. This pattern occurs with dotted vertical zigzag between the triangles (Pl. 25:10), and an interesting variant from Level II is shown by Plate 25:12. Plates 25:13 and 2:4 show very complicated elaborations from Level IV.

B 2. Reversing hemispheres, composed vertically, either plain or with fill between the columns, are rare (Pl. 25:6, 11).

B 3. Equally rare are reversing rectangles (Pl. 25:14, 15).

C 1. Designs formed by columns of not more than five tip-linked right triangles whose hypotenuses face in different directions alternately (Pl. 26:6) are relatively rare, and no essential difference may be seen between Levels III and IV. Variety is produced by changing the form of the triangles (Pl. 26:1, 5) or more usually by appendages (Pl. 26:2-4). Some columns are so short (Pl. 26:7, 9) that if they had not been so rarely used they would have been included in a separate section under design X. Plate 26:8 is unusual because the triangles are in oblique instead of vertical columns. Occasionally in both Levels III and IV the columns are paired, and the designs thus achieved vary only in the form of termination at the border (Pl. 26:10-12) or in the fill (Pl. 27:1, 3). Plate 27:4 shows this pattern in outline.

C 2. Similar to the last type of design is one produced by a zigzag touching or cutting the middle of each side of a rectangular meander. This motive is very rare except when paired. An oblique form (Pl. 27:2) from Level IV deserves note. Most of the paired forms are from Level III. Variety is produced mainly by the fill (Pl. 27:5, 6, 8), for which triangles are sometimes used. A rare variant, shown paired on Plate 27:7, occurs in Level I, on one Level IV jar fragment, and more often in Level III.

V. STEPS

A. This design is found on bowls and rarely pots in Levels III and sometimes IV. The steps are ordinarily drawn with simple bands and may have as many as six treads, though fewer are commoner. Unusual types from Level III show triangular terminations (Pl. 2:5) and loop fringe (Pl. 27:9).

B. A variant in which one side of each step band is denticulated (Pl. 27:10, 11) is very rare.

C. Line steps are rarely found in Level IV (Pl. 27:12, 15), sometimes with an unusual thickening of the risers (Pl. 27:16). Exceptionally in Level III groups of steps are spaced at intervals in the zone. The semiovals of Plate 27:14 are not typical. Fill between steps (Pl. 27:13, 17) is unusual.

D. Plate 27:18 shows one of the commoner designs from the lower levels (I-II). The heavy bars may be without the negative rhomboids. When these occur there is a clear resemblance to the semicontinuous form of the triangle-rhomboid design (XVII F).

VI. ZONES DIVIDED INTO FIELDS

A. The exteriors of bowls are divided into segments which assume triangular form due to the smallness of the bases. This design is found almost exclusively on thin hemispherical bowls (form IV A-B) in both Levels III and IV. Plates 2:9 and 28:1, 2, 4, 5 show several treatments of the triangular segments and various elements separating them.

B. The interiors of bowls may be divided into fields too.

1. Only one fragment (Pl. 28:8), from Level IV, shows the interior divided into halves, though see section C and Plate 2:3.

2. Trisected interiors from Level III are illustrated by Plate 2:6, 8.

3. Quartered interiors are quite rare. One fragment showing this composition was found in Level II. Plate 28:3 shows the counterpart of design VI A on the inside of a bowl, while Plate 28:7 (Level III) and 6 (Level IV) illustrate true quartering.

C. Another design dividing interiors, with series of wavy lines, is worth considering separately because it is confined to interiors and is moderately common in comparison with the other design classes. The division is not usually as definite as in the previous examples, for the bands of wavy lines radiate obliquely and, though dividing the interior into three or four areas, do not produce real trisection or quartering. Plate 2:3 (Level III) shows an interior halved.

Two main forms of this design predominate in Levels I-III but are represented on so few sherds in Level IV that they were probably intrusive there. Groups of three to six wavy lines extend obliquely from the rim border toward one another. The ends of the wavy lines of one group may or may not be attached to the next group. In one form (Pl. 28:12), by far the commoner, each group of wavy lines has a straight-line border along one side; the other form (Pl. 28:9) has no such straight-line borders.

Variant types from Level III are shown on Plates 28:10, 11 and 29:1, 3. At the rim there may be no fill or merely fringe; Maltese squares (cf. Pl. 40:6) may replace the usual triangles as fill. Plate 29:2 shows a transformation toward a suspended design which results in no sort of field effect.

In Level IV, as we have mentioned, this design is rare enough to be considered intrusive. Plate 29:5 shows an unusual example in which the ends of the wavy lines may have been free. Plate 29:6 represents the usual type with the groups of wavy lines bordered on one side, but in No. 4 this may have changed into a pattern quartering the interior. In this level also the border is found scalloped toward the wavy lines (Pl. 29:7). Maltese squares are again found as fill replacing triangles.

D. Division by vertical elements of design zones which cover most of the exteriors of vessels produces segments as in design VI *A*, though creating a different effect. There is a real contrast to VI *E*, which is in principle the same.

1. This design is rather rare in Level III. There is a charming variety of fills (Pls. 1:8 and 30:4), circles being commonest (Pl. 30:1, 3). In Level IV it is somewhat rarer (Pl. 30:5, 6). Two charming variants (Pl. 30:7, 11) are of uncertain provenance. A few remarks are warranted by the vertical dividing elements. The caduceus⁵ is found from Level I and is the most usual (Pl. 30:1), though columns of isosceles triangles and bands occur. A divided caduceus (Pl. 30:9) with as many as four lines between is fairly common in Levels III–IV. Plate 30:2, 8, and 10 show unusual vertical dividing elements.

2. Crescents between high points seem to be confined to Level III, where they are rare and found only on bowls and cones. The crescent may be plain or with a butterfly motive (Pl. 2:7) or other elements (Pl. 30:12, 13) above it.

3. Beaker-like cups (Pl. 16:5) with two or three superimposed triangles filling the design zone and leaving blank fields (Pl. 30:14) are found rarely in Level IV and less frequently in Level III.

E. Here, in contrast to *D*, the design does not cover most of the exterior of a vessel and therefore merely the design zone rather than the entire surface is divided into fields. This is not very different from the jar designs classed under III *C*, though there the vertical effect predominates over that of division into fields.

1. On jar shoulders the design zone is often divided by vertical zones or elements with a fill motive between (Pl. 31:4). There is little difference between Levels III and IV. The vertical elements are usually either bordered groups of wavy lines or plain bands, the latter seemingly more typical of Level IV than of Level III. Between the dividing elements circular elements are most common (Pls. 2:2 and 31:1–3, 5), though various other elements also were used (Pls. 3:8, 9 and 32:1).

2. On bowls of Levels III (Pl. 32:4) and IV (Pl. 32:2, 3, 6) the design zone is occasionally divided into fields by groups of vertical zigzags. Very rarely in both levels fields are formed by vertical bands with elements between them (Pl. 32:5, 7–9, 11, 12; all unique examples).

VII. PANELS

In distinction to zones divided into fields (design VI) are true panels, each with a separate frame. These are much more common than the field designs and are found practically always on bowls, except the hemispherical and conical types. The panels may be filled in a variety of ways.

A 1. Diagonal cross.—The triangles formed by the crossbars contain fill. Plate 32:10 shows an example from Level I. In Level III the design is rare, and simple triangular fill occurs (Pl. 32:13). It is equally rare in Level IV, where divided or plain stepped triangles (cf. Pl. 32:6) are used as fill. Plate 33:1 shows an odd form. In Level IV a slightly different type of design is created with negative crosses (Pl. 33:2, 3). A further variant is found in Level III, where the opposing triangles which form the negative cross are joined at the center, or only two of them horizontally or vertically (Pl. 33:5). The triangles may be solid as well.

A 2. Diamond.—This is a favored panel fill with the following numerous variations in treatment:

a) A diamond is inscribed, and the resultant corner triangles are filled. This design is known from Level I in simple form (Pl. 33:4). It is somewhat rarer in Level III than in Level IV.

⁵ The nomenclature of the elements is as objective as possible and does not imply any interpretation.

In both strata the corner triangles are usually scalloped, while the diamond may be hatched, checkered, or as on Plate 33:7.

b) A diamond with circular pattern inside is rare, but commoner in Level IV than in the preceding strata. Plate 33:6 illustrates the usual type, though the inner circle may be completely crosshatched or contain a cross element (Pl. 33:12) or other fills (Pl. 33:8, 11).

c) In Level IV more elaborately filled diamonds appear most commonly (Pl. 33:9, 13, 15, and cf. No. 10). Plate 33:9 is unusual because the panel is separated from the borders.

d) A further distinctive pattern, which is moderately common, has two negative vertical lentoids in a solid diamond. The usual form (Pl. 33:14) is commoner in Level IV than in the preceding levels. Whether it is intended to represent a head is uncertain, but there is no doubt about Plates 33:16 and 34:1, which may be related to the diamond with negative lentoids. The stepped corner triangle is very rarely reduced to a rectangle (cf. Pl. 34:3).

e) Rarely in Levels I, III, and IV the diamond may be surrounded by an inner frame (Pl. 34:4). The triangular corners may be fringed.

f) The diamond may be joined to the frame of the panel by two or four (Pl. 34:2) small triangles. This form is rare and found in Level IV only.

g) Diamonds divided vertically or horizontally (Pl. 34:3, 5) are found very rarely in Level IV.

h) Exceedingly rarely in Level IV diamond-filled panels are separated by another diamond (Pl. 34:6).

A 3. *Diagonal*.—The panel is divided by a diagonal into triangular halves, which are filled in various ways.

a) The diagonal may be formed by one line (Pl. 34:7) or more lines (Pl. 34:9), usually wavy. On one sherd straight lines alternate with a series of wavy lines like those of Plate 34:9. This panel type appears to be rarer in Level III than in Level IV.

b) The diagonal is a band rarely in Levels I and II, where it may occur with a wavy line flanking either side, and more commonly in Level IV (Pl. 34:10), where wavy and straight lines alternately may flank it. Plate 34:8 is a peculiar variant of uncertain provenance. In Level IV the band may also be filled (Pls. 34:11 and 35:1), the simpler types having no dots in the negative zigzag. The corner triangles may be scalloped or without fringe.

c) Again, merely a negative diagonal may be left. This, though found mainly in Level IV, occurs in Level II also. The simplest type, resembling Plate 35:4 but with plain triangles, may be used in a minor design zone. More elaborate triangles give variation (Pl. 35:4, 8). Plate 3:2, from Level III, may be placed here, though the panel feeling is not very strong. In some respects it is close to design XI D.

B. *Miscellaneous*.—In addition to the above-mentioned fairly common panel types there is a considerable variety of rarer panel designs. Checkered zones, usually found in Level III, sometimes frame animals (Pl. 69:15) or rectangles (Pl. 35:2), and checkered (Pl. 35:3, 6, 9) or crosshatched panels occur. Plate 35:9 is unusual in that the panels are attached alternately to opposite borders. Again, panels barred alternately horizontally and vertically (Pls. 3:5 and 35:5) are found. The panels may also be filled with triangles (Pl. 35:7, 10, 11) or occasionally a negative or positive circle (Pls. 3:4 and 36:1-3). Plate 36:4 and 5 show a type with square-filled corners. An unusual combination of two types of panels (Pl. 36:12) is found rarely, but more commonly than the rest of these miscellaneous types, on bowls in Levels III and more rarely IV. Other types are shown by Plates 36:6-11 and 80:13. Attention should be drawn to Plate 76:18, where the panel frame is not attached directly to the border.

MATERIAL REMAINS

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VIII. VERTICAL ZONES OF ZIGZAGS JOINED BY HORIZONTAL BANDS

A. This combination of vertical and panel design, with verticality predominating, is very characteristic of Bakun A. Except for a probable variant (Pl. 80:1) it is found on cones only (Pl. 36:13, 14).

B. A design somewhat similar to the preceding is very rare and known on bowl fragments only (Pl. 37:1). With this may be connected another fragmentary design, in which the vertical units seem to have straight edges and be joined by horizontal zigzags (Pl. 37:2, 3).

IX. CHECKERED ZONES

There are two types of these zones: those only two rectangles in height (*B*) and those three or more (*A*), creating checkered fields. Simple checkered zones of both types formed by alternating painted and unpainted squares or rectangles are found in all levels.

A. In checkered fields of Level II crosshatched rectangles alternate with rectangles containing Maltese squares. In Level III solid rectangles containing oblique negative lentoids may alternate with negative rectangles containing crossbarred vertical lines (Pl. 37:5), or crosshatched squares may alternate with negative squares containing vertical ovoids (Pl. 37:6) or oblique crosses (Pl. 37:8). Unusual are Plate 37:7 with large rectangles and No. 4.

B. In Levels I–II solid rectangles containing oblique negative lentoids alternate with negative rectangles containing various kinds of fill (Pl. 37:9, 12). In Level III crosses alternate with crosshatched rectangles (Pl. 37:10, 14) or horizontal lines (Pl. 38:2), and circle-filled rectangles may alternate with other elements (Pls. 37:11 and 38:1). In Level IV checkered zones are very rare, being formed usually of solid squares sometimes containing negative ovoids alternating with negative squares containing vertical-line fill (Pl. 37:13). Plate 38:3 shows an unusual design from this level. Some of these narrow zones may have formed parts of broader fields, though this cannot be ascertained from the fragments.

X. UNCONNECTED ELEMENTS

A. Rows of unjoined simple motives are found usually on bowls and cups and in minor zones on pot necks. Only rarely is there more than one row in a zone or more than one such zone. Vertical lentoids are found from Level I to Level III, whereas strokes (Pl. 38:15) are commoner in Level IV. Rarely in Level III and slightly oftener in Level IV S's in single (Pl. 38:4) or multiple (Pl. 38:7) series are found. Rectangles occur in single or multiple rows. Chevrons are found occasionally from Level I to Level IV (Pl. 38:5) and in a thicker form in Level I (Pl. 38:8). Sometimes in Levels I–IV paired oblique strokes create the effect of a row of chevrons (Pl. 38:6, 10). Crosses are sometimes found in Levels III–IV; Plate 38:9 is an unusual example. From Level I comes Plate 48:13. Toothed crescents, double blobs (Pl. 38:11), and crosslets are found in the upper levels. Swastikas are found only between two zones of linked diamonds like those on Plate 48:13. Dot-centered circles (Pl. 38:13, 20) are rare in Level I. In Level III sigmas, crossbars (cf. Pl. 49:10), stylized horns (cf. Pl. 80:11), "arrowheads" (Pl. 38:17), reversed F's (Pl. 38:14), and divided ovoids (cf. Pl. 43:10) occur. In Level IV crossbars, oblique rectangles, crosses, pairs of short wavy horizontal lines, fringe (Pl. 38:18), line lentoids (Pl. 38:16), divided ovoids, vertical wavy lines or short vertical zigzags (Pl. 38:19), and oblique lines (Pl. 38:12) are found.

Slightly more elaborate elements in Levels III–IV, used predominantly in minor design zones, are vertical reversing triangles and two-stepped rectangles. The former may take the form seen on Plate 38:21, though in Level III without the fill and often touching the borders, or they may be more oblique and not join at exact right angles. Other forms are shown by

Plate 38:22, 23. Stepped rectangles sometimes have a block of stroke fill between them. Plate 38:24 is exceptionally elaborate.

B 1. Diamonds with triangular fill between them at top and bottom are found in the earliest level (Pl. 38:25). They are rare in Level III and may be checkered, crosshatched, or with apex-quartering (cf. Pl. 39:5). Unusual types are shown by Plate 39:1, 2, 4; the diamond of Plate 39:2 is found in vertical position also. This type of design is fairly common in Level IV. Plate 39:5 shows diamonds with typical apex-quartering, which may be with or without the crosses or as on Plate 39:3. The use of strokes between diamonds and triangles is typical of this level. Simpler crosshatched or checkered diamonds and triangles occur. Sometimes the triangles (Pl. 39:9) are replaced by *V*'s, which when attached to the borders form line triangles. Diamonds with unusual interiors include some with circular fill and others (Pl. 39:6–8, 10). Plate 39:8 is also found with parallel series of dentilated bands filling the diamond.

B 2. Diamonds with other than triangular fill between them are rarer. In Level I divided stepped triangles occur; in Level III, hourglasses or the element of Plate 40:1; in Level IV, the unusual types shown on Plate 40:2–4.

B 3. Maltese squares are treated much as the diamonds. Two of the usual forms, which are found rarely in Levels III–IV, are shown by Plate 40:5, 6.

B 4. Rare in Levels III–IV is the element seen on Plate 47:3 but placed in the design zone as on Plate 40:7 and often with triangular hooks (cf. Pl. 41:1) between.

B 5. A small series of spirals made of triangles was found in Level III (Pl. 40:8, 9).

B 6. Another element, fundamentally the same as that of IV *C 2*, is moderately rare in this type of composition in Levels III–IV (Pl. 41:1). It gains variety by the fill, usually a hook, between the triangles. Plate 41:8, with the hook coming from the back of the next unit, is unusual. Other types of fill are seen on Plate 41:2, 3 and exceptional forms on Plate 41:4–7, 9. Rarely the triangular units are paired (Pl. 41:10).

B 7. Another moderately common design from Levels III–IV is close to VII *A 3*. Forms with plain oblique bands are shown on Plate 41:11, 12 and more unusual types on Plate 41:13, 14. More elaborate oblique bands (Pl. 42:1, 2) are found in Level IV; predominantly from this level are wavy oblique lines (Pls. 41:15 and 42:3, 6). Very exceptionally the unit may be paired (Pl. 42:7).

B 8. There are, of course, various unconnected elements, as often in a minor as in a main design zone, which appear so rarely that they cannot be classified in groups. Many of these are without intervening fill. Examples from Levels I–II include Plate 42:5, 8, 9. In Level III are found circles of the type of Plate 42:9 or filled by a cross with triangles occupying the resultant quarters (cf. Pl. 43:4), Maltese squares, stepped right triangles, and the elements seen on Plate 42:4, 10–12, 14. In Level IV occur stepped right triangles, sometimes with oblique stroke fill between them, concentric circles, and the elements of Plate 42:13, 15 widely spaced on jar shoulders and of Plates 3:3 and 6, 42:16–19, 43:1–2. Another series is elaborated by addition of minor units between the main elements. From Level II comes Plate 43:4. From Level III we have Plate 43:3 and 5, the latter unusual for its asymmetry and its lower border; and from Level IV or the surface, two asymmetric designs (Pl. 43:6, 7) and Plate 43:8–11, 13. Number 11 is quite unusual.

C 1. Composed essentially as in *X B* is a small series of designs, mostly from inside bowls, which lack lower borders. In part these consist of the same element repeated in a band. Plate 43:14 probably illustrates this type from Level I. From Level III come Plates 3:7 and 43:12, 16. See also Plate 43:17 (design XI *J 2*). This arrangement from Level IV is seen on Plates 43:15 and 44:1.

C 2. Also usually inside bowls is found a similar composition, in which the elements are

partly separated by other elements suspended from the rim. This too is rare. As examples we show Plates 44:2, 5 and 75:12 from Level III; Plate 44:3, 6 from Level IV; and Plate 3:1 of uncertain provenance. There is also an interior design with swastikas like that of Plate 78:32 replacing the crosses of Plate 44:3.

C 3. Again without lower border is a series of very widely spaced elements found mainly on jar shoulders. That there was a band near the middle of the jar is possible but not likely, since the elements would not then have been centered in the design zone. Plate 44:7 comes from Level I. In Level III eight-ended Maltese squares (cf. Pl. 31:4) were composed in this manner, while from Level IV come Plate 44:4, 10. Here may be mentioned a pot of uncertain context but probably from Level IV with a series of rayed circles inside the lip of the neck.

D. Variation was also produced by alternating two different elements. An hourglass alternates with a checkered diamond or a Maltese square in Levels I-II. This type of design is rare in the higher two levels, from which two examples are shown (Pl. 44:8, 9). A suspended diamond may alternate with dentilated bars (Pl. 45:3) or a variant Maltese square (Pl. 45:1, an exceptional design). In other cases divided ovals alternate with stepped triangles (Level II), stroke chevrons (Pl. 45:2), or in Level IV with divided stepped triangles or plain vertical wavy lines. The other examples belonging to this class are unique (Pls. 4:8 and 45:4-7).

E. In solid zones occur negative elements often containing fill. Those without fill are rare and found in Levels III (Pl. 45:9 and inside the bottom of a large bowl with much larger circles) and IV (Pl. 45:8). Examples with fill are represented in Level III by Plate 45:12, and in Level IV by a sherd which has a negative circle with tabbed-diamond (cf. Pl. 43:2) fill and by Plate 45:10, 11, 13. The design of No. 13 is moderately rare, though commoner than any of the other examples shown; it occurs in Level II also. Very rare in both Levels III and IV and distinctive are negative elements in a solid field below the design zone (Pls. 3:10 and 46:1).

F. The previous designs if they create a feeling of movement in the zone do so by the form of the individual elements and not by their changing position in the design zone. In the following series the unconnected elements are oriented in the zones so as to produce a very different effect.

1. In one quite rare type, found in Levels II-IV, triangles are opposed apex to apex from opposite borders (Pl. 46:4).

2. Triangles attached to opposite borders but dovetailed achieve a different effect, possibly recognized by the artist as a negative zigzag. This is found in Levels I and III but most commonly in IV. It is illustrated by a simple form (Pl. 46:2) and by a more elaborate, asymmetric form (Pl. 46:3). The triangles are rarely crosshatched. A somewhat different effect is created if each triangle touches both borders. In Level III this is illustrated by Plate 46:6 and was once found with strokes between triangles like those of Plate 55:5. From Level IV come such forms as Plate 46:5, 7, 8. In both levels this type is rare. Another peculiar type, found rarely in Level III and moderately rarely in Level IV, is shown in two variations (Pl. 46:9, 10).

3. Right triangles may be dovetailed similarly. They are almost always of the stepped form and while exceptional in Level III are moderately rare in Level IV. They are found on pot necks or frequently in minor design zones unless in multiple zones. The steps range in form from those practically scalloped (Pl. 46:12) through those of Plate 46:13 to the extreme of Plate 46:16.

4. Rarely found in Levels III-IV is a similar composition where a diamond is suspended from one triangle. Plate 46:11 represents one variation, while designs such as that on Plate 46:14 often have a group of plain line zigzags between the elements.

5. Here only one element is used, but it is alternately oriented differently. This type is represented in Level II but is commonest in Level III, where it forms only a very small series (Pls. 46:15, 17 and 47:1-3). One of these designs (Pl. 47:2) continued to be used in Level IV.

XI. JOINED ELEMENTS

A. There are a few simple elements composed in this manner and used most often in minor design zones. Various forms of crosshatch occur. That of Plate 38:10 (center zone) is found in all levels, while other forms (Pls. 47:4, 8 and 58:11, rim zone) are found in Levels III-IV. Loops which are not suspended are unusual (Pl. 47:7). Simple rows of right or isosceles triangles (Pl. 47:5, 6, 10) are found in Levels III and occasionally IV, where they are often elaborated. The hatched looped band of Plate 47:9, from Level I, is very rare. Isosceles triangles in horizontal position appear rarely in Levels I-IV and are usually without the triangular side fill of Plate 47:13.

B. Various more elaborate elements are met with occasionally. More elaborate triangles are sometimes found in the various levels (Pl. 47:11, 12). The unusual element of Plate 47:14 is rarely found in Levels III and possibly IV. Another design (Pl. 47:15), probably derived from a double row of diamonds, is moderately common in Levels I-II but becomes rarer in III. Plate 47:16 shows a very rare design from Level III.

C. Quite a considerable group is formed by hourglasses with or without fill between them. Plain hourglasses (Pl. 47:18) are found throughout, usually forming minor design zones. They are rare in Level I and have a simple element between them, strokes or a cross (Pl. 47:17). In Levels III-IV the hourglasses are themselves usually more elaborate (Pl. 48:1-3). A variant in which the tops and bases of the hourglasses are concave is moderately rare in Level III; Plate 48:4 and 7 are two extremes. Various types of fill occur between the hourglasses: rectangular stacks of bars, skewered lentoids (cf. Pl. 58:3), or skewered circles. The suspending "branch" of Plate 48:5 is unusual.

D. Another element fairly often found joined is the Maltese square. Plate 48:8 and 9 show the usual type, which is moderately rare in Level III. Short vertical zigzags may replace the reversed Z's between the arms of the element seen in No. 9, while in one case hatched circles replace the horizontal V fill. In Level IV this design is rare, and, though the type of Plate 48:9 was found, one comes across unusual examples (Pl. 48:10, 11).

E. The element most commonly joined to form continuous rows is the diamond in a great variety of forms.

1. Plain and crosshatched diamonds occur in Levels I-II, where a distinctive design is formed by two zones of diamonds between which is a row of such elements as crosses (Pl. 48:13), swastikas, chevrons, reversed Z's (cf. Pl. 48:9), diamond-birds (cf. Pl. 76:9), insects (Pl. 76:16), or often the zigzag of Plate 53:5. In Levels III-IV the same types of diamonds and also the checkered form are moderately common and are found oftener on pots and small jars than on bowls.

2. Diamonds with a horizontal negative lentoid inside are rarely found in all levels. In Levels I-II the lentoids are dotted (Pl. 48:12); the diamonds are plain in Level III and sometimes in double rows, as also in IV. In Level IV one sherd shows this form of diamond alternating with hatched diamonds, and variations such as Plate 48:6 occur.

3. Diamonds with a negative diagonal are rare in Levels I-II and exceptional in the upper levels (Pl. 48:14).

4. Very rare forms of diamonds are shown on Plates 48:15 and 49:1-3, 6. Rarely in Levels III-IV two or three of these types may be combined alternately in one zone.

5. Further variety is given to rows of diamonds by suspending them from the borders in

different ways. This form of composition exists in Levels I–II and is typical of Level III but exceptional in IV. Each diamond may be suspended at top and bottom by triangles as in Plate 49:7, which shows the most elaborate form. This design occurs without fill elements and with crosshatched diamonds as well. The diamonds may be alternately small and big with only the small ones suspended by triangles (Pl. 49:4), and the diamonds and triangles may be filled in the various ways already shown. The suspending element may be a triangle with concave base inward (Pl. 49:5), in which case the diamonds are usually crosshatched. Several other suspending elements are occasionally found (Pl. 49:8–10).

6. The spaces between the diamonds may be filled in various ways. Dots (Pl. 49:11) or triangles (Pl. 49:12–14) are moderately common in all levels, the triangles being usually solid, crosshatched, or checkered. Plate 49:13, with the triangles overlarge, is unusual. Fill elements which rarely link the sides of the diamonds may be triangles with apex out (Pl. 49:15), chevrons similarly oriented, or in Level IV hatched rectangles (cf. Pl. 49:8).

F. Triangles or diamonds in superimposed rows within the zone forming a type of network or repetition pattern are on the whole rare. Two rows of diamonds are moderately common in Levels I–II but rarer in III–IV, where three rows were preferred. An unusual example from Level IV is shown by Plate 49:16. Not uncommonly another element, often a diamond, is placed in the negative space between the diamonds. Networks of triangles are commoner in Level IV than in Level III. In Level III when there are only two rows the apexes may be directly under one another or staggered as on Plate 49:17, 18. In Level IV simple rows like those on Plate 49:18 are rarer, and the apexes are always staggered as on Plate 49:20. Networks of right triangles (Pl. 49:21) occur in Levels III–IV, while a unique square network (Pl. 49:19) comes from the surface.

G. As with unconnected elements, joined elements may be alternately different. This type of design occurs rarely and only in Level IV (Pl. 50:1–3). The semiovoid of Plate 50:1 may be diagonally hatched also, and a Maltese square may replace the diamond of Plate 50:2.

H. Joined elements may alternate direction vertically to form designs closely comparable to reversing triangles (design XV). Plate 50:4 shows the only example from Level III. This type is rare in Level IV, where the elements alternate usually from a central join (Pl. 50:5, 6, 8) and unusually from a side join (Pl. 50:7).

I. Only in Level IV are elements rarely found joined centrally by lines. Such elements are usually circles (Pl. 50:9) with either oval or circular fill between them. Plate 50:10 is unusual.

J. Though centrally joined elements are most usual, another fairly small series has the units joined by side links.

1. Side-joined triangles are represented in Level II and are moderately rare in Level III but are not found in Level IV. Plate 50:12 shows a simple form, which often has solid triangles. A variant has split isosceles triangles (Pl. 50:15), which may be divided right down to the border. Between the triangles may be a running band, often paired as in Plate 50:15, or occasionally a running element such as that of Plate 53:12.

2. Diamonds joined as on Plate 50:13 are found occasionally in Levels I–III and more rarely in Level IV. Diamonds rarely may be linked by other elements also (Pls. 43:17, 50:11 and 14, 51:1), and other elements too are rarely side linked (Pl. 51:2, 3, 6). More elaborate side joins are illustrated by Plate 51:4, 5.

XII. PLAIN BANDS

Series of plain horizontal bands, of uniform width, are rare. They exist in Levels I–II, although they are found mostly in Level III. They occur most commonly on cones and cups and more rarely on large jars. In Level IV they are found only on a few cones.

XIII. ELEMENTS ON A CENTRAL LINE

A different series of patterns is formed by elements on a continuous central line. This is a rather rarely represented series.

A. Diamonds are found arranged in this fashion. Plate 51:7 is the sole example certainly from Level III, while Plate 51:8 and 10-11 are representative of Level IV. Ovoids and circles are more common. Represented in Level I (Pl. 51:9), they are rare in Level III but a little less so in IV. The various forms (Pls. 51:12-14 and 52:1) are the same in Levels III and IV. Other elements composed in the same way are exceptional (Pl. 52:2, 4, 6, 9). Another attractive but rare design has paired leaves joined by a central line (Pl. 52:3, 5).

B. In a very small series mainly from Level III open rectangles are joined by a central band (Pl. 52:7, 8, 11).

XIV. HORIZONTAL ZIGZAGS

Horizontal zigzags in a variety of forms were much used, usually on bowls.

A. Simple zigzags are exceptional, and the few examples (from Levels III-IV) are formed by thick bands.

B. Parallel zigzags are not as rare as the plain variety and are found throughout the various levels. They occur in plain zones, though more often with triangular side fill (Pl. 52:12). Plate 52:10 is an unusual example. Occasionally (provenance certain for one sherd from Level III only) the apexes of the zigzags are joined by plain vertical lines running through them or as on Plate 52:13.

C. Zigzags with appendages running off the apexes were much favored; though fairly frequent on pots, they are more usual on bowls. Triangular-hook appendages are commonest in Levels III-IV (Pls. 52:14 and 53:1-4, 8). A simpler type wherein the zigzag line merely continues past the apex is found in various forms (Pl. 53:5-7). The type of Plate 53:5, known in Level II also, is rare and often used in minor design zones. Essentially the same but painted solid to give a triangular form is the design on Plate 53:12, which is found in Levels III-IV. The triangular side fill may be absent, and the vertical edges of the triangles of the zigzag may be scalloped. Nearly unique is the form shown by Plate 53:9 (Level III).

D. In another common class the triangular areas left by the zigzag are filled in various ways. They may be filled with lines alternately changing direction (Pl. 53:10), of which only a simple type without the solid triangular corners is found in Level II, while in Levels III-IV both types occur rarely. Various types of triangles are most common as fill, and the zigzag may or may not touch the borders of the design zone. In Levels I-II the triangles are usually cross-hatched or checkered (Pl. 53:13, 14; No. 13 is exceptional). In Levels III-IV the same types are used (Pls. 53:11, 15, 16 and 54:1, 2) as well as that of Plate 55:5. More rarely in Levels III-IV the triangles are not attached (directly at any rate) to the borders (Pl. 54:3, 4), and quite rarely their apexes are outward (Pl. 54:5, though usually without the tabs). Occasionally a row of dots borders the base of each triangle as do the blobs on Plate 80:18. Hooks occur occasionally as fill (Pl. 54:6), mainly in Level III, but are far commoner as appendages (XIV C). Various other fills are met with very rarely (Pl. 54:7-9, 11). In Level IV stepped triangles are once used, and once horizontal stroke fringe is attached to the left side of the zigzag.

E. A zigzag crossed by oblique Z's (Pl. 54:10) forms one of the commonest designs found at this site. Its prototype, found predominantly in the lower levels, is shown by Plate 54:15.⁶ It is more usual in Level III without the dots of Plate 54:10, which rarely form short fringe.

⁶ This is attributed by mistake, I think, to Level IV or is intrusive.

A negative diamond is always left at each crossing-point. Further elements are added as fill in Level IV. Rows of dots rarely occur, as do the elements of Plate 54:13, 14, while Plate 54:12 shows even an elaboration of the Z.

F. Zigzags are not always of the regular forms treated above, though peculiar forms are much less common. Only in Level IV are dentilated bands (Pl. 55:1, 2) found. Other odd forms are illustrated by Plate 55:3, 4, 6. Zigzag bands may be replaced by zigzag rows of dashes or other elements between rows of dovetailed triangles, a form which cannot be classed under design X *F* 2. This is rare in Level III (Pl. 55:7), where it occurs also with groups of strokes all parallel and keeping the same obliquity and therefore alternately parallel and perpendicular to the zigzag. It is much more typical of and moderately common in Level IV, where the zigzag may be of dots rarely or vertical strokes (Pl. 55:5). The usual form is with groups of strokes parallel to the sides of the dovetailed triangles (Pl. 55:8, 9, 11, 12). Triangles like those of Plate 55:12 are found in Level IV only.

G. Two or more intersecting zigzags create a design similar in effect to XI *F*; but these are made of bands or lines and thus are closer to a zigzag pattern. Such combinations of zigzags are rare and very unusual without fill. Forms such as those on Plate 55:10, 13 are found in Levels I–II and only very rarely thereafter. Other types of fill (Pls. 55:14 and 56:1, 3) also are occasionally found. In Level III there is a negative diamond at each intersection and the triangular areas at the borders are filled in one case with oblique rows of dots, in another as in Plate 56:1. In Level IV one sherd has stepped line-triangle fill and another that shown on Plate 56:3. Plate 56:2 is a peculiar variant. The design of Plate 4:5 is found only in Level III, where it is of moderate rarity. The dot fringe may be missing, and the triangles may be filled differently.

H 1. Another irregular zigzag pattern is composed of pairs of unilaterally wavy bands which form a discontinuous zigzag. This design, which is not common, is found in Levels III (Pl. 56:4, 6) and perhaps IV. Slightly different types (Pl. 56:5, 7) are quite rare in Level IV.

H 2. A similar, partly continuous zigzag is found rarely in Level IV (Pl. 56:9).

H 3. Further variety is obtained when one of the strokes of the zigzag is vertical or replaced by a vertical element. This is seen in plain line on a Level II sherd, though in this case it might be a carelessly made zigzag. The only other examples (Pl. 56:8, 10) are from the surface. Much commoner, though still rare, are superimposed diamonds joined by oblique bands. Plate 56:12 shows a typical example of this Level III design, though there may be more reversing triangles between the diamonds and the latter may be filled differently (Pl. 56:13) or the triangles may be crosshatched. Other elements linked in this way are very unusual (Pl. 56:11).

H 4. A unique continuous irregular zigzag from Level II is shown by Plate 57:1.

XV. REVERSING TRIANGLES

In variant forms this is one of the commonest designs at the site.

A. The simple form is found in all levels.

B. Forms with fill between the triangles are more usual. In Level II rows of dots, strokes, or sigmas are used, and the triangles may be crosshatched. Strokes occur in Level IV also. Simple triangular side fills like those with true zigzags are more common in Level III than in Level IV. Rarely in both levels the fill triangles may be stepped or scalloped (Pl. 57:2) or in Level IV like those on Plate 59:1, 3 but without wavy lines. Other types of fill occur only occasionally: Plate 57:3–6 and as on Plate 57:8 but with only one bar to the scalloped edge of the fill triangle (Level III); Plate 57:8 (Level IV); Plate 57:7, 9, 10 (uncertain provenance).

C. As with zigzags, appendages running off the apexes of the triangles are very common, particularly if composed of triangles. This type is illustrated from Level I by Plate 57:11. In

Level III there are two main types of appendages (Pl. 57:12, 13). Unusual varieties are shown by Plates 57:14 and 58:1, 2. The inner side of the triangular appendage of Plate 58:2 may be convex. In Level IV the type of Plate 57:13 continues, but usually with parallel lines joining the first appended triangle and the reversing triangles or with geometric birds as on Plate 58:10. A simplified form (Pl. 58:3) is frequent also. The other type (Pl. 57:12) also is found, sometimes with the triangles based on the borders much enlarged. The bases of all or only some (Pl. 58:4) of the triangles may sometimes be scalloped. Plate 58:5 represents an unusual fragment. Other forms of appendages occur rarely, and the reversing triangles may be varied (Pl. 58:6-11). A form like Plate 58:9 has fringe connecting the outer triangles and the borders. An example was found with the reversing triangles in the form of the triangles of Plate 55:5.

D. Another type of pattern is created by separating the reversing triangles by a line which may vary in length. Different fills are used to give variety, but divided triangles are most usual (Pl. 59:1). This design, already found in Levels I-II, is rare in Level III, where the divided triangles may be stepped and with (Pl. 59:3) or without vertical lines between. It is more prevalent in Level IV, where the variants already mentioned occur as well as simply fringed divided triangles as fill. Unusual are Plate 59:2, 5, 6, 9 and from Levels III-IV anthropomorphic fill elements (Pl. 59:7, 8). Spiral hooks as on Plate 59:4, 11 are rarely found in Levels III-IV.

E. Curved reversing triangles are rare in Levels III-IV and are either like those on Plate 59:10 or more wavy like those of Plate 59:12.

F. Reversing right triangles form one of the commoner designs. The appendages with which this design is always found are of two main types. One, represented in Level I by Plate 59:13, is more typical of Level III (Pl. 60:1). Skewered dots (placed as on Pl. 58:3) are very common, while reversing triangles between the pairs of reversing right triangles (Pl. 60:2) are rarer. More rarely found in Level IV, this type of appendage, though frequently like the Level III form (Pl. 60:1), often ends in a triangle (Pl. 60:3, 5), and rows of sigmas are sometimes used as fill between the "arm" and the triangle. The other main type of appendage is formed of triangles and is rare in both Levels III and IV. Plate 60:4, though usually without the last triangle of the appendage, is typical of Level III. In Level IV the same form is found as well as those of Plate 60:7, 11. A few other appendage forms are unique (Pl. 60:6, 8, 10).

G. Two types of reversing triangles described above (*A* and *D*) were also used multiply in a zone.

1. Two or more rows of the *A* type joined at the apexes are rare in both Levels III and IV. Various elements are placed in the hexagonal and semihexagonal areas which remain free (Pl. 61:2). Some such elements (Pls. 60:9 and 61:1) are common to Levels III and IV. Concentric diamonds like those on Plate 49:1 occur in Level III, while Plate 60:12 is from Level IV. The free areas may be without fill in Level IV.

2. The *D* type is found rarely in Levels III-IV in parallel rows as on Plate 60:13, which is typical. The fill at the borders may also be various types of divided or stepped triangles, and a triangular bird is once used thus. Plate 61:3, with small horns along the connecting lines, is exceptional.

XVI. MEANDERS AND WAVY LINES OR BANDS

These are exceptional.

A. Only two certain examples of right-angled meanders were found, both in Level III (Pl. 61:5, 6). Plate 61:5 is a simplification of the design shown on Plate 4:3. Oblique-sided meanders are shown by unique examples (Pl. 61:4, 7, 8).

B. The one type of wavy-line design which is not exceptional (Pl. 61:9) is found in Level III only. The others are unique (Pls. 61:10-13 and 77:6, 7).

XVII. TRIANGLE-RHOMBOID PATTERN

This forms one of the commonest and most typical designs of this site.

A. The simple form (Pl. 62:1) is common in Level III and fairly common in Level IV and probably derives from XVII B. Most usual on bowls of all types, it is very rarely used on jars and pots also. Once it is oblique (Pl. 62:4), and it is once seen used as an isolated element on its side (Pl. 62:3). There are often oblique rows of dots in the negative petal-like areas (Pl. 62:2). A slight variation, found only on bowls of Level III, is shown by Plate 62:6.

B. An attenuated form with rows of dots in the negative areas (Pl. 62:7) is found only in Levels I-II, except for rare sherds probably intrusive in Level III.

C. Rarely the shape of the triangles is changed in Level IV (Pl. 62:5, 8), or the rhomboids are elaborated (Pl. 62:10, 11, and probably 9). The negative area in the form shown on Plate 62:10 may have dentilated edge.

D. Quite frequently the units of the design are separated by various elements. Such an element, commoner in Level III than in Level IV, is shown by Plate 63:1, 2. Maltese squares, triangles, and crosshatched rectangles also are found inside the paired triangle-frames. Groups of vertical zigzags are commoner in Level IV than in Level III, as are stepped triangles placed always as on Plate 63:3. Rare in both levels are one or more columns of triangles (Pl. 63:4, 5). Elements very occasionally used in Level III include those on Plates 63:6-11 and 4:4 as well as vertical reversing triangles with unattached triangle fill, reversing rectangles, columns of Maltese squares, and columns of tip-linked triangles (cf. Pl. 26:6). Exceptional elements in Level IV are seen on Plates 62:9 and 64:1-3, 5 and include also vertical wavy lines, skewed chevrons, and crosshatch fill of the type on Plate 47:8.

E. Elements are also very rarely placed inside the units in various ways. Joined elements may run in the area between the upper and lower sections of the unit (Pl. 64:6-8). Rows of unconnected elements or single elements may be placed in the same position: double blobs, sigmas, crossbarred lines, and reversed Z's (Pl. 64:9) in Level III; reversed Z's and a cross (Pl. 65:1) in Level IV. Also rarely the upper and lower rhomboids may be joined by vertical bars with wavy-line edges (cf. Pl. 2:1) or a diamond (Pl. 65:2) in Levels III-IV and by ovoids (Pl. 65:3) in Level IV only. Very rarely fill elements are placed in the negative petals between the rhomboids and the triangles (Pl. 65:4, 5, 7). Rarely in Level IV fringe is applied to one edge of the triangles (Pl. 65:6).

F. The triangle-rhomboid unit is also converted into a semicontinuous design the simple form of which (Pl. 65:9) is found only in Level III. This form alternating with another element is found rarely in Levels III-IV (Pl. 65:8, 10). Plate 65:11 is unique in the deformation of the simple form.

G. By using half the unit obliquely a continuous design is created. It varies only in the triangular fill above and below, which moderately rarely in Level IV is stepped (Pl. 66:2) and rarely in Levels III-IV is like that of Plate 66:1 or 3.

XVIII. ANTHROPOMORPHOUS PATTERNS

Anthropomorphous designs, composed both horizontally (A) and vertically (B), are usually found on large bowls though occasionally on pots and jars. The vertical figures usually have linked arms and legs.

A 1. Complete figures in horizontal position (Pl. 66:4, 7, 8) are found rarely in Level III. Plate 4:2 is unusual because of the clever combination of horizontal and vertical figures.

A 2. "Busts" of the type of Plate 66:5 are known in Levels I-II and are rare in Levels III-IV. Variations are shown by Plates 66:6, 9 and 67:1. "Busts" occur also with simple

triangular heads. Plate 67:4, from Level I, illustrates this type, which is very rarely found in Levels III–IV also, though with solid and not crosshatched “hands.” Perhaps Plate 67:2 is a variant belonging to this category.

A 3. Bodies with triangular “heads” at both ends are known from Level I, where alongside are skewered “birds” (cf. Pl. 73:8); in Levels III–IV this exceptional type is represented by Plate 67:3. A Level IV sherd has stepped-triangle fill alongside the body.

B 1. The simplest vertical figure has bar body, triangular “head,” and line-arms and -legs. This is moderately rare in Levels I–III and rare in Level IV. The only variation is in the fill elements between the figures. Such elements from Levels I–II are to be seen on Plate 67:5, 7 and also include crosshatched circles, dot-ended “stars,” and skewered ovoids as on Plate 67:8 but vertical and attached to the arm and leg links. In Levels III–IV the fill of Plate 68:8 is fairly common, both horizontal and vertical, and that of Plate 67:6 as well as quartered circles (cf. Pl. 70:15) and geometric birds (cf. Pl. 68:1) also occurs. Plate 67:9 is of uncertain provenance. Very rarely in Levels III–IV the arms are extended through to form bars between the figures (Pl. 67:10).

B 2. In Levels III–IV much the same form is found but with thicker arms. The figures may be solid (Pl. 67:12) or open (Pl. 67:11). Other sherds show triangular “heads” with apex fill (cf. Pl. 55:5) and between the bodies apex-filled diamonds, triple groups of thick sigmas, or the usual rectangles (cf. Pl. 4:3).

B 3. The last-mentioned form is given a diamond head, sometimes with eyes, and we have at last a more obviously human form. The simplest type (Pls. 67:13 and 68:1) is found in Level III only.

B 4. There are various figures with more elaborate heads and bodies. The following are mostly unique examples. Ears (Pl. 68:2, 3) are seen in Levels II–IV. The usual head is that of Plate 68:4. Various body types are shown by Plate 68:2–10. Figures with tails are found predominantly in Level IV (Pl. 68:9). The rectangle alongside the figure in No. 9 is the commonest fill and when used with men with tails always has the side bows.

B 5. Very rarely in Level III the more elaborate types of men are invertible, with a second “head” between the “legs” (Pls. 4:3 and 68:11).

B 6. Figures are very exceptionally found with “disarticulated” limbs. Stepped limbs (Pl. 69:1) occur in Levels III–IV. Slightly different forms are shown by two unique sherds (Pl. 69:2, 3).

C. Unique forms include those shown on Plate 69:4–5, probably a scorpion man (Pl. 69:6), and what seems to represent a seated or squatting figure (Pl. 69:8).

D. In all levels eyes were placed in what appear to be purely geometric elements (Pl. 69:7, 10, 13).

XIX. ANIMALS

Besides vessels with the numerous forms of geometric designs already mentioned there are a considerable number decorated with rows of animals. Animals may also be alternated with geometric elements or placed in checkered panels. At the same time animal designs are less numerous than geometric designs.

A. The most popular animal was the ibex, which is found in all strata in much the same forms. It may have two legs (Pls. 4:1 and 69:15, 16, 18) or, apparently in Levels III–IV only, four (Pl. 69:14, 17). Attempts to show cloven hoofs are very unusual (Pl. 70:1). Very rarely rectangular-bodied ibexes (Pl. 70:2,3) are found, but usually a sweeping line formed two of the legs and the belly in one stroke. More commonly the ibexes are not bearded, but quite a few whiskered animals were found in all levels (Pls. 4:4 and 70:4, 5, 7). Plate 70:7 represents the

largest animal drawing found. The head is usually a simple triangle. Long noses like that of a mouflon (Pl. 71:5) are exceptional. The horns are represented in several different ways. Some element is almost invariably placed between them and inside their circle. Horns with the upper sides wavy are usual. Horns with dentilated upper sides (Pl. 73:2), with knobs (Pl. 70:6), or with "flowers" (Pl. 70:8, 9) are exceptional, as are plain-band horns (Pl. 70:10, 12, 13). Plate 70:12 is unique in showing the eye.

B. Only very exceptionally is a scene represented, and this can be considered likely only in cases where other animals, probably dogs, are placed either inside or above the ibex horns (Pl. 70:3, 11, 14). Otherwise, except possibly on Plate 77:16 (see design XIX *O*), quadrupeds of different types do not appear together.

C. The next commonest animal is the mouflon. The most distinctive form is that in which the body is reduced to a mere fill below the horns (Pl. 4:10). This is characteristic of Level III only. In Level I Plate 70:15, with lines of small dots, is typical. In Levels III–IV the same form occurs without the dots (Pl. 71:1), but another type, with horns dividing high above the head, is found also (Pl. 71:2, though usually not dentilated). Some bodies are unusually crudely drawn (Pl. 71:3). Plate 71:4 has peculiar legs, 71:5 an unusual muzzle, and 71:6 queer horns.

D. Not infrequently the body of the ibex or mouflon has been discarded and the design formed from the horns alone.

1. Pairs of mouflon horns occur frequently, the design being varied by the elements inside and between the horns. It is found in all levels but is most common in Level IV. The horns may be separated at the base (Pl. 71:9) or joined (Pl. 71:7, 8, 10). Plate 4:6 shows horns with a hairy head.

2. Rows of single mouflon horns also occur with moderate rarity in Level III (Pls. 4:9 and 71:12, 15, the last with a head). These may be distinguished from ibex horns, which are only exceptionally smooth-edged.

3. Pairs of ibex horns are only rarely found in Levels III–IV (Pl. 71:11, 13). Plate 71:14, from Level III, shows the only fragment suggesting a single ibex horn.

4. Finally there are a few sherds on which horns seem to have become a purely decorative motive. This feature is probably confined to Level IV. Such horns seem to be derived from those of the mouflon but have both ends pointed. One form is in a sense framed (Pl. 72:1), or the horns may be placed in uncertain order (Pl. 72:2, 5).

5. A great many fragments showing horns are too small to permit certainty as to their belonging to real animals. Interesting fill elements are shown by Plate 72:3, 4, 6–10. Negative areas inside horns are rarely found. Plain rhomboids and other elements (Pl. 72:11–15) occur. Unusual forms of wavy-topped horns, some with unusual fill, are seen on Plate 72:16–18, 20. Dentilated horns (Pls. 72:19 and 73:1–3) are commonest in Levels I–II. Horns dividing high above the head (Pl. 73:4, 5) are rare, and rarely a rectangle is attached to the base of each horn (Pl. 73:6). Narrow ribbon horns (Pl. 73:7–9) are mainly from Levels I–II. An unusual type which is very rare appears on only one sherd with certain provenance (Pl. 73:10, from Level IV).

E. A few sherds from Level III showing some form of *Bos* seem to be drawn with unusual detail. Plate 73:11 and 12 certainly show bulls' heads, while Plate 59:10 may show a bull's head, and Plate 73:13 may represent the tail and legs of a bull.

F. Gazelles are very rare, if Plate 73:14 shows one. Such sherds come from Level III. Plate 77:16 also may represent a gazelle.

G. Several types of dogs were occasionally drawn. One with a thick tail curled over its back (Pl. 73:17) is rare in Levels III–IV. A type with high thin body and long narrow tail (Pl.

73:15, 16) is occasionally found in Levels I and III. A form with lower, thicker body and long tail (Pls. 4:7 and 74:1-3) comes from Levels III-IV. Plate 74:4 might be a feline.

H. In Level IV a few sherds show animals which might be rabbits (Pl. 74:6, 7).

I. Leopards and felines were only rarely drawn. Leopard types are found in Level III (Pl. 74:5, 9), and once in Level IV (Pl. 74:8). The animal of Plate 74:10 possibly is not a leopard, though the spotting suggests that it is. Representations of lions are apparently rarer in Level III than in Level IV (Pls. 74:11 and 75:1, 2). Two feline forms are shown by Plates 5:2 and 75:3, and Plate 74:4 may show a feline.

J. One sherd may show the hindquarters of a pig (Pl. 75:5).

K. Birds in a variety of forms are moderately rarely represented among the designs.

1. Spread-eagle forms, though commoner than any other, are rare. The body may be solid or with a negative area, the wings are usually fringed, the tail is more often of triangular form than just feathered, and the head is usually a pointed loop (Pls. 5:1 and 75:4, 6-9, 11). Plate 75:6 is a unique form, and No. 11 may be double-headed. Plate 75:10 and 13-14 probably represent spread-eagle geese.

2. All other birds are represented in pure profile and seem to be aquatic fowl: waders and swimming birds (Pls. 75:12, 15, 16 and 76:1-8).

3. Various geometricized forms occur occasionally. Short four-stroke zigzags (Pl. 73:8) may sometimes, though probably not invariably, denote flying birds, as do fill elements of Plate 68:1. Joined diamond-birds (Pl. 76:9) are apparently the only form found in Levels I-II, while various other types (Pl. 76:10-14) occur in Levels III-IV as well.

L. The only certain representation of a fish (Pl. 76:15) is from Level I, though Plate 76:18 of Level IV might be either a fish or a bird.

M. Certain motives are probably intended to represent various sorts of insects. These are found in all levels, though most of the examples, which are all unique, come from Level IV (Pls. 76:16, 17, 19 and 77:1-5).

N. Only two fragments (Pl. 77:6, 7), both from Level III, certainly show snakes, though Plate 77:8 and 9 also probably represent reptiles.

O. There are in addition various animal designs too fragmentary to be classified. Only the more interesting are shown. Knobs on legs (Pl. 77:10) occur several times. Paws such as those on Plates 1:7 and 77:11 occur very occasionally. Unusual heads are shown on Plate 77:12, 13, 17. Plate 77:14-15 and 18 represent unusual bodies. Plate 77:16 may show a gazelle below a leopard.

VARIA

A good many interesting elements of design occur on sherds too small to permit determining the composition into which they fitted.

Chief among these are plant motives. Those from Levels I-II are to be seen on Plate 78. Most commonly these designs resemble branches with leaves or flowers. Fairly common are multiple zones of three-petaled flowers rising vertically from a line (Pl. 78:1). Floral designs from Level III also will be found on Plate 78. They resemble the designs of the lower levels, though horizontal zones of three-petaled flowers are absent. Much the same plant motives from Level IV and some of uncertain context also are shown on Plate 78.

Elements from Level I which may well have had symbolic meaning will be found on Plate 78. Similar elements from Level III are shown on Plates 78-79. In addition, the swastikas of Plates 78:25 and 79:7 and several elements similar to the circle of Plate 78:38 (found in Level I also) were found in this level. Plate 78:35 might show a man with all-around fill, Plate 78:33 an animal of some sort.

Elements from Level IV are to be seen on Plates 78–79. There are a number of interesting ones which are probably forms of the Maltese square (Pl. 79:11–13; see also Pl. 79:1 from Level III). Crosses with chevron-filled quarters (cf. Pl. 67:9) seem to be a fairly common fill element in Level IV.

In spite of the variety of elements and compositional forms already described it must be remembered that a great many others were found on fragments too small to permit restoration of the design. It is certain that the later excavations have brought to light not a few new combinations of elements in compositional forms described above. A few fragmentary and uncertain patterns may be mentioned here. Plate 80:3 shows, perhaps, a different way of decorating the interior of a bowl. Plate 80:4 is some sort of discontinuous zigzag which is found in Level IV also. Mainly from Level IV or the surface come a small series of line designs with handlike appendages (Pl. 80:5, 6, 10, 11; also Ernst Herzfeld, *Iranische Denkmäler I A* [Lfg. 1–2; Berlin, 1932] Pl. XIV 2) and other line designs (Pl. 80:7–9) including one with dot fill (Pl. 80:12). These are of interest because of tendencies in design at a later period in Baluchistan. Plate 80:15 is probably a design dividing the interior of a bowl into halves, and No. 14 shows a simple way of decorating the inside of a cup. Plate 80:19 is very puzzling. Other fragmentary designs composed of such segmented bands have been found as well. Plate 80:20–23 are appended to illustrate interior base designs, for the bottoms of the more complete vessels were usually missing. Plate 80:25–27 may be potters' marks, since they were drawn inside the bases. Plate 80:28 shows part of a Maltese square drawn on a flat base.

An interesting detail of style worth noting is a peculiar method of encircling the main elements of a design with fill. Plates 70:9 and 75:6 are fine examples. Though such all-around fill is frequently crosshatched, it cannot with any certainty be considered as an inclosing net. This feature is very rare and is found in Level III but probably (though this is uncertain) not in Level IV.

ARTISTIC QUALITIES

In this section we summarize briefly the qualities of the pottery designs, which have just been described in detail (pp. 34–53). Those who have labored through these pages will have appreciated the great variety of patterns and the artistic value of the painting. Obviously here we are not analyzing the conscious approach of the artist to his task. We have merely the resultant to study. It is not unlikely that the contents of the designs were of much greater significance to the artists and to the users of the vessels than their decorative quality. That they certainly have, however, and we are here concerned only with the schemes which these ancient people utilized in covering their pottery with designs.

All the pottery to be decorated offered a continuous surface within the limits of the rim or neck and the base. Three major solutions were chosen in the treatment of the given surface.

In the case of overall designs, bowls were treated as hemispheres limited only by rims. The interiors of bowls when thus treated became circles with roughly even filling of small elements. This was perhaps the simplest solution possible.

The second method was almost as simple but offered somewhat greater possibilities for artistic expression. Elements suspended from a band could be arranged to give simple or more pronounced rhythmic effects. If such elements are spaced or grouped at not very great intervals, they can, because of the absence of a lower border, cause attention to be concentrated at the one boundary of the vessel's surface. The remainder of the surface was ignored; but the effect is not necessarily loose, for a nooselike tightening of attention at the upper border may be achieved. This applies mainly to exterior designs with repeated groups or series of elements.

As we shall see, on the interiors of bowls the inclosedness of the circular surface was felt to obviate necessity for lower borders.

In these methods of composition to a certain extent either the structural qualities of the vessel were ignored or, with overall designs, the vessel was treated as a unit bounded only by what profiles could be seen. Naturally the design was painted to be seen. This requirement and that of applying the design within the structural limits of the vessel (rim or neck, maximum diameter or body break, and base) were satisfactorily fulfilled by a zone of design. This third method quite naturally was the favored and basic framework of the artists. Such a frieze was always firmly banded to emphasize its character as such. The painters of Halafian pottery were the only earlier people who realized the necessity for a firm banding to achieve a really satisfactory zone.

Within the zone of design there were three major methods of composition: connected or unconnected elements in a row or a band with rhythmic motion. The resultant effect varies greatly, depending on whether the borders have the same circumference and whether they are close together or far apart. The satisfactory solution of the problems resulting from the differences in form and size of the frieze is one of the notable achievements of these pottery-painters.

Perhaps the most difficult problem was the treatment of small hemispherical and conical bowls (forms IV-V). In both forms the bottom border has a much smaller circumference than the top if the whole surface is covered. The obvious treatment of limiting the zone to the narrow nearly vertical area close to the rim was not chosen. The satisfactory solution selected was to divide the area into segments which when seen from below have a really radial character. At an earlier time in Siyalk II this treatment had been applied to the interiors of bowls;⁷ but only at Bakun A was it discovered as a satisfactory way of decorating the outsides of steeply sloping bowls, though artists of the early Ubaid period at Tepe Gaura were not far from it. At Bakun, whether the artists used segmental units (Pls. 28:2 and 5, 30:3-8 and 11-12), spiraling horns (Pl. 4:10), or triangle-rhomboid units (Pl. 62:1-2); the resultant radial effect is the same. In all these cases basically we have a series of unconnected elements in compositional forms dictated by the shapes of the vessels.

Vessels with very high sides—bowls and particularly beakers—offered other problems. Especially in the case of beakers, if the zone was to cover most of the surface, the elements used had to be all of vertical character if they were simply to be repeated. The usual series of motives if enlarged to the necessary height would have been so wide that only two or at the most three would have fitted into the zone. Fortunately our artists were not content to decorate such vessels in the fashion used by the painters of Susa. There, frequently, a main zone was restricted to more normal height and the surface was divided into two or more horizontal zones, a compositional form which destroyed the cleanness of the beaker shape.⁸ At Bakun, besides using vertical elements (designs III B-C, IV) and rarely horizontal zigzags (Pl. 54:15), the artists created attractive results by repeating vertical zones in the main design zone (design III A; see Pl. 23).

The greatest variety of designs is in zones which are on the nearly vertical surfaces of vessels, so that the curvature does not affect the design, and which, though often of considerable height, are of sufficient length so that there is plenty of space in which to arrange the motives. Here the primary factor was the desire for a continuous frieze. Certain designs (checkers, connected elements, rhythmic bands) inherently afford this effect. It is not as easy to achieve

⁷ See Roman Ghirshman, *Fouilles de Siyalk près de Kashan 1933, 1934, 1937 I* (Paris. Musée du Louvre. Département des antiquités orientales, "Série archéologique" IV [1938]) Pl. XLVI S. 1737.

⁸ See e.g. France. Délégation en Perse, "Mémoires" XIII (Paris, 1912) Pl. I 4.

with panels or unconnected elements. Certain of the unconnected elements have an obviously directional quality in themselves (Pl. 38:4, 5, 14, 17). This is not true of many other elements. A diamond, for example, is a self-contained unit. It is in this connection that we begin to understand the reason for the use of fill elements. Our artists did not have a *horror vacui*. Triangles at the borders between diamonds or Maltese squares (Pls. 39, 40:1-6) not only filled unpainted areas; more important, they created negative zigzags along the sides of the main elements which, whether appreciated as zigzags or not, carry the eye from one diamond or Maltese square to the next. Numerous other examples where negative areas achieve similar results are to be seen. In other cases the effect of a continuous frieze is produced by the pairing of elements (Pls. 4:10, 42:7). We are more certain that this effect was a primary consideration when we see that the most static elements—panels—are occasionally linked (Pls. 3:4, 33:14, etc.), so that the eye moves along the zone. Even vertical zones are sometimes joined, so that, though the predominant effect is still vertical, the eye follows the design horizontally also (Pl. 23:19-20).

There are many designs, of course, where the frieze is not continuous. In some cases an element may have been of sufficient interest so that it was satisfactory by itself. Again, some such designs may have been painted by inferior artists. In the largest number of panel designs the first suggestion seems to be true. Regardless of what the panels may have meant, they were satisfactory units in themselves. Most of them are complete, if simple, compositions within their frames.

Rhythm is obviously a quality common to most of the design of early painted pottery of the Near East. Our design, however, exceeds all others in the feeling of movement which it creates. Sometimes the zone offers an unaccented rhythm of repeated units, which by their forms may create simple unidirectional movement. Or repeated units may be composed so as to give a more pronounced rhythmic character (Pl. 35:9). A wavy line, meander, or zigzag is the simplest means of achieving a pronounced rhythmic movement. To all three of these, fill elements are added not merely to take up empty space but by their shapes to emphasize or direct the motion. The appendages of some of the zigzags give the motion a unidirectional character (Pl. 53:1). Even unconnected elements create a pronounced rhythmic form when they are opposed and dovetailed or when their orientation is varied (design X *F*). Reversing triangles also produce the same effect.

Even more characteristic is the opposition of forces, termed "torsion," which creates the effect of opposed movement of the various parts of a design. The simplest form, with the line of movement in two zones in opposite directions (Pl. 42:14), is rarely found. The reader will better appreciate the decided motion in such designs by looking at certain plates than by reading a summary of the various methods by which this effect was achieved. Plate 25 provides excellent examples, and numerous others are to be seen. Zigzags crossed by oblique Z's (Pl. 54:10, 12-15) and zigzags or reversing triangles with appendages running off in opposite directions from the top and bottom apexes (Pls. 53:7, 58:4) emphasize this quality most surely. Plate 58:4 is particularly interesting for the opposed swirl, almost spiral, of the appendages. Designs do not usually "snarl" or become confused as a result of torsion, for there is always the zigzag effect to carry them on. Thus the directional possibilities of the frieze are exhausted with emphasis on the horizontal, the vertical, and the oblique.

Large zones of design, with the emphasis on the full surface covered, apparently were preferable to multiple zones. The latter do occur, however, and the artists displayed good taste ordinarily by filling them not with large elements of different types, which would attract attention unequally, but with simple small elements which, if they were not all the same, at least were equally striking.

The interiors of bowls provide different problems than the exteriors of vessels. Here the design must fit into a circle, and the properties of a circle which can be used to advantage are the circumference and the radii. In addition a centrifugal effect was much favored by our artists.

Simple zones, in which almost any type of design or composition might be used, are not uncommon inside the rims of bowls. We have already noted that the firm bordering typical of the outsides of vessels was not felt necessary, for the round centers of bowls were considered to be sufficiently self-contained. We suspect that it is for this same reason that suspended elements are moderately common inside vessels and that rows of elements without lower borders may be found inside rims.

When the complete interior of a bowl was treated as a field for design we find more interesting compositions. Here the artist was usually not content to exploit only one of the properties of the circle. Where a bowl is quartered or trisected a centrifugal or whirligig effect, which gives a feeling of movement, is achieved as well (Pl. 28:3, 6). Plate 26:2 illustrates perfectly the use of every property of the circle to produce a design full of motion and life. It is obviously because they achieved the same effect that swirling patterns of wavy lines (design VI C) were so much favored (see Pls. 28-29).

It is perhaps only necessary to note that, with a few exceptions, all patterns where symmetry can play a part are strictly symmetrical.

Representations of natural motives are, of course, strictly ideoplastic. This obviates the necessity for terming them abstract or naturalistic, for the artists of the Near East before the time of Greek influence did not portray visual impression. What we now appreciate in ideoplastic art is a differentiation as regards decorative qualities or an approach to varying degrees of physical reality. In this animal design it is clear that the end result is animals which form attractive decorative units. Ibex and mouflon horns conform to this purpose. It might be argued that to these primitive people horns had a significance which made them favor the ibex and mouflon as animals for their design. But such an assumption can hardly be made for the highly decorative tails of the dogs of Plate 73:17. Yet despite this predominantly decorative quality of the animals, there was a certain limited interest in visual detail. This is shown by the presence of eyes (Pls. 70:12, 73:11-12, etc.), hair on the head in one case (Pl. 73:12), and indications of what may be wing areas on some of the silhouetted birds (Pl. 75:16). The developments in animal style at the end of Siyalk III⁹ could then be perfectly natural, though further evidence is needed to clarify this point. Variation in quality but no conventionalization is to be noted in the animal design throughout the life of Bakun A.

No attempt is made here to explain the meaning of the geometric motives and the significance of the natural elements. It is clear why the qualities of most of the animals drawn would appeal to a primitive people. To try to appreciate the feeling which the other elements evoked is to leave the realm of reality and to enter the field of pure theory.

To sum up briefly the main qualities of the design: Symmetry is a cardinal principle. The design is applied in either free fields or zones. In the zones there may be a closely woven pattern of repeated elements, a simple rhythm of repetition, or a more pronounced rhythm of movement which in its strongest form creates a feeling of torsion. On the interiors of bowls all the properties of the circle are exploited, but centrifugal or swirl effects are favored because they create more markedly the greatly preferred feeling of movement. Finally, in natural motives the ornamental predominates over the feeling for physical reality.

⁹ See Ghirshman, *Fouilles de Siyalk* I, Pl. LXXXIII.

RELATIONSHIP OF FORMS AND DESIGNS

Certain designs have been mentioned as being most commonly found on certain types of vessels. It must, however, be remembered that one cannot say that particular elements in certain forms of syntax will not occur occasionally on almost any shape, even though the type of composition may not be strictly suitable to the form of the vessel. The freedom of variation in design carried over in its application to the vessels.

Cones (form XI *C*), cups (form XII), and less frequently jars (form X) might be left unpainted, though the preponderance of the pottery is painted.

Series of plain bands of uniform width (design XII) are found mainly on precisely the same forms that are sometimes unpainted.

It is perhaps simplest to mention first those designs which are confined to one form or to a small number of forms and not to mention them again as absent on other shapes. Overall designs (I) are confined mainly to cups and the interiors of small bowls (form III). Vertical zones (III *A*) were preferred on beakers (form XI). Vertical zigzags (IV) occur usually on the higher hemispherical bowls (form IV *B*) and also on small bowls (form III). Vertical zones of zigzags joined by horizontal bands (VIII *A*) occur, with one probable exception, on cones (form XI *C*).

Deep bowls (form I) and broad bowls (form II) are painted with much the same decoration. The only designs not found on them are those just mentioned and suspended elements (design II) except opposed loops (II *A* 3) on form II. The vertical designs not used on beakers (III *B-C*) are drawn more often on these bowl forms than on others. The forms of field patterns are usually those of design VI *E* 2. The decoration of the broad bowls differs from that of the narrower high type only in including interior designs (especially VI *C*). The smaller forms of broad bowls may be decorated also with designs more usual on small bowls (form III).

The interiors of small bowls (form III) may have overall designs (I), as noted above, or may be divided into fields (VI *B-C*). The whole exterior is often divided into fields (VI *D* 1), and vertical zigzags (IV) are rather frequent. Most of the other designs too may occur on them.

Very low hemispherical bowls (form IV *A*) and some of the slightly higher ones (form IV *B*) are usually divided into segments (VI *A*) or fields (VI *D* 1). On the slightly higher ones vertical zigzag patterns (IV) also are frequent, as are step designs (V) and unconnected elements (X). Hemispherical bowls with small ring base and slight body break (form IV *C*) are treated more like large bowls (forms I-II) and are often decorated with horizontal zigzags crossed by oblique Z's (XIV *E*), triangle-rhomboid units separated by other elements (XVII *D*), and ibex designs (XIX *A*).

Few designs are used on conical bowls (form V): the simple form of the triangle-rhomboid design (XVII *A*), mouffons (XIX *C*), and mouffon horns (XIX *D* 1-2). They are also occasionally divided into segments (VI *A*).

Campaniform bowls (form VI) are too rare to give any indication of connection between form and design.

This is true also of bowls approaching a hole-mouth form (form VII), though they are treated somewhat like pots.

Pots with body break (form VIII) and globular and ovoid pots (form IX) are decorated similarly, though the latter may show a slightly greater variety since their decorated surface is greater because of no body break. Pots, next to large bowls, show the greatest variety of design. Almost any design may appear, though zones of connected (XI) or unconnected (X) elements, particularly diamonds, and horizontal zigzags (XIV), particularly those with appendages (XIV *C*), are common, as are also animals (XIX). Ovoid pots (form IX *C*) are sometimes treated like jars with merely suspended elements below the neck band (II *B*).

TALL-I-BAKUN A

Jars (form X), on the other hand, are decorated with more special designs. The commonest decoration is a design zone divided into fields (VI E 1) or the very similar composition in which vertical zones alternate with vertical elements (III C). Also distinctive are series of widely spaced elements with no lower borders (X C 3). Less often series of widely spaced horizontal

RELATIONSHIP OF POTTERY FORMS AND DESIGNS

DESIGN	FORMS														
	I	II	III	IV A	IV B	IV C	V	VI	VII	VIII	IX	X	XI A-B	XI C	XII
I.....			×												×
II A 1.....									/			/			/
A 2.....			/												
A 3.....		/													
B 1-2.....											/	/			/
C.....			/								/				
III A.....													×		
B.....	/	/													
C.....	/	/										×			
IV.....			/		×			/					/		
V.....	/	/							/						
VI A.....				×	/		/								
B.....		/	/												
C.....		/	/												
D 1.....			/	×	/										
D 2.....		/												/	
D 3.....													/		
E 1.....										/	/	×			
E 2.....	/	/													
VII.....	/	/	/							/	/	/			/
VIII A.....														×	
IX.....	/	/								/	/				
X A.....	/	/	/		/			/					/		/
B.....	/	/	/		/			/		×	×		/		/
C.....	/	/	/								×	C 3			
D-F.....	/	/	/		/					/	/		/		
XI A.....	/	/	/							/	/		/		/
B-J.....	/	/	/							/	/		/		/
XII.....												/		×	/
XIII.....	/	/								/	/				/
XIV A-B.....	/	/	/								/				/
C.....	/	/	/							×	/				
D, F-H.....	/	/	/						/	/	/				
E.....	/	/	/			/			/	/	/		/		
XV.....	/	/	/					/	/	/	/				/
XVI.....	/	/													
XVII A-B.....	/	/	/				/			/	/				
C, E-G.....	/	/	/												
D.....	/	/	/			/			/						
XVIII.....	/	/	/							/	/				
XIX.....	/	/	/			A	C, D 1-2			/	/				
Unpainted.....	/	/	/							/	/	/		/	/

bands (XII) cover the surface, but in addition almost any design may rarely occur, and animals (XIX) are not uncommon.

On beakers (form XI) vertical zones (III A) and to a less extent vertical zigzags (IV) are typical. Various other designs occur, however, most usually unconnected and connected elements (X-XI) and zigzags crossed by oblique Z's (XIV E). The cones (form XI C) are usually ornamented with vertical zones of zigzags joined by horizontal bands (VIII A) or with plain horizontal bands (XII) or are unpainted.

Cups (form XII) are decorated with almost all the simpler forms of the various designs: overall patterns (I), suspended elements (II A 1, B 1-2), connected and unconnected elements

(XI, X), horizontal zigzags (XIV), and reversing triangles (XV) as well as plain horizontal bands (XII).

Thus it may be seen that the choice of compositions for each vessel form was closely connected with the suitability of its shape to the designs which might be applied. The table on page 58 briefly summarizes the relationship of forms and designs. Single strokes denote that a design occurs at least rarely on a particular form. A design which was drawn only very rarely on a given vessel type is marked only for forms VI and VII. An \times indicates that the design involved occurs frequently relative to other designs drawn on the form in question. Particular subtypes of designs are noted when they rather than the more general classes are typical of any given form.

STRATIGRAPHY¹⁰

LEVELS I-II

In the lowest meter of deposit most of the vessel shapes were present, but no forms were distinctive of these levels alone. Pots (forms VIII-IX) occurred but were apparently rare. Big bowls seemed all to be of the deep type (I), with the broader bowls (II) absent. It is not certain that hemispherical bowls (IV) were present.

One of the distinctive designs is a step pattern (V *D*; Pl. 27:18) which is very common. Another typical design is that formed by two zones of joined diamonds between which, without separate borders, is a row of elements (XI *E* 1; Pls. 48:13, 76:16). Another distinctive design (Pl. 54:15) is the prototype of the zigzag crossed by oblique *Z*'s (XIV *E*). The attenuated form of the triangle-rhomboid design with rows of fine dots in the negative areas (XVII *B*; Pl. 62:7) is very typical. Such rows of small dots are equally distinctive with mouflon designs (XIX *C*; Pl. 70:15).

Rows of joined oblique crosses (XI *B*; Pl. 47:15) are moderately common but last into Level III. Rows of joined diamonds containing a negative diagonal (XI *E* 3; Pl. 48:14) though rare here are apparently commoner than in Levels III-IV. Dentilated and narrow ribbon horns (XIX *D* 5; see Pl. 73) are commoner in the lowest two levels than in the succeeding periods of occupation.

A good many designs occurring in Levels III-IV are absent in Levels I-II, though this in many cases may be merely chance. Overall designs (I) are found; of suspended designs only II *A* 1 is present. Vertical designs are confined to certain types of vertical zones (III *A* 2, 4, 5), and vertical zigzags to certain forms (IV *B* 1 and 3, *C* 2). Only the type of step (V) mentioned above occurs. A few of the field designs (VI *B* 3, *C*, *D* 1) are in evidence. Various types of panels (VII) occur, but vertical zones of zigzags joined by horizontal bands (VIII) are absent. Checkerboard zones (IX) occur, as do most of the designs formed by rows of unconnected elements except X *B* 3-7 and *F* 4. Of the zones of connected elements, most of the motives and various forms of joining are represented, including all types of diamonds (XI *E*); but XI *D* and *G-I* are absent. Plain bands (XII) exist, and of elements on a central line (XIII *A*) diamonds, ovoids, and circles are found. Various types of horizontal zigzags (XIV) are represented, usual-

¹⁰ In this section those designs and forms which are surely typical of a particular level and which may be considered as criteria for cross-dating pottery at other sites with very similar ceramic industries, such as those in Fars described by Stein, are distinguished from pottery which seems commoner in one stratum than in another. Some of the latter may really be typical of only one level. Various factors make this uncertain in this particular material. The quantity of material from Levels I-II was not very great. Level IV was quite thoroughly disturbed by the Muslim graves which in some cases even penetrated its floors. Furthermore the floors of Levels III and IV were never much more than one meter apart. Since this material could not be worked up by the original excavator and in view of the probability of ancient disturbance, when a certain design or vessel shape is somewhat rare it is impossible to depend with too much confidence on the sherds. It is to be hoped that the second season's work will clarify some of these points.

ly the simpler forms. Of patterns with reversing triangles only XV *E* and *G* are missing. Meanders (XVI *A*) occur, but wavy-line designs (XVI *B*) do not. The predominant form of the triangle-rhomboid design is the attenuated type (XVII *B*), but XVII *D-E* also are present. All the main types of anthropomorphous designs (XVIII) are found. Of the animal patterns (XIX) rows of single mouflon horns, ibex horns, "free horns" (XIX *D 4*), Bos, gazelles, rabbits, felines, pigs, apparently birds (except geometric forms), and snakes are not represented, but all of these except the birds are rare in the other levels.

Thus it is obvious that in Levels I-II though some patterns were used which did not find favor later and some variations of basic designs may not yet have been created, the basic forms of the designs of the succeeding two levels were already established.

LEVELS III-IV

The forms of the vessels from Levels III-IV are too similar to be used for stratigraphic distinctions. The pot type VIII *C* seems to occur only in Level III, as perhaps do two cup types (XII *A-B*). Certain of the broad bowls (II), the hemispherical bowls (IV), and the conical bowls (V) are commoner in Level III than in Level IV.

The same general types of designs are shared by Levels III-IV too, but certain variations are either typical of one level or more common in one level than in the other.

The few designs which occur in Level III and not in Level IV and hence may safely be used to distinguish Level III vessels from those of the succeeding stratum are the crescent between high points (VI *D 2*), side-joined divided triangles (XI *J 1*), and a pattern formed by intersecting zigzags (XIV *G*; Pl. 4:5).

Designs which are apparently commoner in this phase than in Level IV are certain negative designs (III *A 7*; Pl. 24:1), a vertical zigzag pattern (IV *C 2*; Pl. 27:5), a step pattern (V *A*), wavy-line patterns inside bowls (VI *C*), vertical zones of zigzags joined by horizontal bands (VIII *A*), checkered zones (IX), negative areas in solid zones (X *E*), joined Maltese squares (XI *D*), suspended joined diamonds (XI *E 5*), the zigzag crossed by oblique Z's without dots along the edge of the Z (XIV *E*), reversing right triangles (XV *F*) particularly with the skewed-dot fill or reversing triangles between the right triangles, simple vertical anthropomorphous figures (XVIII *B 1*), and the mouflon with body reduced to a mere fill (XIX *C*).

The following designs are not represented in Level III, but, since they are quite rare in the levels where they do occur, this may well be due to chance: II *C 2*, IV *B 3*, V *D*, VI *B 1*, VII *A 2f-g*, XI *G* and *I*, XIV *H 2*, XIX *D 4*, *H*, *J*.

In Level IV distinctive designs are somewhat rarer, but very characteristic are bands of strokes as fringe (Pl. 39:8), also designs with dentilated bands (Pls. 46:8, 56:9), likewise the form of Plate 55:12, for both the dentilated bands and the form of the zigzag.

Designs which are apparently commoner in this level than in Levels I-III include solid zones containing negative areas with or without fill (III *A 6*), columns of joined elements (III *B-C*), superimposed triangles spaced in the design zone to leave blank fields (VI *D 3*), several types of diamond-filled panels (VII *A 2a-d* and *3a, c*), various unconnected elements (X *A*, *B 1*, *F 2-3*), joined elements alternating direction vertically or alternately different (XI *G-H*), unusual forms of zigzags in general (XIV *F*), reversing triangles separated by a line with divided-triangle fill (XV *D*), anthropomorphous figures with tails (XVIII *B 4*), lions (XIX *I*), probably insects (XIX *M*), and a series of line designs (see p. 53).

The following designs were not found in Level IV, but, since they were rare in Level III, no conclusions may certainly be drawn: III *A 1*, IV *A*, *B 2*, X *B 5*, XVIII *A 1* and *B 5*, XIX *E-F* and *N*.

STONE VESSELS

In both Levels III and IV a number of fragments and a few nearly complete stone vessels were found. Usually any traces of tooling which might have existed have been obliterated by weathering which has eaten into the stone and in some cases warped it badly. Traces do remain, however, of the original polished surfaces.

The fragments from Level III are mainly of pure, white calcite. The broken base of a cylindrical mortar-like vessel is seen on Plate 81:1. This vessel probably had a simple slightly thinning vertical rim, for fragments of such rims were found. The other forms include a cup (Pl. 5:3) and bowls, one with a slightly thinning vertical rim and a solid knob handle (Pl. 81:2) and the others with ledge rims and almost vertical sides (Pl. 81:3, 11). Plate 81:4 looks very much like a ring base which has broken off at a groove where it was attached to a body. The weathering of the broken surface makes this uncertain, and it might really be a rim.

In Level IV on the surface several very fine vessels were found. Two miniature pots are made of a mottled red and yellow stone with gray veining. One (Pl. 81:5) has a moderately high polish outside and is polished inside also. The other (Pl. 81:6) shows a low exterior polish, but the interior is unpolished below the neck and shows horizontal scoring; its walls are very even. A small saucer (Pl. 81:7) in the same material is also nicely polished. Plate 81:10 shows a hole-mouth alabaster bowl. All the other vessels from Level IV are of white calcite.

