

NOTES
ON THE MEGIDDO
POTTERY
OF STRATA VI-XX



BY GEOFFREY M. SHIPTON

THE ORIENTAL INSTITUTE OF THE UNIVERSITY OF CHICAGO
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JOHN ALBERT WILSON & THOMAS GEORGE ALLEN · *EDITORS*

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PREFACE

I wish to acknowledge here my extreme indebtedness to Dr. John A. Wilson and Mr. Gordon Loud for giving me the opportunity of publishing this preliminary report on the pottery excavated at Megiddo under the latter's direction.

To the other staff members, Mr. and Mrs. Charles B. Altman and Mr. R. B. Parker, I should also like to express my gratitude for their enthusiastic help. To Mrs. Altman is particular credit due since she undertook all the secretarial work.

I am extremely grateful to Mrs. Elizabeth Hauser of the editorial office and Dr. R. M. Engberg, both of whom in working over this material have proffered advice and suggestions which I feel have improved the book immeasurably.

GEOFFREY M. SHIPTON

CHICAGO
November 10, 1938

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CHART

- SIGNIFICANT POTTERY FORMS FROM EACH STRATUM *at end*

LIST OF ABBREVIATIONS

AAA	Annals of archaeology and anthropology (Liverpool, 1908—).
AASOR	American Schools of Oriental Research. Annual (New Haven, 1920—).
AJSL	American journal of Semitic languages and literatures (Chicago, 1884—).
<i>Beth-Pelet II</i>	MACDONALD, EANN, STARKEY, J. L., and HARDING, LANKESTER. <i>Beth-Pelet II</i> (London, 1932).
<i>Duncan, Corpus</i>	DUNCAN, J. GARROW. <i>Corpus of dated Palestinian pottery</i> (London, 1930).
<i>FitzGerald, Beth-Shan Pottery</i>	FITZGERALD, G. M. <i>The four Canaanite temples of Beth-Shan. Part II. The pottery</i> (Publications of the Palestine Section of the Museum of the University of Pennsylvania II [Philadelphia, 1930]).
<i>Gjerstad et al., Cyprus</i>	GJERSTAD, EINAR, LINDROS, JOHN, SJÖQVIST, ERIK, and WESTHOLM, ALFRED. <i>The Swedish Cyprus Expedition</i> (Stockholm, 1934—).
<i>Gjerstad, Studies</i>	GJERSTAD, EINAR. <i>Studies on prehistoric Cyprus</i> (Uppsala, 1926).
<i>Macalister, Gezer</i>	MACALISTER, R. A. STEWART. <i>The excavation of Gezer, 1902-1905 and 1907-1909</i> (3 vols.; London, 1912).
<i>MJ</i>	Pennsylvania. University. University Museum. <i>The museum journal</i> (Philadelphia, 1910—).
<i>OIP</i>	Chicago. University. The Oriental Institute. <i>Oriental Institute publications</i> (Chicago, 1924—).
<i>OIP XXVI</i>	MAY, HERBERT GORDON. <i>Material remains of the Megiddo cult</i> (1935).
<i>OIP XXXIII</i>	GUY, P. L. O., and ENGBERG, ROBERT M. <i>Megiddo tombs</i> (1938).
<i>OIP XLII</i>	LAMON, ROBERT S., and SHIPTON, GEOFFREY M. <i>Megiddo. I. Seasons of 1925-34. Strata I-V</i> (1939).
<i>PEFQS</i>	Palestine Exploration Fund. <i>Quarterly statement</i> (London, 1869—).
<i>QDAP</i>	Palestine. Department of Antiquities. <i>The quarterly</i> (Jerusalem, 1931—).

- SAOC* Chicago. University. The Oriental Institute. Studies in ancient oriental civilization (Chicago, 1931—).
- SAOC* No. 10 ENGBERG, ROBERT M., and SHIPTON, GEOFFREY M. Notes on the Chalcolithic and Early Bronze Age pottery of Megiddo (1934).
- Teleilat Ghassul I* MALLON, ALEXIS, KOEPPEL, ROBERT, and NEVILLE, RENÉ. *Teleilat Ghassul I* (Institut biblique pontifical, *Compte rendu des fouilles, 1929-1932* [Rome, 1934]).
- Wright, *Pottery* WRIGHT, G. ERNEST. The pottery of Palestine from the earliest times to the end of the Early Bronze Age (American Schools of Oriental Research, Publications of the Jerusalem School, Archaeology I [New Haven, 1937]).
- WVDOG* Deutsche Orient-Gesellschaft, *Berlin*. Wissenschaftliche Veröffentlichungen (Leipzig, 1900—).

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I

INTRODUCTION

§ 1. This preliminary report on the pottery of Megiddo VI-XX makes no attempt at being final or even complete, though an effort has been made to illustrate the significant forms of each stratum. While the section of the mound that has been cleared to bedrock covers quite a considerable area (Area B in Fig. 1), it is intended that further work in the all-important Early Bronze and Chalcolithic periods will be undertaken during the forthcoming seasons.

§ 2. The present paper establishes a practically unbroken sequence of cultures—as represented by the pottery—from some time before 3000 to about 1100 B.C. (see § 8), that is, from the earliest occupation on bedrock (Stratum XX) up to and including the last pre-Israelite period (Stratum VI).¹

§ 3. Figure 1 shows the areas under excavation; Area A is cleared to Stratum XIII, Area B to bedrock, and Area C to Strata VIII-VII.

§ 4. From a ceramic viewpoint it is rather unfortunate that the area in which bedrock has been reached was almost throughout dedicated to religious purposes and contained a series of superimposed temples. Temples and similar structures have a tendency to longevity and reuse, so that what in a normal dwelling area would constitute a number of clearly distinguishable strata are here represented by single buildings—showing indeed certain modifications during the various phases of their existence—in which the surviving pottery is for the most part representative only of the final occupation.

§ 5. Another factor that has made the task at Megiddo more complex and difficult is that from the first settlement on bedrock (Stratum XX) to Stratum VI the site appears to have enjoyed an uninterrupted history with little sign of a major destruction, resulting in such a gradual development of the pottery that it is extremely difficult to decide just where one culture ends and another begins. This factor, combined with the almost total lack of inscriptional material, makes

¹ For the publication of the subsequent strata (V-I) see *OIP* XLII.

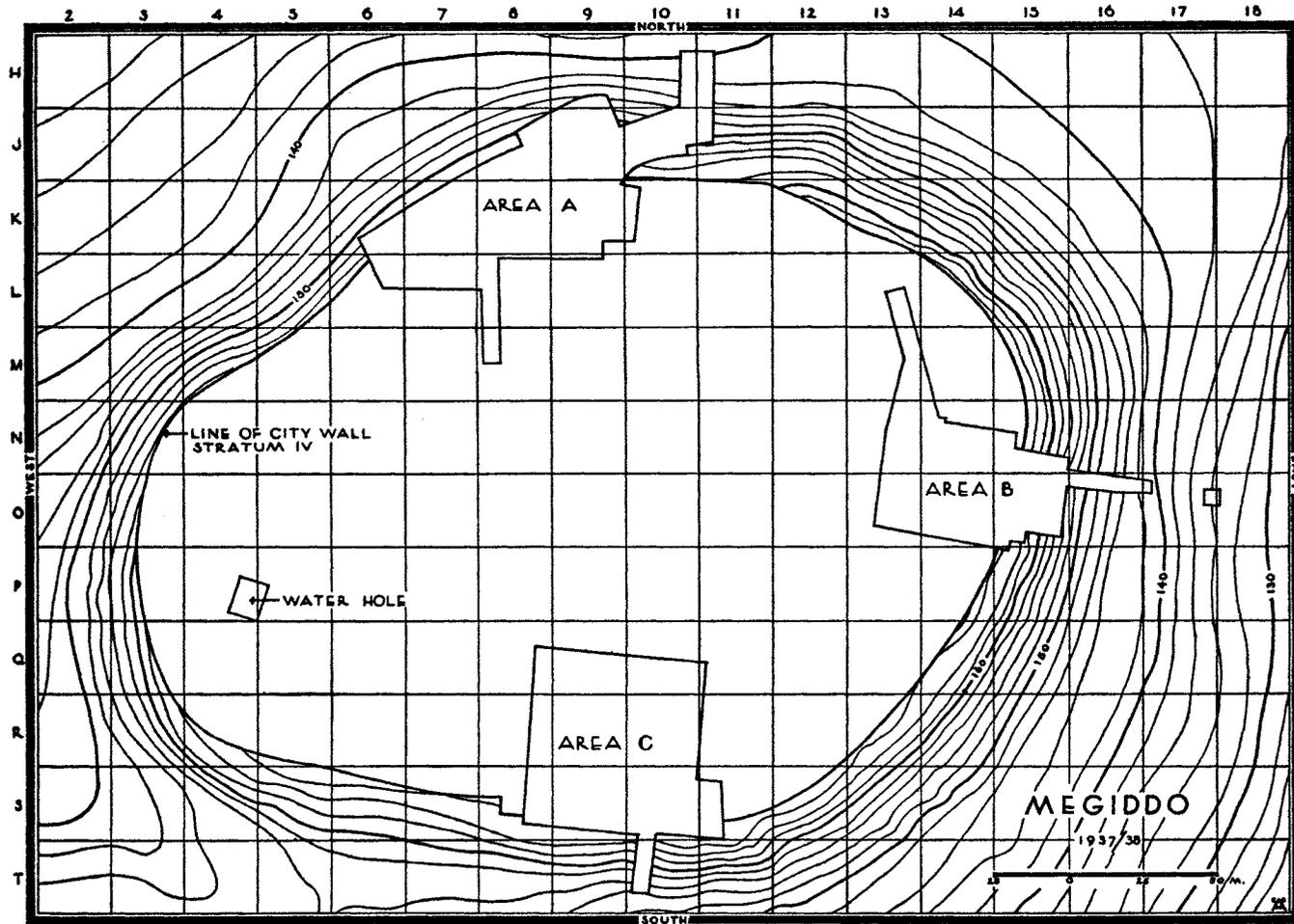


Fig. 1.—Map of the Megiddo mound showing areas under excavation. Scale, 1:2500

the assignment of absolute dates a matter more of comparative archeology than the direct result of the excavations. It will be noted that absolute dates have been applied to the strata, though at best they are but indications of the relative length of occupation of each stratum within its cultural period and may be subject to modification on the production of more concrete evidence.

§ 6. The majority of the evidence for dating is based on the pottery, but a considerable mass of evidence from other types of small finds, though not adduced here, has been taken into consideration.

§ 7. Since this is intended to be no more than a preliminary report, it has been considered most convenient to present the pottery in chart form. Little explanation is needed for the chart, as it is for the most part self-explanatory. However, there are a few points that need some elucidation. The chart is divided into six sections. The vessels illustrated represent the most significant forms in each stratum. In the text reference is made to them by stratum and pot number. The scale has been kept fairly constant at about 1:13. It has been considered unnecessary to indicate reconstructions based on known forms; where a doubt exists, however, the reconstruction is shown by a broken line. The chart is supplemented by photographs (Pls. 1-11), where the vessels are arranged by strata and referred to vessels in the chart. All the vessels on the plates, unless described in the text, are accompanied by their descriptions. Owing to the importance, but somewhat fragmentary condition, of the early material, a number of photographs of sherds are included (Pls. 12-19) and in the case of the Stratum XX ceramics drawings also (Pl. 20). All these sherds are described and referred, when possible, to vessels in the chart.

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§ 8. MEGIDDO CHRONOLOGY WITH EQUATION TO
THE TELL BAIT MIRSIM STRATIFICATION
AND EGYPTIAN DYNASTIES

Megiddo Chronology	Megiddo Strata	Tell Bait Mirsim Strata	Egyptian Dynasties
Late Iron (600-350)	I (600-350)	A-B ₂	
Middle Iron (1000-600)	II (650-600) III (780-650) IV (1000-800)		
Early Iron II (1100-1000)	V (1050-1000)		
Early Iron I (1200-1100) and Late Bronze II (1350-1200)	VI (1170-1100)	B ₂	20
	VII (1350-1170)	B ₁ -C ₂	19 and early 20
Late Bronze I (1500-1350)	VIII (1479-1350)	C ₁	late 18
Middle Bronze II (1750-1500)	IX (1550-1479)	Gap	early 18
	X (1650-1550)	D	13-17
	XI (1700-1650)	E ₂	
	XII (1750-1700)	E ₁	
Middle Bronze I (1950-1750)	XIII (1800-1750)	F	12
	XIV (1850-1800)	G	
	XV (1950-1850)	H-I	
Early Bronze (3000-1950)	XVI-XVII (2500-1950)	J*	
	XVIII (3000-2500)		
Chalcolithic (before 3000)	XIX (3300-3000)		
	XX (before 3300)		

* Latter part of XVI-XVII.

II

THE POTTERY SEQUENCE

STRATUM VI

§ 9. The pottery of Stratum VI had little in common with that of the overlying Stratum V. The whole content of Stratum VI is in the Late Bronze or Canaanite tradition, and not a single sherd of the early Israelite hand-burnished, red washed fabrics so typical of Stratum V was discovered. Forms which first appear in Stratum VII continue with hardly noticeable change to the termination of VI, where they come to an abrupt end.

§ 10. The wares fall into two main categories: (1) ordinary, moderately fired, medium textured, buff-colored ware with white and gray grits (e.g. Nos. 2, 4, 7, 10-13, 15-16, 22, 24-26, and 29), the common utilitarian vessels of the period which find parallels from analogous sites such as Baisan and Tell el-Fara in the 19th and 20th dynasties; (2) much more distinctive, well fired, somewhat finely levigated, orange-buff ware with minute black and white grits which give it a "pepper-and-salt" appearance (e.g. Nos. 1, 5, 18, 21, 28, 32, and 34). The latter type seems more properly confined to the 12th century. In general it is hand burnished, with almost invariably a red-line decoration. Again parallels can be cited from the Early Iron period at Tell el-Fara and Baisan, while at Tell Abu Hawwam and Tell el-Duwair examples come from both the 19th and 20th dynasties.

§ 11. A form found only in this stratum is No. 3, which consists of a rather fine well baked pink-buff ware. It is covered with a light buff wash not dissimilar to that of the Philistine fabrics (cf. No. 27), despite Albright's statement that no creamy wash akin to that of the Philistines occurs in north Palestine during the Early Iron period.¹ There are a number of variations of this jug form, but as a typical example the jug illustrated serves admirably. Tell el-Fara produces a similar form in the 19th dynasty.²

¹ *AASOR* XII (1932) 62.

² Duncan, *Corpus*, 65 D 2.

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§ 12. No further light has been thrown on the vexed Philistine question as a result of the excavations at Megiddo, though one might suggest, judging by the paucity of examples, that Megiddo was never occupied by Philistines. What few sherds were found had equal distribution through VI and VII, which proves no more than a slight Philistine influence during the 12th century! As an actual piece No. 6 (Stratum VI) is interesting. Its decoration consists principally of a frieze depicting a pastoral scene of a shepherd with crook and harp surrounded by his somewhat motley flock including a lion, a horse, a gazelle, a dog, a fish, a scorpion, and a goose! The remainder of the decoration is typically Philistine, as also are the pink-buff ware and cream slip.

§ 13. The flasks from this stratum cannot be distinguished from those of Stratum VII, either on ware or decoration—another indication of the continuity of the two strata. The most profuse is an ovoid form (No. 31) with a decoration of either concentric circles or spirals. It is found in numbers throughout Palestine during the period represented by VI and VII, while in Egypt it appears to be roughly contemporary.³ The cup flask No. 32 with its more elaborate but equally stereotyped decoration was found commonly in VI and VII, but not a single example was discovered in VIII.

§ 14. Of the cooking bowls No. 35 is more truly a Late Bronze carry-over. While No. 36 occurs also in VII (No. 59), it most probably belongs to the Early Iron part of that stratum, for with little change it is found in the early part of the Israelite period (Stratum V). With this may be associated Nos. 8 and 9, which have practically the same history.

§ 15. Crater No. 37 is a typical form of the Early Iron period and appears to be a Cypro-Mycenaean vessel. A similar form with identical decoration from Ithaca is dated by Heurtley to ± 1200 B.C.⁴ In general appearance it is not dissimilar to certain examples of Cypriote "White Painted I" ware which are placed in the Cypro-Geometric I period.⁵

³ E.g. W. M. F. Petrie, *Illahun, Kahun and Gurob* (London, 1891) Pl. XIX 17.

⁴ British School at Athens, *Annual XXXIII* (1935) Fig. 15 and p. 63.

⁵ Gjerstad *et al.*, *Cyprus I*, Pl. CXXIV 9-10.

§ 16. Jar No. 13 has a long history and belongs to that ubiquitous class of vessels which are related to the Mycenaean pyxis and as such may be dated as early as 1400 B.C. At Megiddo they first appear in VII (No. 16), reach their climax in VI, and occur in debased form in the Israelite period.

§ 17. Chalices 15-17 form a strong Early Iron group, of which perhaps the form with more or less straight pedestal (No. 16) is the earliest. No. 17 is a more ornate form, the pedestal being ornamented with a series of openwork windows. A good parallel comes from Tell Abu Hawwam V (1400-1230 B.C.).⁶

§ 18. Chalice No. 18 is of interest and falls into a somewhat specialized group, of which No. 52 from Stratum VII is an earlier example. Baisan provides a parallel from the pre-Amenophis III or Amenophis III level.⁷

§ 19. Two offering-stands (Nos. 19-20) have been published in *OIP XXVI*⁸ but are here included in their pottery context.

STRATUM VII

§ 20. A noticeable feature of the pottery of Stratum VII is the profusion of decoration. With few exceptions red decoration is applied to the pink-buff, moderately fired, medium textured ware which constitutes the main body of the ceramics of VII and VI. Only two examples (Nos. 2 and 45) of the "pepper-and-salt" ware so typical of Stratum VI occurred here.

§ 21. The majority of the vessels have a wet-smoothed finish over which the red decoration is applied. An exception is jug No. 12, which has a thick white wash under typical LB II geometric and debased palm-tree motifs. This jug form is one of the best criteria for Stratum VII and for the 19th dynasty in Palestine. Parallels have been found throughout Palestine, notably at Tell el-Fara,⁹ where they are dated to the 19th dynasty, and at Tell Bait Mirsim, where Albright dates them to the 19th to 20th dynasties.¹⁰ While the decora-

⁶ *QDAP IV* (1935) Pl. XVII 276.

⁷ FitzGerald, *Beth-Shan Pottery*, Pl. XLII 22.

⁸ Pl. XX.

⁹ *Beth-Pelet II*, Pls. LXXXV 41 O and LXXXIV 37 J.

¹⁰ *AASOR XII*, Pl. 47:15; *XIII*, Pl. 18:10.

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tion in this period is extremely stylized and degenerate (e.g. No. 12), there is still apparent a certain realism, as can be seen in jar No. 22 and to a lesser degree in bowl No. 29.

§ 22. With No. 12 can be classed Nos. 11, 13, and 27, which are again typical of the 19th dynasty in Palestine.¹¹ Jug 60 can also be included in this group, though its combination of strainer top, strainer spout, and basket handle is somewhat anomalous. However, its ware, inclosed trellis decoration, and general shape place it with little doubt correctly in this temporal picture.

§ 23. Jugs 9-10 and 15 are obviously the last vestiges of earlier duochrome ware (see § 34). They occur no later than VII and consequently belong more properly to the early or Late Bronze part of the stratum.

§ 24. Jug No. 4, with cream ware, thrust-through handle, and shaved body, was found only in Strata VIII (No. 19) and VII and must be confined to Late Bronze. The thrusting-through of the handle is a definite Cypriote characteristic, and numerous jugs of this type have been found in Cyprus. They fall into the category of "White shaved ware," which Gjerstad dates from Middle to Late Canaanite¹² and considers a mainland product.¹³ Eighteenth dynasty parallels also can be cited.¹⁴ Of the undoubtedly Cypriote imports must be mentioned Nos. 18, 36, and 62. Jug 18, a handmade Cypriote bilbil, was the only complete form of its kind found, though there were numerous fragments of a slightly different and later bilbil form present in the stratum. It is pointless to produce parallels for these vessels, for they appear both in Palestine and Cyprus throughout the whole of the Late Bronze period. Bowl 36 is a common type of handmade base-ring ware bowl that was exported from Cyprus in great quantities during the Late Bronze period. A slightly earlier form occurred in VIII (No. 33) and IX (No. 30). Milk bowl No. 62 has practically the same distribution as the foregoing except that an even earlier example occurs in Stratum X (No. 46 a).

¹¹ E.g. FitzGerald, *Beth-Shan Pottery*, Pl. XLVI 5.

¹² Gjerstad, *Studies*, p. 181.

¹³ Personal communication.

¹⁴ T. Eric Peet and C. Leonard Woolley, *The City of Akhenaten I* (London, 1923) Pl. LI xl/258.

§ 25. Apart from the Cypriote and Mycenæan forms illustrated (Nos. 18, 36, 49, and 62) there were numerous Mycenæan sherds—and one lone piece of Minyan—spread throughout this stratum, though it must be admitted there was a greater preponderance in VIII than in VII.

§ 26. Craters 28–32 show a gradual decline in decorative motif, with No. 29 the earliest typologically and No. 30 the latest. In No. 29 the antithetic grouping of animals around the tree of life compares favorably with the decoration on jar No. 22. A noticeable feature of Nos. 29–31 is the high pedestal base.

§ 27. Stirrup cup No. 49 with its lustrous paint is a true Mycenæan import of the 14th–13th centuries.

§ 28. No. 23 is by far the most typical jar of this stratum and the most easily recognizable. Its main characteristics are the flat shoulder, tapering body, and handle attachment at the shoulder line. Such jars found at Tell el-^cAmarnah¹⁵ are of course well dated. There, however, they were sometimes decorated in blue and more closely resemble our Stratum VIII example (No. 29). At Minet el-Baida⁷ a whole room was found stacked with vessels which are indistinguishable from ours and dated by Schaeffer to the 15th–13th centuries.¹⁶ Similar vessels from the same period come from Tell el-Fara¹⁷ and Baisan.¹⁸

§ 29. Such handleless forms as Nos. 24–26 would seem more at home in Egypt than in Syria or Palestine. They are apparently related to a Stratum VIII form (see § 39). No. 25 occurred several times, but no reasonable explanation can be offered for the hole near the base. There is no sign of burning, so apparently it was not used as a brazier, and we reluctantly suggest that it may have had some cult significance.

§ 30. Of the chalices, Nos. 48 and 50 are the normal shapes for this stratum. The square variety (No. 55) is rare, though a more exotic shape (No. 52) is quite happily placed here. It was found only once,

¹⁵ Peet and Woolley, *The City of Akhenaten* I, Pls. LI–LII, type xliii.

¹⁶ *Syria* XIII (1932) Pl. III 3 and pp. 13 f.

¹⁷ *Beth-Pelet* II, Pl. LXXXVI 47 H 6.

¹⁸ FitzGerald, *Beth-Shan Pottery*, Pl. XLII 13 (pre-Amenophis III or Amenophis III level).

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but a perfect parallel from Baisan would seem to indicate that the shape and decoration are not unusual.¹⁹

§ 31. The long thin pipelike form No. 19 is found frequently, but only in VII. While the shape remains fairly constant, the finish varies considerably, ranging from a thick well burnished red slip to a wet-smoothed and occasionally decorated form. This type of vessel has been found elsewhere in Palestine, notably at Tell Abu Hawwam in Late Bronze (Stratum V)²⁰ and at Gezer in a Third or early Fourth Semitic tomb,²¹ which now can with little doubt be placed in the 19th dynasty.

§ 32. Of the bowls, Nos. 34 and 38 are undoubtedly the best criteria for this stratum. The peculiarly flattened side of No. 34 is not accidental, for numerous examples were found—some with loop handles and flat bases. They occur at Baisan in the pre-Amenophis III and Amenophis III levels,²² though a better dated example comes from the latest temple at Tell el-Duwair (*ca.* 1325–1260 B.C.).²³ The saucer bowl No. 38, with red-line decoration on the slightly flaring rim, is also confined to VII and was probably of the early part of the stratum.

STRATUM VIII

§ 33. This stratum presents an interesting picture of the final development from true Middle Bronze ceramics (Stratum X) via the hybrid Stratum IX to the true Late Bronze stratum (VIII), in which practically no trace of Middle Bronze influence was found. It must be stressed that Stratum VIII is dated to the LB I period on the evidence of the Megiddo stratification itself. Well dated comparative material is scarce, but on its own merits there can be little doubt that Stratum VIII constitutes the clearest and best defined LB I stratum so far excavated in Palestine.

§ 34. The main point of interest is that here is encountered the latest manifestation of a duochrome decorative technique which was first observed in Stratum X. It reached its climax in IX (§§ 43–49)

¹⁹ FitzGerald, *Beth-Shan Pottery*, Pl. XLIV 20.

²⁰ *QDAP* IV, Pl. XVI 256.

²¹ Macalister, *Gezer* III, Pl. LXXXV 2, 5, 6, and 8.

²² FitzGerald, *Beth-Shan Pottery*, Pl. XLI 21–25.

²³ See J. L. Starkey in *PEFQS*, 1934, Pl. VI 2.

and is present in this stratum in debased form (e.g. Nos. 14-16). While in Stratum VII certain of the vessel forms still exist (Nos. 9-10 and 15), the decoration has degenerated into plain roughly applied red lines. In Stratum VIII were found a number of Mycenaean sherds also, and though complete forms were lacking there could be no doubt that they were correctly placed in this stratum. Here, then, is definite evidence that the end date for Stratum VIII must be brought down to at least 1400 B.C.

§ 35. Jugs 5-7 and 9 are good examples of Stratum VIII forms and decoration. They are obviously the prototypes of later forms (e.g. VII 12), and one may go back even as far as Stratum IX for their earliest appearance (No. 3). In looking for parallels, not only for these specific vessels but also for the rest of the Stratum VIII repertoire, it becomes increasingly apparent that in the published results of excavated Palestinian sites there is a surprising paucity of such material. Tell Bait Mirsim has produced perhaps the best stratified analogies (see § 36), though even here not only is the material extremely fragmentary but the quantity leaves much to be desired. Jericho and Baisan present certain parallels, but one cannot help feeling that some of the pottery attributed to Late Bronze I would be better placed in Late Bronze II.²⁴ Of the unpublished material the earliest temple of Tell el-Duwair²⁵ gives the best parallels.

§ 36. The decoration of Nos. 5-7 and 9 can be compared with that on sherds from Stratum C₁ at Tell Bait Mirsim,²⁶ which Albright dates 15th-14th century. At Jericho analogies in both form and design are dated by Garstang 1600-1400 B.C.²⁷ At Baisan parallels come from the Amenophis III and pre-Amenophis III levels.²⁸

§ 37. Jugs 2 and 10 with their red-line decoration were found only in VIII and constitute good criteria for the stratum. Vessels similarly

²⁴ In particular the forms illustrated in *AAA XX* (1933), Pl. X 1, 7, 8, 11, and 13.

²⁵ The writer is grateful to both the late Mr. J. L. Starkey and Miss Olga Tuffnell, now responsible for the publication of the Tell el-Duwair material, for permission to make full use of their as yet unpublished finds.

²⁶ See *AASOR XIII* (1933) Figs. 26-27 and p. 89, § 51.

²⁷ *AAA XXI* (1934) 108 f. and Pls. XXXI 8-9 and 13, XXXV 5, and XXXVI 20.

²⁸ FitzGerald, *Beth-Shan Pottery*, Pl. XLIII 26, 31, and 38.

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decorated in one color were discovered in 18th dynasty context along with Cypriote bilbils at Abydos in Egypt.²⁹

§ 38. The Cypriote jugs of the stratum fall into two categories, "White painted V" ware (No. 18)³⁰ and "Base-ring" ware (Nos. 20-22).³¹ The former first appeared in Stratum IX, where it was found fairly frequently (Nos. 10 and 12; see § 50). The base-ring ware shows a good range in forms and was found both in this and the preceding stratum (IX 30). Albright has produced evidence to prove that this ware was imported into Palestine at least as early as 1550 B.C.³² The other Cypriote forms are Nos. 33-34. The former is the early type of "Monochrome" wishbone-handled bowl³³ which was found only in IX and VIII. "White slip" milk bowls (e.g. No. 34),³⁴ which show practically no change from Stratum IX to VII, were found here in quantities, though in all cases in a very fragmentary condition. The milk bowl of Stratum X (No. 46 a) differs considerably in decorative motif from those found in IX-VII and is comparable to the type Petrie calls "Anatolian."³⁵ No. 35 in normal buff ware appears to be a local imitation of Cypriote "White slip" milk bowls. Petrie unearthed a similar one at Tell el-'Ajul but reconstructed it with two handles and dated it to the 16th dynasty.³⁶

§ 39. No. 30 is the only jar that calls for comment. It is of buff ware with a gray core, and its handleless form can best be compared to vessels from Egypt, notably some from Sedment³⁷ and Tell el-'Amarnah.³⁸ It seems to be an earlier form of certain Stratum VII jars (Nos. 24-26).

