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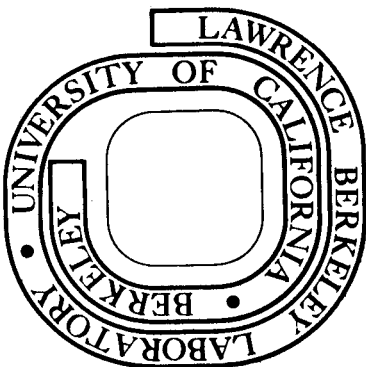
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IMPORTED AND LOCAL BICHROME WARE IN MEGIDDO*

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INTRODUCTION

Examples of the "Palestinian" Bichrome Ware have been found in Turkey, Egypt, the Levant, and in Cyprus. The largest collections of this ware were found in Palestine, at Tell el-'Ajjul and Megiddo; and in eastern Cyprus, at Enkomi and Milia. The total number of vessels and sherds which have been found is not great as compared with other families of exported ceramics, and the life span of the style was quite short. It was well established in Cyprus by the end of the 16th century B.C. and was popular in Palestine in the first part of the 15th century B.C.

Both, W. A. Heurtly⁽¹⁾ and C. Epstein⁽²⁾, who had worked extensively with this material, deduced that the ware was native to Syro-Palestine, but their interpretations as to stylistic antecedents, places of manufacture and evolution diverged considerably. Heurtly arrived at a very detailed set of conclusions which can best be summarized in his own words: "The earlier pre-figure phase represented at Megiddo may, of course, turn up at Tell el-'Ajjul in a stratified context, but, on the present evidence, one would infer that the style originated in the north of Palestine, and that the center of production then passed to the south. It is not unlikely that the vase painter, who transformed the simple into mature style and whose hand can be identified in the majority of the pieces studied, was an itinerate artist, offering his services where there happened to be a demand for them. If so, he seems to have soon established himself in the south, where examples of his work were exported to other parts of Palestine, to Syria, and eventually

to Cyprus. There is a uniformity about the Cyprus group which suggests that they formed part of a single consignment and the form of the jugs can be explained by supposing that they were especially designed to satisfy Cypriote tastes."⁽³⁾

It is seen that Heurtly⁽⁴⁾ constructed his sequence of events in large part from a division of Megiddo pottery into two groups which he correlated with Megiddo stratigraphy. Epstein⁽⁵⁾, however, took exception to his interpretation of Megiddo stratigraphy and was not so sure that the assemblage from 'Ajjul was greatly different from that at Megiddo. Consequently, she would not accept as proved the sequence of events starting with early developments "in the north" and maturation of the style in the hands of a single vase painter who established himself at 'Ajjul.

In our initial study of this problem⁽⁶⁾, we undertook to obtain additional information by determining the actual places of origin of Bichrome Ware excavated at various Palestinian and Cypriote sites. The technique involved neutron activation analyses to obtain the chemical composition of the pottery in fine detail, and in this way to establish 'chemical fingerprints' related to places of origin⁽⁷⁾. The careful stylistic analysis of Bichrome Ware by Epstein and by Heurtly are of great value in describing these wares but historical deductions must be reassessed in the light of our laboratory work which showed that the vast majority of the vessels considered had come from eastern Cyprus. In another study by one of us,⁽⁸⁾ an assessment was made of the typological similarity between the Bichrome Ware and the White Painted family of Cyprus. A brief review will be given of our initial study⁽⁹⁾ which will lead up to the special importance of the Megiddo collection, the subject of the present report.

THE MEGIDDO BICHROME ASSEMBLAGE

The largest collections which we analyzed were excavated at Tell el-'Ajjul and Milia (Cyprus). Of the 39 specimens from Milia, all could be assigned eastern Cyprus origin, and such was the case for 48 of the 54 vessels from 'Ajjul. Sampling from other Palestinian sites (Bethel, Lachish, Tell Hesi and Tel Nagila⁽¹⁰⁾), were more sparse, but all of these vessels also came from Cyprus. From Tel Mor, sherds of Bichrome Ware (which could clearly be identified as such) were also largely from Cyprus although there were a few pieces of probable local manufacture. The clays of the Cypriote group tend to be well levigated, the fabric colors run from buff to pink, and can be described in the Munsell color charts as 7.5 YR 8/4 to 10 YR/8/6. The pinkish slip is smooth, at time wheel-burnished. The two paint colors tend to be intense, often red and blue-black.