The finest stone vessel discovered (Pl. 81:13) is a tall cone with an incised zigzag on a raised collar below a flaring rim. The surface seems to have been smoothed, though redepositions of lime on it make this unclear. The interior retains vertical scoring produced in the excavation or smoothing of the cavity. The sides are even well below the incised collar, but then the cavity becomes irregular and, close to the base, one side is 5 mm. and the other 11 mm. thick. The section with the bottom of the cavity is missing, and the edges of the lowest part preserved are smoothed. Since striations left by chiseling or grinding show that this is not due to weathering, the break probably occurred in antiquity. The base was found with the cone; it is solid, its tip decorated with deeply incised crosshatch. The exact use of this cone is uncertain. It might have served as a torch, though no trace of burning exists. Due to its height its capacity is considerable.

Most of the other fragments are parts of bowls with sides rising obliquely outward and simple rims (Pl. 81:8-9).

Plate 81:12 shows a fragment probably later than Level IV, since it is very different in material and form. Compare a stone vase from Tell Agrab.¹¹

ANIMAL FIGURINES

Numerous animal figurines were found in Levels III-IV, while only two fragments are recorded from the lowest meter of occupation. The figurines of all levels are much the same. Most of the more elaborate ones come from Level IV, but the presence of two fine animals (Pl. 5:7, 10) in Level III shows that this is due merely to chance.

Half of the figurines are made of the usual pottery clay, and the majority of these are painted with the usual black-brown or brown paint. The other half are made of fairly well washed brown clay and only partly baked. They are in exactly the same condition and of the same material as the labels (pp. 66 f.). They are much more crudely made than those in the pottery clay.

¹¹ H. Frankfort in the *Illustrated London News*, Sept. 12, 1936, p. 435, lower left.

FIGURINES IN POTTERY CLAY

Two types of birds were discovered. Plate 5:5 shows one type, Plate 5:4 the other, in which the bird is highly stylized. The most elaborate bird is represented by a fragment from Level IV (Pl. 5:6).

Three examples of bears (e.g. Pl. 5:7-8), a lion (Pl. 5:12), a leopard (Pl. 5:9), a dog with collar (Pl. 5:10), and an animal of uncertain species (Pl. 5:13) were found. Plate 5:11 is probably the hind part of a dog.

Most of the figurines represent horned animals. In nearly every case the horns run straight out from the sides of the top of the head and are broken off so close to the head as to make it uncertain whether they curved like ram horns or were those of a bull. Some of the horned animals are doubtless sheep, but it is interesting that the few horns found separately are all of cattle (e.g. Pl. 5:15, 17) except one of an ibex (Pl. 5:18). These figurines, which seem predominantly to represent cattle, as a rule have solid fore- and hind legs with concave-sided rectangular cross sections, though crudely modeled pairs of legs occur occasionally (Pl. 5:19). They have short tails which turn down, and they are frequently painted with broad bands along the spine and vertical bands on the front and hind quarters (Pl. 5:16). Occasionally a band encircles the belly, or the body is covered with dots (cf. Pl. 5:10). The eyes, if shown, are dabs of paint. Some of these figurines were of very considerable size, as may be seen from a well modeled cloven hoof (Pl. 6:1) which is as high as ordinary figurines and from a fragment of a head (Pl. 6:2). Details as a rule seem not to have been incised. There are no indications to show that any of the figurines were intended for cows or ewes.

DETAILS

Plate 5:5 seems to have been unpainted. Other examples of the same type have the head closer to the body and the tail more perked. The fore part of one was covered with paint to the shoulders.

Plate 5:6 most probably had a body like that of Plate 5:5.

Plate 5:4 is painted almost solid, though the paint rises at the sides near the back and then is brought down in a vertical stroke to indicate the tail. The base is slightly concave.

Plate 5:7 is certainly a bear. The body is very flat and tabular, the face is painted, the eyes are incised, and the back is covered by a row of chevrons. Aside from Plate 6:1, this is the only figurine in which traces of an attempt to show paws or details of the feet are preserved. Without Plate 5:7, No. 8 could not be identified as a bear. It has the same type of tabular body, straddled legs, and very short tail. An unillustrated figurine probably represents a bear, since it resembles these two in the broadness of the chest. It is better modeled, the body being nearly round; the tail is slightly longer, and the pairs of legs are closer together. The face must have been well formed, for there are brown-painted perforations for the eyes and mouth. The back had a medial band of paint, cut by crossbars extending only to the top of the sides.

Plate 5:9 is a well modeled leopard. Legs and tail, which is very thick at the base, are broken, as is the right ear. The left ear is pinched into pyramidal form. The gaping jaws originally held some object. Only traces remain of this object, which was of pottery clay and only partly baked. It must have been inserted after the figure was fired (the latter is somewhat overfired), and probably the whole was then rebaked slightly. Apparently a leopardess is intended, for there is a painted incised line between the rear legs.

Plate 5:10 is a dog with a collar. It is complete to the belly except for damaged ears.

Plate 5:11 is presumably the hind quarters of a dog, whose short tail turns up. Unusual attention has been given to the male organs. It is complete as far as the major break except for the tip of the tail.

Plate 5:12 is the only certain example of a lion. The eyes and mouth are deeply incised, the mouth extending back almost 5 cm. In the roof of the mouth is a triangular incision, apex to the front, intended to represent the palate. The break shows an ovoid core to which more clay was added.

Plate 5:13 may have been intended to represent a lion, though the appearance is somewhat porcine. The tail is fairly heavy, the hind legs show separate modeling, and the eyes and mouth are incised. The paint is much weathered, but there are traces of single bands along the spine, probably around the belly, and on the hips, face, and shoulders.

MATERIAL REMAINS

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The profile of Plate 5:14 strongly suggests an ovine animal. Plate 6:3 for the same reason looks ovine, though the formation of the head and horns is exactly like that of the more bovine-appearing figurines. Both of these have separately modeled legs. Plate 6:3 shows no sign of paint.

Plate 5:16 is decorated alike on both sides. Tail and horns are broken.

Plate 5:15 is a horn which spirals half a turn out to the broken tip. Tip and base are painted.

Plate 5:17 is a thick horn with rounded tip. It shows signs of scraping, such as are occasionally noticeable on other figurines also.

Plate 5:18, a knob-edged ibex horn, is covered with a slightly darker brown "slip" and shows the fingerprints made when its knob edge was pinched out.

Plate 5:19 has an unusual trough in the top of the head. That it was baked this way is shown by continuation of the paint over the curved edges of the trough. The inside of the trough is somewhat rough, and there is no sign of an impression. It seems likely, however, that a small horn or pair of horns may have been cemented in it after firing, though no indication of this is preserved. A line is painted along the top of the muzzle, the broken tip of which was apparently painted solid. The major break shows that the body was modeled roughly in a rodlike core to which the legs and the surface of the body were added in the same clay.

Plate 6:1 is the well modeled foot of a bull, painted solid and with a longitudinal incision on the bottom to indicate a cloven hoof.

Plate 6:2 is part of a very large bull figurine. This massive transversely ridged head continued out in the horns. It was painted solid except for a ring around each eye. The broken surfaces show that it had a globular core to which the nose and the horn ridge were added. A cavity was left, in part, between the horn ridge and the core.

Plate 6:4 is undecorated except for eye dots and a band across the top of the head and horns. Tail and horns are broken.

Plate 6:5 is of tan ware. The fore part is painted solid, though the rest of the body, including the right horn-break, which must have occurred in antiquity, is covered with reddish stain. Tail and horns are broken, and the pinched-up muzzle is chipped.

FIGURINES IN HALF-BAKED BROWN CLAY

Most of the figurines in the less attractive clay are very simply modeled and are undecorated. The legs are always solid, and the tail is sometimes omitted. They are generally smaller than the figurines made of pottery clay, running as low as 3 cm. in height. Predominantly they represent sheep (Pl. 6:7) or cattle (Pl. 6:8), though it is difficult to distinguish between the two, for the horns are usually merely pinched up. Other animals also are represented, though identification is very uncertain due to the crudity of the modeling. Plate 6:11 looks somewhat canine, as do Plate 6:9, 15, and possibly 12 with its unusually long body. Two groups of these figurines were found in the houses, twelve in room IV 2 and fourteen in room XIV 3.

DETAILS

Plate 6:7 is larger than usual. A slight grooving indicates the pairs of legs. Tail and horns are broken.

Plate 6:8 has a perforation just behind the muzzle to indicate the eyes. Tail and horns are broken.

Plate 6:9 is unusually large. The right ear only is slightly fractured.

Plate 6:10 and 13 are unusually well modeled for this type of figurine. The tails are broken, but the horns are nearly complete.

Plate 6:12 is complete except for the muzzle and chipped tail.

Plate 6:14 is interesting because of an oblique incision in the right side. The head is broken, and it never had a tail.

Plate 6:15 is unique, for it is merely a head (right ear complete) with an oval disklike body and a slight tail. The body resembles somewhat that of the birds.

Plate 6:16 shows a perforation for the eyes. Traces of a band of red-brown paint encircle the belly. Tail, foreleg, and left horn are broken.

Plate 81:14 (head missing) shows a vertical perforation from the base of the forefoot up into, and perhaps originally through, the head.

HUMAN FIGURINES

No human figurines were found in Levels I–II. Those in the higher two levels seem basically the same. All are handmade of the usual pottery clay, and most are painted with the usual black-brown paint. The points of breakage indicate that heads and breasts were added separately.

Some uncertainty must remain as to the exact number of types which existed, for the fragmentary character of the specimens makes uncertain what base and bust fragments belonged together. Most of the figures have flat busts with winglike arms above cylindrical bases (Pl. 6:17). Only one fragment (Pl. 6:18) shows a cylindrical base with separate, though contiguous, legs. In both Levels III and IV occurs a type with separately modeled arms (cf. Pl. 6:19). Probably to Level IV belongs a specimen with modeled arms and an oval cylindrical body which is seated, or perhaps kneeling, with stumps of legs projecting straight in front (Pl. 6:20). Only fragments occur of figurines which show better modeling (Pl. 6:21–22). Heads were always found broken from the bodies.

All the figurines represent females except Plate 6:22, possibly Plate 7:2, and a head with a beard (Pl. 6:27). The other three heads found (Pl. 6:24–26) give no sign of their sex.

Plate 6:23 is of orange-red clay with a thin red burnished slip or wash. It is either an import of the time of Level IV or belongs to the subsequent occupation by users of plain red pottery (see p. 32).

DETAILS

Plate 7:1 is one of the most interesting fragments. Bands around the throat presumably indicate a necklace, a feature not usually shown. The exact position of the arms is uncertain, for the left arm did not curve down under the breast as the right apparently did. The applied knobs on the back may indicate cicatrices. Here swastikas are associated with what, by comparison with pottery design, could be a plant motive.

Plate 7:10 is complete except for the head and left breast. A line down the middle of the front ends in a triangle. The back shows two horizontal bands across the shoulders. The base is concave, as also is another base (unillustrated) from the same level.

Plate 6:17 is the most complete specimen of this type of figurine. The markings just below the break of the neck seem to indicate a necklace with chevron-shaped pendants or beads. Just above the broken edge of the base is a triangular painted area.

Plate 6:18 is the only fragment of a cylindrical base with modeled legs. The legs, though contiguous, were modeled separately. The lower part is painted solid, and the wavy lines continue all around.

Plate 6:19 is the sole certain example of a figurine with cylindrical base and modeled arms. It is simply ornamented with bars of paint.

Plate 6:21, a right leg, was modeled separately as high as it is preserved. The inner side shows that it was contiguous to the left leg. Traces of five punctations in the pudendal region exist.

Plate 6:22, of uncertain provenance, is a body fragment of a male figurine. From the broken areas it seems likely that to a roughly modeled inner core was added clay to a thickness of over 5 mm. in which the final modeling of details was done. The back is unpainted. It is not impossible that the figure was shown seated.

Plate 7:3 is unpainted. A short ledge projects at the front of the base.

The design on Plate 7:4a may indicate a connection between the swastika, the wavy line, and rows of chevrons. It may represent either actual painting of the body or merely symbolism. Designs such as that on Plate 7:8 seem to be purely decorative. The three vertical wavy lines on Plate 7:4b certainly represent hair, a convention seen on one of the heads also (Pl. 6:24).

Plate 7:5, a flat-bottomed cylindrical base, is painted in front only. The painted rectangle is covered with punctations, which continue in a row along the vertical line.

The front of the figurine shown on Plate 7:7, though much damaged, seems to have had the same markings as the back. This figurine is unusual because of a groove along the neck showing that an additional layer of clay was added here. Though at the neck break it looks very much as if the front and back had been made separately, there is no such indication at the waist. Since there are no such traces in any other case, as there should be where a head

has broken cleanly away from a body which was protected by it from becoming smooth, it seems most probable that the upper part of this figurine was much too flat and a layer of clay was added.

Plate 7:8 has a plain back except for the points continuing over the shoulders.

The back of the figurine shown on Plate 7:9 shows a horizontal row of four oblique crosses just above the break.

Plate 6:20 is one of the two examples of seated figurines. It is unpainted except for the present tips of its arms (both broken). The bottom is flat. The surface of the chipped left leg indicates that it did not project farther than it is preserved and so was but a stump. The left arm as far as preserved seems to show that it continued on straight before it may have curved. Plate 7:2 is similar, but the bottom is not as flat and the legs are farther apart. The painted band continues all around the lower part of the trunk.

Plate 6:27 shows a modeled face with applied ears. The lower edge of the beard is broken. The eyes are formed by lentoid incisions over which paint was applied. The paint is much weathered, but it seems probable that the head was painted solid. Plate 6:24 and 26 are of the same type. The latter probably is complete and sat directly on the shoulders as it is. Both have ridged oblique-slit eyes. The former was overfired, and the black paint, etched into the grayish-green clay, has been preserved in vertical wavy lines all over. Plate 6:25 is a much simpler form of head and would have fitted on the shoulders as it is.

Plate 6:23 is in orange-red clay with a thin red burnished slip or wash. The top is damaged but is too narrow to permit assumption that a head rose above it. The face, therefore, is just above the flat shoulders with a small ridge nose and slit eyes, in which brown paint still adheres, formed by applied strips which were smoothed down at the back of the neck. A vertical incised groove starts just below the applied breasts and ends in a large triangular area of punctations.

SEALS AND SEAL IMPRESSIONS

MATERIAL AND FORMS

We are fairly well informed concerning the glyptic art of the inhabitants of the site. Twenty-four seals, of which all but five are well preserved, and many impressions on clay were found.

The seals are made of stone, except for three of pottery which were found in Level IV or the surface. These are in the usual cream-colored clay, and one was covered with a slip or paint of thick black-brown.

Plate 7:11 is of interest because it is a reddish steatite seal which remained unfinished, perhaps because it was damaged during manufacture. It shows very clearly filing with a flint or an abrasive. It should be noted that the front and back surfaces of all seals, except for the incised lines, were carefully polished.

The seals are, with a few exceptions, button-shaped with convex faces, some of which are fairly flat (Pl. 81:28) though usually they are moderately or extremely bulbous (Pl. 81:22). The backs are flat and show three different forms of suspension. Commonest is a ridge which extends across the seal and is pierced centrally by a concave perforation bored from both sides (Pl. 82:10). A cylindrical knob, narrowing slightly to a flat top, with concave perforation (Pl. 82:21) is slightly less common. A loop (Pl. 82:14), much like the first mode of suspension but with the ridge only in the center of the seal, is found still less frequently.¹² The seals are usually round, though oval forms also are fairly common and triangular shapes are known from impressions. Four seals from Level IV or the surface are unique in form. One is rectangular with a very slightly convex face and a rectangular knob on the back (Pls. 8:9, 82:19). Another is conoid with a convex base (Pls. 8:11, 82:20), and two are plano-convex (Pl. 8:5, 8). Plate 8:5 was pierced parallel and close to the face, and the ends of the perforation have worn down into the face, a sign of use such as is not apparent on the other seals. It should be noted, however, that Plate 82:12 has a hole, bored through from back to front, which may have replaced the broken ridge on the back. One of these unique seals (Pl. 8:5) is so different in form and

¹² A triangular seal found in earlier excavations by Herzfeld (*Iranische Denkmäler* I A, Pl. XXIX P 160) is simply perforated.

design from all the other seals that the possibility must be admitted that it was imported or contemporary with the occupation by the makers of plain red pottery (see p. 32).

That these decorated buttons were seals is proved by the large number of labels bearing impressions of similar seals. The labels were rarely found scattered but more usually were in groups in the various rooms. The largest number, about fifty-five, came from room IV 2. Other rooms containing more than ten were II 1, III 3-4, IV 3, and VII 4. Only one room in Level IV (XIII 1) contained a group. In fact, only ten fragments of seal impressions were found in this level.

The labels, made of fairly fine clean brown clay, are usually conical, perforated vertically, with simple rough flattish bases (Pl. 7:13, 18-19). The sides, which ordinarily slope at about 45°, were smoothed to receive the seal impressions.

The top part of the perforation, at the apex of the cone, is smooth and tubelike and was presumably made by a stick. The diameter ranges close to 1.5 cm., though in one case it must be over 3 cm. or perhaps ovoid. The height varies considerably, though usually it is not more than one-third of the total height. Below this comes a globular cavity of greater diameter than the tube with two or three horizontal grooves just above a contraction to the slightly smoothed edge of the bottom of the perforation. The interior of the cavity is covered with a confused series of very fine line impressions of hair. Occasionally there is no contraction at the bottom of the perforation, and the horizontal grooves continue to the smoothed lower edge of the perforation. Very rarely another smooth tube is found at the base of the perforation.

The base of the label, though often horizontal, is frequently oblique to the line of perforation and either flat or slightly rounded. Though rare cases do occur where the base was smoothed by hand, the usual roughness suggests the impression to be expected when wet clay is placed on a dirt floor. In several cases a fairly flat base has a groove running from the perforation to the outer edge and showing the same sort of hair impressions as the cavities.

These are the facts, but their interpretation is not very certain. We consider that string made from goat or other animal hair was coiled near one end of a stick to make a knot or ball. Such string seems usually to have been twisted, though in one case it seems likely that it was braided (diameters 3-6 mm.). Gobs of clay were plastered onto the knot or ball and smoothed around with the thumb, naturally producing an oblique slant down to the base of the knot and an occasional thinness on one side when insufficient clay was used. Little attention was given to the bottom, which did not always inclose the base of the knot. Possibly only one end of the string used in making the ball was attached to the object to be sealed. The usual absence of traces of an out-going cord may be due to the fact that the knot of cord was not always completely covered by the clay. It seems most likely, indeed, that the mud cone was not complete but thinned out on one side of the stick, at which point the cord went through to the object to which the sealing was attached. No complete example was found, but those most nearly intact do show a thinning of the wall of the cone on one side. A cord impression on the base would occasionally occur when a loop was caught below the clay. Why this peculiar form of sealing on a stick was used is problematical, but it may be that a ball of clay around the knot to be safeguarded was not found satisfactory or that one end of the stick was used to tighten the cord around the neck of a bag or skin like a tourniquet. The same type of sealing was used at Susa in the late Uruk or the Jamdat Nasr period.¹³

Another type of label is almost discoid and shows no smooth tubular perforation, since it was formed around a ball of cord only.

¹³ Léon Legrain, *Empreintes de cachets élamites* (France. Mission archéologique de Perse, "Mémoires" XVI [Paris, 1921]) Pl. XIX 286-93.

In a third type of label clay was pressed directly onto a knot which has left its impression on the bottom. Plate 7:12 is a complete example of this form in which the clay barely projected around the cord. In one case the cord went through the clay, the sealing being of plano-convex shape. A faceted surface like that seen in Plate 7:12 occurs on stick sealings also. Apparently the surface was so prepared for larger sealings.

Lumps of clay, some of which are not certainly sealings, bear impressions of reed matting (Pl. 7:16-17). Several lumps of clay which had not been fastened to anything bear seal impressions. Of these Plate 7:14 is the most interesting because it, uniquely, is made of pottery clay and bears two different seal impressions. It is possible that these represent some sort of token.

Jar-stoppers with seal impressions are very rare. Plates 7:15 and 83:9 show such a stopper.

All of these sealings have of course been accidentally burned, or they would not be preserved. Why they should be found in groups is problematic. It may be that stick sealings were found in greatest number because they were subsequently thrown into the fire to burn the sticks. That a feeling of individuality and a sense of possession were developed is made abundantly clear by these fragments of clay.

DESIGNS

Typical in the designs are line combinations suggesting arrowheads and the use of strokes, intersecting or radiating outward to the circumference, as fill. The designs in general show the symmetry and sometimes the motion which are noticeable in the pottery designs.

LEVEL II

Only one seal was found in Level II (Pl. 81:16). It is in light green stone, and the design may be a circle with diameters crossed by oblique lines.

LEVEL III

Designs on round seals usually show simple or more complex division of the surface by a cross (Pl. 8:7 and a seal with the design of Pl. 81:17 with an X filling each arm of the band-cross). Some have crosses with the quarters filled by lines more or less perpendicular to the circumference (Pl. 81:18-20). Occasionally the seal surface is divided by a diameter (Pl. 81:21). Four unusual seal designs are shown by Plates 8:12, 81:23 (swastika-like) and 27, 82:3.

Oval seals are in part similarly treated. There are oblique crosses (Pl. 81:24-25) and real crosses (Pl. 81:26, 30). One seal (Pl. 82:9) shows a cross with the long arm double. Length-wise division also is found (Pl. 81:31-32). Two impressions (Pls. 81:33, 82:1) have oblique crosses at both ends. A crosshatch filled with crosses (Pl. 82:2) is like the design of one of the round seals (Pl. 82:3). The impression shown on Plate 82:4 is too incomplete to permit restoration of the design.

Two impressions reveal triangular seal forms (Pl. 82:5-6). Their designs are composed of radiating lines singly or in groups. A third example (Pl. 82:7) is of uncertain provenance.

A unique form is shown by Plate 82:8.

It will be noted that many of the lines forming crosses end in V's which make them resemble arrowheads (Pls. 8:7, 81:21, 26-27, 82:9). Though arrowheads may really be represented, some uncertainty is caused by designs with V's as separate elements (Pl. 81:19).

LEVEL IV

Three round seals (Pls. 8:2, 81:17, 82:10) have designs on the cross principle, though Plate 81:17 shows crossed bands and Plate 8:2 a double band crossed by a single line. Plate 82:11 is

the only impression with a cross pattern. Another round seal (Pl. 8:3) and an impression (Pl. 82:13) each have a border at the circumference with crosshatch inside. An unusual design is shown by Plate 82:15.

One oval seal (Pl. 8:4) is divided transversely by a band, and the two ends show the same treatment though reversed. Another (Pl. 82:16) is simply divided longitudinally. Plate 82:17 is probably from an oval seal, though the impression does not permit certain restoration. Plate 8:8 is simply crosshatched.

A rectangular seal (Pls. 8:9, 82:19) is covered by simple crosshatch.

Plate 8:5, which may be later than Level IV (pp. 65 f.), shows the only example of a cross whose quarters are filled with chevrons with sides parallel to the adjacent arms of the cross.

SURFACE

A round seal (Pls. 8:10, 82:14) has a central rectangle with its sides continued to the left, though the effect has been confused by other fill strokes.

A cross pattée with a plain cross inside adorns a conoid seal (Pls. 8:11, 82:20).

NOTES ON RESTORATIONS FROM IMPRESSIONS

Plate 81:18 is based on 43 fragments. One is a clay lump which is unperforated and therefore perhaps a token; the others are labels. The impressions on these and other fragments are often distorted, in one case apparently by closure of the central perforation. One impression is covered with mud. Eleven fragments show contiguous impressions placed without plan. Four have impressions on the same axis but slightly staggered. Two have impressions with the points of the crosses touching though not forming straight lines, while three other fragments show straight rows of contiguous impressions with points touching. One fragment has a mat impression on the back.

Plate 81:20 is from 2 fragments. The disposition of the concentric lines of the web is not absolutely certain, but there are surely five.

Plate 81:21 is from 4 fragments. The design is not clear on the upper part, but since on both halves of the lower part the fill strokes are identical this is likely for the upper part.

Plate 81:23 is from 4 fragments. The edge of the seal is uncertain but most probably as drawn.

Plate 81:24 is from 2 fragments. One shows the design to the left of the diagonal which leans to the left, the other the design to its right.

Plate 81:26 is from 37 fragments, one with impressions in a row tip to tip.

Plate 81:27. The outer V's are uncertain.

Plate 81:30. The crescents at the ends are uncertain, since only the inner sides of what might be crescents show. No strokes come in at any rate.

Plate 82:1. The upper corners are uncertain, and the whole seal might be a little larger.

Plate 82:2 is from 2 fragments. The stroke from the circumference toward the X in each square is not absolutely certain, as it shows only once faintly.

Plate 82:5 is from 24 fragments. Four of these show basketry impressions on the bottoms. Six are of labels with faceted surfaces, one clearly showing the impression of a twisted cord inside.

Plate 82:7. The lower right-hand corner is not absolutely certain.

Plate 82:8 is from 3 fragments. How the strokes ran into the edge of the seal is not clear. It is possible that they came to points and that the edge was smooth.

Plate 82:11 is from 1 impression, which is not complete at the edge. The "arrows" at top and bottom are not clear owing to breaks.

Plate 82:13 is from 5 fragments. The size is accurate to within 2-3 mm. The seal might possibly have been oval, but this is unlikely.

STONE CONES

Two stone cones were found (Pl. 82:26-27). Both have smoothed surfaces and were presumably used as game pieces. The weight of No. 26 is 9.185 grams.

MATERIAL REMAINS

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POTTERY WHORLS

All the whorls are of well baked pottery clay and are unpainted. A quarter of them came from Level IV, and only one is recorded from Level II.

Only a few simple types are represented. The commonest has a slightly curved octagonal profile (Pl. 82:28). Though the plain variety is commoner, the edge may be deeply (Pls. 8:16, 82:29) or only slightly (Pl. 82:30) scalloped. Biconoid whorls are a little less common than the octagonal ones. They may be plain (Pl. 82:31) or less often with scalloped (Pl. 82:34) or indented (Pl. 82:35) edge. They are by no means always symmetrical, and occasionally, probably unintentionally, a short collar appears at either end of the perforation (Pl. 82:36). No scalloped biconical whorls were recorded from Level IV. A few ringlike whorls, with the ring semicircular in section, were found in Levels III-IV. Plate 82:37, uniquely, has a row of incised points just below the maximum diameter.

POTTERY DISKS

Found in both Levels III and IV are disks (unillustrated) made from sherds by chipping. The clay fractures fairly cleanly, and by chipping a fairly good circle was achieved. Many are very irregular in shape, and only rarely are the fractured edges smoothed. As a rule such disks are covered with fragments of pottery design. They vary considerably in size, the smallest being 1.1×1.3 cm. and 0.2 cm. thick, the largest roughly 6.5 cm. in diameter and 1.8 cm. thick.

Equal in number to those described above are sherd disks bored in the center (unillustrated). They are always bored from both sides, and the hole is frequently oblique. Several sherds were found with holes only begun on the opposite sides. The pierced disks almost always have their edges smoothed, probably by rubbing against a stone. These range in diameter from approximately 2.2 to 6.5 cm., but none is as thick as the largest unpierced disk.

A very few perforated disks were hand-formed from pottery clay. They resemble disks presumably used as pawns (see below) except for one (Pl. 82:32) which is unusually large. It has a very flat groove on one side made by running a finger around the perforation. Peculiarly, the perforation was bored as it was in the disk shown on Plate 82:33, but there it was done from one side only because the disk is thin. One specimen is unusual in that it is perforated horizontally. It probably is a bead (see p. 75). Its thickness of 1 cm. is much greater than that of the other formed disks of the same diameter.

The purposes of the three types of disks are uncertain. It is possible that the unperforated disks are incomplete, though it seems odd that so many should have been left in this condition. The edges show a certain amount of smoothing, but there are no other signs of possible wear. If they were smoothers, the very smallest would have been inconvenient to use. That the perforated disks may have been used as whorls seems likely. They show no signs of use, though it is possible that the edges of the sherd disks were worn down by use. This is unlikely, however, because the edges are not flat but rounded or beveled toward the unpainted sides. The formed disks have straight edges, which likewise show no signs of wear. It is not likely that the perforated disks were used as beads or pendants, for suspension would have been awkward and the designs left from the original sherds are unattractive. The formed disks are undecorated.

PAWNS

A series of small disks is made mostly from pottery clay, though several of this quality are of a darker gray than the whitish gray which the pottery usually shows after firing. The disks are

flat-surfaced, though one or both of the faces may be slightly concave. The edges are as straight as rubbing with the hand would make them. They are fairly uniform in size, usually about 2.5 cm. in diameter and 0.5 cm. thick. Some, however, are as much as 3.2 cm. in diameter and very rarely as thick as 1.3 cm. Fourteen were found in room IV 3. Other groups were of only two or three.

These disks are probably pawns, for a few are decorated on one side with a small centered cross or diameters crossing at right angles (Pl. 82:38) or crosshatch (Pl. 82:39). Both painted and plain examples occurred in both Levels III and IV.

Of uncertain provenance is a stone disk of the usual diameter. Its faces are slightly convex, perhaps due to weathering.

POTTERY TUBES

Cylindrical tubes of pottery clay (Pl. 82:40) were found in both Levels III and IV. They are handmade and vary considerably in dimensions, ranging in diameter from 2.6 to 7 cm. and in height from 5.3 to 8 cm. They are decorated in two ways in both levels. Two horizontal bands, one at each end (occasionally omitted), are linked by two or three vertical bands; or two, sometimes three, bands encircle each end. Their use is unknown, for they show no signs of wear. One tube with oblique and very irregular ends, if it was considered serviceable, suggests that the ends played no part in their use.

Plate 82:41 is decorated more elaborately than the others and is unusual for its concavity. It is unlikely, however, that it served exactly the same purpose as the other tubes, for the lower fracture suggests that it fitted into a clay object. A fragment (unillustrated) with the lower end constricting to a tube form might be a small cone. It is painted with horizontal bands. Both of these peculiar forms are from Level IV.

RINGS

From Level III came the unusual pottery ring seen on Plate 82:42. The lower edge is much chipped, so that it is likely that it was a scraper, though the top is too sharp to be grasped comfortably.

The other rings are mainly from Level IV. Plate 8:13 is unique, being a rod of clay whose two ends were pressed together. It might have served as a child's bracelet or as a pot-stand, though the surfaces are not even enough to make it particularly suitable for the latter purpose. Much higher rings were, however, probably used as pot-stands (Pl. 82:43, 45-48). They vary from 3.3 to 5 cm. in height and from 5.6 to 11 cm. in outer diameter. Usually the whole surface is rough except the in-beveled top edge, which is carefully smoothed. The outer surface is at most only roughly smoothed and in a few cases is scalloped. Plate 82:44 is unique; it is rectangular in cross section and has a small foot. Two stone rings (Pl. 85:2, 4) are of problematical use.

POTTERY SCRAPERS

Sherds of the usual ware broken to a very roughly rectangular shape with one of the shorter ends chipped much like a flint to provide a scraping-surface are found in all levels. They are 7.5-10 cm. long and 4-6.5 cm. wide, though greater dimensions occur occasionally. A disk made from the belly of a large jar has a flaked edge all around. Its diameter is 18 cm. and its thickness 2 cm. Three sherds of burnished red ware are flaked in the same fashion. This bit of evidence is suggestive in relation to the possibility that there was an element of continuity between Level IV and the last occupational level of the site.

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Only one example of a flat scraper made originally for that purpose was found (Pl. 83:3). It is tabular in form, the acute edge being ground down or produced by wear. There are no signs of subsequent wear or chipping.

It is possible that stirrup-shaped scrapers are limited to Level III, for only small sections of them were discovered in several rooms and debris of Level IV. They consist of a blade approximately triangular in cross section (Pl. 83:1) and a loop handle, round to oval in section, which leans at about 40° from the horizontal in the direction of the cutting edge. Either the sharp side of the blade stands out from the handle (Pl. 8:14) or the base of the handle is broadened so that the sharp edge of the blade does not protrude (Pl. 83:1). The sharp edge is brought to its thinness by scraping before baking or by grinding after baking. These scrapers are 7–9 cm. high and 8.5–12 cm. broad, with blades 2–3 cm. wide.

The edges of the blades show small and moderate nicks from use and are sharp enough for scraping hides, the clay being strong enough to stand such treatment. These could have been used in scraping pottery also, though the edges of the blades are usually straight or only slightly concave.

Plate 83:2 is unique in its size and its rounded cutting edge. Perhaps it was intended as a polisher, though it shows no signs of use as such, or possibly its edge had not yet been ground down.

POTTERY PLAQUES

Four plaques were found, two each in Levels III–IV. One (Pl. 83:4) is slightly curved and may have been made from a sherd. Its sides are ground down, and it could have served as a polisher. Two, however, were formed in their present shapes from the usual pottery clay (Pls. 8:15, 83:5). Plate 8:15 is the more carefully made of the two and quite flat except for a slight thinning at the edges. Plate 83:5 has a slightly rough bottom, and the smooth but not perfectly flat top retains traces of paint. Probably it was used as a palette, though stone slabs were generally preferred for this purpose.

FIRING-TRIPODS

Three of these three-armed pieces with slightly turned-down points were found. The illustrated example (Pl. 8:17) is of uncertain provenance. The two others (PPA 2348–49) were recorded as coming from room VIII 3 (Level III) and Trench I, 27–30 meters, +0.32 m., hut area (Level I). It seems, then, that they go back a long way toward the beginning of pottery-making. That they were not used invariably for separating vessels during firing is shown by several cases where paint from the base of a bowl has adhered (not vaporized) to the bottom of the bowl in which it was set during firing.

FIREDOGS

Two types of firedogs were found in Level III. One is a flat-based cone, with apex broken in the illustrated example (Pl. 83:6). Two found during the 1937 excavations were each surmounted by a very small concave-based inverted cone. They are made of well levigated clay with much vegetal temper. The core has burned a light tan-brown color. The surface is covered with a thick coating of clay (2.5 mm. thick), also containing vegetal temper, which has burned a buff color. The clay is very crumbly and had been burned in an open fire only. Fragments of this type were found in Level I also.

The second type, found in Level IV also, is represented by Plate 83:10. None was found complete. It is flat-based, long ovoid in plan, with sides slightly oblique inward, flat-topped with presumably both tips slightly elevated and a cavity in each tip.

JAR-STOPPERS

Jar-stoppers are very rare, doubtless because they were preserved only if they were accidentally burned. They are made of well washed clay which has burned a tan-buff color, and some are blackened on part of the surface. One (Pl. 83:9) has already been mentioned because of its seal impressions (p. 67). Plate 83:8, with very irregularly smoothed top, shows the impress of a pot or small jar neck on its convex bottom, which shows also crossed grooves for string. Others (e.g. Pl. 83:12) have no rim impressions and probably after drying were used as jar or pot lids.

UTENSILS OF UNCERTAIN USE

Two points from Levels III-IV, with rounded tops and made from sherds, may have been used as polishers. The two sides of each rather than the point show signs of wear. A similar point, with two notches just below the convex top, might have been a pendant (Pl. 83:7).

Plate 83:11, made of pottery clay, may also have served as a polisher. The sides and bottom show longitudinal scratches, and the somewhat sharp sides were certainly ground down, though not necessarily by use.

Plate 83:13 shows a rectangular pottery plaque, with slightly convex sides, made of two strips. The flat back and the sides are covered by bars of red-brown paint. The other surface, which is somewhat pitted, shows traces of paint. This object possibly might be the base of a tabular figurine, though it is queer that the "front" with the groove which might represent the "legs" should not be well smoothed.

Plate 83:16 is probably a handle, but the type of object to which it belonged is uncertain. It is in the form of a ledge handle, but it did not fit an evenly curved surface. It was made separately, and part of its inner surface has broken cleanly away from the clay to which it was attached. In plan it has an inner profile like the upper three sides of an isosceles trapezoid. It may as well have been set vertically on some object as horizontally.

A unique find (Pl. 85:8), though the lower part is missing, is so strikingly similar to a symbol found in a much later period at Susa¹⁴ that it was very probably originally much the same. It is made of the usual pottery clay and has two bands of red-brown paint on each face. It differs from the Susa object in that below the circular top the shoulders are squared and the sides are vertical. It therefore seems questionable that it might be related to the series of circles in a vertical row seen in the pottery design.

Besides the objects made of the usual pottery clay, there are some crudely made objects, in the brown clay used for labels, which are half baked through accidental burning. The best formed of these are flat-based cones which range in height from 1.5 to 8 cm. and are usually steep-sided (Pl. 83:17). In addition, there are roughly cylindrical rods and flat or more rounded tablet-shaped patties (Pl. 83:14-15). All of these served some temporary need, but none of them exhibits any trace of how it might have been used. They may have been play-things or products of children.

¹⁴ France. Délégation en Perse, "Mémoires" XIII, Pl. XXXVI 3.

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GROOVED POLISHERS

Several of these tools were found in Levels III-IV. They varied in form according to convenience, though Plate 83:20 and an imitation in clay (Pl. 83:21) represent probably the usual type. The imitation is made of coarse clay with straw and grits. It is covered with a thick surfacing of buff clay and, though well fired, has a black core. The groove shows signs of scratching.

Two flattened ovoid stone polishers (e.g. Pl. 83:20) were found in Level III. The whole surface is well smoothed, and the shallow groove shows longitudinal scratching as does the flattish top. A tabular slab of rock has a groove which still retains traces of red color worn in its polished surface.

In Level IV exactly the same form as that shown on Plate 83:20 was found. Plate 83:18 is tabular and was originally ovoid in plan. The back is only roughly smoothed, and the deeply scored groove is slightly curved. On either side of the groove a rough zigzag was incised as decoration. Plate 83:19, with an unusually deep groove, is interesting. It was originally a sledge hammer. It broke along the present base across the perforation, and a polishing-groove was fashioned in the end which then remained. It, like the others, shows traces of scratching in the groove. The outer surface was left in the original rough state of the hammer stone.

Whether these were used for bead-making¹⁵ must remain uncertain until numbers of beads are found. They did serve probably in a variety of ways as smoothers and polishers and were not always of extremely hard material, for even the clay specimen (Pl. 83:21) shows signs of use.

HAMMERS

In Level IV on the surface two large sledge hammers were found. One (Pl. 84:1) is of gray crystalline stone, dioritic in appearance, and has very rough ends from pounding. It is a heavy tool, with the perforation none too large for a strong handle.

Two other stones might have been used as hammers. One (Pl. 84:2) is of gray-green stone with all the edges abraded except in the center of the smoothly convex side. Though smoothed elsewhere, it is unpolished. Since the perforation is almost too small for a suitable handle, this may have been tied onto something as a weight. The other (Pl. 84:3) is made from an irregular lump of light yellow-brown limestone. The whole surface and the perforation, which in this case only is bored from one side, are polished. If the upper edge were not abraded, this could be called a macehead or a weight of a type known at Tepe Hissar.¹⁶

RUBBING-STONES

A great number of stones, polished on at least one face, were found in all strata. In the main they were not preliminarily shaped; but nodules in convenient forms were chosen, and in some cases perhaps the whole surface was polished, though such polish may be due mainly to use. Ordinarily only one of the sides is flattened and faceted by use, though in some cases (Pl. 84:4) two or even three sides have been worn down to flat surfaces. Among the numerous forms found in all levels occur ovoid nodules, sometimes worn down to triangular (Pl. 84:7) or ovoid flattened form; sometimes one or both of the ends (Pl. 84:5) or the long edge was used, or an oblique facet was worn at one end (Pl. 84:6). Rods of stone were found convenient, and

¹⁵ Cf. Ernest Mackay, "Bead making in ancient Sind" (American Oriental Society, *Journal* LVII [1937] 1-15) pp. 4 f.

¹⁶ Erich F. Schmidt, *Excavations at Tepe Hissar, Damghan* (Philadelphia, 1937) Pl. XVIII H 2095.

usually only one end was used as a polishing surface (Pl. 84:8). To call these polishers is not strictly correct, for a very large percentage of them retain traces of red pigment, which must indicate that they were used to grind pigment.

PALETTES

In various rooms of Level III were found thin slabs of limestone, each with one or both of the faces polished. Some of these are colored red by a pigment, so it would seem that they were used as palettes on which pigment was pulverized. The edges of these palettes were left rough as they broke off from the rock. Mussel shells with traces of red color inside may also have been used as palettes (see p. 75).

POUNDING-STONES

Rods of stone, like Plate 84:8 in shape, occasionally show abraded ends denoting use as pounders. A roughly cubical or spherical form (Pl. 84:9) also was used for pounding during the various phases.

METATES AND MANOS¹⁷

Some thirty metates were found in the rooms of Levels III-IV, but two only in Level II. They are made usually of fairly coarse conglomerate, though occasionally of sandstone. In plan they are either rounded rectangles or triangles, with convex, rarely flat, lower sides. The top, grinding surface is usually flat rather than concave. One unusually large specimen is 45 cm. long, though the ordinary length is about 20 cm. A large number of these metates had been broken in antiquity but apparently were retained for grinding small quantities of material.

The manos are made of conglomerate or rarely sandstone. They are roughly rectangular in plan or more rarely disk-shaped. They are found in both Levels III and IV. They are of a convenient width to fit the hand, though the length may run up to 12 cm. It is clear that the rubbing-stones described above were not used as manos, for their surfaces never show the scoring which use on conglomerate would produce.

BONE IMPLEMENTS

The almost complete absence of bone implements is in striking contrast to the large number from earlier periods at Tall-i-Bakun B.¹⁸ Only two awls were found, and those in Level III. They are broad flat pieces of bone and highly polished (Pl. 85:3). The only other bone object is a slightly curved antler point (12 cm. long) from Level III, which was bored at the base for suspension. The horn is in such bad condition, with the tip missing, that no traces remain which might give a clue as to its use.

PERSONAL ORNAMENTS

Very few beads were found. In Level II the only specimen was an incomplete carnelian ring bead with ovoid section.

In Level III shells were frequently used as beads. Mussel shells have the end polished flat till a hole is formed. The outer skin is removed from the surface, which is highly polished. It is

¹⁷ [These terms are preferable to "querns and mullers" because "querns" does not express the actual form as accurately as does "metates."—EDITOR.]

¹⁸ Erich F. Schmidt, *The Treasury of Persepolis and Other Discoveries in the Homeland of the Achaemenians* ("Oriental Institute Communications," No. 21 [Chicago, 1939]) p. 124.

MATERIAL REMAINS

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possible, however, that these were used as palettes, for several of them retain traces of red color inside. Unpierced, unpolished mussel shells also occurred, so it seems likely that the polished specimens were used as ornaments. Conchlike shells also are pierced and polished (Pl. 8:18) as are other small shells (Pl. 8:19). One small disk bead is made of a fish(?) vertebra (Pl. 84:10).

Some of the objects classed as whorls (see p. 69) may be beads, and a horizontally perforated disk (see p. 69) probably is a bead.

Light blue stone (probably turquoise matrix), smoky quartz, and lapis lazuli were the stones used for beads in Level III. One in each material occurred. Both the light blue stone and the quartz beads (Pl. 84:11-12) are oblately spheroid, but the lapis bead (Pl. 84:17) is a faceted disk. The quartz and lapis beads were found 20 cm. above the floor of room XII 2 together with the small shell beads, eighteen in number, and twelve bitumen beads. The bitumen beads occur in three forms: conical, globular (Pl. 84:13), and oblately spheroid (Pl. 84:18). They were formed around something fine like a straw, for, unlike the stone beads, their perforations were not made from both sides. One thick disk in bitumen (Pl. 84:14) also was found in Level III.

In Level IV discretion is necessary to distinguish beads actually belonging to this level from those intrusive from Muslim graves. Of a few beads found in rooms we can be fairly certain. Only stone beads were found. One in white calcite (Pl. 84:16) certainly belongs to Level IV, as do two minute disks of turquoise (e.g. Pl. 84:15).

A pendant of roughly drop-shaped form in polished turquoise matrix possibly belongs to Level IV, though it was not found in a room.

Discovery of burials of the people at this site is necessary before we can learn much of their personal ornament.

MACEHEADS

Maceheads, usually fragmentary, were found in both Levels III and IV. Those of Level III are usually made of white or black limestone. Their surfaces are ordinarily polished. Those whose perforations were not completed are only partly polished. The perforation is always bored from both sides. Globular (cf. Pl. 84:20), squat-globular (cf. Pl. 84:19), and more ring-like (cf. Pl. 84:21) types occur.

The maceheads of Level IV are on the whole similar, but calcite, granite, sandstone, and Yazd alabaster also were used. Too few specimens were found to permit conclusions in regard to relative prevalence of globular (Pl. 84:22), squat-globular (Pl. 84:23), and ring-shaped (Pl. 84:24) types. The unfinished head seen on Plate 84:25 is unusually flat and may be a drill top. The greatest height is 7.5 cm., the largest diameter 11.5 cm., and the largest perforation 2.8 cm. in diameter, though most of the holes are smaller. Plate 84:26 is interesting, for it is presumably piriform and ovoid in cross section. It is of calcite, and severe weathering makes uncertain whether the raised ridge on the surface is decoration or a later deposition of lime. Plate 85:1, in black limestone, is either a macehead or a drill top.

CLAY SLINGBALLS

Quantities of these objects were found toward the surface of the mound, and subsequent digging has shown that they belong to the culture characterized by plain red pottery (see p. 32). They are made of fairly well washed drab-brown clay and are sun-dried. The forms (Pl. 85:5-7), whose variation is probably due to hand manufacture, are all round in cross section.

COLORING MATERIAL

In the rooms of Levels III–IV were found lumps of red, yellow, and white coloring material. Since these have not as yet been analyzed, their composition is not certain. The red lump is some form of red ocher. The yellow is crystalline and offhand resembles potassium chromate. There is no question that the white material is sulphur, for it burns and gives off a sulphurous smell.

FOSSILS

It is interesting that in various rooms of Level III about a dozen fossils were found. The limestone of Kuh-i-Rahmat is full of them, and it is possible that they were purposely collected and saved.

THE FLINT INDUSTRY

By JOAN CROWFOOT

The stone implements of this industry are made of either chert or obsidian, the former being much more common. The chert implements comprise remarkably few types and show very little secondary retouch. The tools are all made on blades, slender and thin for their length, and very straight; these blades have been used as knife blades, sickle blades, and less frequently borers. Obsidian is used only for very small blades.

The fact that there are no arrowheads or javelin heads in this industry¹⁹ should be noted particularly. Their absence appears to be a feature common to the lower levels of most comparable sites of the region, and the way in which they suddenly appear in somewhat later levels is most striking. Such sites, however, are few in number and far apart, and it is therefore not possible to draw from them any definite deductions as to the flint cultures of the district.

At Tepe Hissar the flint implements of Strata I–II are very similar to those of Bakun A and include numerous blades and sickle blades and similar rather rough borers. Only three small arrowheads come from Stratum I, and there is none from Stratum II, whereas in Stratum III they are very abundant.²⁰ Obsidian, however, was not found in any of these layers at Tepe Hissar.²¹

The flints found at Susa²² are not comparable. The sickle blades are shorter and broader than those from Bakun A and show more secondary retouch, the backs being blunted and the denticulation along the working edges more regular. However, at Tepe Muhammad Ja'far,²³ a site in the Musyan district, an industry very like that of our village was found. The sickle blades appear to be identical, and there are similar small blades of obsidian.

At Anau²⁴ the stone industries of cultures I and II show absence of arrowheads and javelin heads; blades used as knives or as sickles are again common, and awls occur. In culture III arrowheads of flint and obsidian appear along with many other innovations.

¹⁹ One possible exception should perhaps be recorded; it is a diamond-shaped flake 4.5 cm. long and 2.8 cm. wide. I have unfortunately seen only a rough sketch of this, but it appears to be retouched along both sides and may therefore be an arrowhead.

²⁰ Schmidt, *Excavations at Tepe Hissar, Damghan*, p. 219.

²¹ *Ibid.* p. 57.

²² France. Délégation en Perse, "Mémoires" I (Paris, 1900) 191–95 and XIII 14–21.

²³ *Ibid.* Vol. VIII (Paris, 1905) 81–83.

²⁴ Raphael Pumpelly, ed., *Explorations in Turkestan, Expedition of 1904. Prehistoric Civilizations of Anau* (2 vols. consecutively paged; Washington, 1908) pp. 164 f.

The monotonous nature of the industry of Bakun A—the small number of types present and the lack of elaborate secondary retouch—is in marked contrast to the elaborate nature of industries of about the same period in the Near East. At Tell Judaidah²⁵ in Syria, at Jericho²⁶ in Palestine, and at Mersin²⁷ in southern Anatolia stone industries of the Neolithic period all include javelin heads showing delicate fluting retouch.

DESCRIPTION OF TYPES

Of a total of some 1,350 implements, only a small proportion, about one-eighth, was exported from Iran. This description of types is based only on an examination of this small collection and on the field catalogue, and I am therefore unable to give any quantitative analysis of the types present. For the same reason, I cannot say for certain whether there are any minor differences in the implements from the various layers. In the small number that I have studied the industry appears to be uniform from Level I to Level IV.

KNIFE BLADES

The specimen shown on Plates 8:20 and 85:12 is particularly interesting, as it indicates the way in which many of the tools of this industry must have been hafted for use. It is a blade 7.3 cm. long and about 1.3 cm. wide. One edge has been much utilized; the other is imbedded in bitumen,²⁸ the material used to fix the blade to the haft. Bitumen served so many different purposes throughout Mesopotamia and Iran from the first prediluvian culture onward that it is only to be expected that it should be used as a cement in this fashion. A number of examples of flints bearing traces of the bitumen casings in which they had been set were found in the lowest levels of Nineveh.²⁹ In the Near East, on the other hand, various other substances were used for this purpose. The earliest known hafted flints come from Palestine, from Mesolithic deposits in a cave, the Mugharet el-Wad. In these specimens all traces of the original sticking-matter had disappeared, the blades being kept in place by calcareous concretions.³⁰ A Neolithic sickle from the Fayyum is set with blades kept in position with resin.³¹ Other sickles from Egypt, dating from the 12th dynasty, come from Kahun, and here the cement used was a mixture of Nile mud and glue.³²

Of the haft itself in the Bakun specimen unfortunately practically nothing remains, but the bitumen appears to be intact except at the bulbar end of the blade and bears a very clear impression of the haft. Dr. M. H. Clifford, of the Cambridge University School of Botany, has very kindly examined it and reports that "the impression is that of a wooden handle of which apparently a carbonised wood film persists in adherence to the surface of the cement, but without sufficient fine detail for any specific determination." The surface of the bitumen originally covered by wood is black and smooth, while elsewhere it is roughened and discolored; the tool

²⁵ Not yet published.

²⁶ Joan Crowfoot in *Annals of Archaeology and Anthropology* XXII (Liverpool, 1935) 176-81 and XXIV (1937) 46-49.

²⁷ Miles Burkitt, "The earlier cultures at Mersin" (*Annals of Archaeology and Anthropology* XXVI [1939/40] 51-72).

²⁸ R. C. Spiller, M.A., of the Department of Mineralogy, Oxford, has very kindly examined this and finds that it is certainly bituminous in character, being partly inflammable and largely soluble in organic solvents; he considers it possible that it is a bituminous clay.

²⁹ M. E. L. Mallowan in *Annals of Archaeology and Anthropology* XX (1933) 143.

³⁰ D. A. E. Garrod and D. M. A. Bate, *The Stone Age of Mount Carmel I* (Oxford, 1937) 37 f. and Pl. XIII 1.

³¹ G. Caton-Thompson and E. W. Gardner, *The Desert Fayum* (London, 1934) p. 45 and Pls. XXVIII 2 and XXX 1.

³² W. M. Flinders Petrie, *Tools and Weapons* (London, 1917) p. 46.

must therefore have remained undisturbed with the haft still in place until the wood finally disintegrated.

In addition to telling us the material of which the haft was made, the bitumen shows something of the fine form of the haft also. It was modeled to the shape of a groove which was cut in the haft to receive the blade (see Pls. 8:20*a* and 85:12, cross section and end-on view). The groove was wedge-shaped, measured about 0.75 cm. from lip to lip, and was approximately 0.5 cm. deep.³³ The bitumen turned back a little over each lip of the groove and then sloped down onto the blade, covering more than two-thirds of its width. At the tip of the blade the impression of the haft in the bitumen ends in a distinct line, the bitumen turning slightly over what must have been the end of the haft (see Pl. 8:20). At the bulbar end of the blade the bitumen is broken; here the haft may have continued, holding more blades, or it may have ended in some sort of handle.

The working edge of the blade shows no trace of luster, but it is much nibbled with use; it was therefore used not as a sickle but as a knife. It is not impossible that the haft was much longer and that other blades were set into it below this one, as in the well known multiple-bladed sickles. This blade, however, by itself is of a convenient length for a small knife, and it is of about the same length as many other blades bearing the same signs of use. It is therefore likely that many of the blades of this size in our industry were hafted singly for use as knives.

SICKLE BLADES

Sickle blades, showing well marked luster along one side only or along both sides, are fairly numerous (e.g. Pl. 85:13*a-d*). They are made on blade sections and vary considerably in size; the majority are about 6 cm. long and from 1 to 2 cm. wide. There is generally rather fine denticulation along the cutting edge; the secondary retouch making the denticulation may be on either the upper surface or the bulbar face, but not on both. A few specimens have been roughly resharpened by further retouch after the formation of the luster. There was no attempt to blunt the backs of the blades when only one side had been used. In a number of specimens there is retouch, generally not very neat, across one end, to make it fit with the end of the next blade in the sickle.

Along one side of one specimen are slight traces of the bitumen used to fasten it to the haft.

BORERS

These (e.g. Pl. 85:13*e-g*) are made on blade sections generally about 4 cm. long. The points are strong and rather blunt and are made by steep retouch along both sides; the retouch often is along one side on the upper surface and along the other side on the bulbar face, but it may well be all on one or the other surface, or on both surfaces making the tip circular in cross section. The retouch generally extends only a few centimeters along the sides of the blade.

One specimen (Pl. 85:13*h*) may be a broken borer; but it is narrower and thicker than any complete borers found, and the top of the blade appears to have been broken off before, rather than after, the retouch along the sides had been made. If, however, it is complete as it stands, its use is rather obscure.

³³ Wooden hafts, as might be expected, have much larger grooves than those made of bone. The following measurements of grooves from sickle hafts may be compared with those given above: two Mesolithic bone specimens from Mugharet el-Kebarah (see F. Turville-Petre, "Excavations in the Mugharet el-Kebarah," Royal Anthropological Institute of Great Britain and Ireland, *Journal* LXII [1932] 271-76) average respectively 0.25 and 0.3 cm. in width, 0.2 and 0.3 cm. in depth; a Neolithic wooden specimen from the Fayyum (Caton-Thompson and Gardner, *loc. cit.*) is about 0.6 cm. (0.25") wide and about 1.0 cm. (0.4") deep for 90% of its length; an 18th dynasty wooden haft from Ghurab averages 0.75 cm. in width and 1.25 cm. in depth.

MATERIAL REMAINS

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RETOUCHED BLADES

A number of blades have irregular fine denticulation along one side or along both sides. These probably were intended for use as sickle blades but were not sufficiently used to acquire the characteristic luster. If this is true, it is interesting to note that in some specimens both sides were prepared for use at the same time, though when the blade was hafted only one side would be used until it was blunted, when the blade would be reversed in the haft.

Some blades have a little flat retouch along part of one or both of the sides. Blades with at least one shallow notch are not uncommon; such notches appear to have been used as concave scrapers rather than as an aid to hafting.

FABRICATORS

A few thick blades have very steep retouch along both sides; the sides narrow down to form strong blunt tips and are battered with use.

"LAMES DE DÉGAGEMENT"

These are few in number and rather rough. They are triangular in cross section, the ridge along the upper surface having been made by battering on the core before the removal of the blade. A *lame de dégagement* is a normal feature of a blade industry and is the first blade to be removed from a prepared core. In some industries, such as the Neolithic of Jericho, in which blades as slender and straight as those from our village are found, long slender *lames de dégagement* are numerous. Their scarcity and roughness in our industry may be connected with the form in which the raw chert was found. If the tabular form was used, an elaborate *lame de dégagement* would obviously be unnecessary.

BLADES

Straight slender blades are very common. They are remarkably uniform in size, the average dimensions being $8.3 \times 1.5 \times 0.3$ cm. They may be either triangular or trapezoidal in cross section. The striking-platforms are extremely small, the thickness of the blades at the bulbar end having been reduced by battering on the upper surface before their removal from the cores. Nearly all have been utilized along both sides, the edges being nibbled. These signs of utilization run from the tip to the bulbar end, and it is therefore impossible that the blades were hafted at one end only, like a modern table knife; they must have been hafted along one side, as in the specimen previously described (Pls. 8:20, 85:12) in which the bitumen used to hold the blade in the haft is still in place, and then rehafted along the other side when the edge first used became blunt. This suggestion is borne out in three specimens by the presence of faint traces of bitumen along an obviously utilized edge.

FLAKES

These are few and are very variable in shape and size. All show signs of use, though there is no secondary retouch.

CORES

Blade cores (e.g. Pl. 85:13i) are very neat. They are single-ended; and the striking-platform, either faceted or plain, is at an acute angle to the flaking surface. The cores have been used until they are only about 1 cm. thick.

TALL-I-BAKUN A

OBSIDIAN TOOLS

Obsidian is used only for making very small blades. These generally measure about $4.5 \times 1.0 \times 0.3$ cm. and may be either triangular or trapezoidal in cross section. They show signs of much use, and in some there is fine nibbling retouch along part of one or both of the sides.

MATERIAL

The vast majority of tools in the industry are made of chert. A fine-grained grayish-green chert, sometimes veined with purple, is the commonest material; a streaky reddish-brown variety, coarser in grain, is also much used. Less common are streaky buff and dark brownish-gray chert, both coarse-grained.

Dark gray translucent obsidian also is used, but it is comparatively rare. Miss Hall, of the Department of Mineralogy and Petrology in Cambridge, has very kindly examined samples and finds that, from the values of the specific gravity (2.37) and the refractive index (1.495), they appear to be typical rhyolite obsidian. The glass is colorless and contains small, not very common, crystallites arranged as minute stars parallel to the flow lines. Very strongly marked conchoidal fracture is displayed. Unfortunately it is not possible without much further research to say from what district this obsidian was brought. Miss Hall has examined a number of specimens from the Lake Van region and finds that, while there are slight differences between the samples from Bakun A and Lake Van, those from Lake Van show slight differences among themselves also, and the differences are so small that they might easily be found in a single flow.

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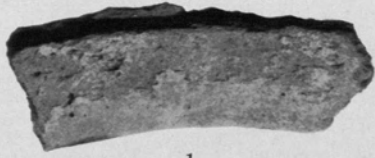
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PLATES

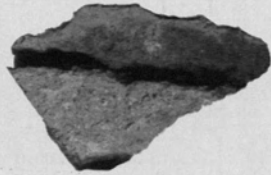
Field numbers are given without the site designation (PPA). Distance from the east end of the trench is included for objects found in Trenches I and II. The objects are in cream-colored ware with black-brown or brown paint if not otherwise described. The decoration is on the outside of pottery vessels unless designated as being on the inside. Dimensions are given in centimeters. The scales indicated for drawings made from field sketches are only approximate. The following abbreviations are used:

B.	breadth	out.	outside
D.	diameter (maximum unless otherwise stated)	Rm.	room
H.	height	surf.	surface (top meter of deposit)
in.	inside	Th.	thickness
L.	length	v.s.	virgin soil
mx.	maximum		

No.	Field No.	Provenance	Level	Form	Design	D.	H.	Th.	Remarks	Scale	See Page
1	3562	Rm. III 4	III	XIV, Pl. 18:1		41.2	35.2		cooking-pot rim, light red ware, side join	1:3	15, 24
2	lost			XIV					cooking-pot, side join, moderately high burnish	1:3	24
3	5097	Trench II, 50-60 m., .55 m. deep	surf.						base, mat impression	1:3	24
4	5074	M 28, +1.27-1.87 m.	III					1.1	side join	1:3	24
5	5098	below Rm. XIV 3	top III						side join	1:3	24
6	5100	L 28, on kiln	IV						join of base to body, tan ware	1:3	24
7	2162	L-N 30, +2.5 m.	top IV, surf.		XIX O			1.5	scraping ridges	1:4	25, 52
8	2097	Rm. IV 2, floor	III	III	VI D 1	15	13	.35		1:4	15, 27, 39
9	3564	Rm. III 4	III	II	XIV E				light green ware, black paint etched, traces of red in.; note brush strokes	1:2	25
10	2083		III			ca. 6	4.4		theriomorph; see Pl. 18:7	1:2	31
11	3297	Rm. XII 4, fill(?)	III	V, Pl. 11:14	II A 3	24.4-25.2	17.6 mx.			1:4	34 f.
12	3273	M 31, +2.87 m.	top IV or surf.	III, Pl. 11:3	I in.	11.4	9.2		cream-tan ware	1:4	35
13	2754								handle(?); see Pl. 18:22	1:2	32
14	2392a								handle(?); see Pl. 18:21	1:2	32
15	2080	L 28, in kiln	III	IX C, Pl. 14:6	II B 1	8.8	6.0		light gray-green ware	1:2	7, 35



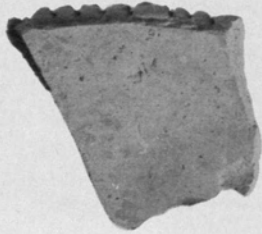
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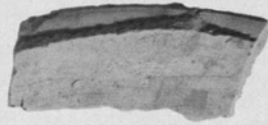
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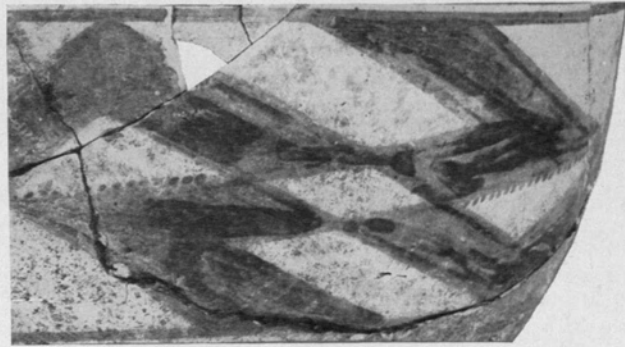
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No.	Field No.	Provenance	Level	Form	Design	D.	H.	Th.	Remarks	Scale	See Page
1	2047	Rm. XI, floor	III	X, Pl. 14:13	III C	53.6	58.4			1:8	16, 37, 49
2	2069	Trench I, 48 m., +2.7 m.	IV	X, Pl. 14:11	VI E 1	33.1	33.9			1:4	34, 39
3	2095	Rm. III 1	III	III	VI C in.; 2 zones XI E 1 out.	19.8	13.3-14.2	.4-.7	irregular rim	1:4	15, 38
4	2946	Rm. XVII 5, fill	IV	II D, Pl. 10:4	IV B 1	28.4	13.8 mx.			1:4	37
5	3253	Rm. X 3, floor(?)	III	VII, Pl. 12:6	V A	15.4	9.8 mx.		suspension holes	1:4	38
6	2036	Rm. XI, floor	III	III, Pl. 10:9	VI B 2 in.	19.2	10.8	.6		1:4	16, 38
7	2347a			XI C	VI D 2	14.7	22.5	.6		1:4	34, 39
8	2075	Rm. V 3, floor	III	III, Pl. 10:8	VI B 2	21.0	13.7-15.0	.65-1.0		1:4	17, 38
9	3266	Rm. II 4	III	IV B, Pl. 11:7	VI A	20.8	10.6 mx.			1:4	34, 38



1



2



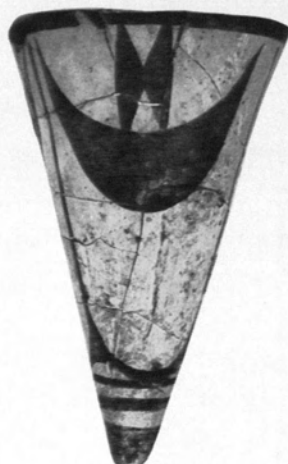
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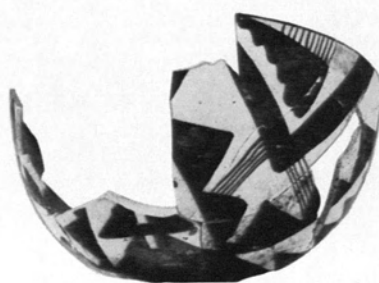
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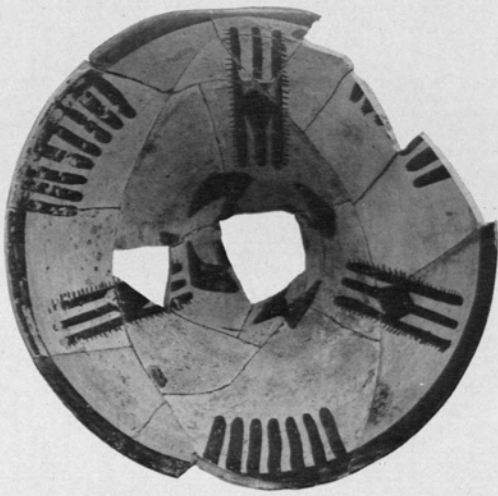


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No.	Field No.	Provenance	Level	Form	Design	D.	H.	Th.	Remarks	Scale	See Page
1	2181			II	X C 2 in.	26.5	13 mx.	.45		1:4	43
2	2039	Rm. XI, floor	III	I A	VII A 3c	28	25.7	.5-1.0		1:4	16, 40
3	2181			II	X B 8	24.5	12.5	.45		1:4	42
4	2161	M 28, +1.93 m.	base IV	II A	VII B	27.5	19.5			1:4	40, 55
5	2815	Rm. XII 2	III	XII C, Pl. 17:3	VII B	12.4	8.6 mx.		cream-tan ware	1:2	40
6	3190	probably Rm. XVII 2	IV?	VIII A	X B 8	14	10 mx.	.35-.75		1:4	42
7	2035	Rm. XI, floor	III	III, Pl. 10:7	X C 1 in.	19.1	12.5			1:4	16, 42
8	2037	Rm. XI, floor	III	X, Pl. 15:3	VI E 1	24.8	25.8		crescent in. base	1:4	16, 34, 39
9	2212	Rm. III 4, floor	III	X, Pl. 14:12	VI E 1	43.2	45.6 mx.			1:8	15, 39
10	3277	Rm. VIII 6, floor(?)	III	IV B	X E	15	9 mx.	.2		1:4	43



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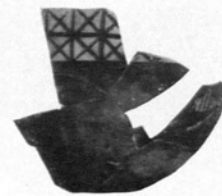
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SCALE, 1:4

No.	Field No.	Provenance	Level	Form	Design	D.	H.	Th.	See Page
1	2160	Rm. XV 1, +2.3 m., upper floor	IV	X	XIX A	28	23 mx.		21, 50
2	3304	Rm. III 4	III	II A	XVIII A 1	31-32.6	25		49
3	2178	Trench I, 0-10 m., +1.1 m.	III, surf.	I C, Pl. 9:4	XVIII B 5	30.0	21.6	.4	48, 50
4	3298	Rm. VII 4, fill	III	II A, Pl. 9:10	XIX A, XVII D	29.6-ca. 33	18.1	.45-1.1	18, 33, 49 f.
5	3302			I A	XIV G	25	23.3		33, 47, 60
6	2105	Trench I, 42.4 m., +2.67 m.	IV	V, Pl. 12:2	XIX D 1	13.8	18.0		51
7	2073	Rm. VII 1, floor	III	IX A, l. P13:18	XIX G	16	13 mx.		18, 52
8	3292	M 29, 1.5 m. above Rms. II 4, III 4	IV, surf.	IV	X D	19	9 mx.		43
9	2101		III	V	XIX D 2	16.5	10.5	.45	51
10	2501	Rm. VIII 2, upper part	III	V	XIX C	18.5	11.5		51, 54 f.



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VESSELS

No.	Field No.	Provenance	Level	Form	Design	D.	H.	Th.	Remarks	Scale	See Page
1	3454	Rm. V 1	III	X, Pl. 15:2	XIX K 1	46.5	42.2 mx.	.8-1.0	cream-tan ware	1:4	34, 52
2	3445			VIII B, Pl. 13:6	XIX I	16	14.4 mx.	.7		1:4	34, 52
3	600	Rm. XI, floor	III				4.5 mx.		cup rim, alabaster, traces of red color in.	1:3	16, 61

FIGURINES. SCALE, 1:2

No.	Field No.	Provenance	Level	D.	L.	B.	H.	Th.	Remarks	See Page
4	391	L 29, +2.3 m.	IV	2.2	1.3	2.8			bird	62
5	393	Rm. IV 3, floor	III	5.0	2.2	4.0			bird	17, 62
6	394	K 29, +2.5 m.	IV, surf.				4.0 mx.		bird	62
7	412	M 28, +1.37 m.	III	9.0			3.5		bear	61 f.
8	413	K 33, +1.67 m.	surf.	9.4	4.0		2.5 mx.		bear	62
9	397			8.5	2.5		5.5 mx.		leopard	62
10	409	Rm. IV 2, floor	III	4.5 mx.			6.0		dog	17, 61 f.
11	415	M 28, +1.47 m.	III	5.0 mx.	2.8		4.8		dog?	62
12	396	Trench I, 60-70 m., +2.9 m.	surf.	6.0 mx.	3.5		9.0		lion	62
13	420	Q 31, +2 m.	IV, surf.	10.5	3.2		4.5 mx.		lion or pig?	62
14	400	Rm. XIII 3, one of floors	IV	6.0 mx.			6.0 mx.		ovine?	63
15	2330			1.6	6 mx.				bovine horn	62 f.
16	408	M 30, +2.07 m.	base IV	7.0			5.0		bovine or ovine	62 f.
17	2326a	L 30, +2.32 m.	IV	2.2	6.0 mx.				bovine horn, tan ware	62 f.
18	433	Rm. IX, floor	III	3.3 mx.			.8 mx.		ibex horn, light brown ware, slightly darker brown slip(?)	18, 62 f.
19	398	P 29, +2.8 m.	surf.	6.5 mx.	3.0 mx.	8.0			bovine	62 f.



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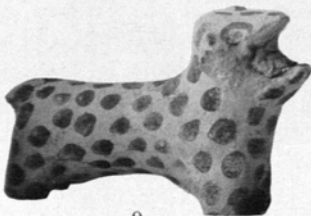
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FIGURINES. SCALE, 1:2

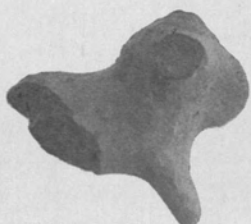
No.	Field No.	Provenance	Level	L.	B.	H.	Th.	Remarks	See Page
ANIMAL									
1	421	O 32, +2 m.	surf.		2.4 mx.	6.0 mx.		bull foot	62 f.
2	2335	L 28, S. of Rms. IV 1, V 2, deepest level	I		6.0 mx.	5.5 mx.		bull head	62 f.
3	405	L 35		5.5 mx.	2.4	5.0 mx.		ovine?	63
4	406	N 28, +2.31 m.	IV	7.8	2.5	6.0 mx.		bovine?	63
5	555	Rm. II 2, floor	III	9.5	3.0	7.0 mx.		bovine, tan ware, red-brown paint	16, 63
6	404	Q 32, +2.05 m.	surf.	4.4 mx.		6.0 mx.		horned	
7	428	Trench I, 36-40 m., +2.62 m.	IV	4.8	2.1	4.5		ovine, brown clay	63
8	423	Rm. II 2, floor	III	5.5		4.8		bovine, brown clay	16, 63
9	452	Rm. XIV 3, floor, +2 m.	IV	4.5 mx.	2.4	6.0		canine(?), light brown clay	20, 63
10	422	House XVI, +2 m.	IV	4.5	1.6	3.0		horned, brown clay	21, 63
11	411	L 30, +2.2 m. (level of Level III wall tops)	base IV	4.8		3.5		canine(?), brown clay	63
12	429	Rm. V 6	III	5.0 mx.	1.4	3.0		canine(?), brown clay	17, 63
13	440	Rm. IV 2, floor	III	3.7 mx.	1.4	2.5		horned, brown clay	17, 63
14	431	M 29, +1.3 m.	III	2.8	1.6	2.8 mx.		brown clay	63
15	451	Rm. XIV 3, floor	IV	5.2	2.4	3.0		canine(?), light brown clay	20, 63
16	427	K 27, +2.5 m.	IV	4.8	1.9	2.5 mx.		bovine, brown clay, traces of red-brown paint	63
HUMAN									
17	374	O 28, +3.31 m.	surf.		8.2	10.5 mx.		female	64
18	380	M 27			2.9	5.5 mx.	2.0 mx.	female	64
19	381	M 30, +2.6 m.	top IV, surf.		4.0	5.5 mx.		female	64
20	387	K 33, +1.6 m.	surf.		6.0 mx.	7.2 mx.	4.0 mx.	seated female	64 f.
21	379	Trench I, 50-52 m., +2.4 m.	IV		1.8 mx.	4.2 mx.	2.7 mx.	right leg of female	64
22	385	M 27			4.2 mx.	3.0 mx.		male	64
23	388	Trench I, 62.5 m., +2.42 m., in level of graves	surf.		6.9	11.1 mx.	2.1	female, orange-red ware, burnished red slip or wash	64 f.
24	530	Rm. XII 2	III		1.1 mx.	4.0 mx.	1.5 mx.	head fragment, light gray-green ware, black paint etched	18, 64 f.
25	382	Rm. VI 4, floor	III			3.5 mx.		head	17, 64 f.
26	383	O 32, +2.3 m.	surf.			5.0 mx.		head	64 f.
27	2352	House XII	III		2.0 mx.	4.5 mx.	2.4 mx.	male head	64 f.