§ 40. Platter No. 32 is an unmistakable form, which from the evidence at Megiddo seems to be characteristic of the MB II and LB I periods. It is of coarse brown ware, with rope decoration around a

²⁹ John Garstang, *El Ardbah* (London, 1901) Pl. XVIII E 268.

³⁰ Cf. Gjerstad, *Studies*, p. 172, jug 8.

³¹ Cf. *ibid.* p. 186, jugs 1-2.

³² Cf. Gjerstad, *Studies*, p. 183, bowl 1

³³ *AASOR* XII, § 39A.

³⁴ Cf. *ibid.* p. 195, bowl 2.

³⁵ See *Ancient Gaza II* (London, 1932) Pl. XXXVII.

³⁶ *Ibid.* Pl. XXVIII 19 S 4.

³⁷ W. M. F. Petrie and Guy Brunton, *Sedment* (London, 1924) II, Pl. LXIV 26 M₁ (18th dynasty).

³⁸ Peet and Woolley, *The City of Akhenaten I*, Pl. L xxv/247.

slightly upturned rim and incised marks on the base. Starkey found several in his third (earliest) temple at Tell el-Duwair (1480-1420 B.C.) and called them "bread pans." They are found with little change as early as Stratum X (No. 39).

§ 41. Chalice No. 46 is of pink-buff ware and because of its red decoration and deep cup is distinctive. A good analogy on ware, shape, and decoration comes from the earliest temple at Tell el-Duwair and as such is well placed in the 15th century. In this stratum lamps begin to have appreciably squeezed lips (e.g. No. 44), and their presence may be regarded as one of the strongest criteria for the advent of Late Bronze.

§ 42. Bowl No. 41 with its straight sides and rather porridgy appearance—the result of numerous white grits in a rather moderately fired pink-buff ware—is the bowl most typical of the stratum. Slightly carinated forms such as Nos. 37-38 and 42 show a certain Middle Bronze character. Bowl No. 40 with its thumb handle, peculiar mauve-red wash, and wheel burnishing must belong to the latter part of the period and is undoubtedly the prototype of No. 35 in VII.

STRATUM IX

§ 43. The pottery of this stratum is by far the most interesting of the later pottery yet unearthed at Megiddo. It includes not only normal Palestinian Middle Bronze II forms but also some delightful painted pottery typical of the end of the period. It is this latter ware that for the moment interests us most. The majority of the vessels are made of a finely levigated pink-buff ware and are well but irregularly hand burnished under a two-color decoration of red and black. Nos. 4-5 and 31 have a heavy slip varying in color from cream-buff to green-buff under the red and black decoration.

§ 44. First observed in Stratum X these fabrics reached their climax in Stratum IX and were present in a debased form in Stratum VIII. Manifestations of them have been found fairly widespread throughout the coastal plains of Palestine—from Tell el-ʿAjul in the south to Megiddo in the north—and in Syria, Cyprus, and Egypt at about the same period, while the simultaneous appearance in Mesopotamia of certain of the distinctive decorative elements brings that part of the

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Near East into a picture that at last seems to be assuming a definite and coherent pattern.

§ 45. There can be little doubt that such a general diffusion of these fabrics was the result of some big ethnic movement. Since these wares in no way replace the normal pottery found throughout the Hyksos levels, but are found cheek by jowl with them in this stratum, along with toggle pins, scarabs, alabastra, etc. of undoubtedly Hyksos types, it is concluded that this movement was closely related to that of the earlier Hyksos and probably represented a last big wave from the north before the Egyptian conquest of Palestine under Thutmose III.

§ 46. Speiser has shown conclusively that there were Hurrians in Palestine in the middle of the second millennium and produces strong arguments for identification of the Hurrians as an element of the Hyksos.³⁹

§ 47. The decorative motifs are interesting and varied, consisting of "Amorite" birds, fish, running cartwheel or guilloche designs, and numerous geometric patterns, including "Union Jacks," Maltese crosses, and spoked wheels. In the Hurrian level (Stratum 3) at Tell Billah near Mosul Speiser has discovered a profusion of decorative motifs which include a number of designs that are directly comparable to those of the two-color patterns of our late Hyksos fabrics. In particular may be mentioned the similarity of the birds, fish, "Union Jacks," looped designs filled with dots, and the guilloche pattern.⁴⁰ Tell Billah 3 is dated 1600-1400 B.C. by Speiser,⁴¹ who calls attention to the similarity between the Palestinian and the Hurrian designs.⁴²

§ 48. The simultaneous appearance of these distinctly unusual designs in two colors in Palestine and Mesopotamia—apart from the convincing philological arguments adduced by Speiser—suggests strongly that the peoples responsible for them were derived from a common stock.

§ 49. These designs have been found by Petrie at Tell el-'Ajul.⁴³ At Tell el-Duwair, Starkey found numerous sherds bearing similar decoration in the fosse below and adjacent to his Thutmose III

³⁹ "Ethnic movements in the Near East in the second millennium B.C." (*AASOR* XIII 13-54).

⁴⁰ *MJ* XXIII (1932/33) Pl. LXIV.

⁴¹ *Ibid.* p. 275.

⁴² *Ibid.* p. 276.

⁴³ *Ancient Gaza* II, Pl. XLII.

(earliest) temple. While not dismissing the possibility of their contemporaneity with the temple, he was inclined to date them somewhat earlier. Other Palestinian parallels come from Tell el-Hasi, where the spoked wheel is compared by Albright to an earlier form (1600 B.C.) from Syria.⁴⁴ Our jug No. 7 can be compared to a Thutmose I vessel from Rifah.⁴⁵ The fish and bird designs have come from Gezer in the Second Semitic period,⁴⁶ from Minet el-Baida⁷ in Syria,⁴⁷ and from 16th dynasty context in Egypt.⁴⁸ Plain geometric patterns like those on our Nos. 6 and 7 are duplicated in 16th dynasty context at Sedment.⁴⁹ In Cyprus examples with comparable designs are considered by Gjerstad to be of Syrian origin.⁵⁰

§ 50. Another noticeable feature of this stratum is the number of Cypriote imports (Nos. 9, 10, 12, 30, 39, and perhaps 11 and 13). Nos. 10 and 12 are "White painted V" ware, dated by Gjerstad from about 1750 to 1600 B.C. (Middle Cypriote III),⁵¹ a somewhat earlier date than the present stratigraphic evidence from Megiddo indicates. There, however, a vessel of this ware⁵² occurred in a tomb group which can be well equated to Stratum X, so that its absence in X itself would appear to be accidental. Nevertheless, its presence in Stratum VIII (No. 18) proves conclusively that at Megiddo it must extend well into the 15th and possibly even into the 14th century. Perhaps the most distinctive form of this group is a long-necked burnished jug type (Nos. 11 and 13) of fine gray ware with either rounded or flat base. Such a jug was found in a Late Cypriote II tomb at Cyprus.⁵³ In Egypt they have been found in 18th dynasty contexts.⁵⁴ Petrie has dated those at Tell el-Ajul to the 15th dynasty or earlier.⁵⁵ The

⁴⁴ *AASOR* XII 27.

⁴⁵ Petrie, *Gizeh and Rifah* (London, 1907) Pl. XXVII F 169.

⁴⁶ Macalister, *Gezer* II, Fig. 324. ⁴⁷ *Syria* XIII, Fig. 7 (p. 11).

⁴⁸ Petrie and Brunton, *Sedment* I, Pl. XLV 71.

⁴⁹ *Ibid.* Pl. XLV 67-68.

⁵⁰ Gjerstad, *Studies*, pp. 205 and 207-9 ("Painted ware").

⁵¹ *Ibid.* pp. 172 (jugs 4 and 8), 176, and 273 (chart).

⁵² *OIP* XXXIII, Pl. 24:3.

⁵³ Gjerstad *et al.*, *Cyprus* II, Pl. CXV 9, and I 348 (for date).

⁵⁴ E.g. Petrie and Brunton, *Sedment* II, Pl. LXIII 273 B.

⁵⁵ *Ancient Gaza* III (London, 1933) Pl. XXXIX 68 A 3' and F 3.

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evidence from both Egypt and Palestine is in favor of a date earlier than Gjerstad allows; indeed the evidence from Megiddo itself, where this type is confined to Stratum IX, tends to limit it to the latter half of the 16th and the beginning of the 15th century.

§ 51. Squat juglet No. 17, with which can be classed No. 16, while typical of IX occurred also in VIII (No. 3) in a slightly debased form. The ware is normally pink- or cream-buff with invariably a well hand-burnished finish and occasionally a thick white slip (also burnished) like that of bowl No. 35 (see § 52). At Tell el-^cAjul they have been found in association with the two-color fabrics and dated to the 15th and 16th dynasties.⁵⁶ In Syria they have come from the 2d stratum at Ras Shamra, which is dated 19th-16th century.⁵⁷ Their presence in Megiddo Stratum VIII is well substantiated at Tell el-Duwair, where they were found in the Thutmose III temple.

§ 52. With the vessels discussed in § 51 must be associated on the basis of ware and slip bowls Nos. 35 and 32. They are made of very fine, well fired, almost metallic, pink-buff ware and covered with a thick white burnished slip. No. 35 because of its red-brown decoration falls into Petrie's "chocolate and white" class.⁵⁸ It finds parallels from Jericho in levels D-E, which are dated about 1500 B.C.⁵⁹ Garstang's date agrees perfectly with our evidence, for this type was found only in Stratum IX.

§ 53. Chalice No. 29 with its deep cup form is close to the LB I types (cf. VIII 46) and can be paralleled from the Thutmose III period in Egypt.⁶⁰

§ 54. Cooking bowl No. 44 was found in Stratum IX only. A slightly earlier example occurred at Tell Bait Mirsim in Stratum D.⁶¹

§ 55. Of normal MB II forms, the following comprise the most typical as represented in Stratum IX: flat-based juglets (Nos. 14, 18, 20, and 21), elongated jugs (No. 24), trefoil-spouted jugs (No. 19), jugs with shoulder handles (Nos. 23 and 25), large (No. 27) and small

⁵⁶ Petrie, *Ancient Gaza* III, Pl. XXXVIII 51 P 7-8.

⁵⁷ F. A. C. Schaeffer in *Syria* XIII, Pl. XII 3.

⁵⁸ Cf. *Ancient Gaza* II, Pl. XLII.

⁵⁹ AAA XX (1933) Pls. XXV ρ and XXXIII 31.

⁶⁰ Brunton, *Qau and Badari* III (London, 1930) Pl. XXVI 42-43 and p. 16.

⁶¹ AASOR XIII, Pl. 13:11.

(No. 33) amphorae, carinated bowls (No. 37), straight-sided bowls (No. 38), and lamps like No. 41. Since they are all duplicated in Stratum X or XI, it was not considered necessary to discuss them here.

STRATUM X

§ 56. Strata XII–X cover the period from about 1750 to 1550 and constitute one long continuous occupation, wherein certain ceramic changes can be observed. New forms come and go, stable forms show certain modifications, but to distinguish between the pottery of two contiguous strata is difficult. It might perhaps be more satisfactory for these three strata to be grouped and discussed together. Since, however, they were so well separated stratigraphically, they have been treated separately in the hope that they may prove of more value to other excavators. This difficulty of distinguishing changes within the Middle Bronze period appears to be general throughout Palestine, in particular at Tell Bait Mirsim, where Albright finds that “the pottery of E is very difficult to distinguish from D on the one hand, as well as in certain cases from F on the other.”⁶²

§ 57. Stratum X was strongly represented both stratigraphically and ceramically throughout the excavated areas. It contains normal MB II forms including carinated bowls (Nos. 34–36 and 47), piriform (Nos. 10–11) and flat-based juglets (Nos. 8–9), single- (Nos. 15–18) and double-handled (Nos. 19 and 30–31) amphorae, long pointed juglets (Nos. 13–14 and 23), and fine-ware goblets (No. 32).

§ 58. The appearance in this stratum of the two-color fabrics (Nos. 1, 2, and 3) which reached their climax in Stratum IX indicates that the late influx of northerners (Hyksos) was making its presence felt as early as the middle of the 17th century (cf. §§ 43–49). Among the other decorated forms may be mentioned Nos. 43–44. Covered with a matt white wash under the decoration of red and blue lines these vessels present a most striking and easily recognized finish. Fragments of this ware have been found as early as Stratum XIII (see §§ 100–102).

§ 59. The flat-based juglet (Nos. 8–9) is the most typical MB vessel and was found as late as Stratum IX (Nos. 14, 18, 20, and 21). Many

⁶² AASOR XII 19.

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have been found in Egypt in pre-18th dynasty contexts.⁶³ The presence of this form in Stratum XV (No. 3) is unfortunate, for out of the great amount of pottery from the three subsequent strata (XIV-XII) not one was found, and it had been thought with confidence that Stratum XI was the period of its inception. Now, however, we are forced to acknowledge that it was introduced at the same time as the button-based piriform jug. The flat-based jugs of Strata XI-IX are not covered with the thick red burnished slip so characteristic of Strata XV-XIII but are for the most part of pink-buff ware commonly hand burnished. Both this type and the piriform jug have either single or double handles, with perhaps an emphasis on the double handle in the earlier strata. Parallels for the plain forms of both types (X 8-11) can be cited from 18th-16th century Tell Bait Mirsim,⁶⁴ from Tell el-Fara in the 16th dynasty,⁶⁵ from the storerooms of the MB II palace at Jericho,⁶⁶ and from Cave 28 II at Gezer,⁶⁷ which can be dated 18th-17th centuries (see § 112).

§ 60. The long pointed juglet (Nos. 13-14) of pink-buff, rather fine, well hand-burnished ware occurs as early as Stratum XII (No. 10). The same general type, but with a heavy red burnished slip, slightly flattened base, and somewhat fatter body, occurs in Strata XV-XII. To quote Albright, the later form "is so well-known that no comparative remarks are necessary to establish its date and range."⁶⁸ No. 23, however, deserves a little more attention. Its distinctive characteristics are a ridge around the neck and a divided handle. Found in Stratum X only, it should prove of definite value in identifying this late MB II period. A parallel comes from Tell Bait Mirsim in the analogous Stratum D.⁶⁹

§ 61. Jug 12, with divided shoulder handle, has a very long history, first occurring in Stratum XIII (Nos. 18-19) and obviously derived from a red burnished form of Strata XIV (No. 14) and XIII (No. 17).

⁶³ E.g. Petrie and Brunton, *Sedment I*, Pl. XLV 64; Petrie, *Hyksos and Israelite Cities* (London, 1906) Pls. VII 5, 13, and 26 and VIII A 66.

⁶⁴ *AASOR XIII*, Pls. 9:2-3 and 5-6 (Stratum E) and 15:1-4 and 6 (Stratum D).

⁶⁵ *Beth-Pelet II*, Pl. LXXXVIII 74 O 1 and 18.

⁶⁶ *AAA XXI*, Pl. XXI 5 and 10.

⁶⁸ *AASOR XII* 21.

⁶⁷ Macalister, *Gezer III*, Pl. XXVIII 2 and 7.

⁶⁹ *AASOR XIII*, Pl. 15:7.

This form of handle can be traced back to the 12th dynasty in Egypt, where it appears on a piriform jug.⁷⁰

§ 62. The large storage jars Nos. 20–22 and amphora No. 19 need little comment. No. 22, with ridged rim, was found with little change as early as Stratum XIII (No. 41). Such jars cut roughly in two were commonly used as funerary urns in Strata XI–X. Jar 19 is a normal late Hyksos amphora which in earlier strata has a splayed rim (XII 37 and XI 44). Identical forms for both this and the handleless jar No. 20 have been found at least as early as the time of Amenemhet III and IV at Byblos⁷¹ and for No. 19 in Cave 28 II at Gezer⁷² in the 18th to 17th centuries (see § 112). Gjerstad, who saw No. 20, suggests that the incised mark on it may well be the Aegean *pa*. Other parallels can be cited from Hyksos tombs of Abusir el-Melek in Egypt⁷³ and from Palace II at Tell el-'Ajul, which Albright dates 18th–17th centuries.⁷⁴

§ 63. Jar No. 33 has a somewhat anomalous shape and is found only in XI (No. 43) and X. Tell Bait Mirsim produces a perfect parallel from Stratum D (17th–16th centuries).⁷⁵

§ 64. There was but one example of bowl No. 26, with three looped legs. It is a good MB form, the upper part being reminiscent of the goblet shape (cf. XI 18). Both Jericho and Tell Bait Mirsim provide good parallels in the 17th–16th centuries.⁷⁶

§ 65. The fine-ware goblet No. 32 and the trumpet-based bowl No. 34 form a strong group. A bowl characteristic of both MB I (XIV 20–21) and MB II (XI 36 and X 37) has a slightly inturned rim with curls or thumb handles. The curls seem confined to MB II plain pink-buff bowls with wet-smoothed or originally wheel-burnished finish, while the thumb-handled type with either plain burnish or burnished red slip belongs to MB I. At Tell Bait Mirsim the later type is found in

⁷⁰ Metropolitan Museum of Art, *Bulletin* XVI, Nov., 1921, Pt. II, Fig. 18.

⁷¹ Pierre Montet, *Byblos et l'Égypte* (Paris, 1928–29) Pl. CXVI and p. 202.

⁷² Macalister, *Gezer* III, Pl. XXXVII 1.

⁷³ Georg Möller, *Das vorgeschichtliche Gräberfeld von Abusir el-Meleq*, bearbeitet von Alexander Scharff (*WVDOG* XLIX [Leipzig, 1926]) Pls. 69:469 and 76:1 and 6.

⁷⁴ *AASOR* XIII 73 f. ⁷⁵ *AASOR* XIII, Pl. 14:2.

⁷⁶ *AAA* XIX, Pl. XXXIII 6–7; *AASOR* XIII, Pl. 14:3.

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Stratum D,⁷⁷ and its presence at Megiddo in the 17-16th centuries is thus corroborated.

§ 66. The Cypriote imports (Nos. 2 *a*, 4-6, and 46 *a*) form not only an interesting group but an important one. Milk bowl No. 46 *a* is made of fine red-buff ware with a white burnished slip under red-brown decoration. It falls into Petrie's "Anatolian" class (see § 38), and, while we accept that term with reservations, it is true, nevertheless, that this class is definitely earlier than the normal "White slip" Cypriote milk bowl with black decoration (Strata IX-VII; see § 38). Jugs 5 and 6 are Cypriote forms of the 18th to 17th centuries.⁷⁸ No. 5 is of fine green-buff ware with a decoration which originally was dark red but has become reduced to black. The handle is thrust through in true Cypriote fashion, and the vessel is handmade. No. 6 is similar to the foregoing, though the ware is pink-buff, the decoration red, and the entire vessel burnished over the decoration. From Syria come the best mainland parallels, specifically from Ras Shamra, where Schaeffer dates them from the 20th to the 17th century,⁷⁹ and Mishrifé-Qatna in a tomb of about 1600 B.C.⁸⁰ The evidence at Megiddo, where this form is found in X only, though typologically earlier Cypriote forms were found in the preceding stratum, indicates that its range is somewhat more limited and that it should be confined within the late 17th and early 16th centuries. Jug No. 4, another distinctive type from Cyprus, is of fine pink-buff ware and has a green-buff slip under dark red decoration, the whole being burnished. The handle is thrust through. This form occurs only in XI (No. 15) and X. From the Megiddo stratification a date of 1700-1550 seems to be indicated, though in Syria a somewhat earlier date is applied, namely 18th-16th centuries.⁸¹ Illustrated with those from Syria is a jug similar to our No. 24.⁸² Jug 2 *a*, however, is a peculiar vessel—lentoid in shape, the side illustrated showing the largest diameter. The ware is comparable

⁷⁷ *AASOR* XIII, Pl. 13:2.

⁷⁸ Gjerstad, *Studies*, p. 172, jug 2.

⁷⁹ *Syria* XIV (1933) 111 and Fig. 10:2.

⁸⁰ *Syria* XI (1930) Pl. XXXI 82.

⁸¹ Schaeffer in *Syria* XVII (1936) Fig. 18 R-S (p. 131).

⁸² *Ibid.* G.

to that of No. 5, while the brown-red decoration is in keeping with that of earlier Cypriote forms, in particular XI 35 *a* and XII 8.

§ 67. A trumpet-based, fine-ware, carinated bowl is characteristic only of XI (No. 24) and X (No. 34). This range is identical to that at Tell Bait Mirsim, where they were found in Strata D and E.⁸³ The green-buff ware carinated bowl No. 36 is found only in X, but there in profusion and thus appears to be a good criterion for the stratum. It finds an analogy from Cave 28 II at Gezer,⁸⁴ which is dated by Albright between 1750 and 1600 B.C.⁸⁵

§ 68. Straight-sided bowls (Nos. 28 and 48) show certain variations of base, the most common being the disk. The ring-base so typical of Stratum IX straight-sided bowls (No. 38) is absent in X. No. 29 has an inturned rim, which typologically is much more normal in Strata XIII–XII.

§ 69. The two-handled forms Nos. 40–41 with their out-turned rims are somewhat reminiscent of late cooking bowls which find a parallel from Stratum D at Tell Bait Mirsim (§ 54). At Jericho the two-handled form was found in Tomb 9, which is dated about 17th century.⁸⁶

§ 70. The lamps of this stratum are the normal slightly pinched MB types, which can be duplicated throughout Palestine during the 18th to 16th centuries. The seven-cup lamp No. 49, however, is an interesting and unique exception. The cups are interconnecting, so that oil poured into any one cup immediately rises to the same level in all seven. The ware is pink-buff and rather well fired.

§ 71. Stratum X is marked by distinct changes in cooking-bowl forms from those observed in IX. The out-turned rim does not occur, and its place is taken by the doubled-over rim (No. 46). In this stratum both the type illustrated (No. 46), with a cross on its base, and others with plain round bottoms were found. The latter had a range from XIII to X. A 12th dynasty parallel can be adduced from Tell el-ʿAjul for the raised cross and circle on the base of No. 46.⁸⁷

⁸³ AASOR XII, Pl. 43:6 (D); XIII, Pl. 8:13 (E).

⁸⁴ Macalister, *Gezer* III, Pl. XXXIX 4.

⁸⁵ AASOR XII 17 f.

⁸⁶ AAA XIX, Pl. XXXV 7.

⁸⁷ Petrie, *Ancient Gaza* I (London, 1931) Pl. XXXII 54 and p. 10.

STRATUM XI

§ 72. The continuity of the occupation from Stratum XII to X was well established stratigraphically, and it is only to be expected that such a continuity would be reflected in the pottery. Thus the fairly detailed description of numerous forms in X has largely eliminated the necessity here of minute description and in place has allowed a certain amount of generalization both in this and the preceding stratum (XII).

§ 73. Button-based piriform juglets (Nos. 1-9) were more profuse here than in X and, while conforming to the same type, show a number of variations. No. 4 has a slightly hollow base that might almost be termed a ring-base. One good parallel from Jericho was found in a 17th-16th century tomb,⁸⁸ while others are more closely dated to the 17th century.⁸⁹

§ 74. With the white-filled, pricked, and incised piriform juglets (Nos. 5-6), known as Tell el-Yahudiyyah ware, we make the acquaintance of what has so far been considered one of the most typical and easily recognizable criteria of Hyksos culture. Their appearance in Strata XII (Nos. 5-6) and XI can by no means be considered particularly early manifestations (see § 103), since they are known as early as the 12th dynasty in Egypt.⁹⁰

§ 75. Two button-based jugs (Nos. 7-8) may eventually prove of stratigraphic value, for they were found only in Stratum XI. The angled lip is distinctive and suggests an Anatolian⁹¹ or Cypriote⁹² origin, for no parallels can be found in Palestine.

§ 76. Jug No. 37 is obviously an earlier edition of X 12. A similar form comes from level *g* in Tomb 5 at Jericho, which is dated between 1750 and 1600,⁹³ while from Tell el-Fara come good 15th⁹⁴ and 16th⁹⁵ dynasty analogies.

⁸⁸ AAA XIX, Pl. XLI 2 and p. 54. ⁸⁹ AAA XX, Pl. III 7-8 and p. 7.

⁹⁰ E.g. D. Randall-MacIver and C. L. Woolley, *Buhen* (Philadelphia, 1911) Pl. 49 K 9-10 and pp. 185 f.

⁹¹ Cf. Erich F. Schmidt, *The Alishar Hüyük, Seasons of 1928 and 1929 I (OIP XIX [1932])* Pl. IV b 1671, from Stratum II, which includes the whole of the Palestine MB period.

⁹² Cf. Gjerstad, *Studies*, p. 123.

⁹⁴ Duncan, *Corpus*, addenda 59 L 3.

⁹³ AAA XX, Pl. XX 6 and p. 36.

⁹⁵ *Beth-Pelet II*, Pl. LXXXVII 59 L 4.

§ 77. The round-based jug No. 40 proves of little use in distinguishing within the MB II period, for it was found from XII to X (XII 17 and X 16 and 18), and analogies for the same distribution in Palestine are plentiful. The large jug No. 41 is of rather well baked green-buff ware. The snake on the handle is an interesting feature. The serpent motif on vessels in the MB II period is quite common. Albright finds them in his E level and mentions others from Tell el-^cAjul,⁹⁶ though they appear earlier at Byblos,⁹⁷ on the foundation jar, which Albright dates about 1800 B.C.,⁹⁸ and on one of the pots found outside the temple⁹⁹ but obviously to be dated to the MB I period.

§ 78. Jug No. 39, with its fine buff ware, twisted rope handle, and surface beautifully burnished to an orange-buff color, is reminiscent of the early red burnished jugs (cf. XII 14). Tell Bait Mirsim E produces a parallel for the upper part of the vessel.¹⁰⁰

§ 79. Imports are well represented by four Cypriote forms (Nos. 15 [see § 66], 23 [see § 84], 31 *a*, and 35 *a*). No. 31 *a* was fairly common, though found only in this stratum. It is classed as Cypriote "White Painted IV" ware,¹⁰¹ which is found in Middle Cypriote II-III (ca. 1900-1600 B.C.).¹⁰² The "White Painted IV" ware jug No. 35 *a* is first encountered in Stratum XII (No. 8). This form comes from the stratum below the cemetery at Ras Shamra and is dated 20th-17th centuries.¹⁰³ This allows a much longer life than is possible from our data, which confine it to about 1750-1650. The neck of a similar jug dated to the 12th dynasty comes from Kahun along with black pricked Tell el-Yahudiyyah ware.¹⁰⁴

§ 80. The jars in this stratum, though numerous, show little variation in shape. As can be seen, Nos. 43-44 are but earlier examples of X 33 and 19. The latter type in Stratum XI commonly forms part of the funerary offerings of the large covered tombs found only in XI throughout the excavations. Such vessels were found in the G-F

⁹⁶ AASOR XIII 81 f. and Fig. 1.

⁹⁷ Montet, *Byblos et l'Égypte*, Pl. LXI 395.

⁹⁸ AASOR XIII 70 and 73 f.

⁹⁹ Montet, *op. cit.* Pl. CLIV 995.

¹⁰¹ Gjerstad *et al.*, *Cyprus I*, Pl. CIX 3.

¹⁰⁰ AASOR XIII, Pl. 9:1.

¹⁰² Gjerstad, *Studies*, p. 273 (chart).

¹⁰³ Schaeffer in *Syria XIV* (1933) Fig. 10:9 and p. 111.

¹⁰⁴ Petrie, *Illahun, Kahun and Gurob*, Pl. I 18.

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levels at Tell Bait Mirsim,¹⁰⁵ while their occurrence at Gezer and Byblos in the 19th to 17th centuries has already been noted (§ 62). No. 42 with its white-washed upper surface and red and blue decoration compares favorably with X 31.