The Bichrome ware from Megiddo was dealt with only briefly,⁽¹¹⁾ but the assemblage is particularly interesting because a substantial number of the pieces look different from the main bulk of the Cypriote Ware. Although the fabric colors do not differ greatly from those of the Cypriote wares, the clay is gritty and the fabric porous. Where there is a slip, it is rarely applied well and the paint decorations do not have clear intense colors. On the basis of this fragmentary information, one of us (M.A.) divided the Bichrome Ware from Megiddo into two categories before the Megiddo samples were analyzed. It was here that we encountered in full force the questions raised in Heartly's attempt at a stylistic division of the Bichrome repertory. One of these concerns the possibility of redefining the stylistic boundaries

of what should be included in what is termed 'Bichrome Ware'. But we would like to comment on the stylistic and typological divisions later in this paper.

ANALYTICAL RESULTS

In the tabular results and discussion which follow, the data obtained from individual vessels are grouped according to their chemical homogeneity. A concordance of group members (see page 16) identifies the vessels in each group by our serial numbers. A description of each vessel or sherd from Megiddo, along with other information, will be found in a separate table. We present the chemical results without an explanation of the methodology as this can be found in other publications. (12)

Twenty-six pieces of Bichrome Ware from Megiddo were analyzed. Nine had a chemical profile similar to the profile of large number groups of sherds of Bichrome Ware from Milia and Tell el-'Ajjul, as well as other Palestinian sites -- all shown to be of eastern Cypriote origin. The chemical profiles are shown in Table I and Fig. 1 where they may be compared with the profiles of groups from 'Ajjul and Milia which were taken from the earlier publication. Two other vessels from Megiddo (MEG 46 and 54), which were left out of the Megiddo chemical group because their composition differed slightly, but they also are undoubtedly from Cyprus (see Table III). The conclusion, therefore, is that 11 of the 26 Bichrome vessels from Megiddo are of Cypriote origin.

The group of 9 Cypriote vessels from Megiddo appear again in Table II and Fig. 2 under the heading "Meg. Bichr. I". The adjoining two columns (Meg. Bichr. IIA and IIB) show the results from two other groups, one of nine and the other of five Bichrome vessels from Megiddo.

A comparison of the data in these three columns shows that the compositions are vastly different. More importantly, no pottery with the composition of Meg. Bichr. IIA and IIB has been found among the many analyses made at LBL and elsewhere on Cypriote materials from many sites on Cyprus.

The last column in Table II shows the profile for a group of 5 vessels from Megiddo whose styles are typical of Palestinian pottery of the period. We have assumed that these vessels were made locally although measurements on a large selection of pottery would be necessary to confirm the origin. It is seen from Table II that the group of 5 sherds is chemically indistinguishable from the Bichrome Ware listed under Meg. Bichr. II. We may deduce, therefore, that this Bichrome group as well as Meg. Bichr. IIB, which is chemically close to the two were also made of Megiddo.

Of the remaining Bichrome Ware from Megiddo, a chemical group was made of 5 other pieces (see Table II, third column). These were not combined with the groups Meg. Bichr. II because statistically they did not fit; nevertheless, the pattern of composition was sufficiently similar that we may surmise that they came from the same area.

Two other pieces (Meg. 5, 42) did not match in composition any of the wares discussed above, nor did they match each other. At present, nothing can be said as to the provenience of these vessels.

Typological Study

At this juncture we venture to make a typological division between the Bichrome Ware jugs and tankards of the Cypriote family and those of Palestinian manufacture. As mentioned in the Introduction,

Heurtly divided the Bichrome reportory into stylistic sub-groups which he attempted to correlate with stratigraphy and place of manufacture. Heurtly assumed that all the Bichrome Ware had a Palestinian origin, but we can now examine stylistic features with the knowledge of which vessels were made in Cyprus and which in Palestine. Most of the provenience determinations in this work were made on sherds and, therefore, it is impossible to arrive at a full typological description for all the types of the two families. Nevertheless, sherds do afford a view of the color and texture of the fabric, color and artistry of the decorations, and something of the quality of workmanship. For an accurate picture of vessel shape and dimension, a substantial part of the vessel must be available. Only for tankards and jugs were we able to take samples from a substantial number of whole vessels. With the criteria in Epstein's study⁽¹³⁾, the tankards can be divided into two groups: the type represented in Plate II, 1-3 is Palestinian, whereas that illustrated in Plate II, 4-6 is Cypriote.