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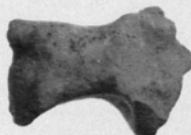
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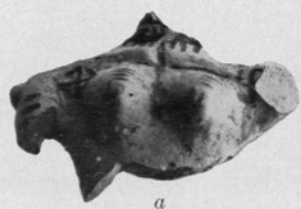


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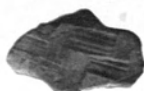
No.	Field No.	Provenience	Level	D.	L.	B.	H.	Th.	Remarks	Scale	See Page
1	372	Rm. V 1	III			7.5	5.0 mx.		front (a) and back (b) views of female figurine	1:2	17, 64
2	384	Q 31, +2.3 m.	IV, surf.				6.0 mx.		seated male(?) figurine	1:2	64 f.
3	386	N 30, +2.12 m.	IV				7.8 mx.		female figurine	1:2	64
4	371	N. of Rm. VIII 7, +2.2 m.	IV, surf.			7.5 mx.	6.0 mx.	1.3	front (a) and back (b) views of female figurine	1:2	64
5	2361	House XIII	IV	3-3.7			3.5 mx.		base of female figurine, tan ware	1:2	64
6	378	Trench I, 10.4 m., +1.3 m.	III, surf.			5.0	3.5 mx.		female figurine	1:2	
7	376	M 30, +2.6 m.	top IV, surf.			7.5	6.0 mx.		back view of female figurine	1:2	64 f.
8	2353	M 28, court level	IV			7.0 mx.	4.5 mx.	1.7 mx.	female figurine	1:2	64 f.
9	373	O 27, +2.9 m.	IV, base surf.			6.0 mx.	3.8 mx.		female figurine	1:2	65
10	375	Rm. VIII 6, upper fill	III			5.5	5.0 mx.	chest, 1.2	female figurine	1:2	18, 64
11	37	N. of Rm. XIII 3, +2.6 m.	IV		2.9	2.2	1.6		unfinished button seal, complete, reddish steatite, black patches, polished; see Pl. 81:15	1:1	65
12	272	Rm. IV 3	III		3.8			1.8	label, brown clay; design on Pl. 82:5	1:2	17, 67
13	337	Rm. III 3, floor	III	8			4.3		label, brown clay; design on Pl. 81:26	1:2	17, 66
14	347	Rm. VI 4, floor	III		4.6 mx.			1.8	token(?) fragment, cream clay; design on Pl. 81:27	1:2	17, 67
15	2	Rm. XIII 1	IV	7.1			3.5		jar-stopper, light brown clay, half-baked; see Pl. 83:9	1:2	20, 67
16	3	Rm. XIII 1	IV		3.5 mx.			1.2	label(?), mat impression on base, brown clay	1:2	20, 67
17	13	Rm. II 1	III		3.4			1.4	label(?), mat impression on base, brown clay	1:2	16, 67
18	336	Rm. III 3, floor	III		5.5		3.0		label, brown clay; design on Pl. 81:26	1:2	17, 66
19	339	Rm. III 3, floor	III		5.8		3.8		label, brown clay; design on Pl. 81:26	1:2	17, 66



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No.	Field No.	Provenance	Level	D.	L.	B.	H.	Th.	Remarks	Scale	See Page
1	35	L 27, +2.3 m. (.4 m. above Level IV floor)	IV	4.0			2.1		button seal, black stone, polished; see Pls. 81:17 and 82:21	2:3	
2	38	N 27, court before Rm. XIII 3, +2.7 m.	top IV	3.7			1.8		button seal, white chalk, artificially blackened surface; see Pl. 82:22	2:3	67
3	32	Trench I, 28.5 m., +2.12 m.	IV	3.0			.8		button seal, black and white veined stone, polished; see Pl. 82:23	2:3	68
4	557	Q 31, +2.29 m.	top IV, surf.		2.8	2.0	.9		button seal, gray-green steatite, low polish; see Pl. 82:24	2:3	68
5	565	O 28, +2.9 m.	top IV or surf.	3.5			1.0		stamp seal, gray-green steatite, low polish; see Pl. 82:25	2:3	65 f., 68
6	560	Rm. XII 1 or 3, fill	III	3-3.25			1.2		button seal, light green stone, polished; see Pl. 81:31	2:3	18
7	558	Trench I, 36.5 m., +1.59 m.	III	2.1			1.0		button seal, red-brown stone, polished; see Pl. 81:22	2:3	67
8	36	Rm. XV 1, +1.8 m., lower floor	IV		2.6	2.0	.8		stamp seal, cream ware; see Pl. 82:18	2:3	21, 65, 68
9	42	L 30, +2.75 m. (above Rms. IV 2-3)	top IV or surf.		2.2	1.6	.9		button seal, black stone, polished; see Pl. 82:19	2:3	65, 68
10	561	K 30, +2.37 m.	surf.	2.2			1.0		button seal, sealing-wax-red stone, polished; see Pl. 82:14	2:3	68
11	566	Q 29, +2.6 m.	surf.	1.9			2.8		stamp seal, cream ware; see Pl. 82:20	2:3	65, 68
12	559	Q 30, +1.17 m. (.35 m. below floor of Rm. XVII 2)	III	4.5			1.1 mx.		button seal, light green stone, polished; see Pl. 81:28	2:3	67
13	90	M 29, +2.2 m.	IV	5.8			1.5		ring	1:3	70
14	370	Rm. IV 2, floor	III		10.2		9.0		scraper	1:3	17, 71
15	2385	Rm. XV 1 or 2	IV		6.5 mx.	7.8		1.2	plaque	1:3	71
16	536	below Rm. XIV 3	top III	3.3			2.0		whorl, tan ware; see Pl. 82:29	1:2	69
17	531	K 28			6.5				firing-tripod	1:3	71
18	67	Rm. XI, floor	III		3.2				bead, conchlike shell	1:2	16, 75
19	3632	O 31, Rm. XII 2, .2 m. above floor	III	.7-.9			.9-1.2		shell beads	1:2	75
20	590	Rm. III 2, floor	III		7.3	1.3		.15	flint knife blade set in bitumen; see Pl. 85:12	1:1	15, 77-79



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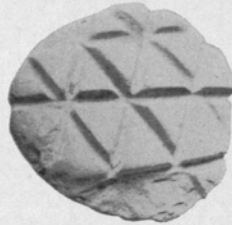
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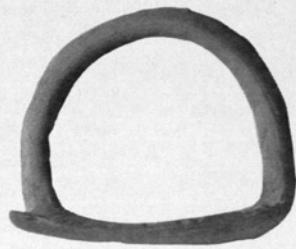
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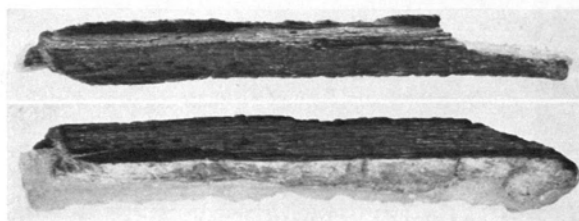
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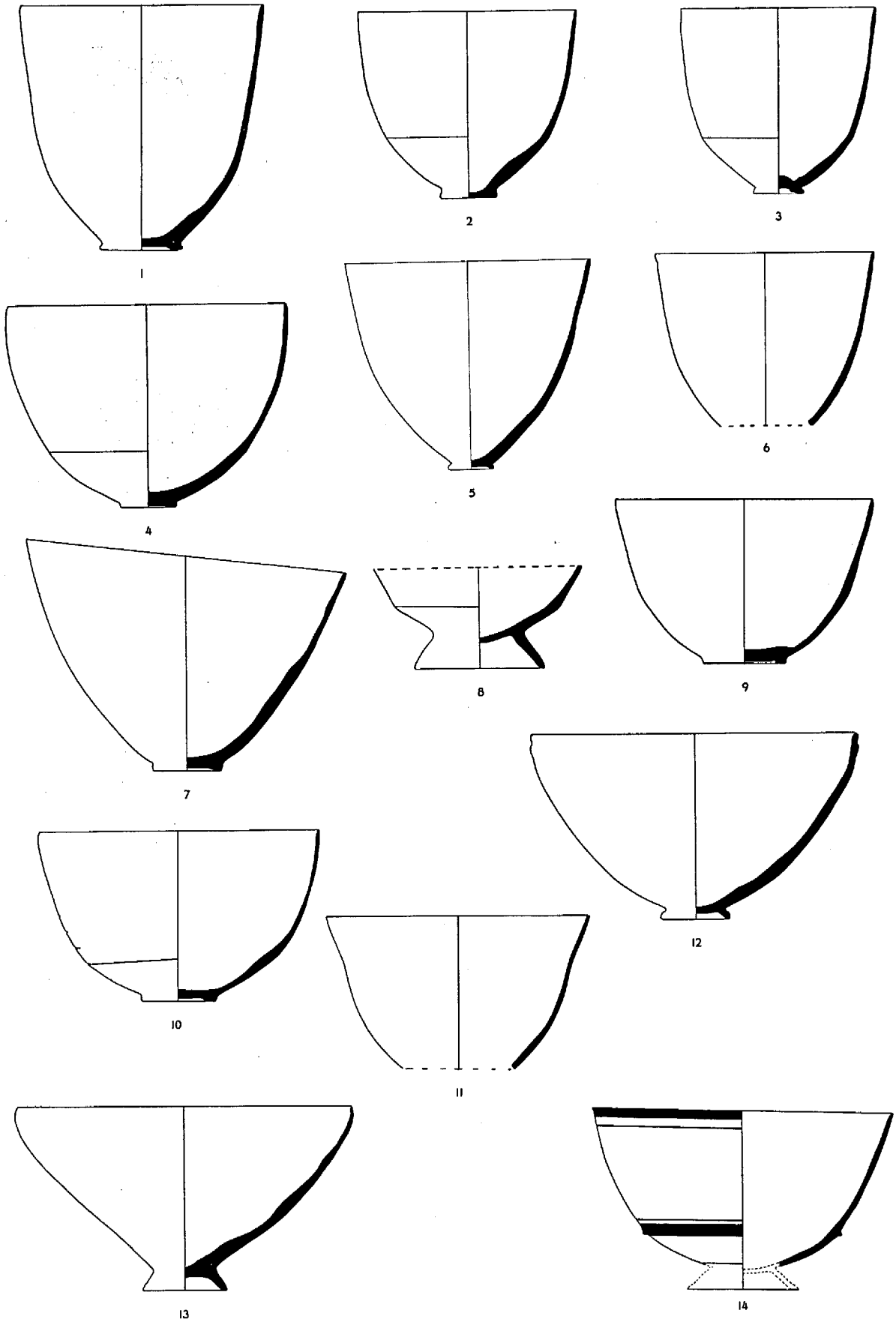


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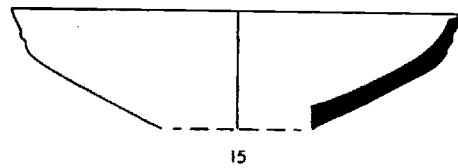
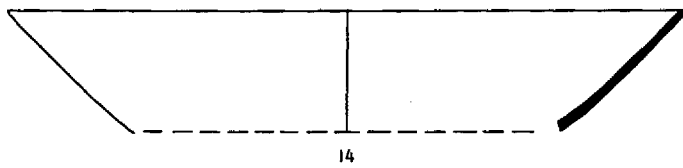
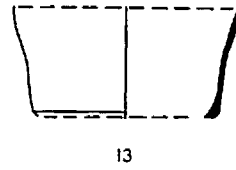
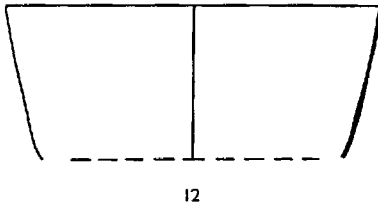
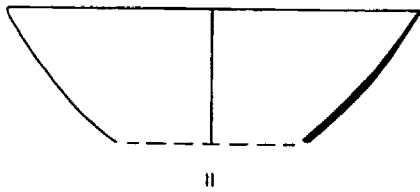
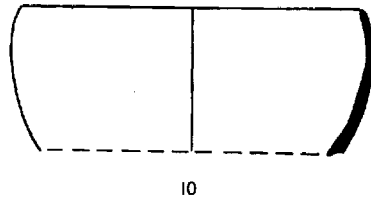
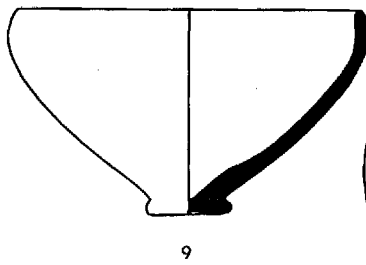
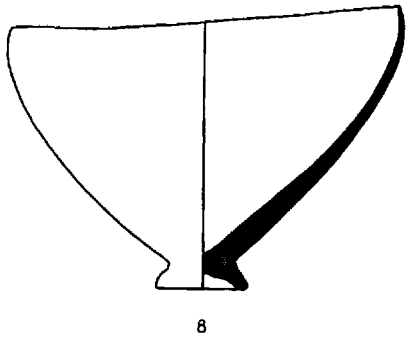
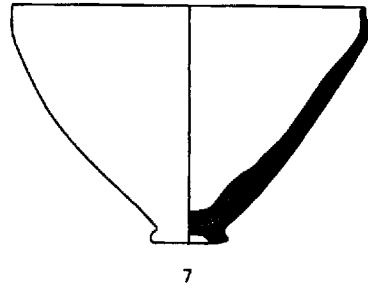
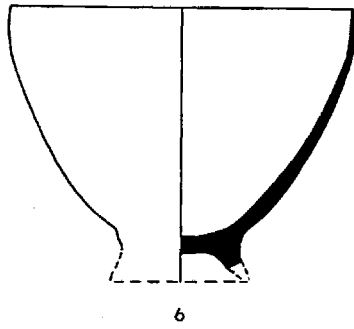
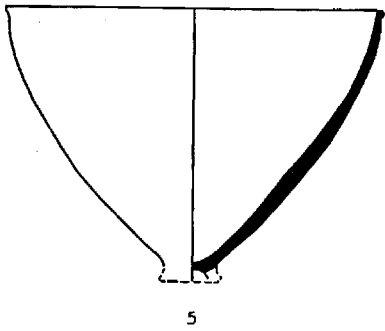
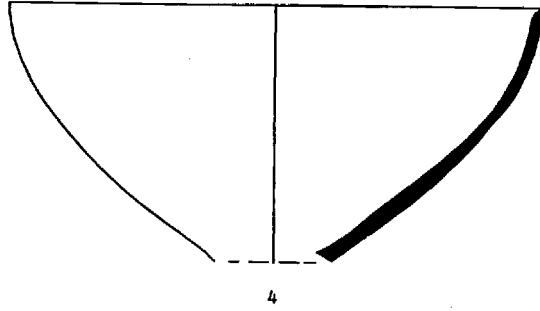
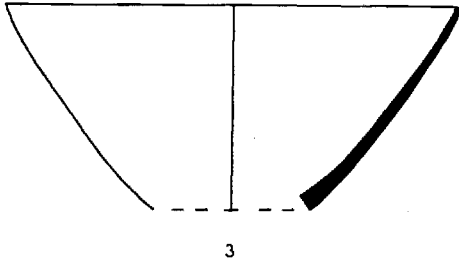
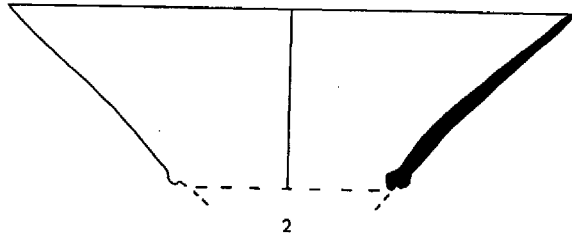
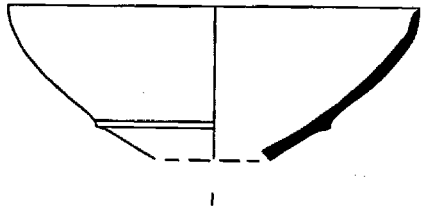
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No.	Field No.	Provenance	Level	Form	Design	D.	H.	Th.	Remarks	Scale	See Page
1	3296			I A	XIV E	26.2	26.0		incomplete	1:6	26
2	3299			I A	XIV E	23.2	19.8	.4	complete, light cream-tan ware	1:6	26
3	2041	Rm. XI	III	I B	XIV E	20.8	19.8		incomplete	1:6	16, 26
4	2178	Trench I, 0-10 m., +1.1 m.	III, surf.	I C	XVIII B 5, Pl. 4:3	30.0	21.6	.4	nearly complete	1:6	27
5	3563	Rm. IV 3, floor	III	I C	XIV G	34.6	29.3	.45-.8	incomplete	1:8	27
6	3867a	N 31, somewhat above v.s. Rm. XII 2	II III	I C	XVIII A 1, Pl. 66:7	23.3	18.3	.7	incomplete, pale gray ware	1:6	27
7	3300	Rm. III 4, floor	III	I C	XIV E	30-34.4	21-24.6		nearly complete	1:6	27
8	2528	Rm. XIII 3	IV	I C	XVII A	22.0	10.7 mx.		fragment, cream-tan ware	1:6	27
9	3400	Rm. VII 2	III	II A	VI D 2	25-28	17.5		incomplete	1:6	27
10	3298	Rm. VII 4, fill	III	II A	XVII D, XIX A, Pl. 4:4	29.6-ca. 33	18.1	.45-1.1	incomplete	1:6	27
11	2138	Rm. VII 2	III	II B	XV E, Pl. 59:10	28	16.2		fragment	1:6	18, 27
12	2074	Rm. III 4, floor	III	II B	VI C	15.2	19.7	.8-1.2	complete	1:6	15, 27
13	3359	Rm. X 1	III	II B	XIV E, II A 3, Pl. 54:10	36	19.5	.8	incomplete	1:6	27
14	3202			II C	XVII E above linked panels	32.4	16.4 mx.	.5-.95	incomplete, cream-tan ware; foot restored from PPA 3203, L 28, +2.7 m.: Level IV	1:6	27



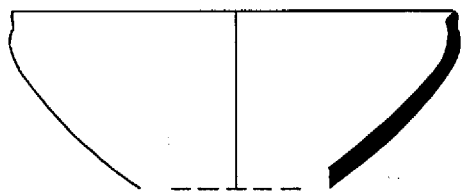
SEE PAGE 27. SCALE, 1:4

No.	Field No.	Provenience	Level	Form	Design	D.	H.	Th.	Remarks
1	3205	Rm. IV 3	III	II C	X C 1 in.; X A out.	22	8.0 mx.		fragment, cream-tan ware
2	3230	Rm. IV 3	III	II C	VI E 2 in.; XVII A out., Pl. 32:12	30	9.7 mx.		fragment
3	5439	L 29, +2.57 m.	top IV, surf.	II D	IV C 1 in., Pl. 26:2	24.0	10.8	.95 mx.	fragment
4	2946	Rm. XVII 5, fill	IV	II D	IV B 1, Pl. 2:4	28.4	13.8 mx.		fragment
5	5440	N 31, level of Rm. VIII 6	III	III	X A above negative wavy line in.	20	14.0 mx.	.5	fragment
6	3254			III	II A 2 in.	18.4	13.8 mx.		fragment
7	2035	Rm. XI, floor	III	III	X C 1 in., Pl. 3:7	19.1	12.5		complete
8	2075	Rm. V 3, floor	III	III	VI B 2, Pl. 2:8	21.0	13.7-15.0	.65-1.0	incomplete, light green ware
9	2036	Rm. XI, floor	III	III	VI B 2 in., Pl. 2:6	19.2	10.8	.6	complete
10	4293	O 28, street N. of Rm. I 2 O 28, +3.75 m.	III surf.	III	X B 1	19.4	7.8 mx.	.7	fragment
11	3189	Trench II, 50-60 m., .55 m. deep	surf.	III	XIII A in., Pl. 52:4	22	7.0 mx.		fragment
12	2207			III	XV B, Pl. 57:9	20.1	8.0 mx.	.25	fragment, cream-tan ware
13	2201	Trench I, 10-15 m., +1.32 m.	III	III	X B 6, Pl. 41:3	12	5.8 mx.		fragment, light green ware
14	2950	Trench I, 0-10 m., +.8-1.3 m.	II-III, surf.	III	II C 1, out. and in. identical, Pl. 22:24	36	6.4 mx.		fragment
15	5070	Rm. IV 3	III	III		24	6.2 mx.	1.1	fragment, tan ware

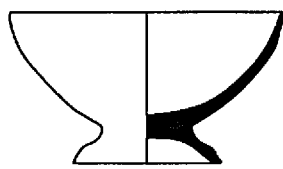


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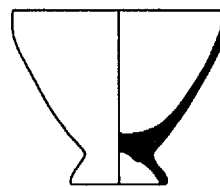
No.	Field No.	Provenance	Level	Form	Design	D.	H.	Th.	Remarks	See Page
1	5069	K 30, +2.07 m.	base IV, base surf.	III	band at rim in.	24	9.4 mx.	.95	fragment	27
2	2120			III	X C 2 in.	14.6	8.0	.45	incomplete	28
3	3273	M 31; +2.87 m.	top IV or surf.	III	I in., Pl. 1:12	11.4	9.2		incomplete, cream-tan ware	28
4	3234	Trench I, 50-60 m., +2.77 m.	IV	III	X C 2 in., Pl. 44:3	12.2	6.2	.6	incomplete, cream-tan ware	28
5	3272	Trench II, 50-60 m., .7 m. deep	surf.	III	band at rim	12.7	7.8		cream-tan ware	28
6	3735	Rm. XIII 3 N 31, +2.52 m.	IV surf.	IV A	XV F, Pl. 60:10	ca. 24.2	ca. 8.7 mx.	.2-.6	fragment, light tan ware	28
7	3266	Rm. II 4	III	IV B	VI A, Pl. 2:9	20.8	10.6 mx.		fragment	28
8	3265	M 28, +2 m.	base IV	IV B	IV B 1, Pl. 25:13	16.6	• 10.4	.15-.4	incomplete	28
9	3242	above Rms. I 1-2	surf.	IV B	X B 1 in.	12.4	7.4		fragment	28
10	2100	Rm. II 2, floor	III	IV B	X D, Pl. 45:5	15.2	11.6	.2-.5		15, 28
11	3721	Trench I, 20-30 m., +1.47 m.	III	V	XIX D 2, Pl. 71:12	18.1	12.0 mx.		fragment, whitish cream ware	28
12	3295	Rm. IV 3	III	IV C	XVII D	18.4	10.2 mx.	.25-.45	fragment	28
13	5703			V	XIX C	16.8	12.6		incomplete, greenish ware	28
14	3297	Rm. XII 4, fill(?)	III	V	II A 3, Pl. 1:11	24.4-25.2	17.6 mx.		fragment	28
15	3366	Rm. X 3	III	V	XIX A, Pl. 70:9	26.2	15.4 mx.	.5-.7	fragment, cream-tan ware	28



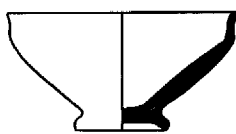
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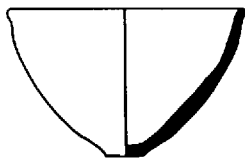
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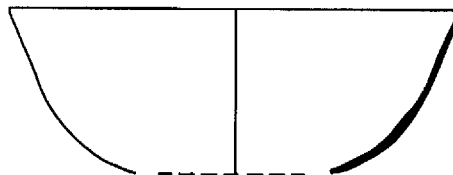
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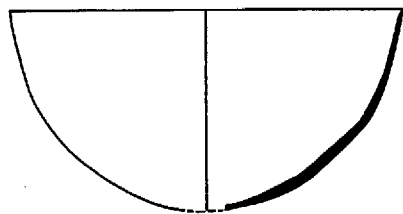
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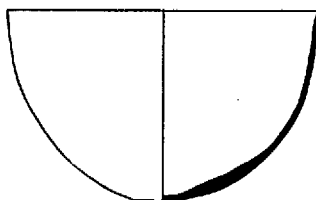
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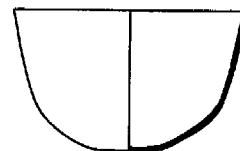
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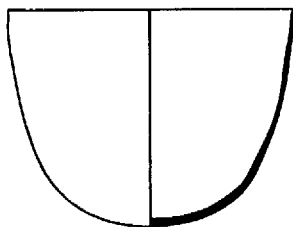
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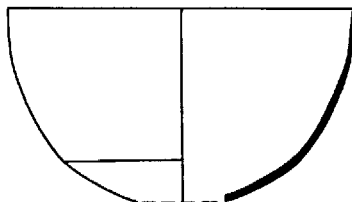
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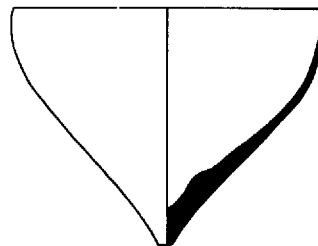
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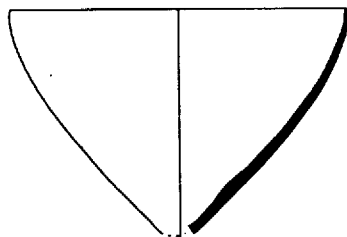
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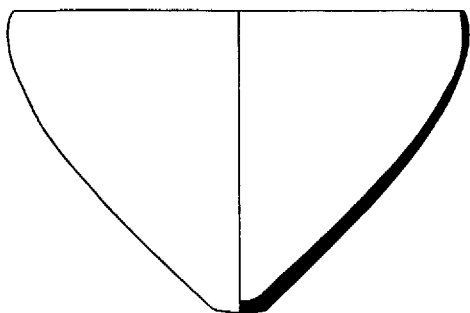
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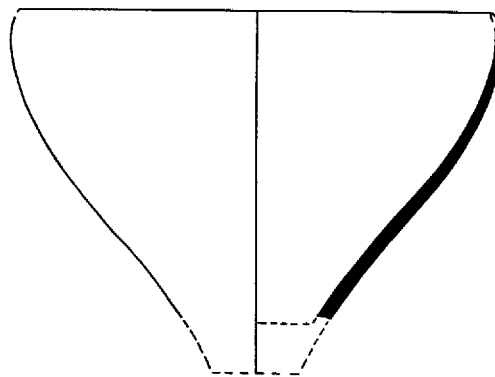
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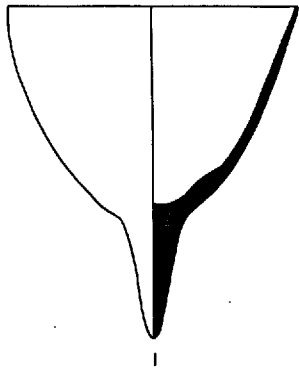
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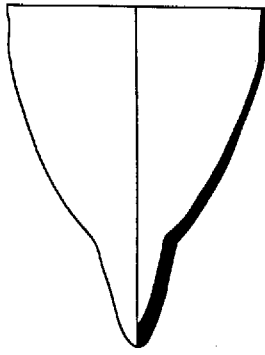
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SCALE, 1:4

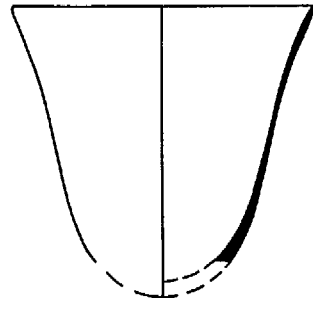
No.	Field No.	Provenance	Level	Form	Design	D.	H.	Th.	Remarks	See Page
1	2106		III	V	XVII A, Pl. 62:2	15.6	17.6	.3-.7	incomplete	28
2	2105	Trench I, 42.4 m., +2.67 m.	IV	V	XIX D 1, Pl. 4:6	13.8	18.0		incomplete	28
3	2192			VI	IV C 1, Pl. 26:8	16	13.6 mx.		incomplete	28
4	2132	Rms. XV 2-3	IV	VI	XV D, Pl. 59:11	18.1	16.9		incomplete	21, 28
5	3269	Trench I, 40-44 m., out- side Houses XIII, XV	IV	VII		15.2	11.0		incomplete, cream-tan ware, painted solid	29
6	3253	Rm. X 3, floor(?)	III	VII	V A, Pl. 2:5	15.4	9.8 mx.		fragment, suspension holes	29
7	3757	Rm. I 1	III	VII	XV C, Pl. 57:12	26.8	17.2 mx.	.5-1.2	fragment, tan ware	29
8	2391a			VII	?	22.8	6.8 mx.		fragment	29, 32
9	2929	Rm. XIII 1	IV	VII	XVII A	20.0	6.8 mx.		fragment, light cream-tan ware, 6 suspension holes around mouth	24, 29
10	2038	Rm. XI, floor	III	VII	XIV D	26.4	23.7	1.2	nearly complete, cream- yellow ware, 8 suspen- sion holes	16, 24, 29
11	2128	M 28, +1.4 m.	III	VII	XV C, Pl. 58:2	20.0	12.8 mx.		fragment, 3 suspension holes preserved	24, 29
12	2118	Rm. VIII 2, floor	III	VIII A	XIV D, Pl. 54:6	14.8	8.6 mx.		fragment	18, 29
13	2112	M 29, +2.5 m.	IV	VIII A	XIV C, Pl. 53:4	18.8	12.2	.6	incomplete	29



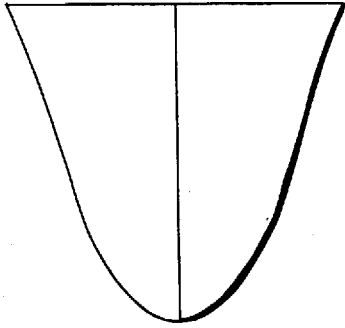
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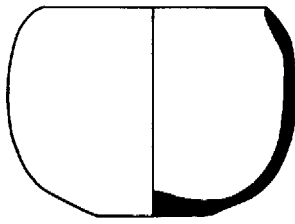
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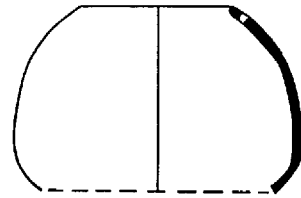
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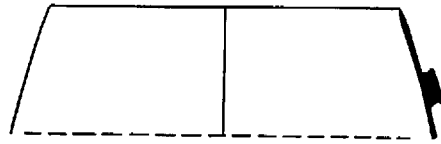
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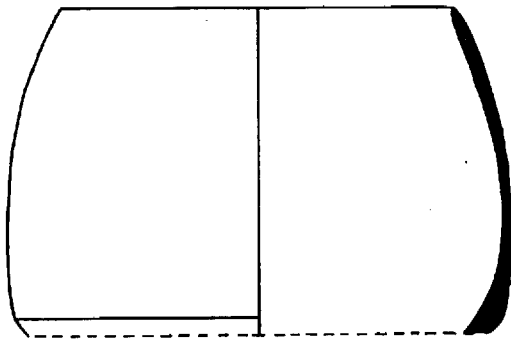
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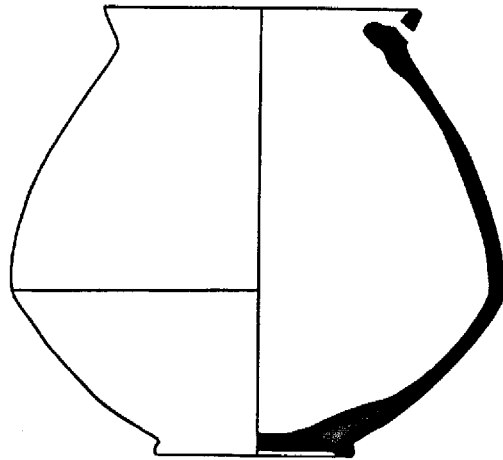
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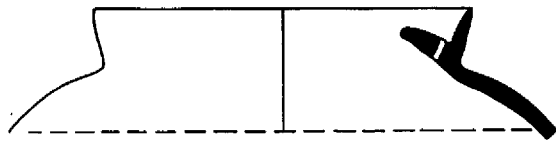
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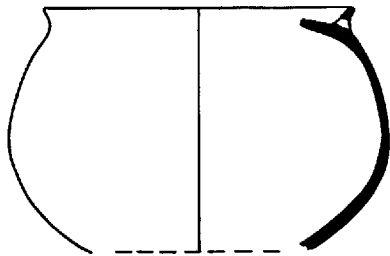
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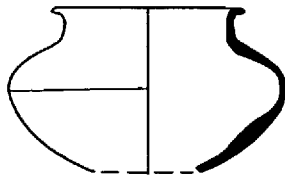
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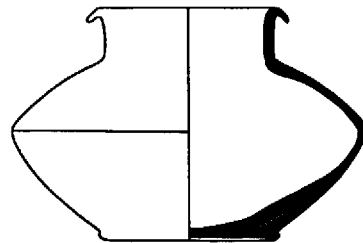
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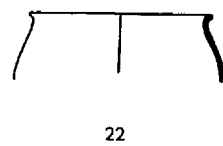
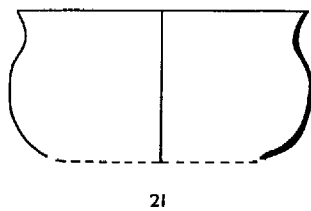
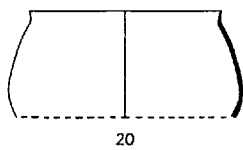
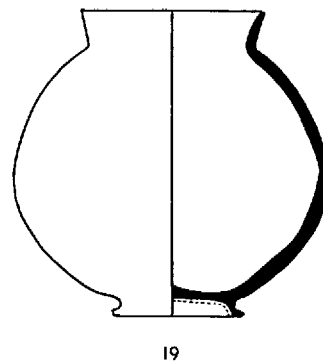
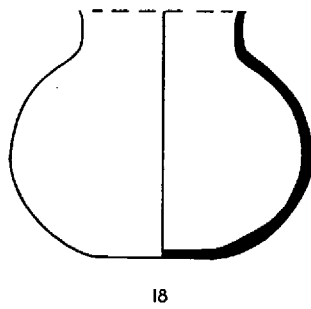
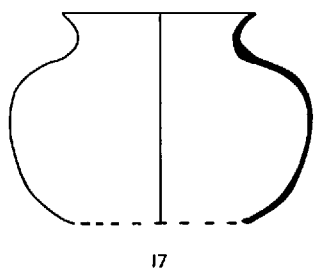
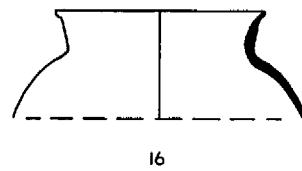
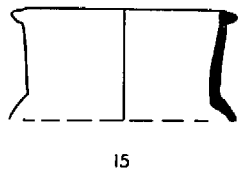
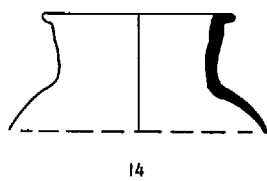
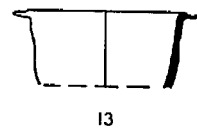
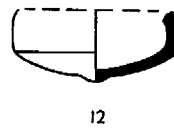
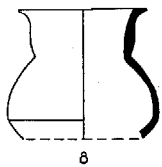
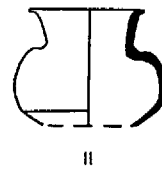
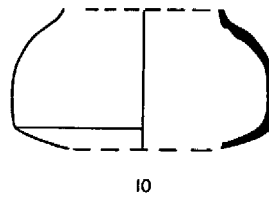
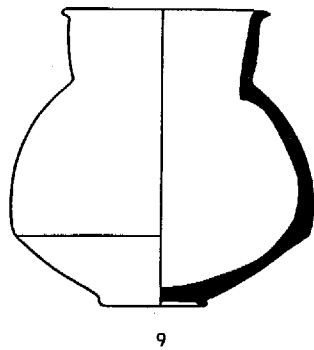
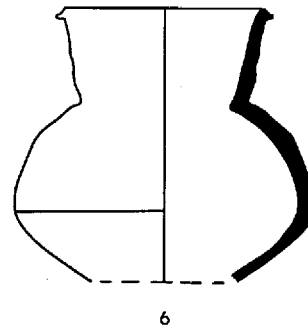
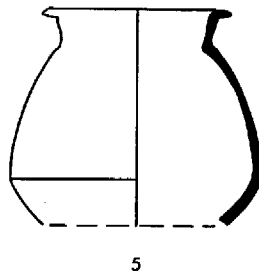
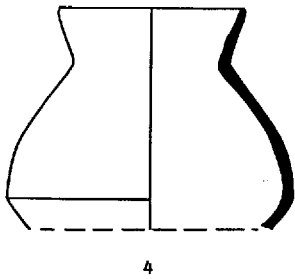
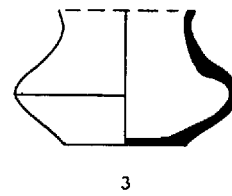
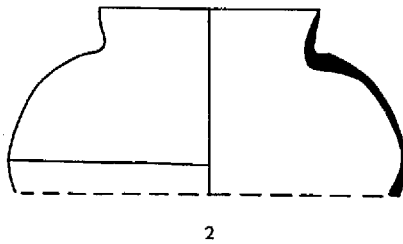
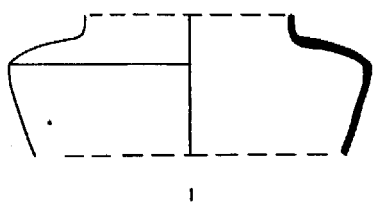
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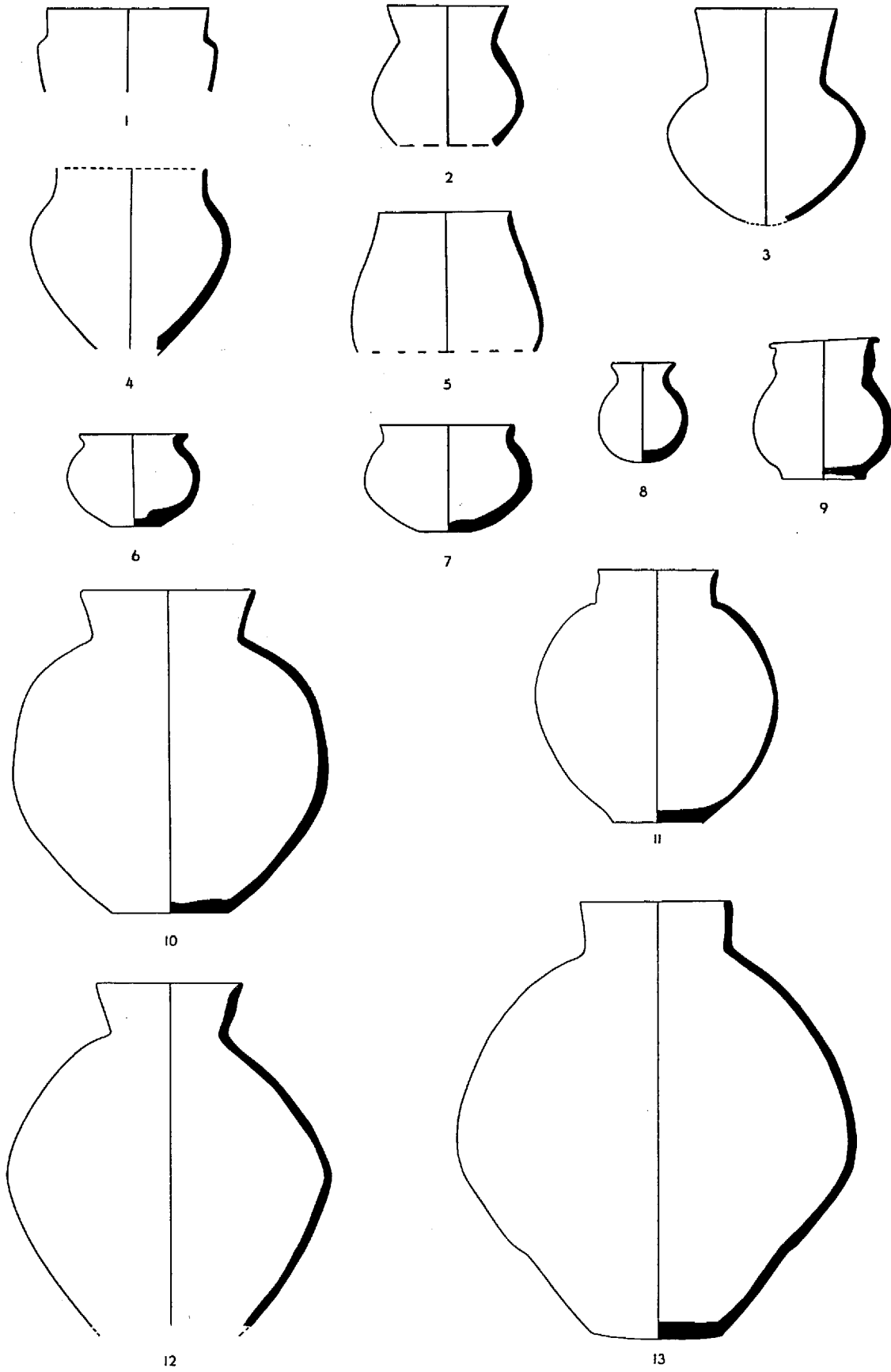
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SCALE, 1:4

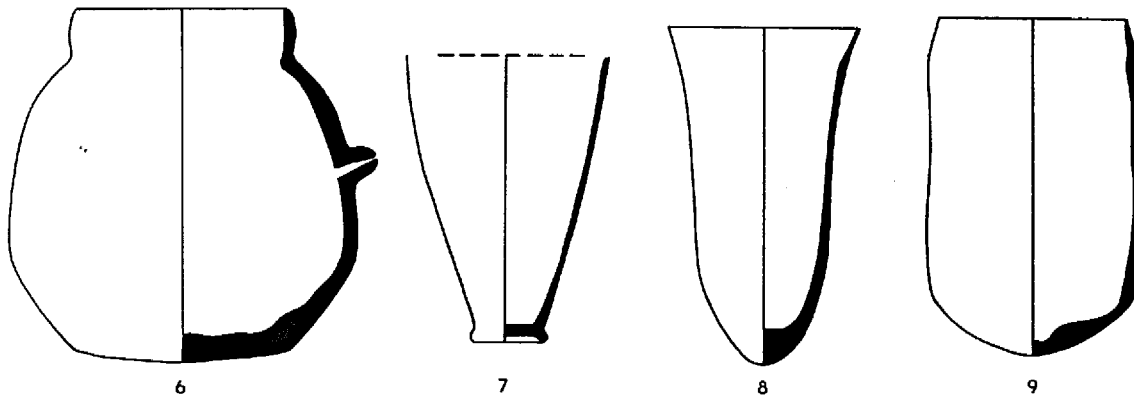
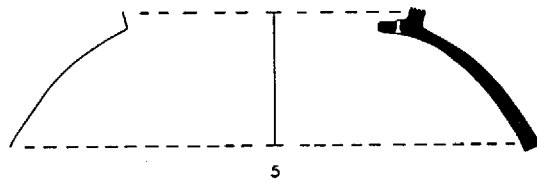
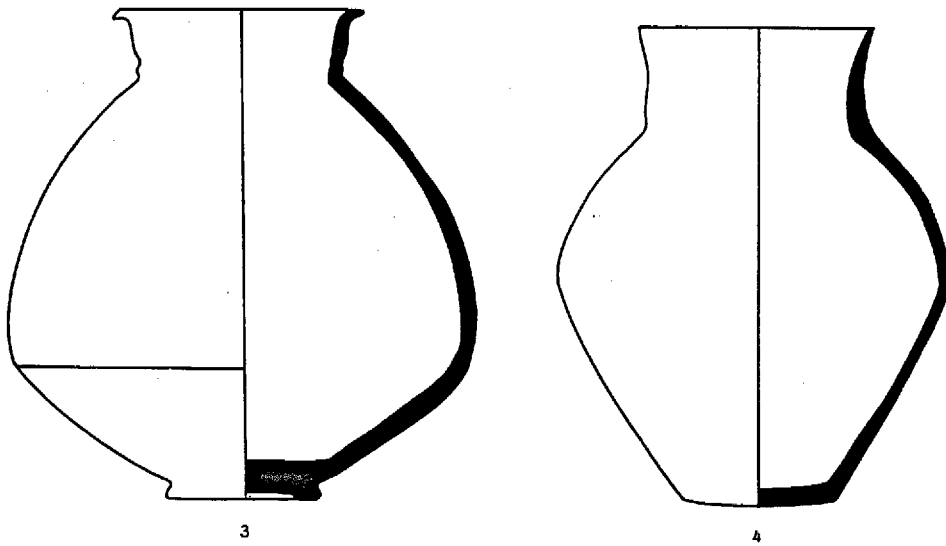
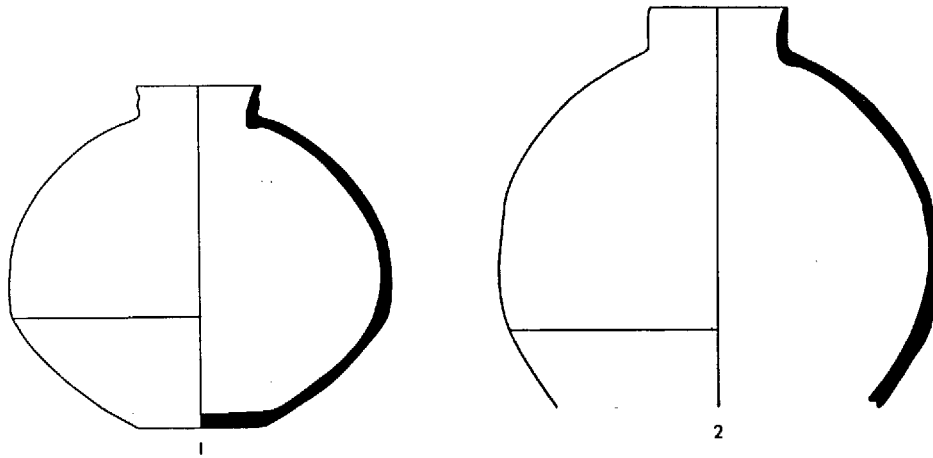
No.	Field No.	Provenance	Level	Form	Design	D.	H.	Th.	Remarks	See Page
1	3173	Rm. XVII 5	IV	VIII A	X B 4 variant	18.8	7.2 mx.	.4-.6	fragment, cream-tan ware	29
2	3154			VIII A		21.2	9.8 mx.		fragment, cream-tan ware	29
3	2110	Trench I, 13-15 m., +1.15 m.	III	VIII A	XIV D	12.0	7.1 mx.	.4-.6	fragment, gray-green ware	29
4	2937	Trench I, 10-20 m., ±0 m.	I	VIII B	X A	14.8	11.6 mx.	.65	fragment, light red-tan ware	29
5	2126			VIII B	XIV C, Pl. 53:8	13.4	11.4 mx.		fragment	29
6	3445			VIII B	XIX I, Pl. 5:2	16	14.4 mx.	.7	fragment, cream-tan ware	29
7	2867			VIII A		7.1	4.5		complete, shoulder, light cream-tan ware, neck painted solid, wavy line below	29
8	5077	Rm. VII 2	III	VIII B	uncertain; on neck only	8	6.8 mx.	.5	fragment, cream-yellow ware	29
9	2072	Rm. V 6	III	VIII C	XI F (diamonds)	16.1	15.7		complete	16, 29
10	3184	L 29	III	VIII C	XIV D	14	7.4 mx.		fragment, cream-tan ware	29
11	2869	Rm. VIII 6	III	VIII C		8	6.2 mx.		incomplete, cream-tan ware, band on rim, hori- zontal lines on neck, body painted solid	29
12	3152	Rm. VII 3	III	VIII C	?	9.0	3.8 mx.		fragment	29
13	5101	Trench II, 10-20 m., .5 m. deep	surf.	VIII		rim, 10	4.2 mx.	.6	fragment, tan ware, irregu- lar wavy line below two bands	29
14	2478	Rm. IX	III	VIII	?	rim, 10	6.2 mx.		fragment	29
15	3166	Q 33, ±0 m.		VIII	XI A	rim, 12	5.8 mx.		fragment	29
16	3164	Rm. XIII 3	IV	VIII	?	15.2	5.8 mx.		fragment, cream-tan ware	29
17	2108		III	IX A	XVI B, Pl. 61:12	16.0	11.1 mx.	.4	incomplete	29
18	2073	Rm. VII 1, floor	III	IX A	XIX G, Pl. 4:7	16	13 mx.		incomplete	29
19	2102		III	IX A	XIII A, Pl. 52:3	16.7	16.0		incomplete	29
20	2200	Trench I, 0-10 m., +1.15 m.	III or surf.	IX B	X F 2, Pl. 46:2	12.3	5.6 mx.		fragment	29
21	5600	Rm. IV 1 L 29, +2.0 m.	III base IV	IX B	III A 7, Pl. 23:26	16	7.8 mx.	.2	fragment	29
22	5086	probably Trench I, 0-10 m., +.8-1.3 m.	probably II-III or surf.	IX A	II B 1	9.8	3.6 mx.	.4	fragment, light tan ware	29



No.	Field No.	Provenance	Level	Form	Design	D.	H.	Th.	Remarks	Scale	See Page
1	5599	Rm. I 1	III	IX B	VIII A(?), Pl. 80:1	12.0	5.6 mx.	.2	fragment	1:4	29
2	3136	O 28, +3.75 m.	surf.	IX C	X B 1	10	9 mx.		fragment, cream-tan ware	1:4	29
3	2449			IX C	VII B	13.2	14 mx.		incomplete	1:4	29
4	4316	Rm. I 1	III	IX C	XIV F	13.2	12.0 mx.	.3-.7	fragment, light tan ware	1:4	29
5	4325	O 29, +3.25 m. and deeper	surf.	IX C	III A 2, Pl. 23:7	12.8	9.4 mx.	.2	fragment, light tan-pink ware	1:4	29
6	2080	L 28, in kiln	III	IX C	II B 1, Pl. 1:15	8.8	6.0		complete, light gray-green ware	1:4	29
7	2111	M 30, +2.15 m.	IV	IX	II A 1, Pl. 22:10	11.2	7.1	.6	complete, cream-tan ware	1:4	29
8	2130	N 29, +3.0 m.	IV, surf.	IX		6.0	6.6		complete, cooking-pot ware, surface fire-mottled black	1:4	29
9	2081	Rm. XVII 5, floor	IV	IX		9.4	9.1-9.5		incomplete, neck painted solid	1:4	21, 29
10	2066	Rm. XVII 2, floor	IV	X		21.0	21.4	.8	complete, neck painted solid	1:4	20, 30
11	2069	Trench I, 48 m., +2.7 m.	IV	X	VI E 1, Pl. 2:2	33.1	33.9		nearly complete	1:8	30
12	2212	Rm. III 4, floor	III	X	VI E 1, Pl. 3:9	43.2	45.6 mx.		incomplete	1:8	30
13	2047	Rm. XI, floor	III	X	III C, Pl. 2:1	53.6	58.4		complete	1:8	30

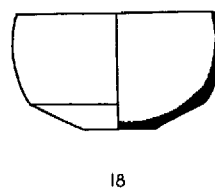
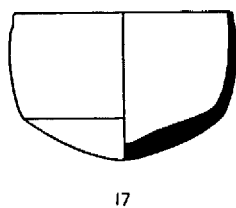
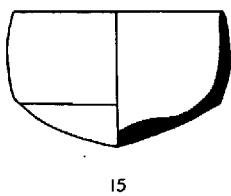
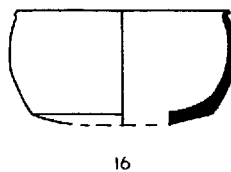
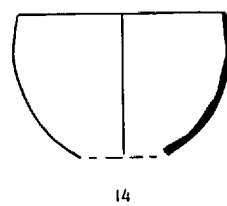
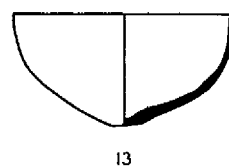
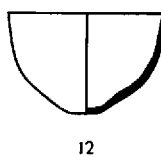
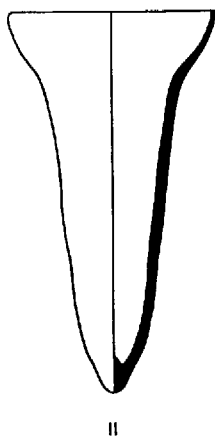
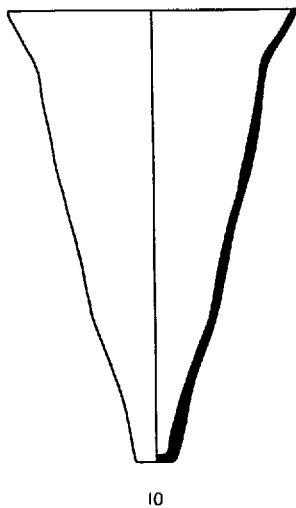
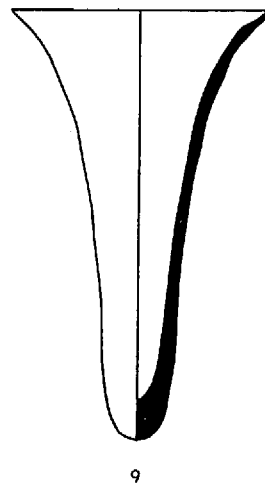
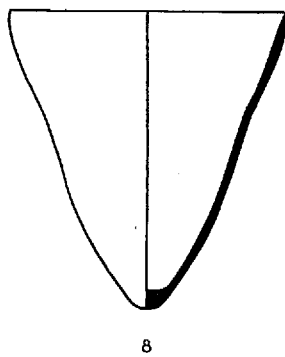
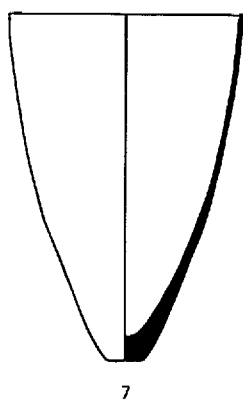
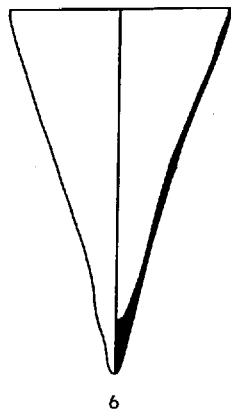
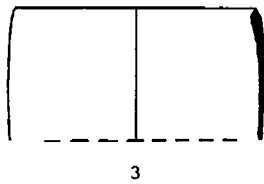
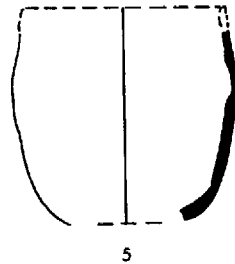
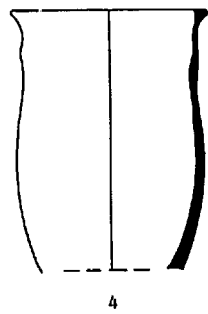
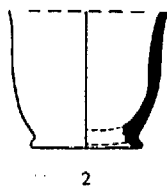
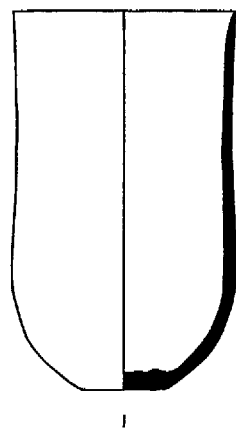


No.	Field No.	Provenance	Level	Form	Design	D.	H.	Th.	Remarks	Scale	See Page
1	3554	M 31, below small walls to v.s.	I	X	VI E 1, Pl. 31:4	40.4	36.0		incomplete	1:8	30
2	3454	Rm. V 1	III	X	XIX K 1, Pl. 5:1	46.5	42.2 mx.	.8-1.0	incomplete, cream-tan ware	1:8	30
3	2037	Rm. XI, floor	III	X	VI E 1, Pl. 3:8	24.8	25.8		complete	1:4	30
4	2936	O 33, lowest level		X		20.5	25.5		complete, cream-tan ware, neck painted solid	1:4	30
5	4065	Rm. XIII 3	IV	X	X B 6	56.0	15.0 mx.	1.6	fragment, tan ware	1:8	29 f.
6	2040	Rm. XI, floor	III	X	X A	18.4	18.6		incomplete, cream-tan ware, spout pierced by stick	1:4	16, 30 f.
7	2165	House XV (no room attribution)	IV (probably intrusive)	XI A	XIV E, Pl. 54:15	10.7	15.2 mx.	.45	fragment, green-cream ware	1:4	21, 30
8	2107	Trench I, 15 m., +1.45 m.	III, base surf.	XI A	V C, Pl. 27:13	10.2	17.8		incomplete	1:4	30
9	2088	Rm. X 6	III	XI B	3 zones of XI E 1	11.4	17.8	.5-1.0	complete, light greenish ware, sides of irregular th.	1:4	16, 30

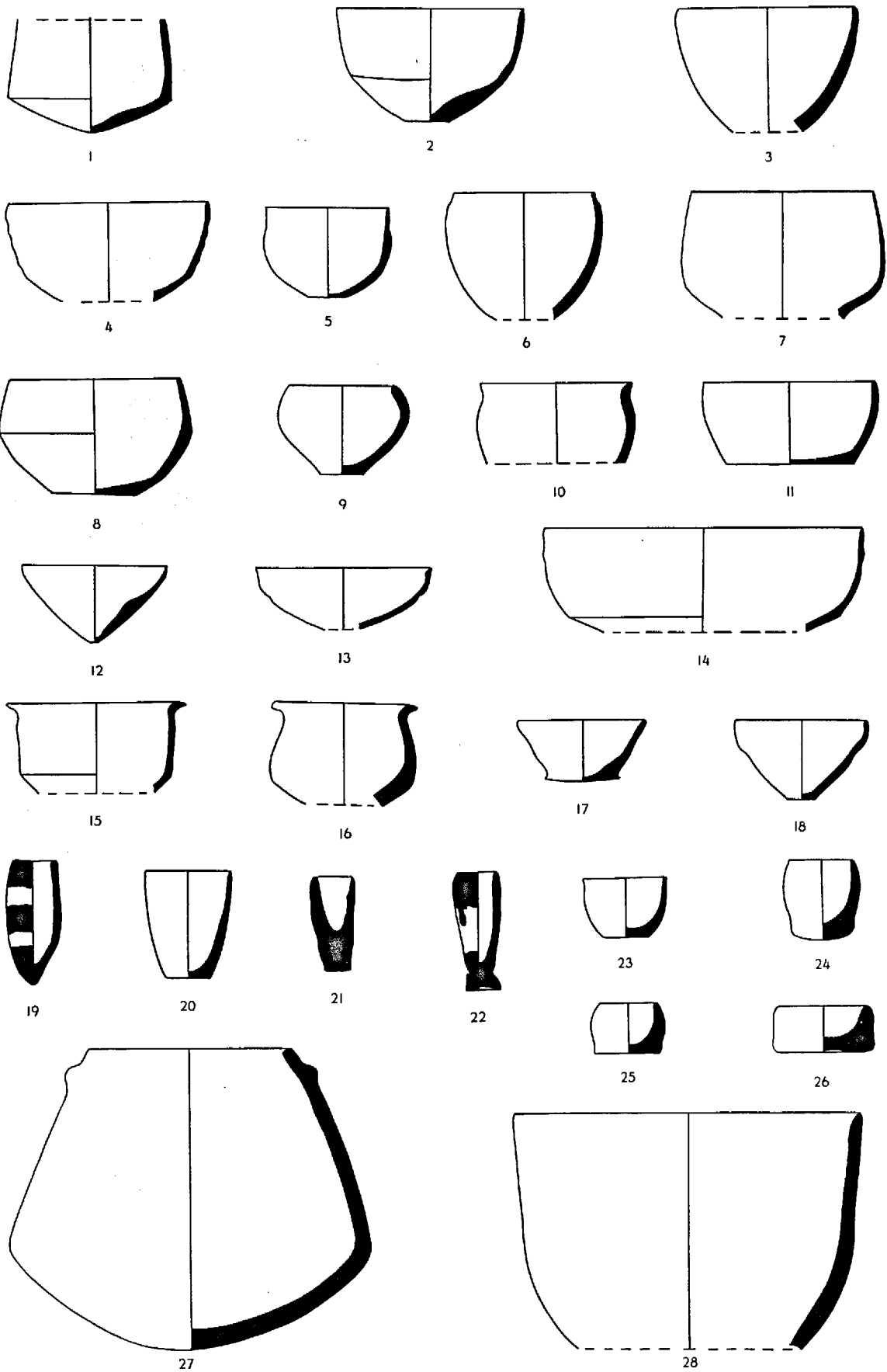


SCALE, 1:4

No.	Field No.	Provenance	Level	Form	Design	D.	H.	Th.	Remarks	See Page
1	2042	Rm. XI, floor	III	XI B	X B 3, Pl. 40:6	12.0	20.0		complete	16, 30
2	4130	Rm. V 1	III	XI B	IX B, Pl. 38:2	8.4	7.2 mx.	.5-1.2	fragment	30
3	4501	Trench II, 40-50 m., .4 m. deep	surf.	XI B	VIII B?	13.6	7.0 mx.		fragment, cream-tan ware	30
4	2391	Trench I, 20-30 m., +.67 m.	II	XI B	XVIII B 1	10.6	13.8 mx.		fragment	30
5	2767	Rm. XIV 3	IV	XI B	VI D 3, Pl. 30:14	12.0	10.0 mx.		fragment, cream-tan ware	30, 39
6	2103		III	XI C	VIII A	11.8	19.2	.3	complete	30
7	2060	Rm. III 2, floor	III	XI C		12.4	18.2		complete	15, 30
8	2070	Rm. V 6	III	XI C	VIII A	14.8	15.6	.45	complete	17, 30
9	2343a			XI C		14.0	22.6		incomplete, horizontal bands in fast black- brown paint, vertical zigzags in non-fast red- brown paint	25, 30
10	2077	Trench I, 32.6 m., +1.05 m.	III	XI C	XII	15.2	23.8	.45	complete	30
11	2058	Rm. XVI 3, floor	IV	XI C	XII	11.0	20.0		complete	20, 30
12	2817	Rm. III 3	III	XII A	band at rim	8.4	5.3		incomplete	30
13	2819	Rm. V 5	III	XII A	band at rim	11.8	6.0		complete, cream-tan ware	30
14	3241	M-N 26, +2.5 m.	IV	XII A	X B 1 in.	11.6	7.5 mx.		fragment, cream-tan ware	30
15	2780	Rm. VII 2	III	XII B	XI A	12.0	7.1		complete, cream-tan ware	30
16	2793	Rm. XII 4	III	XII B	XI F	12.0	6.0 mx.		fragment, cream-tan ware	30
17	2797	Rm. V 6	III	XII B	XI A	12.0	7.8		fragment, cream-yellow ware	30
18	2791	M 28, above +2 m.	IV	XII B	XI A	11.2	6.0		fragment	30

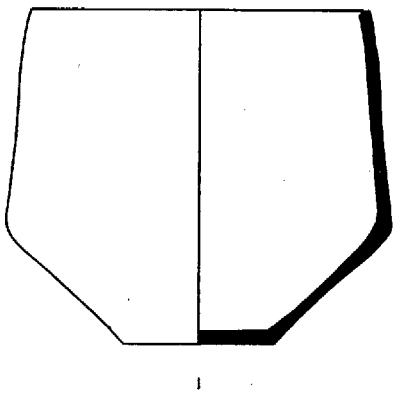


No.	Field No.	Provenance	Level	Form	Design	D.	H.	Th.	Remarks	Scale	See Page
1	2150	Rm. XIII 2, floor	IV	XII B	VII B, Pl. 36:5	11.4	7.7 mx.		incomplete, cream-tan ware	1:4	20, 30
2	2090			XII B	XI A	12.9	7.8	.4	complete	1:4	30
3	2815	Rm. XII 2	III	XII C	VII B, Pl. 3:5	12.4	8.6 mx.		fragment, cream-tan ware	1:4	31
4	2838	Rm. II 1	III	XII C	I	14.0	6.8 mx.	.45-.75	fragment	1:4	31
5	2828	Rm. IV 3	III	XII C		8.8	6.1		fragment, cream-tan ware	1:4	31
6	2841	Q 33, about ± 0 m.		XII C	X A	10.8	8.6 mx.	.7	fragment, cream-tan ware	1:4	31
7	2796			XII C	XI E 1	14.0	8.6 mx.	.5	fragment, tan ware	1:4	31
8	2833			XII C	I	13.0	7.9		fragment	1:4	31
9	2818	M 30, +3.37 m.	surf.	XII C	II B 1	9.0	6.0		fragment, cream-tan ware	1:4	31
10	2826	K 29, deep level near kiln	II	XII C	II A 1	10.8	5.5 mx.		fragment, cream-tan ware	1:4	31
11	2816	Rm. II 2	III	XII C		12.1	5.6		fragment, hole drilled in bottom at edge	1:4	31
12	2096	Rm. III 2, floor	III	XII C	I	10.0	5.2		complete	1:4	15, 31
13	5087	N 28, level of Houses I-II	III	XII C	?	12.0	4.2 mx.	.35	fragment, tan ware	1:4	31
14	5090	Rm. VIII 3	III	XII C	band at rim	22.0	7.0 mx.	.5	fragment	1:4	31
15	5088	Rm. V 6	III	XII C	XII	12.0	6.2 mx.	.65	fragment	1:4	31
16	2810	M 30, Rm. VIII 2, fill	III	XII C	II B 1	10.0	7.0 mx.		fragment	1:4	31
17	3193	N 28, +2.7 m. (above Rm. II 2)	IV	XII C	in., Pl. 80:14	8.8	4.2		fragment	1:4	31
18	3194	N 28, +2.7 m.	IV	XII C	I in., Pl. 22:4	9.2	5.4		fragment, cream-tan ware	1:4	31
19	2059	Rm. XVI 3, floor	IV	XIII	XII	3.5	8.4	.4	complete	1:4	20, 31
20	2766	M 30		XIII		6.0	7.2		incomplete, cream-tan ware, fine grits	1:4	31
21	2086	Rm. VII 2, floor	III	XIII	XII	3.2	6.4		complete	1:4	18, 31
22	2085	Rm. IV 3, floor	III	XIII	XII	3.3	8.0		complete	1:4	17, 31
23	2831	M 30, +3.25 m. and deeper	IV or surf.	XIII	band at rim	5.6	4.0		incomplete	1:4	31
24	2087	M 31, +2.8 m.	top IV or surf.	XIII		5.2	5.4	.6	complete, brown-red cooking-pot ware	1:4	31
25	2629	N 28, level of Houses I-II	III	XIII		5.0	3.4		complete, light red cooking-pot ware	1:4	31
26	2628	Rm. XVII 4	IV	XIII		6.8	3.2		complete	1:4	31
27	2049	Rm. XI, floor	III	XIV		24.6	20.4		complete, cooking-pot ware, fire-blackened surface, 2 knobs	1:4	16, 31 f.
28	2939	M 27, +1.6 m.	III	XIV		47.6	35.2 mx.		fragment, red-brown cooking-pot ware	1:8	31

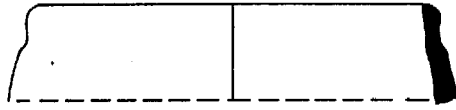


SEE PAGES 31 F.

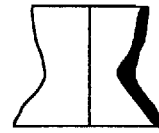
No.	Field No.	Provenance	Level	Form	Design	D.	L.	B.	H.	Th.	Remarks	Scale
1	3562	Rm. III 4	III	XIV		41.2			35.2		fragment, light red cooking-pot ware, side join; see Pl. 1:1	1:8
2	5085	Trench I, 20-30 m., +1.2 m.	III	XIV		24.0			10.0 mx.	1.2	fragment, tan ware	1:4
3	2764					8.0			6.4		pot-stand, fragment, cream-tan ware	1:4
4	2622	Rm. III 4	III	XIV		19.8			10.4		fragment, light red cooking-pot ware	1:4
5	2082	M 27			X F 3	13.6			6.6	.5-.8	pot-stand, fragment	1:4
6	2765	N 28, +2.7 m. (over Rm. II 2)	top IV		X F 3	16.0			9.8 mx.		pot-stand, fragment, cream-tan ware	1:4
7	2762	N 31, +2.27 m	top III or base IV, surf.		XIV D, Pl. 54:8	12.0			5.0	.6	pot-stand, fragment, cream-tan ware	1:4
8	5080	Rm. IV 1, E. part	III		?	ca. 10			7.6 mx.	.5	spouted pot, fragment	1:4
9	2610	Rm. VII 4	III								spouted pot, fragment, pink-cream ware	1:4
10	2609	Q 33, ±0 m.			X A						spouted pot, fragment, greenish ware, pinkish surface	1:4
11	5094	O 28, +3.0 m.	top IV or surf.		?					.6	pouring lip, fragment	1:4
12	2613	Trench II, 47 m., 1 m. deep	surf.		XIV A	20			3.6 mx.		platter(?), fragment, cream-tan ware	1:4
13	5071	Trench I, 50-60 m., +3.47 m.	surf.			24.0			6.0		platter, fragment, red cooking-pot ware	1:4
14	2880	M 31, +2.87 m.	top IV or surf.				9.5 mx.	4.3	3.0		trough, fragment, cream-tan ware	1:4
15	2889	K 30, +2.07 m.	base IV, base surf.				10.5 mx.	8.6 mx.	9.5 mx.		fragment, cream-tan ware	1:4
16	2378					ca. 50			4.3		platter, fragment, coarse tan ware	1:4
17	2083		III			ca. 6			4.4		theriomorph, incomplete; see Pl. 1:10	1:4
18	2620	Rm. V 4	III				8.3 mx.	3.8 mx.	4.8 mx.		fragment, cream-tan ware	1:4
19	2646	M 29, level of Rm. II 4	III					4.5 mx.	3.8 mx.	3.2 mx.	lug handle, fragment	1:4
20	2657	M 30, +2.95 m.	surf.								knob handle, fragment, painted solid	1:4
21	2392a				Pl. 1:14						handle(?), fragment	1:4
22	2754				Pl. 1:13						handle(?), fragment, projection painted solid	1:4
23	5075	K 31, +2.3 m.	surf.		XII	14.0			5.0 mx.	.55	base(?), fragment, cream-yellow ware	1:4
24	5084				band at "rim"	"rim," 14.0			5.0 mx.	.8	neck or base, fragment	1:4
25	2761	Rm. IV 3	III		XI E 1, X A						fragment, cream-tan ware	1:4
26	2760	N 30, +2.75 m.	top IV, surf.		?						fragment	1:4



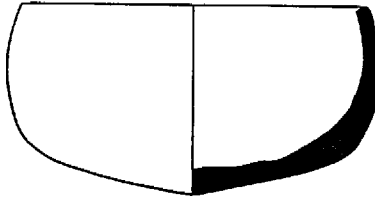
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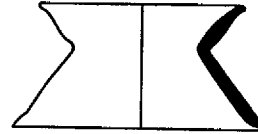
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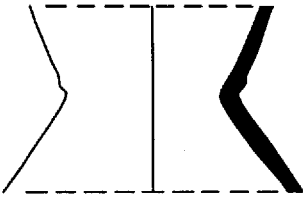
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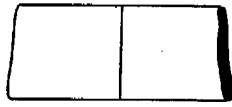
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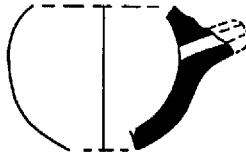
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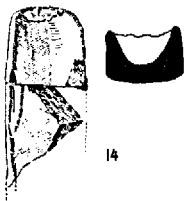
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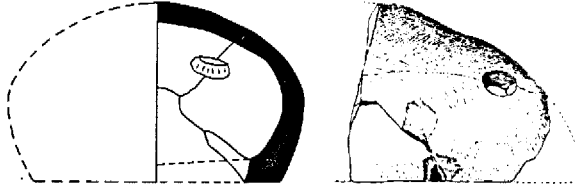
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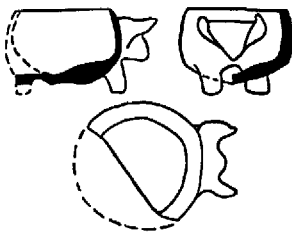
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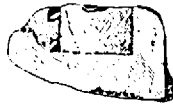
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16



17



18



19



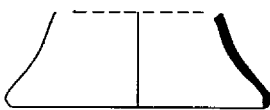
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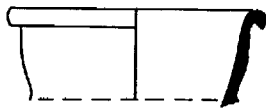
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22



23



24

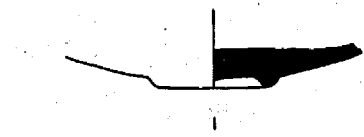


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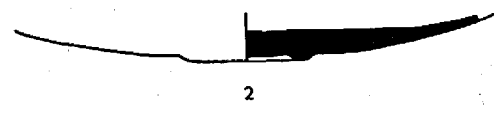


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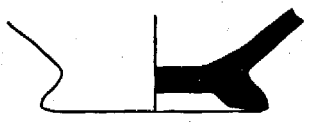
No.	Field No.	Provenance	Level	Design	D.	H.	Th.	Remarks	Scale	See Page
1	3003	Q 30		band	base, 3.4	base, .3		ring base, fragment	1:2	32
2	3004	Rms. XV 2-3	IV	band	base, 3.6	base, .15		ring base, fragment	1:2	32
3	3021	Q 30		band	base, 6.0	base, 1.1		ring base, fragment, light cream-tan ware	1:2	32
4	3056	Rm. V 1	III	band	base, 6.6	base, .75		ring base, fragment, cream-tan ware	1:2	32
5	3025	Rms. XII 1, 3	III	band	base, 5.8	base, 1.0		ring base, fragment, cream-tan ware	1:2	32
6	3054			band	base, 6.0	base, .8		ring base, fragment, cream-tan ware	1:2	32
7	3016	Q 33		band	base, 5.6	base, 1.1		ring base, fragment, tan ware	1:2	32
8	3062				base, 5.6	base, 1.6		ring base, fragment, painted solid	1:2	32
9	3095	O 28, +3.75 m.	surf.	band	base, 6.2	base, 1.6		conical base, fragment	1:2	32
10	3093	Trench I, 0-10 m., +.6 m.	II, surf.(?)	band	base, 11.0	base, 1.8		conical base, fragment, traces of red color in.	1:2	32
11	2660	House XIII, N.part	IV		base, 5.6	base, 3.0		cylindrical base, fragment, light red cooking-pot ware	1:4	32
12	3067			band	base, 6.5	base, 1.7		conical base, fragment	1:2	32
13	3077	outside Houses XIII-XIV	IV?		base, 12.4	base, 1.9		conical base, fragment, cream-tan ware, painted solid	1:2	32
14	3082	O 27, +3.5 m.	surf.	2 bands out; II B 1 in., Pl. 22:21	base, 8.2	base, 5.4		conical base, fragment	1:2	32
15	3097	Rm. III 1	III	band	base, 9.4	base, 4.5		conical base, fragment	1:2	32
16	3090	P 31			base, 8.2	base, 2.2		ring base, fragment, light red cooking-pot ware	1:2	32
17	2093	M 31, +2.8 m.	IV or surf.	lost	12.0	11.9	.6-1.0	pot, incomplete, light red very gritty ware, whitish slip	1:4	5, 32
18	2094	M 31, +2.8 m.	IV or surf.	geometric	9.2	10.0 mx.		spouted pot, incomplete, light red very gritty ware, whitish slip, zigzag in 2 contiguous zones with triple-line borders	1:4	5, 32
19	2092	M 31, +2.8 m.	IV or surf.	geometric	10.0	7.2	.15-.8	beaker, incomplete, light red very gritty ware, whitish slip	1:4	5, 32



1



2



3



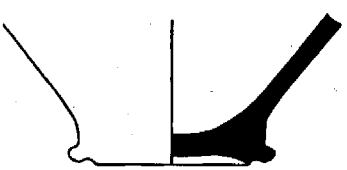
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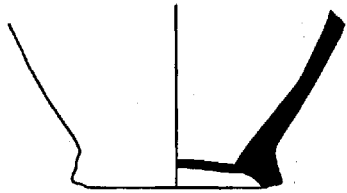
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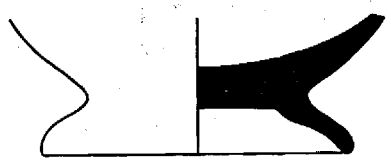
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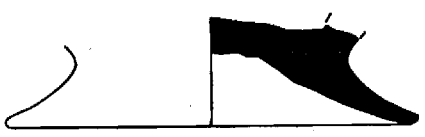
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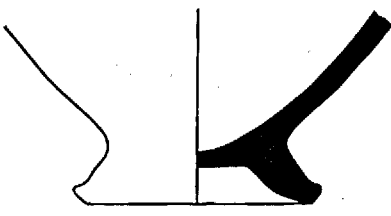
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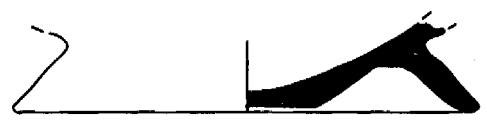
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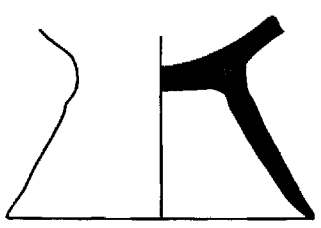
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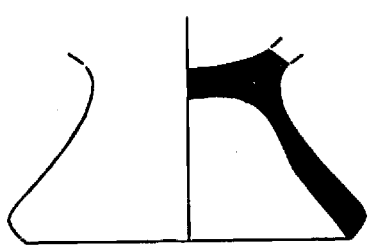
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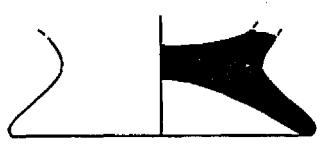
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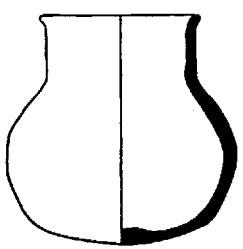
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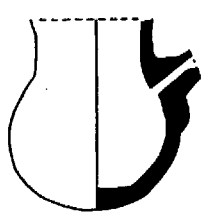
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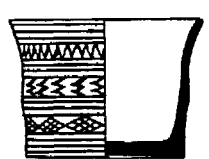
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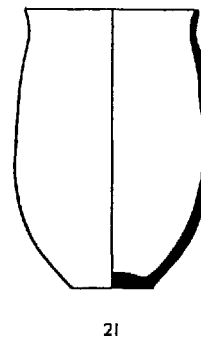
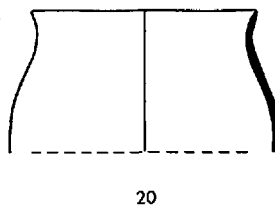
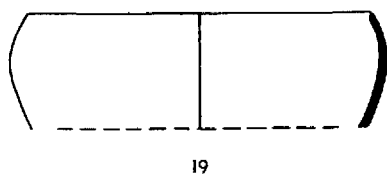
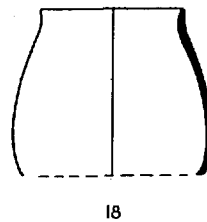
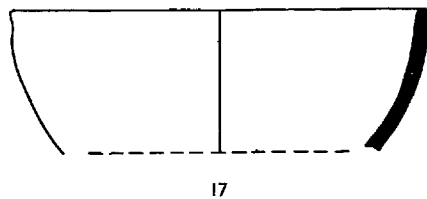
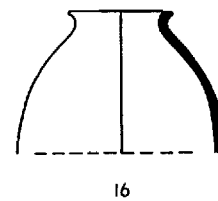
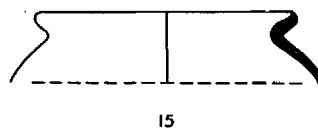
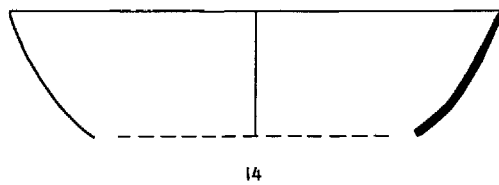
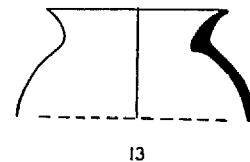
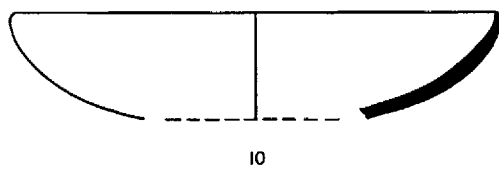
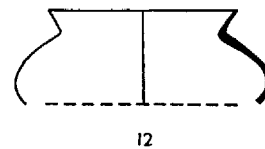
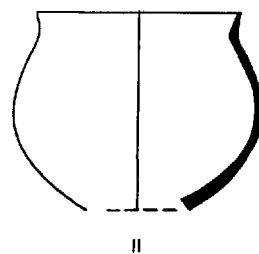
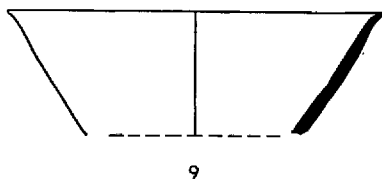
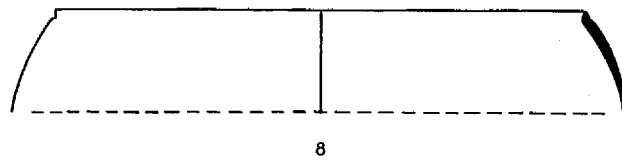
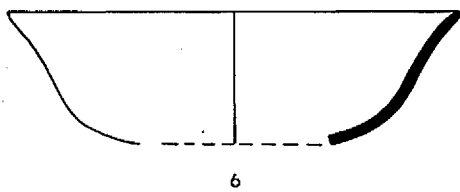
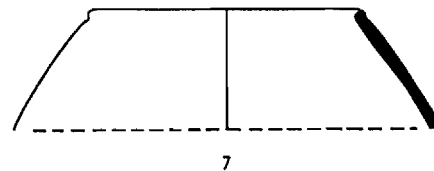
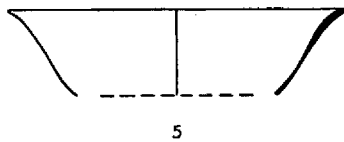
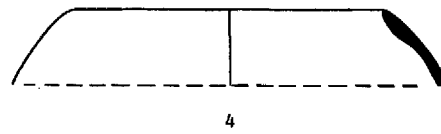
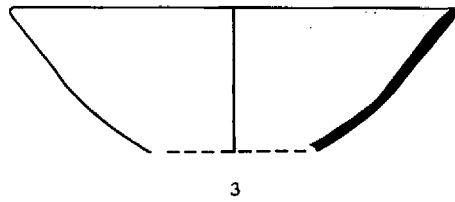
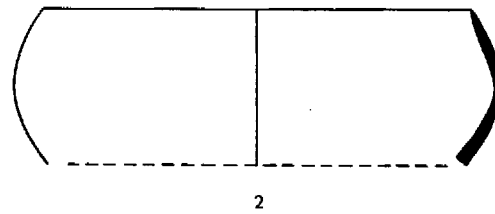
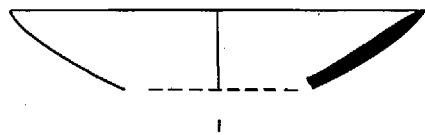
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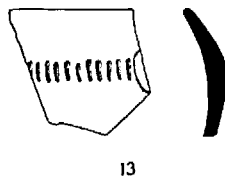
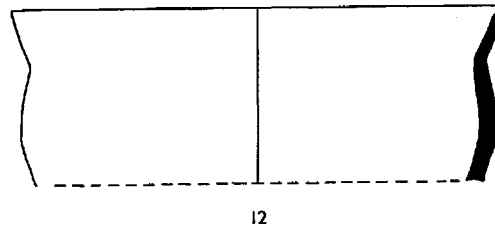
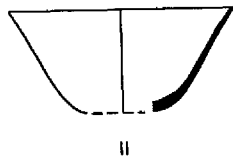
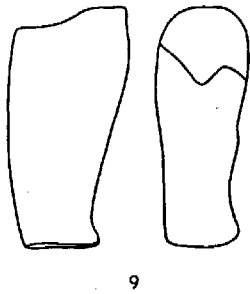
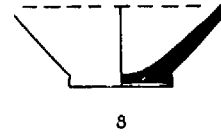
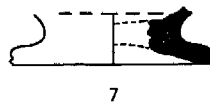
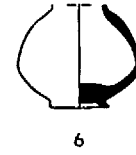
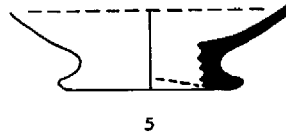
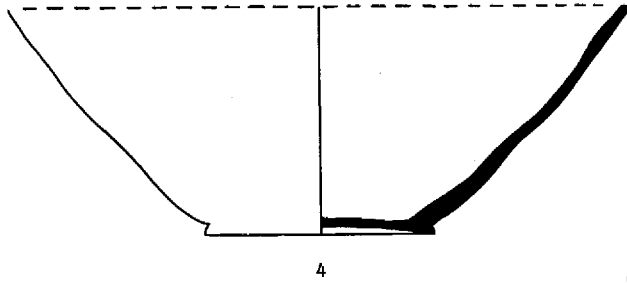
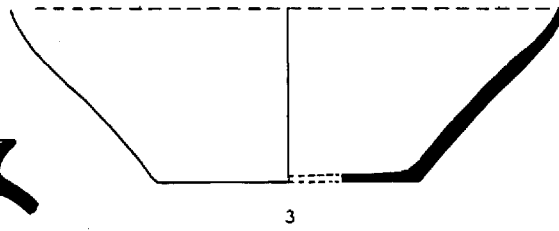
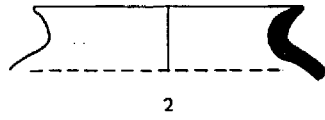
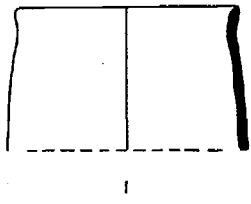
FRAGMENTS OF UNPAINTED RED WARE (SEE PAGES 32 F.). SCALE, 1:4

No.	Field No.	Provenience	Level	D.	H.	Th.	Remarks
1	5514			22.0	4.2 mx.	.65	bowl, red to deep tan
2	5528	Trench I, 30-40 m.		26.0	8.2 mx.	.6	bowl, burnish
3	2856	Trench I, 10-20 m.	surf.	24.0	7.5 mx.		bowl, dark red, burnish in. and out.
4	5532			22.4	4.0 mx.	.45	bowl, light red to orange-red
5	5517			18.0	4.6 mx.	.5	bowl, orange-tan, traces of red slip or burnish
6	5515			24.0	14.0 mx.	.7	bowl, brick-red, deep red slip(?), burnish in. and out.
7	5536			22.8	6.4 mx.	.9	bowl, red with brownish surface
8	5535			32.8	10.8 mx.	.6	bowl, light brown, burnish
9	5519	N 30, +2.75 m.	surf.	20.0	6.6 mx.	.65	bowl, orange-red, brown surface, burnish
10	5523			26.0	5.6 mx.	.95	bowl, some large grits, blackish in.
11	5498	L 28, surf. above House XII	surf.	13.2	10.4 mx.	.65	pot, light orange, red wash(?), burnish
12	2846	O 27, +3.87 m.	surf.	13.6	4.9 mx.		pot, light red, burnish
13	2847	Rm VII 3	III (probably intrusive)	12.8	5.8 mx.		pot, bright red, burnish
14	5521			26.0	6.5 mx.	.55	bowl, burnish
15	5541	Trench I, 10-20 m., +1.75-1.9 m.	surf.	13.2	4.0 mx.		pot, red with black core, dark red slip(?), burnish
16	5508			11.2	7.6 mx.	.6	flask, pink-red
17	5512	Trench I, 50-60 m., +2.82 m.	surf.	22.0	7.4 mx.	1.0	bowl, light red, gritty
18	2848	L 27, above Rms. I 1-2	IV or surf.	10.8	8.7 mx.		beaker, light red, in places black mottled, burnish
19	5524			20.0	6.0 mx.	.5	bowl, burnish
20	2850	O 27, +3.87 m.	surf.	14.4	7.4 mx.		beaker, light red, burnish
21	2091			10.4	14.6		beaker, light orange-red, burnish, made in 2 sections