§ 81. Bowls were profuse in this stratum and show a variety of forms, the most characteristic being carinated (Nos. 24-26, 29, and 32). Angled bowl No. 27 is an extremely decadent example of a type with red burnished slip which is most characteristic of Strata XIV (Nos. 28 and 32) and XIII (No. 32). Another feature of Stratum XI is the presence of both straight-sided (No. 22 *a*) and inturned-rim (No. 35) bowls—a combination also observed at Mirsim in level E.¹⁰⁶ The straight-sided bowl is more typical of X, and that with inturned rim is more typical of XIII-XII; both types together, therefore, are only to be expected in Stratum XI. No. 22 *a*, with either horizontal or spiral burnishing over a red wash, finds a parallel from Jericho in the MB II tower area.¹⁰⁷ No. 35 with its slightly hollow disk base and inturned rim has numerous analogies in Palestine, notably at Jericho in the palace storerooms,¹⁰⁸ at Tell Bait Mirsim E,¹⁰⁹ at Gezer,¹¹⁰ and from the 15th and 16th dynasties at Tell el-Fara.¹¹¹

§ 82. The fine-ware goblet No. 18 occurred first in Stratum XII (No. 24). At Jericho it occurs in the lowest layer (*c*) of Tomb 19, but not above, and thus is dated to the 17th century.¹¹² From Mirsim E come other good parallels.¹¹³ From as far away as Ras Shamra in the 20th to 17th centuries comes an analogy,¹¹⁴ a fact which shows that these "true" Hyksos vessels had the same wide geographic distribution as the red wares of Strata XV-XIII (see § 104).

§ 83. Basin form No. 30, like No. 27, is a carry-over from earlier strata (cf. XV 19-20 and XIII 24). Few parallels can be adduced in Palestine, though Jericho produces a somewhat larger edition from

¹⁰⁵ AASOR XIII, Pl. 5:6.

¹⁰⁶ *Ibid.* Pl. 10.

¹⁰⁷ AAA XXI, Pl. XVII 1.

¹⁰⁸ AAA XXI, Pl. XX 12.

¹⁰⁹ AASOR XIII, Pl. 10:5.

¹¹⁰ Macalister, *Gezer* III, Pl. XLI 5-6.

¹¹¹ Duncan, *Corpus*, 21 B 1.

¹¹² AAA XX, Pl. III 2 and pp. 6 f.

¹¹³ AASOR XIII, Pl. 8:11-12.

¹¹⁴ Schaeffer in *Syria* XIV, Fig. 10:6 and p. 111.

Tomb 22 (17th–16th centuries).¹¹⁵ Earlier parallels are found at Byblos,¹¹⁶ from the end of the 12th dynasty or a little later.

§ 84. The remaining bowl to be discussed is No. 23. It has been reconstructed from numerous small sherds, and, while the rim form is correct, its entire shape cannot be vouched for, as it may well have had both a handle and a spout. It is a "Red-on-Black" Cypriote import¹¹⁷ and as such is a 19th–17th century product. Tell el-'Ajul has a few parallels for this ware dated to the 15th dynasty.¹¹⁸ At Gezer it was found in a Second Semitic group¹¹⁹—1800–1400 B.C.—which, as Gjerstad rightly suggests, must belong to the early part of the period.¹²⁰

§ 85. Apart from the lamp form No. 21, which occurred with monotonous regularity from XII (No. 36 *a*) to IX (No. 41), only two other types were found in the stratum. Of these No. 22 seems to be of interest, for from comparative material the flat base is an early attribute.¹²¹ Lamp 20, the only one of its kind, has a bent-over rim which at the lip joins the base to form a ledge. The turned-in rim is a sensible non-spill idea, and one wonders why it did not become popular before the late Greek period.

§ 86. Except for a few sherds of flat-bottomed cooking vessels like XII 35 *a*, the only other type is that illustrated (No. 31). It is found only in Stratum XI. The best parallel comes from the 15th dynasty at Tell el-Fara.¹²²

STRATUM XII

§ 87. A glance at the chart cannot help but impress one with the homogeneity of the contents of Strata XIV–XII. The red burnished forms of XIV are, with few exceptions, present in Stratum XII, though the slight diminishing of the burnished slip shows the later tendency of this stratum. Nevertheless, we must not lose sight of the fact that in Stratum XII are inaugurated the majority of the vessels

¹¹⁵ AAA XIX, Pl. XLI *bis* 4 and p. 54.

¹¹⁶ Montet, *Byblos et l'Égypte*, Pl. CXXIV, bottom row.

¹¹⁷ Cf. Gjerstad *et al.*, *Cyprus I*, Pl. CIX 12–14.

¹¹⁸ E.g. Petrie, *Ancient Gaza III*, Pl. XXX 10 U 2.

¹¹⁹ Macalister, *Gezer III*, Pl. CXL 8.

¹²¹ Cf. AAA XIX, Pl. XXVIII 15.

¹²⁰ Gjerstad, *Studies*, p. 304.

¹²² Duncan, *Corpus*, 32 E 4.

which are characteristic of the MB II period in Palestine, and this stratum is therefore closely related to Stratum XI. If we consider Strata XII and XI as a unit we find at Megiddo a situation similar to that in Tell Bait Mirsim E. This level Albright can divide into two phases¹²³—the earlier marked by certain vessels with rich burnished slips and the later by vessels typical of our Stratum XI. Tell Bait Mirsim E covers the period from 1750 to 1650 B.C.,¹²⁴ which coincides with Strata XII-XI at Megiddo. It may be mentioned here that scarabs of early Hyksos type were first noted in Stratum XIII and were found in increasing numbers in XII.

§ 88. The key vessels again are the piriform juglets (Nos. 1-7). They are quite different from those of the subsequent strata, and, with the exception of No. 6, none of the jugs has a true button base. Nos. 1, 3, and 7 have pointed bases. This feature Garstang says is an early characteristic.¹²⁵ Most of the vessels are covered with a red wash which is invariably well hand burnished. Jugs 2 and 4, far from having pointed bases, have virtual ring-bases and are reminiscent of jugs from the end of the 12th dynasty or slightly later at Byblos.¹²⁶

§ 89. The beautifully finished and decorated Tell el-Yahudiyyah pricked juglets Nos. 5 and 6—the former with ring-base—can be paralleled at Byblos as also can the small carinated rims of Nos. 3-5.¹²⁷ Ras Shamra too provides an excellent analogy from the 20th-17th century.¹²⁸

§ 90. It will be noted that the long pointed juglets of Strata XI-X have here more rounded bases and somewhat fatter bodies (Nos. 10-12). Nos. 11-12 are later examples of stubbier jugs (XIV 7-8 and XIII 7 and 9). Jugs 13-14 can be compared to Stratum XIII 16. This red burnished ware, which began in XV, is discussed in detail in Strata XIV-XIII, and here we need say little more than that its presence in XII forms a strong argument for the continuity of the culture typified by it from the 12th dynasty to about 1700 B.C.

§ 91. The trefoil jug No. 33 *a* is normally considered a true MB II

¹²³ AASOR XIII 75. ¹²⁴ *Ibid.* ¹²⁵ AAA XX 5 (jugs 10-11).

¹²⁶ E.g. Montet, *Byblos et l'Égypte*, Pl. CXLVI 919, and in *Académie des Inscriptions et Belles-Lettres, Comptes rendus*, 1935, p. 33.

¹²⁷ Montet, *Byblos et l'Égypte*, Pls. CXLVI 914 and 917 and CXLVIII 915.

¹²⁸ Schaeffer in *Syria* XIV, Fig. 10:7 and p. 111.

form (cf. XI 16 and IX 19) but seems at Megiddo to have originated as early as Stratum XIII (No. 20).

§ 92. The only import in this stratum is No. 8, which, as has been stated (§ 79), is a Cypriote "White Painted IV" vessel dated 1900-1600 B.C. No. 16 is superficially like No. 8 but in reality is quite different. It is made of buff ware and covered with a white wash over which is placed the red and black decoration. The gritty, somewhat coarse ware and the white wash preclude its being a Cypriote vessel, and it may in fact be compared to the white-washed and decorated vessels of Strata XI (No. 42) and X (No. 31). It appears to be unique. Jars 36-37 form a close group more comparable to those of XI and later than to those of the preceding strata.

§ 93. The main difference between large storage jars of Stratum XII (No. 39) and those of Stratum XIII (No. 41) is that in the latter the collar below the rim is missing and the base is more flattened. Jar No. 38 is a MB I carry-over. In general form it is to be compared to XIV 19 and XV 14. Good analogies come from Gezer,¹²⁹ Tomb 17 at Beth Shemesh,¹³⁰ from a tomb of the early part of the 2d millennium at Tell 'As,¹³¹ and comparable vessels dated 1800-1600 from the Ghuzlaniyyah tombs near Damascus are displayed in the Aleppo Museum. The comb finish is characteristic of early MB I at Megiddo (XV 14) and of Tell Bait Mirsim G-F,¹³² which levels are analogous to Megiddo XIV-XIII. The sharply angled rim also can be compared to one from Tell Bait Mirsim F.¹³³

§ 94. The carinated bowls Nos. 23, 29, and 31 are first met with in this stratum. They may well have developed out of the angled bowls (No. 27) which are typical of XIV (Nos. 28 and 30) and XIII (No. 32) but do not die out until Stratum XI (§ 81). In the light of the profusion of other types of bowls in Stratum XIII, the complete absence of these carinated bowls in XIII and below should prove of great importance in distinguishing between early and late 18th century strata.

¹²⁹ Macalister, *Gezer* I, Fig. 158:3.

¹³⁰ Elihu Grant, *Ain Shems Excavations* II (Haverford, Pa., 1932) Pl. XXIX 220.

¹³¹ Du Mesnil du Buisson in *Syria* XIII, Pl. XXXIX T I 1 and 12 and p. 187.

¹³² Albright in *AASOR* XIII 70.

¹³³ *Ibid.* Pl. 21:40.

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With these can be classed goblet No. 24, which also does not occur before Stratum XII. It is of cream ware, well fired, and wheel burnished and finds an analogy for its early occurrence in the 20th-17th century at Ras Shamra (§ 82), as does bowl No. 29.¹⁸⁴

§ 95. Bowl No. 30 with its broad ridged rim barely survives the end of Stratum XIII (cf. XIII 25 and 27, XIV 25 and 27, XV 16-18).¹⁸⁵

§ 96. Carinated bowl No. 22 is interesting since its upper exterior surface is covered with a white wash over which the bright red decoration of bands and dots was placed. It is in part comparable to white-washed vessels from XII (No. 16), XI (No. 42), and X (No. 31).

§ 97. Straight-sided bowls of Strata XI-X are entirely lacking in this stratum, where the characteristic bowl has an inturned rim (Nos. 26 and 33), which is encountered originally in Stratum XIV (No. 24).

§ 98. Bowl No. 21 with its thick red hematite wash compares favorably with XIII 21. In XII were found a number of sherds of similar vessels with round knobs such as in the latter. A bowl with round knobs comes from Mirsim G-F,¹⁸⁶ which gives a good parallel for No. 35 with its red burnished slip.¹⁸⁷

§ 99. The round-based cooking vessel with turned-over rim No. 20, which was found as high as Stratum X (No. 46), occurred also in Stratum XIII (No. 38), though no earlier. A parallel for this rim comes from Tell Bait Mirsim G-F.¹⁸⁸ The flat cooking vessel No. 35 *a* is an important form and is discussed in detail in Stratum XV (§§ 122-24).

STRATA XIII-XIV

§ 100. Owing to the similarity of the contents of Strata XIII-XIV and to avoid unnecessary repetition they are treated together. The predominance of red burnished ware in them links them closely with the preceding Stratum XV—and in order to assign absolute dates to these periods we must first identify and place this pottery in its correct chronological setting. An important type that helps considerably in elucidating this problem is jar No. 42 (XIII), whose form, finish,

¹⁸⁴ Schaeffer in *Syria* XIV, Fig. 10:3 and p. 111.

¹⁸⁵ For XV 16 cf. Macalister, *Gezer* I, Fig. 158:4.

¹⁸⁶ *AASOR* XIII, Pl. 4:7.

¹⁸⁷ *Ibid.* Pl. 4:12.

¹⁸⁸ *Ibid.* Pl. 5:2.

and decoration are peculiarly distinctive. It has a wheel-combed finish with a white matt wash on the upper shoulder, over which the decoration of blue, black, and yellow is placed. Since parallels for this type of finish and decoration are well dated, its earliest occurrence at Megiddo is of extreme importance.

§ 101. The best dated parallels come from Tell Bait Mirsim G-F¹³⁹ and Byblos. In the former the painted ornament consists of bands and wavy lines of red and blue over a white-washed combed surface. On extremely good evidence Albright dates his G-F levels 19th-18th century.

§ 102. According to Albright¹⁴⁰ the best parallel for the Mirsim G-F painted ornament occurs on the important foundation jar at Byblos.¹⁴¹ The latter is comparable to the Megiddo vessel in its heavy square rim, raised rope decoration on the shoulder and, if one discounts the presence of the handles on the Megiddo vessel, general shape, while the combed finish is identical. This foundation jar and its contents have been variously dated from the 20th to the 18th century.¹⁴² Consensus of opinion places it no later than 1750 B.C. We have, then, a definite upper limit for the commencement of this type of ware and, therefore, a strong indication that Stratum XIII had its inception before 1750 B.C. At Jericho also occurred a few sherds of this ware, which Ben Dor places in the early MB I period (not published but seen by the writer).

§ 103. It will be noticed that one of the earliest forms of the red burnished ware is a piriform juglet (XV 4). On the Megiddo evidence alone it appears that this was the forerunner of the Tell el-Yahudiyah juglet, which at Megiddo was not found until Stratum XII. That this is not so has been proved by evidence from Egypt, where the latter type was found in undoubtedly 12th dynasty contexts (see

¹³⁹ *AASOR* XIII 70 and Pl. 22:1-10.

¹⁴⁰ *Ibid.* p. 70.

¹⁴¹ Montet, *Byblos et l'Égypte*, Pl. LX; René Dussaud in *Syria* XI (1930) Fig. 2 (for drawing).

¹⁴² Dussaud, *op. cit.* p. 171 (ca. 2000-1800 B.C.); H. Vincent in *Revue biblique* XXXIV (1925) 177 (20th century); Albright in *AASOR* XIII 70 and 73 f. (ca. 1800-1750 B.C.).

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§ 74).¹⁴³ Its absence in the earlier Megiddo strata, then, would appear to be fortuitous, and it is to be hoped that future excavations at Megiddo will produce this form along with the earliest examples of red burnished ware, that is, in Stratum XV.¹⁴⁴

§ 104. There seems to be a fairly general distribution of the red burnished ware throughout Syria and Palestine, and it has been found to a lesser degree in Egypt. In Syria Ras Shamra produced numerous examples of small jugs with spaced vertical hand burnishing over a red slip, along with the early type of piriform jug with carinated rim (cf. XIV 2-3). These appear in the 2d stratum, which Schaeffer dates from the 19th to the 16th century.¹⁴⁵ This early limit is confirmed by Albright, who places the level in the late 12th and early 13th dynasties.¹⁴⁶ At Byblos red burnished ware was found in Tombs I and II, which are dated by Montet to the late 12th dynasty.¹⁴⁷ From Sidon at Kafr Jarra come a number of red burnished forms similar to vessels illustrated from Megiddo Strata XV-XIII.¹⁴⁸ In the Aleppo Museum there are displayed innumerable vessels dated 1800-1600 B.C. from the Ghuzlaniyyah tombs near Damascus and comparable to our small burnished jugs and to larger examples with multiple handles (XIII 16-17 and 34 and XIV 11-14 etc.). Other parallels come from Mishrifé-Qatna, in particular a large jug from Tomb I,¹⁴⁹ which Du Mesnil du Buisson dates to about 1600 B.C. A noticeable feature of this jug is its wheel combing under the red burnish—a common characteristic of the red burnished ware at Megiddo. The decoration can perhaps be compared to that of No. 18 from Stratum XIV.

§ 105. The parallels from Mishrifé-Qatna and Ghuzlaniyyah are dated considerably later than the evidence from Megiddo indicates. This apparent anachronism, however, need not disturb us unduly, since there is still some doubt regarding the final dating of the Syrian

¹⁴³ See also Robert M. Engberg, *The Hyksos Reconsidered* (SAOC No. 18 [1939]) chap. iv.

¹⁴⁴ Corroboration for this is suggested by a peculiar piriform jug (No. 36) in Stratum XIII, on which can be seen the typical Yahudiyyah pricked technique.

¹⁴⁵ *Syria* XIII, Pl. XII 3 and p. 23.

¹⁴⁶ *AASOR* XIII 74 f.

¹⁴⁷ Montet, *Byblos et l'Égypte*, Pl. CXVI 800 and p. 202.

¹⁴⁸ See G. Contenau in *Syria* V (1924) 124 and Pl. XXXIV.

¹⁴⁹ *Syria* VIII (1927) Pl. XI 2 and Fig. 49.

deposits, and in any case the apparently late appearance of the red wares in Syria may coincide with their presence in Megiddo Strata XII-XI. The evidence from Byblos is much more satisfactory, where the end of the 12th dynasty is indicated.

§ 106. In Egypt the red wares are scarce, though if we consider the associated black piriform juglet as part of this group analogies could be cited for periods ranging from the 12th to the 17th dynasty. However, at the moment we are proving our position on the red wares alone. Pottery from well dated 12th dynasty deposits at Abydos¹⁵⁰ adds considerable weight to the evidence regarding the geographic and chronological distribution of these wares.

§ 107. Turning to the comparative evidence from Palestine itself, we find that while no complete red forms have been found as early as the 20th century B.C., yet there is definite indication that certain of these red burnished wares were beginning to appear in Mirsim H.¹⁵¹ In G, however, they were more profuse.¹⁵² Here, then, we have confirmation of the first appearance of this material in the 20th-19th centuries and a gradual increase in the 19th-18th centuries.

§ 108. Apart from the well dated examples of red burnished ware at Mirsim, it is difficult to find other analogies with dates on which one may rely. A mention, however, of the major occurrences at least gives an idea of the general diffusion throughout Palestine. A fine collection of this ware and associated finds from Ras el-^cAin in the Shephelah¹⁵³ are equated to those of the G-F levels at Mirsim and thus dated to the 19th-18th centuries B.C. Below are listed the more obvious parallels:

Megiddo	Ras el- ^c Ain (QDAP V)
Jugs 2-3 (XIV), 1 and 4 (XV)	No. 37
Jug 7 (XIV)	No. 60
Thumb-handled bowl 21 (XIV)	No. 38
Carinated bowls 28 and 30 (XIV)	Nos. 1, 2, 64, 65
Basin bowl 19 (XV)	Nos. 14 and 15

¹⁵⁰ E.g. E. R. Ayrton, C. T. Currelly, and A. E. P. Weigall, *Abydos* III (London, 1904) Pl. XXXIX 17-22 and 30.

¹⁵¹ *AASOR* XII, Pl. 5:25; XIII, Pl. 3:13.

¹⁵² *AASOR* XII, Pls. 6:34-41 and 41:3, 5, 9, and 34-41; XIII, Pls. 4:1-12 and 22.

¹⁵³ J. H. Iliffe in *QDAP* V (1935/36) 113-26.

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§ 109. They have been found in a MB context at Balatah (ancient Shechem), and although they are not yet published the excavators consider them to belong to the MB I period.

§ 110. At Jericho they were found by Sellin and Watzinger, who attributed them to their somewhat comprehensive "israelitische" period,¹⁵⁴ which apparently includes not only Middle and Late Bronze but also the Early Iron period!

§ 111. Good bowl analogies for XIV 28 and 30 and XV 19 come from the courtyard cemetery at 'Ajul, the date of which is still under discussion. Petrie himself considers it as 10th-11th dynasty,¹⁵⁵ but Albright now places it in the 13th dynasty and thus in the 18th century B.C.¹⁵⁶

§ 112. Other good parallels come from Gezer in a group of burials on the Western Hill. Here there were found a vertically hand-burnished jug with double handle and squeezed lip¹⁵⁷ that compares to our XIII 34 and a red burnished piriform jug¹⁵⁸ similar to XV 4. No dating is actually suggested for these burials except that they belong to "an older wave (than the Philistines)."¹⁵⁹ It is interesting to note that in the Hyksos group of Cave 28 II there was not a single piece of red burnished ware, a fact from which it may be inferred that the red wares preceded the internment of this middle Hyksos material. The group has been dated 1800-1600 B.C. by Macalister¹⁶⁰ and Vincent¹⁶¹ and by Albright between 1750 and 1600.¹⁶² This negative evidence helps place our red material before 1750 B.C.

§ 113. Apart from the red burnished ware, jug No. 37 is an interesting vessel in Stratum XIII. It is of buff ware, irregularly hand burnished under the decoration of red spirals inclosed in black circles on the body and alternating red and black bands on the neck. This specific type is easily distinguishable, but the only analogy comes from

¹⁵⁴ Ernst Sellin und Carl Watzinger, *Jericho* (*WVDOG* XXII [1913]) Pl. 30 D 13 and E 1 and 6.

¹⁵⁵ *Ancient Gaza* II, Pl. XXVIII 20 T-U and 25 E 4 and G 5 and p. 5.

¹⁵⁶ "The chronology of a south Palestinian city, Tell el-Ajul" (*AJSL* LV [1938] 337-59) Table 1.

¹⁵⁷ Macalister, *Gezer* I, Fig. 158:1. ¹⁶⁰ *Gezer* I 141.

¹⁵⁸ *Ibid.* Fig. 158:3 a.

¹⁶¹ *Revue biblique* XXXIII (1924) 171.

¹⁵⁹ *Ibid.* p. 299.

¹⁶² *AASOR* XII 17 f.

the cemetery of the 2d stratum at Ras Shamra, which Schaeffer dates 19th-16th century.¹⁶³

§ 114. Little need be said of the remaining vessels, though from the same cemetery at Ras Shamra (see § 113) come a number of jug forms with alternating bands of red and black decoration which compare favorably to XIV 16.¹⁶⁴

STRATUM XV

§ 115. Stratum XV is undoubtedly an extremely important level and should provide a strong basis for our chronological sequence as well as our absolute dates. In it we find just that combination of cultures which can be expected only in a period of transition. The last vestiges of the EB period are plainly seen, while the addition of new forms and better pottery techniques herald the arrival of a new culture.

§ 116. To arrive at the date for the inception of Stratum XV it is first necessary to place it in its correct chronological and ceramic milieu. For this purpose there can be no doubt that our best analogy is the well stratified I-H deposits at Tell Bait Mirsim, which we believe were originally correctly dated 20th-19th century by Albright.¹⁶⁵ In a later report Albright places them between the 21st and the 19th centuries.¹⁶⁶

§ 117. The key features for this comparison are (1) the folded ledge handles of No. 13,¹⁶⁷ (2) the lug handles of No. 10,¹⁶⁸ (3) hole-mouth jar No. 15,¹⁶⁹ (4) platter with inturned rim and pattern burnishing No. 25,¹⁷⁰ and (5) the ribbed rim of small jar or cup No. 22.¹⁷¹ These comparisons constitute a formidable array of evidence in favor of an equation to Mirsim I-H.

§ 118. A ledge handle form that has not yet been found in the stratification is the partially folded type of Tomb 1101-2 Lower.¹⁷² Typologically it should appear in the early part of Stratum XV, a

¹⁶³ *Syria* XIII, Fig. 12:13 and p. 23.

¹⁶⁴ *Ibid.* Fig. 12:17-19. Cf. also Macalister, *Gezer* I, Fig. 158:6.

¹⁶⁵ *AASOR* XII xxi.

¹⁶⁹ *Ibid.* Nos. 33-35.

¹⁶⁶ *AASOR* XIII 66 and 98.

¹⁷⁰ *Ibid.* Nos. 19-20.

¹⁶⁷ Cf. *AASOR* XII, Pl. 3:38 and 40.

¹⁷¹ *Ibid.* Pl. 5:20-21; XIII, Pl. 3:9.

¹⁶⁸ *Ibid.* Nos. 22-23.

¹⁷² Cf. *SAOC* No. 10, Fig. 14 P 4131.

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position which finds support from the lug handles of jar 10.¹⁷³ A close study of this tomb deposit and Strata XV and XVI-XVII shows clearly that typologically the tomb straddles the two strata with perhaps an emphasis on the earlier stratum. Here is further evidence of the continuity of the occupation from Early to Middle Bronze. This deposit has been well placed just prior to Mirsim level I¹⁷⁴ and thus dated about the beginning of the 2d millennium.

§ 119. From Petrie's "Copper Age" at Tell el-^cAjul we also find excellent analogies for Stratum XV forms, which when the dates are adjusted add further definition to the chronological position of our vessels. Of these the best parallels are for Nos. 10¹⁷⁵ and 22-24.¹⁷⁶ Albright places the ^cAjul "Copper Age" just prior to his I-H levels,¹⁷⁷ and, while agreeing in part, the present writer would prefer to allow a longer lag for the "Copper Age" and thus a closer equation to Mirsim J-H.

§ 120. Jar 13 is of greenish buff lightly baked rather coarse ware. No. 10 is of somewhat better fired drab ware, a description that also covers the cup shapes, Nos. 22-24. These descriptions correspond closely to those attributed by Albright to the Mirsim (see § 117) and ^cAjul vessels.¹⁷⁸

§ 121. Despite the presence of folded ledge handles, which were confined to Mirsim I,¹⁷⁹ a general survey of the foregoing comparisons cannot help but confirm our opinion that Megiddo XV should be equated to Mirsim I-H.

§ 122. Another important form which falls into the new repertoire is the flat-based cooking vessel (Nos. 26-27). It was found earliest in this stratum and with modifications as late as Stratum XII. Here it is distinguished by coarse brown drab ware and a raised band below the rim. No. 26 has a series of holes above the raised band which penetrate completely through the wall of the vessel. In Stratum XIV the form with completely pierced holes still exists (No. 32), though a more developed vessel (No. 31) with rope decoration and partially

¹⁷³ *Ibid.* Fig. 14 P 4122 and 4124.

¹⁷⁴ *Ibid.* p. 58.

¹⁷⁵ *Ancient Gaza I*, Pl. XLIX L.

¹⁷⁶ *Ibid.* Pl. XL Z-Z5.

¹⁷⁷ *AJSL* LV 359, Table 1.

¹⁷⁸ *AASOR* XIII 63 f.

¹⁷⁹ *Ibid.* p. 62.

pierced holes makes its appearance. In XIII and XII, however, only this later form is found (Nos. 33 and 35 *a* respectively).¹⁸⁰

§ 123. An analogy for this development in the same type of cooking bowl comes from Tell Bait Mirsim. Albright finds it with completely pierced holes in his I-F levels and with no holes in E-D, while intervening examples have partially pierced holes.¹⁸¹ The latest form at Mirsim did not occur at Megiddo, possibly because this cooking vessel type was not found above Stratum XII. It is more than probable, then, that the E examples from Mirsim come from the upper part of the level, for as we have seen (§ 87) the early part of E corresponds to Stratum XII.

§ 124. Since the form with raised band and completely pierced holes began in XV at Megiddo and in I at Mirsim¹⁸² and that with partially pierced holes began in Megiddo XIV and apparently in G at Mirsim,¹⁸³ we have a useful parallelism between the two sites:

Megiddo XV = Mirsim I-H
Megiddo XIV = Mirsim G.

The presence of rope decoration and partially pierced holes in F¹⁸⁴ suggests that an equation is also possible between Megiddo XIII and Mirsim F.

§ 125. The general distribution of the red burnished ware and its chronological horizon have already been discussed (§§ 104-12), and we have seen that it apparently began in the 20th century B.C. (see § 107).

STRATUM XVI-XVII¹⁸⁵

§ 126. Stratum XVI-XVII belongs in the Early Bronze period. While there can be no quarrel with this assertion, the dating of

¹⁸⁰ Albright has suggested that these perforations were used as escape holes for excess steam (*AASOR* XII 11). Perhaps in the course of time they lost their utilitarian purpose and became mere conventionalized decoration.

¹⁸¹ *AASOR* XII 15.

¹⁸² *Ibid.* Pl. 7:1-4.

¹⁸³ *Ibid.* Pl. 3:29 and 31.

¹⁸⁴ *AASOR* XIII, Pl. 21:30.

¹⁸⁵ It will be noted that in both the chart and the photographs Strata XVI and XVII are always mentioned and considered as a single stratum. While certain stratigraphic differences could be observed, the pottery was at all times identical and no possible distinction could be made. Upon further excavation a distinction may eventually be allowed. For this paper, however, we are left no alternative but to consider them as a unit.

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the material brings us to a somewhat vexed and much discussed question.

§ 127. Naturally our first problem is to establish the date for the termination of Stratum XVI-XVII. Of great help in this matter is the presence of identical forms in Stratum XVI-XVII and Stratum XV (e.g. XV 15 and XVI-XVII 10, XV 15 *a* and XVI-XVII 9, and XV 25 and XVI-XVII 20), which shows that Stratum XV must have commenced shortly if not immediately after Stratum XVI-XVII. Stratum XV began probably in the 20th century B.C., since it can be equated to Tell Bait Mirsim I-H (see §§ 116-17 and 124).