If we compare the two families to one another, we can see the following differences:

1. The fabric of the Palestinian family tends to be porous and gritty while the Cypriote family was made from a finer clay.
2. The painted decoration of the Palestinian family appears mainly on the upper part of the body, occasionally on the lower part of the neck. The Cypriote potters decorated the upper part of the body, the whole neck, and at times even the rim and handle. (see: Fig. 3).
3. The colors used for painting on the two families are perceptibly different. Palestinian colors are brown and a light red which often borders on pink (Munsell Soil Color Charts Hue

10 R 6/6). In the Cypriote family, one of the colors is often blue-black, and the other, brown-red.

4. The Palestinian artists seemed to have used a narrower brush for their decoration than did the Cypriotes. This is true especially in the geometric decoration and line decoration. The use of the thicker brush did not, however, stop the Cypriote artists from achieving rather beautiful thin lines when desired.
5. The animal motifs which we associate with the Bichrome Ware are found almost exclusively on Cypriote rather than Palestinian vessels.
6. Among the tankards, there are dimensional differences between the Cypriote and Palestinian families. This feature and others mentioned are now discussed more fully.

Referring to Fig. 3, we see two jugs of the "tankard" type; that on the left represents the Palestinian style, that on the right is Cypriote. The height of the neck (rim to shoulder) is compared with the height of the body (shoulder to base) and one finds a ratio .50 - .55 for Palestinian vessels and .75 - .80 for those from Cyprus. For the particular vessels shown in Fig. 3 the respective ratios are .54 and .80. The Cypriote vessels of this form generally have a wider neck than the Palestinian counterpart. In other terms, in the Palestinian tankard, the neck is about 30-35% of the total vessel height, while the Cypriote tankard necks comprise about 40-45%.

The same two vessels are shown in the central field of Fig. 4 along with a decorated Palestinian jug of a Late Bronze period and a Cypriote tankard of the White Painted family. The same features which separate the Palestinian Bichrome Ware from the Cypriote Bichrome can be seen here in an amplified form. The Cypriote tradition of the long neck was followed in their production of the Bichrome Ware.

The paintings of the Megiddo group and those of Cyprus show differences as seen both in the decoration itself and its position on the vessel. The Palestinian tankards tend to be decorated in a simple manner, usually with a band around the bottom of the neck which may have more than one painted line, and another horizontal band in the middle part of the body. There are vertical bands in either straight lines or at slight angles which connect the two horizontal bands. The vertical lines consist of interchangeable two-color lines in between which there may be a fishbone or net decoration. There are usually three such bands leaving a space for an empty metope which is either triangular or trapezoidal according to the shape of the vessel. There are, of course, many variations which follow these general patterns. Among the Cypriote types, however, we have horizontal lines which divide the neck and half of the body into a wide band which is then redivided by vertical lines permitting several metopes. The neck, because of its almost uniform width from rim to body, becomes a field of squares and rectangles large enough to be filled with additional motifs, such as the union jack or spoked wheel, etc., or even animal motifs.

Most of the sampled Bichrome Ware sherds which had animal motifs on them were of Cypriote manufacture. However, there is the example of a bird, looking much like a duck, from Tell el-'Ajjul which is of Palestinian manufacture. It would be dangerous to divide the two groups by the quality of their decoration, however; a krater, #33 1536 from 'Ajjul, now at the Rockefeller Museum in Jerusalem, has a rather primitive bird decoration which looks more like a chick and is of Cypriote manufacture. On the other hand, a jug from Megiddo, P. 4393

at the Rockefeller Museum, which has not been sampled by us, has a nicely drawn bird which, although unusual for this repertory, is probably of non-Cypriote manufacture because of its shape and the rest of its decoration. In the same way, one can compare the Bichrome vessels from Milia tombs 10 and 13. While tomb 10 has a large collection of masterfully executed Bichrome Ware vessels, tomb 13 has many rather plain examples of the Ware. However the vessels from both tombs were produced in eastern Cyprus.

CONCLUSION

As our work has shown there are two distinct families of the Bichrome Ware: one which originates in Cyprus, and is found there at the end of the Middle Bronze period; and the other, which is probably local to Megiddo and mostly is found in Megiddo in the stratum IX. We have previously mentioned that W. A. Heurtly has noticed the difference between the two families: but attributed it to a stylistic maturation within a single cultural milieu.