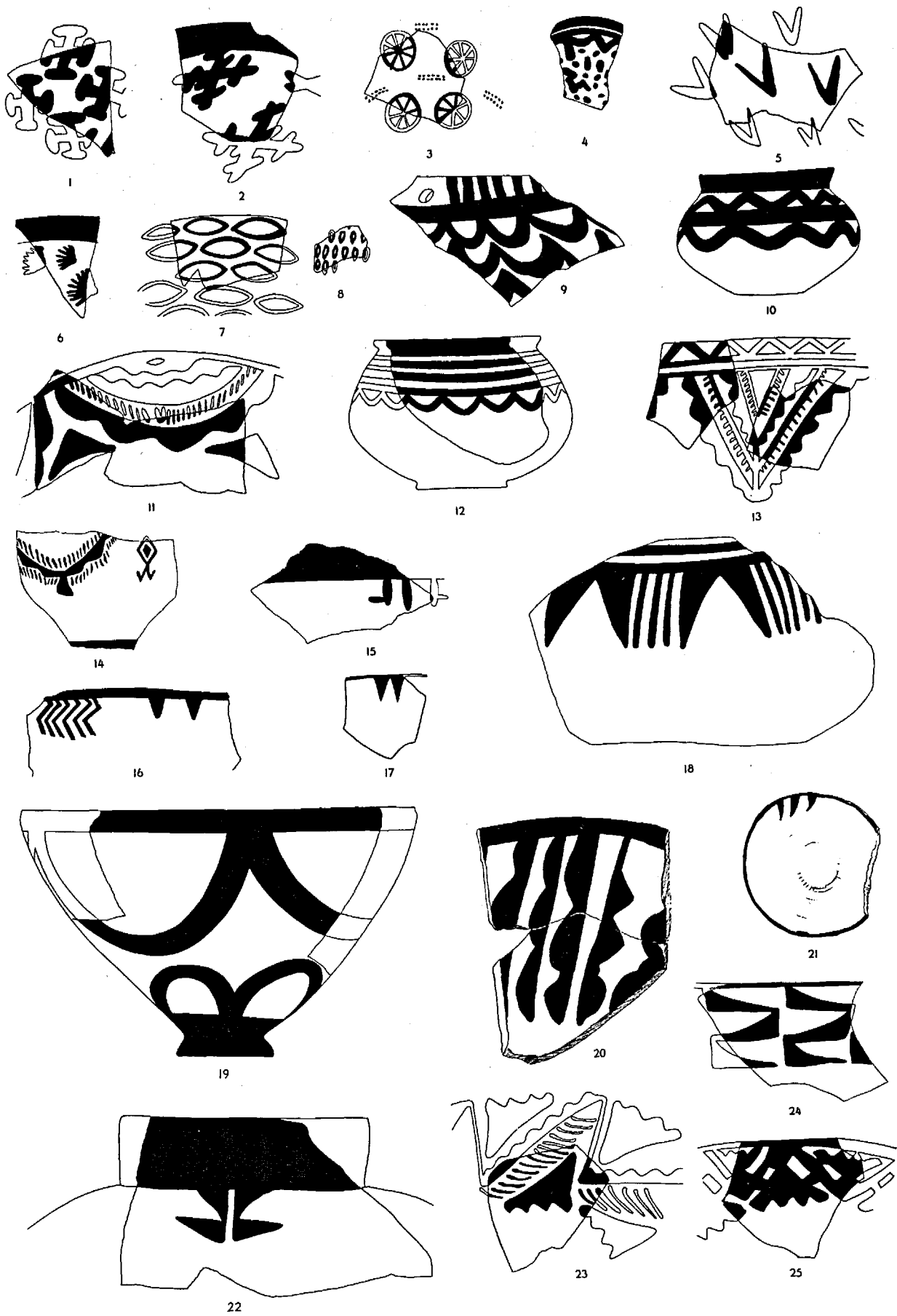
SEE PAGE 33

No.	Field No.	Provenance	Level	D.	B.	H.	Th.	Remarks	Scale
1	2851	O 28, +3.75 m.	surf.	12.8		7.6 mx.		fragment, red ware, vertical burnish	1:4
2	5506	N 30, +2.75 m.	surf.	12.8		7.6 mx.	1.1	fragment, brick-red ware, burnish	1:4
3	2855	Trench I, 10-20 m.	surf.	29.6		9.2 mx.		fragment, red ware, burnish in. and out.	1:4
4	3455	Trench I, 20-30 m., +2.0 m.	IV, surf.(?)	66.4		24.0 mx.		fragment, red ware, scraped	1:8
5	5503			14.2		4.4 mx.	.75	fragment, light red out. to drab-brown in.	1:4
6	2624			6.6		5.4 mx.		miniature pot, incomplete, light red ware, cream-tan slip(?), band of brown paint on base	1:4
7	5502			base, 6.8		3.0 mx.	.8	fragment, light red ware shading to brown in core	1:4
8	2626	M 31, +2.87 m.	surf.	11.6		4.1 mx.		fragment, fine orange-red ware, band of brown paint on base	1:4
9	2661	N 29, +2.6 m.	top IV		5.0 mx.	12.6 mx.	6.6 mx.	fragment, light red ware, smoothed, thick gray core	1:4
10	2631			4.4		4.2		miniature pot, incomplete, gritty black ware, light grayish slip	1:4
11	2858			12.0		5.5 mx.		bowl, incomplete, gray ware, remains of black burnished slip in.	1:4
12	3364			26.0		9.3 mx.		fragment, light red ware, chalky white slip(?)	1:4
13	2637	Rm. XIII 2	IV?	12		3.0 mx.	.6 mx.	fragment, light orange-red ware, burnish in. and out. except on incised ridge	1:2



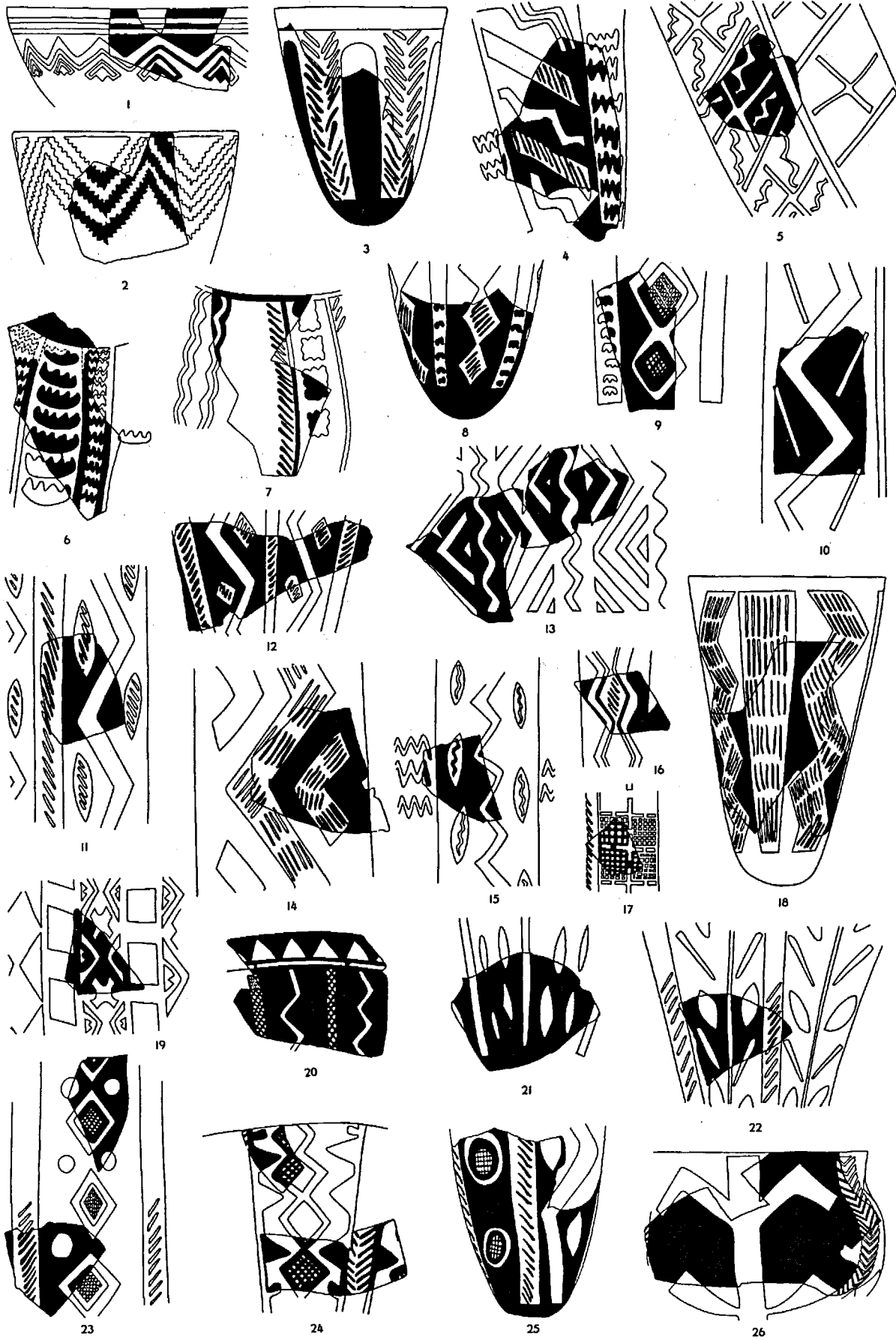
SEE PAGES 34-36

No.	Field No.	Provenience	Level	Form	Design	D.	H.	Th.	Remarks	Scale
1	5401	Trench I, 10-20 m., +2 m.	I		I in.; XI E 6 out.			.5	bowl side	1:3
2	5323				I in.	16.0	5.6 mx.	.5	bowl rim	1:3
3	4735	Trench I, 10-20 m., +1.05 m.	III		I			.3	bowl side, tan ware	1:3
4	3194	N 28, +2.7 m.	IV	XII C, Pl. 17:18	I in.	9.2	5.4		cream-tan ware; design in plan	1:3
5	4471	P 31, +1.95-2.75 m.	surf.		I			.65	bowl side above base	1:3
6	5326	Trench I, 10-20 m., ±0 m.	I		I in.	16	4.4 mx.	.5	bowl rim	1:3
7	5641	M-N 26, +2.5 m.	IV		I	20	3.4 mx.	.3	bowl rim	1:3
8	5642				I			.25	bowl side	1:3
9	2603	K 29, low level of kiln	II	VII	II A 1	rim, 17	6 mx.		suspension holes	1:3
10	2111	M 30, +2.15 m.	IV	IX, Pl. 14:7	II A 1	11.2	7.1	.6	cream-tan ware	1:4
11	5416	K 28, +1.6 m.	III		II A 2 in.			.55	bowl side	1:3
12	4563	Rm. X 6	III	IX	II A 1	12.3	7.0 mx.	.65		1:3
13	4307	Trench II, 50-60 m., .5 m. deep	surf.		II A 2			.35	beaker rim	1:3
14	2450				II A 2			.3-.7	bowl or pot side above base	1:3
15	3162	Rm. VI 4	III	X	II B 1			1.1		1:3
16	4049	M 29, +2.82 m.	top IV, surf.	II B 1		rim, 6	5.5 mx.	.4	pot neck	1:3
17	5030	Rm. XVII 2	IV		II B 1 in.; XIV E out.			.25	bowl rim, red-brown paint	1:3
18	2896	Rm. XVII 3	IV		II B 2	21	12 mx.		small jar, cream-tan ware, cream surface	1:3
19	3382	Rms. X 5, 6	III	II	II A 3	28.9	17.9		cream-tan ware	1:3
20	5457	Rm. V 4	III		II B 2 in.	23.6	11.5 mx.	.7	bowl rim	1:3
21	3082	O 27, +3.5 m.	surf.		II B 1 in.; XII out.	base, 8.2	base, 5.4		conical base; see Pl. 19:14	1:3
22	3553	Trench I, 50-60 m., +3.47 m.	surf.	X	II B 1	rim, 18		1.2-2.0	elements only on opposite sides of jar	1:4
23	5426	L 31, +2.27 m. O 27, +3.5 m.	IV or surf. surf.		II C 2 in.			.65	lower side of bowl	1:3
24	2950	Trench I, 0-10 m., +.8-1.3 m.	II-III or surf.	III, Pl. 10:14	II C 1 in. and out.	36	6.4 mx.		cream-tan ware	1:3
25	5494	N 29, +3.0 m.	surf.		II C 2 in.			1.0	bowl side	1:3

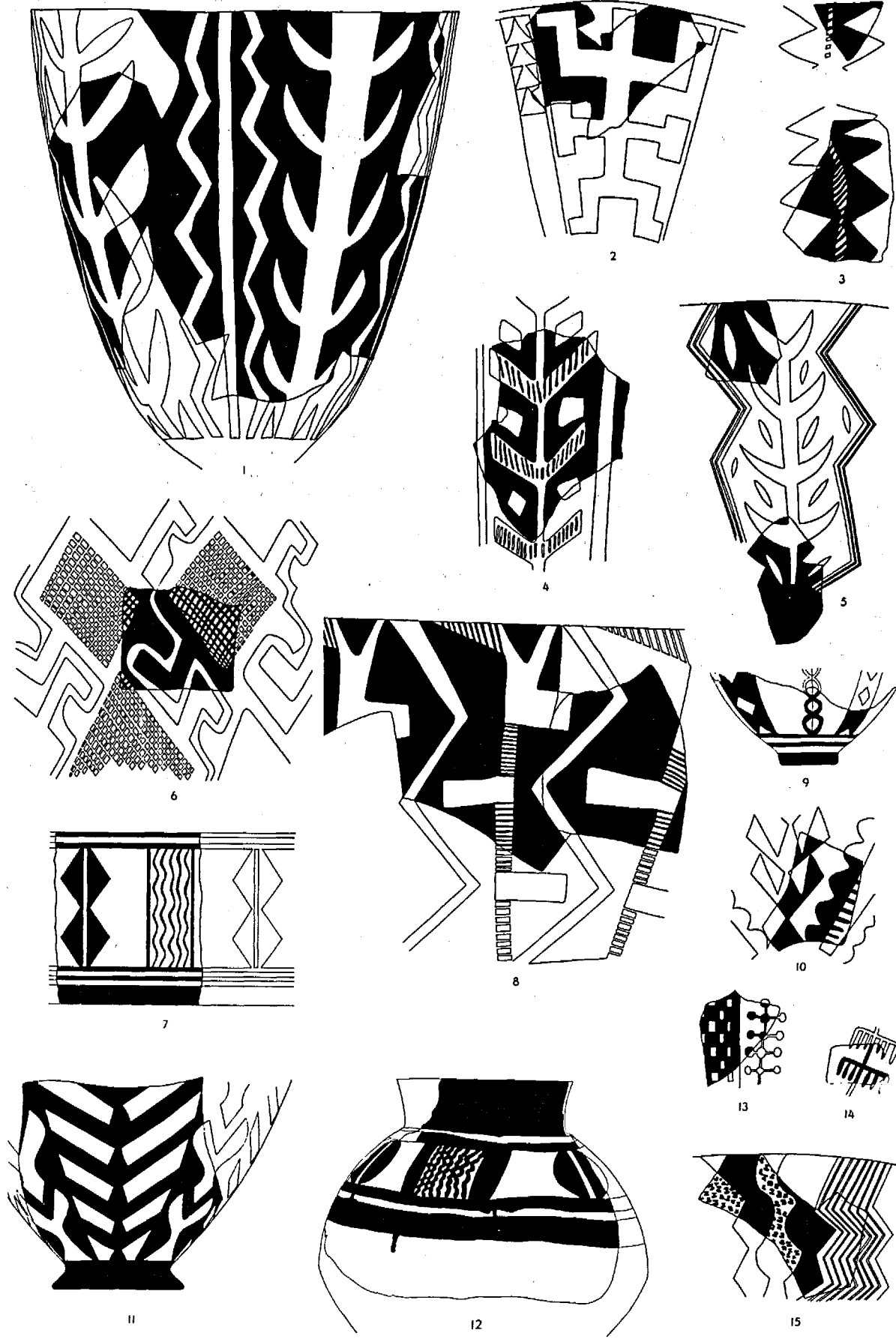


SEE PAGES 36 AND 54. SCALE, 1:3

No.	Field No.	Provenance	Level	Form	Design	D.	H.	Th.	Remarks
1	5429	Trench I, 50-60 m., +2.42 m.; Rm. XIV 3	IV		II C 2 in.	22	4.4 mx.	.3	bowl rim
2	4299	P 31, +1.95-2.75 m.	surf.		II C 2	2.1	7.0 mx.	.25	small bowl rim
3	4062	Trench I, 15-20 m., +1.4 m.	III	XI A	III A 1	9.0	10.7 mx.	.6	
4	4276	M 28, court level	IV		III A 2			.35-.55	beaker side, tan ware, red-brown paint
5	4615	N 31, small walls	II		III A 2			.3	beaker side
6	4063	O 27, +3.87 m.	surf.		III A 2			.7	jar shoulder, red-brown paint
7	4325	O 29, +3.25 m. and deeper	surf.	IX C, Pl. 14:5	III A 2	12.8	9.4 mx.	.2	light tan-pink ware
8	4342	Rm. I 1	III	XI A	III A 3	7.8	6.9 mx.	.5	
9	4186	Trench I, 10-20 m., +1.75 m.	III, surf.(?)		III A 3			.2-.35	beaker side, light tan ware
10	4088	Trench I, 12-14 m., +.62 m.	II		III A 4			.2-.4	bowl or beaker side
11	4331	Rm. V 6	III	XI B	III A 4			.5	
12	4319	Rm. VIII 7	III	XI B	III A 4			.3-.8	light green-toned ware, black paint etched
13	4616	Rm. X 2	III	XI	III A 4			.3	
14	4896	M 32, +2.25 m.	surf.		III A 4			.4	beaker side
15	4328	Trench I, 70-80 m., .3 m. deep	surf.	XI B	III A 4			.5	tan ware, red-brown paint
16	4291	Q 31, outside Rm. XII 4 to v.s.	I-II		III A 5			.3	bowl side
17	4711	Rm. I 1	III		III A 5			.4	bowl(?) side, cream-tan ware
18	4303	O 31, +2.87 m.; Q 28, +3.37 m.	surf.	XI A	III A 4	9.5	10.3 mx.	.35	light tan ware
19	4600	Rm. XVII 4	IV		III A 5			.5	beaker side, cream-tan ware
20	4182	Rm. XVII 2	IV		III A 4	14	6.2 mx.	.3	bowl rim, cream-tan ware
21	4230	O 28, +3.0 m.	top IV or surf.		III A 6			.3-.6	beaker side
22	4751	M 32, +2.25 m.	surf.		III A 6			.55	beaker side
23	4379	Trench I, 40-50 m., +1.95 m.	IV		III A 6			.6	beaker side, tan ware, red-brown paint
24	4060	Q 31, outside Rm. XII 4 to v.s.	I-II		III A 5			.4	bowl rim, light tan ware, brown paint
25	2342a	W. of Rm. XVII 2	IV	XI A	III A 6	8.3	10.1 mx.	.45-.65	cream-tan ware
26	5600	Rm. IV 1 L 29, +2.0 m.	III base IV	IX B, Pl. 13:21	III A 7	16	7.8 mx.	.2	

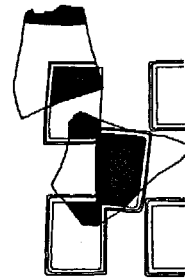
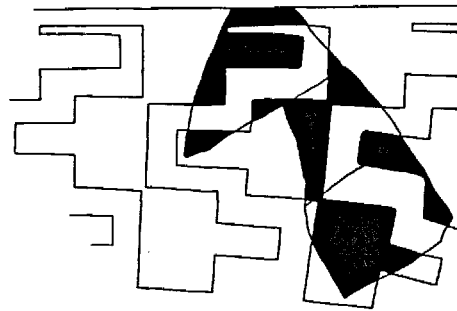
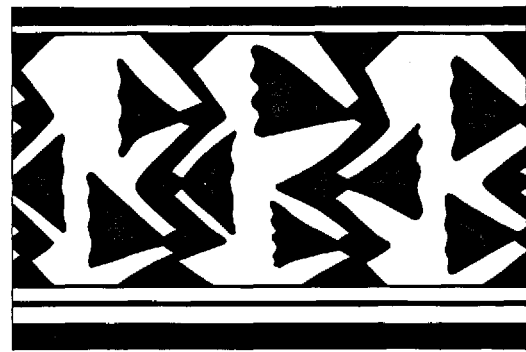
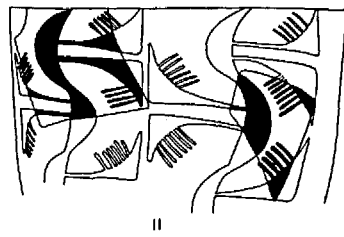
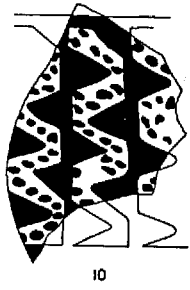
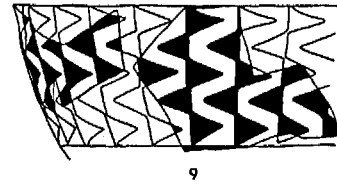
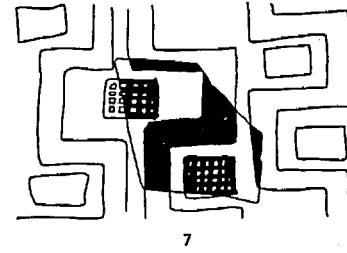
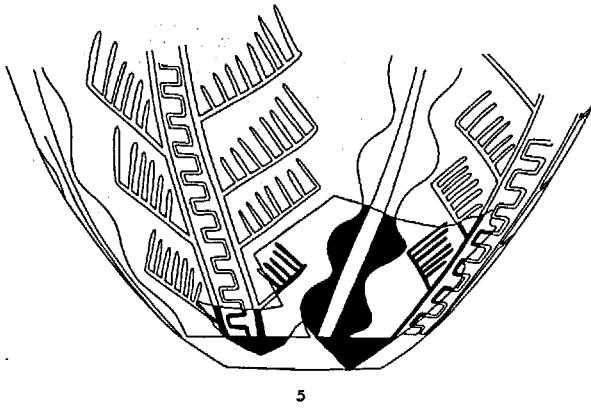
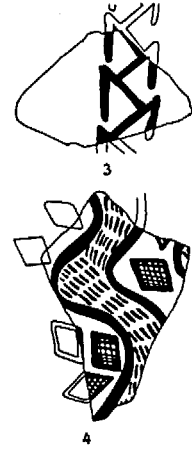
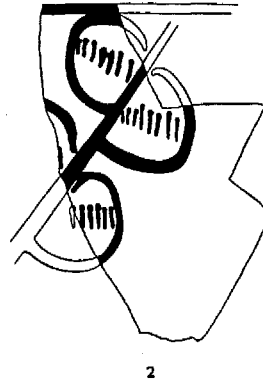
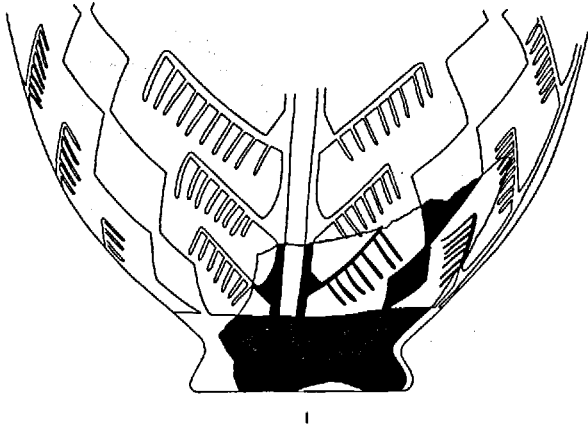


No.	Field No.	Provenience	Level	Form	Design	D.	H.	Th.	Remarks	Scale	See Page
1	2135	M 28, +1.37 m.	III	I	III A 7	22.8	20.7 mx.	.3		1:3	36, 60
2	5629				III A 7			.1	bowl rim	1:3	36
3	4061	Rms. XIII 2-3, XIV 3	IV		III B			.6	bowl rim	1:3	37
4	4321	P 31, +2.75 m.	surf.	XI B	III A 7			.5	green-cream ware, black paint etched	1:3	36
5	5636	Rm. III 2	III		III A 7			.3	bowl rim	1:3	36
6	4426	M 28 or Rm. XIV 3	III IV		III B			.45	bowl side, cream-tan ware	1:3	37
7	3542	Rm. VII 2	III	X	III C	40	32.5		redrawn from field sketch	1:6	37
8	3651	Rm. I 1	III	I	III B	24.0	11.6 mx.	.4	paint weathered	1:3	37
9	2461	Rm. X 1	III	III?	III C	10.1	4.9 mx.		cream-tan ware	1:3	37
10	5558	L 28, +2.7 m.	top IV		III C			.4	lower side of bowl	1:3	37
11	4048	M 30, +3.37 m.	surf.	I	III C	19	11 mx.	.5		1:3	37
12	3550	Q 33, level of House XII	surf.	X	III C	34.8	23.5 mx.			1:6	37
13	4678	N 26, +3.8 m.	surf.		III C			.45	bowl side, tan ware	1:3	37
14	4969	Q 31, +2.62 m.	surf.		III C			.6	bowl side	1:3	37
15	5646	Rm. XI	III		III C			.3	bowl rim, light cream-tan ware	1:3	37



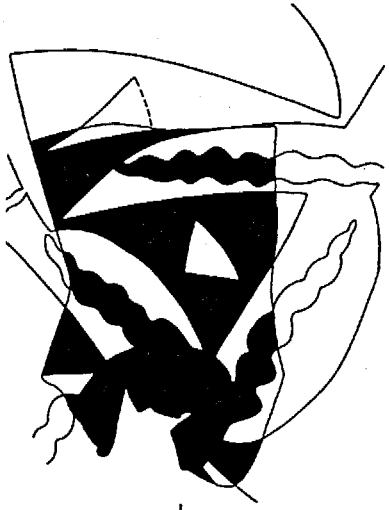
SCALE, 1:3

No.	Field No.	Provenience	Level	Form	Design	D.	H.	Th.	Remarks	See Page
1	4229	L 30, +2.62 m.	top IV, surf.	I?	III C	20.3	9.3 mx.	.6	cream-tan ware	37
2	2496	K 26, +2.1 m. (fill in Rm. XIV 3)	IV	I?	III C	26	13.5 mx.		green-cream ware	37
3	5480	M 29, Rms. II 4, III 4	III		IV A			.5	bowl side	37
4	5694	Rms. X 5-6	III		IV A			.6	beaker or cone side, tan ware	37
5	4273	Rm. V 6 L 30, +2.32 m.; Rm. XV 1, +2.3 m.	III IV	I?	III C			.25-.4		37
6	5597	House I	III		IV B 2			.3	bowl side, yellow-cream ware	37
7	4705	M 30, +3.25 m. and deeper	surf.		IV A			.4	bowl side	37
8	2400				IV A			.5	pot shoulder	37
9	2197	Trench I, 0-10 m., +1.32 m.	surf.	III	IV B 1	16.6	5.8 mx.	.2		37
10	4145	K 28, +2.4 m.	IV, surf.		IV B 1			.6	pot shoulder, tan ware	37
11	2211	Rm. V 5	III	III?	IV B 2	13.5	4.7 mx.			17, 37
12	4068	N 26, +.6 m.	II		IV B 1	32	13.5 mx.	.55	bowl rim, tan ware, red-brown paint; redrawn from field sketch	37
13	3265	M 28, +2 m.	base IV	IV B, Pl. 11:8	IV B 1	16.6	10.4	.15-.4	design in plan	34, 37
14	4248	O 31, +2.45-3.25 m.	surf.		IV B 3			.4	bowl rim	37
15	4946	M 31, +.5 m.	II		IV B 3			.3	pot shoulder, tan ware	37

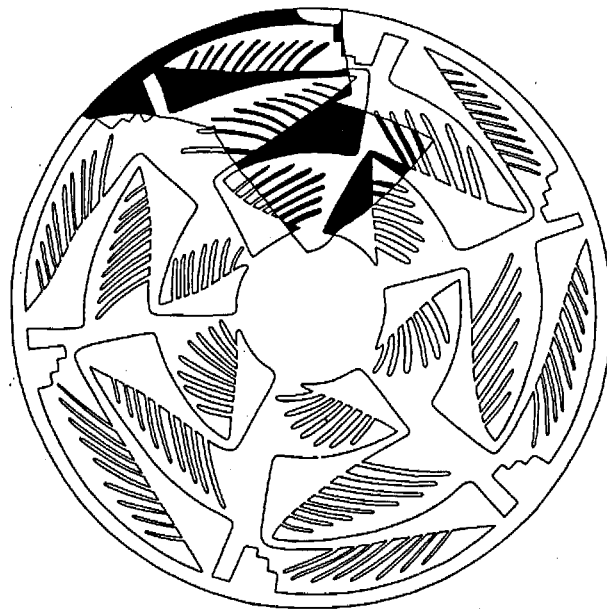


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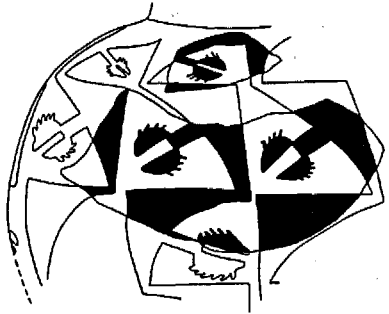
No.	Field No.	Provenience	Level	Form	Design	D.	H.	Th.	Remarks	See Page
1	5562	Rm. V 5	III		IV C 1			.3-.5	lower side of bowl, dirty light yellow ware, black-brown paint etched	37
2	5439	L 29, +2.57 m.	top IV, surf.	II D, Pl. 10:3	IV C 1 in.	24.0	10.8 mx.	.95 mx.		37, 56
3	4139	Rms. XVII 3 and 5	IV	IX	IV C 1			.35-.65	green-cream ware, black-brown paint etched	37
4	4271	M 28 Rm. XIII 3	III IV		IV C 1	28	15.4 mx.	.6	bowl rim, paint weathered	37
5	4046	above Rm. V 2	IV, surf.(?)		IV C 1 out.; fringe in.	28	6.0 mx.	.7	bowl rim	37
6	5656	P 33, +2.25 m.	surf.	IV	IV C 1	16	7.8 mx.	.35		37, 49
7	2193	Trench I, 36-40 m., +1.6 m.	III	IV	IV C 1	17	5.5 mx.	.15-.25		37
8	2192			VI, Pl. 12:3	IV C 1	16	13.6 mx.			33 f., 37
9	4692	Rm. V 5	III		IV C 1			.5	pot shoulder	37
10	4058				IV C 1	12	6.3 mx.	.3	bowl rim, light tan ware, red-brown paint	37
11	4055	Rm. VII 3	III		IV C 1			.2	lower side of bowl	37
12	4698	Rm. I 1	III		IV C 1	20	5.3 mx.	.35	bowl rim	37



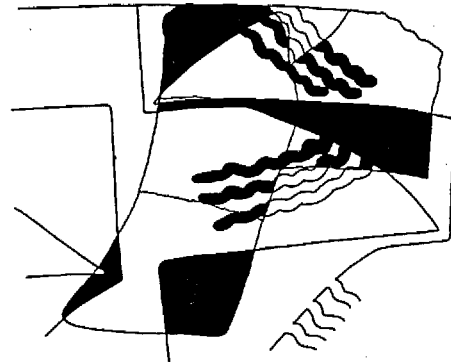
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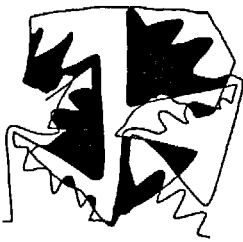
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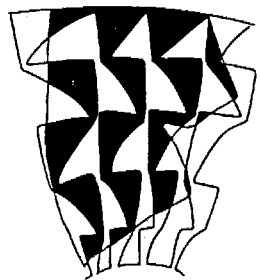
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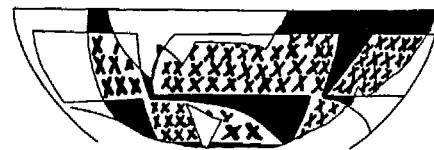
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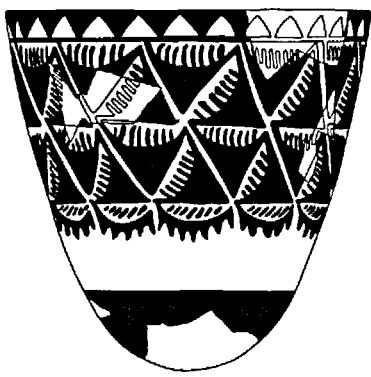
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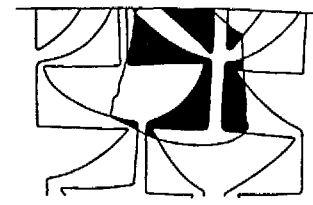
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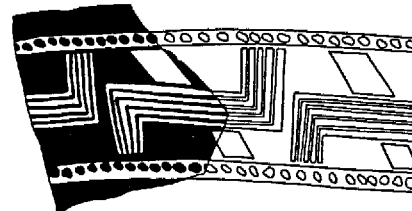
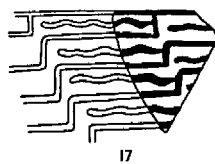
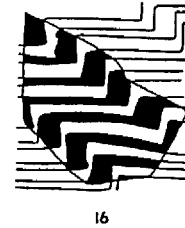
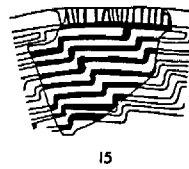
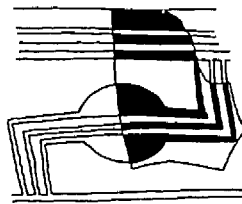
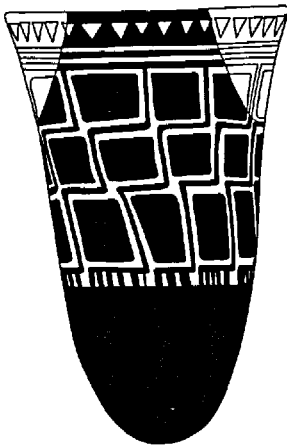
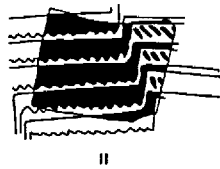
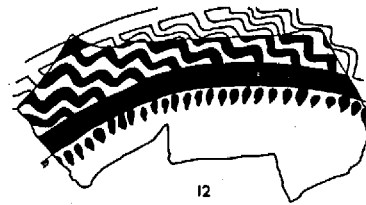
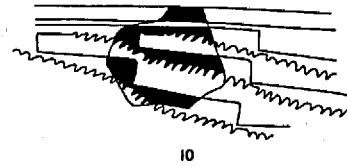
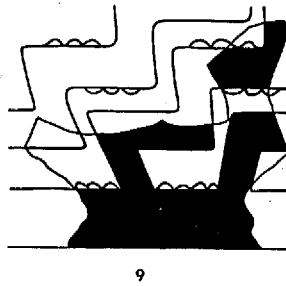
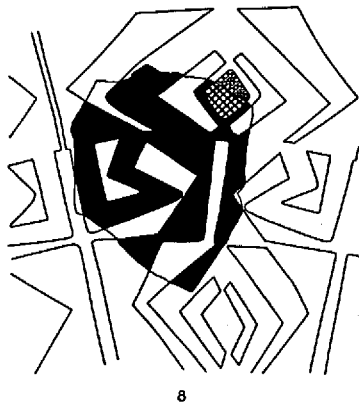
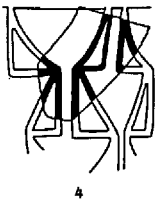
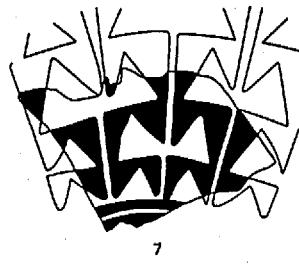
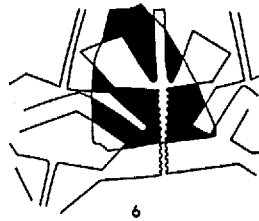
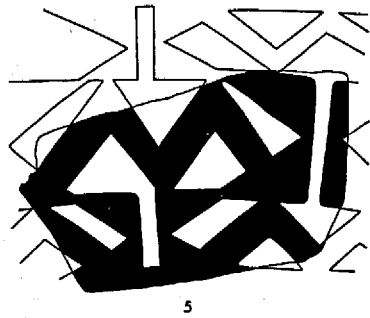
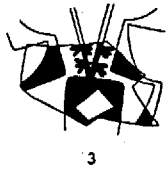
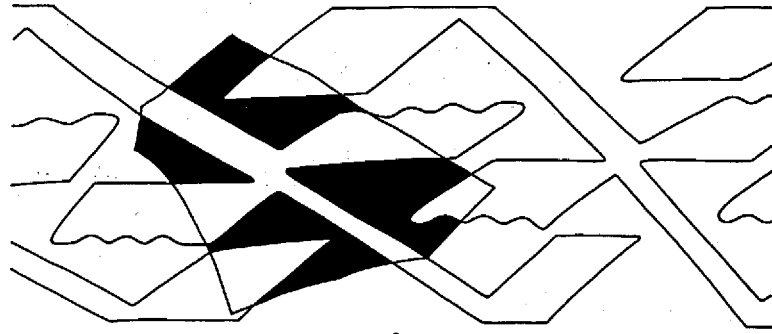
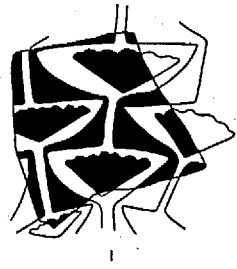
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SCALE, 1:3

No.	Field No.	Provenience	Level	Form	Design	D.	H.	Th.	Remarks	See Page
1	4054	W. of Rm. XVII 2	IV		IV C 1			.35	bowl side	37
2	4135	L 31, +2.22 m.	surf.		IV C 2			.6	bowl side; redrawn from field sketch	37
3	5674	Trench I, 40-50 m., +3.6 m.	surf.		IV C 1			.25	lower side of bowl	37
4	5626				IV C 1				bowl rim	37
5	4047	L-N 28, +2.7 m.	top(?) IV		IV C 2			.5	bowl side, red-brown paint	37, 60
6	4057	J 31, +1.72 m.	top III		IV C 2			.3	shoulder of small pot, light tan ware	37
7	4052	Rm. VII 2	III		IV C 2			.5	lower side of bowl	37
8	4069	Rm. I 1	III		IV C 2			.25	lower side of bowl, light green-cream ware, black paint etched	37
9	4082	Rm. I 1; N 29, street	III		V A	15	9.0 mx.	.4	bowl base; redrawn from field sketch	38
10	5341	K 28, +1.6 m.	III		V B in.			.3	bowl rim, drab ware	38
11	4301	Rm. XIII 3, below floor Rm. XVII 4	III? IV		V B			.3	bowl side, light tan ware	38
12	5425	Trench I, 36-40 m., +2.75 m. O 31, +2.87 m.	IV surf.		V C			.4	lower side of bowl, tan ware	34, 38
13	2107	Trench I, 15 m., +1.45 m.	III, base surf.	XI A, Pl. 15:8	V C	10.2	17.8			33 f., 38
14	2395a	Rm. V 4	III		V C				bowl rim	38
15	5445	K 28, +2.8 m.	top IV, surf.		V C out.; X A (stepped rectangles) in.	12	5.0 mx.	.3	bowl rim, cream-tan ware	38
16	4285	P 28, +3.62 m.	surf.		V C			.55	bowl side, pale green ware, black paint etched	38
17	5627				V C			.35	bowl rim, light cream-tan ware	38
18	4400			I?	V D	14	7.8 mx.	.5		33, 38, 59



13

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15

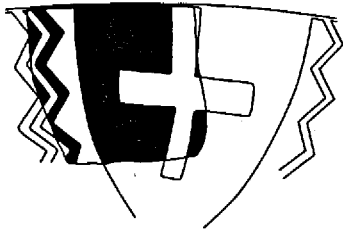
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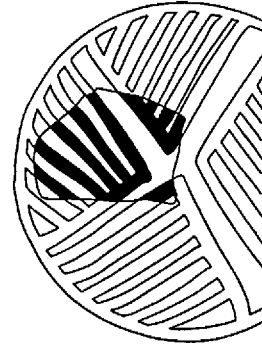
No.	Field No.	Provenience	Level	Form	Design	D.	H.	Th.	Remarks	Scale	See Page
1	5663	L 29, +2 m.	base IV		VI A	14	6.0 mx.	.3	bowl rim, cream-tan ware	1:3	38
2	2177	Rm. XIII 1	IV	IV B	VI A	20.4	10.2 mx			1:3	20, 38, 54
3	5408	Rm. V 6	III	III	VI B 3 in.	12	5.3 mx.	.45	tan ware; design in plan	1:3	38, 56
4	3233			III?	VI A out.; III A 4 in.	22	8.0 mx.		redrawn from field sketch	1:3	38
5	2182			IV B	VI A	17.1	10.1 mx.	.35-.5		1:3	38, 54
6	2962	Rm. XVII 4	IV		VI B 3 in.			.7	bowl base, cream-tan ware	1:3	38, 56
7	3238	Rm. VII 2	III	XII	VI B 3 in.	10	4.0 mx.		design in plan	1:3	38
8	5427	Rm. XVI 3, +2.4 m.	IV		VI B 1 in.			.3-.95	bowl side, tan ware	1:3	38
9	5378	Rm. V 6	III	XII?	VI C in.	11.6	5.0 mx.	.5	design in plan	1:3	38
10	5333	Rm. XII 2	III		VI C in.	18	6.8 mx.	.9	bowl rim, tan ware	1:3	38
11	3449			III	VI C in.	22	10.3 mx.	.6-1.0	tan ware, paint badly preserved	1:3	38
12	2942	probably Rm. XIII 1	probably IV	II	VI C in.	35.4	21.0 mx.	.9-1.4	design in plan	1:4	38



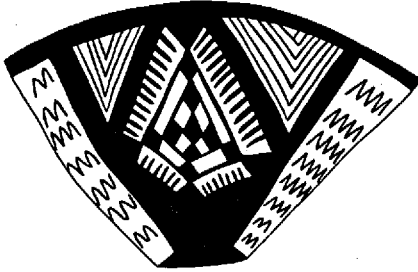
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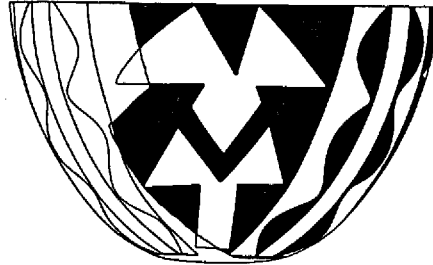
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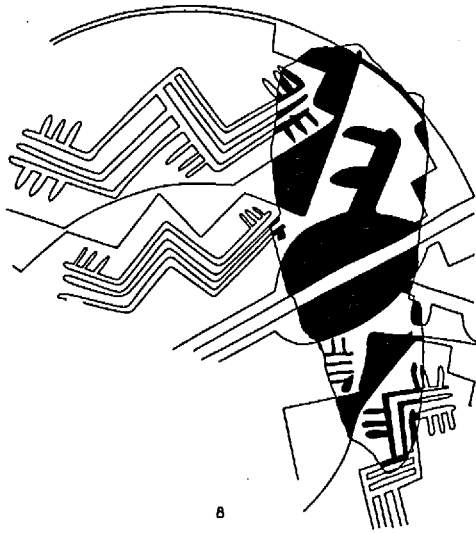
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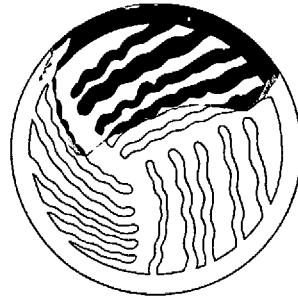
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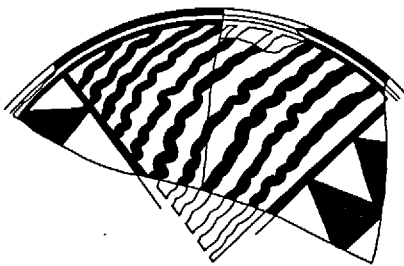
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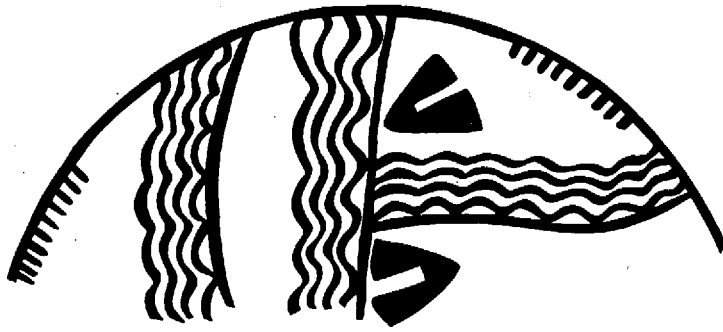
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12

SEE PAGES 38 AND 56

No.	Field No.	Provenience	Level	Form	Design	D.	H.	Th.	Remarks	Scale
1	3452	Rm. III 3	III	II	VI C in.	30	16.5 mx.		light cream-tan ware; re-drawn from field sketch, design in plan	1:3
2	3878	Trench I, 0-10 m., +.6 m. Trench I, 20-30 m., +.82 m. Rm. III 1	II, surf.(?) II III	III?	VI C in.; XI E 6 out.	17	7.0 mx.	.4	design in plan	1:3
3	5407	Rm. I 1	III		VI C in.	25	10.0 mx.	.75	bowl bottom, ashy-gray ware; design in plan	1:6
4	5331	Rm. XVII 5	IV	III?	VI C in.	17.6	5.3 mx.	.8	tan ware; design in plan	1:3
5	5424	Trench I, 50-60 m., +3.47 m.	surf.	II?	VI C in.	28.7	9.5 mx.	.65	design in plan	1:3
6	5428			III?	VI C in.	20.1	10.5 mx.	.6	design in plan	1:3
7	5317	K 30, +2.07 m.	base IV, base surf.	II	VI C in.	34	11 mx.	.75		1:3



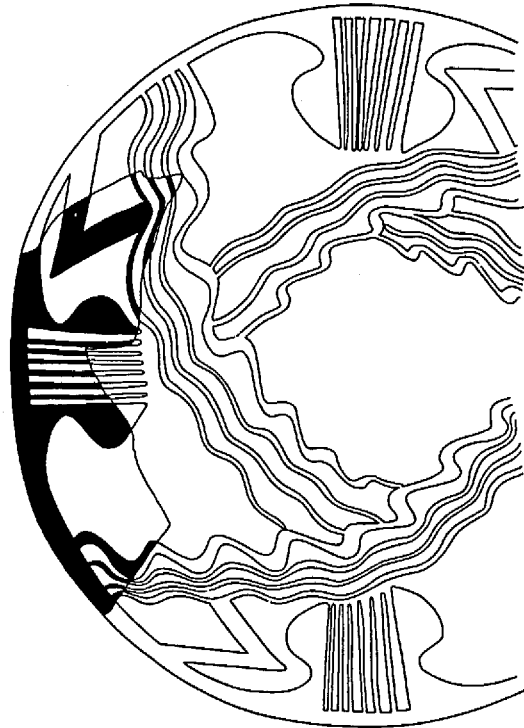
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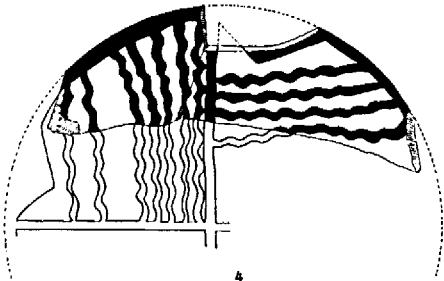
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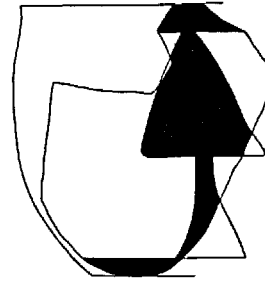
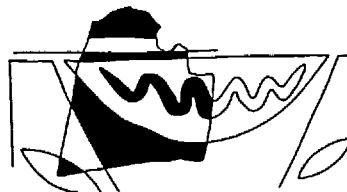
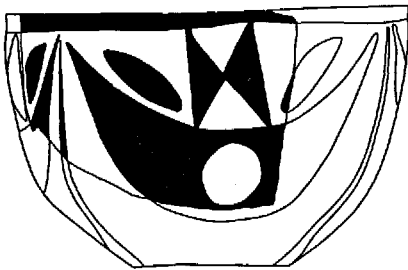
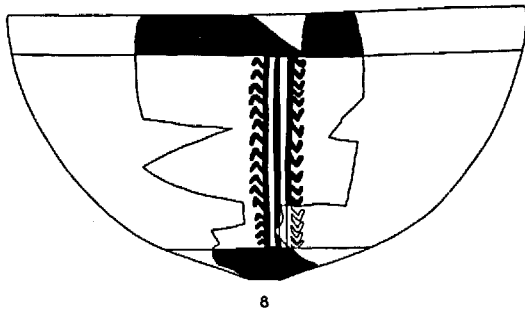
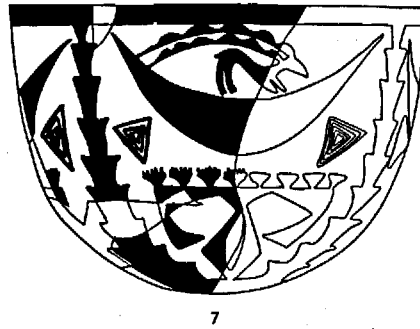
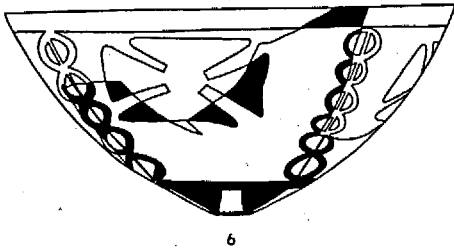
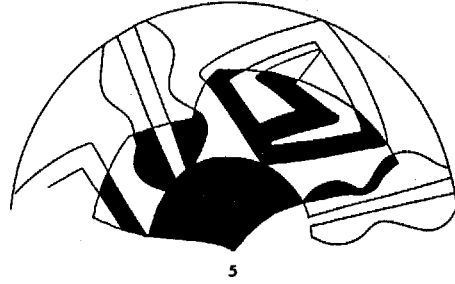
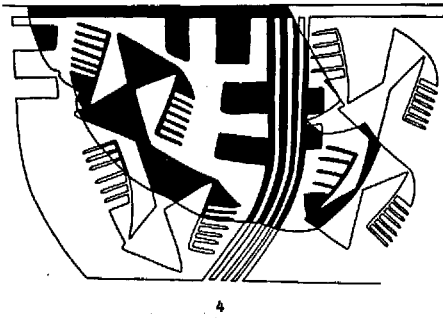
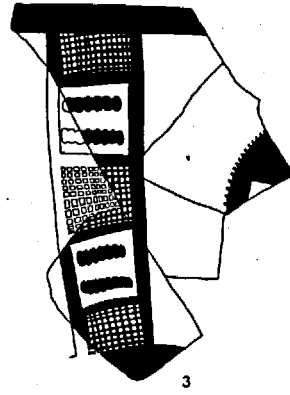
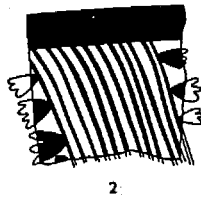
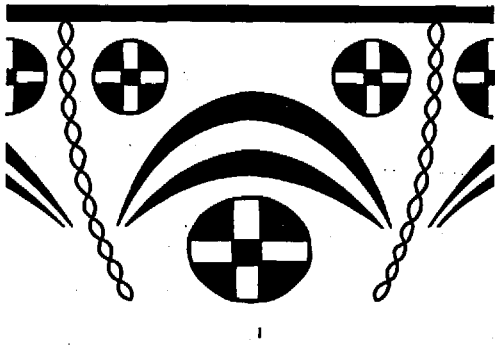
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7

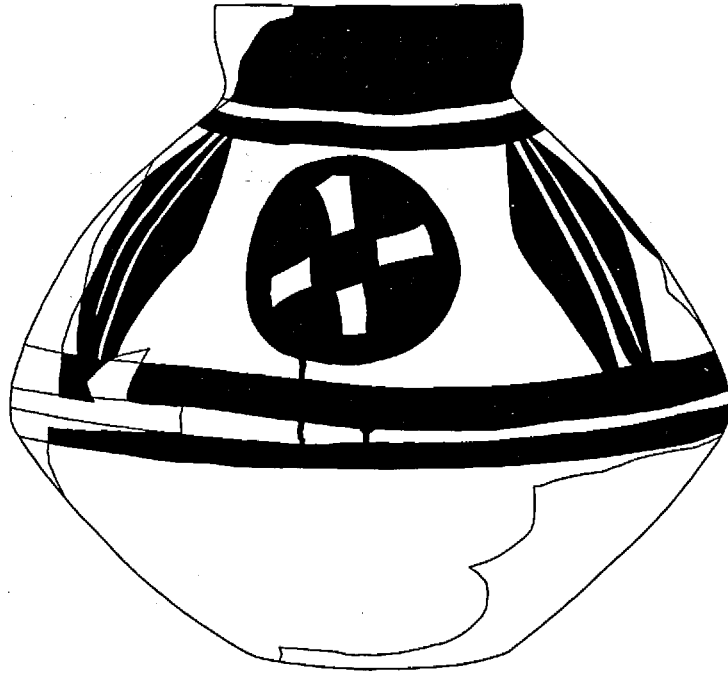
SEE PAGES 39 AND 54. SCALE, 1:3

No.	Field No.	Provenance	Level	Form	Design	D.	H.	Th.	Remarks
1	4066	Rms. VII 3-4; L 31, +1.77 m.	III		VI D 1	18	11.5 mx.	.5	bowl rim, light tan ware
2	4277	Rm. XIII 2	IV	II?	VI D 1	28	5.3 mx.	.6	cream-tan ware, brown-red paint
3	4015	Rms. II 4, IX	III	IV B	VI D 1	24	13.2 mx.	.3	light gray ware, brown paint
4	3264	Rm. V 6	III	IV B	VI D 1	14	9 mx.		cream-tan ware; redrawn from field sketch
5	4134	Rm. XIV 3	IV	IV B	VI D 1	13.2	5 mx.	.35-.7	
6	4870	M-N 26, +2.5 m.	IV	IV A	VI D 1	18	8.2	.3	pink-tan ware
7	2123			IV B	VI D 1	16.6	11.5		
8	4287	Rm. I 1	III	IV A	VI D 1	20.8	10.5	.65	
9	4742	Rm. III 4	III		VI D 1			.45	bowl rim, cream-tan ware
10	3348	M 30, +3.37 m.	surf.		VI D 1	12	6.0 mx.	.2	bowl rim, cream-tan ware
11	2205			IV B	VI D 1	12.4	6.3 mx.	.15	
12	4761	M 30, debris in Rm. VIII 2 N 30, +2 m.	III top III	IV B	VI D 2	16.0	7.8 mx.	.35	cream-tan ware, red-brown paint
13	4862	Rm. I 1	III		VI D 2			.5	bowl side, cream-tan ware
14	2767	Rm. XIV 3	IV	XI B, Pl 16:5	VI D 3	12.0	10.0 mx.		cream-tan ware



SCALE, 1:6

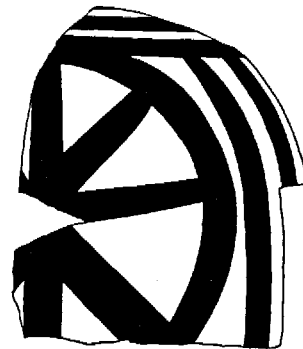
No.	Field No.	Provenience	Level	Form	Design	D.	H.	Th.	Remarks	See Page
1	3559	Rm. III 4, floor	III	X	VI E 1	57.4	52.4 mx.	1.4-2.1		15, 39
2	3539	Rm. XVII 3	IV	X	VI E 1	44	36.2 mx.	1.0		39
3	3551	M-N 28, above Rm. II 1	IV	X	VI E 1 (cart wheel)			1.0-1.5		39
4	3554	M 31, below small walls to v.s.	I	X, Pl. 15:1	VI E 1	40.4	36.0			39, 43
5	3549	M 29, +2.3 m.	IV	X	VI E 1	51.6	36 mx.	1.3	cream-tan ware, cream surface	39



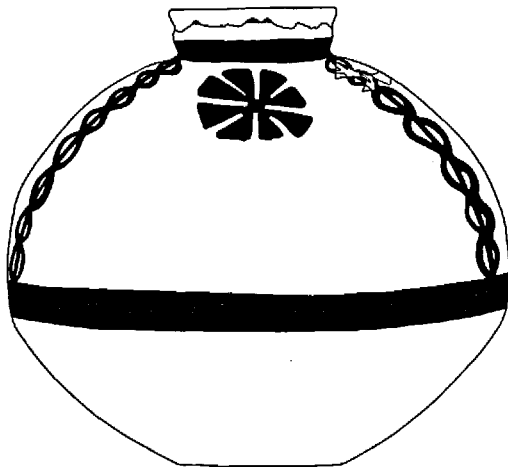
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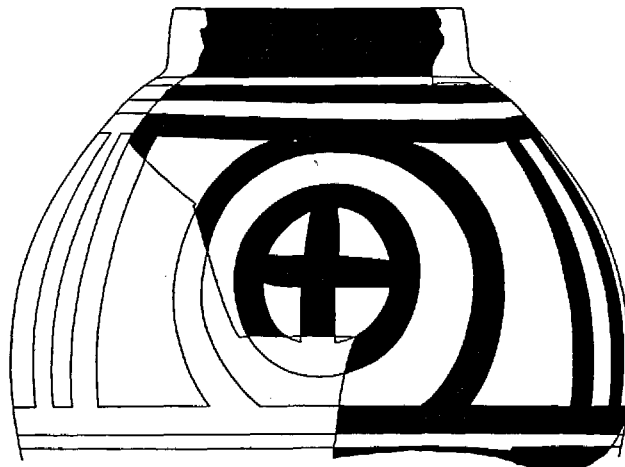
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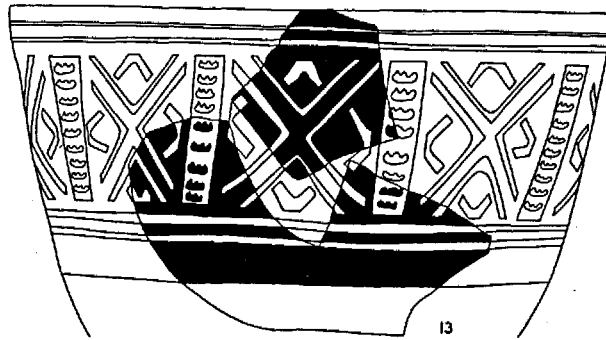
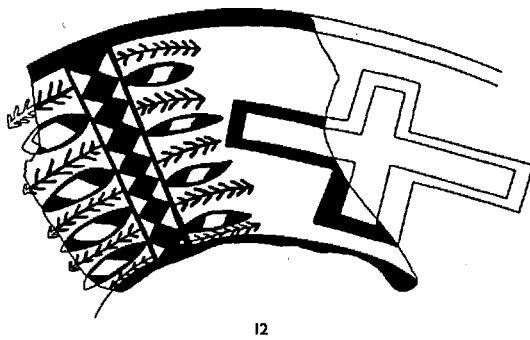
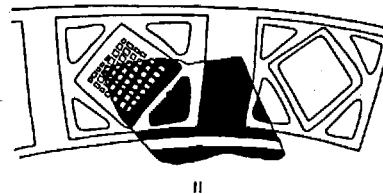
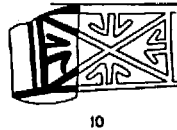
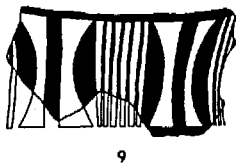
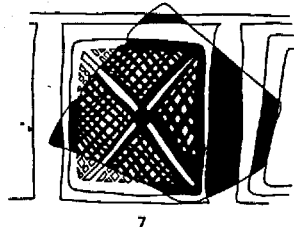
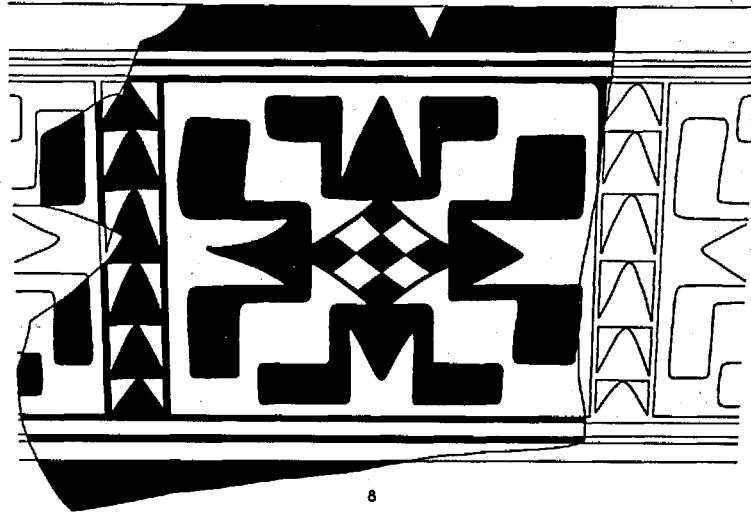
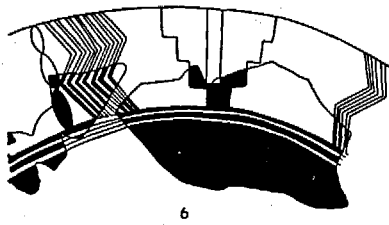
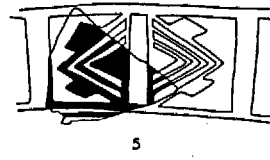
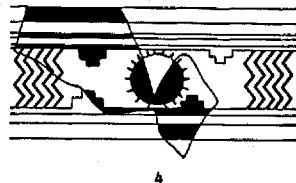
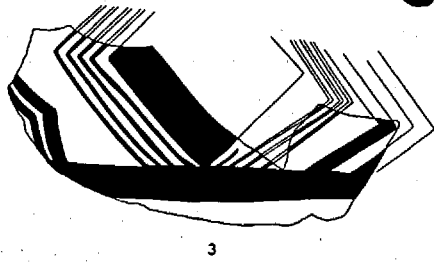
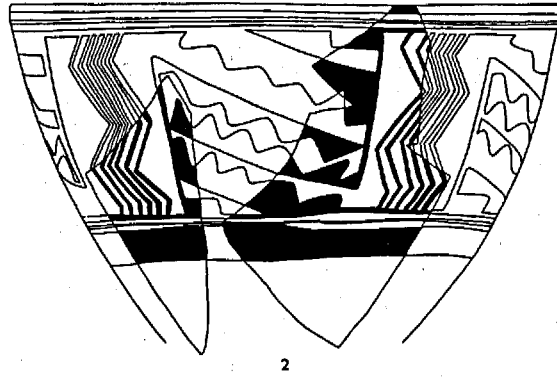
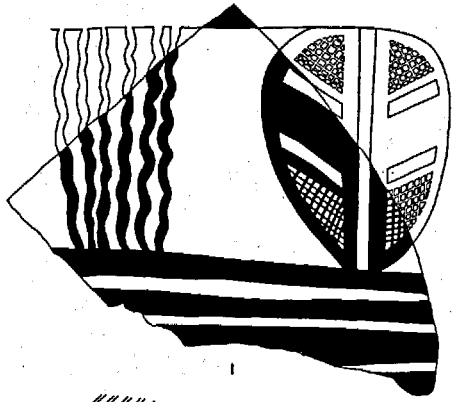
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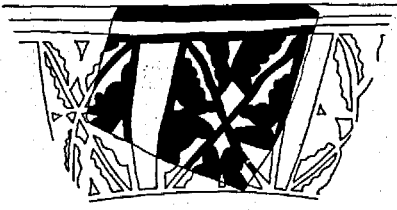
SCALE, 1:3

No.	Field No.	Provenance	Level	Form	Design	D.	H.	Th.	Remarks	See Page
1	2918	Rm. VIII 3	III	X	VI E 1			.9	cream-tan ware, cream surface	39
2	4192	L 31, +2.27 m.; M 29, 1.5 m. above Rms. II 4, III 4	IV or surf.	II	VI E 2	22.2	13.7 mx.	.4	green-cream ware	39
3	3290	Trench I, 60-70 m., +2 m.	IV		VI E 2			.3-.4	lower side of bowl	39
4	4555	House XII	III	IV B or C	VI E 2	22	5.9 mx.	.3	light tan ware, red-brown paint; redrawn from field sketch	39
5	4267	L 30, +2.52 m.	top IV, surf.		VI E 2			.4-.6	bowl side	39
6	5560	L 31, +2.27 m.	IV or surf.		VI E 2			.3	lower side of bowl, green-cream ware, black paint etched	39
7	4702	O 32			VI E 2			.5	bowl side, cream-tan ware	39
8	3391	Rm. IV 3	III	II?	VI E 2	24	20.0 mx.		redrawn from field sketch	39
9	2174				VI E 2			.25	pot neck	34, 39
10	4991	M 31, below small walls to v.s.	I		VII A 1			.3	bowl side	39
11	4709	O 30, +2.45 m.	IV, surf.		VI E 2			.7	bowl side	39
12	3230	Rm. IV 3	III	II C, Pl. 10:2	VI E 2 in.; XVII A out.	30	9.7 mx.			39
13	3994	Rm. I 1	III	I?	VII A 1	28.2	12.8 mx.	.5		39

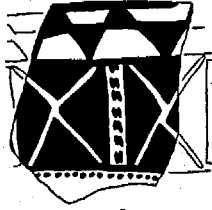


SCALE, 1:3

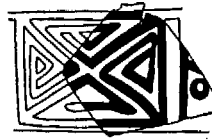
No.	Field No.	Provenience	Level	Form	Design	D.	H.	Th.	Remarks	See Page
1	5448	N 30, +2.75 m.	top IV, surf.	III?	VII A 1 in.	16.2	7.5 mx.	.6	tan ware	39
2	3347	M 29			VII A 1	20	8.1 mx.		bowl rim, cream-tan ware	34, 39
3	4289	M 29, 1.2 m. above Rms. II 4, III 4	IV		VII A 1			.35	bowl side	39
4	3989	Trench I, 10-20 m., ±0-.2 m.	I		VII A 2a			.4	bowl side	39
5	4151	Rm. X 1	III		VII A 1			.35-.6	beaker side	39
6	4365	M 32, +2.25 m.	surf.		VII A 2b	16	7.5 mx.	.4	bowl rim	40
7	4001	Rm. VIII 1	III		VII A 2a			.4	bowl rim, light tan ware, red-brown paint	40
8	4537	Trench I, 50-60 m., +2.42 m.	IV		VII A 2b			.5	lower side of bowl	40
9	5633	Trench I, 0-10 m., +1.15-1.5 m.	III or surf.		VII A 2c			.15	bowl side, yellow-cream ware	40
10	4205	Rm. IV 2	III		VII A 2c	16.2	6.5 mx.	.15-.6	shoulder of small pot, cream-tan ware	40
11	4020	Rm. XIV 2	IV		VII A 2b			.45	bowl side, light tan ware	40
12	3886	Rm. XIV 1	IV		VII A 2b	20	7.4 mx.	.5	bowl rim, tan ware, red-brown paint	40
13	4376	N 29, +2.12 m.	base IV		VII A 2c			.45	bowl rim, cream-tan ware, red-brown paint	40
14	4208	L 29, +2.37-3.37 m. L 30, +2.32 m.	IV, surf. IV		VII A 2d	29	14.0 mx.	.6	bowl rim, red-brown paint	40, 55
15	4202	P 33, +2.25 m.	surf.		VII A 2c			.7	bowl side, cream-tan ware	40
16	4380	N 29, +2.02 m. K 27, +3 m.	base IV top IV		VII A 2d			.6	bowl side, tan ware, red-brown paint	40



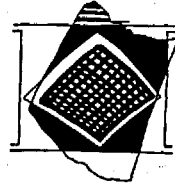
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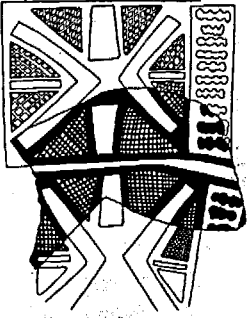
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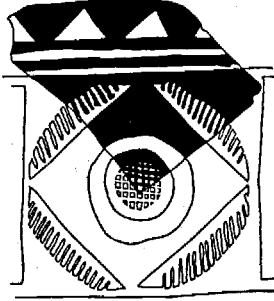
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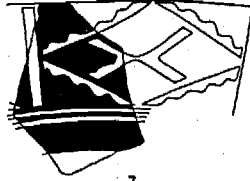
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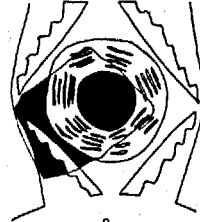
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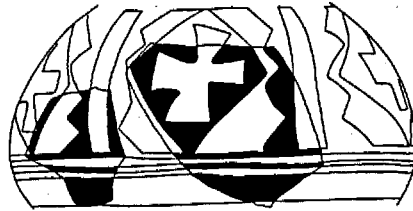
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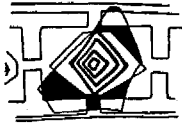
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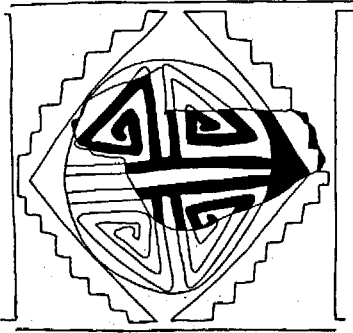
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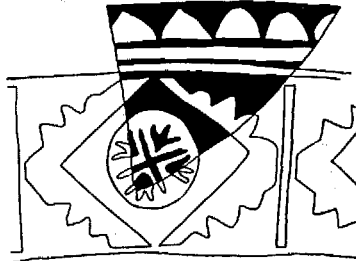
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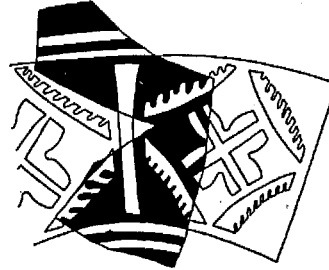
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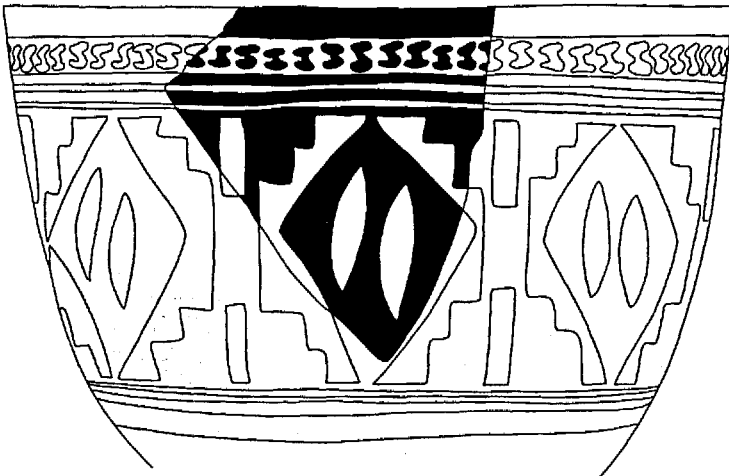
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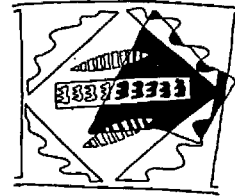
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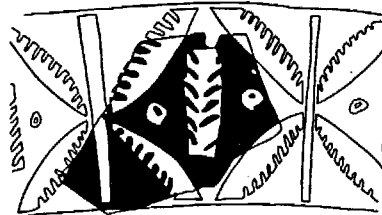
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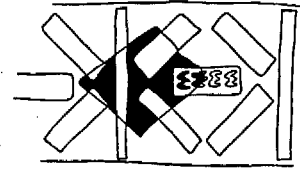
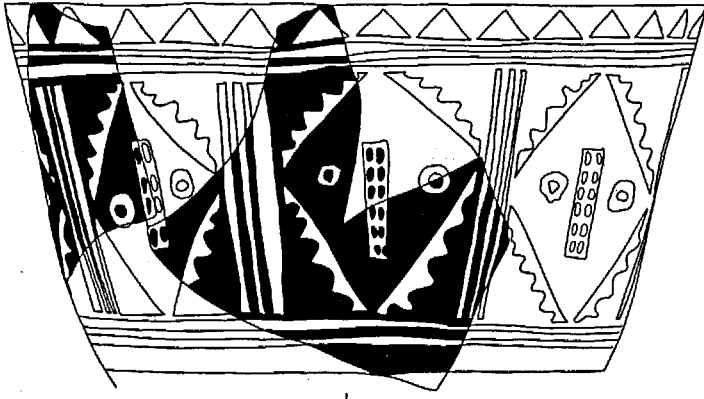
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16

SEE PAGE 40. SCALE, 1:3

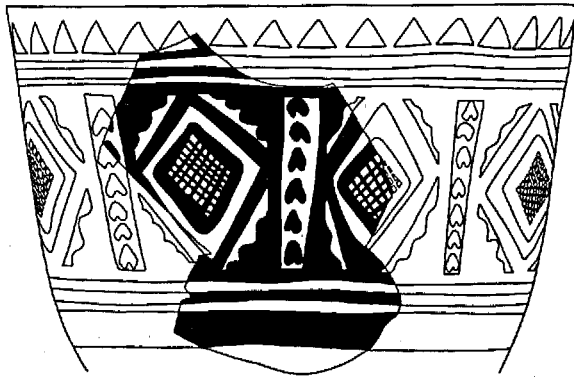
No.	Field No.	Provenance	Level	Form	Design	D.	H.	Th.	Remarks
1	5129			II	VII A 2d	28.0	15.3 mx.	.85	
2	4204	Trench II, 50-60 m., .2 m. deep	surf.		VII A 2f			.4	bowl side, cream-tan ware
3	2176	M 27			VII A 2g				pot neck
4	4002	Rm. XIV 3	IV	I?	VII A 2e	22.8	13.6 mx.	.8	tan ware
5	4181	N 28, +2.7 m. (above Rm. II 2)	IV		VII A 2g			.45	bowl rim
6	4005	Q 31, outside Rm. XII 4, +2.62 m. and deeper	surf.		VII A 2h			.6	shoulder of small pot
7	5456	K 28, +1.6 m.	III		VII A 3a in.			.3	bowl rim, drab ware
8	5652				VII A 3b			.1	bowl side, light gray-green ware, black paint etched
9	4004	Rms. XII 1, 3 O 32, +1.77 m.	III surf.	VII	VII A 3a	ca. 19	6.0 mx.	.5	light tan ware, red-brown paint
10	5433	L 27, above Rms. I 1-2	IV, surf.	III?	VII A 3b in.	18.8	5.8 mx.	.6	tan ware
11	4008	Rm. XIV 1	IV	I	VII A 3b			.5	light green ware



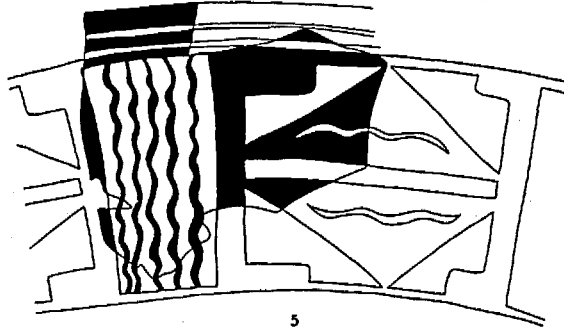
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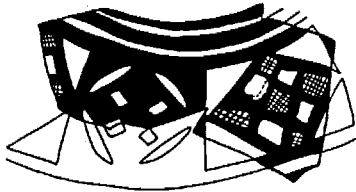
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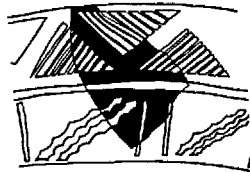
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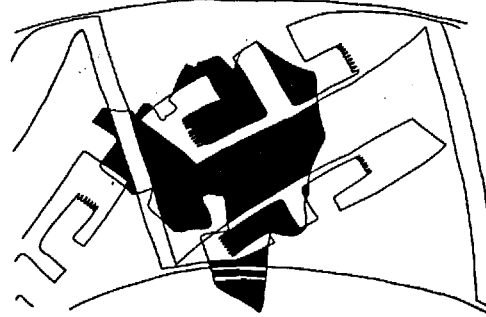
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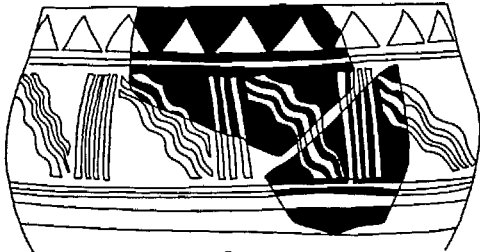
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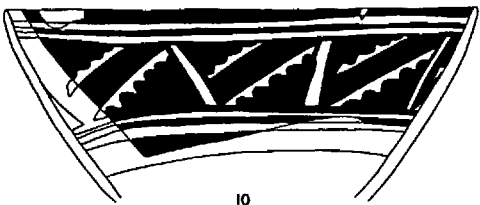
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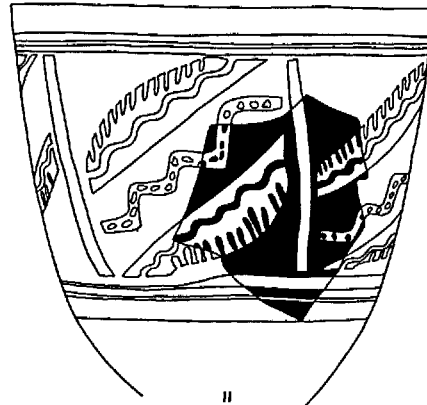
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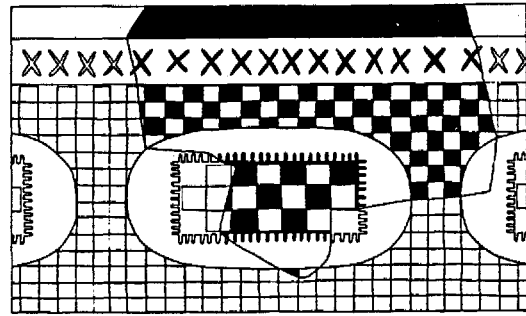
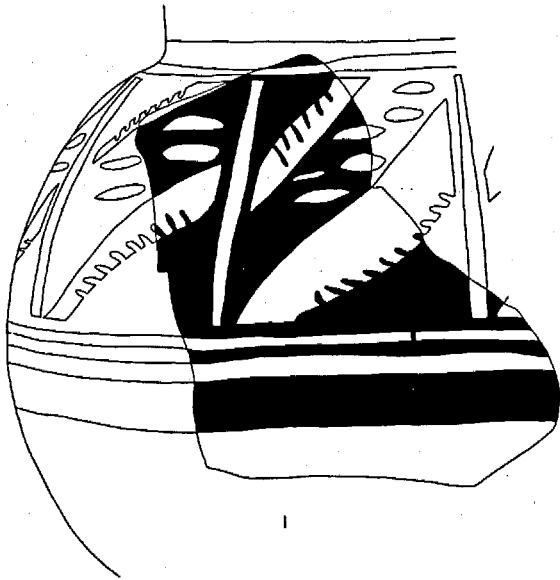


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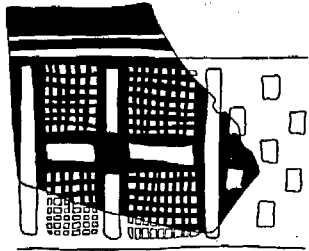