§ 128. The first well stratified EB deposit was unearthed on the east slope of Megiddo. Here four superimposed strata were discovered and assigned to the 3d millennium. The latest stratum, Stage I, was brought to a close toward the end of the 3d millennium.¹⁸⁶ On the evidence then available it was felt that a closer definition was not warranted, and no absolute dates were assigned to the individual stages.

§ 129. Subsequently other stratified Early Bronze material appeared at Baisan, Jericho, and Ai. The general conclusion as a result of these other excavations was that the Megiddo sequence was applicable to the whole of Palestine.

§ 130. A comparative study of the pottery of Stratum XVI-XVII and the EB stages at Megiddo¹⁸⁷ proves useful. The absence of such distinctive forms as red high-polish bowls, pithoi with rail rims, plain ledge handles, inner-ledge bowls with small thumb-indented ledge handles, and bulbous-rimmed hole-mouth jars—all characteristics which terminated in Stage III¹⁸⁸—demonstrates clearly that we are dealing with a period that postdates Stage III.

§ 131. When we consider the array of forms comparable to those of Stages II-I, for example string-cut bowls (Nos. 16-17), flat and high-sided platters (Nos. 23-25), rounded platters with pattern burnishing (No. 20), loop-handled jars (No. 8), pithoi with splayed rims (No. 9), hole-mouth jars (No. 10), stump-based vessels (No. 12), string-cut jars (Pl. 13:25), metallic-ware vessels (Pl. 13:27, 29, 31, 33),

¹⁸⁶ SAOC No. 10, p. 58.

¹⁸⁷ See SAOC No. 10.

¹⁸⁸ See *ibid.* chart 21, 16 B-D, 14, and 12 respectively.

pushed-up ledge handles (Pl. 13:11 and 16-18),¹⁸⁹ there can remain little doubt of the parallelism obtaining between Stages II-I and this stratum.

§ 132. There are, nevertheless, a number of later elements in Stratum XVI-XVII which tend to extend it beyond Stage I. Of these may be mentioned jar No. 5,¹⁹⁰ a small jug (Pl. 13:26),¹⁹¹ a jar with knob (Pl. 13:12),¹⁹² and the spouted high-sided bowl No. 11 (the general shape, rim, and spout constitute a good basis for comparison to one from level J at Mirsim).¹⁹³

§ 133. The normal EB features (see § 131) of Stratum XVI-XVII are for the most part indistinguishable from those of XVIII. Of these the most common are the following:

1. Platters, flat (XVI-XVII 19 and 25 and XVIII 15-16), straight sided (XVI-XVII 23-24 and XVIII 17), and rounded with pattern burnishing (XVI-XVII 20 and XVIII 18). These are characteristic of EB throughout Palestine. Late EB parallels can be adduced from Mirsim J,¹⁹⁴ Baisan level XII,¹⁹⁵ and Jericho Tomb 351,¹⁹⁶ all of which are to be dated to the last two centuries of the 3d millennium. With the exception of one in XIX (No. 16) none occurred below Stratum XVIII.

2. Hole-mouth jars with square-cut lips (XVI-XVII 10 and XVIII 10).

3. Pithoi with splayed rims (XVI-XVII 9 and XVIII 12). The number of examples in XVIII leaves no doubt as to the presence of this type of vessel below Stage II, though the Stratum XVIII examples were of buff medium-fired ware instead of the reddish brown well fired ware of XVI-XVII and XV. Their occurrence at Ai in the sanctuary¹⁹⁷ helps little toward actual dating, for there is still some doubt concerning the date of this structure. Typologically the sanctuary

¹⁸⁹ Cf. *ibid.* chart 2, 1, 12, 16, 8, 5, 11, and 14 respectively.

¹⁹⁰ Cf. *ibid.* Fig. 14 P 4142 (Tomb 1101-2 Lower).

¹⁹¹ Cf. *AASOR* XIII, level J, Pl. 1:10.

¹⁹² Cf. *AASOR* XIII, Pl. 2:1, 3-4 (H). ¹⁹⁴ *Ibid.* Pl. 1:9.

¹⁹³ *Ibid.* Pl. 1:3.

¹⁹⁵ *MJ* XXIV, Pl. VIII 24-25.

¹⁹⁶ *AAA* XXII, Pl. XXXIV 9-10, 13, and 31-36.

¹⁹⁷ *Syria* XVI, Pl. LVI 28.

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postdates the necropolis, which latter can be dated happily to *circa* 3000-2500 B.C. The splayed type of rim was found also at Jericho in the upper EB levels.¹⁹⁸

4. Metallic-ware vessels (Pl. 13:27, 29, 31, 33 in XVI-XVII and chart XVIII 8) were not found below XVIII. Wright has adduced a good parallel from the 1st dynasty in Egypt.¹⁹⁹ These metallic vessels appear for the first time at Megiddo just as the gray burnished wares typical of XX-XIX die out. Only a single example of the gray wares was found along with these vessels, and that in Stratum XVIII (No. 27).

5. Stump-based vessels (Pl. 13:23-24 and 30 in XVI-XVII and chart XVI-XVII 12 and XVIII 5-6) are an important type. At Baisan they occur in levels XI-XII²⁰⁰ and at Jericho in Tomb A,²⁰¹ which has been variously dated between the 24th and the 20th century B.C.²⁰² It undoubtedly covers a long period of deposition. Its termination at the end of EB is strongly suggested by the presence of a decadent type of stump-based vessel,²⁰³ a small pointed juglet²⁰⁴ (cf. Pl. 13:26 and a vessel from level J at Mirsim²⁰⁵), and a small bowl with a hole in the base.²⁰⁶

6. Well fired bowls with inturned rim and pattern burnishing (Pl. 13:8 in XVI-XVII and chart XVIII 21) seem to have a fairly widespread distribution, having been found at Gezer,²⁰⁷ Baisan levels XI-XII,²⁰⁸ Mirsim J and even I,²⁰⁹ the necropolis at Ai,²¹⁰ layer V at Jericho,²¹¹ and from as far north as Byblos.²¹² These parallels appear to cover a range from about 3000 to the end of EB, which is the situation at Megiddo.

¹⁹⁸ AAA XXII, Pl. XXXIII 19.

²⁰⁰ MJ XXIV, Pl. X 17 and 21-22.

¹⁹⁹ Wright, *Pottery*, p. 72.

²⁰¹ AAA XIX, Pl. III 19-21.

²⁰² Garstang in AAA XXII 155; Albright in *JPOS* XV (1935) 211; and Vincent in *Revue biblique* XLIII (1934) 413.

²⁰³ AAA XIX, Pl. II 16-25.

²⁰⁴ *Ibid.* Pl. II 1-3.

²⁰⁵ AASOR XIII, Pl. 1: 10.

²⁰⁶ AAA XIX, Pl. IV 6; cf. SAOC No. 10, Fig. 14 P 4123 from Tomb 1101-2 Lower.

²⁰⁷ Macalister, *Gezer* III, Pl. CLVI 23 (Second Semitic period).

²⁰⁸ MJ XXIV, Pl. VIII 22-23.

²⁰⁹ AASOR XII, Pls. 1: 24 and 3: 19-20.

²¹¹ AAA XXIII, Pl. XXXVIII 19.

²¹⁰ *Syria* XVI, Pl. LVIII 16.517.

²¹² SAOC No. 10, p. 64, n. 19.

7. String-cut bowls (XVI–XVII 16–17 and XVIII 14) do not occur below Stratum XVIII. Since they were found in Stage IV, this is an indication that Stage IV is represented in Stratum XVIII. Few parallels can be adduced for this distinctive bowl, though it is found in the late EB Tomb 351 at Jericho,²¹³ Tomb 1101–2 Lower at Megiddo,²¹⁴ and the Ai sanctuary.²¹⁵

§ 134. Among the remaining vessels from Stratum XVI–XVII jug No. 1 is interesting. It was originally covered with a red burnished wash which has now almost entirely disappeared. The absence of this form in the stages suggests that it postdates them and thus forms another argument in favor of a later date for the end of Stratum XVI–XVII. Jug. No. 2 finds a parallel in Baisan level XII.²¹⁶ Little can be said of jug No. 3. It is of unusual shape, and the brown-red ware is well fired. No analogies could be found for it. The new excavations have cast little light on the subject of the Khirbat Kerak ware so typical of levels XI–XII at Baisan.²¹⁷ Only one piece was found in the stratification (Pl. 13:32), and it belongs undoubtedly to Stratum XVI–XVII. It is difficult to draw any definite conclusions on the strength of a single sherd, though its presence here is suggestive of a date in the second half of the 3d millennium.

§ 135. The rim of No. 6, a two-handled jar with red trellis pattern decoration, compares favorably to that of a jar²¹⁸ which was found only in Stages III–I. Jar No. 7, with its rough comb finish, was common in this stratum, where numerous sherds were found (e.g. Pl. 13:28). Similar sherds come from level J at Mirsim.²¹⁹

§ 136. The division between Stratum XVIII and Stratum XVI–XVII at 2500 B.C. is arbitrary. Since there is little doubt that Stratum XVIII had its inception shortly after the commencement of the 3d millennium (see § 138), XVIII and XVI–XVII together constitute practically the whole of the EB period, and the arbitrary division at 2500 B.C. is simply an indication of the relative lengths of the occupations. We still feel that there is as yet insufficient evidence to justify subdividing EB into four fairly closely dated periods as does Wright.²²⁰

²¹³ AAA XXII, Pl. XXXIV 5–8.

²¹⁷ *Ibid.* Pl. VII.

²¹⁴ SAOC No. 10, Fig. 14 P 4126.

²¹⁸ SAOC No. 10, chart 12 C.

²¹⁵ *Syria* XVI, Pl. LVI 9.1525 and 13.893.

²¹⁹ AASOR XII, Pl. 1:14–15.

²¹⁶ *MJ* XXIV, Pl. X 13.

²²⁰ *Pottery*, Table II.

STRATUM XVIII

§ 137. Stratum XVIII can be correlated with Stage III and the latter part of IV. It contains some types which occurred in Stages V-III (in one case IV-III) and others found in III-I. Thus Stratum XVIII ended at about the same time as Stage III. With regard to the beginning of XVIII we shall see that this stratum also contained pottery typical only of Stages VII-IV. It follows, therefore, that XVIII must go back at least into Stage IV. That it does not include all of Stage IV is apparent from the nature of the pottery in Stratum XIX, which must be considered as belonging to Stages V and the beginning of IV.

§ 138. For the most part the normal EB forms found in Stratum XVIII have been discussed in connection with Stratum XVI-XVII. There are, however, a number of vessels that need particular mention. Jug No. 7 provides a good comparison for jugs from Stages III-I²²¹ and in turn can be compared to Syrian vessels from 1st dynasty tombs in Egypt, Jericho in the EB II period, and Baisan XIII.²²² A somewhat similar vessel comes from the necropolis at Ai.²²³ Here, then, is evidence of a rough synchronism between Stratum XVIII, Jericho EB II, Baisan XIII, and the necropolis at Ai, with dated parallels in Egypt at the beginning of the 3d millennium. We must also mention the comb-finished jar No. 8. It is an extremely important vessel and provides further definition to our equation of the stage series to the mound stratification and also to the 1st Egyptian dynasty. It occurred first in Stage IV²²⁴ and thus helps substantiate the equation of Stratum XVIII to part of Stage IV as well as Stage III. A parallel on form and decoration comes from a 1st dynasty tomb at Abydos.²²⁵

§ 139. Jugs 1 and 3 are comparable to a jug which has a range of Stages III-I.²²⁶ Similarly jug No. 4 with its red decoration and string-cut base (cf. Pl. 14: 28-29) can be compared with a jar²²⁷ with the same range. Loop-handled jar No. 11 is identical to a jar from Stages VII-III.²²⁸ This form comes also from the necropolis at Ai.²²⁹

²²¹ SAOC No. 10, chart 11 A-B.

²²² Syria XVI, Pl. LVIII 42.776.

²²³ Wright, *Pottery*, p. 59.

²²⁴ SAOC No. 10, Fig. 8 E.

²²⁵ Petrie, *Abydos I* (London, 1902) Pl. VIII 6.

²²⁶ SAOC No. 10, chart 3.

²²⁷ *Ibid.* chart 12 Q.

²²⁸ *Ibid.* chart 5 B.

²²⁹ Syria XVI, Pl. LVIII 20.691.

§ 140. Bowl No. 21 is a distinctive and important type. Found both in brown, well fired, almost metallic ware with a bluish core and buff moderately fired ware, it may or may not have the pattern burnishing. Parallels are known from Stages III-IV,²³⁰ the Ai necropolis,²³¹ the EB II levels at Jericho,²³² and levels XIII-XIV at Baisan.²³³ This type of vessel, being found only in Stratum XVIII, indicates strongly that Stratum XVIII cannot be older than Stage IV.

§ 141. The rail-rimmed pithos (No. 28 and Pl. 14:5), which was found only in Stages III-V, is an exceedingly important vessel, since on the hill it occurred only in Strata XIX-XVIII. In XVIII it is of value in equating the end of the period with the end of Stage III.

§ 142. The stump-based vessel is an important form in this stratum, where both a late type (No. 5) comparable to those from Stages III-I and an early type (No. 6) which is found only in Stages IV and V²³⁴ occur together. We have here definite evidence that Stratum XVIII includes part of Stage IV. While jug neck No. 21 on Plate 14 may be part of a stump-based vessel, it may also be part of a vessel similar to one illustrated from the necropolis at Ai,²³⁵ and, if we disregard the difference in ware, No. 27 on Plate 14 forms a perfect parallel to the base of the Ai vessel.

§ 143. Other earlier elements, found in Stages IV-VII, comprise (1) inner-ledge bowls with red wash outside (No. 23 and Pl. 14:32-33), which compare to those found in Stages IV-VII; (2) hole-mouth jars with pointed rims (No. 13 and Pl. 14:39); (3) gray burnished bowls (No. 27 and Pl. 14:34), though not directly comparable to the forms illustrated in the stages, must be placed in this category on account of ware; (4) small red-wash bowl No. 26.²³⁶

STRATUM XIX

§ 144. This stratum can be considered a purely Chalcolithic level. Only one form was found that belongs to later traditions (No. 16). A striking feature is the prodigality of red washes. The exterior surface

²³⁰ SAOC No. 10, chart 22 B.

²³¹ *Syria* XVI, Pl. LVIII 16.517.

²³² AAA XXII, Pl. XXX 19.

²³³ *MJ* XXIV, Pl. V 17 and 21.

²³⁴ SAOC No. 10, chart 8.

²³⁵ *Syria* XVI, Pl. LVIII 37.554.

²³⁶ SAOC No. 10, chart 20 A.

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of practically every form is covered with a red wash, which feature to a lesser degree is characteristic of Stratum XX.

§ 145. In order to arrive at any absolute dates for this material it is first necessary to equate our new stratification to the series of stages on the east slope, for only there have we any definitely dated criteria. The majority of the ceramics of the Chalcolithic stages (VII-IV) can, with the addition of some new forms, be duplicated in Stratum XIX. While the range of most of the parallels is VII-IV, yet certain of the forms (Nos. 7, 10, and 17-19) tend to confine this stratum to Stages V-IV. However, since we have seen (§§ 138 and 142) that Stratum XVIII includes part of Stage IV, it follows that Stratum XIX can be confined to Stage V and the early part of IV. In further support of this equation we may note scratched drawings on pottery in Stage V²³⁷ which have much in common with numerous scratched drawings on a large paved area in Stratum XIX. In Stage V were found a number of cylinder seal impressions on pottery²³⁸ which provide good evidence for the dating of Stratum XIX. Two of the seals,²³⁹ though in the Jemdet Nasr tradition, are definitely Early Dynastic in style. The most important for our purpose, however, is one which can be confined to Early Dynastic II and III.²⁴⁰ These seals must have been used within a comparatively short space of time—the life of pottery household utensils is relatively short—and in point of fact Stage V was a somewhat thin deposit. The presence of the seals in the Jemdet Nasr tradition tends to date the collection to the earliest appearance of seal A, that is, Early Dynastic II.²⁴¹ The most recent chronology for the Early Dynastic period has shown that the end of Early Dynastic II cannot be placed later than about 3000 B.C.²⁴² We can, then, fairly assume that Stage V antedated 3000 B.C., and with the slight extension of Stratum XIX into Stage IV and the synchronism between

²³⁷ SAOC No. 10, Fig. 10.

²³⁸ *Ibid.* pp. 31-39; Engberg and Shipton in *PEFQS*, 1934, pp. 90-93.

²³⁹ Engberg and Shipton in *PEFQS*, 1934, Pl. VI B and F.

²⁴⁰ SAOC No. 10, Fig. 10 A.

²⁴¹ Frankfort has again kindly looked at these seals and concurs with the above conclusions.

²⁴² See Thorkild Jacobsen, *The Sumerian King List* ("Assyriological Studies," No. 11 [Chicago, 1939]).

Stratum XVIII and the 1st dynasty in Egypt (see § 138) it follows that the end of Stratum XIX can be brought down to about 3000 with a fair amount of confidence.

§ 146. The ledge-handle sequence of the stages²⁴³ has found strong substantiation in the latest excavations. In XVIII we have the pushed-up and plain types (Stages IV-III), in XIX the plain, wavy, and thumb-indented (Stages V-IV), and in XX only the wavy and thumb-indented (Stages VII-VI). Along with those of Stratum XIX occurred two new types. One (Pl. 17:15) seems to be a combination of thumb-indented and pushed-up, while the other (Pl. 17:16) is a combination of thumb-indented and pushed-over. Both these forms were found in Site H at Tell el-Fara,²⁴⁴ which can be proved to belong to the transition between Chalcolithic and EB.²⁴⁵ The pushed-over type has been found by Garstang at Jericho in lower EB I,²⁴⁶ which can be equated to our upper Chalcolithic.

§ 147. An entirely new form in the Megiddo repertoire is jar No. 12. With its peculiar spout and wash it can be duplicated from the necropolis at Ai²⁴⁷ and from lower EB I at Jericho.²⁴⁸

§ 148. Other new forms are (1) cornet No. 21, which is made of fine cream-buff ware and invariably decorated with red lines. The complete form has been reconstructed from a number of sherds (Pl. 15: 3-5 and 7-9). In the upper levels of Tulailat Ghassul there were found a few cornets the ware of which can be compared with the Megiddo examples.²⁴⁹ This form first occurred in Stratum XX (No. 16 and Pl. 18:15-19, 23-25). Rims of large straight-sided bowls with similar ware and decoration were also found in Stratum XIX (Pl. 15:1-2 and 6). (2) Jar No. 6 is of pink-buff ware with a brown-pink wash outside. The handles and general shape compare favorably with a jar

²⁴³ SAOC No. 10, chart 14.

²⁴⁴ *Beth-Pelet II*, Pl. XXXVI.

²⁴⁵ A view directly opposed to that expressed by Wright (*Pottery*, p. 79).

²⁴⁶ AAA XXII (1935) Pl. XXXV 6.

²⁴⁷ *Syria XVI*, Pl. LVIII 4.932.

²⁴⁸ AAA XXII, Pl. XXXVI 14.

²⁴⁹ While the majority of the Tulailat Ghassul cornets were made of entirely different ware, the writer saw at the Pontifical Biblical Institute in Jerusalem a number of these forms with ware indistinguishable from that of the Megiddo sherds.

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from Site H at Tell el-Fara,²⁵⁰ which can be dated to the transition between Chalcolithic and EB. (3) Hole-mouth bowl No. 11 can on shape be compared to a Stage VII-IV type.²⁵¹ The rope decoration below the rim is, however, quite a new feature at Megiddo. Similar forms occurred at Baisan as early as level XVI.²⁵² (4) The funnel-shaped vessel No. 14 was found a number of times in a temple of Stratum XIX, and sherds occurred generally throughout Stratum XX (No. 18). The ware is buff, over which is placed a brown-red wash. There are no traces of burning, and it is suggested from its stratigraphic position that it may have had some cult use. (5) Stand No. 15 is of pink-buff ware and has a thick red wash over the entire surface, irregularly hand burnished outside. In ware and shape it is not unlike a fragment from Stage IV.²⁵³

STRATUM XX

§ 149. Stratum XX was the first recognizable occupation level above bedrock, which in a number of instances was utilized for walls and floors of buildings. The pottery includes the earliest yet uncovered at Megiddo, which by comparison with material from other sites may well be termed Neolithic. However, on account of the admixture of Stratum XIX types, XX should be considered as an early phase of the Chalcolithic period.

§ 150. The late Chalcolithic repertoire includes Nos. 7-15, 17, 19-21 (also Pl. 19:26-32), which in ware and form are identical to vessels from Stratum XIX and the early stages. Egyptian parallels for a number of these forms have already been suggested. They range from sequence date 40 to the 1st dynasty.²⁵⁴ Analogies from Neolithic Malta, Crete, and Rhodes for gray burnished ware have also been cited.²⁵⁵

§ 151. The new forms are earlier than any found in the stages. A noticeable feature was the use of chopped straw for tempering, though small gray and white grits were also employed. While attempts at wet-smoothing with grass or straw were not uncommon, the finish for the most part was quite rough. Some of the coarser ware was roughly

²⁵⁰ *Beth-Pelet* II, Pl. XXV 62.²⁵³ *SAOC* No. 10, chart 28 G.²⁵¹ *SAOC* No. 10, chart 13 B.²⁵⁴ See *SAOC* No. 10, Fig. 16.²⁵² *MJ* XXIV, Pl. I 5-6.²⁵⁵ *Ibid.* p. 61.

hand burnished on the exterior, undoubtedly to counteract the extreme porosity of the clay. The firing was inconsistent, varying even on the same vessel. On the whole the ware was under-fired and as a result extremely friable.

§ 152. Jar No. 1 is of lightly fired buff ware with small white grits and a roughly burnished exterior surface. Sherds of somewhat similarly shaped vessels are illustrated on Plates 18 (Nos. 12-13) and 20 (Nos. 9-10). These compare favorably to a number of rims and handles from the upper Neolithic levels at Jericho.²⁵⁶ One may cite a form from Tulailat Ghassul which has a straight neck and small handles at the juncture of neck and shoulder.²⁵⁷

§ 153. Jar No. 2 is of lightly fired buff ware and is tempered with chopped straw. Both surfaces show signs of rough burnishing, and the ware as a result has taken on a grayish tone which is reminiscent of the gray burnished beakers of this stratum (Nos. 11-13) and Stratum XIX (Nos. 22-24). Though no good comparison can be found for this form, the vertical plain rim is an early attribute which is found commonly in the Neolithic period at Jericho.²⁵⁸

§ 154. Jar No. 3 is made of lightly fired coarse cream-buff ware tempered with straw and has a rough finish. The whole appearance is suggestive of a first attempt at pot-making.²⁵⁹ Jar No. 4 is of coarse buff ware with gray and white grits and a rough finish. Jar No. 5, also of coarse buff ware, has a pink wash outside. On handles and general shape it compares to a jar from Tulailat Ghassul²⁶⁰ and to one from the Chalcolithic period at Jericho.²⁶¹

§ 155. Bowl No. 6 is of coarse buff ware and has small white and gray grits. A brown-red wash inside shows signs of rough burnishing, while a similar wash is applied outside as decoration. This type of high-pedestaled bowl is a common Neolithic form throughout the Mediterranean basin. Parallels can be cited from Tulailat Ghassul²⁶² and from as far afield as Corinth in the Neolithic period.²⁶³

²⁵⁶ AAA XXII, Pl. XLV 11-12.

²⁵⁷ *Syria* XIII, Fig. 5 B (p. 341).

²⁵⁸ AAA XXIII (1936) Pl. XXIX 5-7.

²⁵⁹ Note Ben Dor's reactions to the vessels in level IX at Jericho (AAA XXIII 83).

²⁶⁰ *Teleilat Ghassul* I, Pl. 43:104.

²⁶¹ AAA XXII, Pl. XLIII 14.

²⁶² *Teleilat Ghassul* I, Fig. 56:13-14.

²⁶³ See Saul S. Weinberg in *Hesperia* VI (1937) Fig. 10.

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§ 156. The cornets (No. 16) and funnels (No. 18) are identical to those of Stratum XIX (§ 148). Along with the foregoing were found a number of well decorated sherds. The ware of these is generally quite fine and the firing constant. The designs are well developed and the execution good. Jericho produces perfect parallels from the Neolithic levels for both the incised (Pl. 20:1-6)²⁶⁴ and painted (Pl. 20:7-10)²⁶⁵ designs. These latter may also be compared to certain designs on sherds from Site O at Tell el-Fara.²⁶⁶ Surprisingly close comparisons to these come also from Corinth in the Neolithic period.²⁶⁷

§ 157. Jar rims with rope decoration (Pl. 20:18-20) can be paralleled from the early levels at Baisan²⁶⁸ and from the upper Neolithic period at Jericho,²⁶⁹ as can also the mat-impressed bases of Nos. 27-28 on Plate 20.²⁷⁰ The latter can be compared also to similar ones from Site O at Tell el-Fara.²⁷¹

§ 158. The sharply cut rim of No. 22 on Plate 20 is duplicated from the Chalcolithic levels at Jericho.²⁷² Handle No. 26 on Plate 20 also finds a good analogy from the same period.²⁷³

²⁶⁴ Cf. AAA XXII, Pl. XLIV 1-3; XXIII, Pl. XXXIII 12-16.

²⁶⁵ Cf. AAA XXII, Pl. XLIV 7-22; XXIII, Pl. XXXI 14 and 17.

²⁶⁶ *Beth-Pelet* II, Pl. XXXIV.

²⁶⁷ Weinberg in *Hesperia* VI, Figs. 7 and 20.

²⁶⁸ *MJ* XXIV, Pl. I.

²⁶⁹ AAA XXII, Pl. XXXII 23 B.

²⁷⁰ Cf. AAA XXIII, Pl. XLII b 33 A.

²⁷¹ *Beth-Pelet* II, Pl. XXXIV.

²⁷² AAA XXII, Pl. XLI 4-5.

²⁷³ *Ibid.* Pl. XLII 10.

III

SUMMARY AND CONCLUSIONS

§ 159. A general survey of the forms of Stratum XX demonstrates clearly that a number of the vessels and sherds are entirely new to the normal Chalcolithic ensemble as known in Stages VII-IV at Megiddo and are closely comparable to Neolithic vessels from analogous sites. However, on account of the admixture in this stratum of Chalcolithic forms we are left no alternative but to consider it as an early phase of the Chalcolithic period, perhaps antedating 3300 B.C.

§ 160. It has been shown (§ 145) that Stratum XIX can be equated with confidence to Stages V and part of IV. An end date of about 3000 B.C. for Stratum XIX is indicated by the presence of 1st dynasty Egyptian parallels in XVIII (see § 138). Stage V has proved perhaps the best datable horizon for the Chalcolithic period in Palestine, for in it were discovered a number of Early Dynastic cylinder seal impressions which cannot be dated later than 3000 B.C. (see § 145). How much earlier they should be dated is questionable.

§ 161. Strata XVIII-XVI constitute the whole of the EB period, from about 3000 B.C. to about 1950 B.C. Stratum XVI-XVII is comparable to and extends slightly later than Stages II-I (§§ 131-32), and Stratum XVIII may be correlated with Stage III and part of Stage IV (§ 137). The equation of Stratum XVIII (§ 138) to the 1st dynasty in Egypt places its inception close to 3000 B.C.¹ Stratum XVI-XVII finds close parallels in Jericho Tomb A, Megiddo Tomb 1101-2 Lower, and Mirsim J, and can thus be extended to about 1950 B.C. The division between XVIII and XVI-XVII at about 2500 B.C. is arbitrary (see § 136).

§ 162. Although Stratum XV contained late EB pottery, the first appearance of the red burnished fabrics characteristic of succeeding strata shows that we are dealing with a stratum which can properly be regarded as part of the MB I period. Our dating of 1950-

¹ Cf. Palestine Oriental Society, *Journal* XV (1935) 210, for Albright's dating of the 1st Egyptian dynasty.

1850 B.C. for this stratum was derived from an equation to the I-H levels at Mirsim, which we believe were originally correctly dated by Albright to the 20th-19th centuries. The fact that red burnished ware, which began in XV and continued into XII, has also been found in 12th dynasty contexts in Syria and Egypt helps substantiate the dates applied to this stratum.