Since we are obviously dealing with at least two distinct families of the Bichrome Ware, the Milia - Tell el-'Ajjul group and the Megiddo group, we have to reevaluate some of the conclusions which have been reached by the archaeologists who have used the Bichrome Ware in their studies as a single family. There is no doubt that the Bichrome Ware in Cyprus, in such places as Nitovikla, Milia, and Stephanía, appears in the Middle Cypriote period or the beginning of the Late Cypriote period which corresponds with the last part of the Middle Bronze period of Syro-Palestine. The Megiddo group, which is found mainly

in the stratum IX in Megiddo, seems to be a true Late Bronze occurrence, most likely in the time which corresponds with the post Ahmosis destruction of the southern cities (ca. 1570 B.C.). We feel that this chronological difference between the two families may explain the absence of Bichrome Ware in such a site as Tell Beit Mirsim. We do not mean to imply that the beginning of manufacture of Bichrome Ware in Palestine occurred only after the Cypriote Bichrome Ware ceased to be made. We would warn archaeologists of the danger of the application of the Megiddo Bichrome group's time period to other sites, especially coastal sites such as Tell el-'Ajjul or Alalah, since they may have a Bichrome Ware assemblage which may be of the earlier Cypriote type.

We have mentioned differences between the Cypriote Bichrome Ware production found in the two tombs in Milia, Cyprus, but on the whole, the assemblage found in eastern Cyprus is more uniform than that of Megiddo. While there are samples of Cypriote Bichrome Ware in Megiddo and other Palestinian sites, there has been no evidence until now of Megiddo or other Palestinian Bichrome Ware products in Cyprus.

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Concordance of Group Members

Table I:

Megiddo Cypriote Bichrome Ware: Meg. 44, 45, 47, 48, 49, 51, 52,
59, 67

'Ajjul Bichrome Ware: Aju. 1, 4, 6, 7, 9, 11, 22, 23, 24, 29,
30, 31, 32, 33, 34, 36, 38, 39, 46, 47, 48, 49, 51, 53, 54, 56, 57,
58, 60, 61, 62, 63, 64, 65, 76, 77

Milia Bichrome Ware: Mla. 24, 27, 28, 57, 301, 302, 304, 305,
307, 308, 309, 311, 312, 313, 314, 316, 317, 319, 320, 321, 322, 323,
324, 325, 326, 327, 329

Table II:

Megiddo Cypriote Bichrome I: see Table I

Megiddo Bichrome IIA: Meg. 3, 25, 26, 35, 36, 40, 41, 50, 60

Megiddo Bichrome IIB: Meg. 2, 4, 37, 39, 53

Megiddo non-Bichrome: Meg. 38, 43, 55, 56, 58

Table III:

Milia Bichrome Ware: see Table I

Megiddo 46

Megiddo 54

Megiddo Bichrome IIA: see Table II

TABLE I. Comparison of Bichrome Wares from Megiddo and Tell el-'Ajjul, Israel and Milia, Cyprus.

	Meg. Bichr. ^a (9 pieces) M ± σ	Aju. Bichr. ^b (36 pieces) M ± σ	Mla. Bichr. ^c (27 pieces) M ± σ
Fe(%) ^d	5.45 ± 0.32	5.54 ± 0.23	5.54 ± 0.23
Ta	0.671 ± 0.050	0.691 ± 0.034	0.741 ± 0.046
Sc	22.09 ± 1.18	22.08 ± 0.92	23.50 ± 0.65
Co	31.03 ± 4.15	30.54 ± 1.78	31.33 ± 3.20
Cs	4.6 ± 0.4	4.7 ± 0.5	4.7 ± 0.4
Cr	319 ± 28	351 ± 68	346 ± 31
Hf	3.28 ± 0.44	3.31 ± 0.43	3.49 ± 0.39
Th	6.65 ± 0.34	7.05 ± 0.46	7.34 ± 0.54
Ni	249 ± 33	251 ± 21	276 ± 21
Rb	93 ± 15	95 ± 25	84 ± 17
La	20.9 ± 2.2	21.2 ± 1.2	20.4 ± 2.1
Lu	0.316 ± 0.019	0.319 ± 0.019	0.329 ± 0.027
U	2.12 ± 0.61	2.56 ± 0.92	1.85 ± 0.17
Ti(%)	0.443 ± 0.039	0.410 ± 0.055	0.458 ± 0.032
Mn	997 ± 74	973 ± 99	984 ± 172
Na(%)	1.094 ± 0.137	1.074 ± 0.187	1.114 ± 0.178
Al(%)	7.02 ± 0.49	6.85 ± 0.39	7.08 ± 0.31
Ca(%)	10.95 ± 1.93	9.8 ± 1.7	6.16 ± 1.70

^a Meg.Bichr. is a group of 9 pieces of Bichrome Ware from Megiddo.