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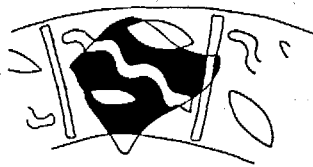
No.	Field No.	Provenance	Level	Form	Design	D.	H.	Th.	Remarks	Scale	See Page
1	2913	O 30, +3.25 m.	surf.	X	VII A 3b	38.1	23.4 mx.	.8-1.3	light tan ware	1:4	40
2	3372	N 27, +1.5 m.	III		VII B	24	11.0 mx.		bowl rim, light tan ware; redrawn from field sketch	1:3	40
3	4194	O 33, N. of walls of Rm. IX			VII B	22	9.2 mx.	.6	bowl rim	1:3	40
4	5366	M-N 26, +2.5 m.	IV		VII A 3c			.5	bowl side, cream-tan ware	1:3	40
5	2948	Q 31, level of small walls and below	I-II		VII B in. in centrifugal composition	22.5	10.8 mx.		bowl rim	1:3	40
6	4022	L 28, upper fill of Rm. XI	top III		VII B	24	10.4 mx.	.55	bowl rim, light tan ware	1:3	40
7	3354				VII B			.6	bowl side, cream-tan ware	1:3	40
8	4333	N 30, +2.75 m.	top IV, surf.		VII A 3c			.35	bowl side, light tan ware	1:3	40
9	4171	P 31, +2.75 m.	surf.		VII B			.4-.6	lower side of bowl, light tan ware, red-brown paint	1:3	40,55
10	4000	L 29, +2.37-3.37 m.	IV, surf.		VII B			.7	bowl side	1:3	40
11	4395	Rm. XIV 1 N 26, +3.8 m.	IV surf.	XI A	VII B	ca.12.3	11.1 mx.	.45	light tan ware, red-brown paint	1:3	40



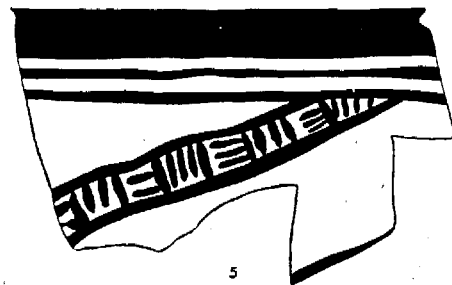
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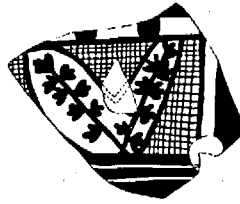
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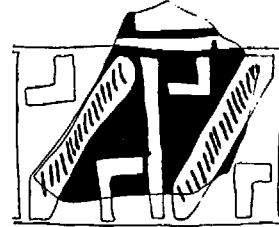
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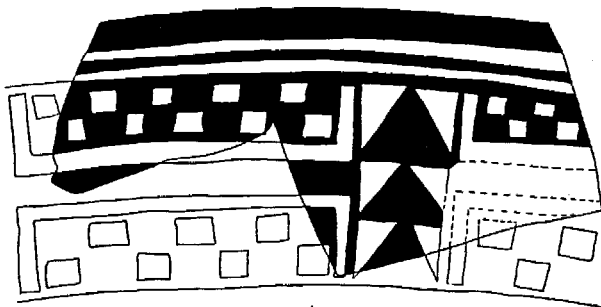
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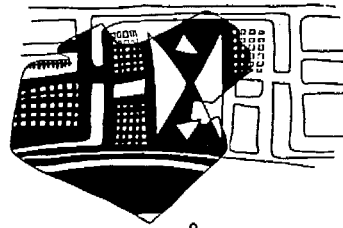
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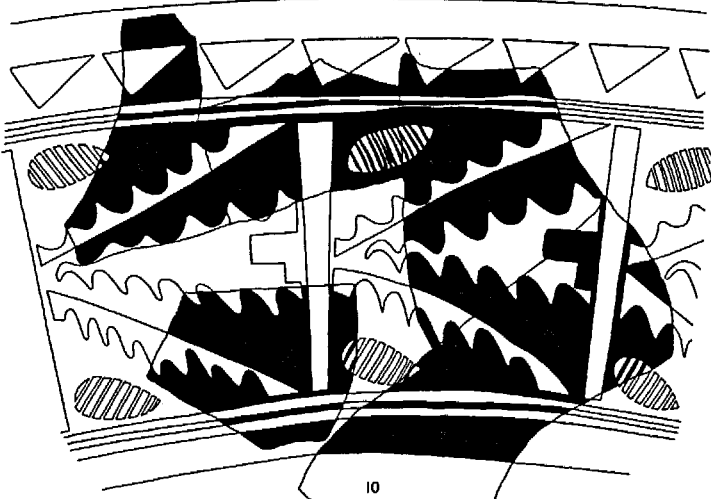
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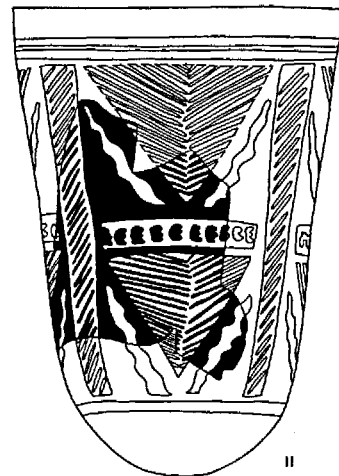
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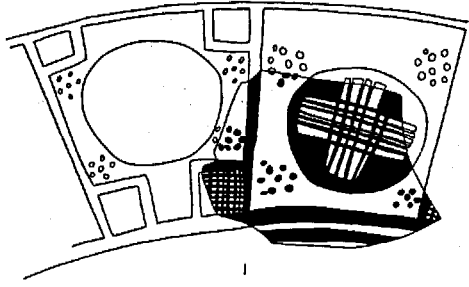
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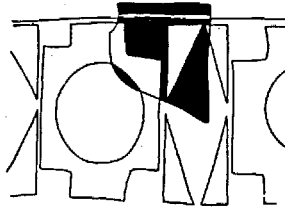
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SCALE, 1:3

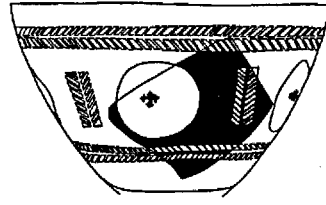
No.	Field No.	Provenance	Level	Form	Design	D.	H.	Th.	Remarks	See Page
1	4017	Q 30, W. of Rm. XII 2	III?		VII B			.4	lower side of bowl, tan ware	40
2	4425	Rm. XI	III		VII B			.4	bowl rim; restoration probable	40
3	4902	P 29, +3.5 m. (above House XVII)	surf. IV	IV	VII B			.3		40
4	4016	M 31, below small walls to v.s.	I		VII B	20	12	.6	bowl rim, tan ware	40
5	2150	Rm. XIII 2, floor	IV	XII B, Pl. 17:1	VII B	11.4	7.7 mx.		cream-tan ware	40
6	4454	Rm. XIV 3	IV		VII B, XI C			.45	bowl rim	40
7	4613	Rm. VIII 1 M 31, +2.47 m.	III surf.		VII B			.7	bowl side; restoration probable	40
8	2519	Trench I, 30-40 m., +1.92 m.	IV		VII B	20	5.5 mx.		bowl rim, cream-tan ware, red-brown paint; restoration probable	40
9	4050	Rms. V 1-2, XI	III		VII B	30	ca. 15 mx.	.4-.75	bowl rim, light tan ware	40
10	3327	Rm. XIV 2	IV		VII B out.; XVII D-E in., Pl. 65:1				bowl side	40
11	2418	N 29, +2.02 m.	base IV		VII B			.45	bowl side	40
12	2399	Rm. XIII 1	IV	II?	VII B	32	11.5 mx.		redrawn from field sketch, restored in part from PPA 4409, Rm. XVII 4: Level IV	40
13	2064	Rm. III 2	III	XI C	VIII A	11.0	15.7	.4		15, 41
14	2104		III	XI C	VIII A	11.2	20.5	.3		34, 41



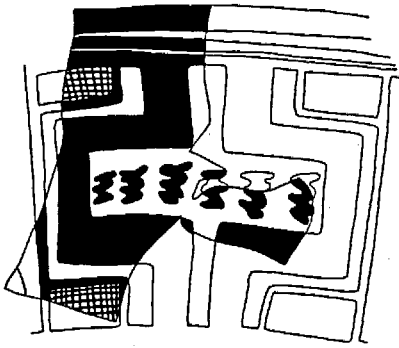
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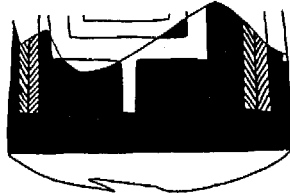
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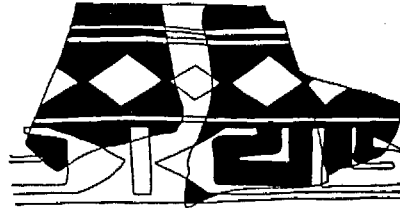
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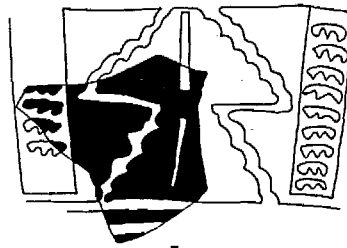
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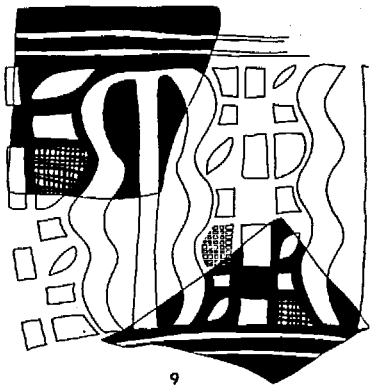
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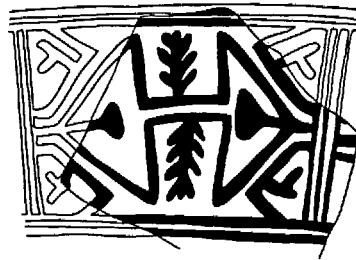
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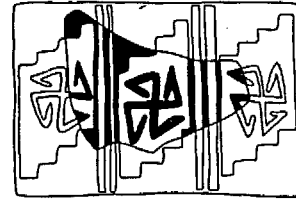
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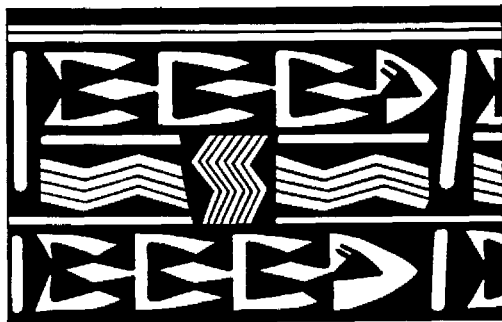
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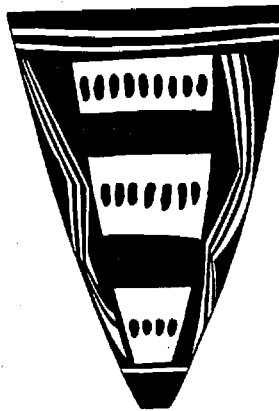
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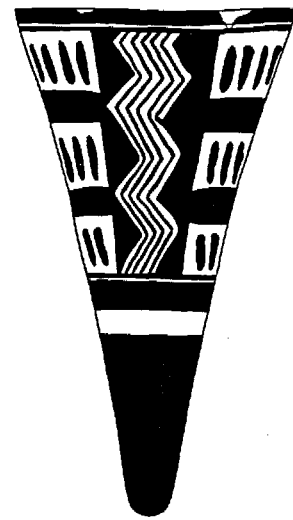
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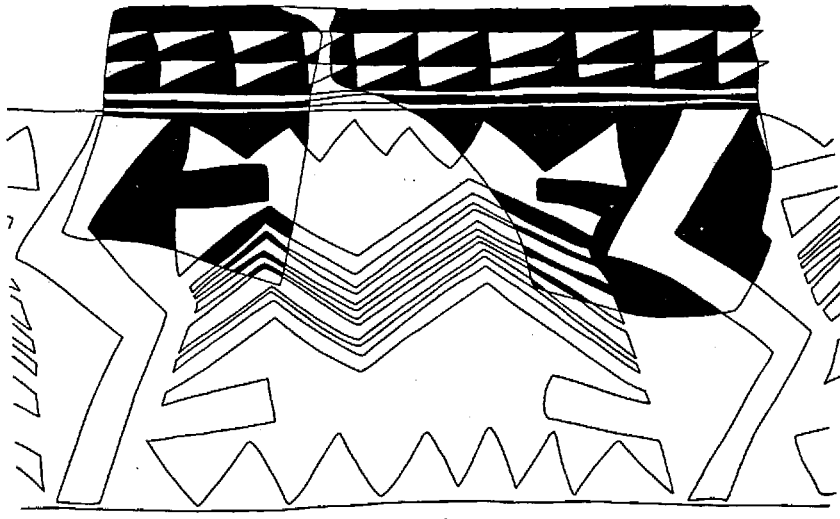


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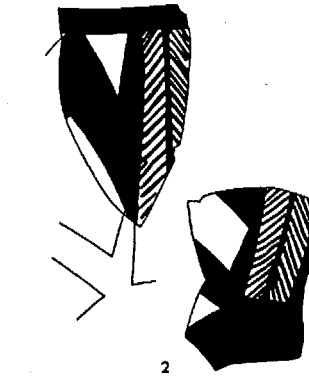


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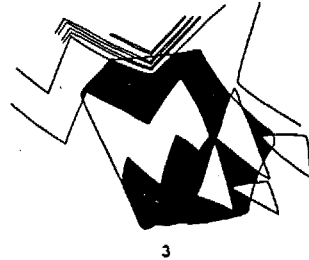
No.	Field No.	Provenience	Level	Form	Design	D.	H.	Th.	Remarks	Scale	See Page
1	3419	L 29, +2.37 m. L 29, +2.57 m.	IV IV, surf.	I	VIII B	28	12.2 mx.	.6		1:3	33, 41
2	4385	M 28, +1.27-1.87 m. Rm. XIV 2	III IV		VIII B	22		.35	bowl rim	1:3	41
3	4510	Rm. V 6 or VI 3	III		VIII B			.4	lower side of bowl, tan ware	1:3	41
4	4128	P 32-33			IX A	16	11.9	.55	bowl rim; redrawn from field sketch	1:3	41
5	2521	Rm. IV 3	III		IX A			.4	bowl side, red-brown paint	1:3	41
6	4175	L 28, in kiln	III		IX A			.3-.4	pot belly	1:3	41
7	4179	O 27-28, debris in street	III		IX A			.6	bowl side, tan ware; redrawn from field sketch	1:3	41
8	4706	N 27, court level	III		IX A			.5	bowl side	1:3	41
9	4238	M 31, level of small walls and below	I-II		IX B			.65	lower side of bowl	1:3	41
10	4159	L 28, in kiln	III		IX B			.45	beaker(?) side, cream-tan ware, red-brown paint	1:3	41
11	5140				IX B			.75	bowl side	1:3	41
12	4121	M 31, outside Rm. XII 4 to v.s.	I-II		IX B			.6	pot shoulder, red-brown paint; restored from field sketch	1:3	41
13	4199	L 28, on kiln	IV		IX B	16	7.0 mx.	.65	bowl rim, cream-tan ware; redrawn from field sketch	1:3	41
14	4174	Rm. X 2	III		IX B			.55	lower side of bowl, cream-tan ware	1:3	41



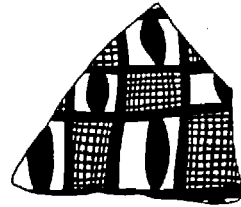
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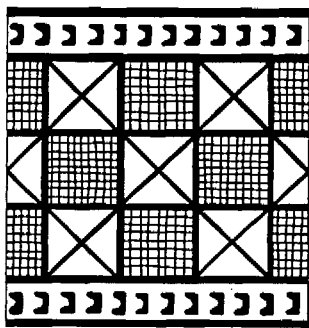
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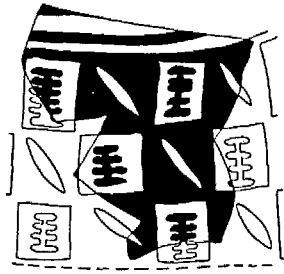
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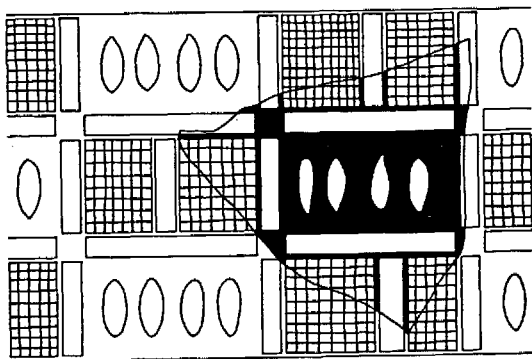
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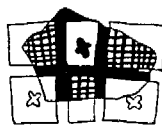
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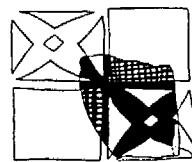
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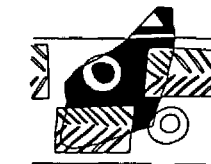
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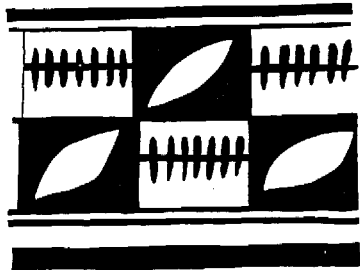
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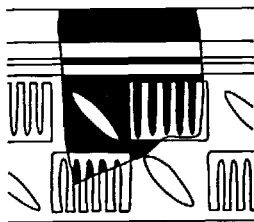
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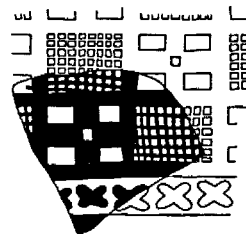
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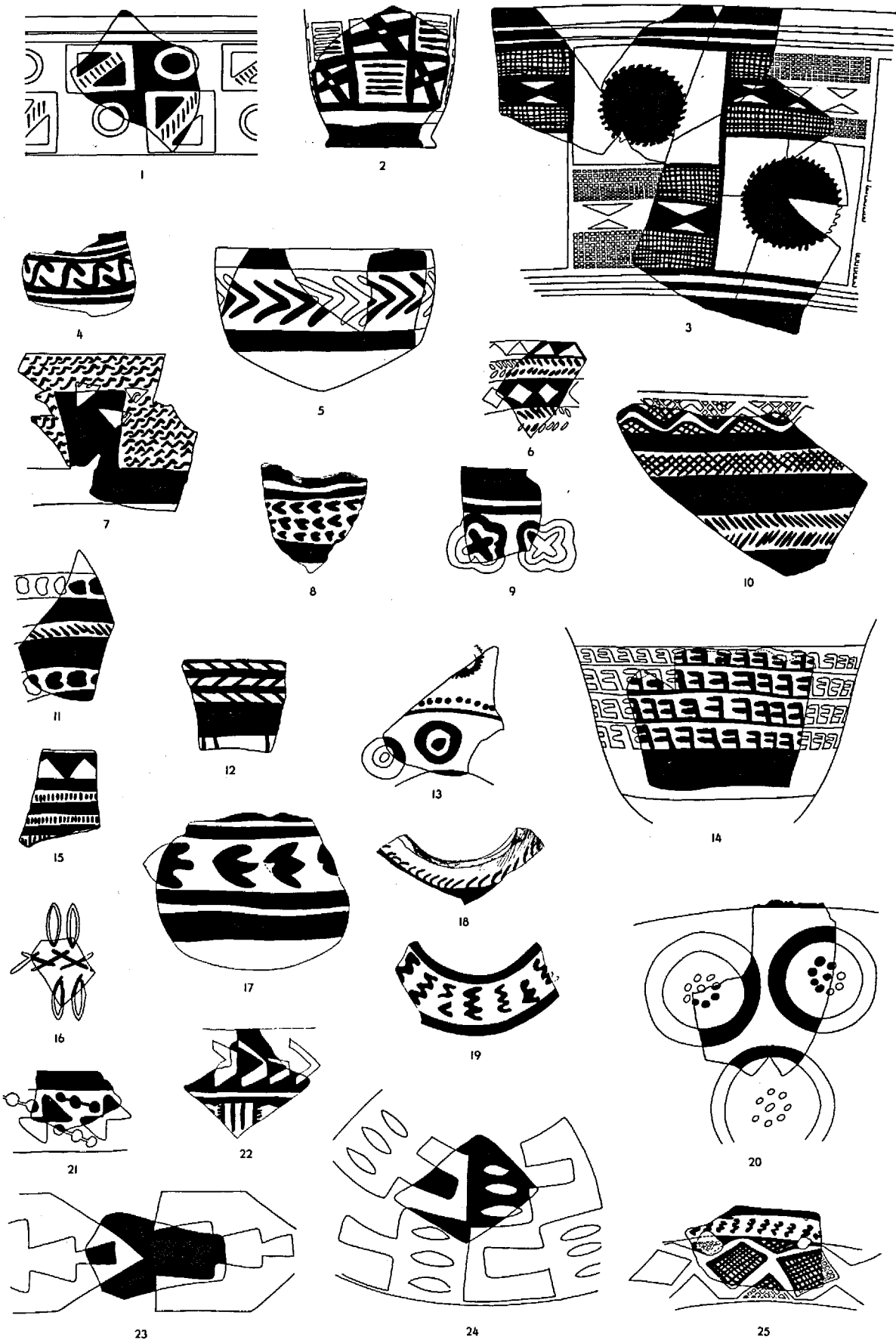
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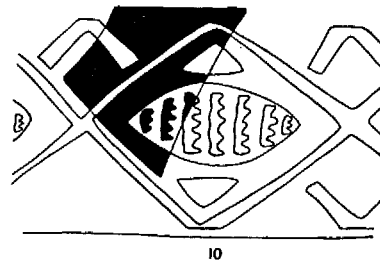
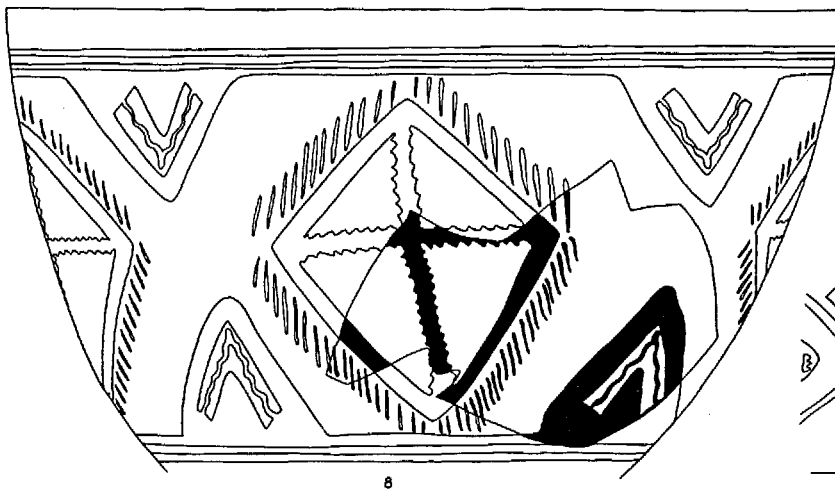
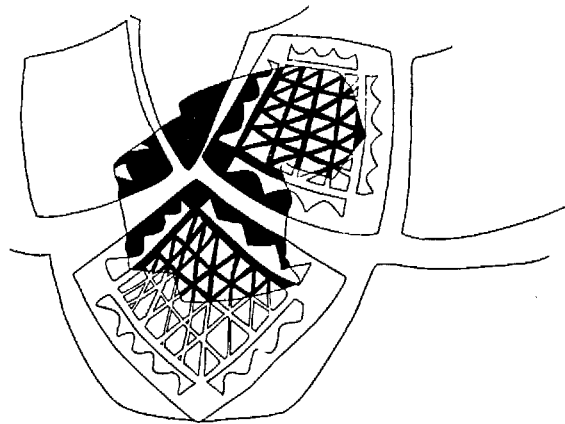
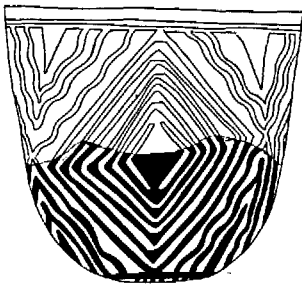
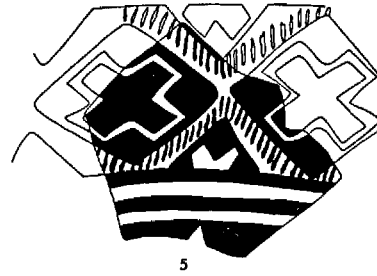
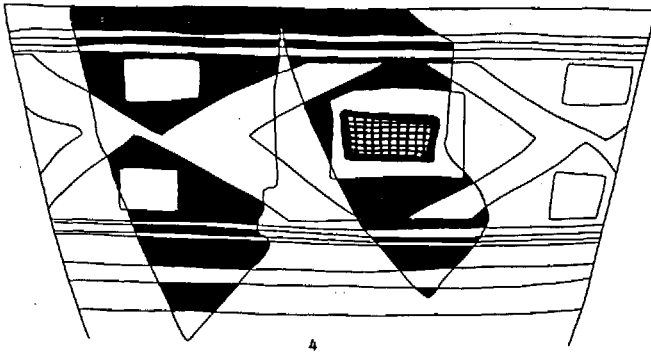
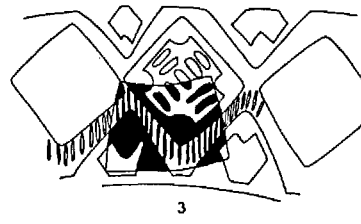
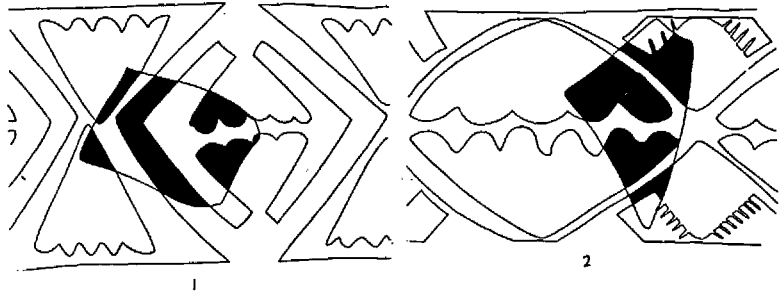
SCALE, 1:3

No.	Field No.	Provenance	Level	Form	Design	D.	H.	Th.	Remarks	See Page
1	4169	N 27, +1.7 m.	top III	XI B	IX B			.2-.5	upper side near rim, tan ware; redrawn from field sketch	41
2	4130	Rm. V 1	III	XI B, Pl. 16:2	IX B	8.4	7.2 mx.	.5-1.2		41
3	3415	L 30, +2.32 m.	IV		IX B	30	17 mx.	.6-.95	bowl rim	41
4	3123	Q 30, W. of Rm. XVII 2	III?		X A	8	4.7 mx.		small pot	41, 55
5	2807	Rm. VII 2	III	XII B	X A	11.6	7.5			41, 55
6	4388	Rm. IV 3	III		X A, XI C			.25	bowl rim, light tan ware	41
7	2152	Rm. XIII 2	IV		X A				bowl rim	20, 41
8	4660	N 32, somewhat above v.s.	I-II		X A			.6	jar shoulder	41
9	4274	O 33			X A			.4	bowl rim	41
10	4391	Q 28, +3.5 m.	surf.		X A, XI A, G			.4-.8	bowl side	41, 44
11	4897				X A			.6	beaker side, tan ware	41
12	4522	L 30, +2.32 m.	IV		X A	18	4.6 mx.	.3	bowl rim	41
13	4775	Trench I, 27-30 m., +.32 m.	I		X A			.3-.8	bowl side	41
14	4122	Rm. VIII 6	III	VI?	X A	17.2	7.6 mx.	.4	light tan ware, red-brown paint	41, 55
15	4496	M 29, +2.3 m.	IV		X A, XI A			.4	bowl rim, tan ware	41
16	5668				X A, XI A			.25	bowl side	41
17	2921	Rm. IV 3	III	IX	X A	14	7.5 mx.		light brown ware	41, 55
18	5005	O 32, +1.52-2.37 m.	surf.		X A			.6	pot shoulder	41
19	3124	M-N 30, over Rm. VIII 2	IV, surf.	VIII	X A	12	4.0			41
20	4787	Rm. I 2 W. of Rm. XVII 2	III IV?		X A			.3	bowl rim	41
21	5334	Trench I, 40-44 m., level of Houses XIII, XV	IV		X A in.	16	3.1 mx.	.35	bowl rim	41
22	3135	Rm. XII 2	III		X A				pot neck	42
23	4487	L 29, +2.17 m.	IV		X A			.55	bowl side	42
24	4442	Rms. JV 1, V 2	III		X A			.4	pot shoulder	42
25	4689	Trench I, 0-10 m., ±0 m.	I, surf.(?)		X B 1			.55	bowl side, fine grits	42



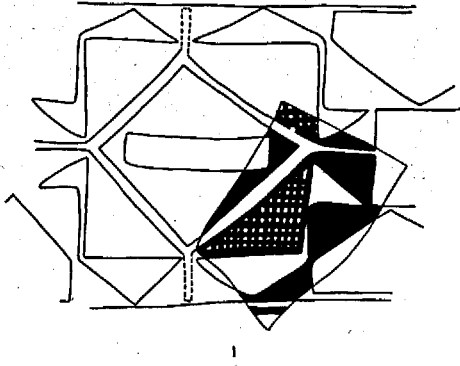
SCALE, 1:3

No.	Field No.	Provenance	Level	Form	Design	D.	H.	Th.	Remarks	See Page
1	4460	Rm. IV 3 N 29, +2.02 m.	III base IV		X B 1			.3	bowl side; restoration probable	42
2	4441	Trench I, 20-30 m., +1.47 m.	III		X B 1			.65	bowl side; restoration probable	42
3	4339	Rm. XVII 3	IV		X B 1			.35	shoulder of small pot, cream-tan ware	42
4	3891	Rms. V 6, VII 3 M-N 26, +2.5 m.	III IV	I or II	X B 1	26.0	13.3 mx.	.75		42
5	4352	O 27, +3.87 m.	surf.		X B 1			.35-.5	lower side of bowl, cream-tan ware	42
6	2814	N 29			X B 1	10.6	5.8 mx.		cup	42
7	4155	Rm. IX P 31, +2.75 m.	III IV, surf.		X B 1			.3-.8	shoulder of small pot	42
8	4294	N 26, +4 m.	surf.	II?	X B 1			.4		42, 60
9	3952	P 28, +3.62 m.	surf.		X B 1			.4	shoulder of small pot, tan ware, brown-red paint	42
10	4489	L 29, +2.57 m.	top IV, surf.		X B 1			.4	bowl side	42

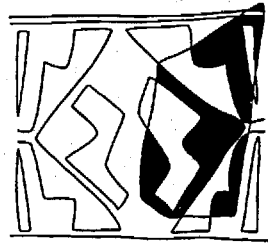


SCALE, 1:3

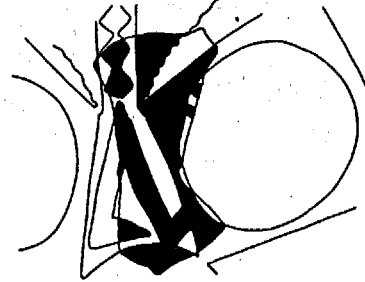
No.	Field No.	Provenance	Level	Form	Design	D.	H.	Th.	Remarks	See Page
1	4164	L 28, on kiln	IV		X B 2			.5	bowl side	42, 55
2	3999	L 30, +2.52 m.	top IV, surf.		X B 2			.6	bowl side	42, 55
3	4189	L 29, +2.17 m.	IV	IV B	X B 2			.15-.5	black paint etched	42, 55
4	4610	Trench II, 50-60 m., .2 m. deep	surf.		X B 2			.55	bowl side, red-brown paint	42, 55
5	2191	Trench I, 10-12 m., +1.4 m.	III, surf.	IV C	X B 3	15.6	10.0			28, 42, 55
6	2042	Rm. XI, floor	III	XI B, Pl. 16:1	X B 3	12.0	20.0			38, 42, 55
7	3441	Rm. III 3	III	I	X B 4	26	13 mx.	.6	cream-tan ware	42
8	4045	Rms. V 3, X 4-6	III	II (shallow bowl)	X B 5	19.8	5.2 mx.	.6	tan-red ware; design in plan	42
9	2159	Rm. VI 4, +1.3 m.	III	I	X B 5	23	14.0 mx.	4		17, 42



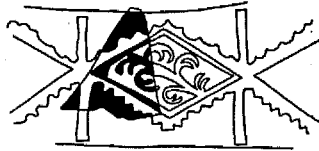
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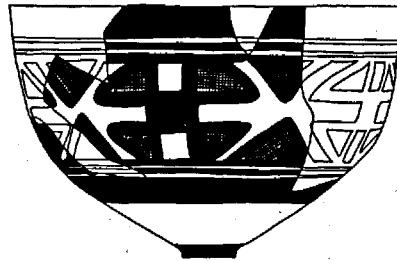
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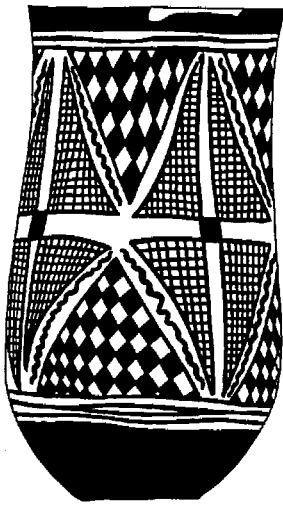
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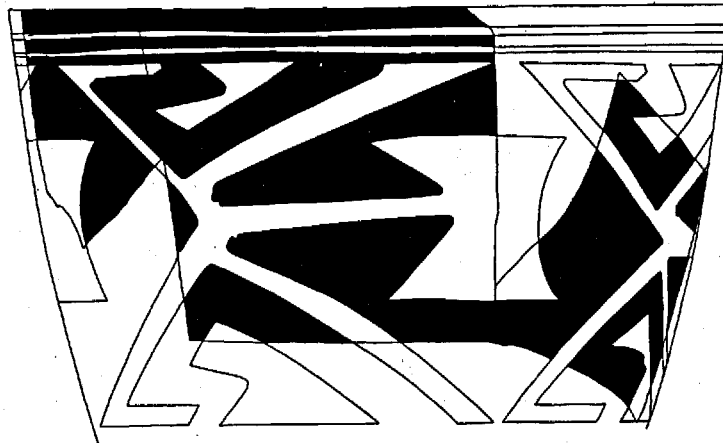
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5



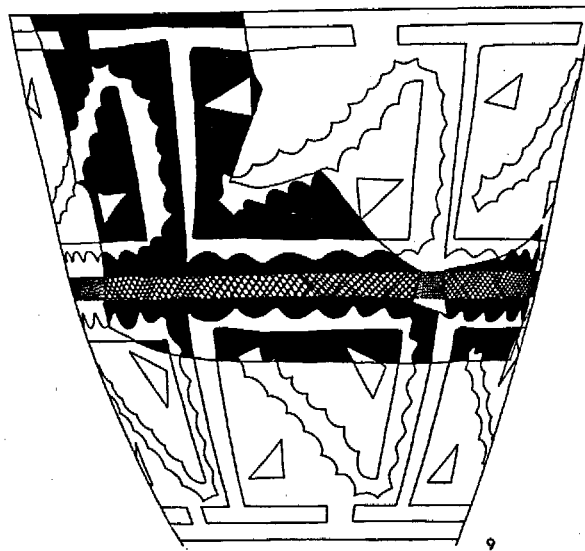
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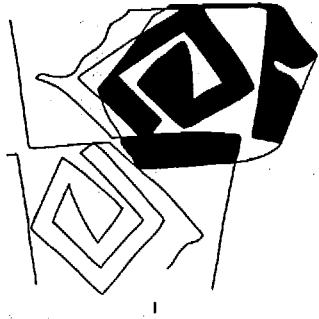
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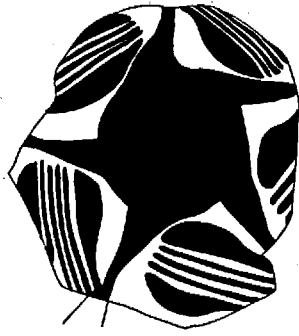
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SEE PAGE 42. SCALE, 1:3

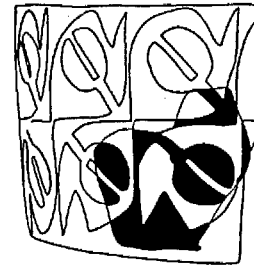
No.	Field No.	Provenience	Level	Form	Design	D.	H.	Th.	Remarks
1	4070	Rm. XII 2	III		X B 6	18	6.1 mx.	.4	bowl rim, green-cream ware
2	2119	L 27, +1.37 m.	III	IV	X B 6				red color in.
3	2201	Trench I, 10-15 m., +1.32 m.	III	III, Pl. 10:13	X B 6	12	5.8 mx.	.3	
4	4077	Rm. XIII 3	IV		X B 6	ca. 14	6.5 mx.	.2-.4	bowl rim, yellow-cream ware; re-used as scraper
5	3376			I or II	X B 6			.45-.6	
6	4570	Rms. I 1-2	III	III?	X B 6	12	3.8 mx.	.7	
7	4152	Rm. XIII 3	IV		X B 6			.65	bowl side, tan ware
8	4105	Rm. V 5	III		X B 6			.3	bowl side, light tan ware
9	5004				X B 6			.35	bowl side
10	3737	Rm. II 1	III	III?	X B 6	17.6	10.0 mx.	.25	redrawn from field sketch
11	5655	L 31, +2.17 m.	IV or surf.	IV?	X B 7	14	ca. 8.5 mx.	.15	
12	4026	Trench I, 10-20 m., +1.4 m.	III		X B 7			.65	lower side of bowl
13	4132	Rm. V 6	III		X B 7			.4	bowl side, light tan ware
14	2208	O 33	?	IV B	X B 7	14.2	9.5 mx.	.3	tan ware
15	4361	O 27, +3.5 m.	surf.		X B 7			.5	bowl rim



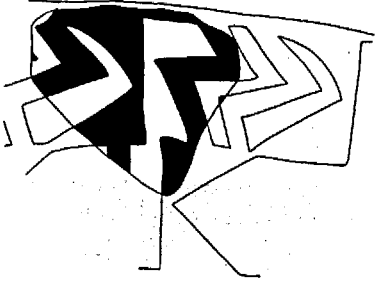
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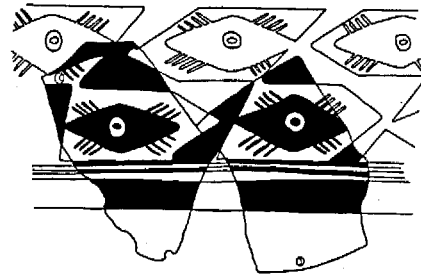
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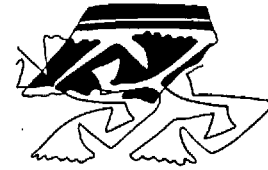
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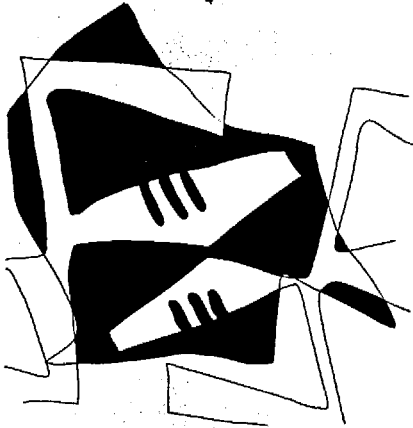
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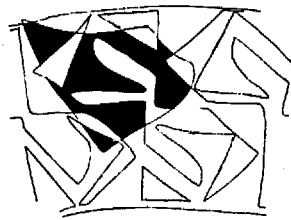
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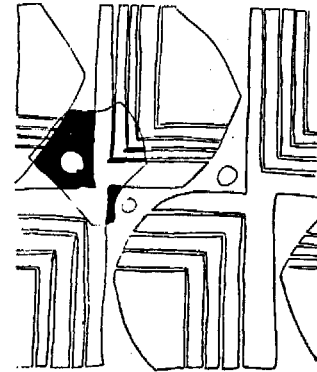
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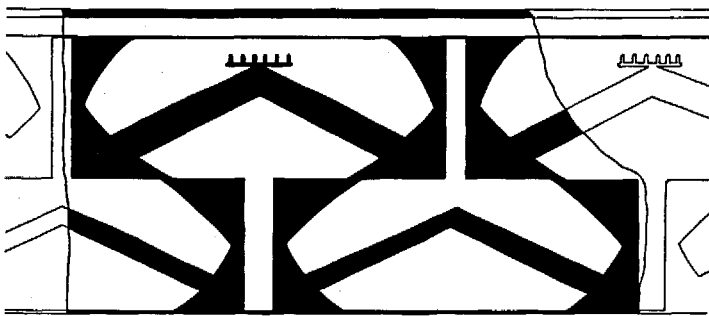
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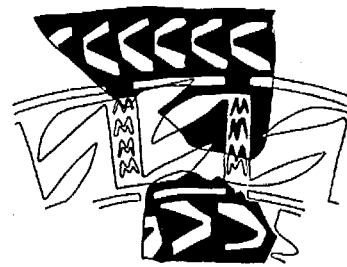
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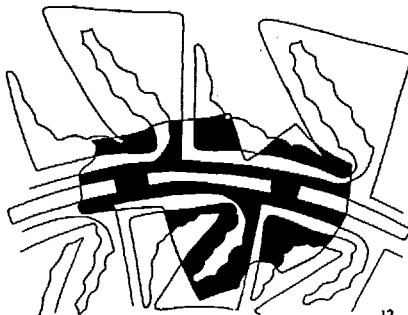
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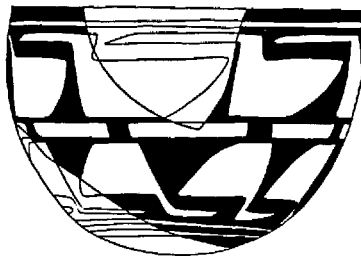
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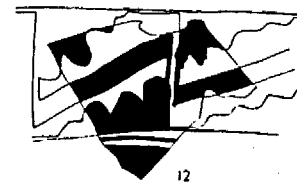
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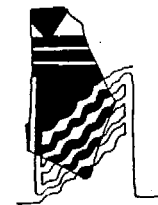
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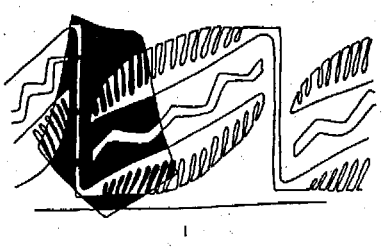


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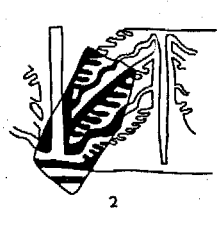


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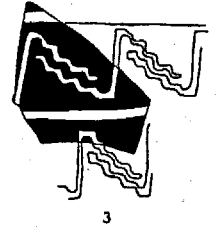
No.	Field No.	Provenience	Level	Form	Design	D.	H.	Th.	Remarks	Scale	See Page
1	4356	Q 30			X B 7			.3-.5	bowl side	1:3	42
2	4359	O 30, +2.45 m.	IV, surf.		X B 7			.6	bowl side	1:3	42
3	4258	Rm. XIII 3	IV	XI B	X B 7			.5		1:3	42
4	5651	O 29-30, W. of House VIII	III?		X B 8			.25	bowl side	1:3	42
5	3943	Trench I, 10-20 m., +2 m.	I		X B 8	18	7.2 mx.	.5	bowl rim	1:3	42
6	4392	O 32, +2.37 m.	surf.		X B 7			.6	bowl side, cream-tan ware	1:3	42
7	4373	M-N 26, +2.5 m.	IV		X B 7			.8	bowl side, tan ware	1:3	42, 55
8	2912	N 31, among small walls	II	X	X B 8				paint weathered	1:6	42
9	4788	Trench I, 10-20 m., ±0 m.	I	IV?	X B 8	14	6.8 mx.	.4	light tan ware	1:3	42
10	2835	Rm. II 1	III	XII C	X B 8	12	6.2 mx.	.4		1:3	42
11	4198	Rm. VI 6	III		X B 8			.6	bowl side; restoration probable	1:3	42
12	2357a	Trench I, 8 m., +1.3 m.	III, surf.		X B 8			.8	pot	1:3	42
13	3456	K 31, +2.5 m. and deeper	surf.		X B 8				jar shoulder	1:3	42
14	4129	M 28, +1.4-1.6 m.; N 28, level of Houses I-II	III		X B 8	15	5.5 mx.	.3	bowl rim	1:3	42, 55
15	2900	L 28, +2 m.	IV		X B 8			1.4	jar shoulder, pink-tan ware, cream-tan surface	1:3	42
16	5621	Rm. XVII 2 P 28, +3.62 m.	IV surf.		X B 8			.4	bowl side	1:3	42
17	4526	L 28, upper fill of Rm. XI	IV?		X B 8			.35	bowl side, tan ware	1:3	42
18	4525	N 30, +3.25 m.	surf.		X B 8			.3	lower side of bowl, cream-tan ware	1:3	42
19	4665	N 32, +2.25 m.	surf.	II	X B 8	22.2	5.7 mx.	.5	tan ware, red-brown paint	1:3	34, 42



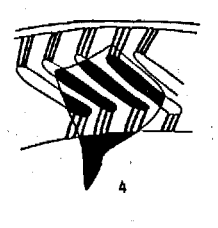
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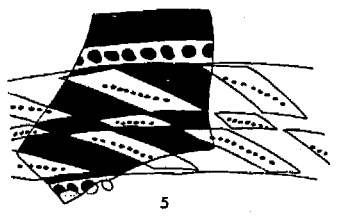
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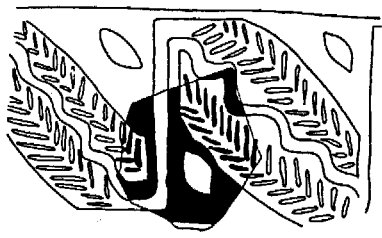
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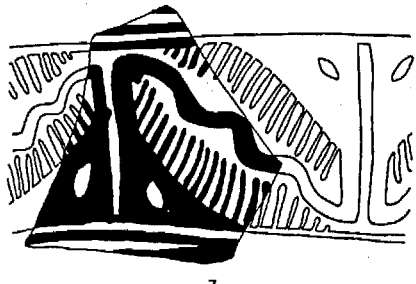
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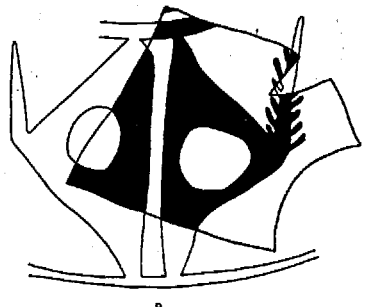
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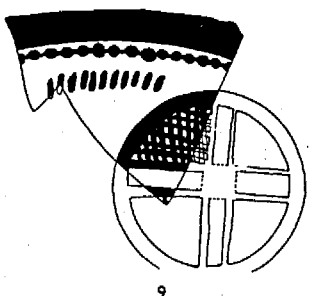
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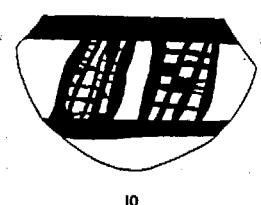
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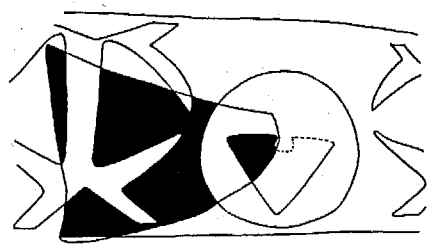
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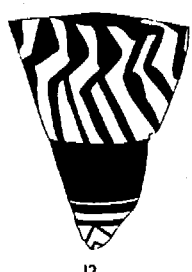
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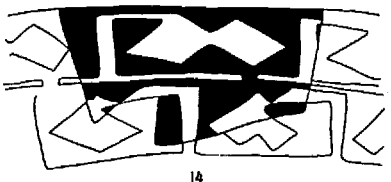
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12



13



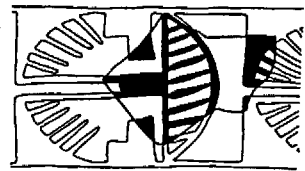
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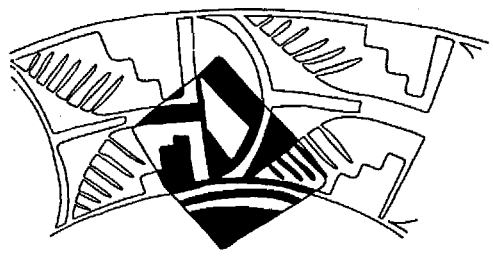
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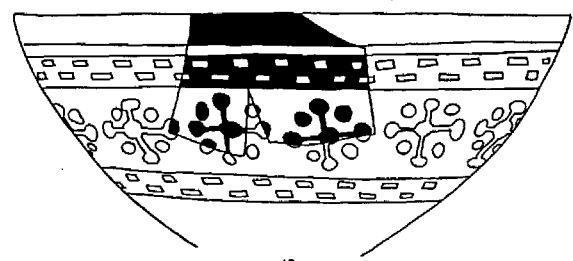
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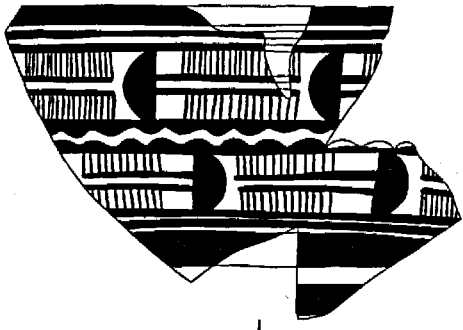
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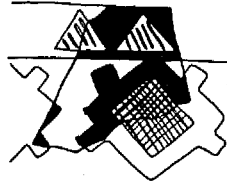
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SCALE, 1:3

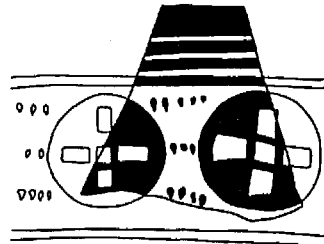
No.	Field No.	Provenience	Level	Form	Design	D.	H.	Th.	Remarks	See Page
1	2164	Rm. XIV 1	IV	II	X B 8	25.2	12.5 mx.	.4		20, 42
2	3968	M-N 29	surf.		X B 8			.5	bowl rim, tan ware	42 f.
3	4792	Rms. XII 1-3	III		X B 8			.65	bowl rim, tan ware, red-brown paint	42
4	4739	N-O 31, level of small walls	II		X B 8	17.5	5.4 mx.	.35	bowl rim, drab ware	42
5	3243	Rm. II 1	III	III?	X B 8	13	6.5 mx.	.55		42
6	4557	N 28, +2.7 m. (over Rm. II 2)	IV		X B 8			.5	bowl side	42
7	5660				X B 8			.3	pot shoulder, tan ware; res- toration probable	42
8	5628	Trench II, 50-60 m., .55 m. deep	surf.		X B 8			.25	bowl side	42
9	4123	Rm. XIV 3 L 28, +2.7 m.	IV top IV	IV B	X B 8	ca. 24.7	ca. 10.5	.3-.55		42
10	4540	M 32, +2.25 m.	surf.		X B 8			.4	bowl side	41 f.
11	4701	N 33, +1.87 m.	surf.		X B 8			.5	bowl side, red-brown paint	42
12	5436	Rm. VI 4	III	II D	X C 1 in.	20	8.1 mx.	.7	yellow-cream ware	27, 42
13	3158	Trench I, 60-70 m., +3.05 m.	surf.	VIII	X B 8	8	2.2 mx.		design in plan	42
14	4190	Trench I, 10-20 m., +.2 m.	I		X C 1 in.	22	4.4 mx.	.35	bowl rim, cream-tan ware	42
15	5422	O 31, +2.27-2.87 m.	surf.	IV?	X C 1 in.	13	7.2 mx.	.4		42
16	4131	Rm. I 1	III	II	X C 1			.35	light tan ware	42
17	3889	Rm. VIII 1	III		XI J 2			.4	jar shoulder	42, 45



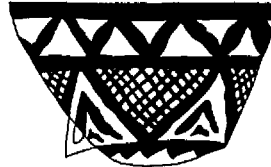
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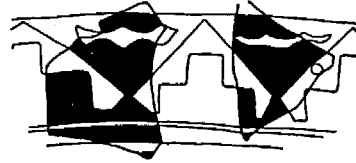
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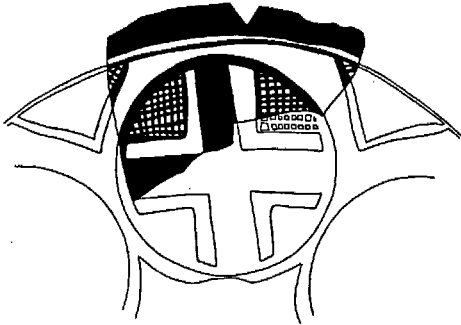
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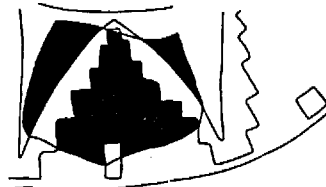
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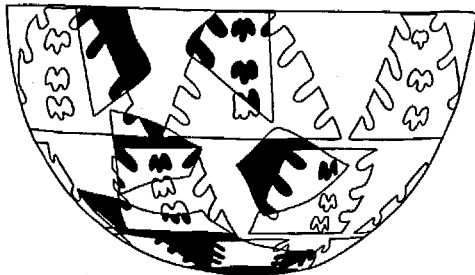
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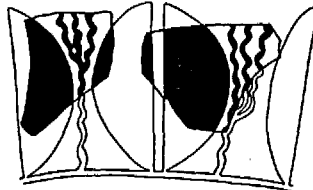
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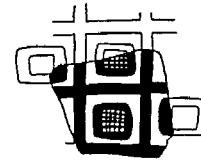
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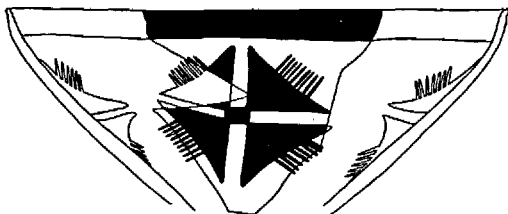
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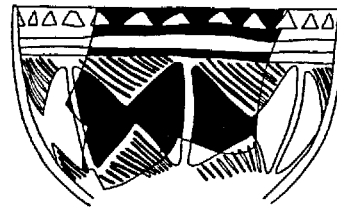
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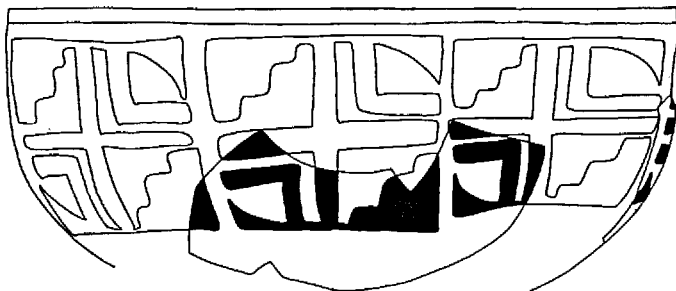
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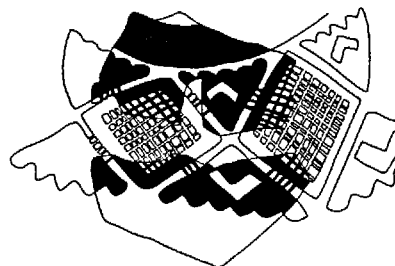
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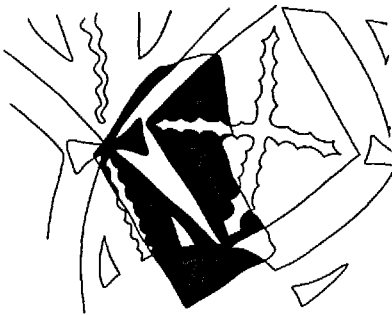
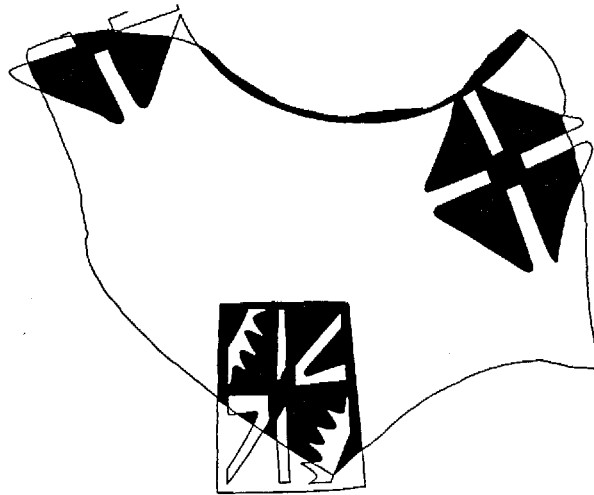
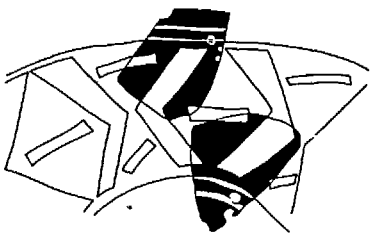
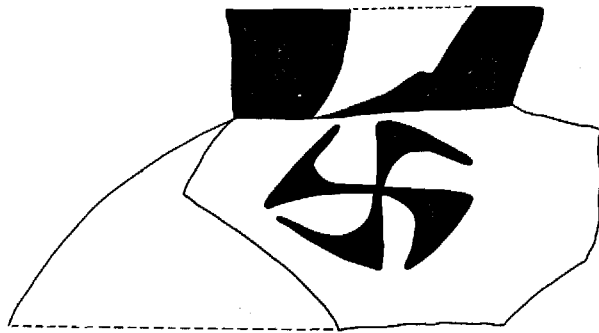
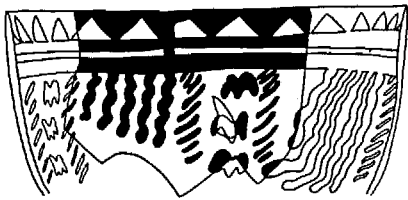
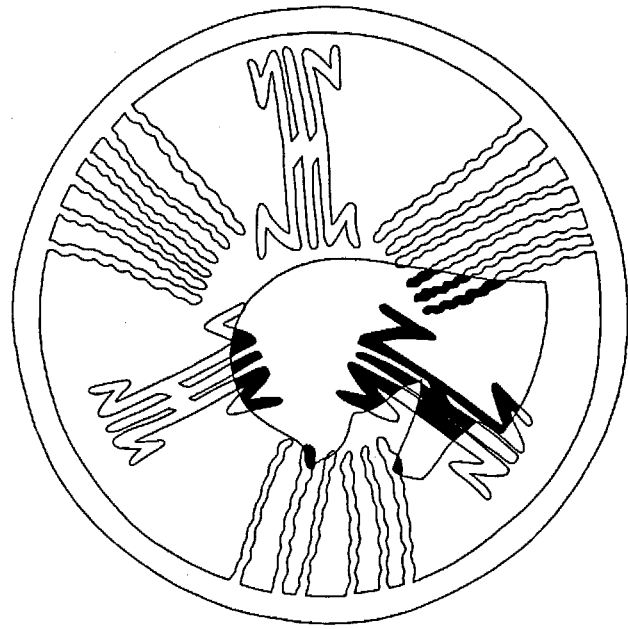
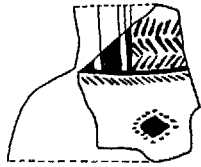
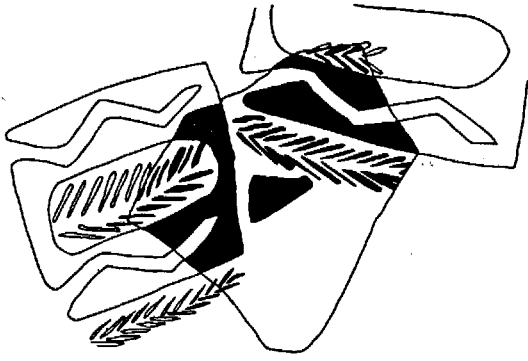


16



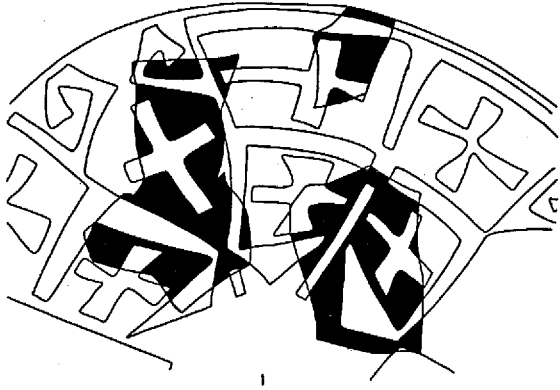
17

No.	Field No.	Provenience	Level	Form	Design	D.	H.	Th.	Remarks	Scale	See Page
1	5417	Rm. XVII 2	IV		X C 1 in.			.7	lower side of bowl, yellow-cream ware	1:3	42
2	5404	Rm. VII 3	III	III	X C 2 in.	14.5	5.2 mx.	.45	light tan ware	1:3	43
3	3234	Trench I, 50-60 m., +2.77 m.	IV	III, Pl. 11:4	X C 2 in.	12.2	6.2	.6	design in plan	1:3	43
4	2436	O 28, +3 m.	top IV	IX	X C 3	ca. 12	5.5 mx.			1:3	34, 43
5	5411	probably Trench I, 0-10 m., +.8-1.3 m.	probably III or surf.	III	X C 2 in.	19.5	8.2 mx.	.5-1.1	design in plan	1:3	43
6	5430	O 29, +3.62 m.	surf.	IV?	X C 2 in.	16.0	7.4 mx.	.3		1:3	43
7	2893	Trench I, 10-20 m., ±0 m.	I	X	X C 3					1:3	43
8	4637	L 31, +1.77 m.	top III		X D	14		.4	bowl rim	1:3	43
9	4622	Rms. XIV 1, 3	IV		X D			.4	lower side of bowl, cream-tan ware, red-brown paint	1:3	43
10	2892	Rm. XIII 3	IV	X	X C 3	ca. 39		1.1-1.5	cream-tan ware, cream surface	1:4	43

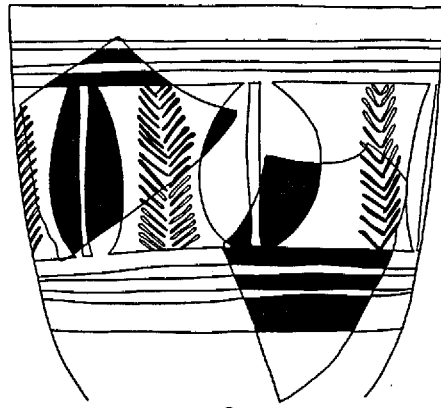


SEE PAGE 43. SCALE, 1:3

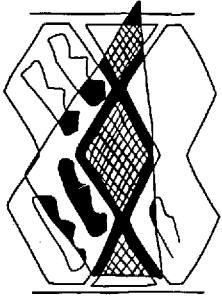
No.	Field No.	Provenance	Level	Form	Design	D.	H.	Th.	Remarks
1	5555				X D			.2-.5	bowl side; restoration probable
2	4345	M 31, below small walls to v.s.	I	I	X D			.5	
3	4184	Rm. XII 2 P 30, +2.62 m.	III top IV, surf.		X D			.4-.6	bowl side
4	4440	Trench I, 30-40 m., +1.62 m.	III		X D			1.0	pot shoulder
5	2100	Rm. II 2, floor	III	IV B, Pl. 11:10	X D	15.2	11.6	.2-.5	
6	4053	Rm. XVII 5; N 29, +2.2 m. Q 31, +2.62 m. and deeper	IV surf.		X D	30	12.9 mx.		bowl rim, tan ware; redrawn from field sketch, intervening elements of design uncertain
7	4348				X D			.45	lower side of bowl, cream-tan ware, red-brown paint
8	4390	P 30, +2.45-3.25 m.	surf.		X E, X A			.7	jar shoulder, cream-tan ware
9	5664	Rms. IV 1, 3	III		X E	18	3.7 mx.	.2	bowl rim, yellow-cream ware
10	4786	P 31, +2.15 m.	IV or surf.		X E	20	7.3 mx.	.4	bowl rim, tan ware
11	5355	M 32, +2.25 m.	surf.		X E in.			.55	bowl side, drab ware
12	4784	Rms. V 3, X 1	III		X E			.45	bowl side, light yellow ware
13	3310	N 26. +3.8 m.	surf.	III	X E	17	9.8 mx.		



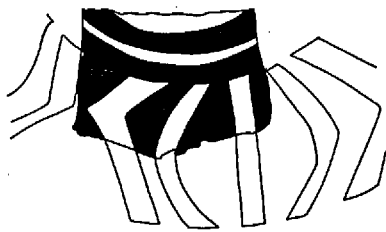
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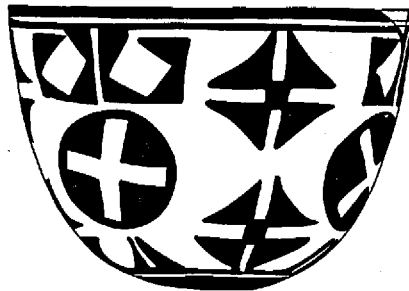
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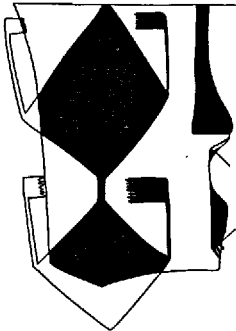
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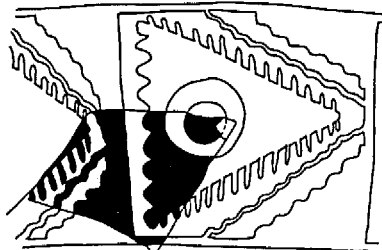
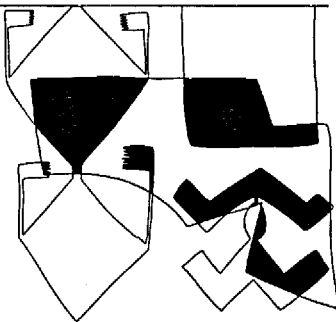
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5



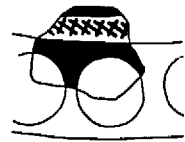
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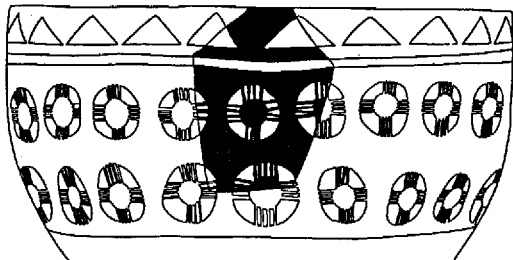
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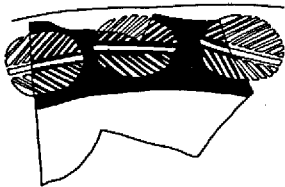
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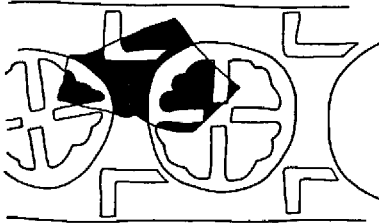
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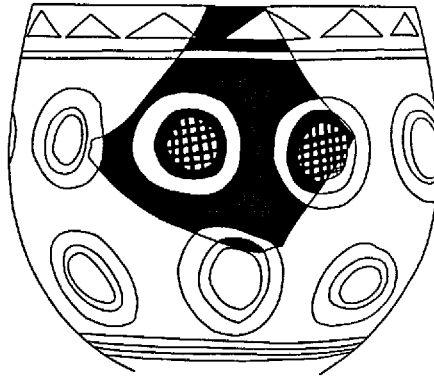
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11



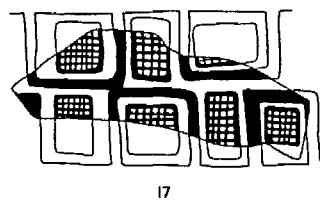
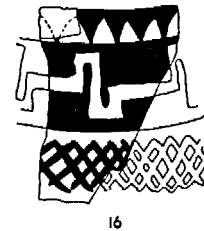
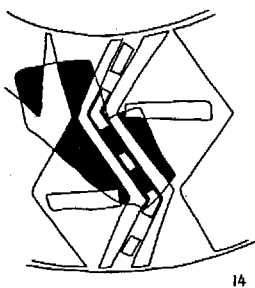
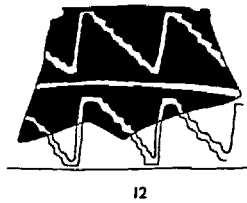
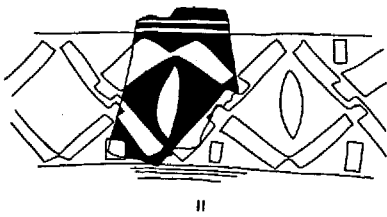
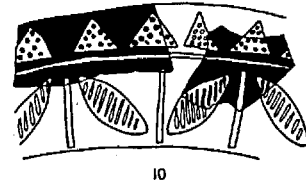
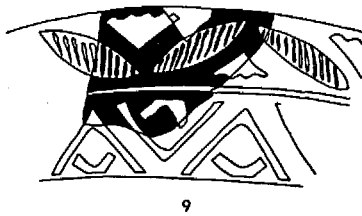
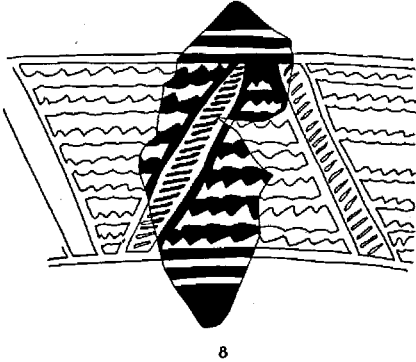
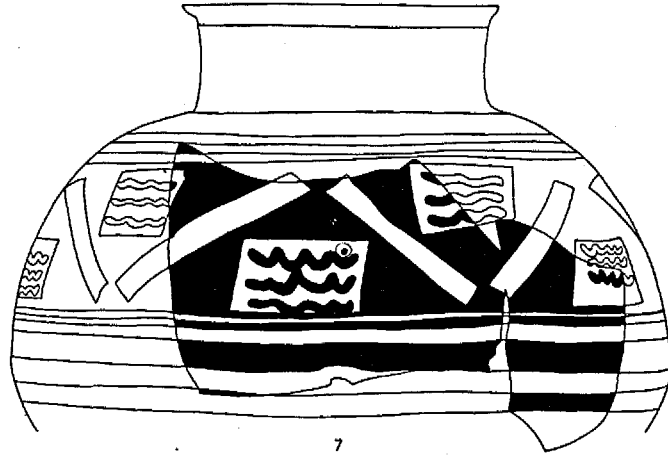
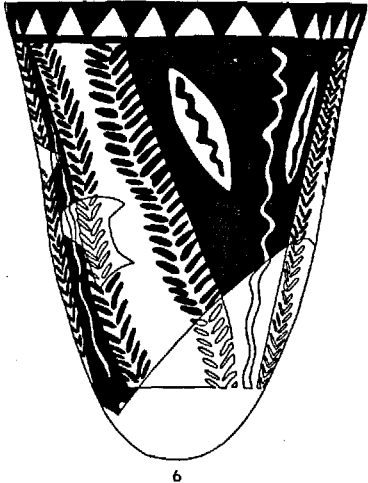
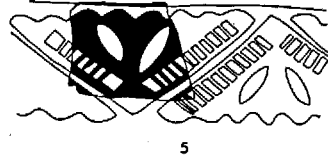
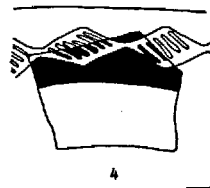
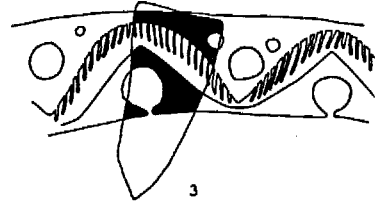
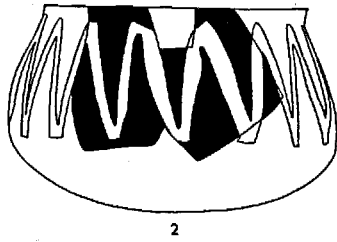
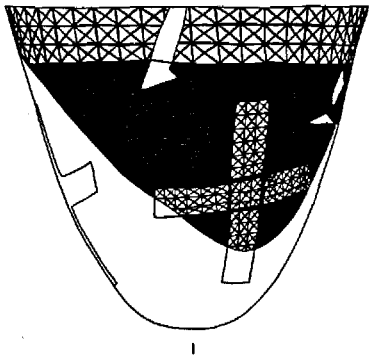
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13

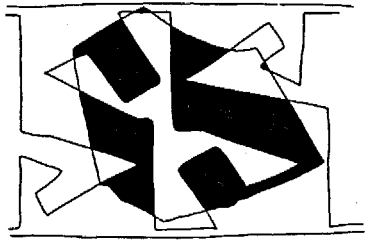
SCALE, 1:3

No.	Field No.	Provenance	Level	Form	Design	D.	H.	Th.	Remarks	See Page
1	2195	Rm. XV 1	IV	VI	X E, XI A	14.5	9.7 mx.			21, 43
2	2200	Trench I, 0-10 m., +1.15 m.	III or surf.	IX B, Pl. 13:20	X F 2	12.3	5.6 mx.			43
3	5402	M-N 26, +2.5 m.	IV		X F 2 in.			.5	bowl side	43
4	5364	O 31, level of small walls	II		X F 1 in.			.5	bowl side	43
5	5486	M 30, surf. to 1 m. deep	surf.		X F 2 in.			.3	bowl side, cream-tan ware	43
6	2109	Trench I, 15-20 m., +1.37 m.	III	XI A	X F 2	14.4	16.4 mx.	.35		43
7	3744	Rm. II 2 M 28, +2.55 m.	III IV	X	X F 2			.9		43
8	4272	M-N 26, +2.5 m.	IV		X F 2			.5	bowl side, tan ware	43, 60
9	5353	Q 29			X F 2, XIV D in.			.35	bowl rim	43
10	4341				X F 2	14	3.9 mx.	.25	bowl rim, cream-tan ware	35, 43
11	4224	Rm. VII 3 M-N 26, +2.5 m.	III IV		X F 4			.4	bowl rim, light green ware, black paint etched	43
12	5447	M-N 26, +2.4 m.; Rm. XIV 3; N 28, above Rms. I 1-2	IV		X F 3	11	5.2 mx.	.3	bowl rim	43
13	5446	Trench I, 36-40 m., +2.75 m.	IV		X F 3	14	4.2 mx.	.45	bowl rim	43
14	4647	Rm. XVII 5	IV		X F 4			.3	pot shoulder, light tan ware, red-brown paint	43
15	5330	J 31, +1.72 m.	top III, surf.	XII	X F 5 in.	13.4	6.4 mx.	.7	tan ware	44
16	4178	O 33, lowest level		VII	X F 3, XI A	rim, 14	7.9 mx.	.7	tan ware, brown-red paint	43
17	4168	Rms. XII 1, 3	III		X F 5			.3-.6	pot shoulder, cream-tan ware; redrawn from field sketch	44

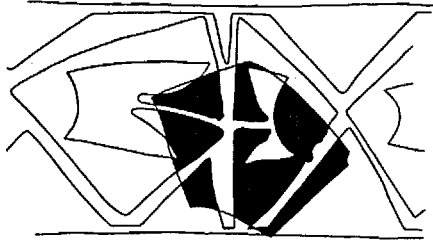


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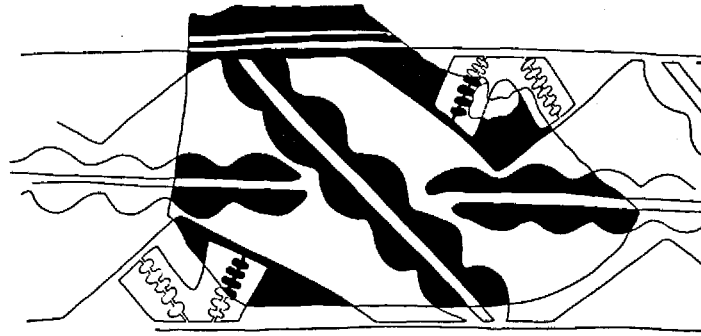
No.	Field No.	Provenience	Level	Form	Design	D.	H.	Th.	Remarks	See Page
1	4133	Rm. IV 3	III		<i>X F 5</i>			.3-.5	bowl side, light tan ware	44
2	3367	Rm. XIV 2	IV	II?	<i>X F 5</i>	32	12.2 mx.	.55-.7		44
3	4161	Rm. XII 2 or Rm. XVII 3	III IV		<i>X F 5</i>			.3	bowl side, cream-tan ware	42, 44
4	3274				<i>XI A</i>	16	6.0 mx.		bowl rim	44
5	5379				<i>XI A in.</i>	26	6.0 mx.	.55	bowl rim, yellow-cream ware	44
6	4338	N 29, +3 m. (above Level IV walls)	surf.		<i>XI A</i>	24	5.8 mx.	.4	bowl rim	44
7	2925	Trench I, 27-30 m., +.32 m.	I		<i>XI A</i>				jar shoulder	44
8	5582	Trench I, 60-70 m., +2.0 m.	IV		<i>XI A, X E</i>			.3	bowl rim	44, 49
9	4245	M 31, from small walls to v.s.	I		<i>XI A</i>			.6	bowl rim, light green ware, black paint etched	44
10	2456				<i>XI A</i>	12	6.5 mx.		bowl rim	44
11	3872	K 29, low level of kiln	II		<i>XI B</i>			.6	bowl side, light tan ware, red-brown paint	44
12	4292	P 27, +3.62 m.	surf.		<i>XI B</i>			.55	bowl side	44
13	2115			<i>XI A or C</i>	<i>XI A</i>	8.2	8.6 mx.	.4		44
14	5458	Rm. V 6	III	IV?	<i>XI B in.</i>	14	6.0 mx.	.3	yellow-cream ware	44
15	3949	Rm. X 2	III	II?	<i>XI B</i>	32	10.5 mx.	.55		44, 59
16	2202	Trench I, 15-20 m., +1.4 m.	III	<i>XI C?</i>	<i>XI B</i>	11.3	7.7 mx.	.2		44
17	4546	Q 33, somewhat above v.s.			<i>XI C</i>			.45	bowl base, light tan ware	44
18	3881	N 31, level of small walls	II		<i>XI C, A</i>			.75	shoulder of large jar	44