§ 163. Strata XIV and XIII together appear to extend from the middle of the 19th century to the middle of the 18th. Ceramically the strata are identical, and the division between them at 1800 B.C. is purely arbitrary. Stratigraphically, however, they were distinct. Stratum XIV in fact was a partial rebuilding of XV, while Stratum XIII had a new and individual town plan and street layout. It was surrounded by an enormous mud-brick city wall which was reused during the XII period (an argument for the continuity of the late MB I stratum, XIII, and the early MB II stratum, XII). The characteristic pottery of XIV and XIII was the red burnished ware.

§ 164. Stratum XII begins the MB II period. In it were instituted the buildings, street layouts, etc. which in Area B (see Fig. 1) at least were reused and rebuilt steadily through Stratum IX. Despite the close affinity of the ceramic of this stratum to that of Strata XI-X, there is no break between that of Stratum XII and those below, a condition to be expected since XII was in part a reoccupation of XIII. The presence of the red burnished forms typical of Strata XV-XIII and the first appearance of new forms characteristic of XI-X argue for a date in the 18th century. This date is dependent to some extent on analogies in the early part of Mirsim level E (see § 87) and a certain parallelism to forms of G-F. However, Mirsim F seems to be better paralleled by Megiddo XIII and Mirsim G by Megiddo XIV (see § 124). From Byblos and Ras Shamra also comes evidence which, while not adding closer definition, is in harmony with the dates applied to this stratum.

§ 165. A survey of the forms of Stratum XI shows that we are dealing with a phase of the MB II period that, though closely related to Stratum XII, is nevertheless typologically later. Most of the Mirsim parallels are from level E, and an equation to the upper part of that level is a fair assumption (see § 87). The presence of Middle Cypriote III imports, the fairly well dated Syrian material, and the

position of this stratum in the sequence all tend to indicate that Stratum XI had its inception at the beginning of the 17th century.

§ 166. The fact that Stratum X seems to be analogous to Mirsim level D provides a strong basis for dating it to 1650-1550 B.C. The duochrome pottery which characterizes Stratum IX appears first in X.

§ 167. In connection with Stratum IX a comparative study of Megiddo and Mirsim proves enlightening. Stratum VIII at Megiddo coincides with the early part of C, and Stratum X with D. Thus it becomes increasingly obvious that at Mirsim there is a hiatus during the period represented at Megiddo by Stratum IX, as witnessed by the total absence not only of the duochrome decorated pottery but also of other forms typical of the transitory Stratum IX period. In fact, Albright himself states that there is "an interval of uncertain length between the fall of city D and its reoccupation by the people of C₁."² The limits of Stratum IX are well governed by a combination of the two-color fabrics, normal MB II wares, and 16th century Cypriote imports (see § 38). The influx of the numerous Cypriote forms at this period is significant. There appear to have been strong commercial ties between Syria and Cyprus at this time, as witnessed by the numerous reciprocal importations into each country during this period, and these products may well have been carried into Palestine along with the two-color wares at the time of the big movement from the north (§ 45). Furthermore, from Egyptian records of the 18th dynasty we know that a strong alliance was formed among the tribes of Syria and Palestine to withstand the efforts of the Egyptians in regaining their northern provinces after the eviction of the Hyksos.³ It may well be that during this period a strong impetus was given to trade and commerce between Syria and Palestine. The defeat of this Syro-Palestinian coalition at Megiddo by Thutmose III and the consequent expulsion of Syrian power and influence from Palestine might well account for the rapid degeneration of the two-color wares during the subsequent VIII period.

§ 168. While Stratum VIII was partly a rebuilding of IX, Stratum IX was in turn largely a rebuilding of X. In IX and X were found numerous jar and open burials and late Hyksos scarabs. An in-

² *AASOR* XII 37.

³ James Henry Breasted, *Ancient Records of Egypt* (Chicago, 1906) II 167.

teresting comparison for the Megiddo stratification comes from Baisan.⁴ Here, below the Thutmose III level (= Megiddo VIII) were found two closely interwoven strata—X A and X B (= Megiddo IX and X); X A was a partial rebuilding of X B. Furthermore, below X A (but belonging to it) was found a child pot burial. Hyksos scarabs were also discovered in this stratum, while the ceramic consisted of a number of duochrome decorated vessels—red and black—with an admixture of earlier MB II types. The pottery of X B was wholly MB II in character (cf. § 57 for the MB II content of Stratum X).

§ 169. The analogies from Palestine, Syria, and Cyprus appear on the whole to be well placed in the 16th–15th century. Egyptian counterparts are largely in the 16th and early 18th dynasties and are fully supported by late Hyksos scarabs, jewelry, and associated bone and alabaster material found throughout this stratum. It is, then, with some confidence that we place the commencement of Stratum IX in the middle of the 16th century. We have good reason to believe that Stratum IX was brought to a close in 1479 by the Egyptian conquest of Megiddo by Thutmose III.

§ 170. Stratigraphically Stratum VIII consists to some extent of a rebuilding of the preceding stratum, and it is concluded that there was no break in occupation between Strata IX and VIII. However, there were a number of large structures (the palace etc. in Area A) which were instituted in this stratum and reused up to the end of Stratum VII. Ceramically, the stratum forms a natural link in the development from Stratum IX to VII. The majority of the forms have been well dated to the period of the 18th dynasty. The presence of Mycenaean sherds indicates that the end date of the stratum was after 1400, and the lack of 19th dynasty vessel forms tends to place it about 1350 B.C.

§ 171. Stratum VII followed closely on Stratum VIII, both stratigraphically and ceramically. Many of the analogies for the pottery are well dated to the period of the 19th dynasty. But for the Ramses III ivories found in the upper part of Stratum VII, we would have had little hesitation in confining the stratum to the 19th dynasty. It is doubtful whether Stratum VII should be carried to the end of Ramses

⁴ FitzGerald in *PEFQS*, 1932, pp. 145–47.

III's reign, and a date around 1170 is suggested. The stratigraphic evidence indicates continuity between Strata VII and VI also, a condition likewise reflected in the pottery. Practically the only differences between the two were the slightly earlier forms and decorative motifs of VII and the presence of LB II importations from Cyprus and the Aegean area.

§ 172. Below Stratum VII was found an inscribed statue base of Ramses VI (*ca.* 1150 B.C.) We believe that it cannot have belonged to Stratum VII (see § 171) and should therefore be attributed to Stratum VI. The date for the end of Stratum VII has been fixed at about 1170 B.C. Since Strata VII and VI together represent a continuous occupation, it follows that Stratum VI commenced immediately after the end of VII.

§ 173. The pottery of Stratum VI is in the Canaanite tradition and is entirely distinct from that of the overlying stratum (V). A similar break was well marked in the stratigraphy between Strata VI and V and is suggestive of a sudden halt in the occupation and a temporary abandonment of the site. Furthermore, the prolific amount of pottery and other utensils *in situ* indicates that the site was forsaken at the height of its occupation.⁵ On pottery alone it is clear that this hiatus extended over a period of four or five decades at least. Because of the Canaanite content of Stratum VI, the definite gap in the occupation between VI and V, and the commencement of the latter at *circa* 1050 B.C.,⁶ it is difficult to place the date of the destruction and final abandonment of Stratum VI any later than the end of the 12th century B.C.⁷

⁵ In Area C there was evidence of sudden destruction followed by a fierce conflagration, possibly the result of an earthquake.

⁶ See *OIP* XLII 7.

⁷ A similar situation was found at Beitin (Bethel), which was destroyed after the 2d phase of the Early Iron period, *ca.* 1100 B.C. (*QDAP* IV 198).

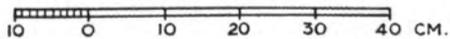
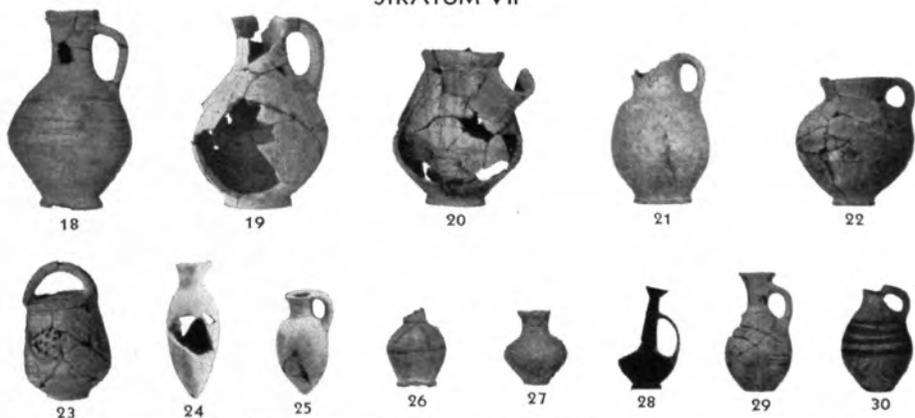
PLATES AND CHART

No.	Chart No.	Description
STRATUM VI		
1	7	Cream-buff, red decoration. § 10
2	1	Orange-buff, irregular hand-burnish under red decoration. § 10
3	6	Pink-buff, cream slip, red and black decoration. § 12
4	35	Buff outside, brown-gray inside, black and mauve decoration over well hand-burnished surface, divided handle. § 14
5	12	Buff. § 10
6	9	Brown-gray cooking-bowl ware, very gritty. § 14
7	3	Pink-buff, red decoration over buff wash. § 11
8	10	Buff. § 10
9	5	Orange-buff, red decoration, basket handle. § 10
10	29	Buff, hole in cup opposite slight lip. § 10
11	18	Orange-buff, red decoration. §§ 10 and 18
12	17	Fine buff ware, irregular hand-burnish, incised decoration, series of windows in two tiers. § 17
13	31	Buff, red decoration. § 13
14	32	Orange-buff, red and black decoration over well hand-burnished surface. §§ 10 and 13
15	26	Orange-buff, red decoration. § 10
16	24	Buff, gray core. § 10
17	37	Green-buff, black decoration; Aegean import. § 15
STRATUM VII		
18	6	Buff, pink-buff slip, red-line decoration
19	7	Buff, red decoration
20	11	Pink-buff, red decoration. § 22
21	5	Coarse buff ware
22	8	Reddish, numerous white grits
23	60	Pink-buff, red decoration. § 22
24	4	Fine cream-buff ware, small red grits, knife shaved. § 24
25	3	Pink-buff
26	15	Gritty pink-buff ware, red decoration. §§ 23 and 34
27	9	Coarse pink-buff ware, numerous gray and white grits, traces of red-line decoration on shoulder. §§ 23 and 34
28	18	Brown, gray core, well hand-burnished; Cypriote import. §§ 24-25
29	2	Fine orange-buff ware, red decoration. § 20
30	14	Buff, white grits, red decoration

STRATUM VI



STRATUM VII



POTTERY FROM STRATA VI-VII. SCALE, 1:10

No.	Chart No.	Description
STRATUM VII		
1	28	Pink-buff, red decoration, 9 handles. § 26
2	29	Pink-buff, red decoration. §§ 21 and 26
3	31	Pink-buff, red decoration. § 26
4	27	Pink-buff, red decoration. § 22
5	38	Green-buff, string-cut base, red-line decoration around rim. § 32
6	34	Pink-buff. § 32
7	35	Buff to pink-buff. § 42
8	39	Pink-buff, red decoration around rim and inside
9	53	Buff to pink-buff, 7 holes
10	48	Buff, red decoration on rim and base. § 30
11	12	Fine pink-buff ware, red decoration over white wash. §§ 21 and 35
12	37	Pink-buff
13	43	Buff, irregular hand-burnish over red spiral decoration
14	47	Pink-buff
15	19	Buff, dark red slip, vertical hand-burnish, handmade. § 31
16	54	Pink-buff, well hand-burnished
17	51	Buff
18	50	Buff, numerous white grits. § 30
19	13	Pink-buff, red decoration over green-buff slip. § 22
20	25	Buff, large circular hole in side. §§ 29 and 39
21	21	Pink-buff, red decoration



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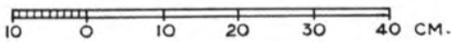
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POTTERY FROM STRATUM VII. SCALE, 1:10

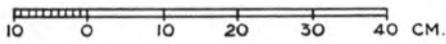
No.	Chart No.	Description
STRATUM VIII		
1	11	Cream to pink-buff, black decoration
2	2	Orange-buff, red decoration. § 37
3	10	Orange-buff, red decoration. § 37
4	8	Orange-buff, irregular vertical hand-burnish, red decoration
5	7	Buff, burnish, red and black decoration. §§ 35-36
6	5	Orange-buff, burnish, red and black decoration. §§ 35-36
7	12	Pink-buff
8	6	Pink-buff, red and black decoration. §§ 35-36
9	18	Fine cream-buff ware, knife shaved, black decoration, handmade; Cypriote import. §§ 38 and 50
10	22	Fine pink-buff base-ring ware, thin lustrous slip, raised decoration, handmade; Cypriote import. § 38
11	15	Buff, black and mauve decoration. § 34
12	16	Cream-buff, well hand-burnished under red and black decoration. § 34
13	13	Gritty pink-buff ware, red decoration
14	40	Pink-buff, spaced wheel-burnish and mauve-red wash over entire vessel. § 42
15	14	Buff, mauve and red decoration. § 34
16	4	Green-buff, numerous minute white grits
17	28	Fine cream-buff ware, white wash, red decoration
18	33	Fine pink-buff ware, red-brown wash roughly applied over entire vessel; Cypriote import. §§ 24 and 38
19	21	Fine brown base-ring ware, brown lustrous slip; Cypriote import. § 38
20	20	Fine orange-buff ware, brown slip, irregular hand-burnish, raised decoration; Cypriote import. § 38
21	46	Pink-buff, red decoration. §§ 41 and 53
22	30	Buff. § 39
23	29	Pink-buff. § 28
24	24	Orange-buff, burnish, black and red decoration



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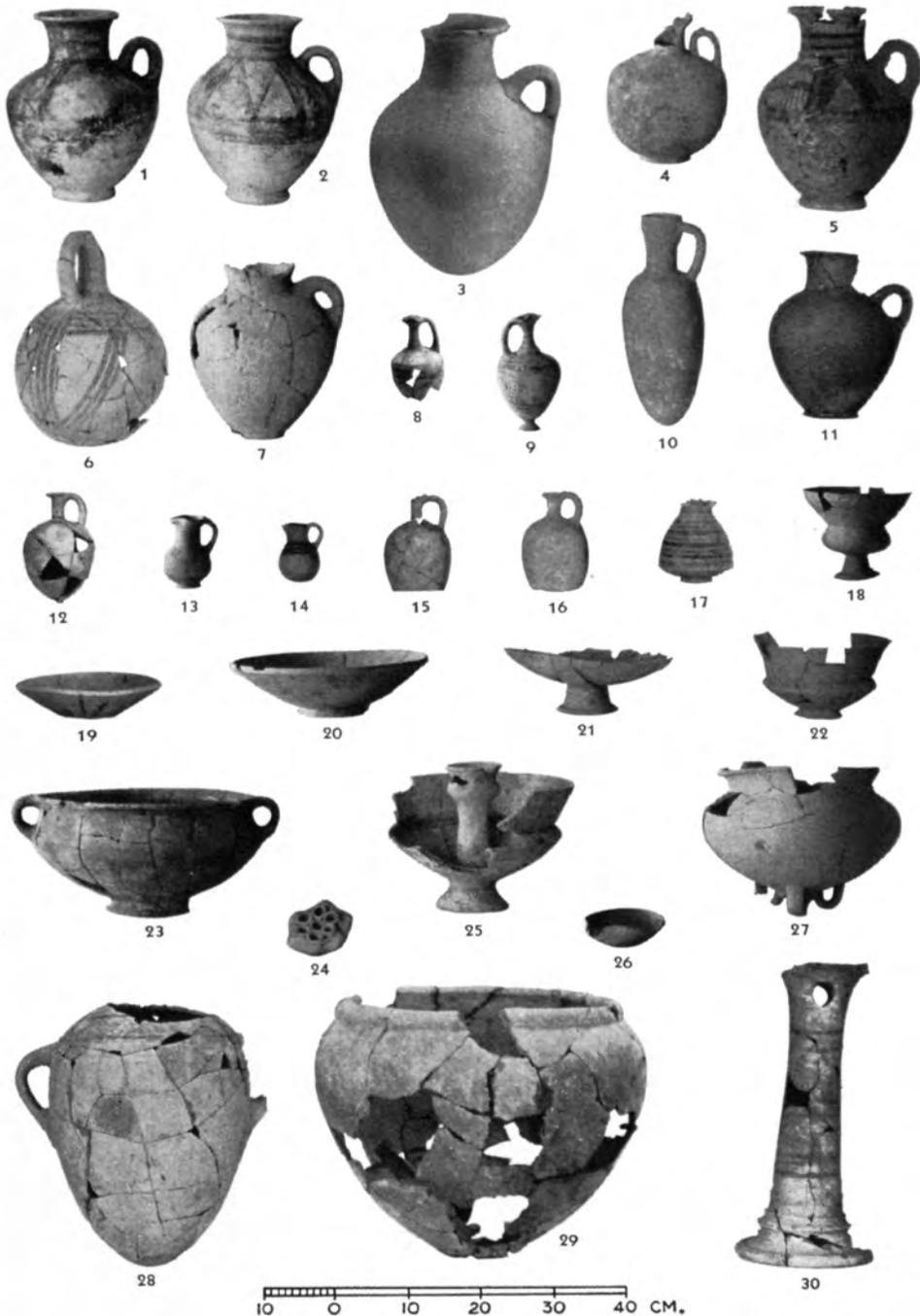
POTTERY FROM STRATUM VIII. SCALE, 1:10

No.	Chart No.	Description
STRATUM IX		
1	26	Pink-buff, roughly applied red and black decoration
2	7	Buff, mauve and black decoration. § 49
3	3	Orange-buff, irregular hand-burnish under red and black decoration. § 35
4	5	Fine buff ware, green-buff slip under mauve and black decoration. § 43
5	4	Fine pink-buff ware, cream-buff slip, red and black decoration. § 43
6	19	Pink-buff. §§ 55 and 91
7	2	Pink-buff, mauve and black decoration over spaced vertical burnish
8	15	Green-buff
9	24	Buff fired to pink-buff in places. § 55
10	16	Fine cream-buff ware, irregular vertical hand-burnish. § 51
11	6	Pink-buff, red and black decoration. § 49
12	20	Fine green-buff ware. §§ 55 and 59
13	14	Fine buff ware, traces of wheel-burnish over black decoration. §§ 55 and 59
14	13	Gray, irregular horizontal hand-burnish. § 50
15	11	Fine brown-gray ware, dark brown-gray slip, close vertical burnish. § 50
16	22	Coarse buff ware, vertical burnish on body and horizontal on shoulder
17	10	Fine cream-buff ware, red decoration; Cypriote import. §§ 38 and 50
18	18	Fine buff to pink-buff ware, wheel-burnish under black and red decoration. §§ 55 and 59
19	9	Pink-buff, white decoration; local imitation of Cypriote base-ring ware(?). § 50
20	36	Fine buff ware, red and black decoration
21	29	Pink-buff, mauve and black decoration over white slip on exterior of vessel. § 53
22	44	Coarse pink-buff to brown-gray cooking-bowl ware. § 54
23	30	Fine pink-buff base-ring ware, dark brown wash roughly applied over entire vessel. §§ 24, 38, and 50
24	34	Pink-buff
25	37	Pink-buff. § 55
26	42	Pink-buff, red-brown decoration
27	41	Buff. §§ 55 and 85
28	32	See § 52
29	28	Fine pink-buff to buff ware, well burnished over brown-red and black decoration
30	31	Fine buff ware, green-buff slip over entire vessel, spaced vertical burnish, red and black decoration over slip. § 43
31	35	See §§ 51-52



POTTERY FROM STRATUM IX. SCALE, 1:10

No.	Chart No.	Description
STRATUM X		
1	2	Fine buff ware, red and black decoration over white slip. § 58
2	1	Buff, wheel-burnish under red and black decoration. § 58
3	18	Buff to pink-buff. §§ 57 and 77
4	12	Fine cream-buff ware. §§ 61 and 76
5	3	Buff, red and black decoration. § 58
6	4	Fine pink-buff ware, green-buff slip, dark red decoration, burnish over slip and decoration. § 66
7	17	Coarse green-buff. § 57
8	6	Fine pink-buff ware, burnish over red decoration, thrust-through handle, handmade; Cypriote import. § 66
9	5	Fine green-buff ware, black decoration, thrust-through handle; Cypriote import. § 66
10	23	Fine buff to pink-buff ware, well vertically hand-burnished. §§ 57 and 60
11	15	Pink-buff. § 57
12	10	Fine buff ware, traces of red wash. §§ 57 and 59
13	25	Buff, red wash, well hand-burnished
14	24	Pink-buff, red decoration, handmade. § 66
15	8	Fine pink-buff ware, originally well burnished over red wash. §§ 57 and 59
16	9	Pink-buff. §§ 57 and 59
17	27	Buff, red and black decoration
18	34	Fine green-buff ware. §§ 57, 65, and 67
19	28	Coarse pink-buff ware. § 68
20	29	Pink-buff. § 68
21	42	Buff
22	35	Buff. § 57
23	41	Red-brown. § 69
24	49	Buff to pink-buff, string-cut base, handmade. § 70
25	43	Buff, white wash over entire vessel, red and blue decoration. § 58
26	50	Buff
27	26	Buff, pink-buff core. § 64
28	31	Buff, red and black decoration over white wash on shoulder. §§ 57, 80, 92, and 96
29	46	Coarse brown-gray cooking-bowl ware, raised rope design on base. §§ 71 and 99
30	44	Pink-buff, red and blue-black decoration over white wash. § 58



POTTERY FROM STRATUM X. SCALE, 1:10

No.	Chart No.	Description
STRATUM X		
1	45	Buff
2	20	Fine red ware, white wash over entire surface, potter's mark. § 62
3	21	Buff, two parallel lines on rim. § 62
4	22	Buff. § 62
STRATUM XI		
5	38	Buff to pink-buff
6	37	Pink-buff, divided handle. § 76
7	39	Fine orange-buff ware, spaced vertical burnish, rope handle. § 78
8	41	Green-buff, snake over handle with head toward neck. § 77
9	13	Pink-buff
10	12	Cream-buff, red-line decoration over white wash
11	16	Buff, vertical hand-burnish on neck and horizontal on body. § 91
12	35 <i>a</i>	Cream-buff, burnish over black decoration. §§ 66 and 79
13	15	Buff, hand-burnish over red to black decoration, handmade. §§ 66 and 79
14	14	Fine pink-buff ware, traces of orange wash, vertical burnish
15	11	Pink-buff, close hand-burnish over orange-buff wash
16	7	Red-brown ware and wash, well hand-burnished. §§ 73 and 75
17	8	Pink-buff. §§ 73 and 75
18	6	Gray-black, well hand-burnished, white-filled incised dots over entire vessel. §§ 73-74
19	31 <i>a</i>	Fine buff ware, spaced hand-burnish under black decoration; Cypriote import. § 79
20	1	Fine buff ware, beautifully burnished over orange wash, giving lustrous appearance. § 73
21	2	Buff, spaced vertical burnish, traces of light buff slip. § 73
22		Buff, spaced vertical burnish
23	5	Fine black-gray ware, originally burnished outside, frieze of white-filled incised dots around body. §§ 73-74
24	19	Pink-buff, orange to red wash, well burnished
25	9	Fine red-buff ware, red wash, well hand-burnished. § 73

STRATUM X



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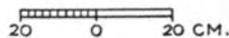
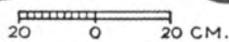
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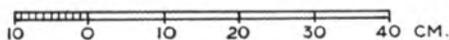
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POTTERY FROM STRATA X-XI. SCALES, 1:10 AND 1:20 (Nos. 2-4)

No.	Chart No.	Description
STRATUM XI		
1	26	Buff. § 81
2	24	Fine green-buff ware, vertical hand-burnish. §§ 67 and 81
3	25	Pink-buff. § 81
4		Fine pink-buff ware
5	29	Fine buff to pink-buff ware. § 81
6	28	Buff, red wash over entire vessel, traces of burnish inside
7	27	Buff, string-cut base. §§ 81 and 83
8	32	Buff. § 81
9	32 <i>a</i>	Fine pink-buff ware, orange-red wash, wheel- and hand-burnish
10	34	Fine buff ware, red wash outside and over rim under wheel- and hand-burnish
11	35	Red-brown, potter's cross on base. § 81
12	22 <i>a</i>	Buff, red wash over entire vessel, spiral burnish inside, potter's mark. § 81
13	18	Fine buff ware, cream slip. §§ 64 and 82
14	36	Buff. § 65
15	33	Buff
16	31	Brown-gray cooking-bowl ware. § 86
17		Buff, wet-smoothed outside, wheel-burnish inside
18	21	Pink-buff. § 85
19	20	Pink-buff. § 85
20	22	Buff. § 85
21	43	Buff, combed finish on lower part of vessel. §§ 63 and 80
22	42	Pink-buff, white wash on upper part of vessel under red and blue decoration. §§ 80, 92, and 96



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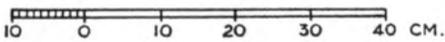
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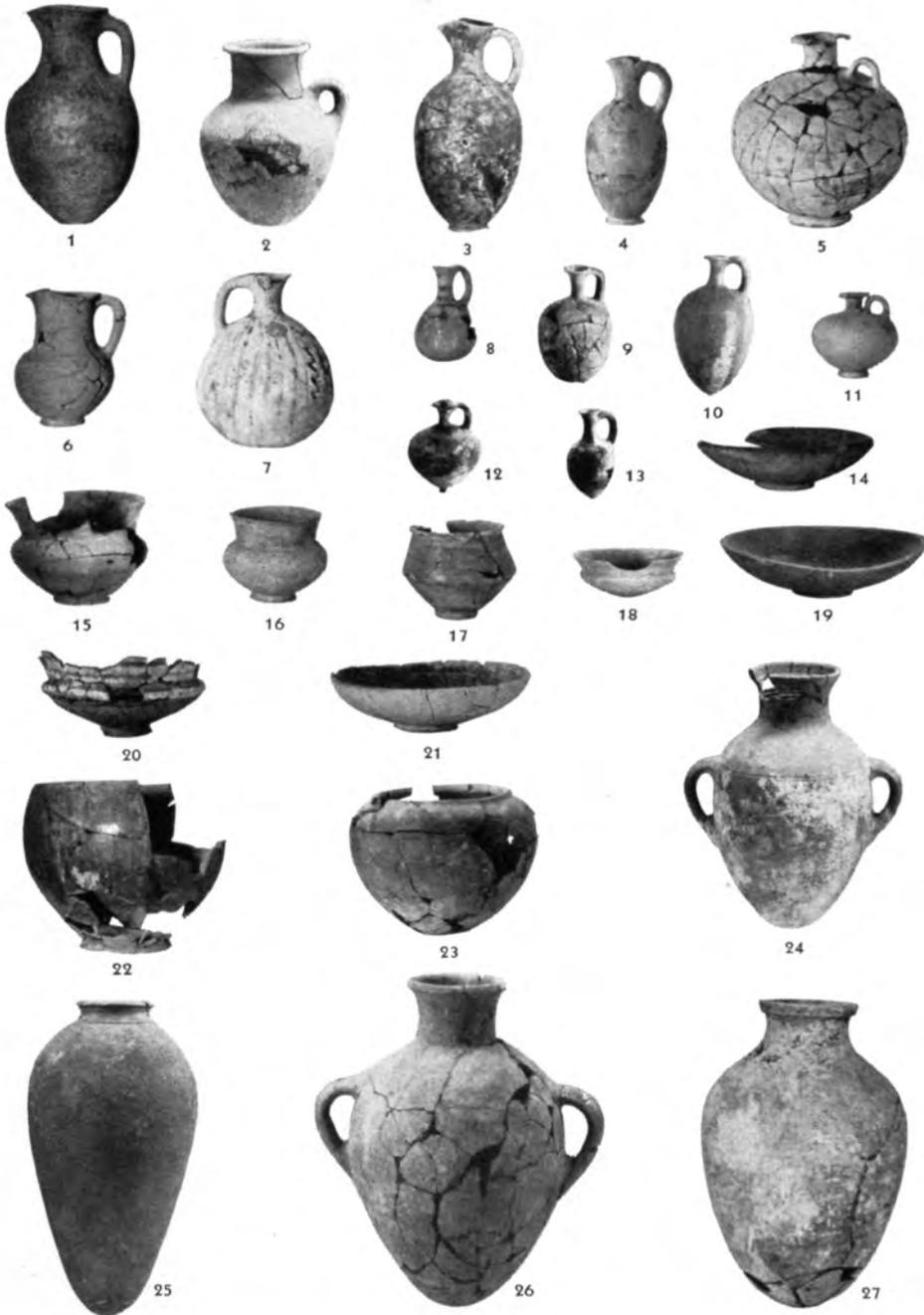