^b Aju.Bichr. is a group of 36 pieces of Bichrome Ware from Tell el-'Ajjul.

^c Mla.Bichr. is a group of 27 pieces of Bichrome Ware from Milia.

^d The entries for the respective elements are, in this case, group mean values (M) plus and minus the standard deviations (±σ). They are all in units of parts-per-million unless designated by percent (%).

TABLE II. Comparison of Megiddo Cypriote Bichrome Ware, non-Cypriote Bichrome Ware, and Megiddo non-Bichrome Ware.

	Meg. Bichr. I ^a (9 pieces) M ± σ	Meg. Bichr. IIA ^b (9 pieces) M ± σ	Meg. Bichr. IIB ^c (5 pieces) M ± σ	Meg. Non-Bichr. ^d (5 pieces) M ± σ
Fe(%)	5.45 ± 0.32	2.86 ± 0.25	2.33 ± 0.05	2.76 ± 0.19
Ta	0.671 ± 0.050	0.851 ± 0.077	0.722 ± 0.027	0.872 ± 0.078
Sc	22.09 ± 1.18	10.36 ± 0.94	8.87 ± 9.19	10.00 ± 0.20
Co	31.03 ± 4.15	22.90 ± 4.20	16.77 ± 1.25	25.00 ± 3.55
Cs	4.6 ± 0.4	1.0 ± 0.4	0.9 ± 0.1	1.1 ± 0.2
Cr	319 ± 27	137 ± 16	118 ± 9	120 ± 10
Hf	3.28 ± 0.44	5.92 ± 0.66	4.66 ± 0.24	5.82 ± 0.41
Th	6.65 ± 0.34	5.02 ± 0.39	4.06 ± 0.29	5.08 ± 0.26
Ni	249 ± 33	81 ± 23	56 ± 12	76 ± 15
Rb	93 ± 15	30 ± 10	23 ± 3	35 ± 6
La	20.9 ± 2.2	27.8 ± 2.1	24.74 ± 1.28	28.3 ± 2.3
Lu	0.316 ± 0.019	0.426 ± 0.060	0.365 ± 0.023	0.413 ± 0.044
U	2.12 ± 0.61	3.18 ± 0.065	2.85 ± 0.25	2.92 ± 0.34
Ti(%)	0.413 ± 0.039	0.423 ± 0.066	0.333 ± 0.031	0.419 ± 0.070
Mn	997 ± 74	967 ± 257	682 ± 30	1066 ± 228
Na(%)	1.01 ± 0.14	0.31 ± 0.09	0.28 ± 0.06	0.31 ± 0.06
Al(%)	7.02 ± 0.49	3.36 ± 0.25	27.74 ± 0.11	3.30 ± 0.07
Ca(%)	10.95 ± 1.93	18.80 ± 2.30	20.94 ± 0.95	19.87 ± 1.29

^aMeg. Bichr. I is a group of nine Cypriote Bichrome pieces excavated at Megiddo; same group as in Table I.

^bMeg. Bichr. IIA is a group of nine local Bichrome pieces excavated at Megiddo.

^cMeg. Bichr. IIB is a group of five local Bichrome pieces excavated at Megiddo.

^dMeg. Non-Bichr. is a group of five non-Bichrome pieces excavated at and local to Megiddo.

TABLE III. Comparison of Cypriote Bichrome Ware from Milia, two Cypriote, Bichrome pieces from Megiddo and non-Cypriote