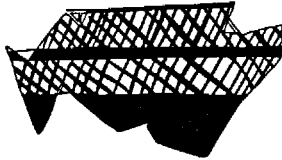
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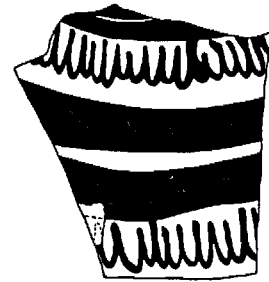
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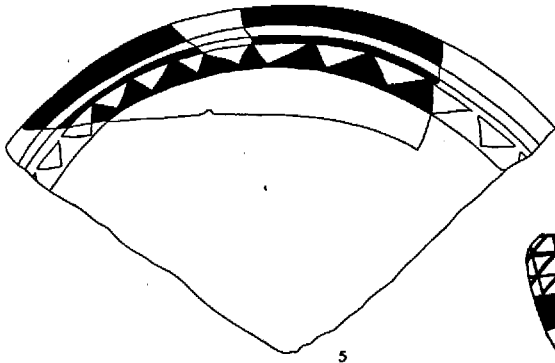
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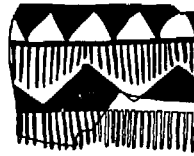
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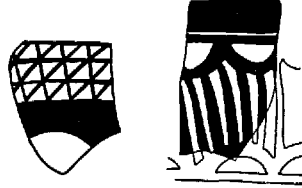
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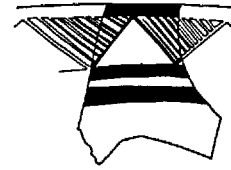
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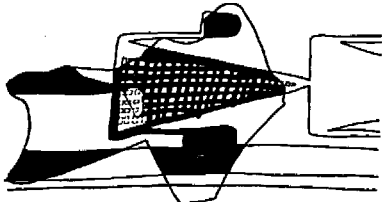
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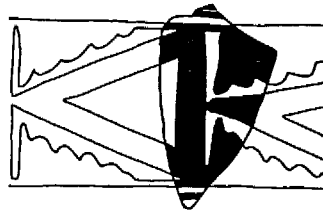
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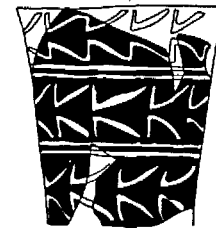
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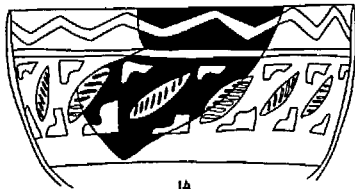
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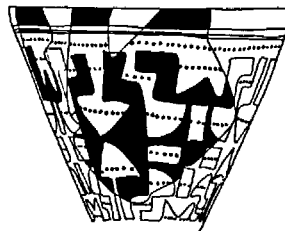
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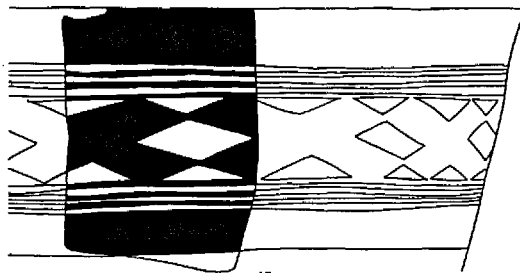
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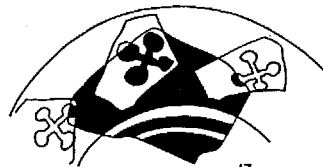
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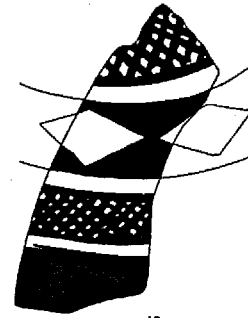
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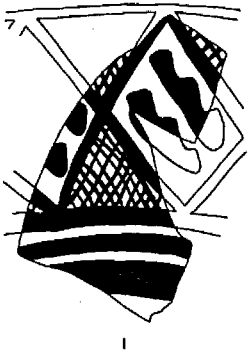
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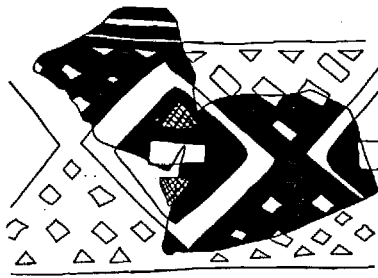
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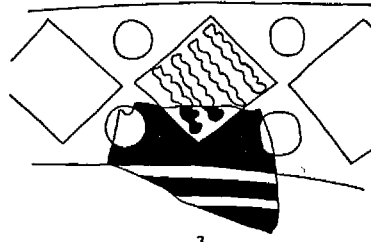
No.	Field No.	Provenance	Level	Form	Design	D.	H.	Th.	Remarks	See Page
1	4183	O 31, below Rm. XI Rm. X 1	II III		XI C			.4-.85	bowl side, tan ware	44
2	3935	Rm. II 2 and court to S.	III		XI C			.5	bowl side, light tan ware	44
3	4769	M 32, +2.25 m.	surf.		XI C			.8	lower side of bowl, tan ware; restoration probable	44
4	3429	Trench II, 10-20 m., .5 m. deep	surf.	I?	XI C	ca. 20	9.7 mx.			44
5	3914	L 28, on kiln	IV		XI C			.75	bowl side, red-brown paint	44
6	4601	O 27, +3.87 m.	surf.		XI E 2	12	3.1 mx.	.35	bowl rim	44
7	2190	Trench I, 15-20 m., +1.4 m.	III	XI A	XI C	12.8	15.7 mx.	.2-.3		44
8	4032	L 29, +2 m.	base IV		XI D			.8	bowl side, tan ware	44
9	4033	Rm. IV 3	III		XI D			.6	bowl side, tan ware	44
10	4986	K 26, +2.5 m.	IV		XI D	26	8.5 mx.	.5	bowl rim, yellow-cream ware	44
11	4567	Rm. XIII 3	IV		XI D			.55	bowl rim; restoration prob- able	44
12	3931	Trench I, 27-30 m., +.32 m.	I		XI E 2	24	6.3 mx.	.65	bowl rim, light tan ware	44
13	5352	O 32, just above v.s. O 31, +2.87 m.	I surf.		XI E 1, X A			.6	bowl side, tan ware, red- brown paint	41, 44, 59
14	3929	Trench I, 15-20 m., +1.4 m.	III		XI E 3			.3	bowl rim, light tan ware; re- used as scraper	44, 59
15	3884	O 32, ±0 m.	I		XI E 4			.4	bowl rim	44



1



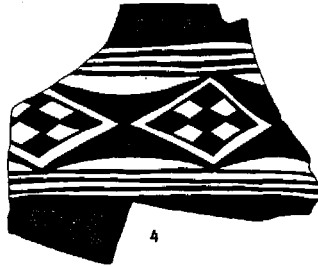
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3



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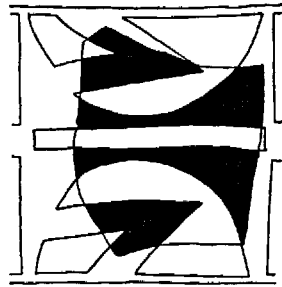
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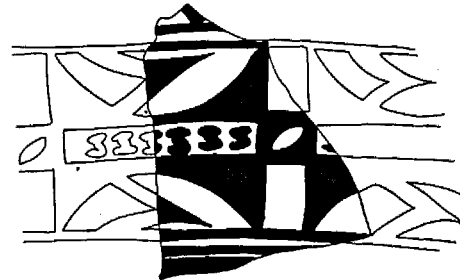
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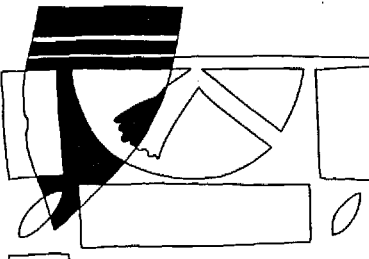
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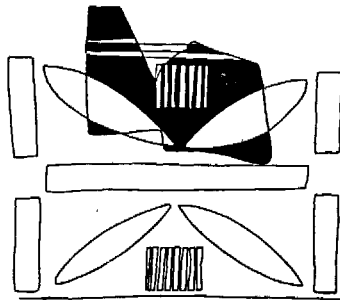
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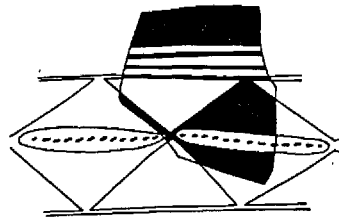
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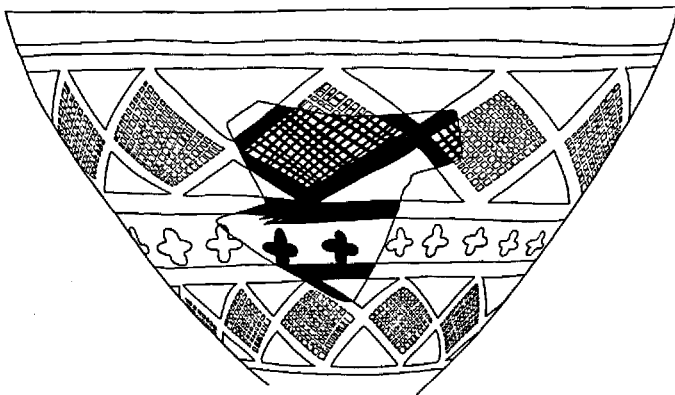
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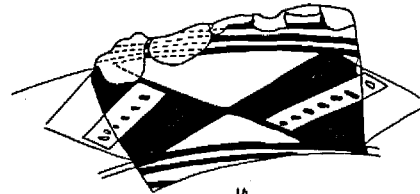
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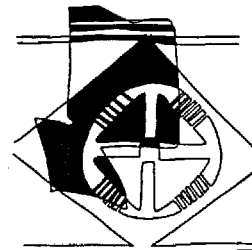
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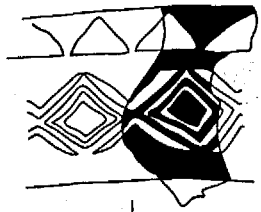
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15

SCALE, 1:3

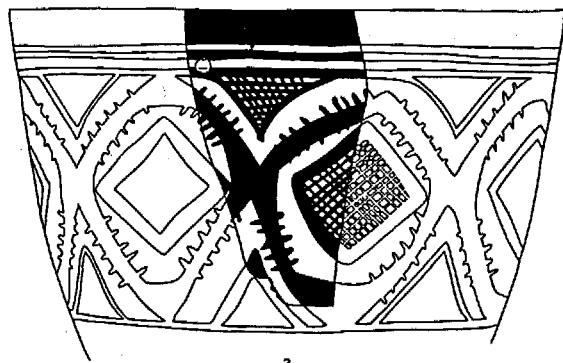
No.	Field No.	Provenience	Level	Form	Design	D.	H.	Th.	Remarks	See Page
1	5340	P 31, +2.75 m.	surf.		XI E 4 in.			.9	bowl side	44, 48
2	4290				XI E 4			.35	bowl side	44
3	3876	Rm. XII 2 Rm. XVII 3	III IV	I	XI E 4	22	11.8 mx.	.6	brick-tan ware	44
4	3958	Q 33, level of House XII			XI E 5			.3	bowl rim, brick-tan ware	45
5	4254	L 28, +2.7 m.	top IV		XI E 5			.6	bowl side	45
6	4993	P 29-30			XI E 4			.4	bowl side, yellow-cream ware; restoration probable	44
7	3874	Rm. IV 3	III		XI E 5			.7	bowl side	45
8	3381	Trench I, 10-20 m., +.2 m.	I		XI E 5			.4-.7	bowl side	45
9	3950	L 28, on kiln	IV		XI E 5			.7	bowl side	45
10	4200	Q 29, on kiln	IV		XI E 5?			.5	bowl side, tan ware	41, 45
11	3932	Trench I, 10-20 m., +.2 m.	I		XI E 6			.45	bowl rim	45
12	5630	Rm. IV 1	III		XI E 6			.2	bowl side, green-cream ware, black paint etched	45
13	5564	Rm. III 3	III		XI E 6			.2	bowl rim	45
14	4201	L 30, +2.62 m.; M 30, 1.5 m. above Rms. II 4, III 4	top IV, surf.		XI E 6	16	8.4 mx.	.4	bowl rim	45
15	3885	L 28, on kiln	IV		XI E 6			.65	bowl rim, tan ware	45
16	4143	P 28, +3.63 m.	surf.		XI F			.4-.6	bowl side, light cream-tan ware, red-brown paint	45
17	5654	Trench I, 10.5-11.5 m., +1.4 m.	III, surf.		XI F			.3	bowl rim	45
18	3902	L 28, +2.7 m.	top IV	IV?	XI F	12	5.0 mx.	.25	red-brown paint	45
19	4708	O 27, +3.87 m.	surf.		XI F			.65	lower side of bowl, tan ware, red-brown paint	45
20	4315	P 30, +2.45-3.25 m.	surf.	XI A?	XI F			.4	black to red-brown paint	45
21	2877	O 32, +1.37 m. O-P 33, v.s.	III ?		XI F				cf. Pl. 18:15	31, 45



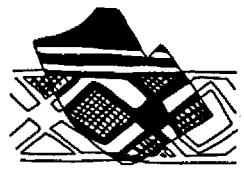
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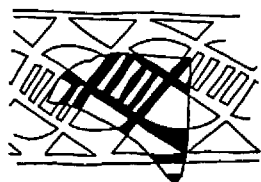
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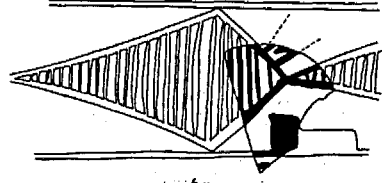
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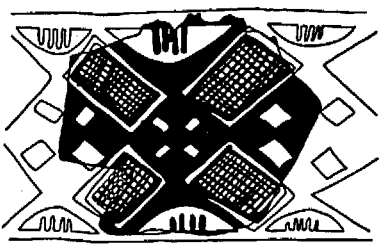
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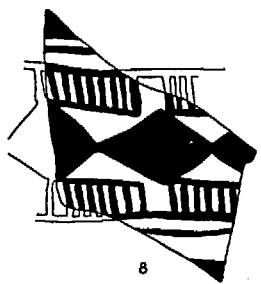
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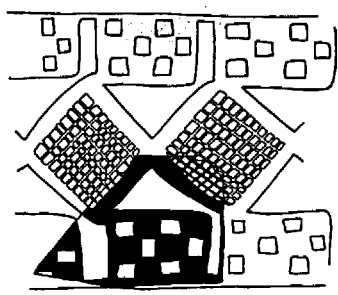
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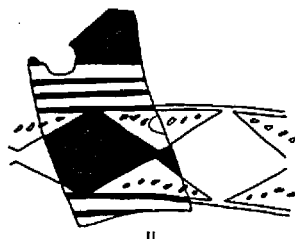
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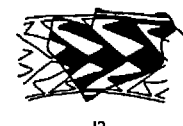
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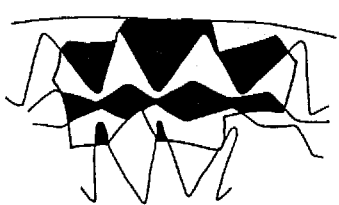
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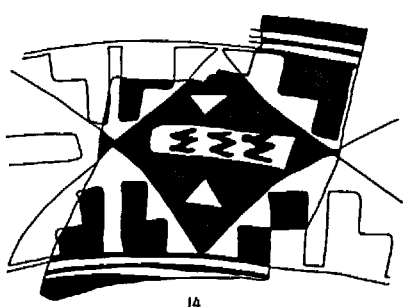
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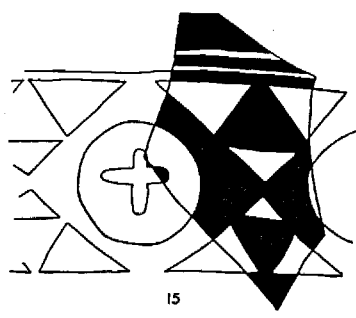
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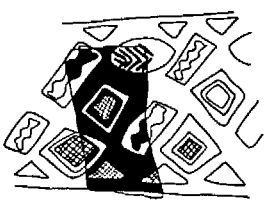
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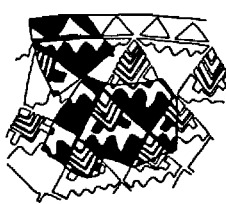
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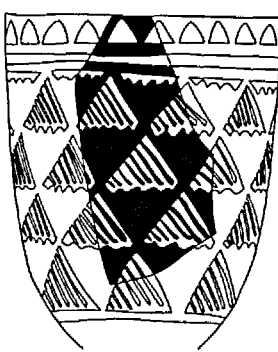
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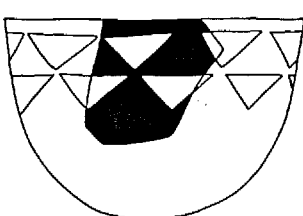
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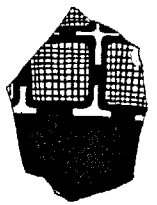
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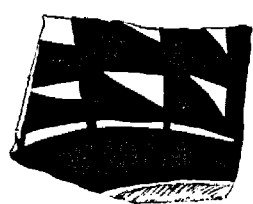
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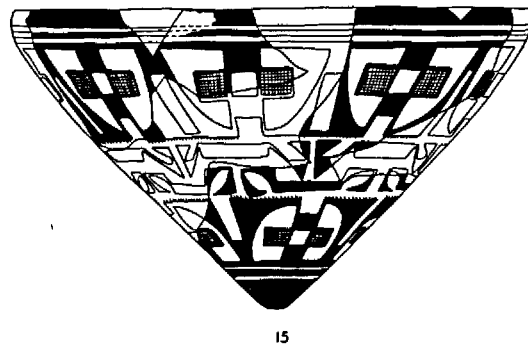
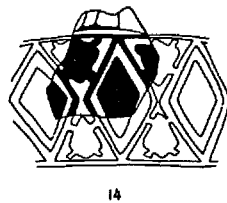
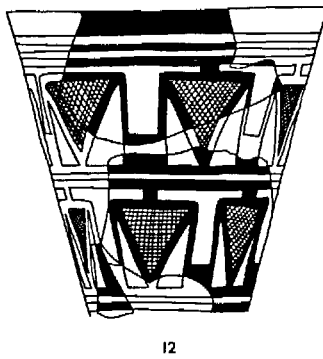
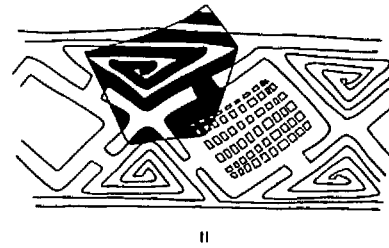
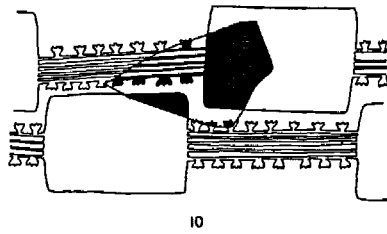
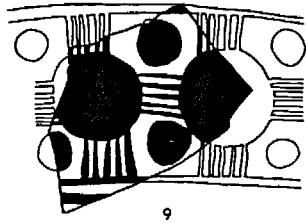
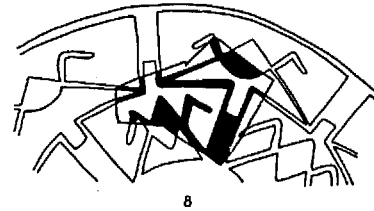
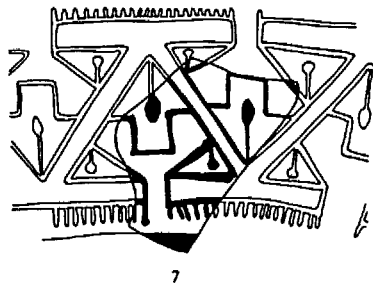
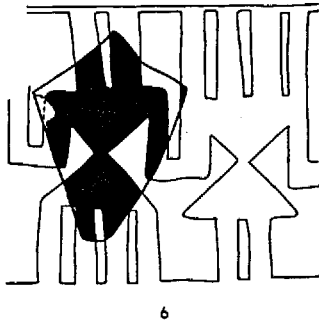
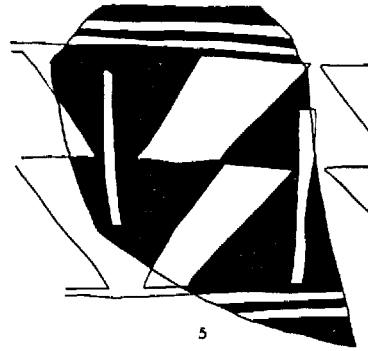
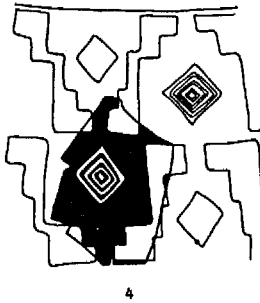
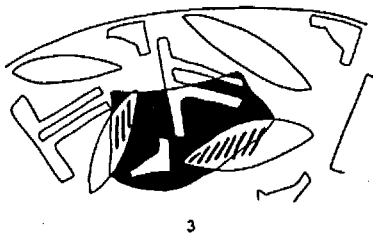
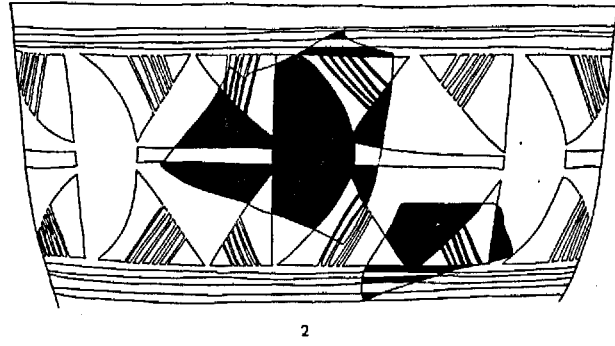
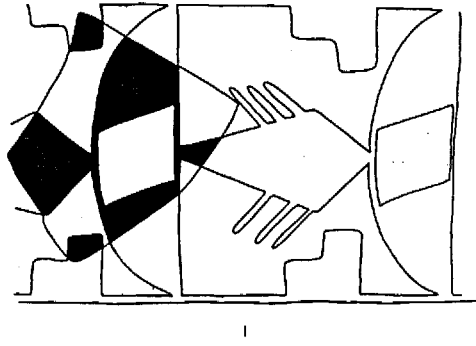
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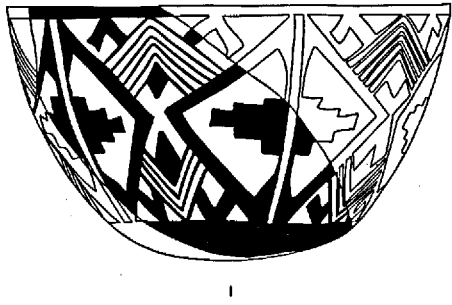
SEE PAGE 45. SCALE, 1:3

No.	Field No.	Provenance	Level	Form	Design	D.	H.	Th.	Remarks
1	4527	M 30	surf.		XI G			.7	bowl side, yellow-cream ware
2	4758	Rm. XVII 3	IV		XI G			.6	bowl side
3	4880	Q 28, +3.5 m.	surf.		XI G			.7	lower side of bowl
4	5659	Rms. II 2-3	III		XI H			.2	bowl side
5	3412	Rms. XV 1-2	IV	I?	XI H	24	13.4 mx.		
6	4611	L 29, +2.37-3.27 m.	IV, surf.		XI H			.5	bowl side, red-brown paint; restoration probable
7	5620	L 29, +3.37 m.	surf.		XI H			.25	lower side of bowl
8	4968	M-N 30, over Rm. VII 2; M 30, +3.25 m. and deeper	IV or surf.		XI H			.3	bowl side
9	4777	Trench II, 50-60 m., .55 m. deep	surf.		XI I			.6	bowl side
10	4952	L 28, +2.7 m.	top IV		XI I			.6	bowl side, light tan ware
11	3965	O 31, +2.27-2.87 m.	surf.		XI J 2			.4	bowl side
12	2206	Trench I, 0-10 m., +1.3 m.	III or surf.	XI C	XI J 1	13	ca. 12.2 mx.		
13	3127	P 30			XI J 2	rim, 9.6	3.9 mx.		pot neck
14	3930	Trench I, 20-30 m., +.27 m.	I		XI J 2			.15	bowl rim, black to red-brown paint; reused as scraper
15	2199	Trench I, 8 m., +1.27 m.	III, surf.	V	XI J 1	20.8	12.0		

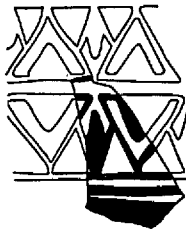


SEE PAGES 45 F.

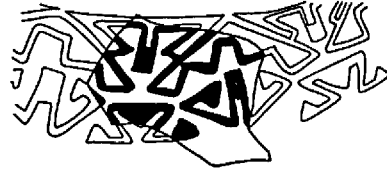
No.	Field No.	Provenance	Level	Form	Design	D.	H.	Th.	Remarks	Scale
1	2183			IV B	XI J 2	17.7	10.0	.4		1:3
2	4447	O 30, +3.25 m.	surf.		XI J 2			1.25	jar shoulder	1:3
3	5619	K 29, low level of kiln Trench II, 50-60 m.	II surf.		XI J 2			.4	pot shoulder	1:3
4	4247	Rm. II 1	III		XI J 2			.3	pot shoulder, cream-tan ware, red-brown paint	1:3
5	3442				XI J 2	26	8.0 mx.		bowl rim	1:3
6	4619	Trench I, 30-40 m., +1.62 m.	III		XI J 2			.6	lower part of bowl, pink-tan ware	1:3
7	3837	M 28, +1.4-1.6 m.	III	II	XIII A	30.1	12.8 mx.	.8	light tan ware	1:4
8	3830	M 29, +1.9 m.	base IV or top III		XIII A			.3	bowl side, light tan ware	1:3
9	3856	O 32, about ± 0 m.	I		XIII A			.4	lower side of bowl	1:3
10	4478	P 30, +2.45-3.25 m.	surf.		XIII A			.3	pot belly, pink-tan ware	1:3
11	2465	N 26, +3.8 m.	surf.		XIII A			.25	pot neck?	1:3
12	3858	Rm. XIII 2	IV		XIII A			.3	bowl side, light tan ware	1:3
13	3389	M-N 27	IV		XIII A			.6	lower side of bowl	1:3
14	3831	L 31, +2.27 m.; N 31, +2.47 m.	IV or surf.	I?	XIII A	ca. 18.2	10.6	.7		1:3



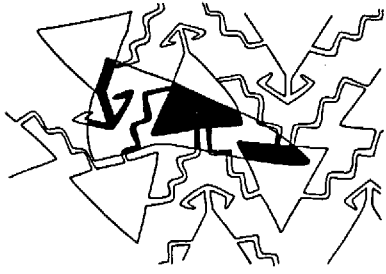
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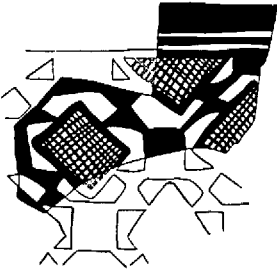
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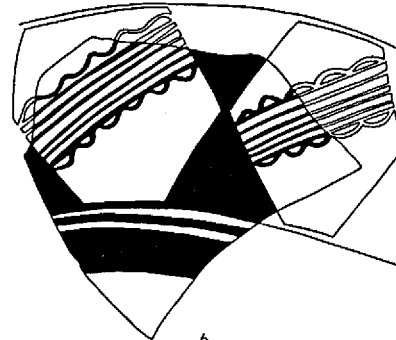
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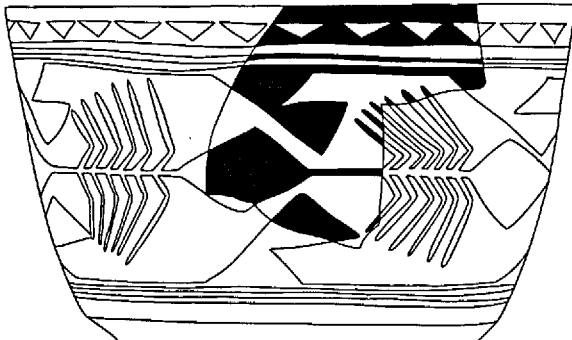
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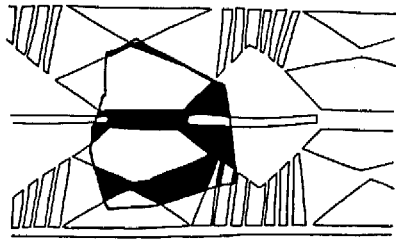
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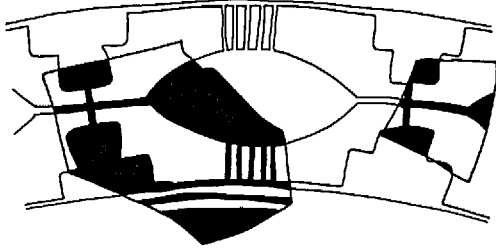
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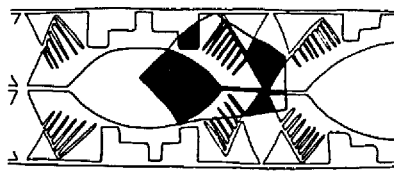
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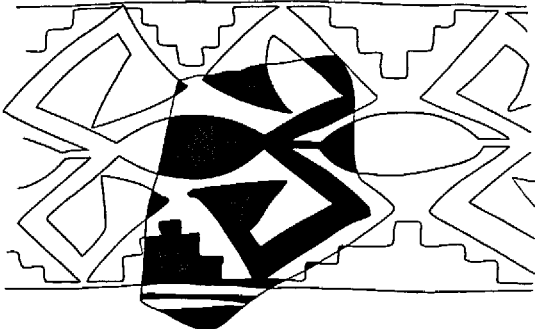
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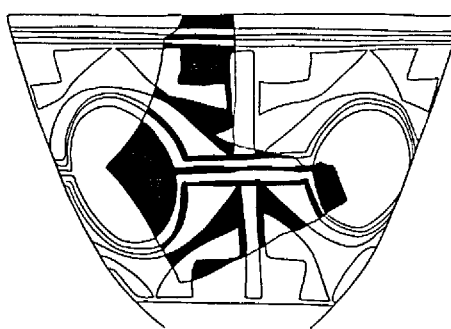
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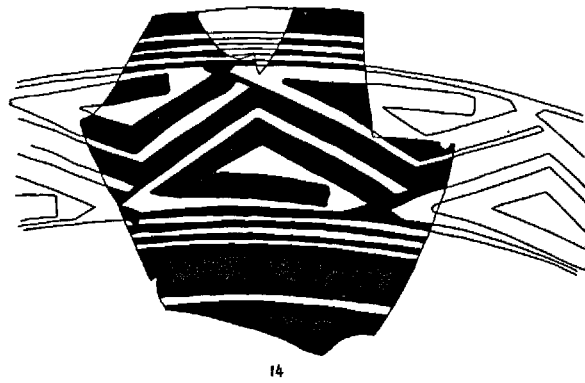
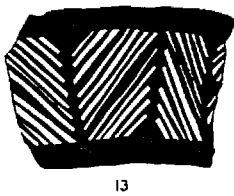
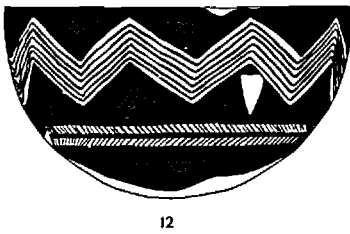
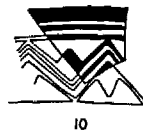
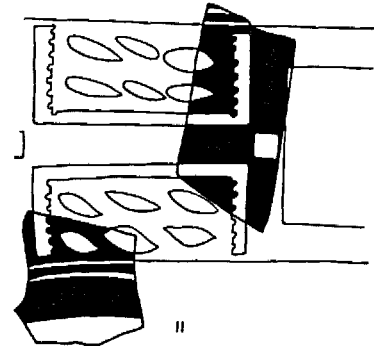
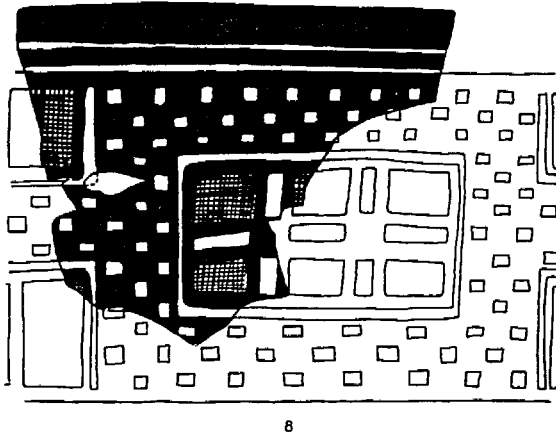
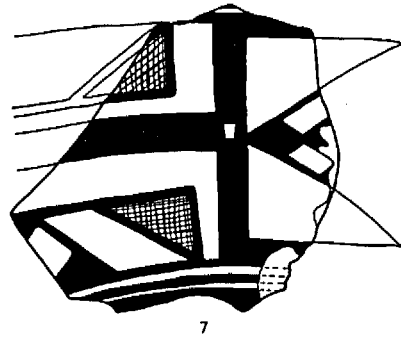
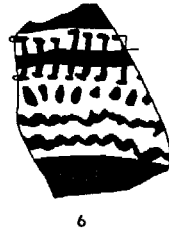
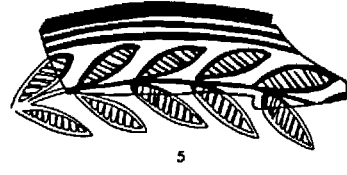
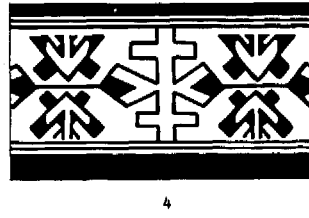
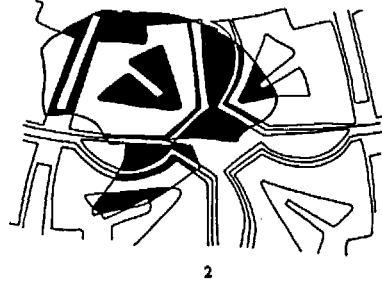
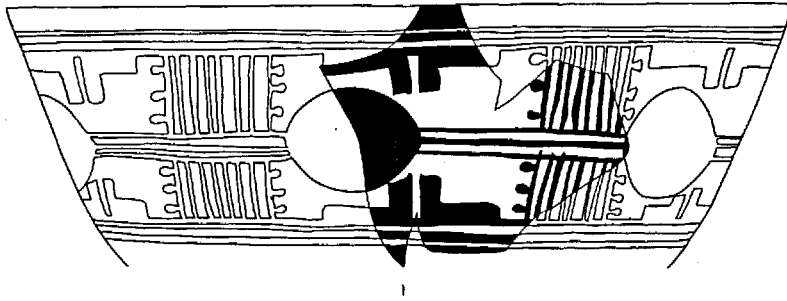
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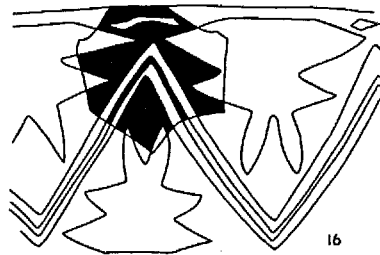
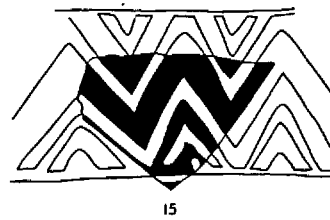
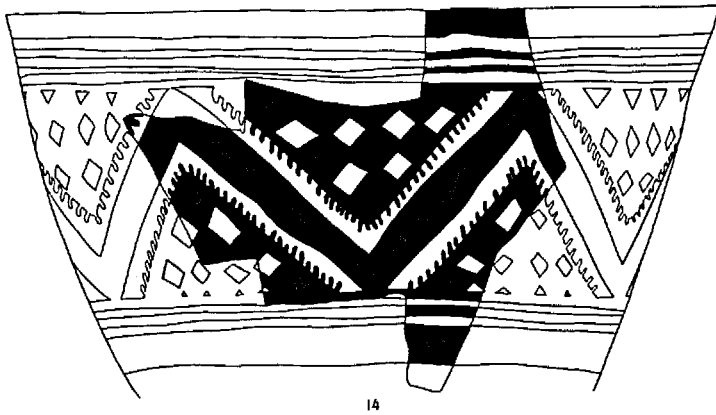
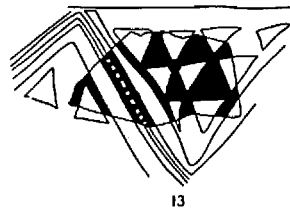
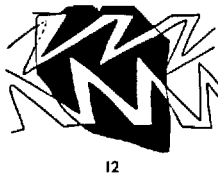
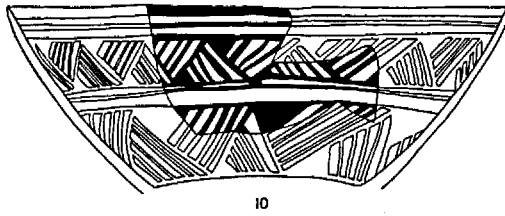
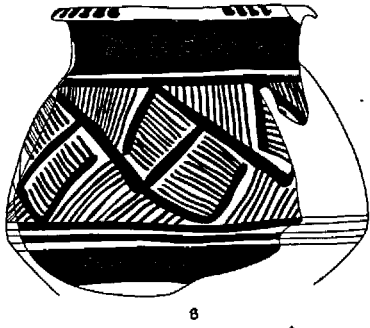
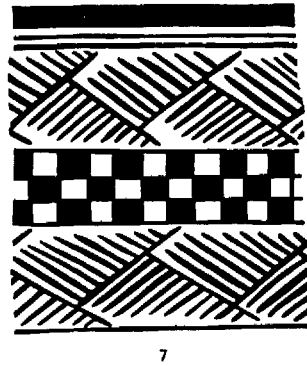
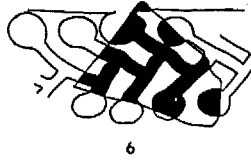
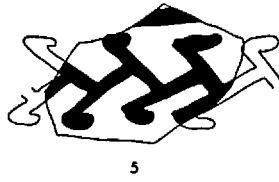
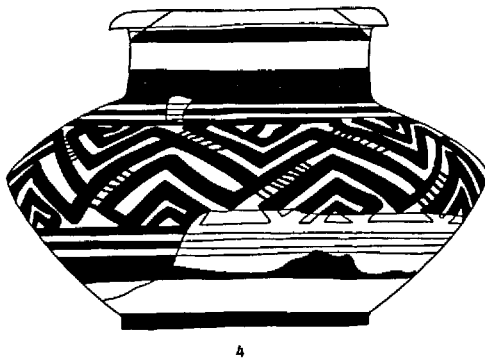
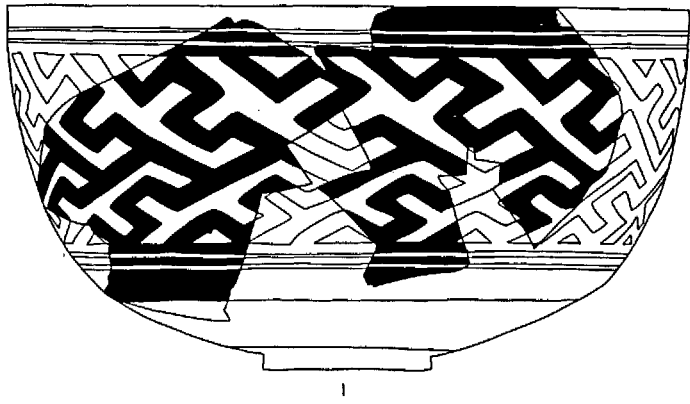
SEE PAGE 46. SCALE, 1:3

No.	Field No.	Provenience	Level	Form	Design	D.	H.	Th.	Remarks
1	3857	N 30, +2.75 m.	top IV, surf.	II	XIII A	ca. 31.5	10.4 mx.	.8	
2	5653	Rm. IV 3	III		XIII A			.45	pot shoulder
3	2102		III	XI A, Pl. 13:19	XIII A	16.7	16.0		
4	3189	Trench II, 50-60 m., .55 m. deep	surf.	III, Pl. 10:11	XIII A in.	22	7.0 mx.		redrawn from field sketch
5	5638	L 28, on kiln	IV		XIII A	18	3.2 mx.	.2	bowl rim
6	2840			XII A	XIII A				
7	4173	Rm. V 6	III		XIII B			.35-.8	bowl side, light tan ware
8	4023	Rms. X 3, XI	III		XIII B	ca. 22	13.4 mx.	.5	bowl rim
9	5594				XIII A			.3	bowl side, light tan ware
10	5626	House XII	III		XIV B			.4	bowl rim
11	4415	Rms. II 2, VII 2 Rm. XVII 4	III IV		XIII B				bowl side
12	2116			IV B	XIV B	13.9	7.3 mx.		
13	3818				XIV B	19.2	6.2	.6	pot-stand
14	3741	Rms. V 6, X 3	III	I or II	XIV C	28	13.3 mx.	.4	light tan ware

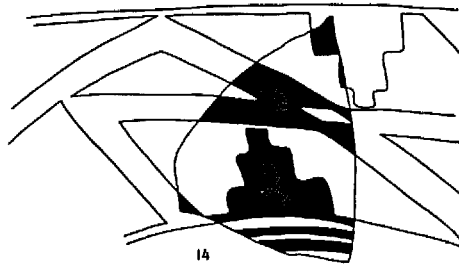
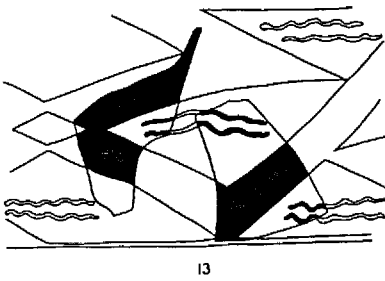
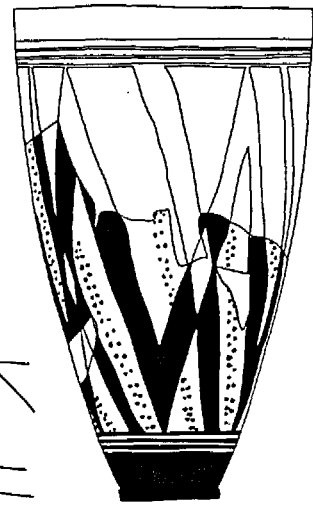
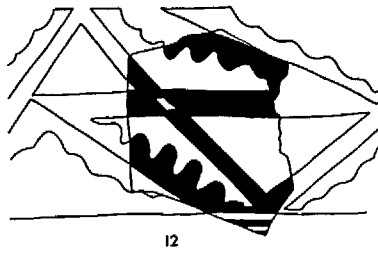
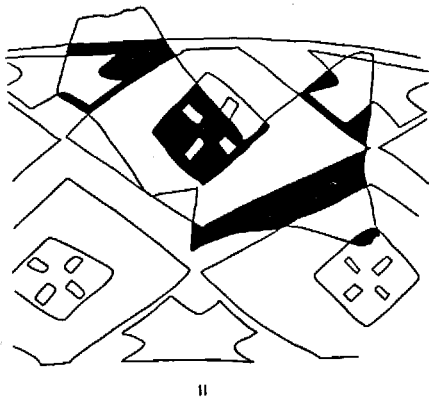
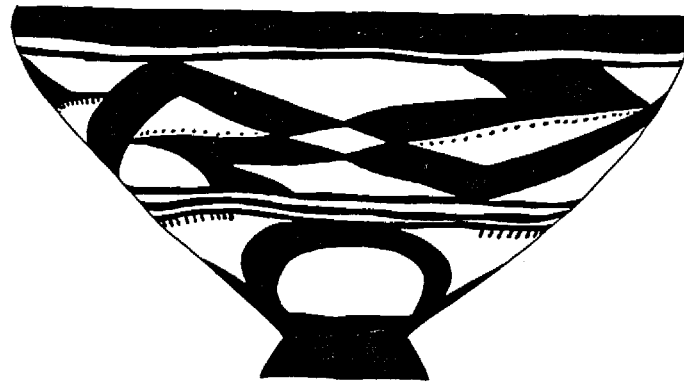
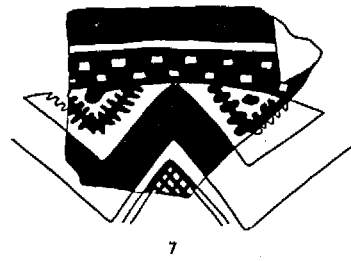
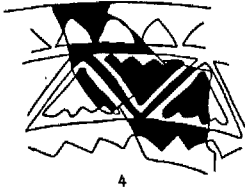
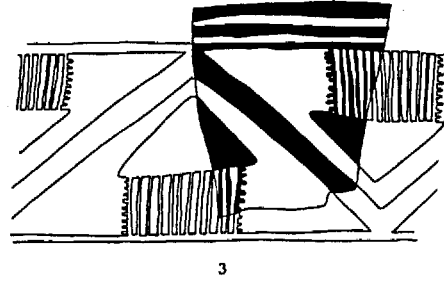
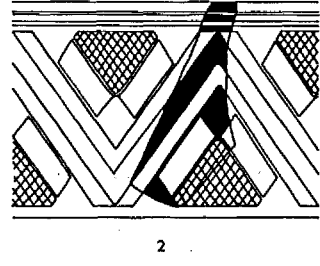
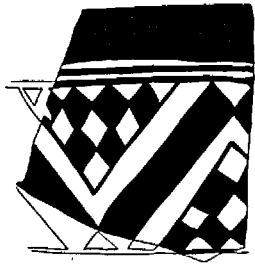


SCALE 1:3

No.	Field No.	Provenience	Level	Form	Design	D.	H.	Th.	Remarks	See Page
1	2179	Trench I, 8 m., +1.2 m.	III, surf.	II	XIV C	36.3	16.7 mx.			46, 55
2	5615	Rm. XV 1	IV		XIV C			.25	bowl rim, cream-tan ware	46
3	2209	M 28			XIV C				beaker(?) side	46
4	2112	M 29, +2.5 m.	IV	VIII A, Pl. 12:13	XIV C	18.8	12.2	.6		34, 46
5	5468	Trench I, 50-60 m., +2.87 m.	IV, surf.		XIV C out.; VI C in.			.45	bowl side	44, 46
6	4683	Q 33, level of House XII			XIV C			.7-.9	bowl side, light greenish ware, black paint etched	46
7	3375	Trench I, 70-80 m., +1.9 m.	top III		XIV C				bowl side; redrawn from field sketch	46, 55
8	2126			VIII B, Pl. 13:5	XIV C	13.4	11.4 mx.			34, 46
9	4737	Trench I, 12 m., +1.3 m., or Rm. VII 3	III		XIV C			.35	bowl side	46
10	5431	L 27, above Rms. I 1-2	IV, surf.		XIV D in.	20	5.1 mx.	.4	bowl rim, tan ware	46
11	3120	Q 29		VIII	XIV D	rim, 9	5.5 mx.		design in plan	46
12	3816	M 30, +1.65 m.	III		XIV C	ca. 18	5 mx.		bowl rim	45 f.
13	3901	S. of Rms. IV 1, V 2, lowest level	I		XIV D			.65	jar side, light tan ware	46
14	3905	Q 31, outside Rm. XII 4 to v.s.	I-II	I?	XIV D	ca. 28.5	15.1 mx.	.4		46
15	3782	M 28, +2.55 m.	IV		XIV D			.55	bowl side, tan ware, red-brown paint	46
16	5585				XIV D			.2	bowl rim	46

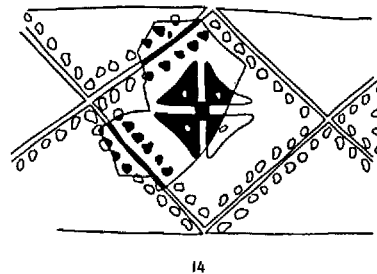
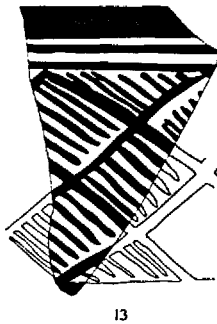
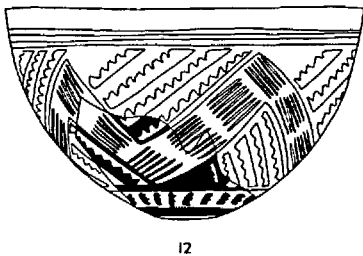
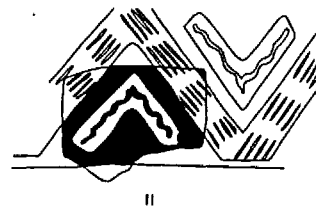
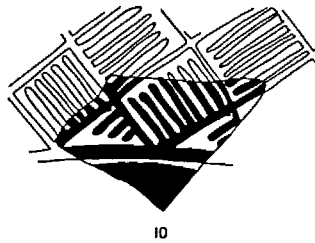
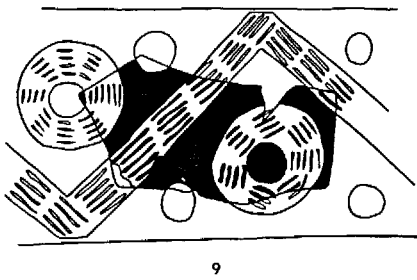
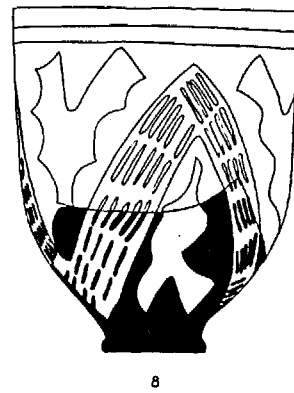
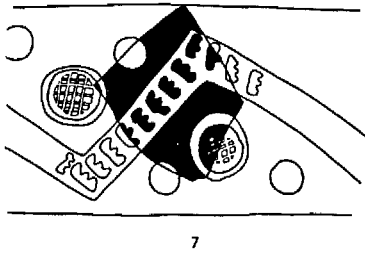
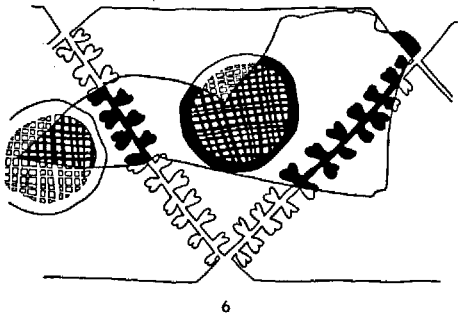
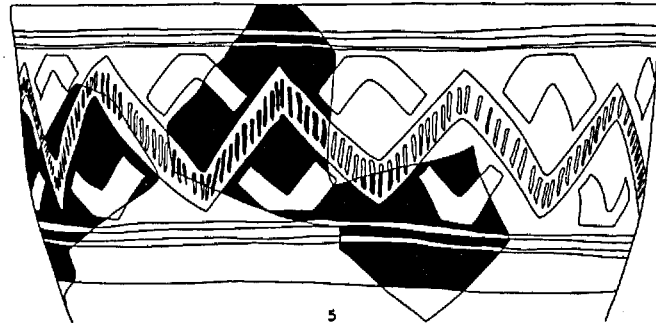
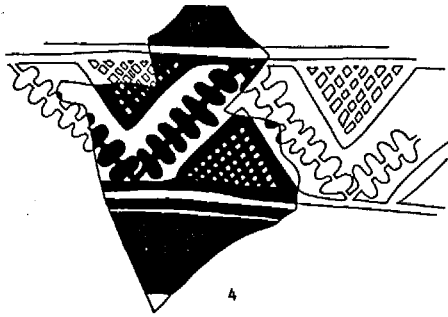
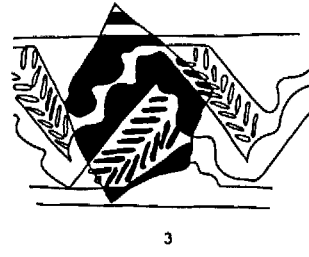
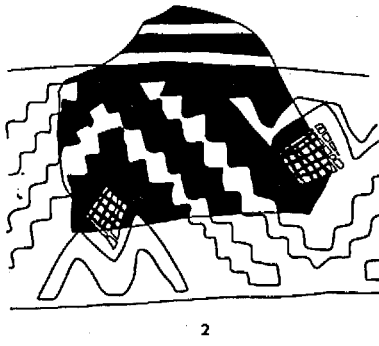
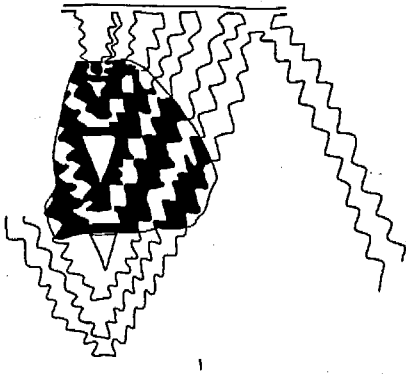


No.	Field No.	Provenience	Level	Form	Design	D.	H.	Th.	Remarks	Scale	See Page
1	3414				XIV D	26	10.4 mx.		bowl rim	1:3	46
2	3904				XIV D			.6	bowl rim, light greenish ware, black paint etched; redrawn from field sketch	1:3	46
3	3817	Rm. I 1	III		XIV D	20	8.1 mx.	.45	bowl rim, tan ware	1:3	46
4	5475	Rm. VII 2 N 30, +2.75 m.	III top IV, surf.		XIV D in.			.7	bowl rim	1:3	46
5	5569	Rm. XIII 1	IV		XIV D	rim, 12	3.5 mx.	.3	pot rim	1:3	46
6	2118	Rm. VIII 2, floor	III	VIII A, Pl. 12:12	XIV D	14.8	8.6 mx.			1:3	46
7	3754	O 32, about ±0 m.	I-II		XIV D			.45	bowl rim, light tan ware	1:3	34, 46
8	2762	N 31, +2.27 m.	top III or base IV, surf.		XIV D	12.0	5.0	.6	pot-stand, cream-tan ware; see Pl. 18:7	1:3	46
9	4971	N 29, +2.12 m.	base IV		XIV D			.3	bowl side	1:3	46
10	3359	Rm. X 1	III	II B, Pl. 9:13	XIV E, II A 3	36	19.5 mx.	.4-1.6		1:4	35, 46, 55
11	3825	Rms. I 2-3	III		XIV D			.6	bowl side, red color in.	1:3	46
12	4612	L 30, +2.32 m.	IV		XIV E			.55	bowl side	1:3	47, 55
13	3795	under floor of Rm. XIV 3	top III		XIV E			.55	bowl side, pink-tan ware	1:3	47, 55
14	5029	Rm. XIV 3	IV		XIV E			.65	lower side of bowl, cream-tan ware	1:3	47, 55
15	2165	House XV (no room attribution)	IV (probably intrusive)	XI A, Pl. 15:7	XIV E	10.7	15.2 mx.	.45	green-cream ware	1:3	34, 46, 54 f., 59

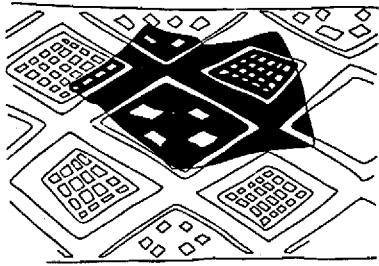


SCALE, 1:3

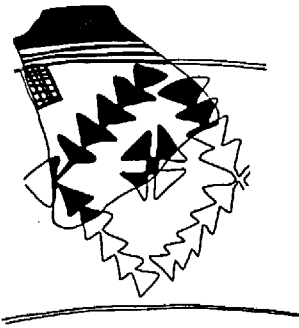
No.	Field No.	Provenance	Level	Form	Design	D.	H.	Th.	Remarks	See Page
1	4297	Trench I, 40-50 m., +2.9 m.	IV		XIV F			.4	bowl side	47
2	4269	Q 30			XIV F			.55	bowl rim; reused as scraper	47
3	4394	P 31, +1.95-2.75 m.	surf.		XIV F			.4	bowl side, cream-green ware	47
4	3758	L 28, in kiln; Rms. X 5-6	III		XIV F			.6	bowl rim	47
5	4336	M-N 26, +2.5 m.	IV	II	XIV F	ca. 26	12.6 mx.	.35-.6		43, 46-48, 50
6	4765	K 26, +2.1 m. (up- per fill of Rm. Rm. XIV 1)	IV		XIV F			.6	bowl side, pink-tan ware	47
7	4753	Rm. VIII 6	III		XIV F			.5	bowl side	47
8	4308	Q 32, +2.12 m.	surf.	XI B	XIV F	10.8	7.0 mx.	.4-.7		47
9	4538	Trench I, 50 m., +2.32 m.	IV		XIV F			.6	bowl side, tan ware	47
10	4286				XIV G			.95	lower side of bowl	47
11	4535	O 28, +3.75 m.	surf.		XIV F			.3	pot shoulder, tan ware	47
12	4278	O 28, +3.75 m.	surf.	IV	XIV F	12.6	4.9 mx.	.2-.5	pink-tan ware, red-brown paint	47, 60
13	3408	M 27-28			XIV G			.6	bowl rim	47
14	4655	Trench I, 10-20 m., ±0 m.	I		XIV G			.25	bowl side	47



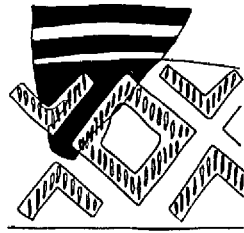
No.	Field No.	Provenience	Level	Form	Design	D.	H.	Th.	Remarks	Scale	See Page
1	3951	M 31, small walls	II		XIV G			.6	bowl side, green-cream ware; restoration probable	1:3	47
2	5567	Trench I, 70-80 m., .3 m. deep	surf.		XIV G	18	7 mx.	.2	bowl rim; restoration probable	1:3	47
3	5320	O 31, below floor of Rm. IX	II		XIV G in.	14	6 mx.	.4	bowl rim	1:3	47
4	4830	Rm. IV 3	III		XIV H 1			.7	bowl side	1:3	47
5	4827	P 31, +1.95-2.75 m.	surf.		XIV H 1	18	12.5 mx.	.5	bowl rim, tan ware	1:3	47
6	4831	Rm. V 6	III		XIV H 1			.8	bowl side, tan ware	1:3	47
7	5365	Q 30			XIV H 1			.5	bowl side	1:3	47
8	4354	Q 33, +1.87 m.	surf.		XIV H 3			.45-.8	lower side of bowl	1:3	47
9	4268	O 28, +3.0 m.	top IV or surf.		XIV H 2	32	6.4 mx.	.5	bowl rim	1:3	47, 60
10	4067	N 30, +3.25 m.	surf.		XIV H 3			.3-.5	bowl or beaker side	1:3	47
11	4451	L 31, level of House VI	III		XIV H 3			.45	lower side of bowl	1:3	47
12	3423	Rm. XI	III	II	XIV H 3	34	15.6 mx.	.45-.6	light yellow-brown paint	1:4	47
13	4216	Trench I, 12 m., +1.3 m.; Rm. V 4 M 28, +2.0 m.	III base IV		XIV H 3			.55	bowl rim	1:3	47



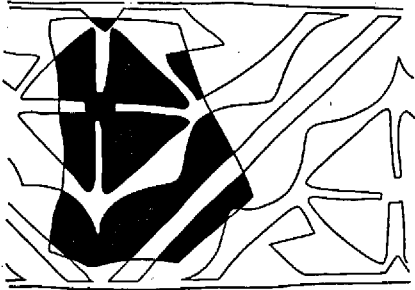
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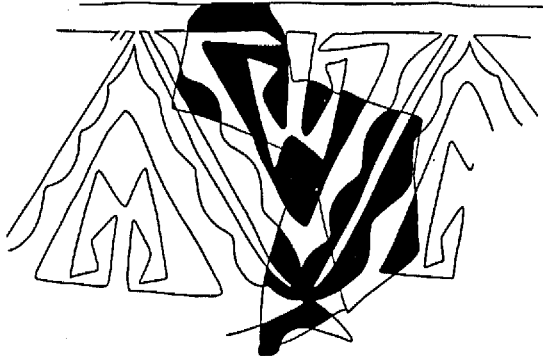
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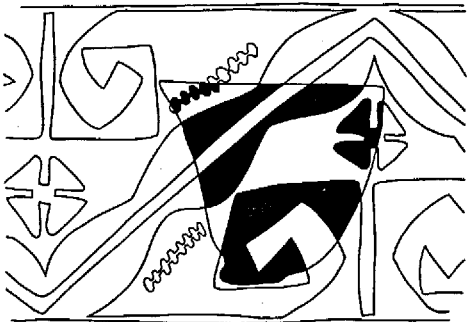
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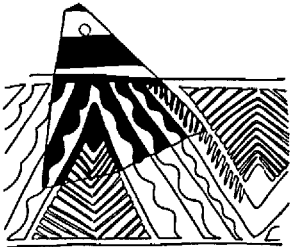
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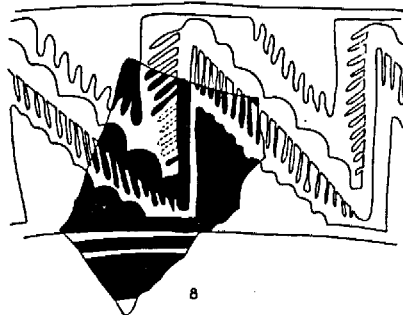
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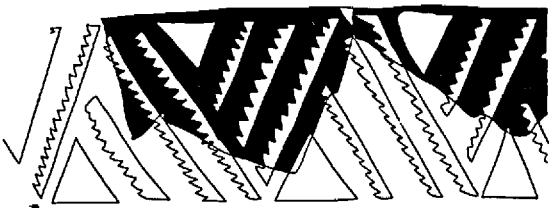
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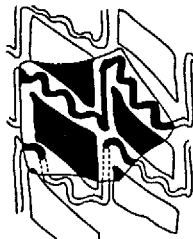
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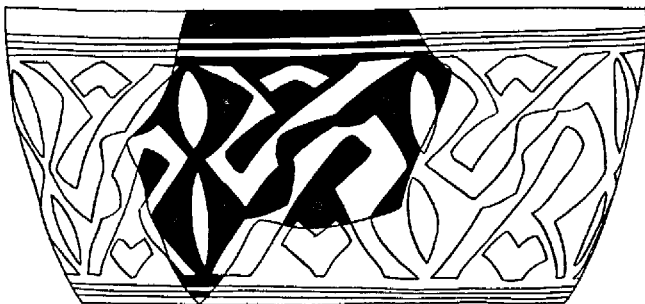
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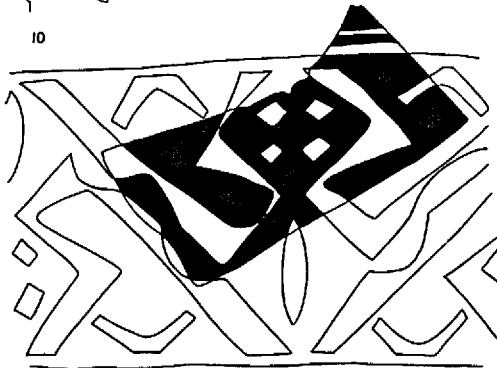
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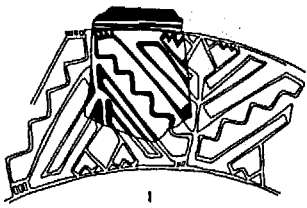


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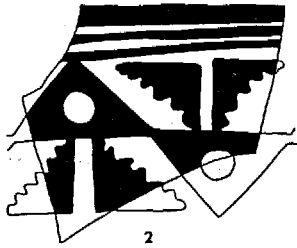


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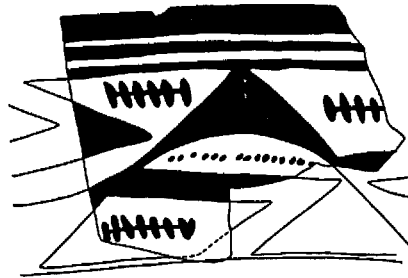
No.	Field No.	Provenance	Level	Form	Design	D.	H.	Th.	Remarks	Scale	See Page
1	5459	O 31, small walls	II		XIV H 4 in.			.2	bowl rim, light greenish ware, black paint etched	1:3	47
2	3411	Rm. VII 4	III		XV B	24	9.5 mx.		bowl rim, light brown paint	1:3	47
3	3789	Rm. VI 1	III		XV B	26	10 mx.	.45	bowl rim, light tan ware, dark brown paint	1:3	47
4	5347	Rm. VII 2	III		XV B in.; uncertain out.			.3	bowl side, greenish ware	1:3	47
5	3437	Rm. VI 4	III		XV B				bowl side	1:3	47
6	3760	M 30, Rm. VIII 2, fill	III		XV B			.25-.65	pot shoulder, light tan ware, brown paint	1:3	47
7	5677	P 29			XV B	12	2.2 mx.	.2	bowl rim	1:3	47
8	3791	Rm. XIII 1	IV		XV B			.4-.6	lower side of bowl, light tan ware, paint weathered	1:3	47
9	2207			III, Pl. 10:12	XV B	20.1	8.0 mx.	.25	cream-tan ware	1:3	47
10	3779	O 29-30			XV B			.5	bowl side	1:3	47
11	4166	M 31, small walls to v.s.	I		XV C			.4	shoulder of small pot	1:3	34, 47
12	3757	Rm. I 1	III	VII, Pl. 12:7	XV C	26.8	17.2 mx.	.5-1.2	tan ware	1:4	48
13	3752	Rm. X 1	III	II	XV C	ca. 38	13.8 mx.	.5		1:4	48
14	3824	Rm. VIII 6	III		XV C			.8	lower part of jar?	1:3	48



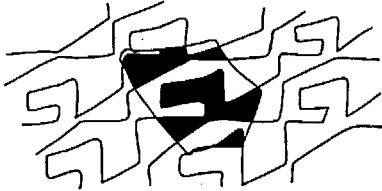
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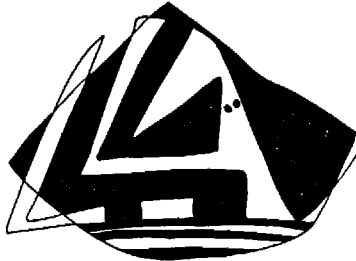
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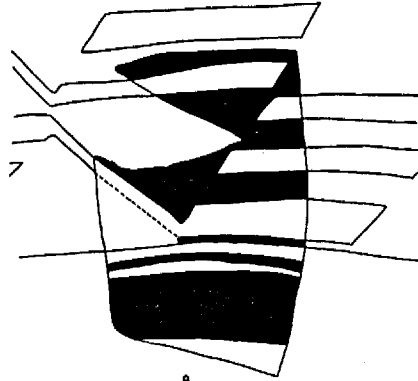
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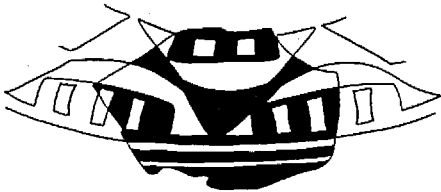
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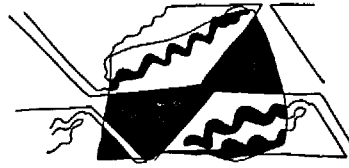
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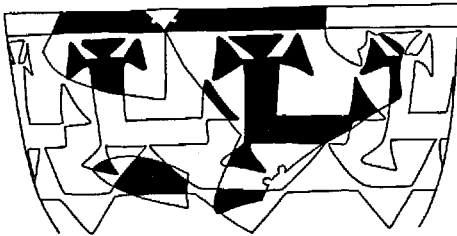
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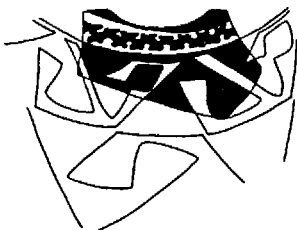
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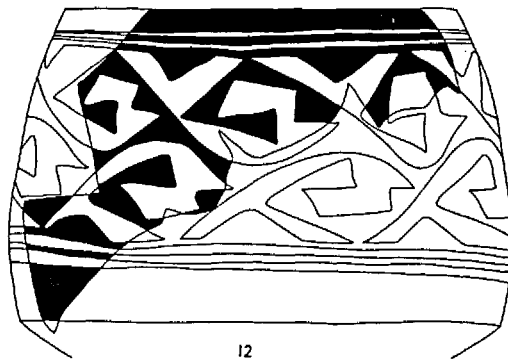
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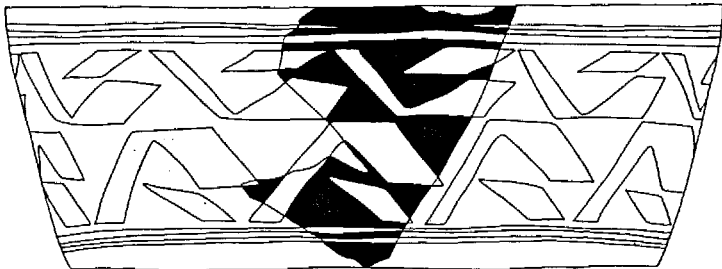
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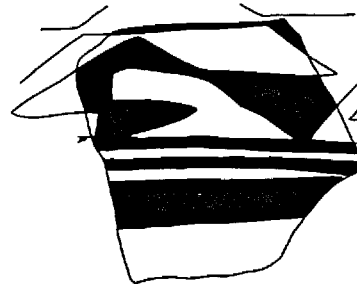
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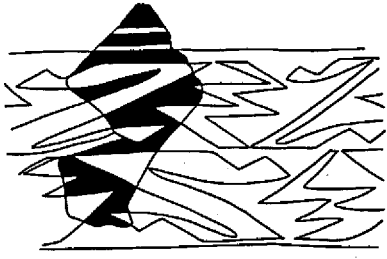


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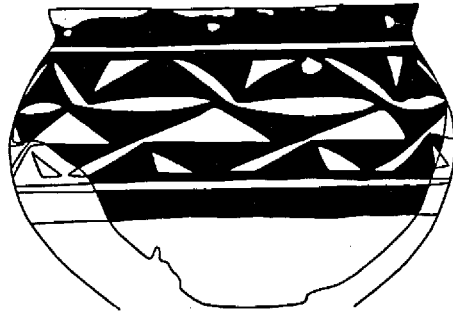


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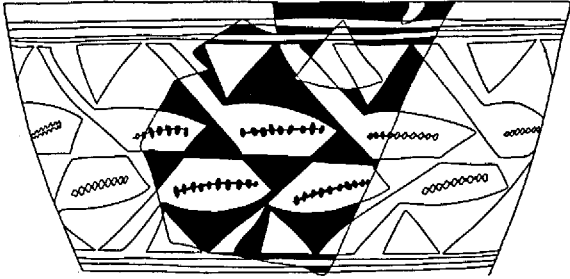
No.	Field No.	Provenance	Level	Form	Design	D.	H.	Th.	Remarks	Scale	See Page
1	3809	M 30, Rm. VIII 2, fill	III		XV C			.55	bowl rim; restoration probable	1:3	48
2	2128	M 28, +1.4 m.	III	VII, Pl. 12:11	XV C	20.0	12.8 mx.		3 suspension holes preserved	1:3	48
3	4819	N 27, above Rms. I 1-2	IV	II	XV C	30	14.5 mx.		tan ware, red-brown paint	1:4	44, 48
4	3151	Trench I, 50-60 m., +2.77 m.	IV	VIII A	XV C	16.0	10.5 mx.			1:3	29, 48, 55
5	3734	Rm. XIII 3; N 27, over Rms. I 1-2; L 28, +2.0 m.; O 28, +3.0 m.	IV	II	XV C	30	15.9 mx.	.3-.9	tan ware, red-brown paint	1:4	48
6	2719	Rm. IV 1	III		XV C	18	8.5 mx.		bowl rim; reused as scraper	1:3	48
7	4799	L 30, +2.32 m.	IV		XV C			.6-1.0	bowl side, paint weathered	1:3	48
8	3736	P 33	surf.		XV C	22	8.3 mx.	.6	bowl rim; restoration probable	1:3	48
9	3406	Trench I, 20-30 m., +.67 m.	II		XV C				jar shoulder	1:3	48
10	4721	Rm. XIII 3	IV		XV C			2.-4	bowl side	1:3	48
11	2172			IX	XV C, XI A	15.3	11.9 mx.			1:3	44, 48



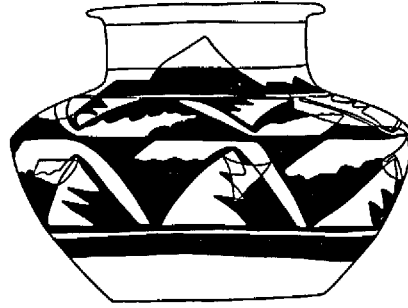
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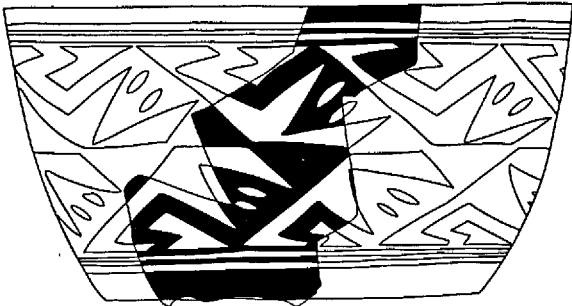
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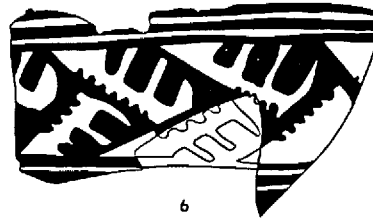
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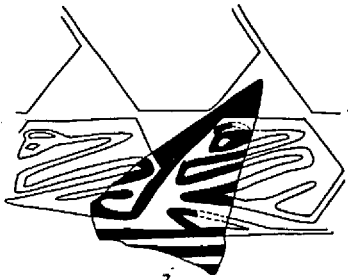
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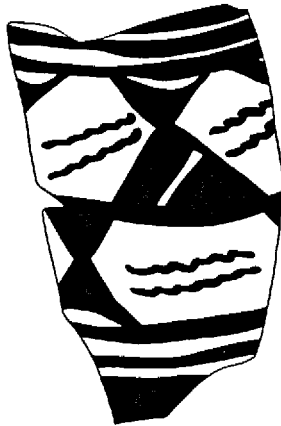
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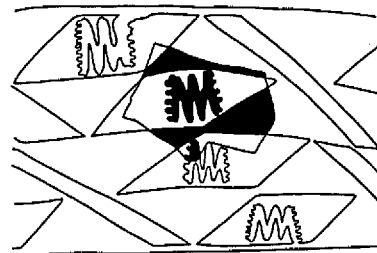
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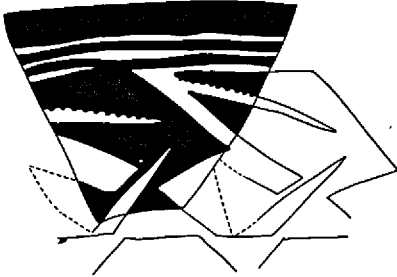
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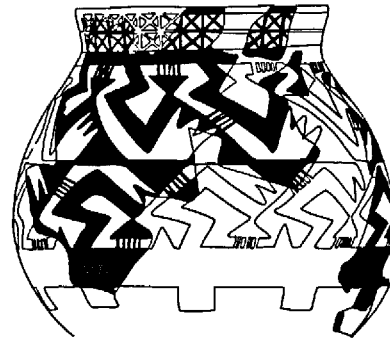
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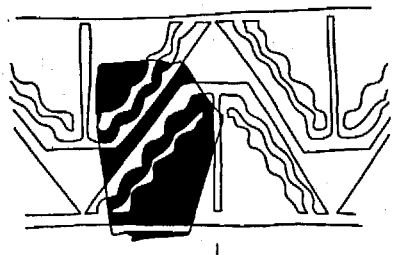
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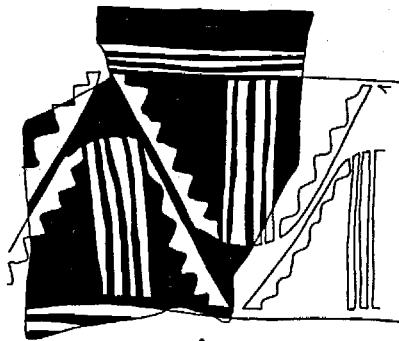
11

SCALE, 1:3

No.	Field No.	Provenance	Level	Form	Design	D.	H.	Th.	Remarks	See Page
1	3747	N 26, +.6 m.	II		XV D			.45	bowl side	47 f.
2	3750	Trench II, 50-60 m., .55 m. deep	surf.		XV D			.4	bowl rim	48
3	3409	Trench I, 13-15 m., +1.15 m.	III		XV D			.6	bowl rim	47 f.
4	5666	M 28, court level N 29, +2.2 m.	III IV		XV D	20	3.3 mx.	.25	bowl rim	48
5	5616	Q 31, +2.32 m.	top IV, surf.		XV D			.3	bowl side	48
6	5483	K 29, +2.67 m.	surf.		XV D			.5	bowl side, light tan ware	48
7	2158	Rm. IV 2	III	IV B	XV D	16.2	10 mx.	.2		17, 48
8	3418				XV D	34	10.5 mx.	.6-.8	bowl rim	48
9	4978				XV D			.65	bowl side, yellow-cream ware; restoration prob- able	48
10	2138	Rm. VII 2	III	II B, Pl. 9:11	XV E	28	16.2 mx.			48, 51
11	2132	Rms. XV 2-3	IV	VI, Pl. 12:4	XV D	18.1	16.9			34, 48
12	4874	Trench I, 50-60 m., +2.77 m., or Trench II, 47 m., 1 m. deep	IV surf.		XV E			.8	bowl side, tan ware	48
13	3823	Trench I, 10-20 m., ±0 m.	I	XII A	XV F	12	7.6 mx.	.35		48



1



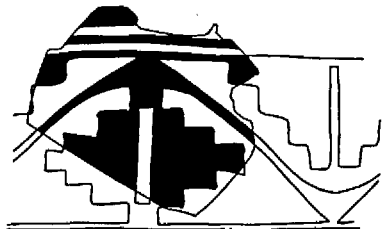
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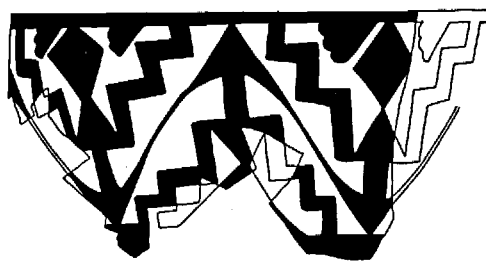
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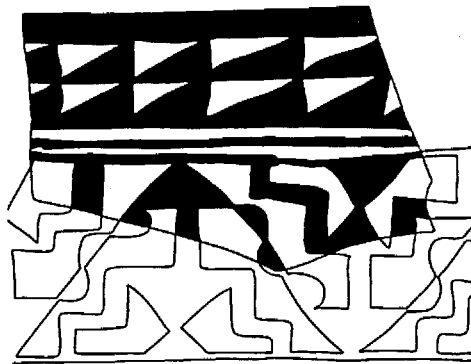
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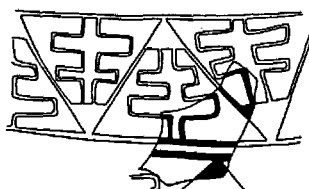
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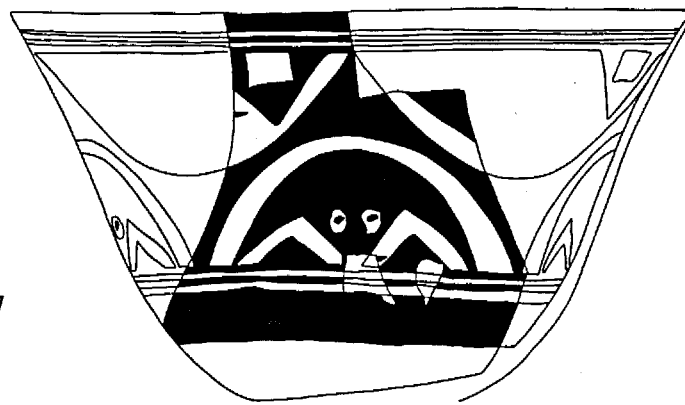
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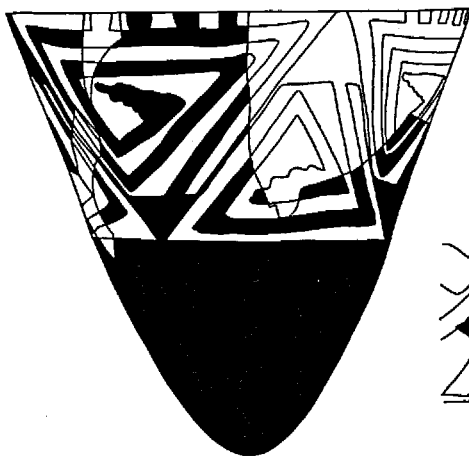
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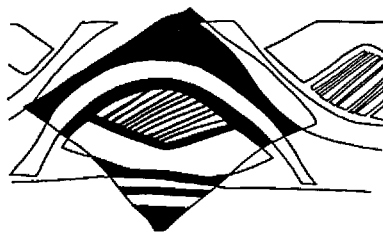
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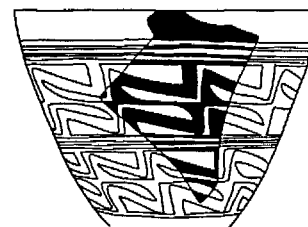
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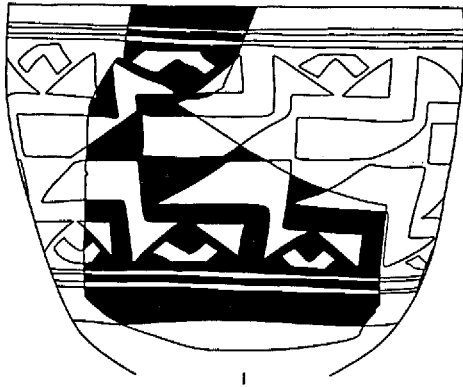