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POTTERY FROM STRATUM XI. SCALE, 1:10

No.	Chart No.	Description
STRATUM XII		
1	18	Pink-buff ware
2	17	Pink-buff. § 77
3	14	Pink-buff, red wash, close hand-burnish. §§ 78 and 90
4	13	Fine buff ware, thick orange wash, well burnished. § 90
5	19	Fine heavily fired blue-gray metallic ware, white slip, hand-burnish
6	33a	Green-buff. § 91
7	16	Buff, white wash under red and black decoration. §§ 92 and 96
8	8	Fine buff ware, black decoration, thrust-through handle, handmade; Cypriote import. §§ 66, 79, and 92
9	4	Fine gray ware, vertical hand-burnish. §§ 88-89
10	1	Fine pink-buff ware, thick red wash, light hand-burnish, giving beautifully polished appearance. § 88
11	9	Fine cream-buff ware, well hand-burnished
12	6	Fine pink-buff ware, dark red wash, well burnished, incised decoration. §§ 74 and 88-89
13	3	Fine gray ware, well hand-burnished. §§ 88-89
14	26	Pink-buff, red spirally burnished wash inside, wet-smoothed outside. § 97
15	23	Green-buff. § 94
16	24	Fine well fired cream ware, spaced horizontal wheel-burnish outside. §§ 82 and 94
17	27	Pink-buff, dark red vertically hand-burnished wash outside. § 94
18	29	Buff, red wheel-burnished wash. § 94
19	32	Pink-buff
20	22	Pink-buff, red decoration over white wash on upper outside. § 96
21	25	Buff, dark red wheel-burnished wash inside
22	21	Pink-buff, heavy matt red highly hand-burnished wash outside. § 98
23	20	Brown-gray cooking-bowl ware, numerous calcite grits. § 99
24	36	Pink-buff. § 92
25	39	Pink-buff. § 93
26	37	Red-buff. §§ 62 and 92
27	38	Pink-buff, combed finish. § 93



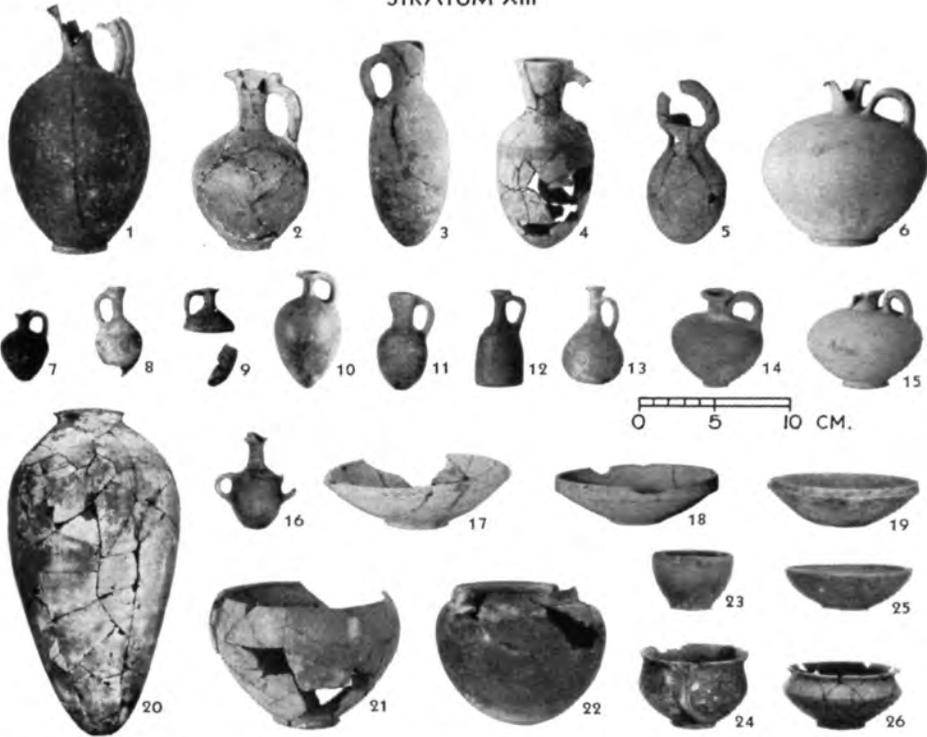
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POTTERY FROM STRATUM XII. SCALES, 1:10 AND 1:20 (No. 25)

No.	Chart No.	Description
STRATUM XIII		
1	16	Fine buff ware, red wash, beautifully hand-burnished. §§ 90 and 104
2	34	Fine buff ware, dark red wash, well hand-burnished, triple handle. §§ 104 and 112
3	13	Buff
4	10	Pink-buff, red decoration, traces of raised wheel turnings outside
5	5	Buff, orange wash, irregular hand-burnished
6	18	Fine cream ware, well hand-burnished. § 61
7	4	Reddish, spaced vertical burnish over black wash
8	35	Buff
9	36	Buff, red wash, vertical hand-burnish, incised reed decoration
10	1	Fine pink-buff ware, thick brown-red wash, well hand-burnished
11	7	Pink-buff, thick red wash, vertical hand-burnish. § 90
12	2	Gray-brown, well hand-burnished
13	6	Pink-buff, red wash, spaced vertical hand-burnish
14	3	Fine buff ware, orange wash, well hand-burnished
15	19	Fine green-buff ware, horizontal hand-burnish. § 61
16	39	Pink-buff, red spiral decoration
17	25	Fine buff ware, traces of red wash on rim, combed finish outside. § 95
18	27	Pink-buff. § 95
19	30	Pink-buff, red wash on rim
20	41	Green to pink-buff. §§ 62 and 93
21	21	Pink-buff, thick red wash outside, beautifully hand-burnished over wash. § 98
22	38	Coarse brown-gray cooking-bowl ware. § 99
23	28	Pink-buff, red decoration on rim
24	32	Pink-buff. §§ 81 and 94
25	31	Pink-buff, series of radial burnish marks inside, red decoration on rim
26	23	Buff
STRATUM XIV		
27	14	Pink-buff, red wash, spaced vertical hand-burnish. §§ 61 and 104
28	12	Pink-buff, red wash, vertical hand-burnish. § 104
29	11	Fine cream-buff ware, brown-red wash, well hand-burnished. § 104
30	13	Buff, red wash, vertical hand-burnish. § 104
31	15	Pink-buff, red wash, vertical hand-burnish
32	10	Same as No. 31
33	9	Fine pink-buff ware, red wash, vertical hand-burnish
34	16	Pink-buff, raised wheel-turning finish under red and black decoration. § 114
35	8	Pink-buff, thick red wash, well vertically hand-burnished. § 90
36	7	Fine pink-buff ware, thick orange to red wash, vertical hand-burnish on body. §§ 90 and 108
37	17	Pink-buff
38	3	Cream-buff, thick brown-red wash, vertical hand-burnish. §§ 104 and 108
39	2	Pink-buff, red wash, vertical hand-burnish. §§ 104 and 108
40	21	Cream-buff, red wash, spiral burnish inside and out, 2 bar handles. §§ 65 and 108
41	28	Pink-buff, thick red wash outside and over rim, horizontal hand-burnish on upper outside and vertical burnish on lower outside. §§ 81, 94, and 108
42	30	Pink-buff, red wash outside and over rim. §§ 94, 108, and 111
43	29	Pink-buff, originally covered with red wash, traces of burning on part of rim: probably used as a lamp
44	5	Pink-buff, thick red wash, hand-burnish
45	6	Cream-buff, red decoration
46	1	Pink-buff, vertical hand-burnish over red wash

STRATUM XIII



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STRATUM XIV

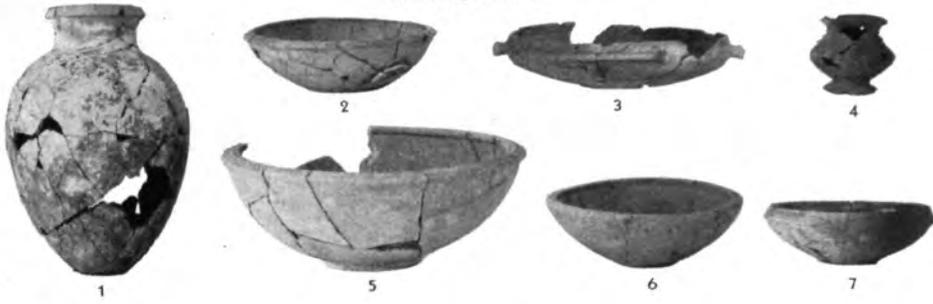


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POTTERY FROM STRATA XIII-IV. SCALES, 1:10, 1:5 (Nos. 5 and 14), AND 1:20 (No. 20)

No.	Chart No.	Description
STRATUM XIV		
1	19	Pink-buff. § 93
2	23	Pink-buff, wet-smoothed, red wash on rim
3	20	Buff to pink-buff, vertical and horizontal burnish. § 65
4	26	Fine pink-buff ware, red wash, irregular hand-burnish
5	22	Pink-buff
6	24	Pink-buff, thick red wash on rim, rough spiral burnish inside. § 97
7	25	Pink-buff, horizontal burnish on rim and spiral inside. § 95
STRATUM XV		
8	7	Pink-buff, thick red closely hand-burnished wash under raised wheel-turnings
9	8	Cream-buff, vertical hand-burnish over pink-red wash
10	2	Pink-buff, red wash, hand-burnish
11	4	Cream-buff, thick brown-red wash, well hand-burnished. §§ 103, 108, and 112
12	3	Cream-buff, thick red wash, vertical hand-burnish. § 59
13	17	Pink-buff, spiral burnish inside. § 95
14	19	Cream-buff, thick brown-red wash over exterior, vertical hand-burnish. §§ 83, 108, and 111
15	20	Pink-buff, red decoration on rim. § 83
16	21	Buff
17	16	Pink-buff, red wash on rim, spiral burnish inside. § 95
18	27	See § 122
19	26	See § 122
20	22	See §§ 117 and 119-20
21	23	See §§ 119-20
22	24	See §§ 119-20
23	9	Buff, string-cut base, wheelmade
24	10	See §§ 117-20
STRATUM XVI-XVII		
25	5	Gray-buff, incised decoration around rim, handmade. § 132
26	23	Buff, red decoration on rim, plain ledge handles, wheelmade. §§ 131 and 133
27	12	Pink-buff, red wash, handmade. §§ 131 and 133
28	1	Buff, traces of red burnished wash, wheelmade. § 134
29	2	Red-brown, handmade. § 134
30	17	Pink-buff, string-cut base, wheelmade. §§ 131 and 133
31	14	Buff, rough finish, traces of burning on lip, handmade; probably used as a lamp
32	15	Buff, string-cut base, handmade
33	4	Buff, rough finish, crescent-shaped incisions, handmade
34	19	Buff, well wet-smoothed, handmade. § 133
35	22	Buff, red decoration, small ledge handles, wheelmade
STRATUM XVIII		
36	1	Fine cream-buff ware, pink to cream wash, string-cut base, wheelmade. § 139
37	22	Pink-buff, cream slip over entire vessel, wheelmade

STRATUM XIV



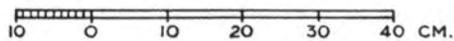
STRATUM XV



STRATUM XVI—XVII



STRATUM XVIII



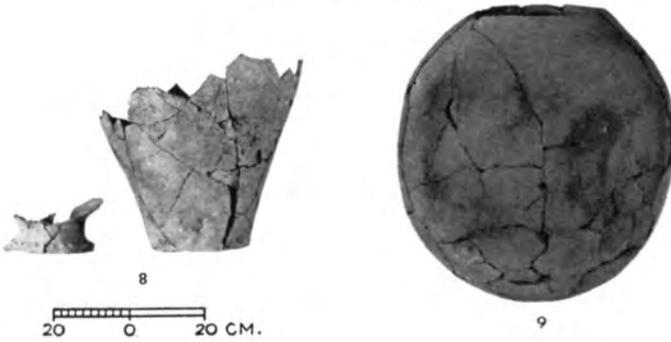
POTTERY FROM STRATA XIV—XVIII. SCALE, 1:10

No.	Chart No.	Description
STRATUM XVI-XVII		
1	20	Pink-buff, pattern burnish, red wash inside and over rim, wheelmade. §§ 127, 131, and 133
2	18	Coarse buff ware
3	21	Buff, red wash inside, wheelmade
4	10	Coarse buff ware, roughly wet-smoothed, potter's mark, handmade. §§ 127, 131, and 133
5	8	Buff, brown-red decoration, handmade. § 131
6	11	Pink-buff, roughly applied red decoration, handmade. § 132
7	7	Red-buff metallic ware, combed finish, handmade. § 135
STRATUM XVIII		
8	12	Buff, red-buff slip, handmade body, wheel finish on neck. § 133
9	10	Buff to brown, handmade. § 133
STRATUM XIX		
10	14	Buff, brown-red wash outside and halfway up inside, handmade. § 148
11	15	Pink-buff, thick red wash over entire vessel, irregular hand-burnish, 3 windows, handmade. § 148

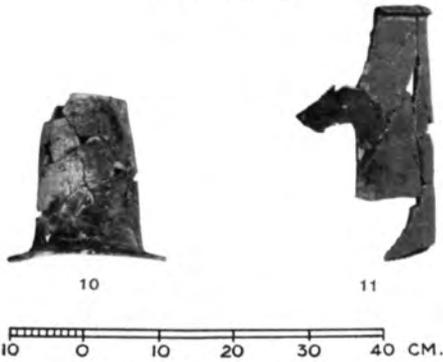
STRATUM XVI—XVII



STRATUM XVIII

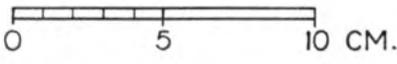
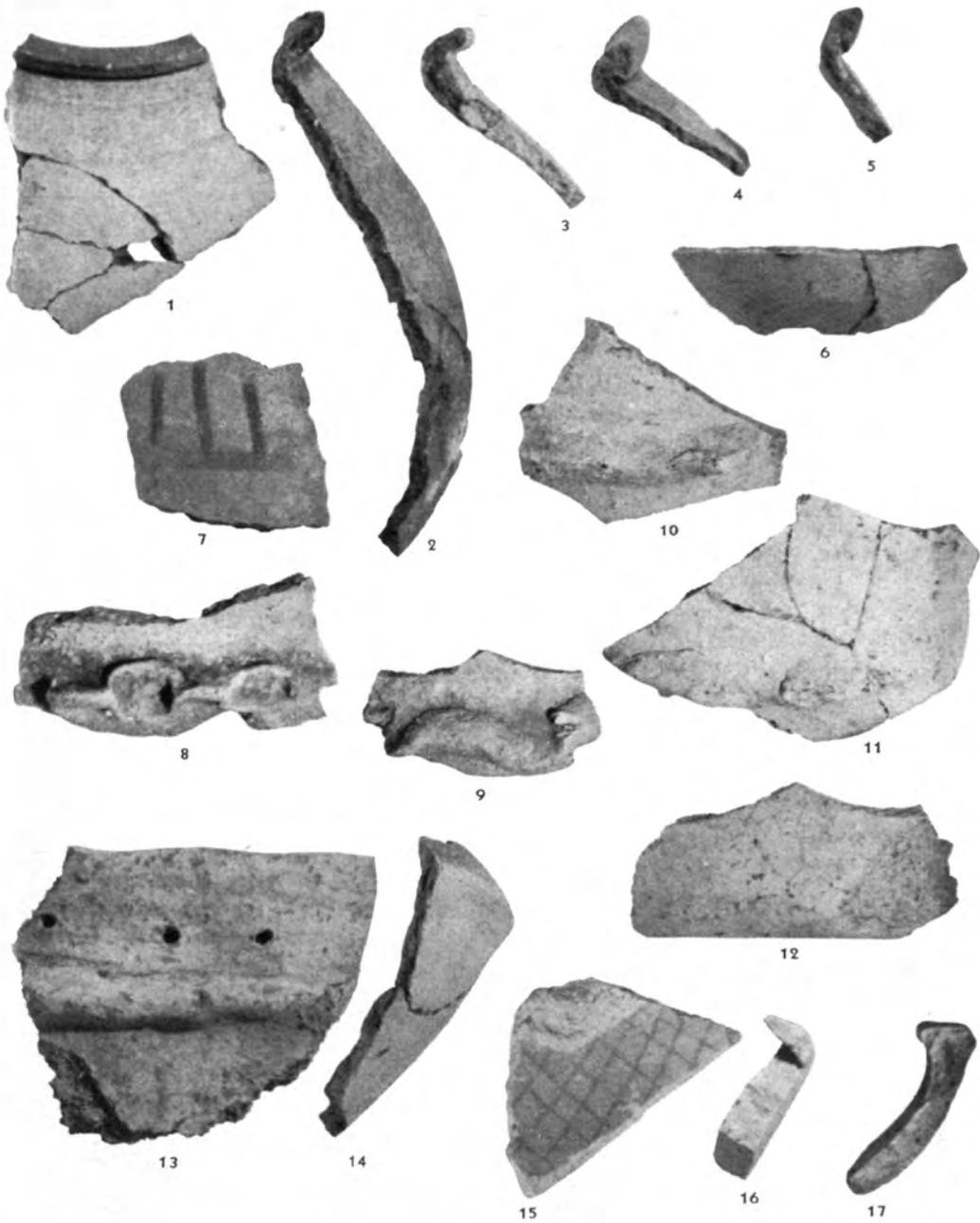


STRATUM XIX



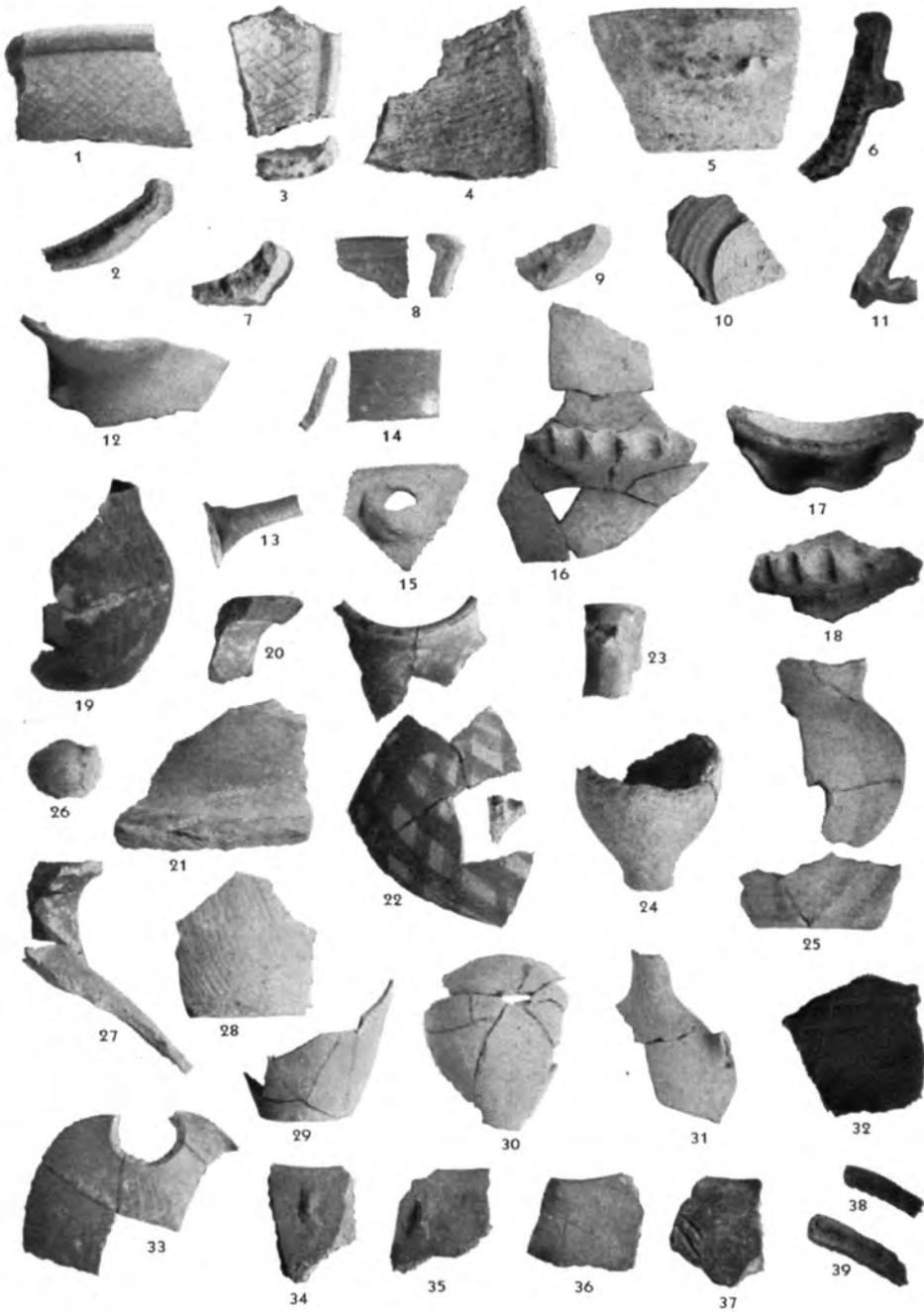
POTTERY FROM STRATA XVI—XIX. SCALES, 1:10 AND 1:20 (No. 8)

No.	Cf. Chart No.	Description
STRATUM XV		
1-3	11	Jars, brown-gray, handmade
4	11	Jar, brown-buff, red decoration, wheelmade
5-7	14	Same as No. 4. § 93
8	12	Ledge handle, coarse green-buff rather poorly fired ware, handmade
9-11	13	Folded ledge handles, coarse green-buff rather poorly fired ware. §§ 117 and 120
12	12	Jar base, coarse green-buff rather poorly fired ware
13	26	Flat-based cooking vessel, coarse brown drab ware, holes completely pierced, handmade. § 122
14	16	Bowl, buff, red wash on rim, wheelmade. § 95
15-17	25	Round platters, buff, red wash inside, pattern burnish, wheelmade. §§ 117, 127, and 130; cf. SAOC No. 10, chart 1 <i>E</i>



SHERDS FROM STRATUM XV. SCALE, 2:5

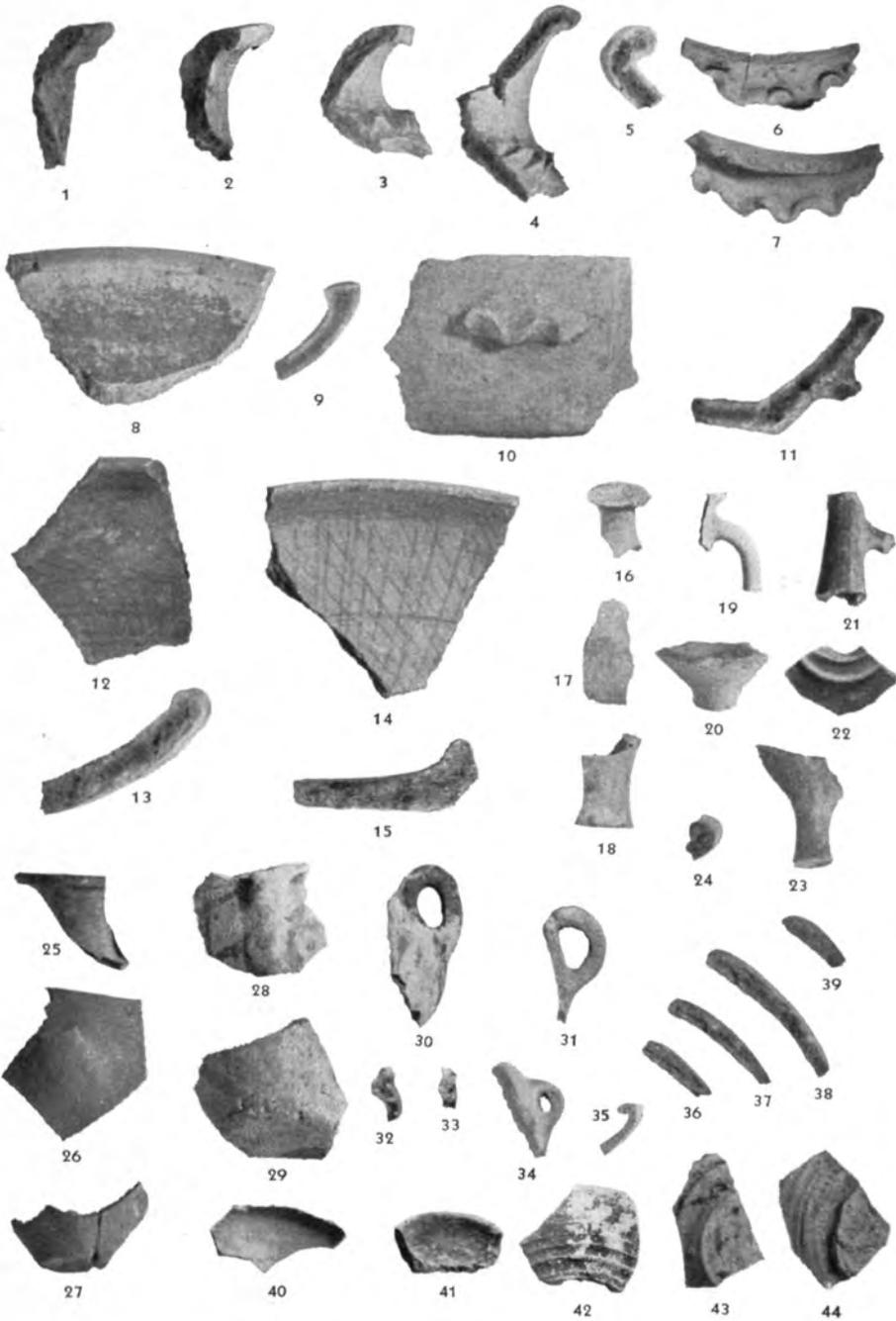
No.	Cf. Chart No.	Description
STRATUM XVI-XVII		
1-4	20	Rounded platters, buff, brown-red wash inside and over rim, pattern burnish, wheelmade. §§ 127, 131, and 133
5-6	24	Straight-sided platters, cream-buff, partly pushed-up and partly thumb-indented ledge handles, wheelmade. §§ 131 and 133
7	25	Flat platter, cream-buff, traces of red wash inside, wheelmade. §§ 131 and 133
8		Bowl, red-buff metallic ware, red-brown wash inside, pattern burnish, wheelmade. § 133; cf. <i>SAOC</i> No. 10, chart 22 <i>A</i>
9	21	Rounded platter, buff, pink-brown wash inside, pattern burnish, wheelmade
10	17	Bowl, cream-buff, string-cut base, wheelmade. §§ 131 and 133
11	24	Straight-sided platter, cream-buff, pushed-up ledge handles, wheelmade. §§ 131 and 133
12		Jar, buff, well fired ware, handmade. § 132; cf. <i>AASOR</i> XIII, Pl. 2:1-4 (Stratum H)
13		Spout, red-buff metallic ware, wheelmade. Cf. <i>SAOC</i> No. 10, Fig. 19 <i>G-L</i>
14		Bowl, pink-buff, thick orange highly burnished wash, handmade
15	11	High-sided bowl, buff, handmade. § 132
16-18		Jars, buff, pushed-up ledge handles, handmade. §§ 131 and 133; cf. <i>SAOC</i> No. 10, chart 14 <i>B</i>
19	1	Jug, cream-buff, red wash outside, wheelmade. § 134
20-21	9	Pithos rim and neck, red buff, wheelmade. §§ 127, 131, and 133
22	6	Jar, buff, red decoration, handmade. § 135
23		Jug, red-buff, orange burnished wash, stump(?) base, handmade. § 133
24	12	Stump-based vessel, buff, handmade. §§ 131 and 133
25		Jar, green-buff, brown decoration, string-cut base, wheelmade. § 131; cf. <i>SAOC</i> No. 10, chart 5 <i>B</i>
26		Jug, buff, button base, handmade. §§ 132 and 133; cf. <i>AASOR</i> XIII, Pl. 1:10 (Stratum J)
27		Jar, red-buff metallic ware, brown-black wash outside, wheelmade. §§ 131 and 133; cf. <i>SAOC</i> No. 10, chart 11 <i>C</i>
28	7	Coarse brown-buff metallic ware, combed finish, handmade. § 135
29		Jug base, red-buff metallic ware, well hand-burnished, wheelmade(?). §§ 131 and 133; cf. <i>SAOC</i> No. 10, chart 11 <i>B</i>
30	12	Stump-based vessel, cream-buff, traces of red burnished wash, handmade. §§ 131 and 133
31		Jug, red-buff metallic ware, well burnished, handmade. §§ 131 and 133; cf. <i>SAOC</i> No. 10, chart 11 <i>A</i>
32		Pink-buff, black outside, pink inside, highly burnished outside and roughly burnished inside, handmade; Khirbat Kerak ware. § 134
33		Red-buff metallic ware, well burnished outside, handmade. §§ 131 and 133; cf. <i>SAOC</i> No. 10, chart 11 <i>B</i>
34-35	10	Hole-mouth jar rims, gray-brown, vestigial handle, handmade. §§ 127, 131, and 133
36-37	10	Hole-mouth jar rims, gray-brown ware, handmade, potter's mark. §§ 127, 131, and 133
38-39	10	Hole-mouth jar rims, gray-brown ware, handmade. §§ 127, 131, and 133