	Mla. Bichr. ^a (27 pieces) M ± σ	Meg. 46 ^b	Meg. 54 ^b	Meg. Bichr. IIA ^c (9 pieces) M ± σ
Fe	5.54 ± 0.23	5.49	5.36	2.86 ± 0.25
Ta	0.741 ± 0.046	0.876	0.614	0.851 ± 0.077
Sc	23.50 ± 0.65	22.01	20.93	10.36 ± 0.94
Co	31.33 ± 3.20	29.59	30.60	22.90 ± 4.20
Cs	4.7 ± 0.4	4.5	3.8	1.0 ± 0.4
Cr	346 ± 31	602	655	137 ± 16
Hf	3.49 ± 0.39	3.41	2.88	5.92 ± 0.66
Th	7.34 ± 0.54	6.42	5.41	5.02 ± 0.39
Ni	276 ± 21	303	275	81 ± 23
Rb	84 ± 17	113	63	30 ± 10
La	20.4 ± 2.1	18.95	19.63	27.8 ± 2.1
L7	0.329 ± 0.027	0.287	0.277	0.426 ± 0.060
U	1.85 ± 0.17	2.03	1.86	3.18 ± 0.065
Ti%	0.458 ± 0.032	0.479	0.400	0.423 ± 0.066
Mn	984 ± 172	877	879	967 ± 257
Na%	1.114 ± 0.178	1.170	1.175	0.31 ± 0.09
Al%	7.08 ± 0.31	6.91	6.40	3.36 ± 0.25
Ca%	6.16 ± 1.70	7.49	9.60	18.80 ± 2.30

^asee: Table I^bsingle piece excavated at Megiddo^csee: Table II

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DESCRIPTION OF VESSELS AND SHERDS

Sample No.	Present Location and Identification No.	Publication	Field	Munsell color chart (body/paint)	Description
Meg.2	Rockefeller Museum Israel Dept. of Antiquities 36.1923	Meg.II 59:18(?)* Meg.II 135:10(?)	a.783 T.2104(?)		Juglet. Globular body, medium concave neck, handle from rim to shoulder, two(?) color decoration.
Meg.3	Rockefeller Museum Israel Dept. of Antiquities 34.2152				Jug. Globular body, medium flaring neck, handle from rim to shoulder, two color decoration.
Meg.4	Rockefeller Museum Israel Dept. of Antiquities 37.861	Meg.II 51:10 Meg.II 133:22	T.3024		Jug teapot. Globular body slightly carinated spout, beginning of basket handle, two color decoration.
Meg.5	Rockefeller Museum Israel Dept. of Antiquities I.3349				Jug. Globular body, slightly carinated medium concave neck, handle on shoulder, two color decoration.
Meg.25	Rockefeller Museum Israel Dept. of Antiquities 49-1360	Meg.II 49:8 C.E. X:16**	T.5013G		Jug/tankard. Globular body, slightly carinated, tall wide concave neck, handle from rim to shoulder, two color decoration. 25.7 cm
Meg.26	Rockefeller Museum Israel Dept. of Antiquities 49-1382	Meg.II 33:8(?)	T.3063(?)		Jug. Globular body, short medium wide concave neck, shoulder handle, two color decoration from middle of neck below the shoulder. Height: 15.5 cm.

*G. Loud, Megiddo II. Seasons of 1935-1939. Oriental Institute Publication LXII, Chicago, 1948.

**Claire Epstein, The Palestinian Bichrome Ware. Brill, Reiden, 1966.

Sample No.	Present Location and Identification No.	Publication	Field	Munsell color chart (body/paint)	Description
Meg.35	Oriental Institute Univ. of Chicago (O.I.C.) A-28243	Meg.II 49:4 Meg.II 132:7	a.1032 T.2127	10 YR 7/4 10 R 5/6 10 R 4/1	Juglet/tankard. Globular body, slightly carinated. Tall wide concave neck. Handle from rim to shoulder, two color decoration from beginning of neck to carination, one color decoration on handle. Height: 12 cm.
Meg.36	O.I.C.	Meg.II 49:17 Meg.II 133:5	A.1035	10 YR 7/3 7.5 R 4/4 5 R 4/1	Jug. Globular body, short concave neck. Handle from rim to shoulder. Two color decoration from beginning of neck to middle of body. Height: 16.5 cm
Meg.37	O.I.C. A-20830A	Meg.II 132:11	A.1090 T.2132	10 YR 7/4 2.5 YR 4/6 10 R 3/1	Jug. Ovoid body, medium narrow concave neck. Handle from rim/neck to body, two color decoration from beginning of neck to about 2/3 length of body. Height: 19 cm.
Meg.38	O.I.C. A-12904		3243	7.5 YR 7/4 10 R 5/6	Juglet. Globular body, narrow concave neck. Handle from top of neck to shoulder, one color decoration from beginning of neck to along 1/3 length of body. Large white inclusions.
Meg.39	O.I.C. A-20808	Meg.II 49:16 Meg.II 133:4	A.1006	7.5 YR 7/4 10 R 5/4 10 R 3/1	Juglet. Globular body, long medium concave neck. Beginning of handle at shoulder, rest missing. Decoration on lower third of neck and upper 2/3 body. Height: 13 cm.