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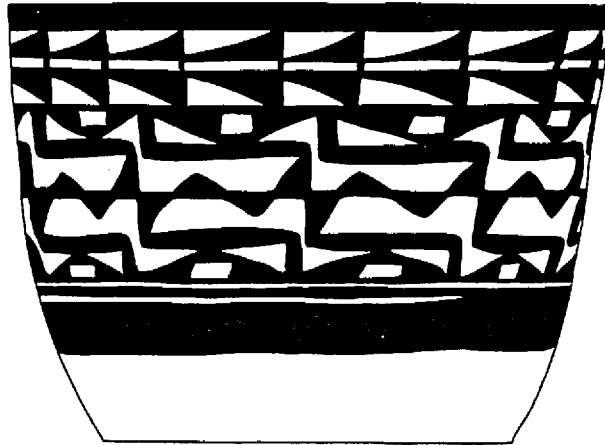


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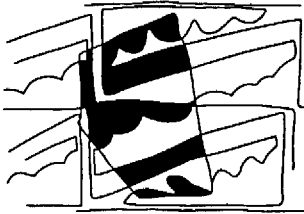
No.	Field No.	Provenience	Level	Form	Design	D.	H.	Th.	Remarks	Scale	See Page
1	5487	Trench I, 60-70 m., +1.3 m.	III	II	XV F	24	18.2 mx.	.6	tan ware	1:4	48
2	3390	Rm. III 3	III	II	XV F	32	23.3 mx.			1:4	33, 48
3	3838	Rm. XIV 3	IV		XV F			.3	bowl side, tan ware	1:3	48
4	3728	Rm V 6 N 31, +3.0 m.	III surf.	IV?	XV F	16	7.2 mx.	.35		1:3	48
5	3820	Trench I, 60-70 m., +2.17 m.	IV	II	XV F	ca. 30	ca. 12 mx	.7		1:4	48
6	3819	Rm. VII 3	III		XV F			.3	bowl side; restora- tion probable	1:3	48
7	4960	N 30, +2.75 m.	top IV, surf.		XV F			.2	bowl side	1:3	48
8	5325	Rm. VIII 6	III		XV F in.			.8	bowl side	1:3	48
9	5650	N 29, +2.2 m.	base IV		XV G 1, X A	20	8 mx.	.3	bowl rim	1:3	48
10	3735	Rm. XIII 3 N 31, +2.52 m.	IV surf.	IV A, Pl. 11:6	XV F	ca. 24.2	ca. 8.7 mx.	.2-.6	light tan ware	1:3	48
11	3793	Rm. XVII 2	IV		XV F			.55	bowl side; restora- tion probable	1:3	48
12	5612	N 28, +2.7 m. (over Rm. II 2)	IV		XV G 1			.1-.15	bowl rim, yellow- cream ware	1:3	48
13	2189	Trench I, 8-11 m., +1.1 m.	III, surf.	IV?	XV G 2	ca. 19.5	ca. 8 mx.	.2		1:3	48



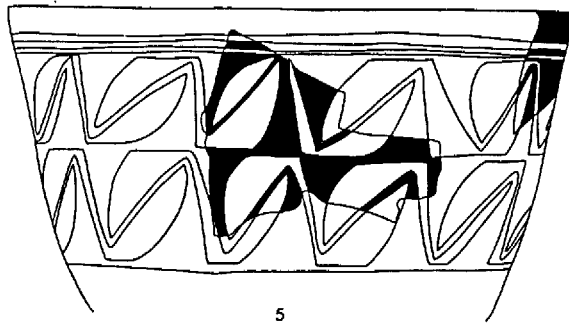
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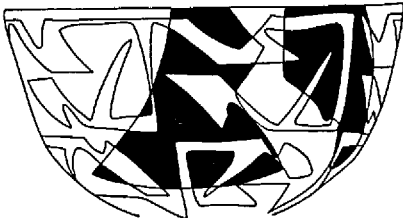
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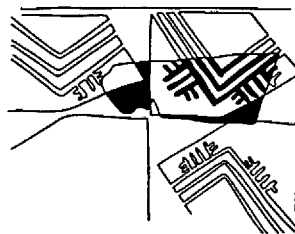
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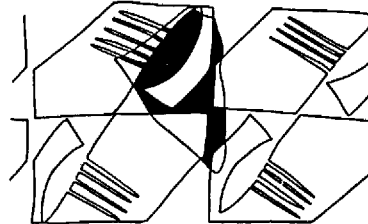
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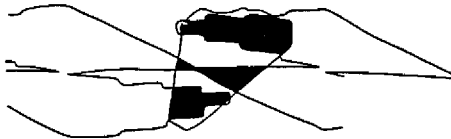
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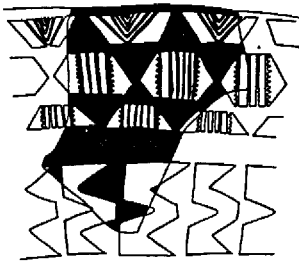
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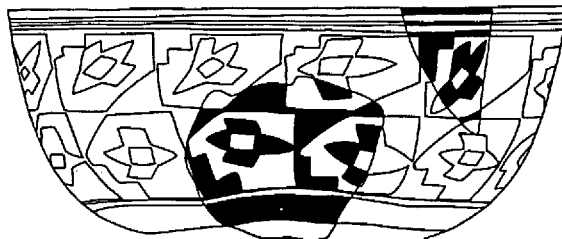
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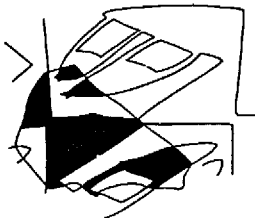
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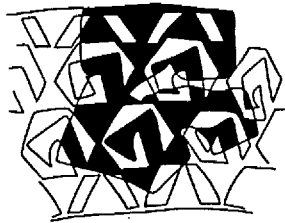
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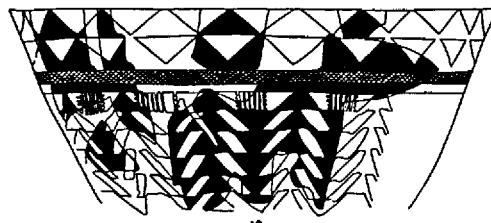
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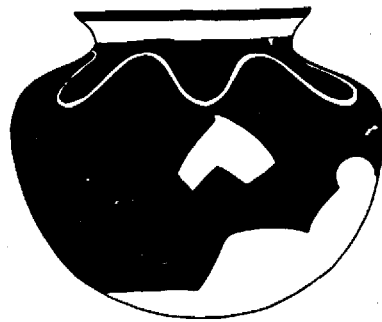
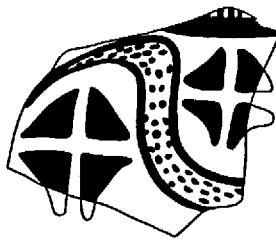
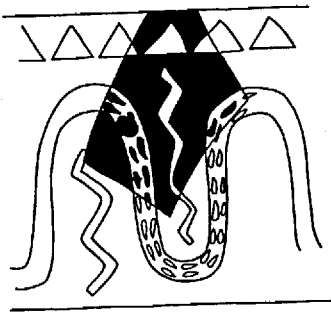
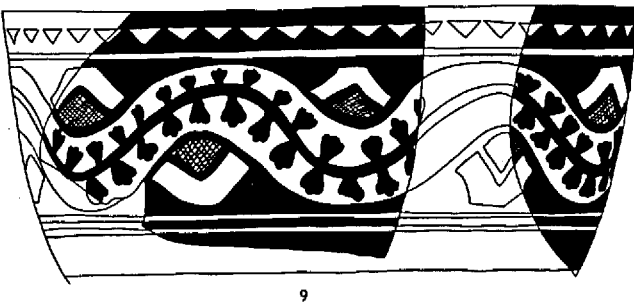
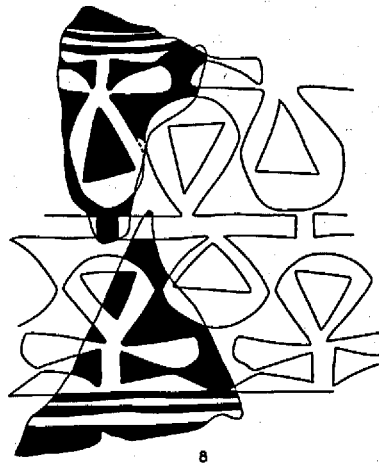
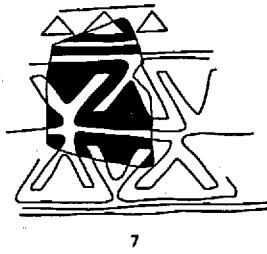
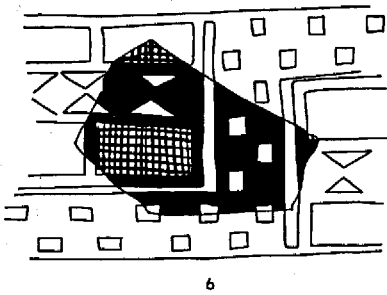
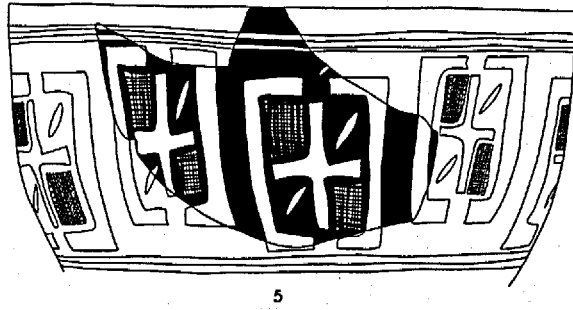
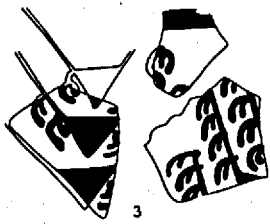
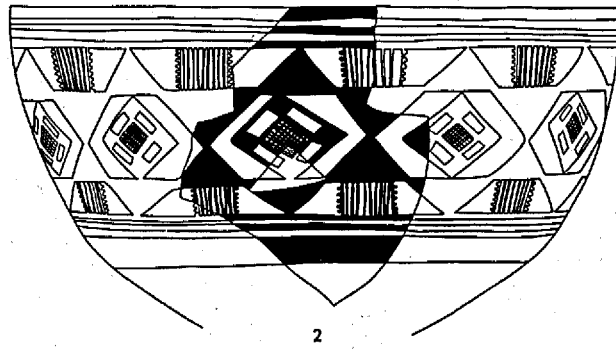
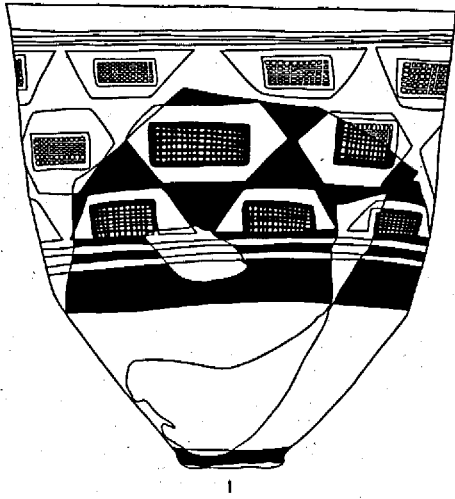
12



13

SEE PAGE 48

No.	Field No.	Provenance	Level	Form	Design	D.	H.	Th.	Remarks	Scale
1	2531			I	XV G 1	22.8	20.2 mx.			1:4
2	3733			II	XV G 1	32.5	16 mx.	.45-.6	yellow-cream ware	1:4
3	5617	House XVII	IV		XV G 2			.35	bowl rim	1:3
4	5622	Trench II, 47 m., 1 m. deep	surf.		XVI A			.3	bowl side	1:3
5	5107	N 27, court, +1.5 m.	III	II?	XVI A	30	12.8 mx.	.6	green-cream ware	1:4
6	4675	Rm. I 1	III		XVI A			.6	bowl side, cream-tan ware	1:3
7	3906	N 32, somewhat above v.s.	II		XVI A			.6	bowl side	1:3
8	3778	Rm. XVII 2	IV		XVI A			1.2	jar side, tan ware	1:3
9	2125	Trench I, 8 m., +1.27 m.	III, surf.	II?	XVI B	34	14.3 mx.	.6-.8		1:4
10	4494	N 29, +2.12 m.	base IV		XVI B	12	6.8 mx.	.4	bowl or beaker rim	1:3
11	2145			IX	XVI B					1:3
12	2108		III	IX A, Pl. 13:17	XVI B	16.0	11.1 mx.	.4		1:3
13	3144	Rm. VII 2	III		XVI B				pot shoulder; redrawn from field sketch	1:3



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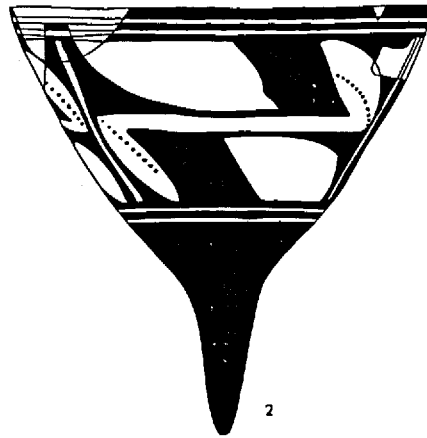
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SCALE, 1:3

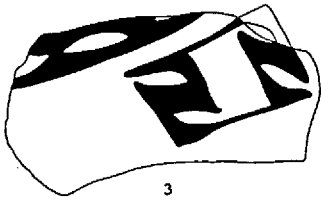
No.	Field No.	Provenience	Level	Form	Design	D.	H.	Th.	Remarks	See Page
1	2043	Rm. XI, floor	III	V	XVII A	16.8	10.5		design in plan	16, 22, 49, 54
2	2106		III	V, Pl. 12:1	XVII A	15.6	17.6	.3-.7		49, 54
3	2895	Rm. XIII 3, +2.0 m.	IV		XVII A	18	5.2 mx.	.4	belly of small jar, dark cream-tan ware, brown paint	49
4	5702	Rm. VII 3	III		XVII A				bowl side, light tan ware	49
5	5316	Trench I, 70-80 m., .3 m. deep	surf.		XVII C			.55	bowl side, light tan ware	49
6	2188	Trench I, 8-11 m., +1.1 m.	III, surf.	IV or V	XVII A	ca. 15	ca. 6.9 mx.			49
7	5304	Trench I, 10-20 m., ±0 m.	I	V	XVII B			.45		49, 59
8	3697				XVII C				bowl side, tan ware	49
9	3332				XVII C(?) - D				jar side	49
10	3687	Rms. V 3, X 4	III	V	XVII C	20	9 mx.		yellow-gray ware	49
11	3426	Rm. III 3	III		XVII C	30	14.4 mx.	.6	bowl side	49



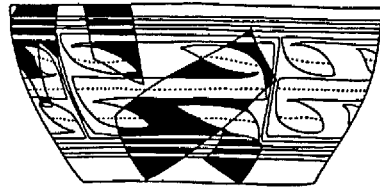
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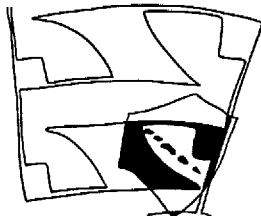
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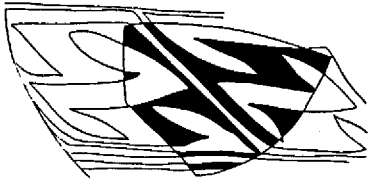
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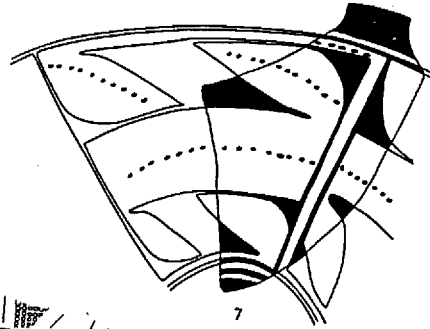
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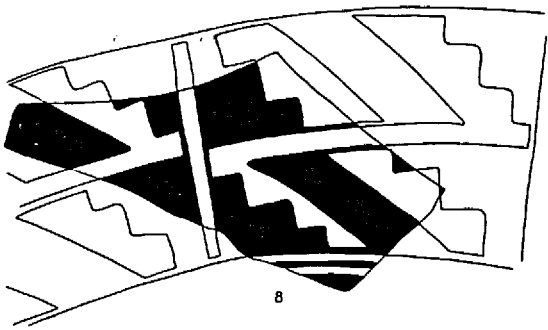
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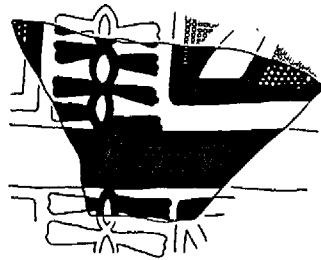
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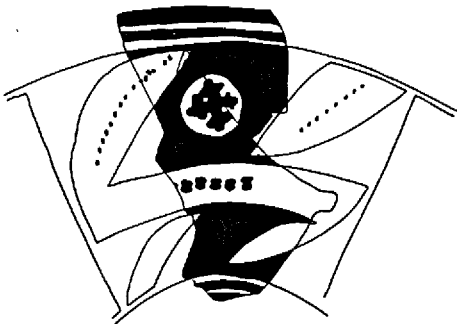
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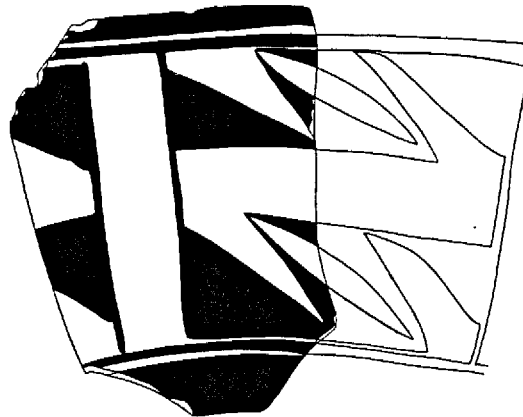
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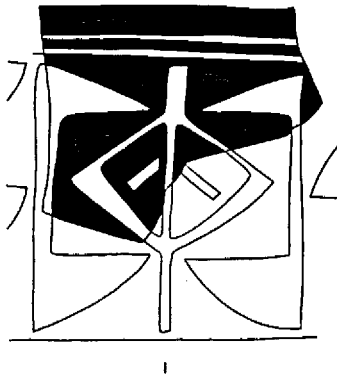
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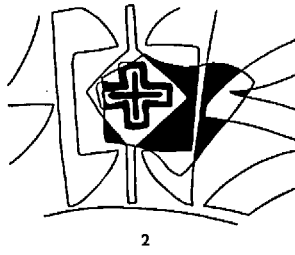
11

SEE PAGE 49. SCALE, 1:3

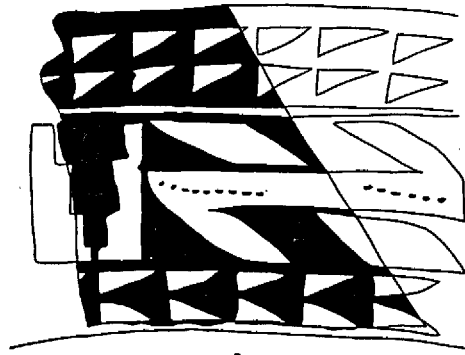
No.	Field No.	Provenance	Level	Design	D.	H.	Th.	Remarks
1	4843	Rm. VI 1	III	XVII D	28	9.2 mx.	.6	bowl rim
2	5055	O 30, +2.45 m.	IV, surf.	XVII D			.4	bowl side
3	3704	Rm. XII 2	III	XVII D	40	12 mx.		bowl rim
4	2675	O 33, surf. to v.s.		XVII D				bowl rim; reused as scraper
5	3701	Rm. VI 1	III	XVII D	22	5.0 mx.		bowl rim, deep tan ware
6	3677	Rm. VI 2	III	XVII D				bowl side, drab ware
7	3420	Rm. V 6	III	XVII D			.45	bowl rim, red-brown paint
8	4997	Rm. II 1	III	XVII D			.3	bowl rim
9	4013	O 32, somewhat above v.s.	II	XVII D			.7	bowl side
10	3654	J 32, +2.0 m.	surf.	XVII D				bowl side, light yellow-brown ware
11	5050	Rm. IV 3	III	XVII D			.45	bowl side



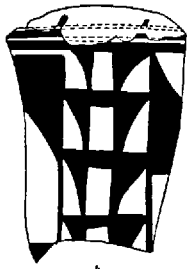
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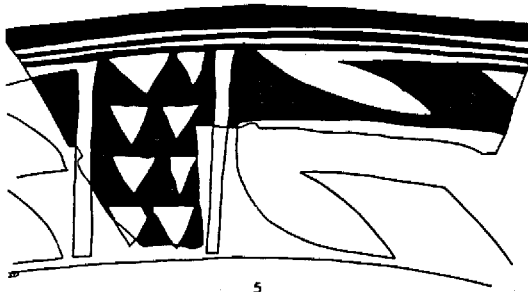
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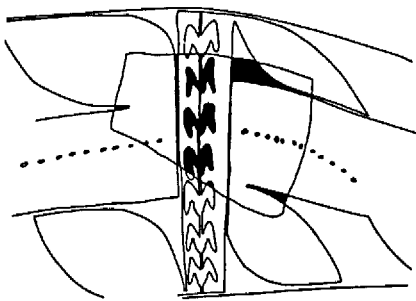
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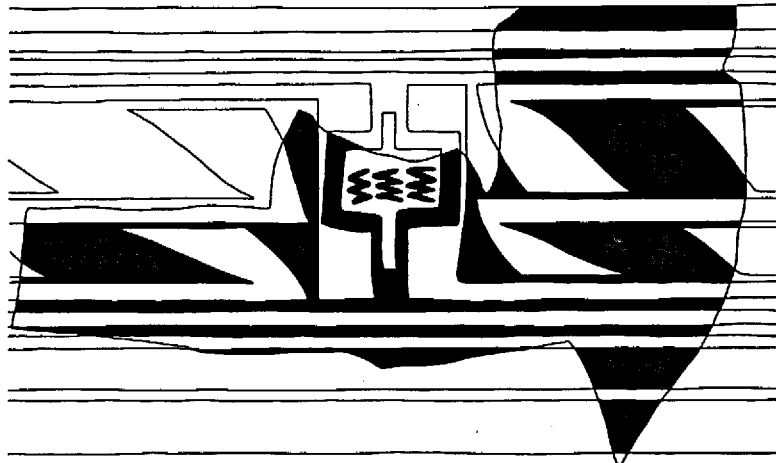
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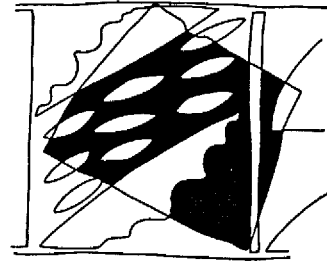
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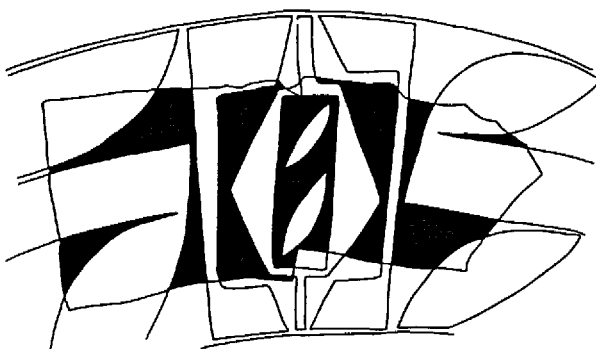
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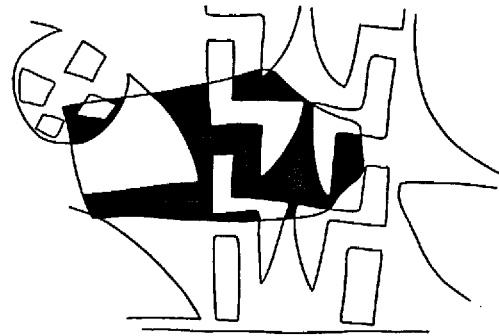
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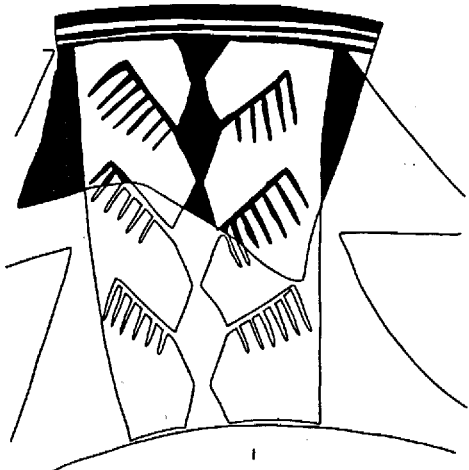
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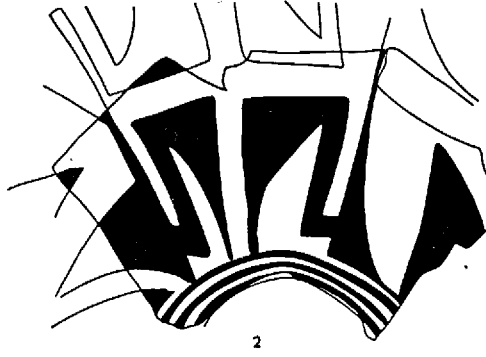
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SEE PAGE 49

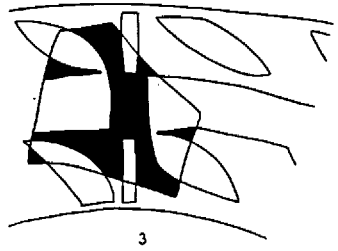
No.	Field No.	Provenience	Level	Form	Design	D.	H.	Th.	Remarks	Scale
1	3680	House XVI	IV		XVII D	32	10 mx.		bowl rim, tan ware	1:3
2	3224	L 30, +2.32 m.; L 28, debris above House III and Rm. XI	IV	II C	XVII D in.					1:3
3	5059	Rm. XVII 2	IV		XVII D			.5	bowl side	1:3
4	2547			II	XVII D	29	17.0 mx.			1:3
5	3652	Rm. XIV 3	IV		XVII D	ca. 32	19 mx.	1.1	jar shoulder and belly	1:4
6	3695	Trench I, 0-10 m., + 8 m.	II, surf.		XVII E				jar side	1:3
7	3771	Trench I, 12 m., +1.3 m.	III		XVII E			.65	bowl side	1:3
8	3692	L 28, +2.0 m.	IV		XVII E				bowl side, tan ware; re- versing rectangles re- stored from PPA 3663: Level III	1:3
9	3662	Trench I, 10-20 m., +1.15-1.75 m. M 30, +2.4-3.25 m.	III, surf. surf.		XVII E	26	16.4 mx.		bowl rim, tan ware	1:3



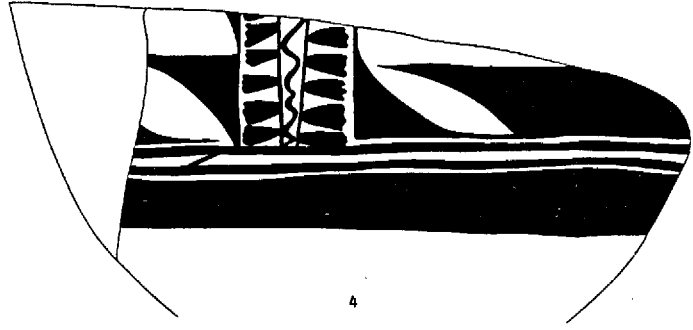
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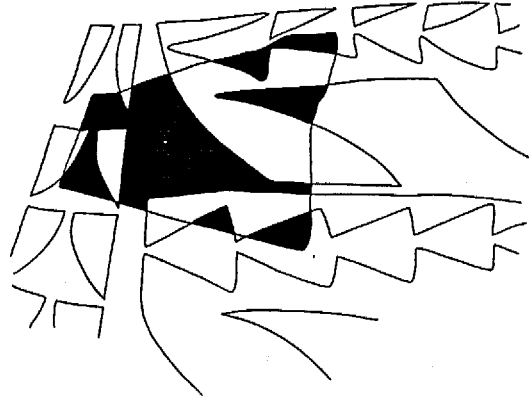
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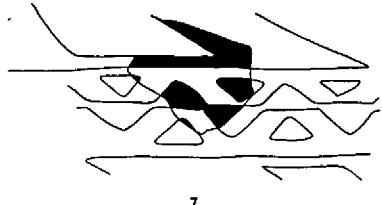
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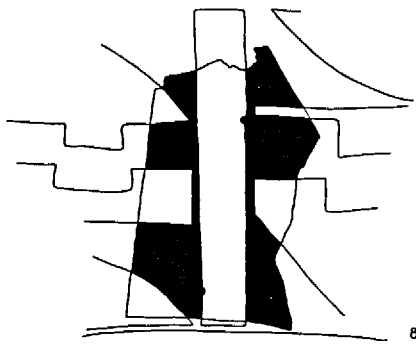
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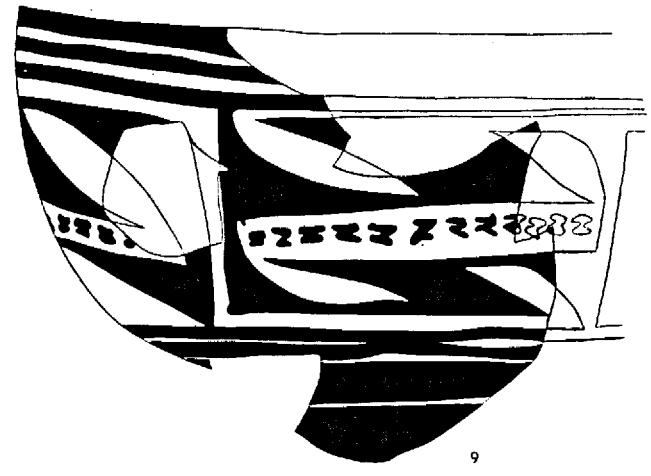
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7



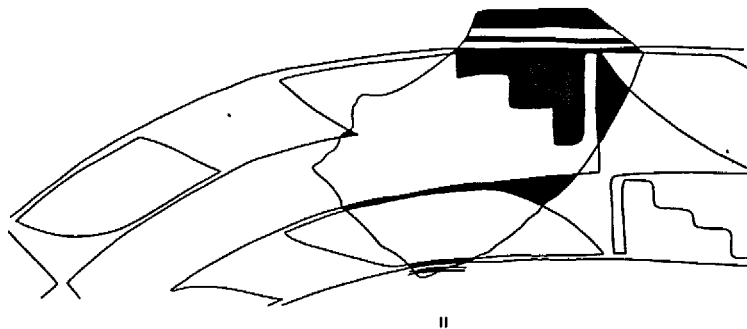
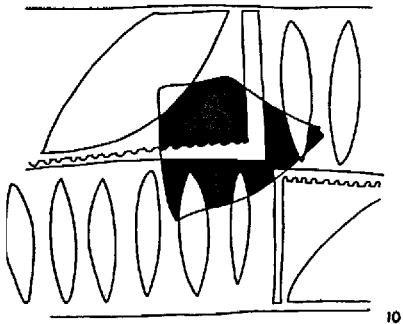
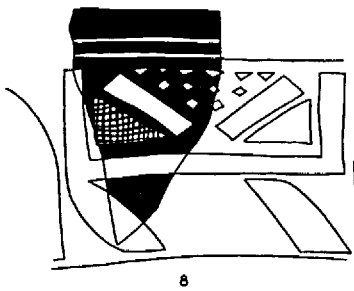
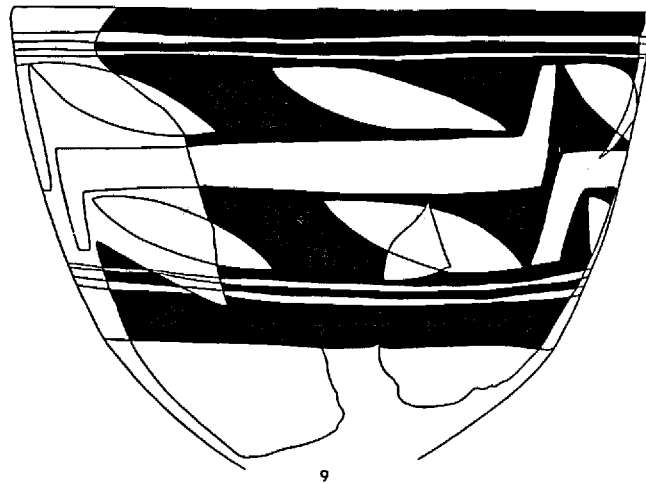
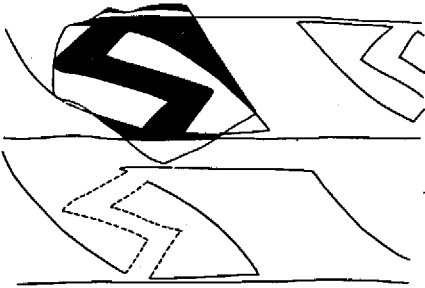
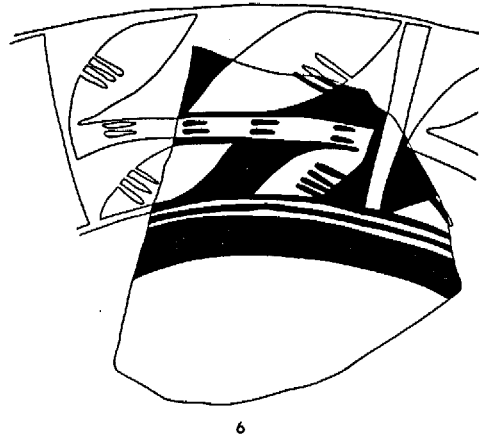
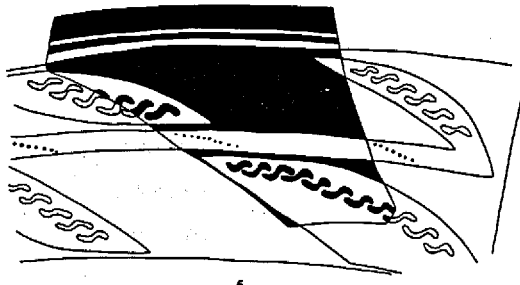
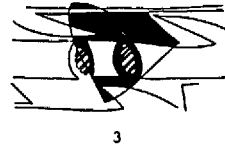
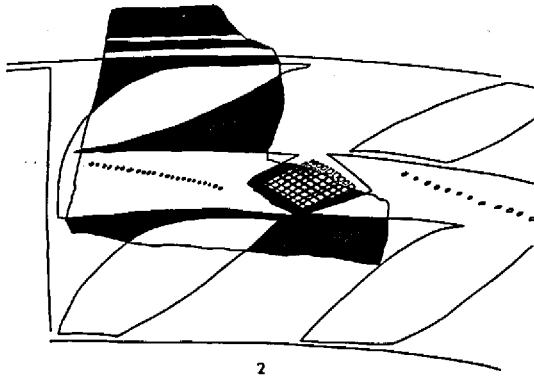
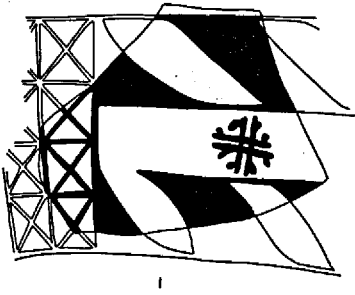
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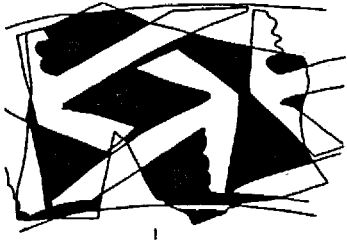
SEE PAGE 49. SCALE, 1:3

No.	Field No.	Provenience	Level	Form	Design	D.	H.	Th.	Remarks
1	3327	Rm. XIV 2	IV		XVII <i>D-E</i> in.; VII <i>B</i> out., Pl. 36:10				bowl side
2	3678	K 28, level of House VI	III		XVII <i>E</i>	ca. 20	13.0 mx.		bowl rim, green-drab ware
3	4747	K 28, +2.8 m.	IV, surf.		XVII <i>E</i>			.4	bowl side
4	5233	O 28, +3.0 m.	top IV or surf.		XVII <i>E</i>	20	7.4 mx.	.5	bowl rim
5	3655	N 26, +.6 m.	II		XVII <i>E</i>	24	8.4 mx.		bowl rim, tan ware
6	3669	Rm. XIV 3	IV		XVII <i>E</i>				lower side of bowl, light brown ware
7	4875	O 27, +3.87 m.	surf.		XVII <i>E</i>			.6	bowl side
8	4688	Trench I, 47 m., +1.0 m.	III		XVII <i>F</i>	28	8.9 mx.	.6	bowl rim, pink-tan ware; restoration probable
9	3653	Rm. VI 2	III	II	XVII <i>F</i>	25.5	17.8 mx.		
10	4755	K 31, +2.3 m.	surf.		XVII <i>F</i>			.5	bowl side; restoration probable
11	3682	M 29, ca. +2.0 m.	base IV		XVII <i>F</i>	ca. 26	9.8 mx.		bowl rim, tan ware

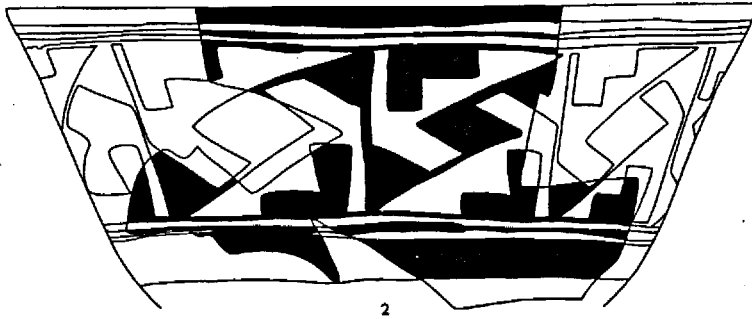


SEE PAGE 49

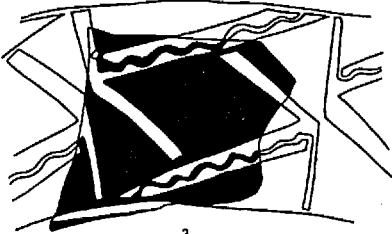
No.	Field No.	Provenance	Level	Form	Design	D.	H.	Th.	Remarks	Scale
1	3898	Rm. VIII 6	III		XVII G			.4	bowl side, light tan ware	1:3
2	3845, 4433	L 30, +2.32 m.	IV	II	XVII G	30	12.0 mx.	.4-.5	light tan ware	1:3
3	3893	M 27, court level	IV		XVII G			.85	bowl side, light tan ware	1:3
4	3827	Rm. VI 4	III		XVIII A 1	29	17 mx.	.4	bowl rim	1:4
5	3863	Rm. XIV 3	IV		XVIII A 2			.7	bowl side	1:3
6	3862	M 28, court level, +1.65 m.	III		XVIII A 2			.7	bowl side	1:3
7	3867a	N 31, somewhat above v.s. Rm. XII 2	II III	I C, Pl. 9:6	XVIII A 1	23.3	18.3	.7	pale gray ware	1:4
8	3833	P 33	surf.		XVIII A 1	30	10.9 mx.	.6	bowl rim, light tan ware	1:3
9	3867	M 29, House XVI, +2.3 m.	IV		XVIII A 2			.5	bowl side	1:3



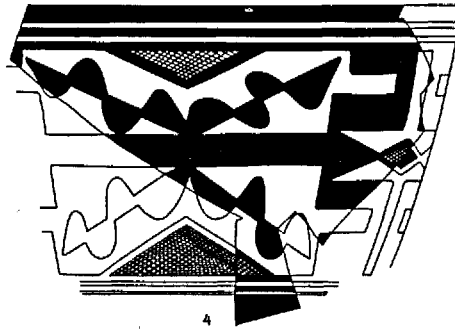
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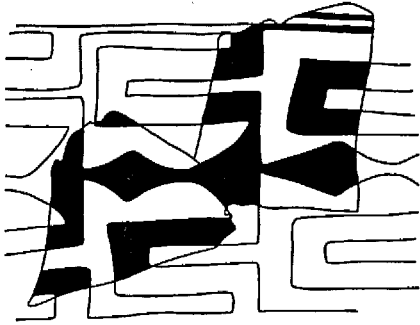
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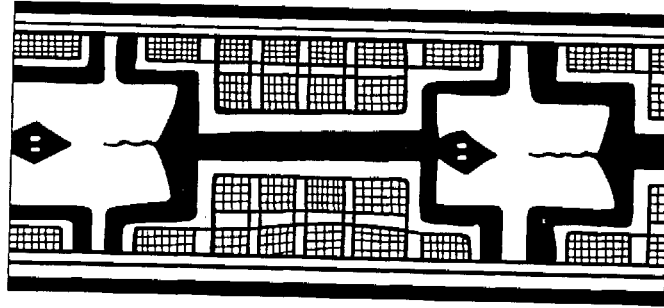
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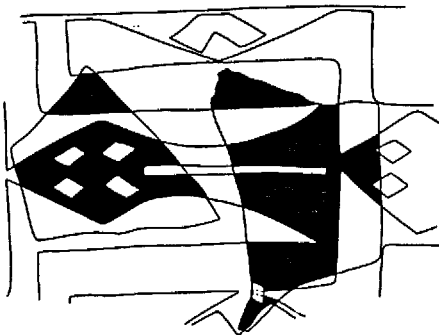
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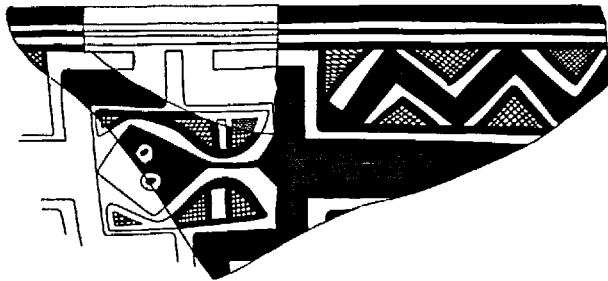
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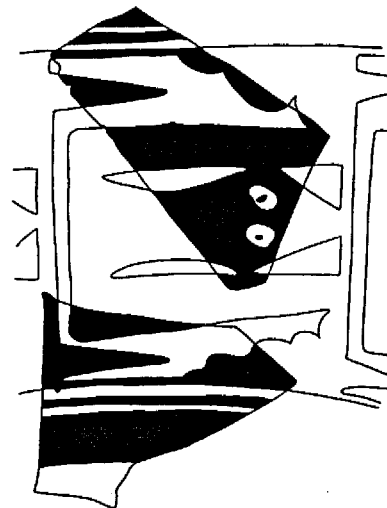
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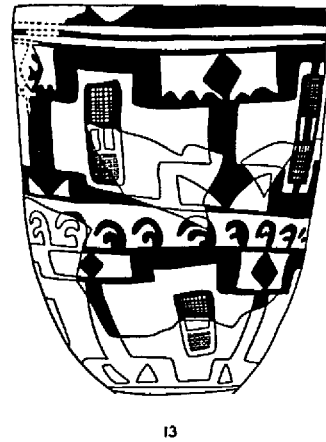
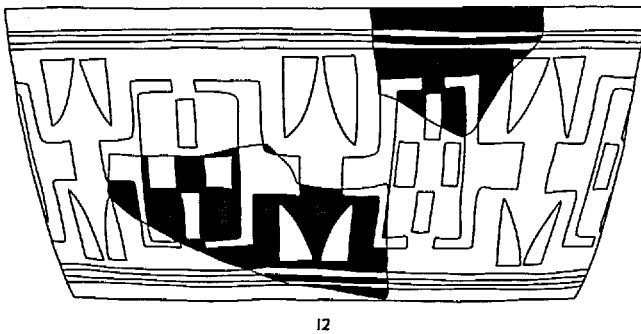
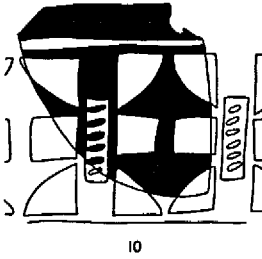
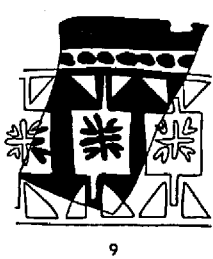
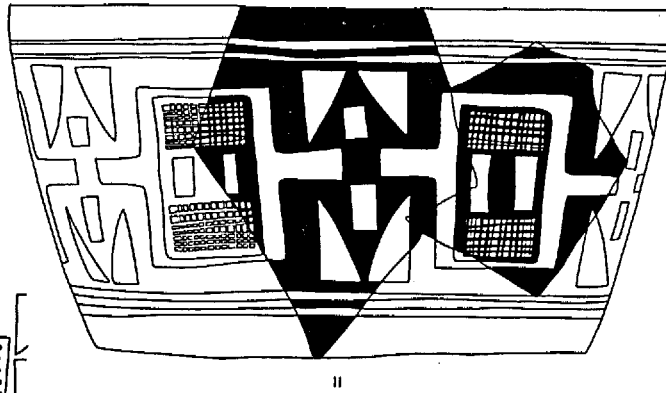
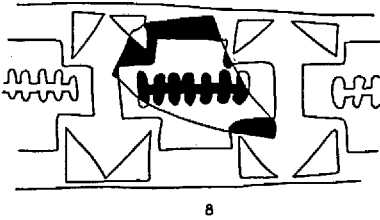
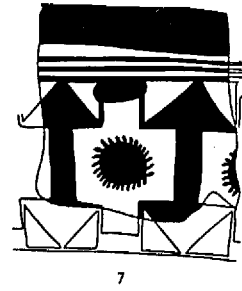
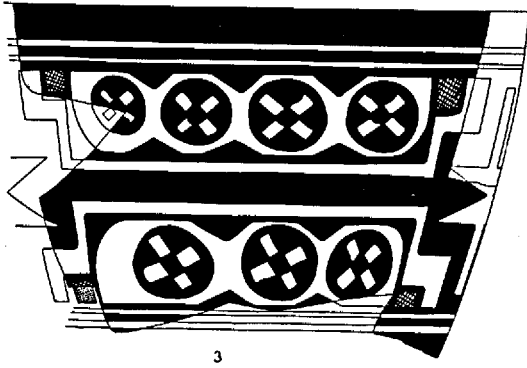
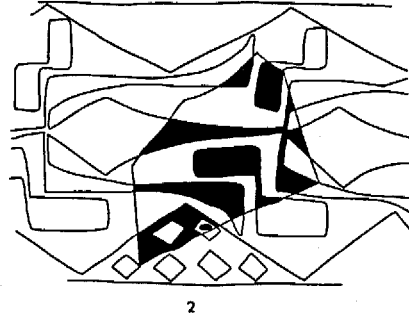
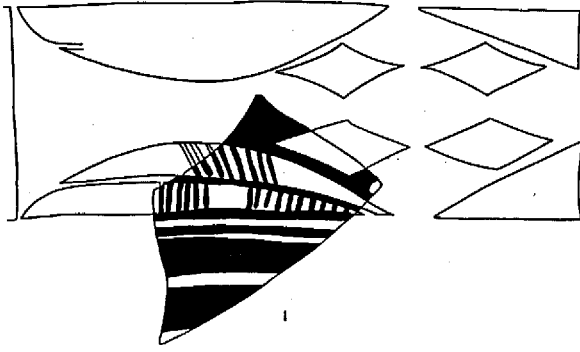


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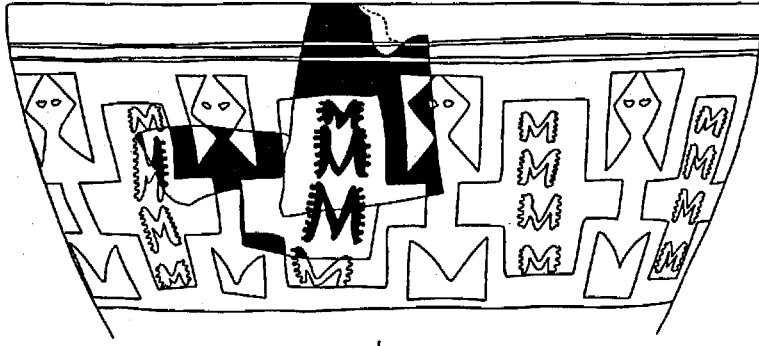


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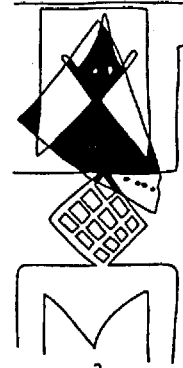
No.	Field No.	Provenience	Level	Form	Design	D.	H.	Th.	Remarks	Scale	See Page
1	4950	Rm. V 6	III		XVIII A 2			.6	lower side of bowl, tan ware; restoration certain from PPA 3915-18	1:3	49
2	3836	M 31, small walls	II		XVIII A 2?			.2-.55	bowl side, light tan ware; restoration probable	1:3	50
3	3399	Rm. IV 3	III	II?	XVIII A 3	23	13.8 mx.	.45		1:4	50
4	5141	Trench I, 27-30 m., +.32 m.	I		XVIII A 2			.55	pot shoulder, greenish ware, flaky surface	1:3	50
5	5111	Trench I, 10-20 m., +.1 m.	I		XVIII B 1			.4	bowl side, yellow-cream ware	1:3	50
6	3308	Rm. I 1	III		XVIII B 1				bowl side	1:3	50
7	3416	probably Trench I, 10-20 m., +.2 m.	I?		XVIII B 1	22	8.5 mx.		bowl rim	1:3	50
8	5155	L 31, level of Rm. VI 1	III, surf.(?)		XVIII B 1			.5	bowl side	1:3	50
9	5154				XVIII B 1	24	8 mx.	.65	bowl rim, yellow-cream ware	1:3	50, 53
10	5153	Rm. XVII 3	IV		XVIII B 1	18	7.3 mx.	.4	bowl rim, brick-tan ware	1:3	50
11	5128	Rms. IV 3, V 6	III	I or II	XVIII B 2	26.5	14.0 mx.	.5		1:3	50
12	5131	O 31, level of base of Rm. IX O 32, +2.37 m.	III IV, surf.	II	XVIII B 2	34		.7		1:4	50
13	5123	Rm. III 3	III	XI A	XVIII B 3	12.8	13.1 mx.	.3	cream-tan ware	1:3	50



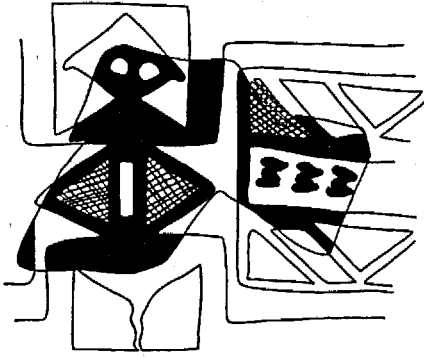
No.	Field No.	Provenance	Level	Form	Design	D.	H.	Th.	Remarks	Scale	See Page
1	5106	M 31, small walls to v.s. Rms. VI 2, IX	I (intrusive?) III	II?	XVIII B 3, XIX K 3			.5		1:3	50, 52
2	5118	L 28, in kiln	III		XVIII B 4			.7	bowl side	1:3	50
3	5146	J 29, +2.02 m.	IV		XVIII B 4			.4	bowl side	1:3	50
4	3351	Rm. I 1	III		XVIII B 4	18	7.5 mx.	.3	bowl rim, pink-tan ware	1:3	50
5	5134	M 31, small walls	II		XVIII B 4			.4	bowl side	1:3	50
6	5142	Rm. V 6	III		XVIII B 4			.55	bowl side	1:3	50
7	5148	L 35, surf. to v.s.			XVIII B 4			.7	bowl side	1:3	50
8	5125	Trench I, 0-10 m., +.6 m.	II, surf.(?)		XVIII B 4			.6	bowl side	1:3	50
9	3383	M 28, +2.0 m. (above Rm. II 1)	IV		XVIII B 4				lower side of bowl	1:4	50
10	5108	N 29, +2.02 m.	base IV		XVIII B 4			1.1	jar shoulder, tan ware	1:3	50
11	5105	Rms. III 3, IV 1, V 2, IX Rm. XV 1	III IV (intrusive?)	II?	XVIII B 5	32	16.9 mx.	1.1		1:4	50



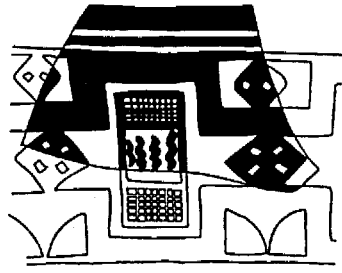
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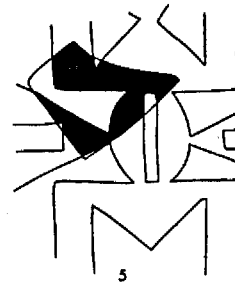
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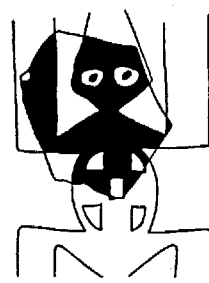
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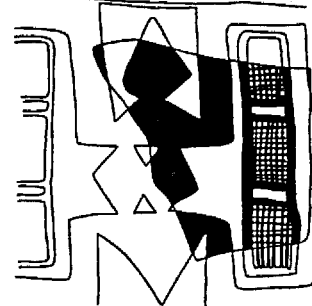
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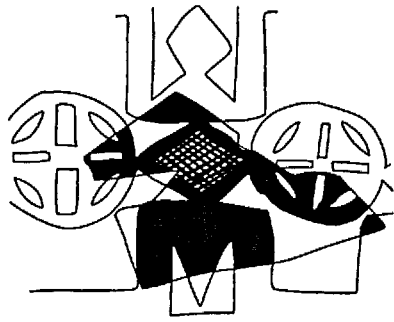
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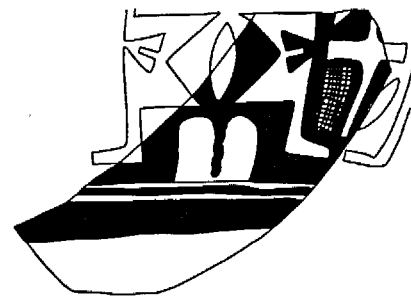
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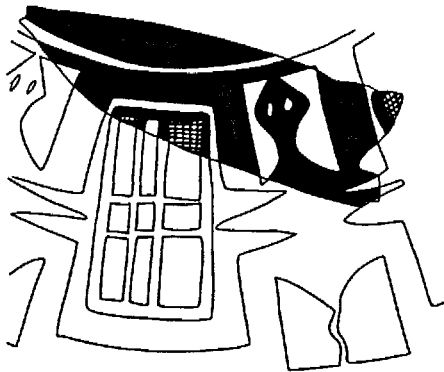
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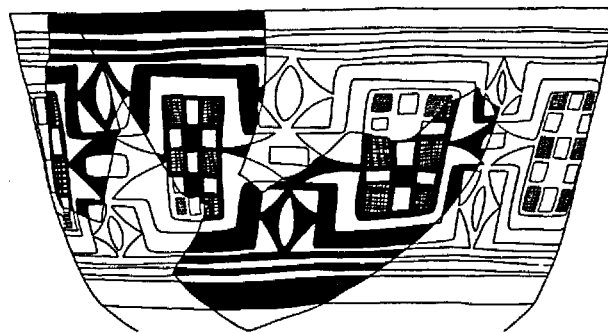
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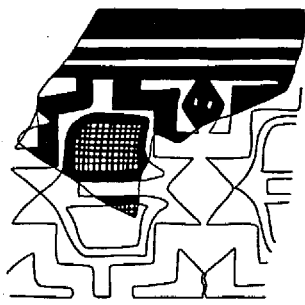
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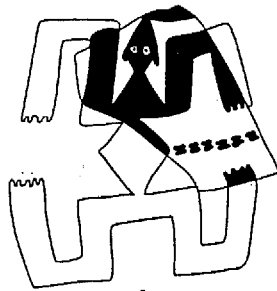
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SCALE, 1:3

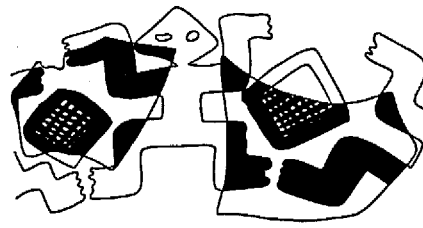
No.	Field No.	Provenance	Level	Form	Design	D.	H.	Th.	Remarks	See Page
1	3349	Rm. XIV 3	IV		XVIII B 6	24	8.3 mx.	.45	bowl rim	50
2	2169	Rm. XIV 3	IV		XVIII B 6				bowl side, traces of red color in.	20, 50
3	5124	M 30, +3.25 m. and deeper	surf.		XVIII B 6			.3	bowl side, tan ware	50
4	2186	Rm. XI	III		XVIII C			.5	bowl side	50
5	2185	N 29, +2.12 m.	base IV		XVIII C				bowl side	50
6	3323	L 28, on kiln	IV	IV or V	XVIII C				tan ware	50
7	3322	O 32, ±0 m. and slightly higher	I		XVIII D			.4-.6	bowl side, green-cream ware	50
8	3328				XVIII C			.75	bowl side	50
9	5109	W. of Rm. XVII 2		I?	XVIII C			.7		
10	3321	Rm. VII 2	III		XVIII D			.2	bowl rim, cream-tan ware	50
11	3993	P 27, +3.62 m.	surf.		XVIII C	28	11.6	.5	bowl rim, light tan ware	
12	5120				XVIII C			.6	bowl side; restoration probable	
13	5372	N 31, somewhat above v.s.	I		XVIII D			.7	bowl side, light cream-tan ware	50
14	5592	Rm. I 1	III		XIX A, X F 2			.6	bowl side, tan ware, reddish paint	50
15	3306	N 31, just above v.s.	I		XIX A in.; VII B out.				bowl side, cream-tan ware, pink-tan surface	40, 50
16	2156	Rm. X 1	III	VIII	XIX A, Fig. 19 b	15	8 mx.	.4		18, 50
17	2203	Trench I, 8 m., +1.3 m.	III, surf.		XIX A			.4-.6	bowl rim	50
18	2204	Trench I, 8-11 m., +1.2 m.	III, surf.	V	XIX A	21	13.6			50



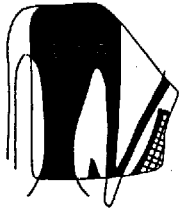
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2



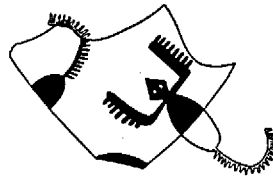
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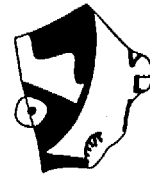
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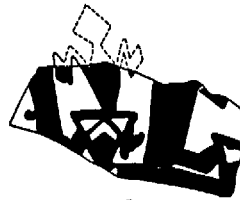
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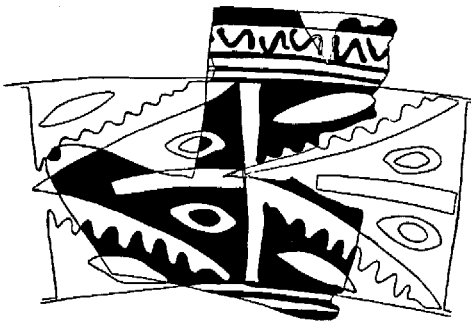
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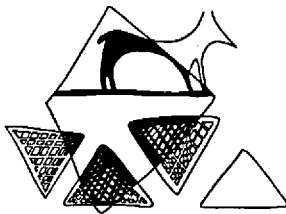
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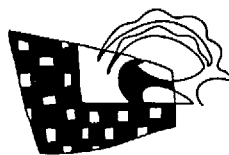
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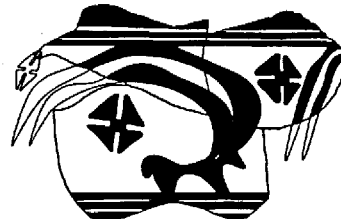
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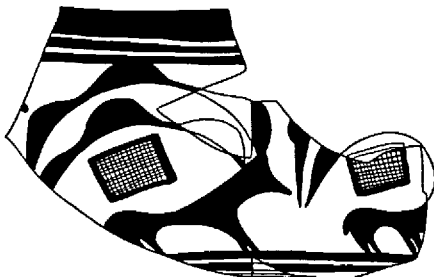
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15



16



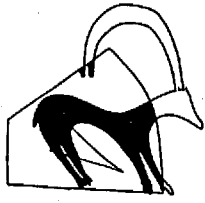
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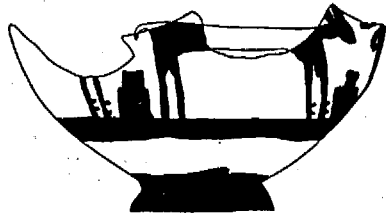
18

SCALE, 1:3

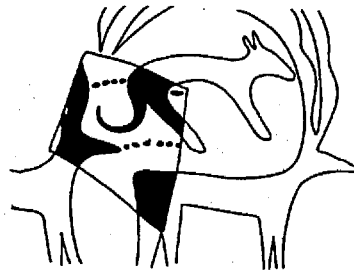
No.	Field No.	Provenance	Level	Form	Design	D.	H.	Th.	Remarks	See Page
1	2144	Rm. XIII 2	IV	IV C?	XIX A					20, 50
2	3291	Rm. III 1	III	III?	XIX A	15	8.2 mx.			50
3	5170	Trench I, 20-30 m., +.67 m.	II		XIX B			.8	bowl side, pale greenish ware, black paint etched	50 f.
4	2151	Rm. XIII 2; L 29, +2.15 m.	IV	VIII	XIX A					20, 50
5	2122			XI C	XIX A	3.9	8.9 mx.			50
6	3325				XIX A			.35	bowl side	51
7	2911				XIX A				large jar side	50 f.
8	2147	Rm. XIII 1	IV		XIX A			.5-.75	bowl side; restoration prob- able	20, 51
9	3366	Rm. X 3	III	V, Pl. 11:15	XIX A	26.2	15.4	.5-.7	cream-tan ware	51, 53
10	5176	Rm. IV 3	III		XIX A			.65	bowl side	51
11	5157	Trench I, 47-50 m.			XIX B			.9	jar shoulder, drab ware	51
12	3324	Q 32, +2.25 m.	surf.		XIX A				bowl side	51, 56
13	2389a	Rm. XVII 2	IV	I	XIX A	20	7.0 mx.	.6-1.0		51
14	2390a	Rm. XIV 3	IV		XIX B, Fig. 19d	30	11.0 mx.		jar shoulder	51
15	2194			VI?	XIX C	17	10.8 mx.	.15		50 f., 59



1



2



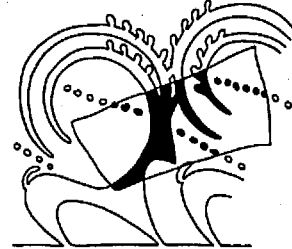
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4



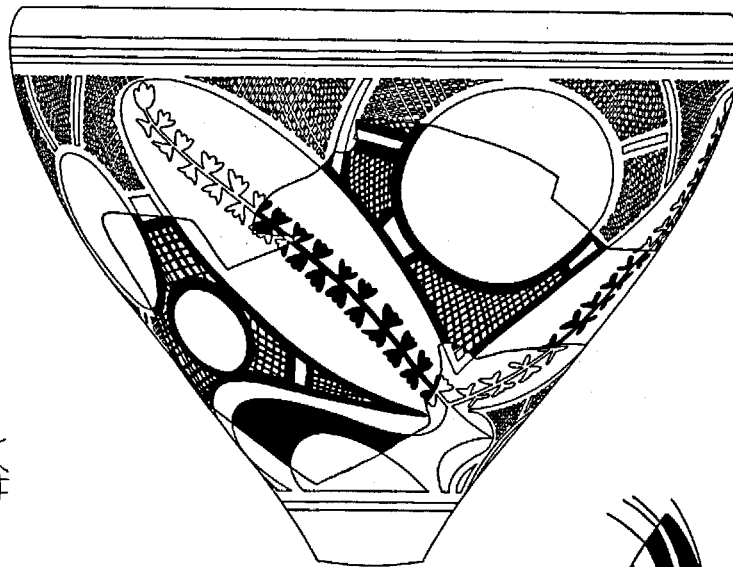
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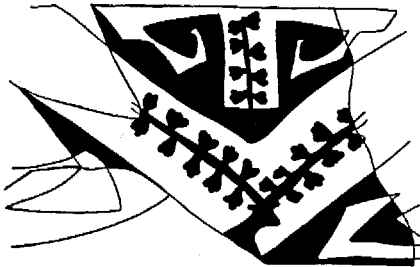
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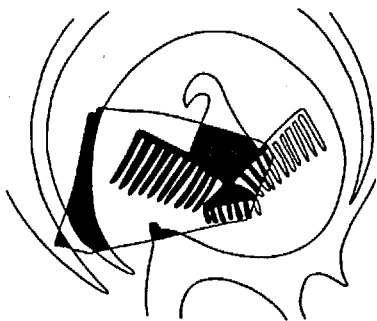
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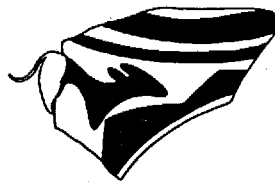
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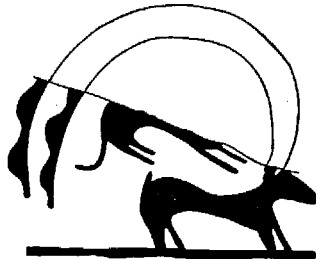
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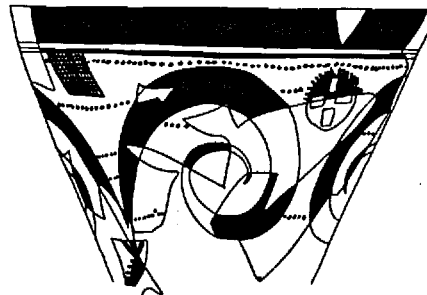
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13



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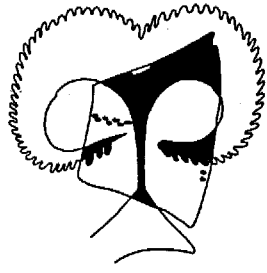
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SCALE, 1:3

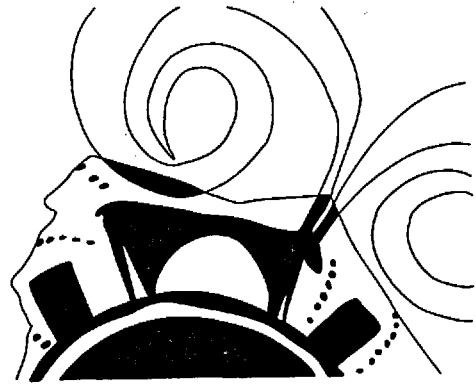
No.	Field No.	Provenance	Level	Form	Design	D.	H.	Th.	Remarks	See Page
1	5250	Rm. V 6 or VI 3	III	V	XIX C	13.4	7.2 mx.	.4		51
2	5242	Trench I, 10-20 m., +1.05 m.	III		XIX C			.45	bowl side, tan ware	51
3	2345a	Q 33, level of House XII		V	XIX C	12	10 mx.	.6		26, 51
4	5166	M 30, +2.97 m.	surf.		XIX C			.6	bowl side	51
5	5161	Trench II, 50-60 m., .55 m. deep	surf.	V (with spike)	XIX C			.3	cream-tan ware	51
6	5282	House XIII	IV		XIX C			.55	bowl rim, cream-tan ware; restoration probable	51
7	3713	M 31, small walls to v.s.	I	V	XIX D 1	17.0	10.0		green-cream ware	51
8	5202	J 31			XIX D 1			.6	bowl side	51
9	3717	M 31, small walls K 29, to level of kiln; Rm. XVII 3	II IV	V	XIX D 1					51
10	5649			V	XIX D 1			.4	restoration probable	51
11	2187	Rm. XIII 3	IV	IV A	XIX D 3	13.4	5.4 mx.	.1		20, 51
12	3721	Trench I, 20-30 m., +1.47 m.	III	V, Pl. 11:11	XIX D 2	18.1	12.0 mx.		whitish cream ware	34, 51
13	2352a	M 30, +1.65 m.	III		XIX D 3				bowl side	51
14	2163	M 28, +1.37 m.	III	IV	XIX D 3	13.8	5.5 mx.			51
15	2134	Rm. II 2	III	V	XIX D 2	20.1	11.3 mx.			16, 51



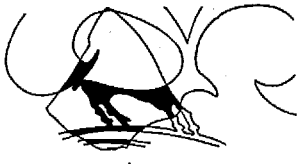
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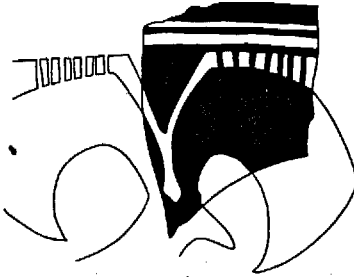
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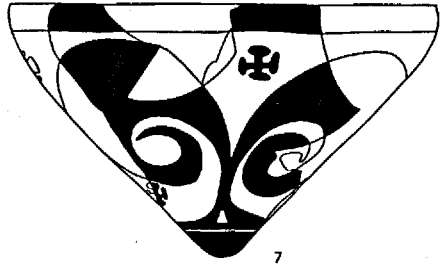
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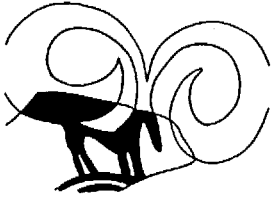
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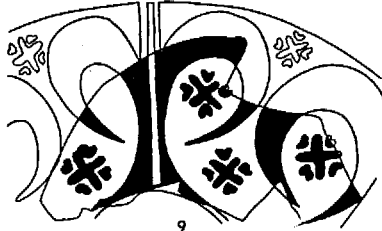
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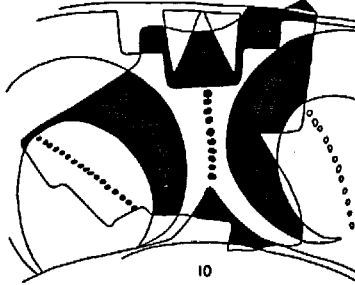
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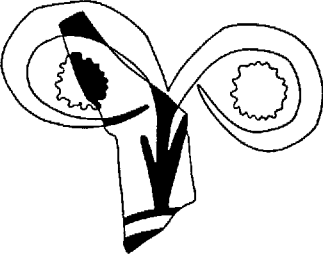
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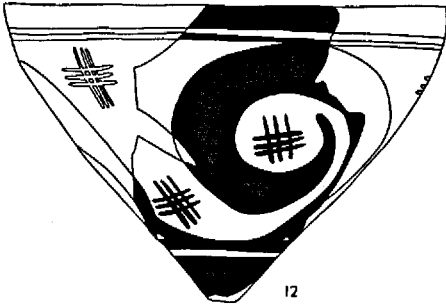
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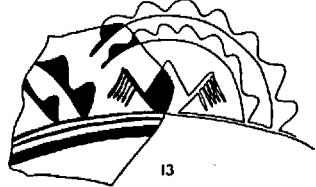
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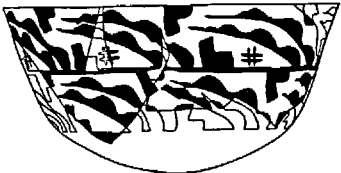
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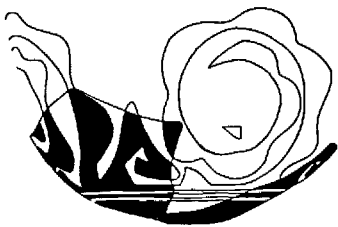
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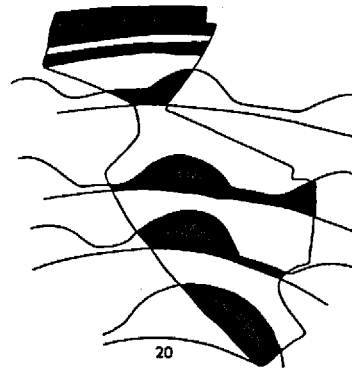
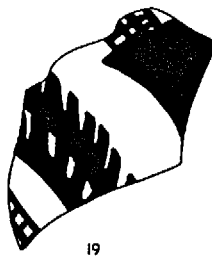
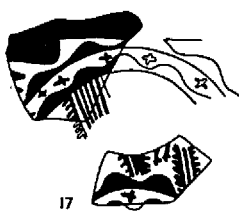
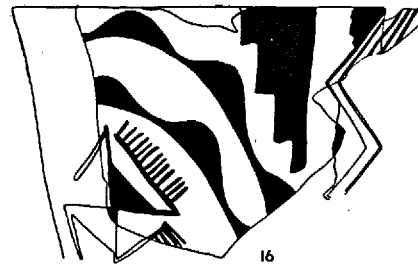
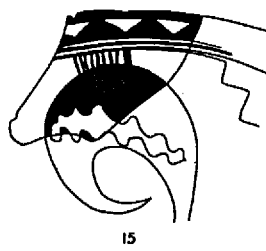
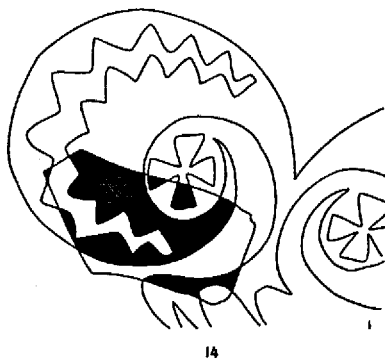
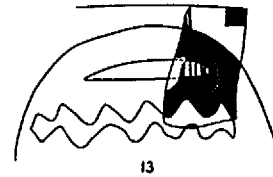
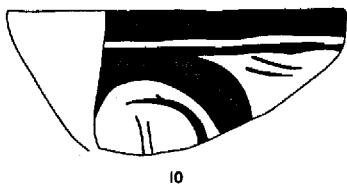
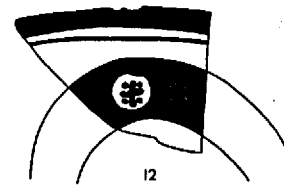
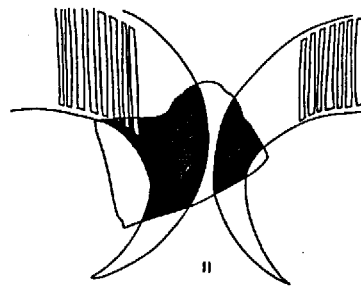
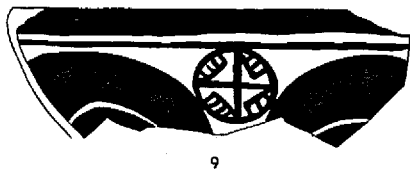
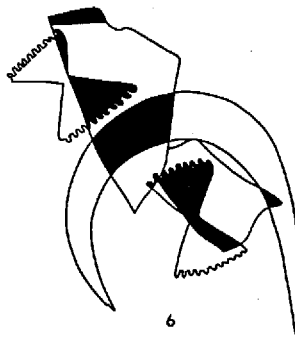
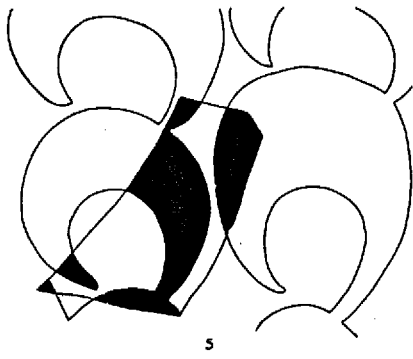
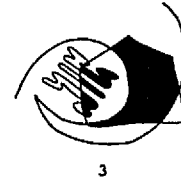
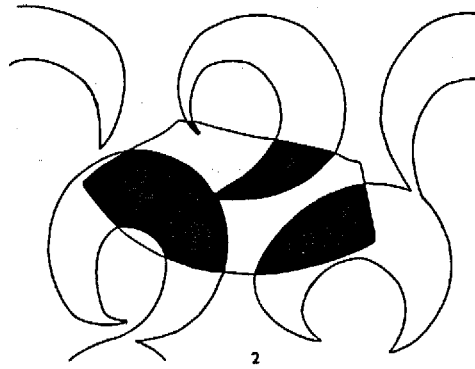
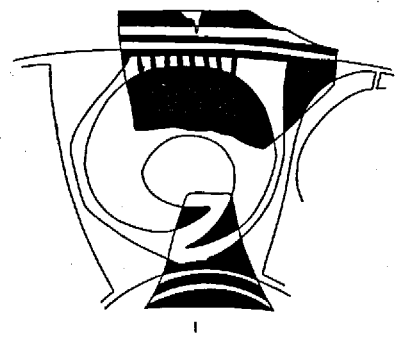
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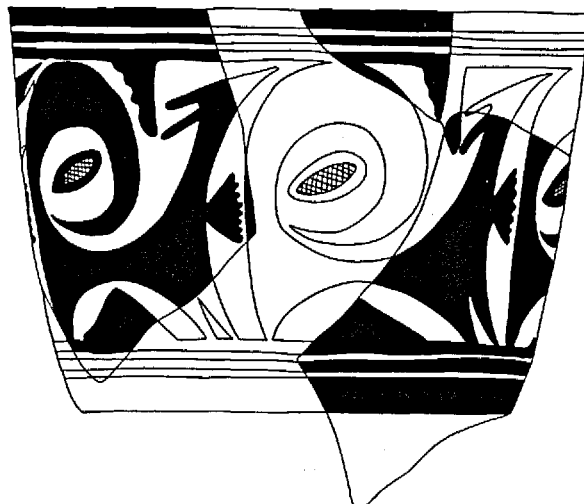
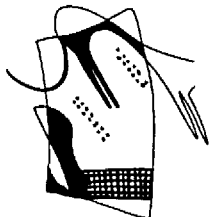
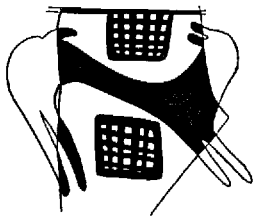
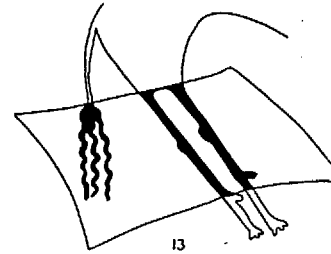
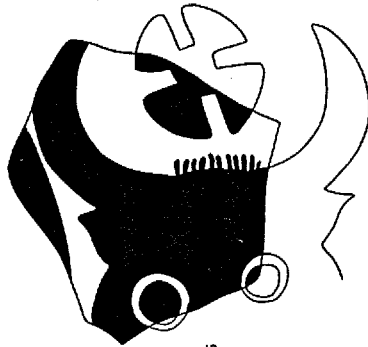
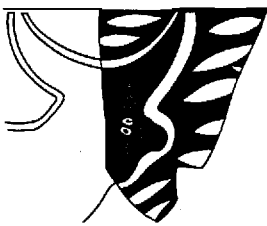
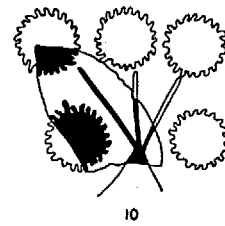
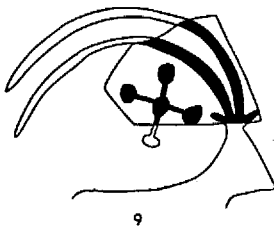
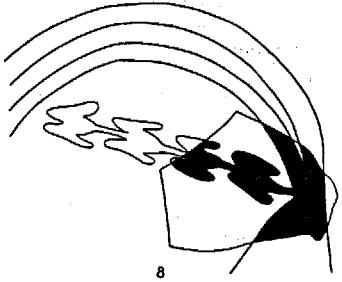
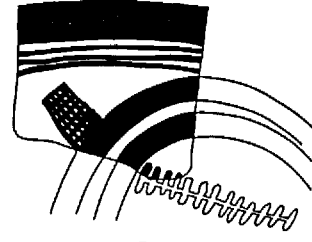
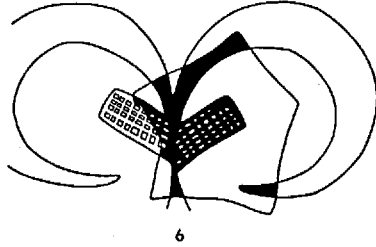
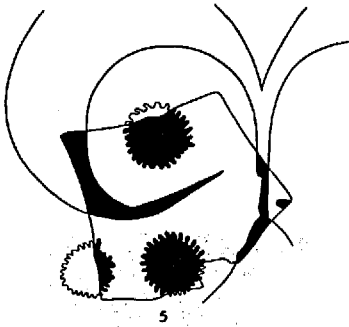
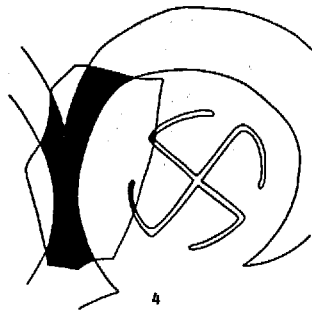
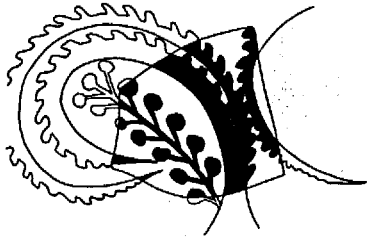
SEE PAGE 51