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SHERDS FROM STRATUM XVI-XVII. SCALE, 1:5

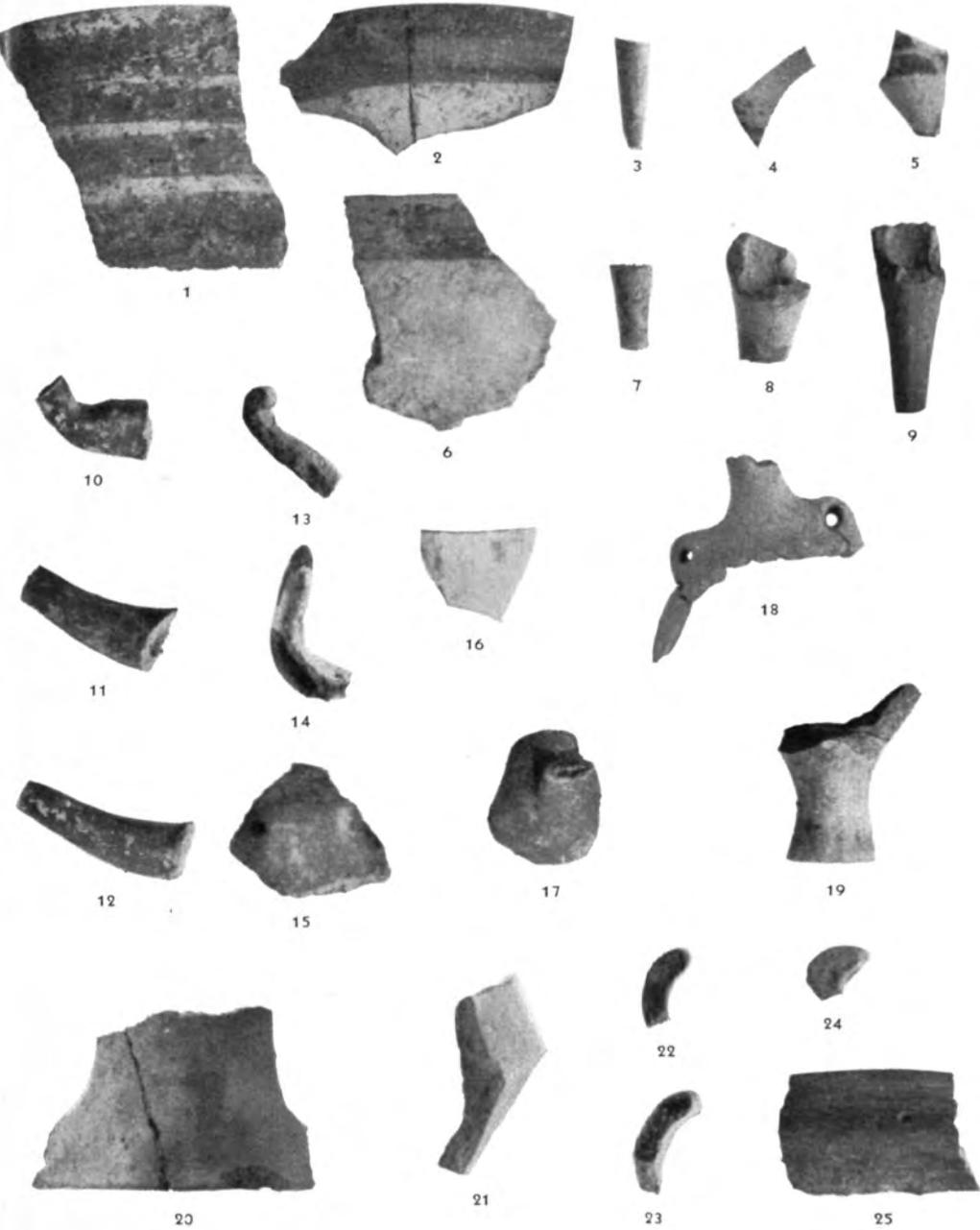
No.	Cf. Chart No.	Description
STRATUM XVIII		
1-2	12	Pithos rims, green-buff, handmade. § 133
3-4	12	Pithos rims, buff, rope decoration. § 133
5	28	Pithos rim, buff, dark core, red wash outside, handmade. § 141
6-7		Pushed-up ledge handles, buff, handmade. Cf. SAOC No. 10, chart 14 B
8-9	18	Rounded platters, buff, red wash inside, pattern burnish, wheelmade. § 133
10-11	17	Straight-sided platters, cream-buff, pushed-up ledge handle, wheelmade(?). § 133
12-13	19	Flat platters, cream-buff, red pattern-burnished wash inside, wheelmade
14-15	20	Flat platters, buff, brown-red pattern-burnished wash inside, wheelmade
16-17	6	Necks of stump-based vessels, pink-buff, well hand-burnished, handmade. §§ 133 and 142
18	6	Stump-based vessel, buff, well burnished, handmade. §§ 133 and 142
19	6?	Stump-based vessel(?), buff, well burnished, handmade. §§ 133 and 142; cf. <i>Syria XVI</i> , Pl. LVIII 37.554
20	5?	Stump-based vessel(?), cream-buff, handmade. §§ 133 and 142
21-23	6?	Stump-based vessels(?), buff, red burnished wash, handmade. §§ 133 and 142
24		Bowl, red-buff metallic ware, pattern burnish inside, wheelmade. Cf. SAOC No. 10, chart 22 A
25	8	Jar, blue-gray metallic ware, handmade. §§ 133 and 138; cf. SAOC No. 10, chart 11 C
26	8	Jar, blue-gray metallic ware, combed finish, handmade. §§ 133 and 138; cf. SAOC No. 10, chart 11 C
27	7	Jar, red-buff metallic ware, burnish, handmade. §§ 133 and 138
28	4	Jug, gritty buff ware, red-brown decoration, wheelmade. § 139
29	4	Jug base, string cut; probably part of No. 28. § 139
30-31		Jugs, cream-buff, wheelmade. Cf. SAOC No. 10, chart 3
32-33	23	Inner-ledge bowls, pink-buff, red burnished wash outside and over rim, handmade. § 143
34	27	Gray burnished ware, handmade. §§ 133 and 143; cf. chart XIX 22
35	24	Bowl, cream-buff, red decoration, wheelmade
36-38	10	Hole-mouth jars, gritty gray-brown ware, handmade. § 133
39	13	Hole-mouth jar, buff to brown, handmade. § 143
40		String-cut bowl, cream-buff, burnish inside, wheelmade
41	25	String-cut bowl, cream-buff, wheelmade
42-44	14	Same as No. 41. § 133



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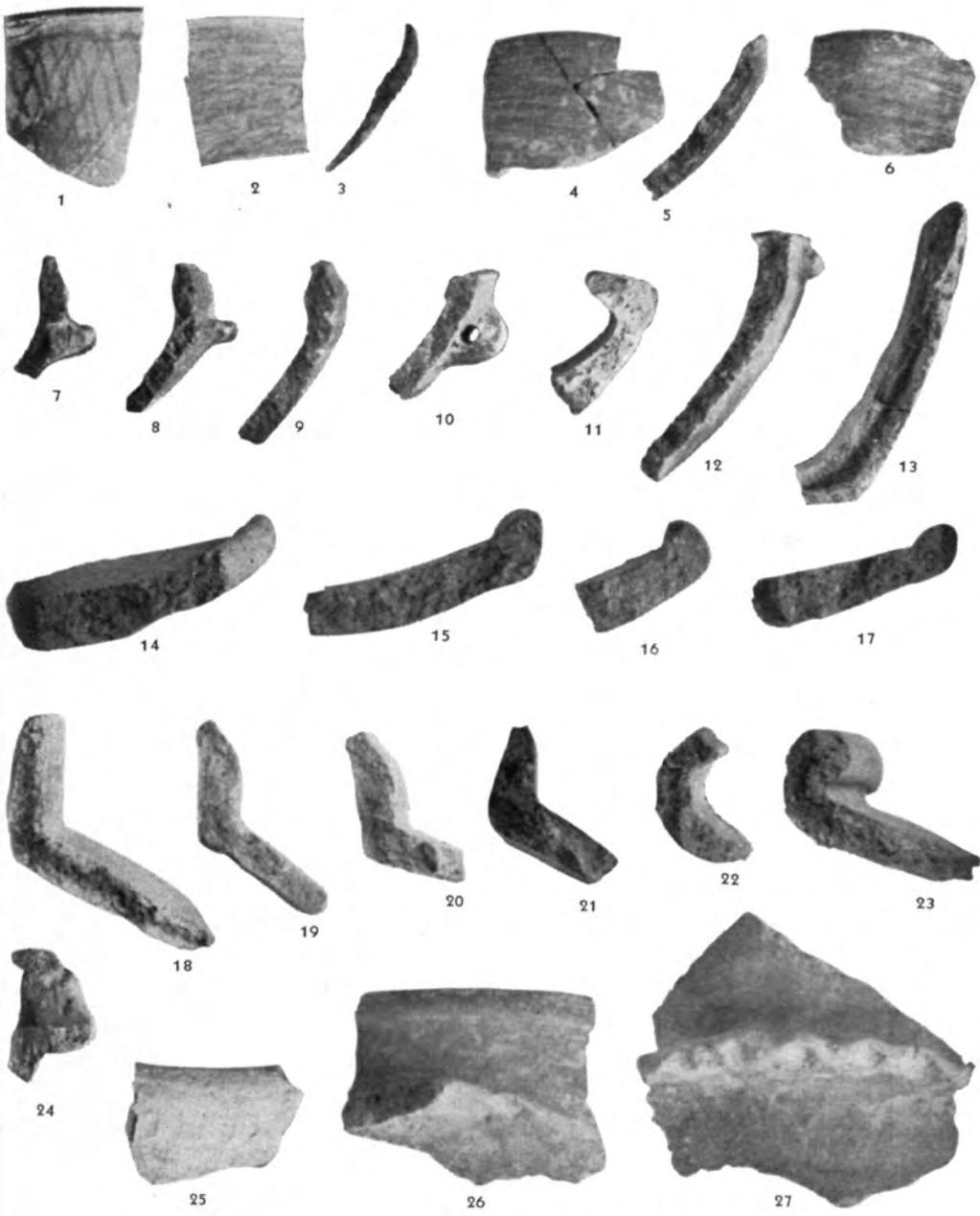
SHERDS FROM STRATUM XVIII. SCALE, 1:5

No.	Cf. Chart No.	Description
STRATUM XIX		
1		Bowl rim, fine buff ware, white grits, wet-smoothed under red decoration (see Pl. 20:25). § 148
2		Bowl rim, fine cream-buff ware, red decoration (cf. Pl. 20:25). § 148
3-5	21	Cornets, fine cream-buff ware, red decoration. § 148; cf. <i>Syria</i> XIII, Pl. LXIX 2
6		Bowl rim, pink-buff, red decoration (cf. Pl. 20:25). § 148
7-9	21	Cornets, fine cream-buff ware, red decoration. § 148; cf. <i>Syria</i> XIII, Pl. LXIX 2
10	2	Spout, pink-buff, red matt wash. Cf. <i>SAOC</i> No. 10, chart 23
11-12	2	Spouts, pink-buff, red matt wash. Cf. <i>SAOC</i> No. 10, chart 23 B
13		Rim, pink-buff ware, red matt wash
14	5	Gourd-jar, pink-buff, red wash. Cf. <i>SAOC</i> No. 10, chart 26
15	1	Semi-cylindrical handle, pink-buff, red matt wash. Cf. <i>SAOC</i> No. 10, chart 23 A
16		Jar rim, cream-buff, red wash, spaced vertical burnish. Cf. <i>SAOC</i> No. 10, Fig. 7 E-F
17	2	Jar handle, pink-buff, red matt wash
18	4	Jar, pink-buff, lightly fired. Cf. <i>SAOC</i> No. 10, chart 25 C
19		Stump-based vessel, pink-buff, red burnished wash
20		Base of a stand(?), gray burnished ware (cf. chart XIX 22)
{ 21	{ 23	Beaker rims, gray burnished ware. § 153
22	22	
23	24	
24		
24		Beaker rim, gray burnished ware. Cf. <i>SAOC</i> No. 10, chart 17 A
25	22	Beaker rim, gray, brown-red wash outside, irregular burnish. § 153



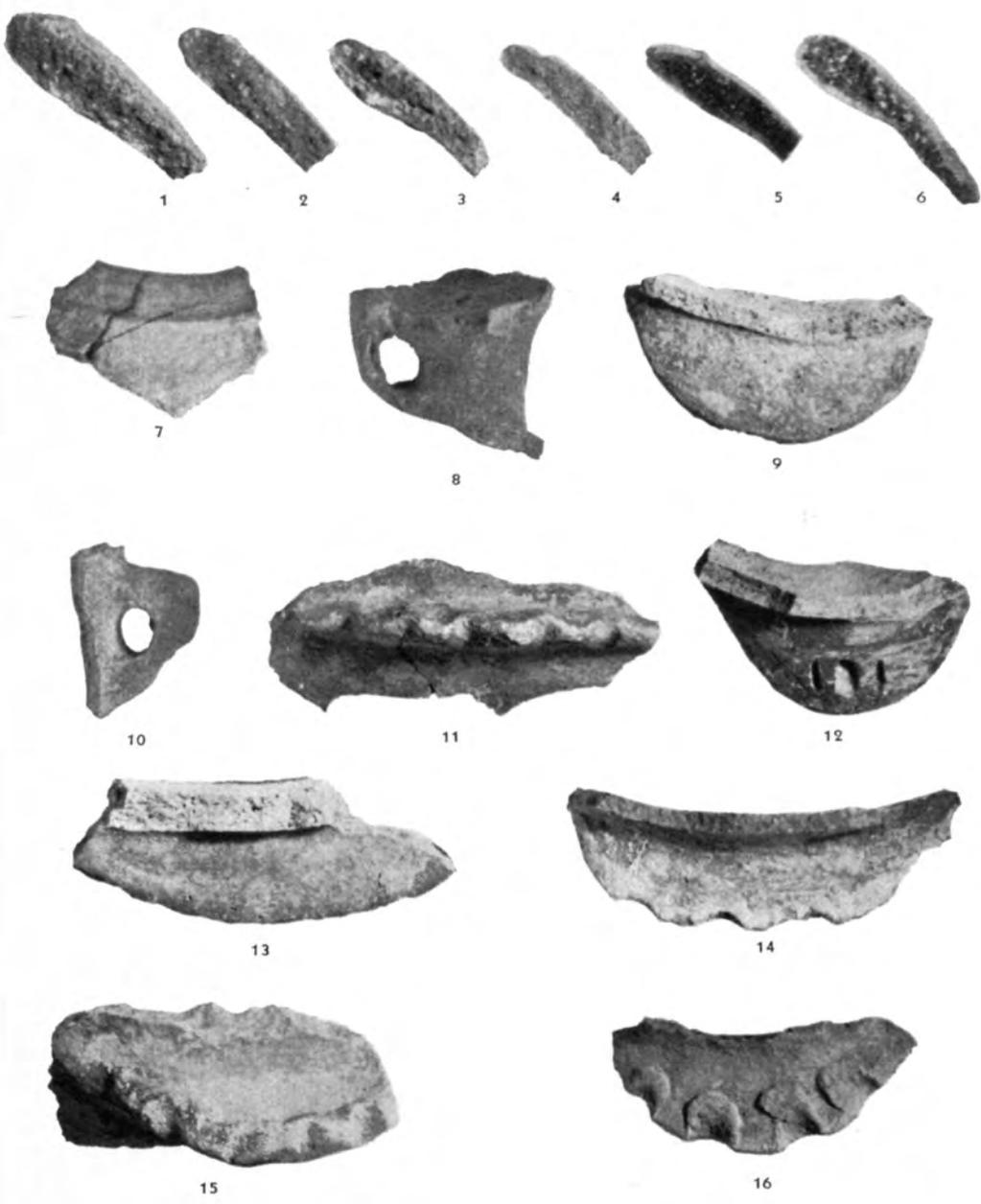
SHERDS OF HANDMADE VESSELS FROM STRATUM XIX. SCALE, 2:5

No.	Cf. Chart No.	Description
STRATUM XIX		
1-6		Bowls, pink-buff, red pattern-burnished wash, handmade. Cf. SAOC No. 10, chart 21 A
7-9	20	Inner-ledge bowls, pink-buff, red wash outside, small wavy ledge handles, handmade. Cf. SAOC No. 10, chart 19 B
10	19	Bowl, pink-buff, red wash inside, firing to black outside, handmade. § 145; cf. SAOC No. 10, chart 21 E
11		Rounded platter, pink-buff ware, red pattern-burnished wash inside, wheelmade. Cf. SAOC No. 10, chart 1 D
12		Bowl, pink-buff, red wash outside and over knobs on rim, handmade. Cf. SAOC No. 10, chart 18 A
13	17	Bowl, pink-buff, red burnished wash, handmade. § 145; cf. SAOC No. 10, chart 22 C
14-17	16	Flat platters, pink-buff, red pattern-burnished wash, wheelmade. §§ 133 and 144; cf. SAOC No. 10, chart 1 E
18		Pithos rim, buff, red-brown wash outside, handmade. Cf. SAOC No. 10, chart 12 P
19-20	9	Pithos rims, pink-buff, calcite grits, red wash outside, handmade. Cf. SAOC No. 10, chart 16 G
21		Pithos rim, gray-buff, red wash outside, handmade. Cf. SAOC No. 10, chart 16 G
22		Pithos rim, pink-buff, red wash outside, handmade. Cf. SAOC No. 10, chart 16 K
23	10	Pithos rim, buff, red wash outside, handmade. § 145; cf. SAOC No. 10, chart 16 F
24		High-sided bowl, buff, handmade. Cf. SAOC No. 10, chart 27
25	11	Hole-mouth bowl, buff, red wash outside, indented rope decoration around rim, handmade. § 148; cf. SAOC No. 10, chart 13 A
26	13	Hole-mouth bowl, buff, red wash, oblique wavy ledge handle, handmade
27	13	Hole-mouth bowl, buff, red wash, wavy ledge handle, handmade



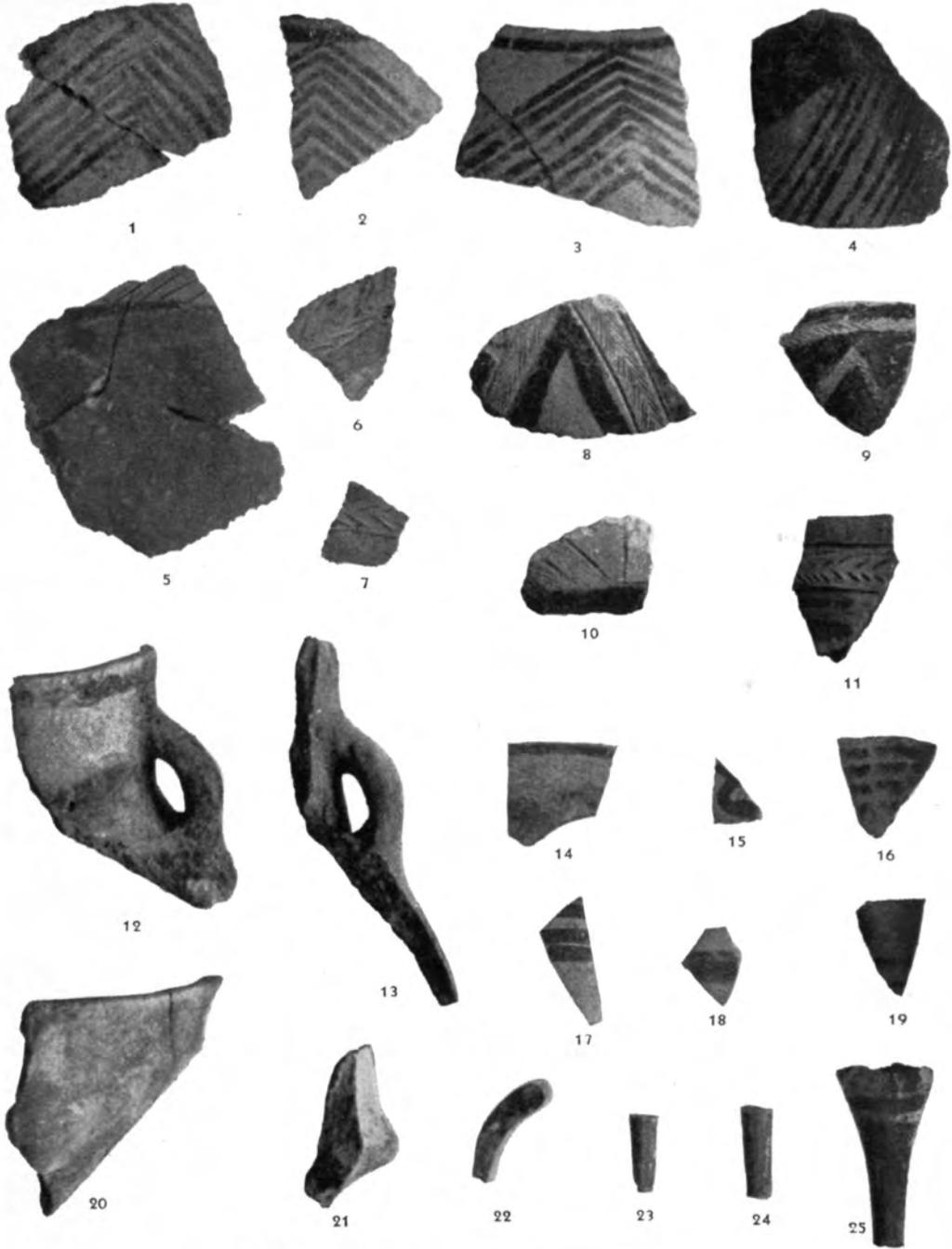
SHERDS FROM STRATUM XIX. SCALE, 2:5

No.	Cf. Chart No.	Description
STRATUM XIX		
1		Ridged-rim hole-mouth jar, gray-buff, brown wash. Cf. SAOC No. 10, chart 12 <i>J</i>
2-4		Ridged-rim hole-mouth jars, gray-buff. Cf. SAOC No. 10, chart 12 <i>H</i>
5		Ridged-rim hole-mouth jar, gray-buff, numerous calcite grits. Cf. SAOC No. 10, chart 12 <i>K</i>
6		Bulbous-rim hole-mouth jar, pink-buff, numerous calcite grits. Cf. SAOC No. 10, chart 12 <i>D</i>
7		Same as No. 1
8	12	Jar, pink-buff, red wash outside. § 147
9		Plain broad ledge handle, red-buff, red wash. Cf. SAOC No. 10, chart 14 <i>E</i>
10		Handle, pink-buff, well fired, red wash
11		Wavy ledge handle, buff, dark red wash. Cf. SAOC No. 10, chart 14 <i>H</i>
12		Plain narrow ledge handle, buff, brown-red wash, 3 incised marks. Cf. SAOC No. 10, chart 14 <i>D</i>
13		Oblique wavy ledge handle, buff, dark red wash. Cf. SAOC No. 10, chart 14 <i>F</i>
14		Thumb-indented ledge handle, pink-buff. Cf. SAOC No. 10, chart 14 <i>G</i>
15		Partly thumb-indented and partly pushed-up ledge handle, buff. § 146
16		Partly thumb-indented and partly pushed-over ledge handle, pink-buff. § 146



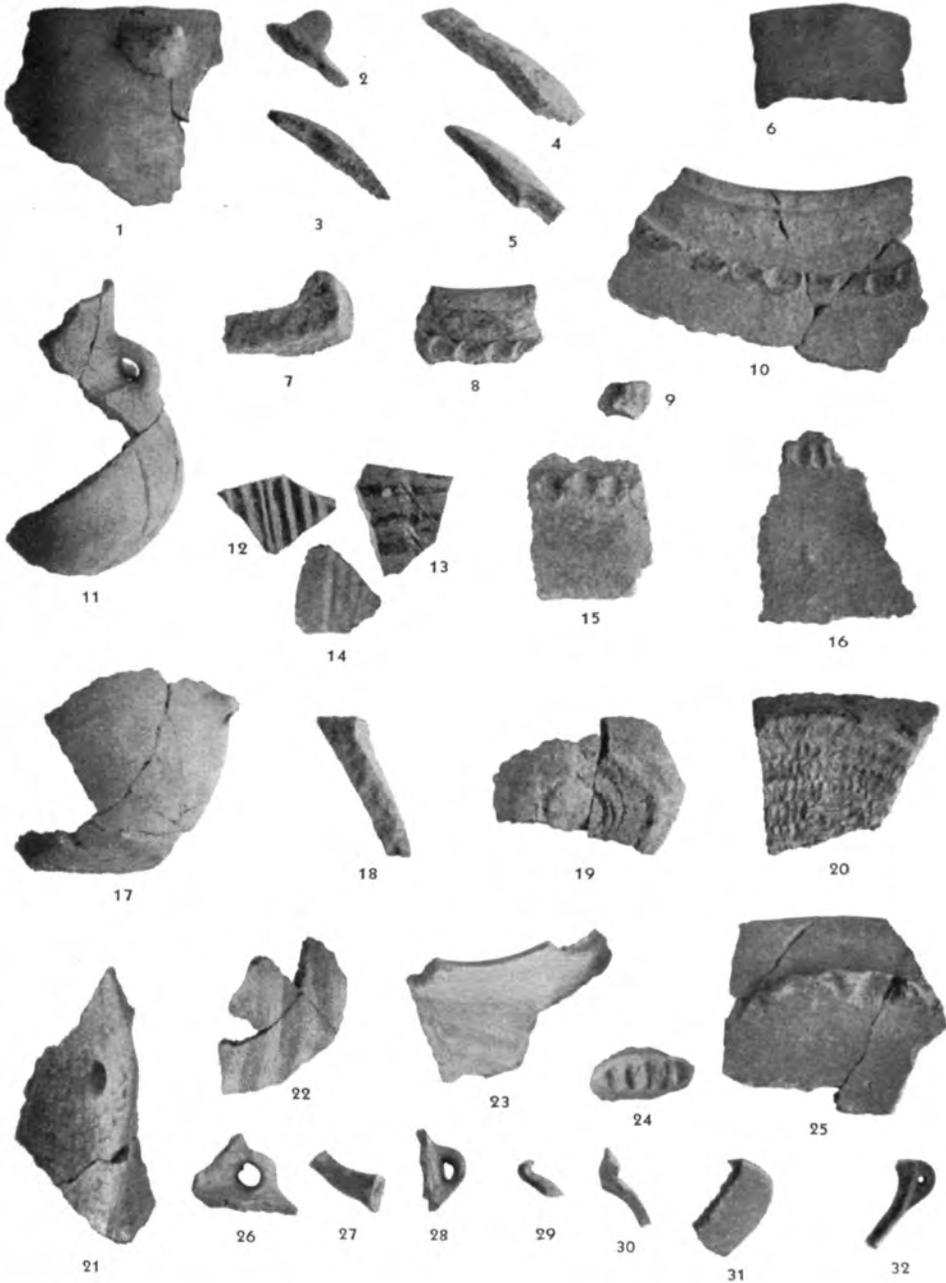
SHERDS OF HANDMADE VESSELS FROM STRATUM XIX. SCALE, 2:5

No.	Cf. Chart No.	Description
STRATUM XX		
1-3		Buff, minute white grits, well wet-smoothed under red decoration (cf. Pl. 20:7). § 156
4		Buff, gray grits, red decoration (see Pl. 20:8). § 156
5		Pink-buff, white grits, red wash inside and out, decorated with incised lines in unwashed bands (see Pl. 20:3). § 156
6-7		Pink-buff, white grits, red wash inside and out, incised herringbone decoration (cf. Pl. 20:4). § 156
8		Buff, some white grits, burnish under red bands inclosing incised herringbone design (see Pl. 20:2). § 156
9		Bowl, buff, numerous small white grits, brown-red wash inside, red wash outside, firing in places to black, incised herringbone design in unwashed bands and chevrons (see Pl. 20:1). § 156
10		Base; similar to No. 9 (see Pl. 20:5). § 156
11		Rim, buff, brown wash inside and out, incised herringbone design in unwashed bands (see Pl. 20:6). § 156
12		Jar, buff, some small white grits, red decoration firing in places to a darker shade (see Pl. 20:9). §§ 152 and 156
13		Jar, buff to gray-buff, numerous small white grits, traces of subsequent burning which may have discolored the now black decoration (see Pl. 20:10). §§ 152 and 156
14		Rim, buff, red wash outside, incised herringbone design in unwashed bands and chevrons (cf. Pl. 20:6). § 156
15-19	16	Cornets, cream-buff, red decoration. §§ 148 and 156
20	13	Beaker rim, gray burnished ware. §§ 150 and 153
21	13	Beaker rim, gray burnished ware, small knob. §§ 150 and 153
22	11	Beaker rim, gray burnished ware. §§ 150 and 153
23-25	16	Cornets, cream-buff, red decoration. §§ 148 and 156