Sample No.	Present Location and Identification No.	Publication	Field	Munsell color chart (body/paint)	Description
Meg.40	O.I.C. A-28436	Meg.II 49:7 Meg.II 132:9	a.827	10 YR 7/4 7.5 R 4/4 10 R 3/1	Jug/tankard(?). Globular slight carination. Tall medium concave neck. Handle from rim to shoulder. Two color decoration from beginning of neck to shoulder. Height: 24 cm
Meg.41	O.I.C. A-20649/233	Meg.II 49:14 Meg.II 133:1	T.2010	7.5 YR 7/4 10 YR 5/8 10 R 3/1	Juglet. Globular slightly carinated body. Wide concave neck, handle from top of neck to shoulder (most missing). Decoration from above top of beginning of neck to below carination. Height: 16 cm.
Meg.42	O.I.C. A-20697		a.73	10 HR 7/4 7.5 R 4/4 10 R 3/1	Jug. Globular body, slight carination. Short medium wide concave neck. Shoulder handle, two color decoration from middle of neck to carination. Height: 18 cm
Meg.43	O.I.C. A-20806	Meg.II 48:11	a.1004	10 YR 7/3	Jug. Globular body, slightly carinated. Medium concave neck. Handle from upper part of neck to shoulder, no decoration.
Meg.44	O.I.C. no number	Meg.II 56:3 Meg.II 134:2	1124	10 YR 7/4 7.5 R 3/4 10 R 3/1	Krater fragment. Globular body, slightly carinated. Two shoulder handles (one still extinct). Two color decoration. Fish motif in neetope, handle also decorated.

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Sample No.	Present Location and Identification No.	Publication	Field	Munsell color chart (body/paint)	Description
Meg.45	O.I.C. A-20811	Meg.II 56:7	a.1012	10 YR 7/3 7.5 R 4/4 10 R 3/1	Krater fragment. Globular body, two color decoration. Spoked wheel and fish motif.
Meg.46	O.I.C. no number	C.E. XVI:6	Rm. of T.3018	10 YR 7/3 7.5 R 4/4 10 R 3/1	Krater(?) fragment. Globular body, two color decoration, spoked wheel motif, 10×8 cm.
Meg.47	O.I.C. no number	C.E. XVII:7	E=T.3004		Krater fragment. Globular body, two color decoration. Spoked-wheel motif.
Meg.48	O.I.C. no number		no field number	10 YR 7/6 5 YR 3/6 10 R 3/4	Krater(?) fragment. Two color decoration. Part of a head of a horned bull. 4.5×4.5 cm.
Meg.49	O.I.C.	C.E. XVIII:5	NW-3011	10 YR 7/3 5 YR 3/1 10 YR 3/6	Krater fragment. Two color decoration, two fish. 18×18 cm.
Meg.50	O.I.C. A-13995			7.5 YR 7/4 10 YR 6/4 10 YR 3/2	Tankard shoulder sherd. Two color decoration, gritty. 9×10 cm.
Meg.51	O.I.C. A-13603			5 YR 7/3 T/5/ R N4 10 R 4/8	Krater(?), fragment in PBW, two color decoration. Part of a bird and horizontal lines below it. 12.5×13.5 cm
Meg.52					
Meg.53	O.I.C. no number	no number		5 YR 7/2 2.5 YR 4/6 5 YR 2.5/2	Tankard(?) fragment. Two color decoration, gritty. 6×6 cm.

Sample No.	Present location and Identification No.	Publication	Field	Munsell color chart (body/paint)	Description
Meg.54	O.I.C. A-14023B			5 YR 7/2 10 R 4/8 10 R 2.5/1	Tankard(?) fragment. Two color decoration. 9 x 7 cm.
Meg.55	O.I.C.		N-3019	7.5 YR 7/4 7.5 R 4/4	Fragment, double handle, brown decoration, gritty ware. 6.5 x 13 cm.
Meg.56	O.I.C.		N-3019	7.5 YR 7/4 7.5 R 3/2	Rim fragment, brown vertical decoration. Gritty ware. 8 x 7 cm.
Meg.58	O.I.C.		NW-3011	10 YR 7/2 5 R 3/4	Tankard(?) body fragment. Brown decoration, gritty ware. 9 x 6 cm.
Meg.59	O.I.C.		SW-2041	10 YR 7/6 5 RYR 3/6 10 YR 3/4	Krater fragment. Two color decoration. Spoked wheel motif.
Meg.60	O.I.C. A-28550		P-5760		Teapot, handle missing. Two color decoration. 8.5 cm.
Meg.66	O.I.C. A-13125			10 YR 7/6	Jug, undecorated. In PBW. 22 cm, well made and fired.
Meg.67	Hebrew University surface sherd		Surface find		Krater sherd with decoration of a fish.