No.	Field No.	Provenience	Level	Form	Design	D.	H.	Th.	Remarks	Scale
1	5248a	Rm. XIII 3	IV	V	XIX D 4			.5	restoration probable	1:3
	5291	Rm. XVI 3, +2.5 m.	IV							
2	4757	probably Trench I, 47 m., +1.7 m.	III?		XIX D 4			.7	bowl side	1:3
3	5259	Rm. VII 3	III		XIX D 5			.3	bowl side	1:3
4	5293	Trench I, 27-30 m., +.32 m.	I		XIX D 5			.25	bowl rim	1:3
5	5302	Q 28, +3.37 m.	surf.		XIX D 4			.7	bowl side, tan ware	1:3
6	4854	Rm. XVII 4	IV		XIX D 5			.55	bowl rim	1:3
7	4760	Trench I, 30-40 m., +1.0 m.	III		XIX D 5			.4	bowl rim	1:3
8	5290	Rm. V 6	III		XIX D 5	22	5 mx.	.3	bowl rim	1:3
9	2503	Rm. VII 3	III	V	XIX D 5	18	11.5			1:3
10	2508			V?	XIX D 5	17	5.5 mx.	.3-.5		1:3
11	5244	K 31, +2.5 m.	surf.		XIX D 5			.4	bowl side, drab ware	1:3
12	5280	Trench I, 10-20 m., ±0 m.	I		XIX D 5	16	5.3 mx.	.4	bowl rim	1:3
13	5635	Rm. VII 4	III		XIX D 5			.15	bowl rim, yellow-cream ware	1:3
14	4783	Rm. XVII 5	IV		XIX D 5			.15-.4	bowl side, cream-tan ware	1:3
15	5640	Rm. VII 4	III		XIX D 5	18	3.9 mx.	.3	bowl rim	1:3
16	2341a	K 28, +2.4 m.	IV, surf.	II	XIX D 5	33	14 mx.	.55-.65		1:4
17	3714	O 32, +1.77 m.; O 27, +3.87 m.	surf.		XIX D 5				shoulder of small pot, tan ware	1:3
18	2362a	Trench I, 10-20 m., ±0 m.	I		XIX D 5			.35	bowl rim; reused as scraper	1:3
19	2367a	Trench I, 20-30 m., +.67 m.	II		XIX D 5				bowl side	1:3
20	5470	L 29			XIX D 5 in.	26		.5	bowl rim	1:3



SCALE, 1:3

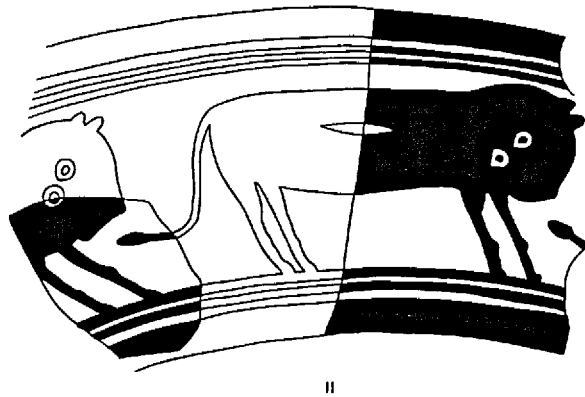
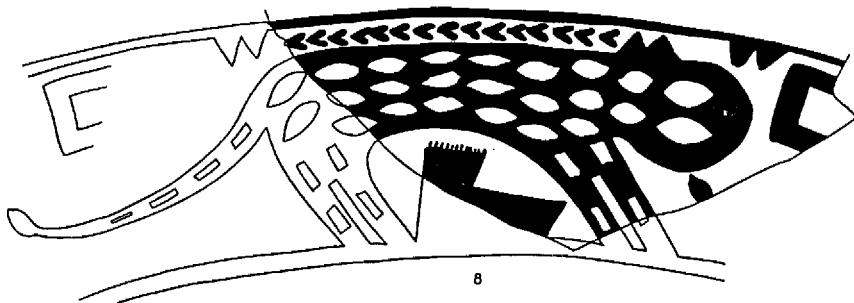
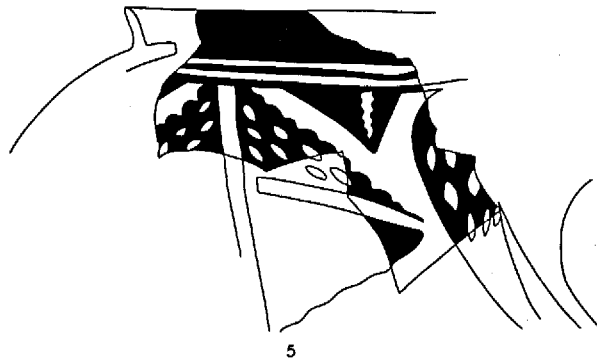
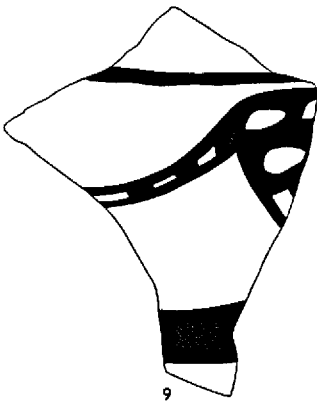
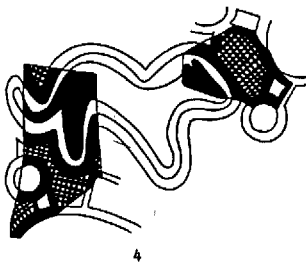
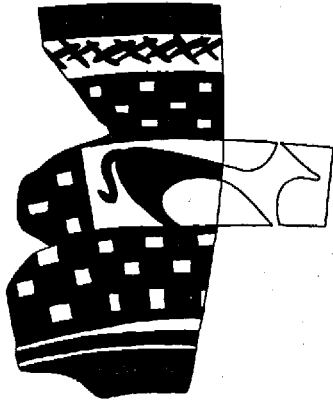
No.	Field No.	Provenience	Level	Form	Design	D.	H.	Th.	Remarks	See Page
1	5266	Trench I, 10-20 m., +.2 m.	I		XIX D 5			.4	bowl side	51
2	2371a	Rm. XIII 3	IV		XIX D 5			.7	bowl side	51
3	5576	Rm. X 1	III		XIX D 5	14	4.2 mx.	.2	bowl rim, drab ware, black paint etched	51
4	3715	Trench I, 10-20 m., +.45 m.	I		XIX D 5				bowl side, light tan ware	51
5	5257	K 31, +2.5 m.; M 30, +3.37 m.	surf.		XIX D 5			.5	bowl side	51
6	4431	Trench I, 0-10 m., +.6 m.	II or surf.		XIX D 5			.3	bowl side	51
7	5278	Trench I, 10-20 m., ±0 m.	I		XIX D 5			.45	bowl rim	51
8	5201	Trench I, 0-10 m., +.8 m.	II or surf.		XIX D 5, K 3			.4	bowl side, cream-tan ware	50-52
9	5367	Rm. VIII 7	III		XIX D 5 in.			.35	bowl side	51
10	4779	L 28, on kiln	IV		XIX D 5			.4	bowl side	51
11	2149	Rm. V 2	III		XIX E				bowl rim	17, 51, 56
12	2167	M 28			XIX E			1.2	jar side	51, 56
13	5196	M 28, court level	III		XIX E?			.6	bowl side, green-cream ware	51
14	2363a	Rm. II 2 and court to S.	III		XIX F			.7	bowl rim	51
15	5190	Trench I, 0-10 m., ±0-.1 m.	I, surf.(?)		XIX G			.35	bowl side	51 f.
16	2894	Rm. IV 1	III		XIX G	23	15.5 mx.		small jar shoulder	51 f.
17	2136	Rm. XIII 2	IV	I	XIX G, Fig. 19 e	23	14.8 mx.			20, 51, 56



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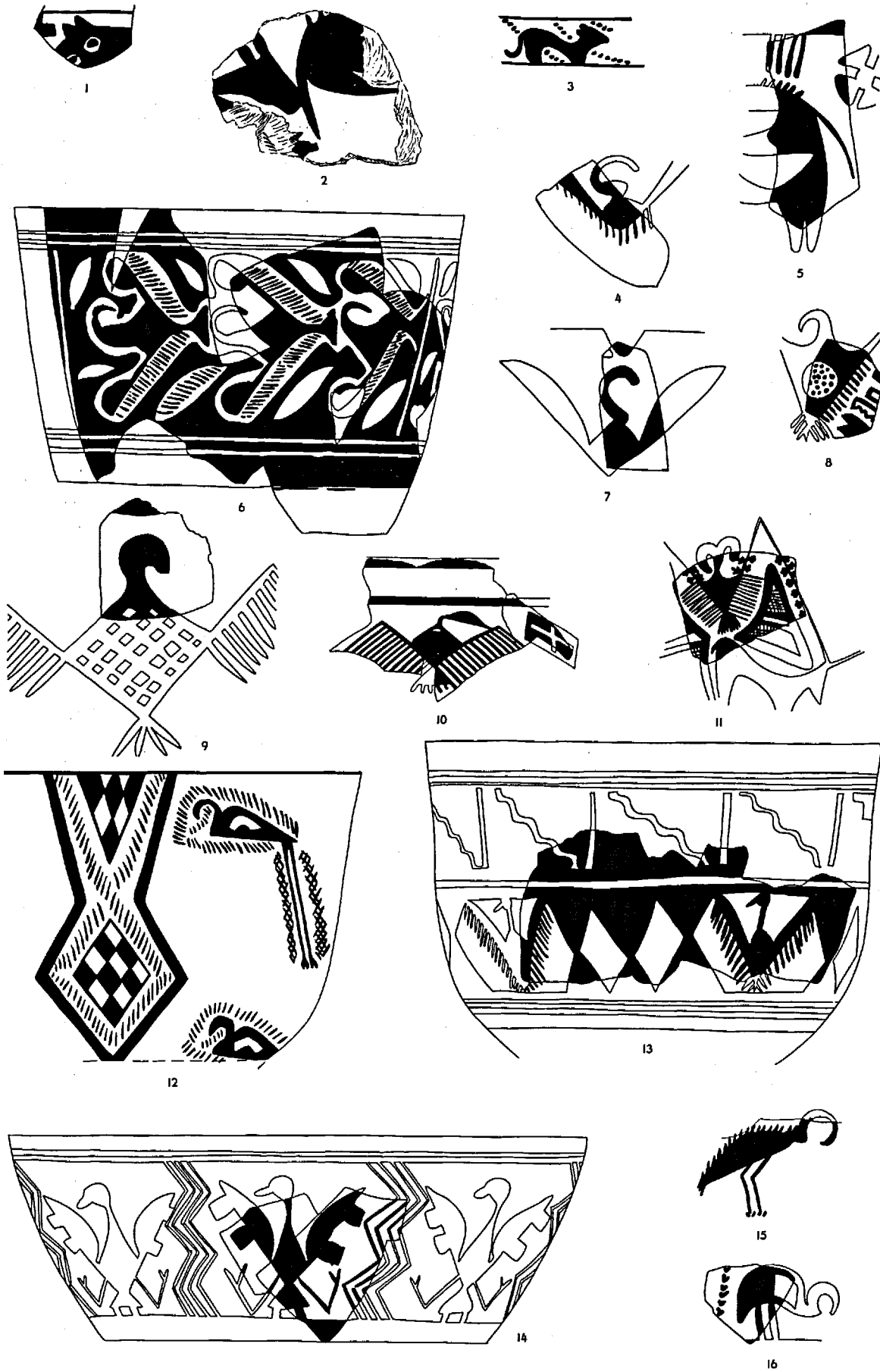
17

No.	Field No.	Provenience	Level	Form	Design	D.	H.	Th.	Remarks	Scale	See Page
1	3305	K 28, level of Rm. IV 2	III		XIX <i>G</i>	21	8.4 mx.		bowl rim	1:3	52
2	3439	Rm. XIV 3	IV		XIX <i>G</i>	32	17 mx.		bowl rim	1:3	52
3	2114	Rm. XIII 3, one of floors	IV	II	XIX <i>G</i>	27	13.9 mx.	.35		1:3	20, 52
4	3318	O 33			XIX <i>G</i> or <i>I</i>				pot belly	1:3	52
5	2920	Rm. IV 1	III	X, cf. Pl. 15:5	XIX <i>I</i>			1.2		1:4	52
6	2154	Rm. XVII 2	IV		XIX <i>H</i> in.			.3-.65	lower side of bowl	1:3	21, 52
7	2142	Rm. XIV 3	IV		XIX <i>H</i>				bowl side	1:3	20, 52
8	2133	Rms. XV 2-3	IV		XIX <i>I</i>	30.5	10 mx.	.5	bowl rim	1:3	21, 52
9	2919	Rm. VII 4	III		XIX <i>I</i>			1.4	jar shoulder	1:4	52
10	2355a	Rm. X 1	III		XIX <i>I?</i>				jar side	1:6	52
11	2348a	N 29, +2.02 m.	base IV		XIX <i>I</i>	22	12.0 mx.		bowl rim	1:3	52



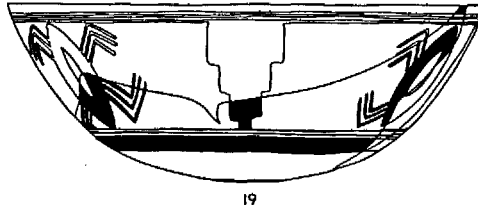
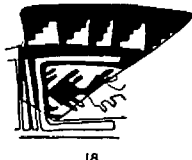
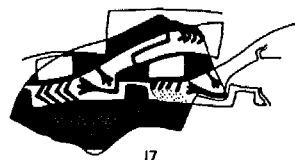
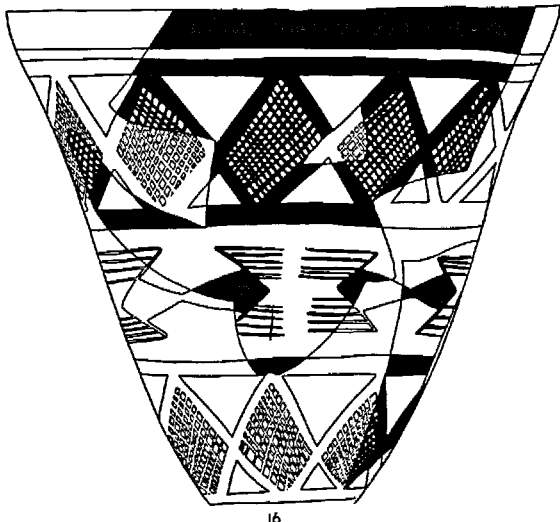
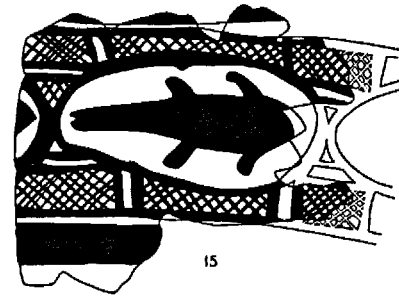
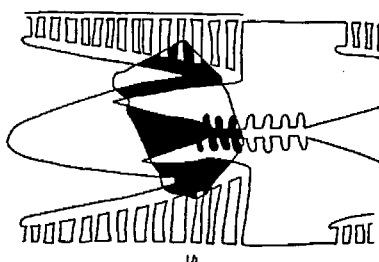
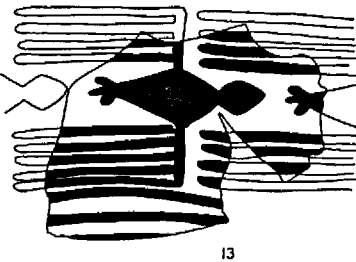
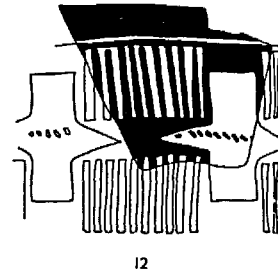
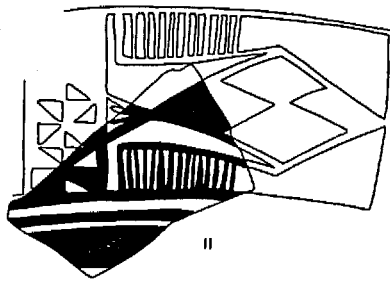
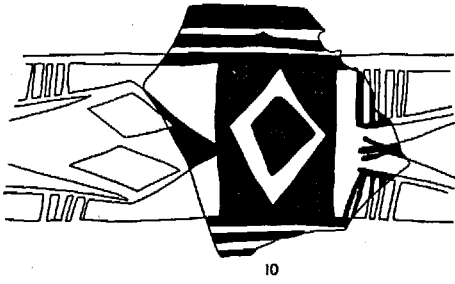
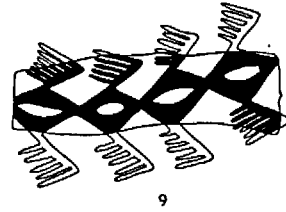
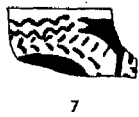
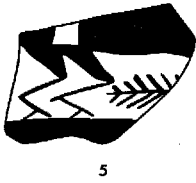
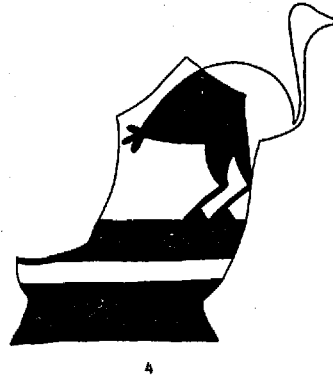
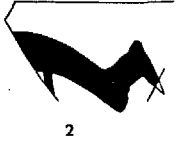
SCALE, 1:3

No.	Field No.	Provenience	Level	Form	Design	D.	H.	Th.	Remarks	See Page
1	3315	L 29, +2.0 m.	base IV		XIX J			.65	bowl side	52
2	5167	L 30, +2.0 m.	base IV		XIX J			.9	jar side, cream-tan ware	52
3	3188				XIX J	13			pot shoulder	52
4	2435	Rm. XVII 4	IV		XIX K 1				bowl side	52
5	2358a	Rm. XIII 3	IV		XIX J in.			.6-1.0	bowl side	52
6	2137	Rm. II 3, floor	III	I	XIX K 1	23.5	16.8 mx.	.35-.45		16, 52 f.
7	5183	M 30, +2.95 m.	surf.		XIX K 1			.5	bowl side	52
8	5695	Trench I, 10-20 m., +1.75 m.	III, surf.		XIX K 1			.3	bowl side, cream-tan ware	52
9	5156	Trench I, 50-60 m., +3.47 m.	surf.		XIX K 1			.8	jar shoulder, light cream-green ware	52
10	2434			IX	XIX K 1	18	7.3 mx.	.6	cream-tan ware, brown paint	52
11	5610				XIX K 1			.4	bowl side, traces of red color in.; restoration probable	52
12	2340a	Rm. I 1	III	I	XIX K 2	20	15.0 mx.		redrawn from field sketch	43, 52
13	4378	Trench I, 36-40 m., +2.75 m.; N 27, above Rms. I 1-2	IV		XIX K 1, VII A 3c			.5	bowl side	52
14	4262	Rm. VIII 3 L 30, +2.32 m.	III surf.	II?	XIX K 1			.2-.35		52
15	2467	Rm. XVII 3	IV		XIX K 2			.5-.7	bowl side	52
16	5180	Rm. XVII 3	IV		XIX K 2			.3	bowl side, tan ware	52, 56



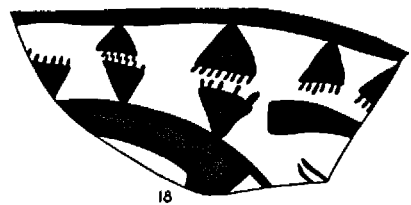
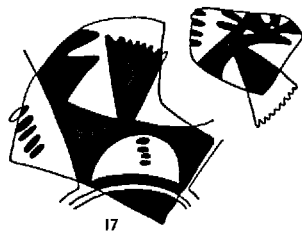
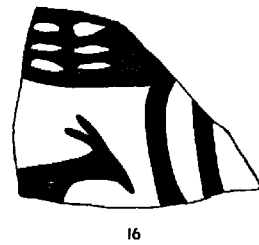
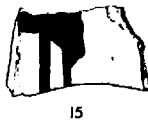
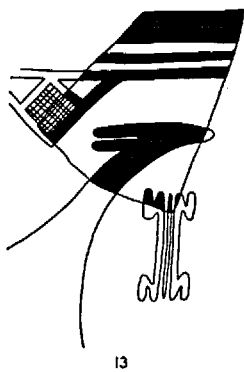
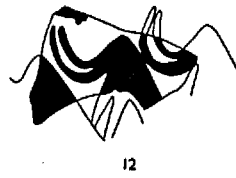
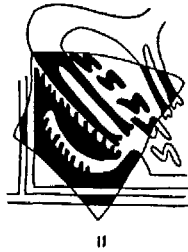
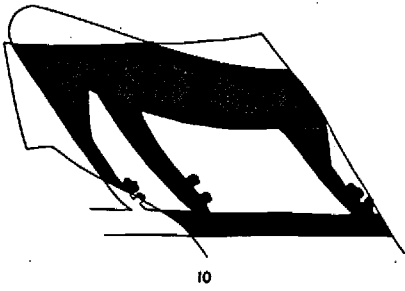
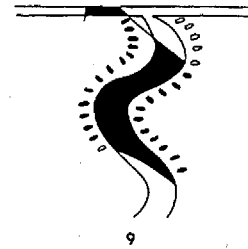
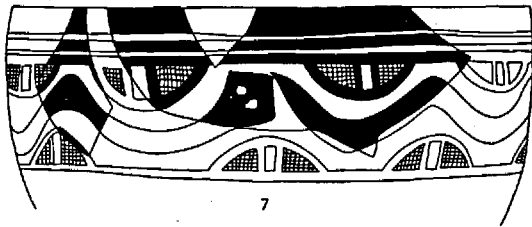
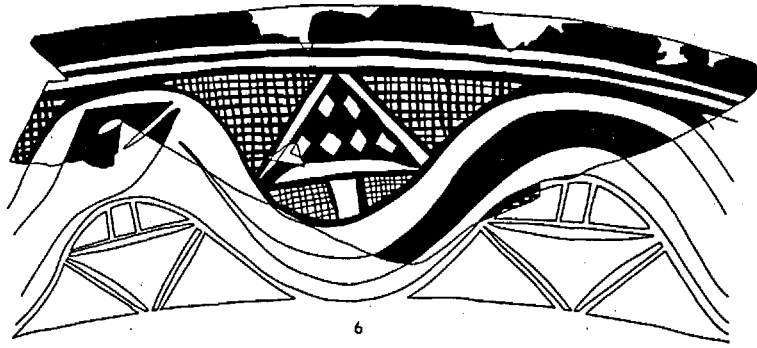
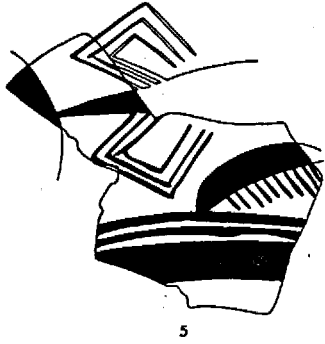
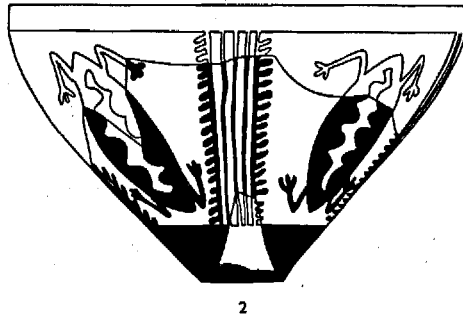
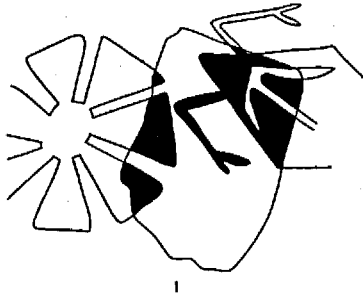
SCALE, 1:3

No.	Field No.	Provenience	Level	Form	Design	D.	H.	Th.	Remarks	See Page
1	2382a	N 29, +2.0 m.	base IV		XIX K 2				bowl side	52
2	3341	L 30, +2.32 m.	IV		XIX K 2				bowl side	52
3	2180a	Rms. III 2, V 1	III		XIX K 2			.55-.65	jar shoulder	52
4	2180b	Rms. III 2, V 1	III		XIX K 2				bowl base	52
5	2168				XIX K 2			.4	bowl side	52
6	5607				XIX K 2			.25	jar neck	52
7	5606	Rm. XIV 2	IV		XIX K 2	20	3.0 mx.	.6	bowl rim	52
8	5608				XIX K 2			.45	jar shoulder	52
9	3879	Trench I, 10-20 m., ±0 m.	I		XIX K 3 out.; VI C in.			.45	bowl side, green-cream ware, black paint etched	37, 44, 52
10	4006	below floor of Rm. XIII 3	top III		XIX K 3	22	10.2 mx.	.55	light tan ware	36, 52
11	4009	J 29, +1.9 m.	top III?		XIX K 3			.6	lower side of bowl	36, 52
12	5193	Rm. IV 3	III		XIX K 3			.45	tan ware; restoration probable	52
13	5182	below floor of Rm. XIII 3	top III		XIX K 3			.55-.7	bowl side	52
	3313	Rm. XIV 3	IV							
14	5150	M 30, +3.37 m.	surf.		XIX K 3			1.1	jar side; restoration probable	52
15	4012	M 31, small walls to v.s.	I		XIX L			.5	bowl side, green ware, overfired and crumbly, black paint etched	52
16	2170	Trench I, 10-20 m., +.2 m. (hut area)	I	I C	XIX M, XI E 1	22	14.5 mx.			27, 44, 52, 59
17	4195	Trench II, 50-60 m., .55 m. deep	surf.		XIX M			.2-.45	pot belly, tan ware, red- brown paint	52
18	5602	Rm. XIV 2	IV		XIX L	18	4.5 mx.	.2	bowl rim	40, 52
19	2210	M 30, +2.12 m.	base IV	IV A	XIX M	19.0	7.0			52



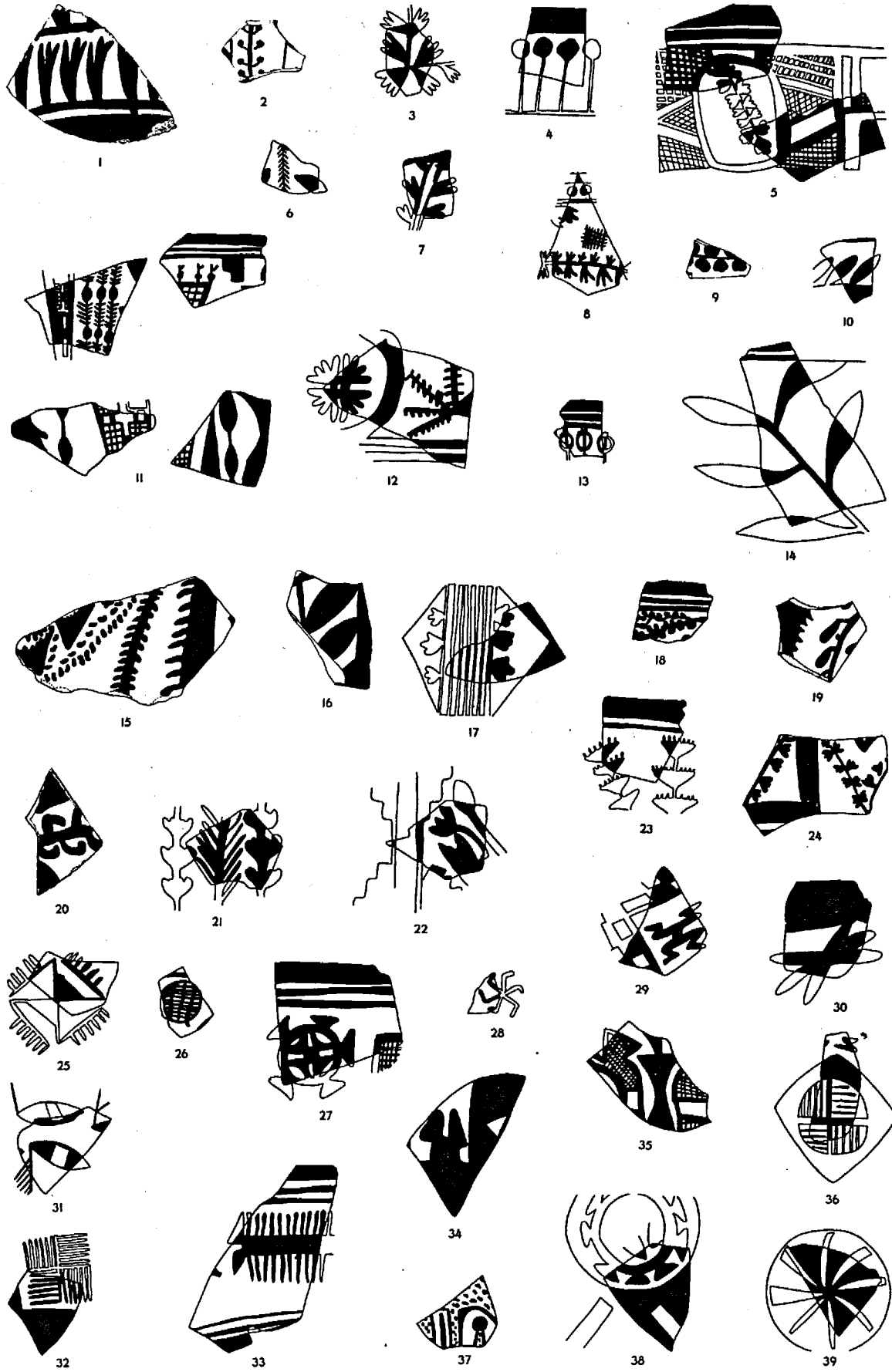
SCALE, 1:3

No.	Field No.	Provenience	Level	Form	Design	D.	H.	Th.	Remarks	See Page
1	5471	Rm. VIII 3	III		XIX M in.			.5	lower side of bowl, yellow-cream ware	52
2	2099	Rm. XIII 1	IV	V	XIX M	17.5	9.0 mx.			20, 52
3	5189	House XVI, +2.3 m.	IV		XIX M			.5	bowl side	52
4	2140				XIX M				bowl rim	52
5	4261	K 28, +2.8 m.; N 28, +2.7 m.	IV, surf.		XIX M			.7	lower side of bowl, cream-tan ware	52
6	4797	Rm. III 2	III		XVI B, XIX N	ca. 28	10 mx.	.3	bowl rim, green ware, crumbly, deformed by overfiring, black paint etched	48, 52
7	4852	Rms. X 1, 3	III		XVI B, XIX N	21	5.9 mx.	.5	bowl rim, tan ware	48, 52
8	3317	probably Q 28, +3.5 m.	probably surf.		XIX N	22	6.8 mx.	.5	bowl rim	52
9	4865	K 28, +1.6 m.	III		XIX N			.8	bowl rim, tan ware, red-brown paint, traces of bitumen in.; re-drawn from field sketch	52
10	2906	Rm. XV 1	IV		XIX O			1.9	jar shoulder	52
11	3329				XIX O			.3	bowl side	52
12	5466	Trench I, 20-30 m., +.67 m.	II		XIX O out.; VI C in.			.5	lower side of bowl	52
13	5173	O 28, street N. of Rm. I 2	III		XIX O			.65	bowl rim	52
14	5169				XIX O			.8	jar side	52
15	5482	House XIII	IV		XIX O			.4	bowl side, shows rear legs of animal	52
16	5192				XIX B or O			.45	jar shoulder, tan ware	51 f.
17	5557	M 28, court level	IV		XIX O			.2	lower side of bowl, green-cream ware, black paint etched	52
18	2949				XIX O in.	16	7.3 mx.		bowl rim, deformed in shape	52



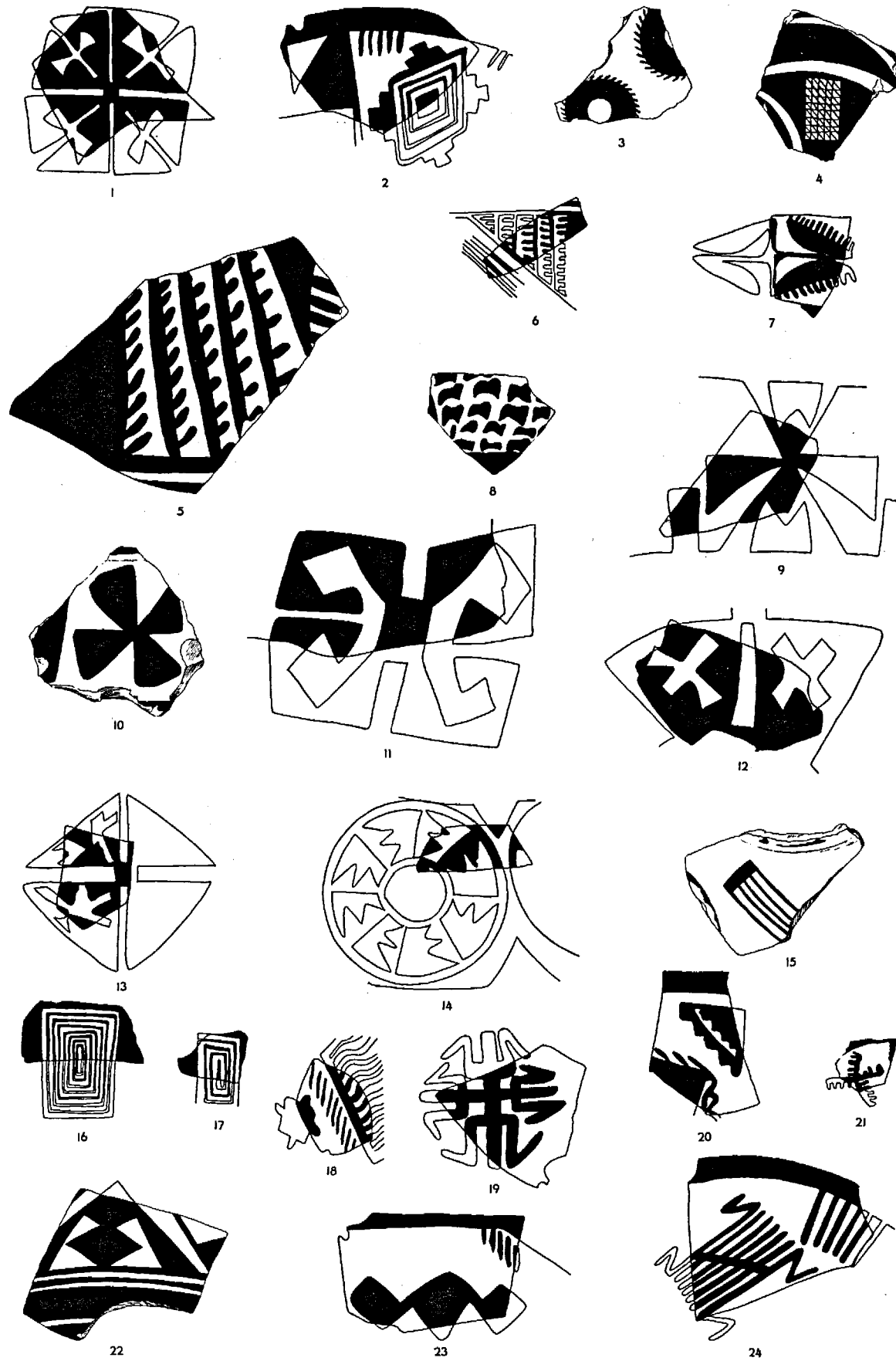
MISCELLANEOUS DESIGNS (SEE PAGES 52 F.). SCALE, 1:3

No.	Field No.	Provenance	Level	D.	H.	Th.	Remarks
1	5214					.5	bowl side, light tan ware
2	5224	Trench I, 10-20 m., +.2 m.	I			.25	bowl side
3	5212	Trench I, 10-20 m., +.2 m.	I			.4	bowl side
4	5234	Trench I, 27-30 m., +.32 m. (hut area)	I			.4	bowl rim
5	4632	O 28, N. of Rms. I 2, X 6	III			.7	bowl rim
6	5696	N 26, +.6 m.	II			.25	bowl side, light cream-tan ware
7	5388	Trench I, 10-20 m., ±0 m.	I			.45	bowl rim, design in.
8	2360a	Trench I, 10-20-m., ±0 m.	I				bowl side
9	5219	M 28, +1.4-1.6 m.	III			.2	bowl side, light gray-green ware
10	5689	Trench I, 10-20 m., +.8-1.3 m.	II-III			.2	bowl side, cream-tan ware
11	5690	Trench I, 10-15 m., +1.3 m.	III			.4	bowl rim and side, light tan ware
12	2394a	Rm. VII 2	III			.3	pot side
13	5688	Rm. X 1	III			.15	bowl rim, yellow-cream ware
14	4468	Rm. X 3	III			.65	bowl rim, tan ware
15	4386	Rm. IV 3	III			.4	bowl side, tan ware, red-brown paint
16	4856					.4	bowl side
17	5218	Trench I, 50-60 m., +2.42 m.	IV			.3	bowl side, yellow-cream ware
18	5669	N 28, +2.7 m. (above Rm. II 2)	IV			.25	bowl rim
19	5198	Trench II, 0-10 m., .2 m. deep	surf.			.45	bowl side, light tan ware, red-brown paint
20	5213	K 31, +2.3 m.	surf.			.3	bowl side, black paint etched
21	5215	N 31, +2.27 m.	top III, surf.			.5	bowl rim
22	5200	P 32				.5	bowl side, tan ware, design VII(?)
23	5322	P-Q 30				.4	bowl rim, design out. and in.
24	3352	O 33, surf. to v.s.				.4	bowl side
25	4606	S. of Rms. IV 1, V 2, deepest level	I			.3	bowl side, cream-tan ware
26	5671	Trench I, 10-20 m., +.45 m.	I			.2	bowl side, cream-tan ware
27	3346	M 31, small walls to v.s.	I	16	6.5 mx.	.6	bowl rim
28	5220	Trench I, 10-20 m., ±0 m.	I			.25	bowl side
29	3345	M 31, small walls	II				bowl side
30	5497	Trench I, 12-14 m., +.62 m.	II			.45	bowl rim, design in.
31	5676	O 32, E. of Rm. XII 2	surf.			.4	bowl side
32	5596	Rm. VIII 3	III			.6	cup side, tan ware
33	4236	Rm. II 2	III			.5	bowl side, tan ware, red-brown paint
34	4113	Rm. XI	III			.2-.4	lower side of bowl
35	5686	Trench I, 0-10 m., +.8-1.3 m.	II-III, surf.			.3	pot side
36	5698	Rm. VII 3	III			.25	bowl side
37	5625	N 28, level of Houses I-II	III				bowl side
38	4776	Rm. X 1	III			.25	bowl side
39	4654	Rm. XI	III			.4	bowl side, cream-tan ware



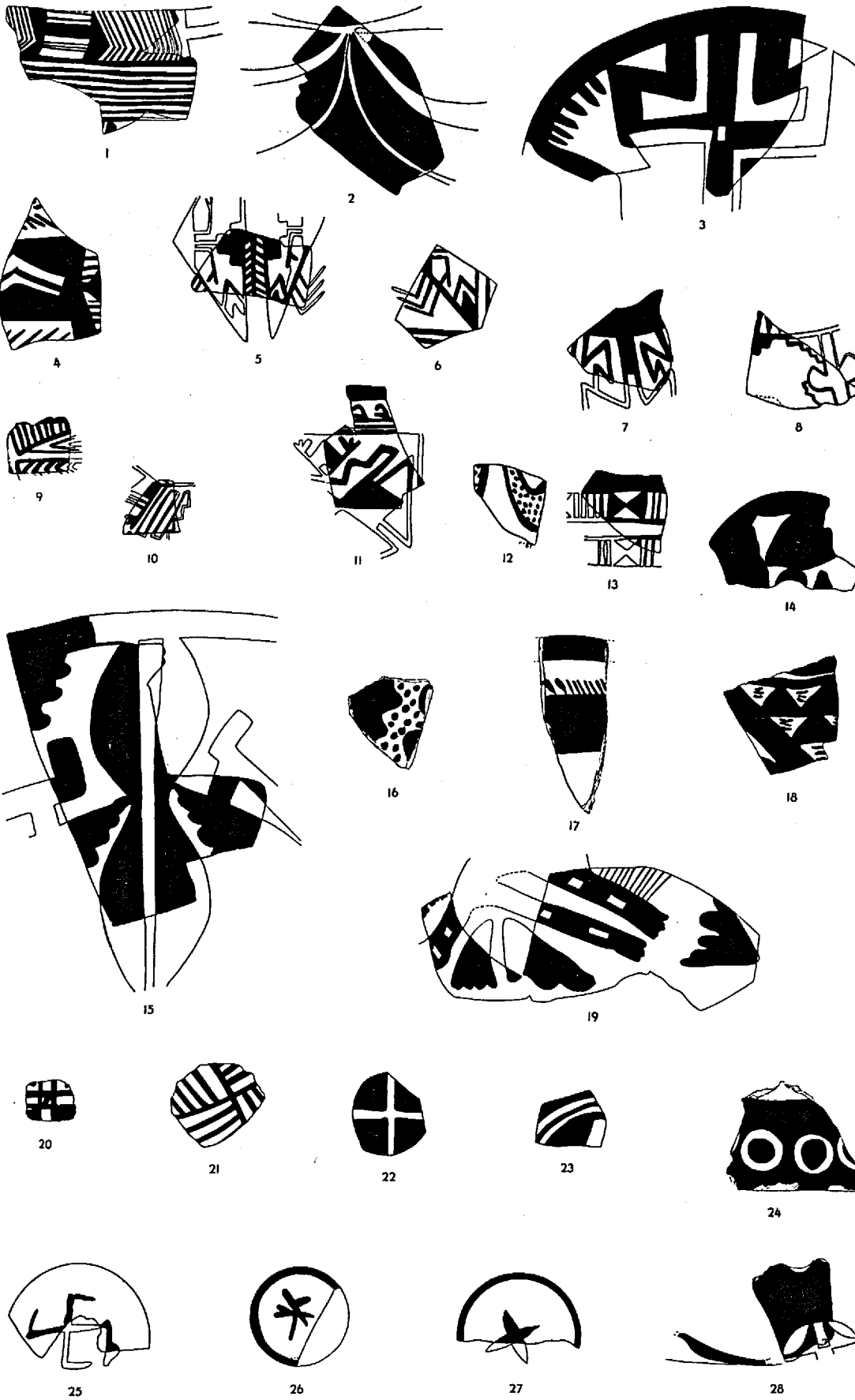
MISCELLANEOUS DESIGNS (SEE PAGES 52 F.). SCALE, 1:3

No.	Field No.	Provenance	Level	D.	H.	Th.	Remarks
1	4658	Rm. VIII 6	III			.85	pot shoulder
2	5435	Rm. VII 2	III	22	4.8 mx.	.5	bowl rim, drab ware, design in.
3	4716	Rm. IV 3	III			.4	bowl side, cream-tan ware
4	4668	J 31, +1.72 m.	top III, surf.			.7	lower side of bowl
5	2923	Trench I, 13-15 m., +1.15 m.	III			1.2	jar side, cream-tan ware, brown paint weathered
6	5662	Rm. VIII 1	III			.3	bowl side
7	4482	Rm. XIII 3	IV	ca. 18	3.7 mx.	.2	bowl rim, light greenish ware, black paint etched
8	4724	Rm. IV 3	III			.5	bowl side, tan ware
9	4483	P 30, +2.0 m.	IV			.7	bowl side
10	4651	N 28, above Rms. I 1-2	IV			.9	jar side, tan ware
11	4649	Trench I, 10-20 m., +1.5 m. L 30, +2.0 m.; M 28, +2.55 m.	III, surf. IV	rim, 16.8		1.3	jar shoulder, cream-tan ware
12	5556	L 28, +2.7 m.	top IV			.3	lower side of bowl
13	5342	above Rm. V 2	IV			.45	bowl side, cream-tan ware, design in.; restoration probable
14	4781	N 30, +2.0 m.	top III			.5	bowl side, cream-tan ware
15	4713	Rms. XV 2-3	IV			.8	pot shoulder, tan ware
16	5391	L 29, +2.17 m.	IV			.8	bowl side, spiral(?) in.
17	4958	L 29	III			.3	bowl side, yellow-cream ware
18	4924	Rm. XVII 2 N 31, +2.27 m.	IV surf.			.55	bowl side
19	4650	N 33, +1.87 m.	surf.			1.3	jar side
20	5338	Q 32, +2.12 m.	surf.	24	5.9 mx.	.7	bowl rim, tan ware, design in.
21	5369					.5	bowl side, design in.
22	4448	L 33	surf.			.5	lower side of bowl
23	4890	P 28, +3.62 m.	surf.	ca. 22	6 mx.	.6	bowl rim
24	5382	Trench II, 50-60 m., .7 m. deep	surf.	20	5.4 mx.	.5	bowl rim, yellow-cream ware, design in.

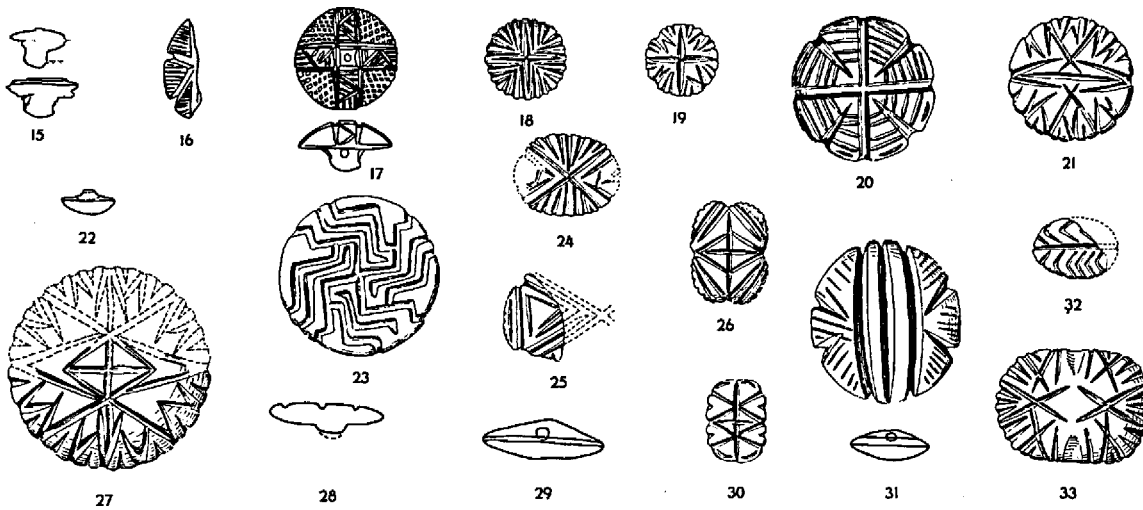
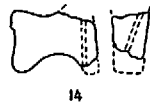
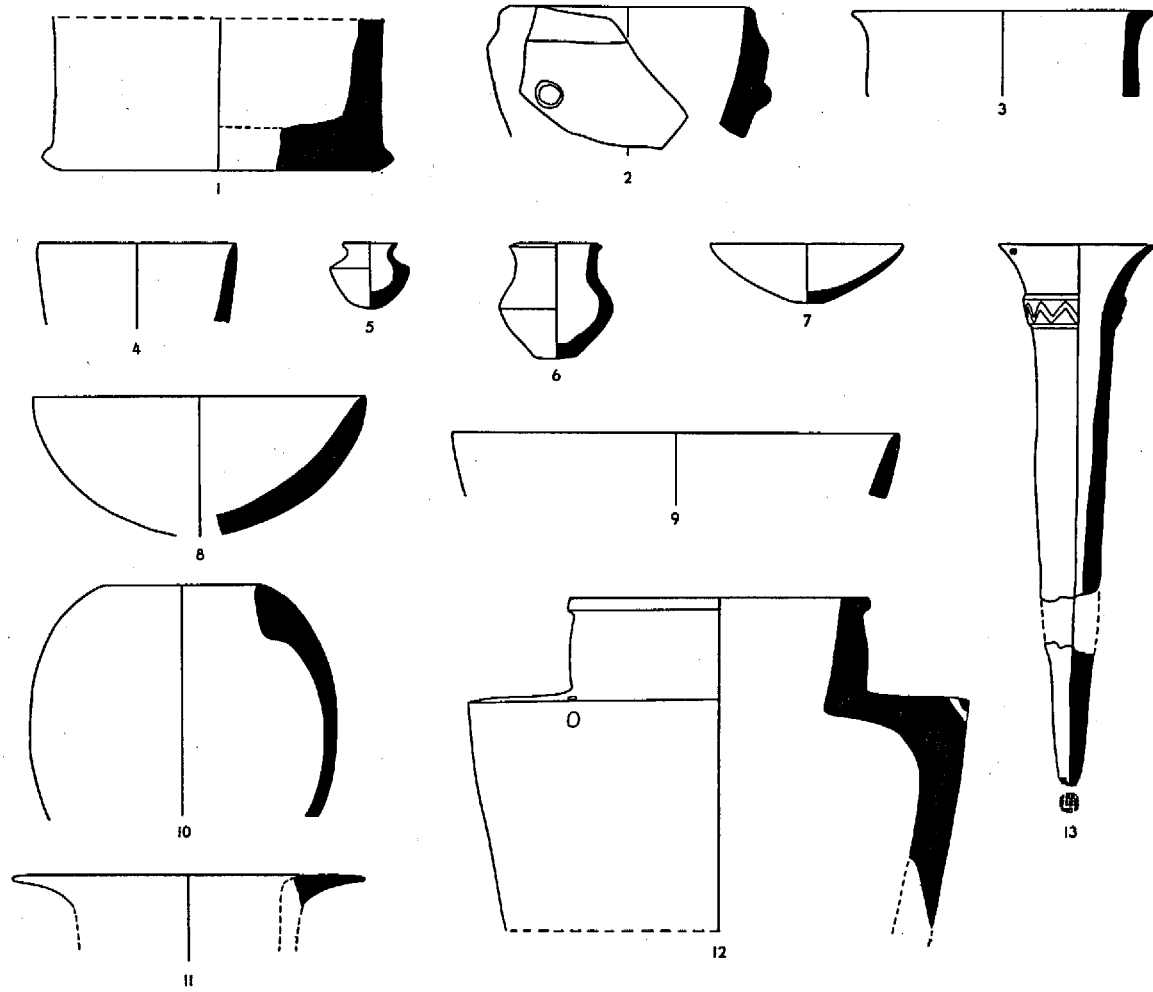


MISCELLANEOUS DESIGNS. SCALE, 1:3

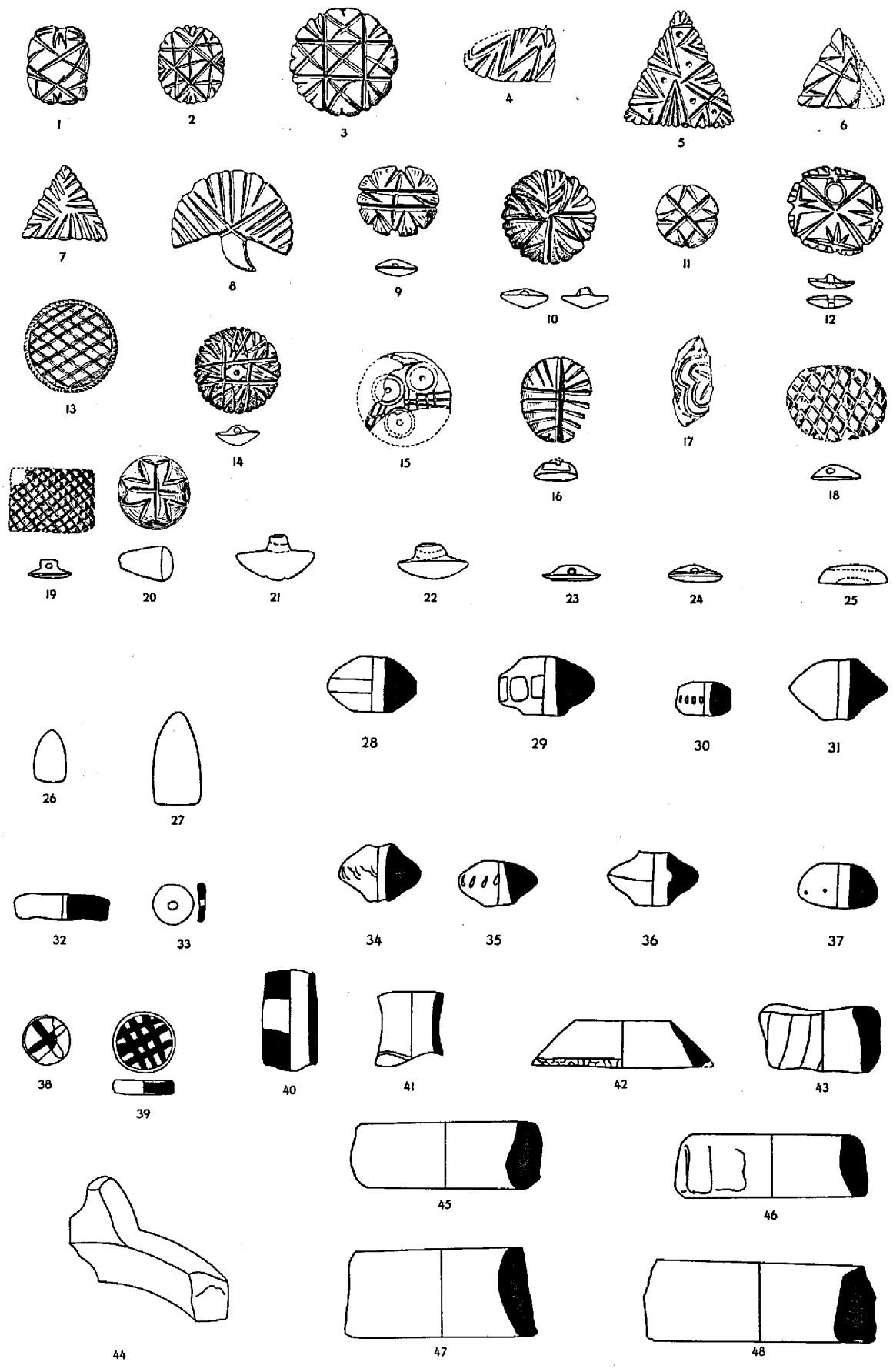
No.	Field No.	Provenience	Level	D.	H.	Th.	Remarks	See Page
1	5599	Rm. I 1	III	12.0	5.6 mx.	.2	form IX B (Pl. 14:1), design VIII A?	41
2	5013	Rms. X 5-6	III			.5-1.0	bowl side, drab ware	
3	5432	Rm. VI 3	III	18	7.5 mx.	.55	bowl rim, design in.	53
4	3835	Rm. II 2	III			.5	bowl side, light tan ware, red-brown paint	53
5	5613	L 28, Rm. XI, upper fill	top III			.25	bowl side, black paint etched	53
6	5614					.3	bowl side	53
7	5626					.2	pot shoulder	53
8	5626	Trench I, 60-70 m., +1.3 m.	III			.2	pot shoulder, brown paint	53
9	5626	Trench II, 50-60 m., .2 m. deep	surf.			.25	bowl side	53
10	5626	Trench II, 50-60 m., .2 m. deep	surf.				bowl side	53
11	4263	Trench II, 50-60 m., .55 m. deep	surf.			.3	bowl rim	34, 41, 53
12	5687	N 26, +3.8 m.	surf.			.75	bowl side	53
13	4955	L 27, +2.5 m.	IV			.3	bowl side, design VII B	40
14	3193	N 28, +2.7 m. (above Rm. II 2)	IV	8.8	4.2		form XII C (Pl. 17:17); design in plan	53
15	5376	L 28, +2.7 m.	top IV	24	14.8 mx.	.75	bowl rim, light tan ware	53
16	4727	Rm. XIII 3	IV				bowl side	
17	5449	N 30, +2.75 m.	top IV, surf.			.5	bowl rim, design in.	
18	3802					1.0	bowl side	46
19	4593	P 33, +2.25 m.	surf.			.45	pot belly	53
20	2971	Rm. II 1	III	ring, 6.8	2.0 mx.		ring base, design in., red color on bottom	53
21	2984	M 26-27, +2.5 m.	IV	ring, 4.2	2.0 mx.		ring base, design VI B 3 in.	53
22	2969	M 29, +2.0 m.	base IV	ring, 8.3	3.0 mx.		ring base, design VI B 3 in.	53
23	2975			ring, ca. 9	3.2 mx.		ring base, design in.	34, 53
24	3084	P 32		ring, ca. 7	4.6 mx.		ring base, design X E	34
25	2956	Rm. XII 2	III	ring, 7	3 mx.		ring base, design in.	53
26	2957	M 29, +2.2 m.	IV	ring, 5	3 mx.		ring base, design in.; redrawn from field sketch	53
27	2965			ring, 6.4	2.0 mx.		ring base, design in.	53
28	2758	M 28					bowl base, design on bottom; design in plan	53



No.	Field No.	Provenience	Level	D.	L.	B.	H.	Th.	Remarks	Scale	See Page
1	597	Rm. VI 4, floor	III	14			6.1 mx.	.9-1.7	base fragment, white calcite, weathered, traces of red color inside	1:3	17, 61
2	599	Rm. IV 3	III	11			5.2 mx.	1.1	bowl fragment, white calcite, weathered	1:3	17, 61
3	607	Rm. VII 2	III	12			3.4 mx.	.6	bowl fragment, white calcite, weathered	1:3	18, 61
4	602	Rm. IV 1, floor	III	8			3.1 mx.	.6	rim or ring-base fragment, alabaster (CaCO ₃), weathered	1:3	17, 61
5	593	Q 29, old sounding		3.2			2.6	.2-.7	miniature pot, incomplete, stone, mottled red and deep yellow, gray veins, polished	1:3	61
6	592	O 28, +3.5 m.	surf.	4.6			4.6	.4-.6	miniature pot, incomplete, same stone as PPA 593, polished	1:3	61
7	591	O 28, +2.76 m.	IV	7.7			2.4	.4 mx.	saucer, complete, same stone as PPA 593, polished	1:3	61
8	596	O 28, +3.31 m.	top IV, surf.	13.3			5.5 mx.	1.0	bowl fragment, alabaster	1:3	61
9	601	Rm. XVII 4, floor	IV	ca. 18			2.5 mx.	.7	bowl fragment, alabaster, smoothed	1:3	21, 61
10	595	Rm. XV 1, floor	IV	12			6.2 mx.	.5	bowl fragment, alabaster	1:3	21, 61
11	606	below Rm. XIV 3	top III	14			1.2 mx.		bowl fragment, white calcite, weathered	1:3	61
12	2579	N 31, above Rm. VIII 2	IV or surf.	20			13.0 mx.	1-1.5	vessel fragment, black limestone, polished out., 5 suspension holes originally	1:3	61
13	594	Rm. XV 1, +2.35 m., floor	IV	12.4			27.8 mx., ca. 43 restored	.3-.7	cone, incomplete, white calcite, weathered; incised zigzag on collar, incised crosshatch at tip	1:6	21, 61
14	444	Rm. IV 2, floor	III			3.5 mx.	2.4 mx.	1.5 mx.	animal figurine, incomplete, light brown clay	1:3	17, 63
15	37	N. of Rm. XIII 3, +2.6 m.	IV		2.9	2.2	1.6		unfinished button seal, complete, reddish steatite, black patches, polished; see Pl. 7:11	1:3	
16	34	Trench I, 30 m., +.75 m.	II						button seal, fragment, light green stone, smoothed surface	1:3	67
17	35	L 27, +2.3 m. (.4 m. above Level IV floor)	IV	4.0			2.1		button seal, black stone, polished; see Pls. 8:1 and 82:21	1:3	67
18		mainly Rms. IV 2-3; also Rms. III 4, VII 4	III						seal design reconstructed from 43 label fragments	2:3	67 f.
19	349	Rm. VII 4	III						seal design from label	2:3	18, 67
20	260a, 262	Rm. III 4	III						seal design from 2 label fragments	2:3	17, 67 f.
21	256 317-19	Rm. III 4 Rm. IV 2	III III						seal design from 4 label fragments	2:3	17, 67 f.
22	558	Trench I, 36.5 m., +1.58 m.	III	2.1			1.0		button seal, red-brown stone, polished; see Pl. 8:7	1:3	65
23	259, 260b 269 7	Rm. III 4 Rm. IV 3 Rm. XIII 1	III III IV						seal design from 4 label fragments	2:3	17, 20, 67 f.
24	12, 16	Rm. II 1	III						seal design from 2 label fragments	2:3	16, 67f.
25	358	Rm. VII 4	III						seal design from label fragment	2:3	18, 67
26		Rms. III 3, IV 2-3	III						seal design from 37 label fragments; see Pl. 7:13, 18, 19	2:3	67 f.
27	347	Rm. VI 4, floor	III						seal design from token(?) fragment; see Pl. 7:14	2:3	67 f.
28	559	Q 30, +1.17 m. (.35 m. below floor of Rm. XVII 2)	III	4.5			1.1 mx.		button seal, light green stone, polished; see Pl. 8:12	1:3	65
29	43	Rm. III 2	III	4.8			1.5 mx.		button seal, light green stone; face damaged	1:3	17
30	348	Rm. VII 4	III						seal design from label fragment	2:3	18, 67 f.
31	560	Rm. XII 1 or 3, fill	III	3-3.25			1.2		button seal, light green stone, polished; see Pl. 8:6	design 2:3, form 1:3	67
32	10	Trench I, 34.6 m., +1.42 m.	III						seal design from label fragment	2:3	67
33	11 24	Rm. II 4 Rm. II 1	III III						seal design from 2 label fragments	2:3	16, 67



No.	Field No.	Provenance	Level	D.	L.	B.	H.	Th.	Remarks	Scale	See Page
1	15	Rm. II 1	III						seal design from label fragment	2:3	16, 67 f.
2	29, 30	Rm. III 4	III						seal design from 2 label fragments	2:3	17, 67 f.
3		Rm. III 4	III						seal design from 6 label fragments	2:3	67
4	21	Rm. II 1	III						seal design from label fragment	2:3	16, 67
5		Rms. IV 2-3	III						seal design from 24 label fragments; see Pl. 7:12	2:3	67 f.
6	23	Rm. II 1	III						seal design from label fragment	2:3	16, 67
7	3457								seal design from label fragment	2:3	67 f.
8	17, 19, 20	Rm. II 1	III						seal design from 3 label fragments	2:3	16, 67 f.
9	40	below Rm. XIII 3	top III		2.1	1.8	.9		button seal, black stone, polished	design 2:3, form 1:3	67
10	39	K 28, +2.77 m.	top IV, surf.	2.4			1.0		button seal, gray limestone, polished	design 2:3, form 1:3	65, 67
11	5	Rm. XIII 1	IV						seal design from jar-stopper	1:3	20, 67 f.
12	33	surface of mound	surf.	2.4			.7		button seal, red stone, polished; loop back broken, perforation just above center	design 2:3, form 1:3	65
13		Rm. XIII 1	IV						seal design from 5 label fragments	2:3	68
14	561	K 30, +2.37 m.	surf.	2.2			1.0		button seal, sealing-wax-red stone, polished; see Pl. 8:10	design 2:3, form 1:3	65, 68
15	1	Rm. XIII 1	IV						seal design from label fragment	2:3	20, 68
16	564	P 30, +2.65 m.	top IV, surf.		2.2	1.8	1.0 mx.		stamp seal, cream ware, thick black paint overall	design 2:3, form 1:3	68
17	2351	N 29, +2.6 m.	top IV						seal design from label fragment	2:3	68
18	36	Rm. XV 1, +1.8 m., lower floor	IV		2.6	2.0	.8		stamp seal, cream ware; see Pl. 8:8	design 2:3, form 1:3	
19	42	L 30, +2.75 m. (above Rms. IV 2-3)	top IV or surf.		2.2	1.6	.9		button seal, black stone, polished; see Pl. 8:9	design 2:3, form 1:3	65, 68
20	566	Q 29, +2.6 m.	surf.	1.9			2.8		stamp seal, cream ware; see Pl. 8:11	design 2:3, form 1:3	65, 68
21	35	L 27, +2.3 m. (.4 m. above Level IV floor)	IV	4.0			2.1		button seal, black stone, polished; see Pls. 8:1 and 8:17	1:3	65
22	38	N 27, court before Rm. XIII 3, +2.7 m.	top IV	3.7			1.8		button seal, white chalk, artificially blackened surface; see Pl. 8:2	1:3	
23	32	Trench I, 28.5 m., +2.12 m.	IV	3.0			.8		button seal, black and white veined stone, polished; see Pl. 8:3	1:3	
24	557	Q 31, +2.29 m.	top IV, surf.		2.8	2.0	.9		button seal, gray-green steatite, low polish; see Pl. 8:4	1:3	
25	565	O 28, +2.9 m.	top IV or surf.	3.5			1.0		stamp seal, gray-green steatite, low polish; see Pl. 8:5	1:3	
26	59		III	1.7			2.7		cone, finely banded white alabaster, polished, weight 9.185 grams	1:3	68
27		N 28, above Rms. I 1-2	surf.	2.4			4.7		incomplete cone, light pink-buff stone, smoothed	1:3	68
28	542	Rm. VIII 6	III	3			1.9		whorl	1:2	18, 69
29	536	below Rm. XIV 3	top III	3.3			2.0		whorl, tan ware; see Pl. 8:16	1:2	69
30	82	Rm. VII 2, floor	III	1.9			1.1		whorl, light green-cream ware	1:2	18, 69
31	544	Rm. V 1, floor	III	3.4			2.1		whorl	1:2	17, 69
32	466	Rm. IV 3, floor	III	5.0			1.3		disk	1:3	17, 69
33	51	Rm. XVIII 1, floor	IV	2.0				.3	disk, deep tan ware	1:3	21, 69
34	79	N 26, +1.7 m.	base IV or top III	2.8			2.0		whorl, tan ware	1:2	69
35	539	below Rm. XVIII 2	top III	2.7			1.6		whorl, cream-tan ware	1:2	21, 69
36	507	K 30, +2.4 m.	surf.	3.1			1.8		whorl	1:2	69
37	534	Q 30		2.8			1.5		whorl, tan ware, row of punctations	1:2	69
38	485	M 30, +2.15 m.	IV	2.5				.15-.4	pawn	1:3	70
39	524	Q 33, +.86 m.		3.2				.7	pawn	1:3	70
40	360	M 31, +2.5 m.	IV, surf.	3.9		5.2			tube	1:3	70
41	365	P 29, +2.5 m.	top IV, surf.	3.5		3.8 mx.			tube(?), fragment, design XIV G	1:3	70
42	366	Rm. IV 3	III	10.0		3.4			ring, scraper(?), chipped edge	1:3	17, 70
43	89	M 29, +2.2 m.	IV	6.2		3.4			ring fragment, cream-gray ware, scalloped side; here inverted(?)	1:3	70
44	2264	L 30, +2.32 m.	IV	16			ring, 2.0; 4.5 mx.		ring fragment, tan ware; here inverted(?); redrawn from field sketch	1:3	70
45	2262	probably Rm. II 1	probably III	10		3.4			incomplete ring, cream-gray ware	1:3	70
46	2263	Q 31		10		3.2			incomplete ring, cream-gray ware	1:3	70
47	2256	L 31, +2.22 m.	IV or surf.	10		4.5			incomplete ring, cream-gray ware	1:3	70
48	2257	L 29, +2.0 m.	base IV	12		4.1			incomplete ring, cream-gray ware	1:3	70

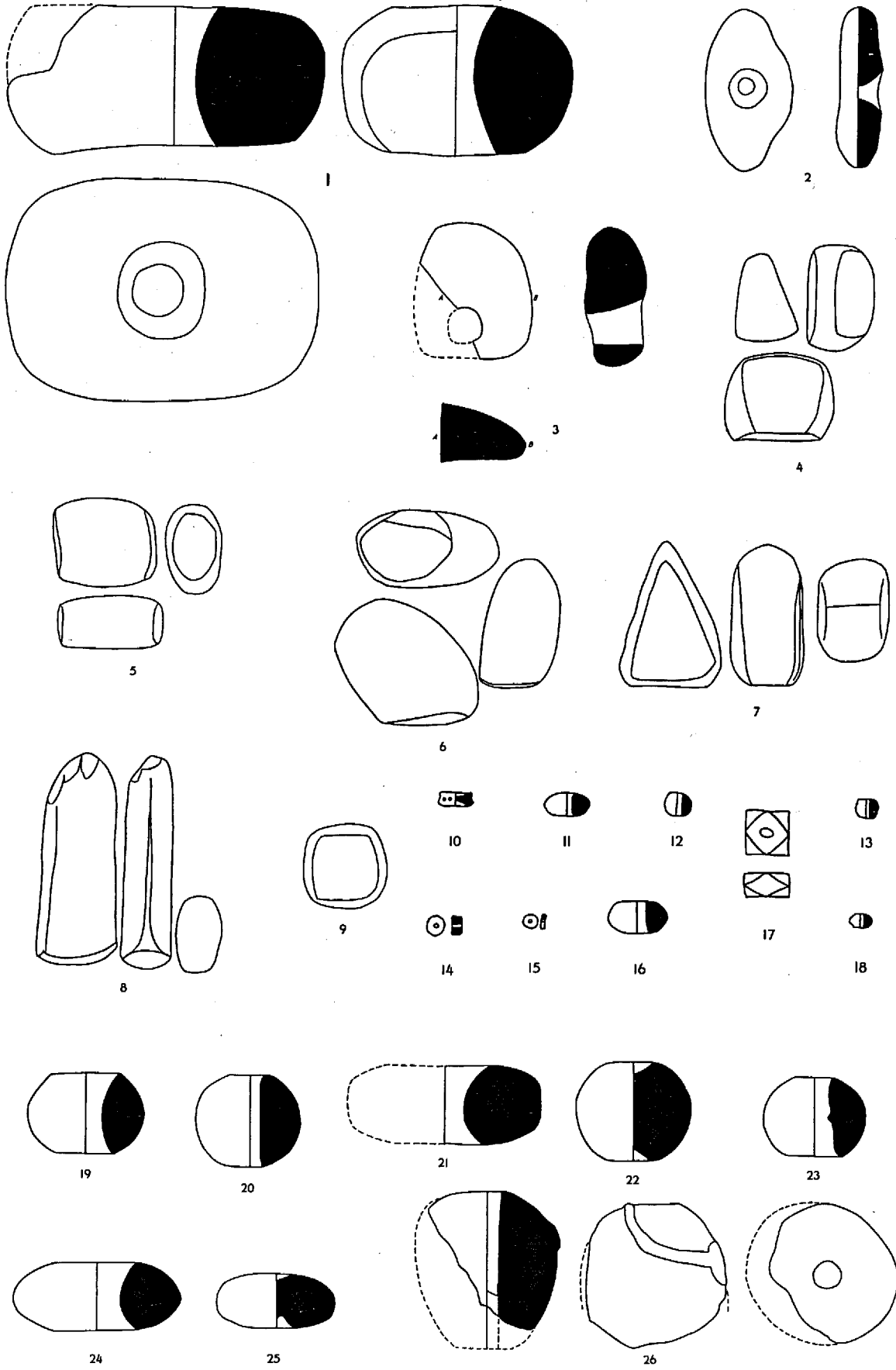


SCALE, 1:3

No.	Field No.	Provenience	Level	D.	L.	B.	H.	Th.	Remarks	See Page
1	367	Rm. III 3, floor	III			9.5	6.9		scraper, yellow-cream ware: (a) top, (b) bottom, (c) side view	17, 71
2	2302	Rm. VII 3	III			12.4			scraper blade or polisher, tan ware	71
3	2379	N 29, +2.2 m.	IV		6.7 mx.	6.1 mx.		1.3 mx.	scraper	71
4	515	Rm. IV 3	III		10.4	5.7		1.5	plaque, polisher(?)	17, 71
5	2384	M 30, +2.37 m.	IV, base surf.		9.0 mx.	10.0 mx.		.9	plaque fragment, palette(?)	71
6	634	Rm. V 3, floor	III	10.0				11.0 mx.	fire-dog, light tan-brown core, buff surface, vegetal temper	17, 71
7	56	M-N 30, above Rm. VIII 2	IV, surf.(?)		3.1	1.2		.4	point or pendant made from sherd	72
8	113	L 28, +1.4 m.	III	ca. 14				4.0	jar-stopper, light brown clay, half-baked	72
9	2	Rm. XIII 1	IV	7.1				3.5	jar-stopper, light brown clay, half-baked; see Pl. 7:15	67, 72
10	513	Rm. IV 2	III		11.8 mx.	6.7		6.0 mx.	fire-dog, light tan-brown core, buff surface, vegetal temper	17, 72
11	2381	P 33, +2.25 m.	surf.		6.6 mx.	4.0 mx.		1.4	polisher?	72
12	633	Rm. XVII 3	IV	ca. 11				2.7	jar lid, light brown clay, half-baked	21, 72
13	2380				4.2 mx.	3.5 mx.		1.0	plaque fragment, figurine(?), red-brown paint	72
14	625	Trench I, 36 m., +2.32 m.	IV		6.7	3.0		2.0	patty, light brown clay, half- baked	72
15	2377	O 32, +2.37 m.	surf.		6.2 mx.	3.2		2.5	patty fragment, light brown clay, half-baked	72
16	2322	Rm. V 5	III		11.6 mx.	2.1 mx.		1.5 mx.	handle(?), fragment, light tan ware, cream surface	72
17	146	Trench I, 30-40 m., +3.55 m.	surf.	2.8				4.0	cone, light brown clay, half-baked	72
18	125	O 30, +2.5 m.	IV, surf.		7.1 mx.	5.2		1.5	polisher, light brown to gray limestone, incised zigzag lines	73
19	112	O 31, +2.7 m.	surf.			5.8 mx.	7.4 mx.	6.0 mx.	sledge-hammer fragment re- used as polisher, gray to brown stone, surface abraded except in groove	73
20	124	Rm. I 1	III		8.0	6.1 mx.		.4	polisher, gray-black lime- stone, polished	16, 73
21	92	Rm. II 3	III		6.9 mx.	5.8	4.6		polisher, light tan-brown ware, black core, buff sur- face, coarse	16, 73

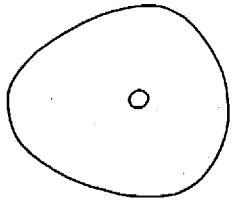


No.	Field No.	Provenance	Level	D.	L.	B.	H.	Th.	Remarks	Scale	See Page
1	120	O 32, +2.0 m.	surf.		16.3	11.4	7.5		sledge hammer, gray crystalline stone of dioritic appearance	1:3	73
2	122	above Rm. XVII 2	top IV		8.2	4.5		2.2	hammer or weight stone(?), gray-green stone, smoothed surface	1:3	73
3	111	O 27, +2.8 m. (above Rm. I 2)	IV		6.9	5.8 mx.		3.1	weight or macehead reused as hammer(?), light yellow-brown limestone, polished	1:3	73
4	131	N 31	IV		5.5		4.5	3.2	rubbing-stone, brown limestone, polished	1:3	73
5	126	M 29, +2.15 m.	IV		5.4	4.6		2.8	rubbing-stone, gray-brown limestone, polished	1:3	73
6	153	P 29, +3.1 m.	surf.		7.4		6.5	3.8	rubbing-stone, red-brown limestone, polished	1:3	73
7	147	from a room of Houses XIII-XV	IV			5.2	7.4	3.7	rubbing-stone, gray-black limestone, polished	1:3	73
8	136	Rm. X 1	III			4.0	10.9	2.5	rubbing-stone, gray-brown limestone, polished	1:3	18, 74
9	192	M 28, +2.3 m.	IV				4.3		pounding-stone, red and gray conglomerate, abraded surface	1:3	74
10	52	M 27	III	1.2			.5		bead, fish(?) vertebra, punctate decoration	1:2	75
11	578	Rm. VIII 3	III	1.5			.8		bead, turquoise matrix(?), light turquoise blue to white, polished	1:2	18, 75
12	3636	Rm. XII 2, .2 m. above floor	III	.9			.8		bead, smoky quartz, whitish, polished	1:2	75
13	3634	Rm. XII 2, .2 m. above floor	III	.8			.7		bead, bitumen	1:2	75
14	581		III	7			.35		bead, bitumen	1:2	75
15	580	Rm. XV 1	IV	.5			.15		bead, turquoise, light turquoise blue, polished	1:2	21, 75
16	577	Rm. XVII 3	IV	2.0			1.1		bead, calcite, white, smooth surface	1:2	21, 75
17	3637	Rm. XII 2, .2 m. above floor	III		1.5	1.5	.8		bead, lapis lazuli, dark blue, polished	1:2	75
18	3635	Rm. XII 2, .2 m. above floor	III	.8			.5		bead, bitumen	1:2	75
19	100	Rm. XIII 2, +1.8 m.	IV	6			4.1		macehead, complete, pale buff limestone, polished	1:3	20, 75
20	110	K 28, +1.9 m.	IV	5.4			4.7		macehead, incomplete, Yazd alabaster, light green, orange veins, polished	1:3	75
21	118	M 31, +2.7 m.	top(?) IV, surf.	9.9			4.0		macehead, incomplete, whitish limestone, polished	1:3	75
22	108	Rm. XVII 2, floor	IV	5.9			5.0		unfinished macehead, complete, white and green granite, rough surface	1:3	21, 75
23	101	L 29, +1.8 m.	base IV or top III	5.2			4.0		macehead, complete, alabaster, white with yellow-red tones, polished	1:3	75
24	103	N 27, +3.1 m.	top IV	8.7			3.5		macehead, complete, gray-white limestone, polished	1:3	75
25	117	Q 32, +2.0 m.	surf.	6.1			2.8		unfinished macehead or drill top, complete, red-brown sandstone, unpolished	1:3	75
26	98	M 28, +2.2 m.	IV	ca. 7.5			7.2 mx.		macehead, incomplete, white calcite, weathered	1:3	75



SCALE, 1:3

No.	Field No.	Provenance	Level	D.	L.	B.	H.	Th.	Remarks	See Page
1	99	N 29, +2.3 m.	IV		8.8	7.6		2.1	macehead or drill top, complete, black limestone, polished	
2	2590	Trench I, 20-30 m., +2.0 m.	IV, surf.(?)	ca. 46				5.0	ring fragment, white calcite; much weathered	70
3	588	Rm. III 3	III		7.2 mx.	2.5		.9	awl, bone, light yellow-brown, highly polished	17, 74
4	2591			ca. 24		4-4.5	6.0 mx.		ring fragment, light buff limestone, surface smoothed	70
5	3501			2.7			3.1		slingball, light gray-buff clay, sun-dried	75
6	3523			2.7	5.0				slingball, light gray-buff clay, sun-dried	75
7	3490			2.8	5.2				slingball, tan clay, sun-dried	75
8	91	Rm VII 3	III			7.4 mx.	10.5 mx.	2.0	incomplete, red-brown paint	18, 72
9	2663	O 29-30, +3.75 m.	surf.		10.0 mx.	3.7 mx.	4.5 mx.		ring, incomplete, brown paint	32
10	2662	Rm. XVII 5	IV	20		3.9	4.5 mx.		ring, incomplete, cream-tan ware	32
11	2753	J 32, +2.0 m.	surf.				6.7 mx.		dipper(?), fragment, cream-tan ware, traces of dark brown paint all over	32
12	590	Rm. III 2, floor	III		7.3	1.3		.15	flint knife blade set in bitumen; see Pl. 8:20	15, 77-79
13		various							flints: <i>a-d</i> sickle blades, <i>e-h</i> borers, <i>i</i> core	78 f.



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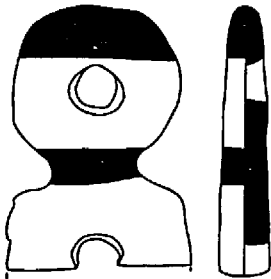
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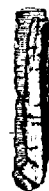
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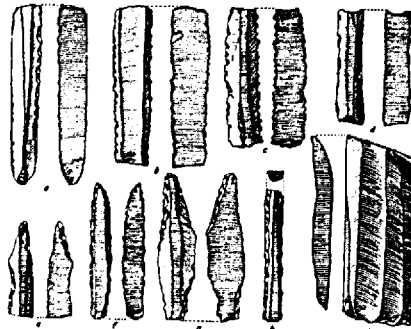
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