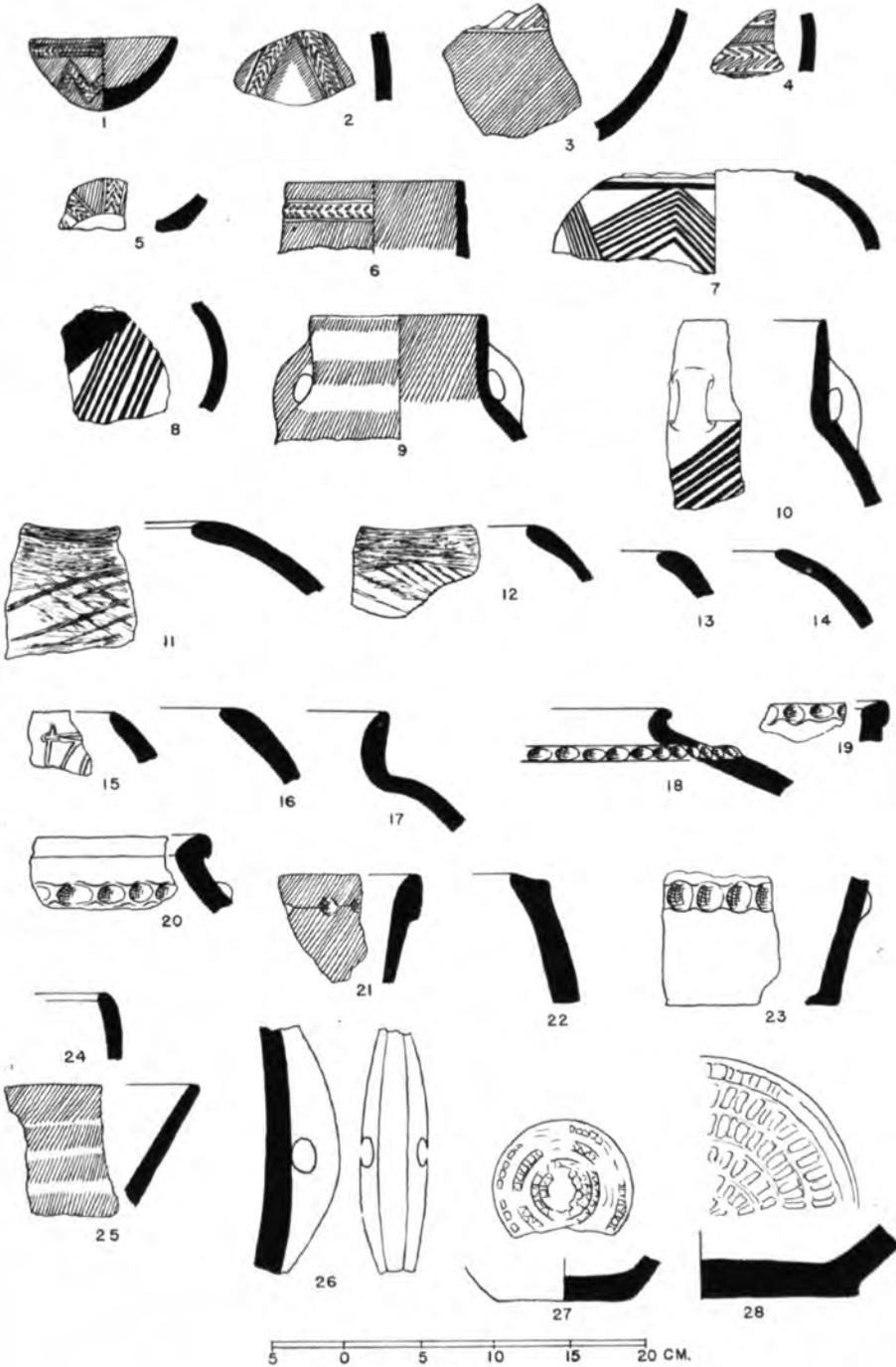
SHERDS OF HANDMADE VESSELS FROM STRATUM XX. SCALE, 2:5

No.	Cf. Chart No.	Description
STRATUM XX		
1	2	Jar, coarse buff ware, straw tempered, rough hand-burnish inside and out. § 153
2		Hole-mouth jar rim, coarse gray-buff ware, rough finish, knob on rim; possibly for use as handle
3		Hole-mouth jar rim, coarse pink-buff ware, straw tempered, roughly wet-smoothed
4	3	Hole-mouth jar rim, coarse gray-cream ware, grit and straw tempered, finish roughly smoothed with grass or straw. § 154
5		Hole-mouth jar rim, coarse buff ware, straw tempered, rough hand-burnish inside and out
6		Coarse gray ware, traces of rough burnish inside and out
7		Bowl, coarse gray-buff ware, straw tempered, rough finish
8		Jar, coarse buff-gray, numerous white grits, rope decoration, rough finish (see Pl. 20:20 and § 157)
9		Jar, coarse buff ware, numerous white grits, thumb indentations around rim, roughly wet-smoothed (see Pl. 20:19 and § 157)
10		Jar, coarse gray-buff ware, gray grits, rope decoration (see Pl. 20:18 and § 157)
11	1	Jar, buff-gray, dark core, numerous white grits, rough burnish outside
12		Cream-buff, black trickle wash
13		Buff, gray trickle wash
14		Cream-buff, red wash outside, chevron decoration resulting from removal of wash. Cf. <i>Syria</i> XIII 343, Fig. 6
15		Jar base, coarse buff ware, numerous gray grits, brown wash outside, rope decoration, roughly wet-smoothed (see Pl. 20:23)
16		Jar base, coarse buff ware, white and gray grits, rope decoration, roughly wet-smoothed
17	9	Jar, buff, white grits, brown wash outside
18		Rim, coarse buff ware, numerous white grits, wet-smoothed (see Pl. 20:22 and § 158)
19		Base, buff, white grits, roughly wet-smoothed, reed-mat markings on base (see Pl. 20:27 and § 157)
20		Base, coarse buff ware, dark core, white grits, wet-smoothed, reed-mat markings on base (see Pl. 20:28 and § 157)
21		Handle, coarse cream-buff ware, few white grits, wet-smoothed (see Pl. 20:26 and § 158)
22		Coarse pink-buff ware, numerous white grits, well wet-smoothed under red decoration
23	19	Pithos rim, buff, roughly applied light brown wash outside, potter's mark. Cf. <i>SAOC</i> No. 10, chart 16 <i>G</i>
24		Thumb-indented ledge handle, coarse buff ware
25	21	Hole-mouth bowl, buff, red wash outside, wavy ledge handle
26	15	Gourd-jar rim, buff, brown-red wash outside. § 150; cf. <i>SAOC</i> No. 10, chart 26
27	17	Spout, pink-buff, dark red matt wash. § 150; cf. <i>SAOC</i> No. 10, chart 23 <i>B</i>
28	17	Jar handle, pink-buff, thick red wash. § 150; cf. <i>SAOC</i> No. 10, chart 23 <i>B</i>
29	17	Jar rim, buff, red highly burnished wash. § 150; cf. <i>SAOC</i> No. 10, chart 23 <i>A</i>
30	14	Inner-ledge bowl, pink-buff, red wash outside and over rim. § 150; cf. <i>SAOC</i> No. 10, chart 19
31	9	Bowl, cream-buff, red wash inside and out, highly burnished. § 150
32	8	Bowl, buff, dark core, dark red wash outside, well burnished. § 150; cf. <i>SAOC</i> No. 10, chart 21 <i>B</i>



SHERDS OF HANDMADE VESSELS FROM STRATUM XX. SCALE, 1:5

No.	Description
STRATUM XX	
1	See Pl. 18:9 and § 156
2	See Pl. 18:8 and § 156
3	See Pl. 18:5 and § 156
4	Cf. Pl. 18:6-7 and see § 156
5	See Pl. 18:10 and § 156
6	Cf. Pl. 18:11 and 14 and see § 156
7	Cf. Pl. 18:1-3 and see § 156
8	See Pl. 18:4 and § 156
9	See Pl. 18:12 and §§ 152 and 156
10	See Pl. 18:13 and §§ 152 and 156
11-12	Hole-mouth jar rims, pink-buff, red wash outside
13	Hole-mouth bowl rim, buff, occasional large stone grits, brown-red wash outside
14	Hole-mouth jar rim, coarse pink-buff ware, straw tempered, roughly wet-smoothed
15	Hole-mouth jar rim, pink-buff, white grits, incised animal(?)
16	Hole-mouth jar rim, buff, numerous calcite grits, brown-red wash outside
17	Jar rim, coarse buff ware, numerous white and gray grits, rough finish (cf. chart XX 4)
18	See Pl. 19:10 and § 157
19	See Pl. 19:9 and § 157
20	See Pl. 19:8 and § 157
21	Jar rim, buff, gray grits, red wash outside
22	See Pl. 19:18 and § 158
23	See Pl. 19:15
24	Hole-mouth bowl rim, buff, white grits, brown-red wash outside
25	See Pl. 15:1 and § 148
26	See Pl. 19:21 and § 158
27	See Pl. 19:19 and § 157
28	See Pl. 19:20 and § 157



SHERDS OF HANDMADE VESSELS FROM STRATUM XX, EXCEPT NO. 25 FROM STRATUM XIX. SCALE, 1:5

No. References to Text and Plates

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- 1 § 10, Pl. 1:2
- 2 § 10
- 3 § 11, Pl. 1:7
- 4 § 10
- 5 § 10, Pl. 1:9
- 6 § 12, Pl. 1:3
- 7 § 10, Pl. 1:1
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- 9 § 14, Pl. 1:6
- 10 § 10, Pl. 1:8
- 11 § 10
- 12 § 10, Pl. 1:5
- 13 §§ 10 and 16
- 14
- 15 §§ 10 and 17
- 16 §§ 10 and 17
- 17 § 17, Pl. 1:12
- 18 §§ 10 and 18, Pl. 1:11
- 19 § 19
- 20 § 19
- 21 § 10
- 22 § 10
- 23
- 24 § 10, Pl. 1:16
- 25 § 10
- 26 § 10, Pl. 1:15
- 27 § 11
- 28 § 10
- 29 § 10, Pl. 1:10
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- 31 § 13, Pl. 1:13
- 32 §§ 10 and 13, Pl. 1:14
- 33
- 34 § 10
- 35 § 14, Pl. 1:4
- 36 § 14
- 37 § 15, Pl. 1:17

STRATUM VII

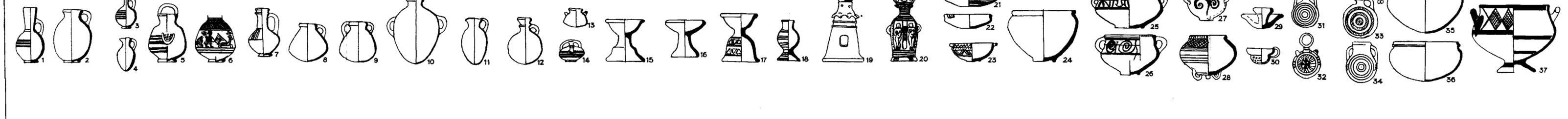
- 1
- 2 § 20, Pl. 1:29
- 3 Pl. 1:25
- 4 § 24, Pl. 1:24
- 5 Pl. 1:21
- 6 Pl. 1:18
- 7 Pl. 1:19
- 8 Pl. 1:22
- 9 §§ 23 and 34, Pl. 1:27

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- 10 §§ 23 and 34
- 11 § 22, Pl. 1:20
- 12 §§ 21-22 and 35, Pl. 2:11
- 13 § 22, Pl. 2:19
- 14 Pl. 1:30
- 15 §§ 23 and 34, Pl. 1:26
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- 27 § 22, Pl. 2:4
- 28 § 26, Pl. 2:1
- 29 §§ 21 and 26, Pl. 2:2
- 30 § 26
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- 48 § 30, Pl. 2:10
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- 50 § 30, Pl. 2:18
- 51 Pl. 2:17
- 52 §§ 18 and 30
- 53 Pl. 2:9
- 54 Pl. 2:16
- 55 § 30
- 56-58
- 59 § 14
- 60 § 22, Pl. 1:23
- 61
- 62 §§ 24-25

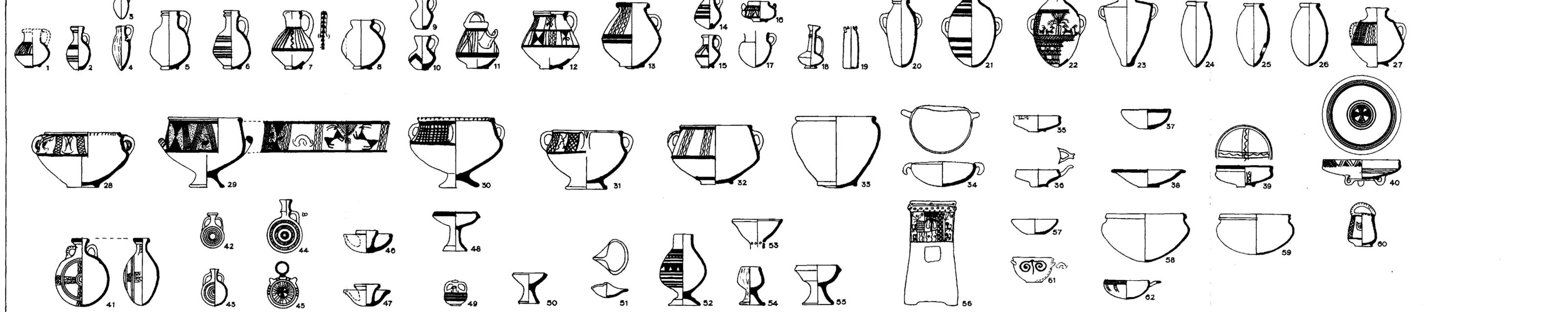
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STRATUM VI



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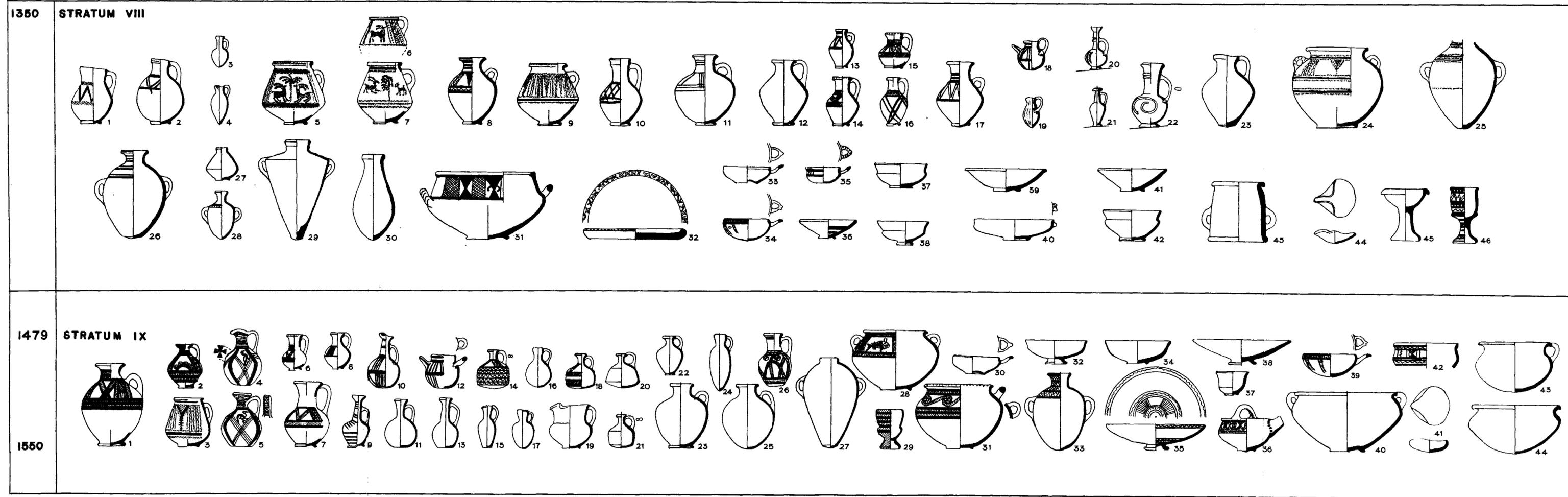
STRATUM VII



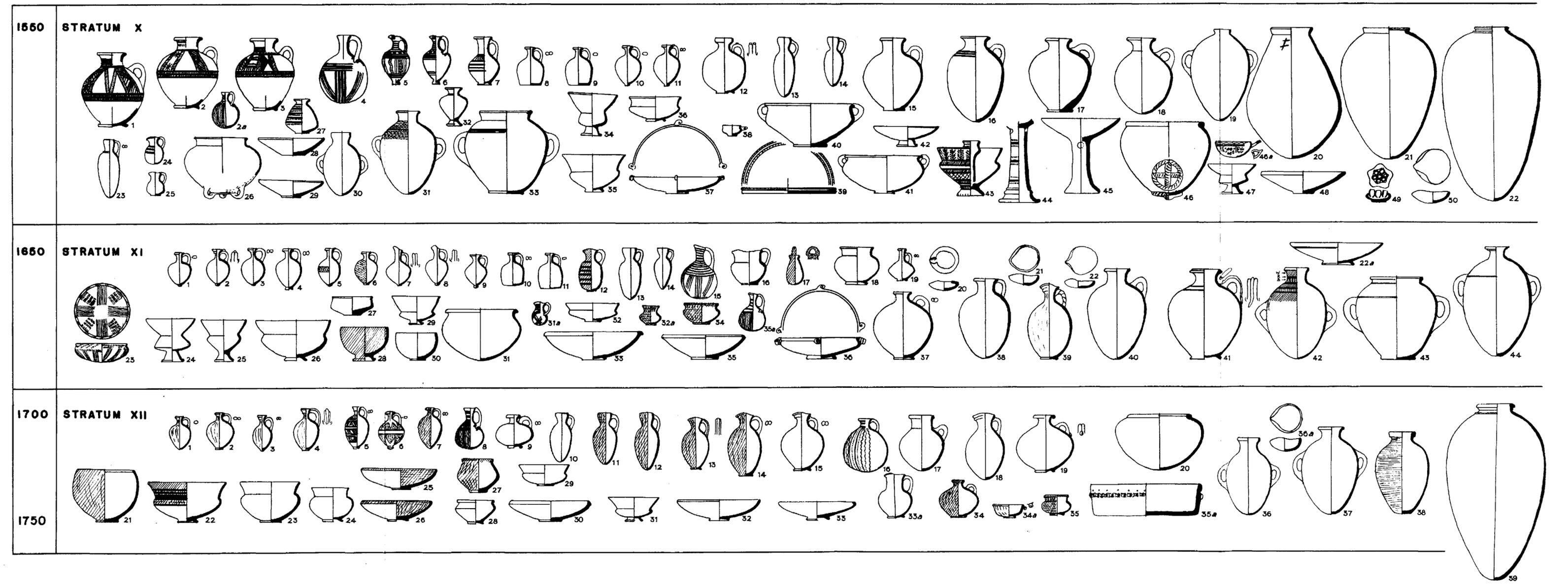
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- No. References to Text and Plates
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 - 2 § 37, Pl. 3:2
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 - 4 Pl. 3:16
 - 5 §§ 35-36, Pl. 3:6
 - 6 §§ 35-36, Pl. 3:8
 - 7 §§ 35-36, Pl. 3:5
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 - 15 § 34, Pl. 3:11
 - 16 § 34, Pl. 3:12
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 - 18 §§ 38 and 50, Pl. 3:9
 - 19 § 24
 - 20 § 38, Pl. 3:20
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 - 28 Pl. 3:17
 - 29 § 28, Pl. 3:23
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 - 4 § 43, Pl. 4:5
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 - 9 § 50, Pl. 4:19
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 - 14 §§ 55 and 59, Pl. 4:13
 - 15 Pl. 4:8
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 - 41 §§ 55 and 85, Pl. 4:27
 - 42 Pl. 4:26
 - 43
 - 44 § 54, Pl. 4:22

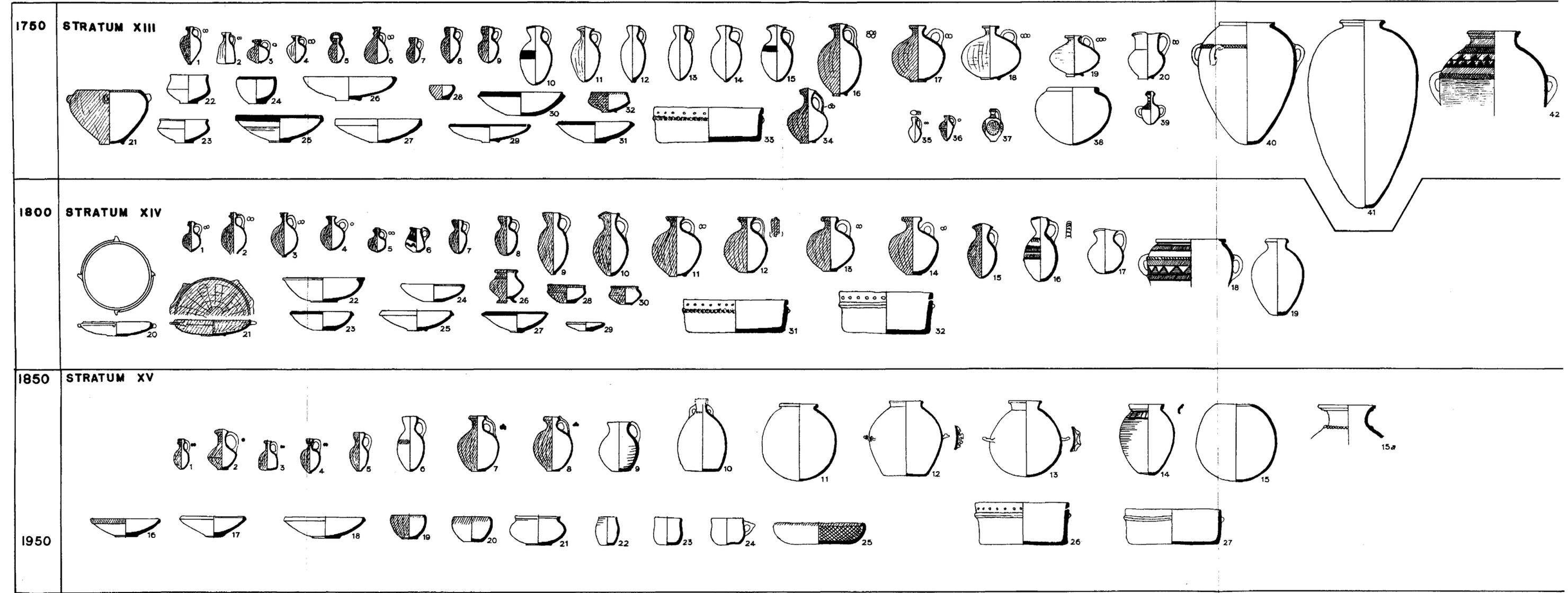


No.	References to Text and Plates	No.	References to Text and Plates	No.	References to Text and Plates
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3	§ 58, Pl. 5:5	4	§ 73	4	§§ 88-89, Pl. 8:9
4	§ 66, Pl. 5:6	5	§§ 74 and 88-89	5	§§ 74 and 88-89, Pl. 8:12
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10	§§ 57 and 59, Pl. 5:12	11		11	§ 90
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12	§§ 61 and 76, Pl. 5:4	13	Pl. 6:15	13	§§ 78 and 90, Pl. 8:3
13	§§ 57 and 60	14	Pl. 6:10	14	
14	§§ 57 and 60	15	Pl. 6:9	15	
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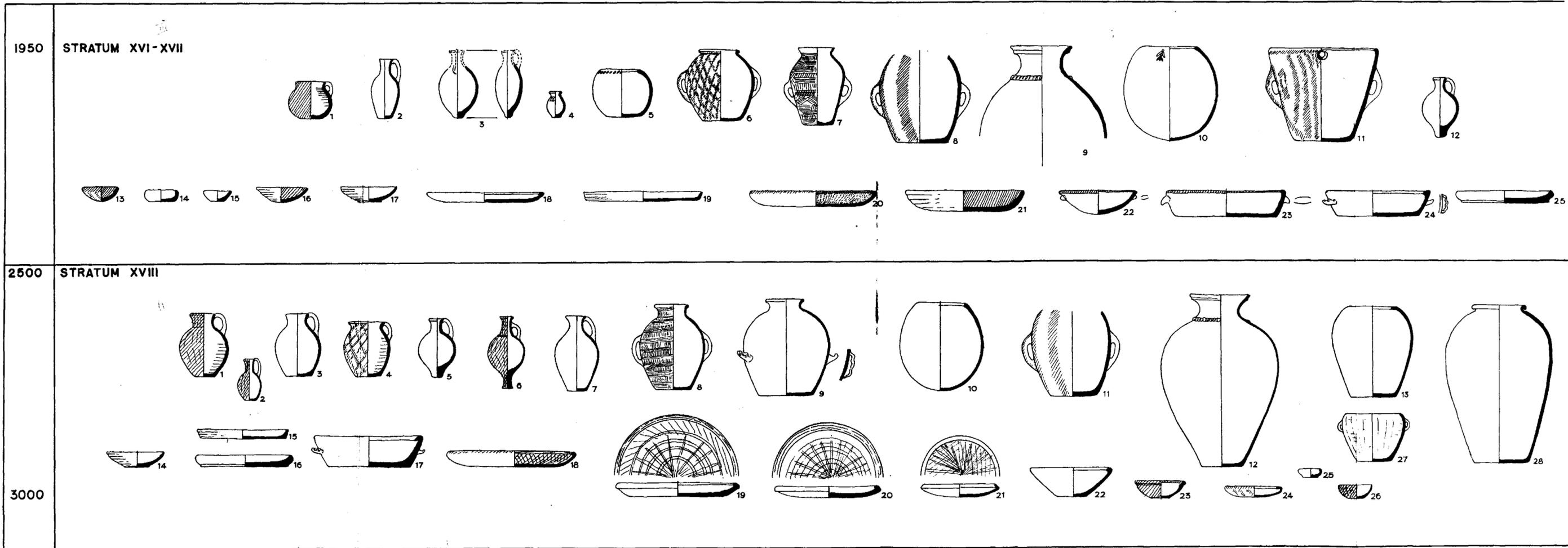


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- 10 Pl. 9:32
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 - 30 §§ 94, 108, and 111, Pl. 9:42
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 - 9 Pl. 10:23
 - 10 §§ 117-20, Pl. 10:24
 - 11 Pl. 12:1-4
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 - 22 § 153, Pl. 15:22 and 25
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- No. References to Text and Plates
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 - 2 § 153, Pl. 19:1
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 - 4 § 154, Pl. 20:17
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 - 7 § 150
 - 8 § 150, Pl. 19:32
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 - 10 § 150
 - 11 §§ 150 and 153, Pl. 18:22
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 - 13 §§ 150 and 153, Pl. 18:20-21
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 - 15 § 150, Pl. 19:26
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