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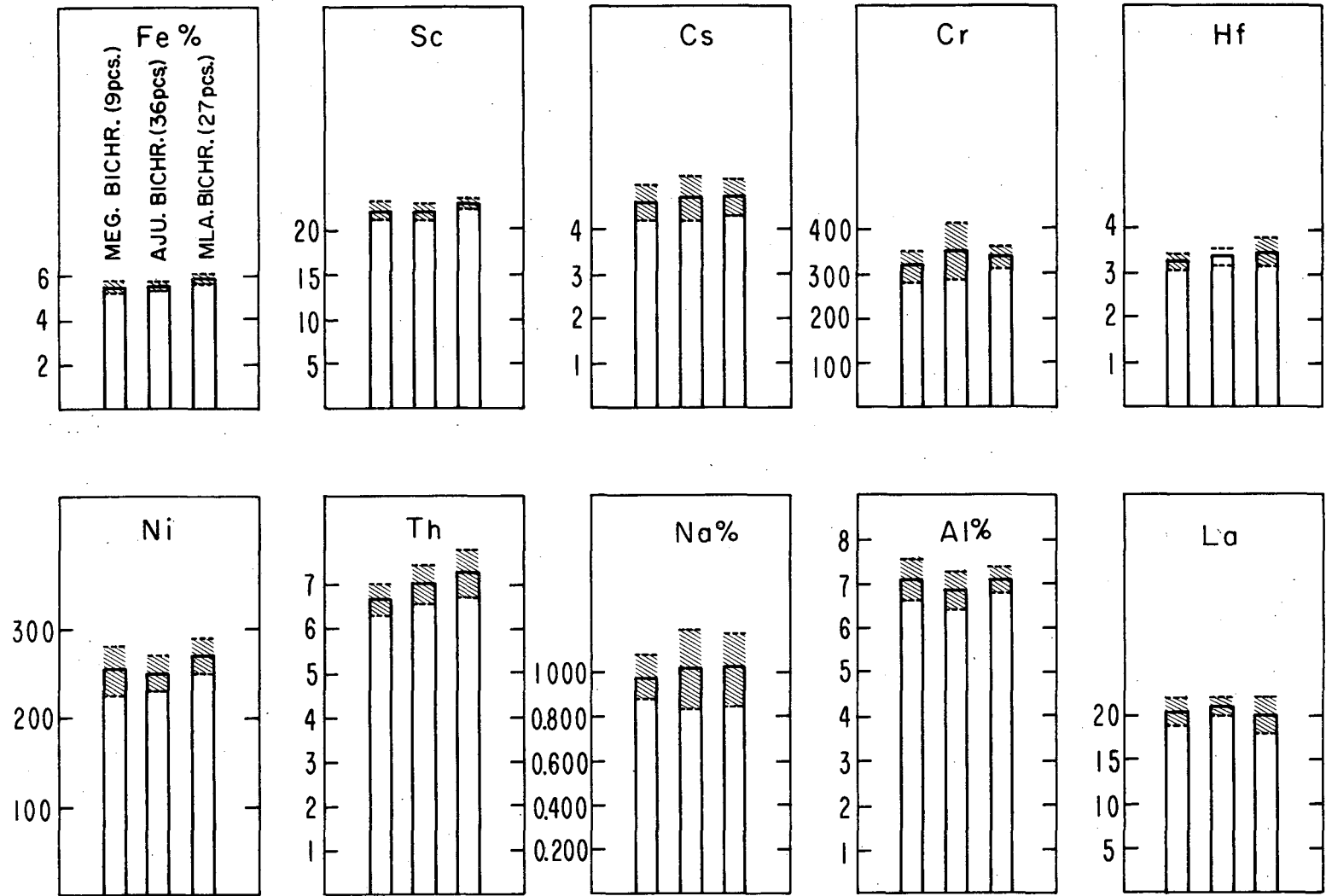


Fig. 1

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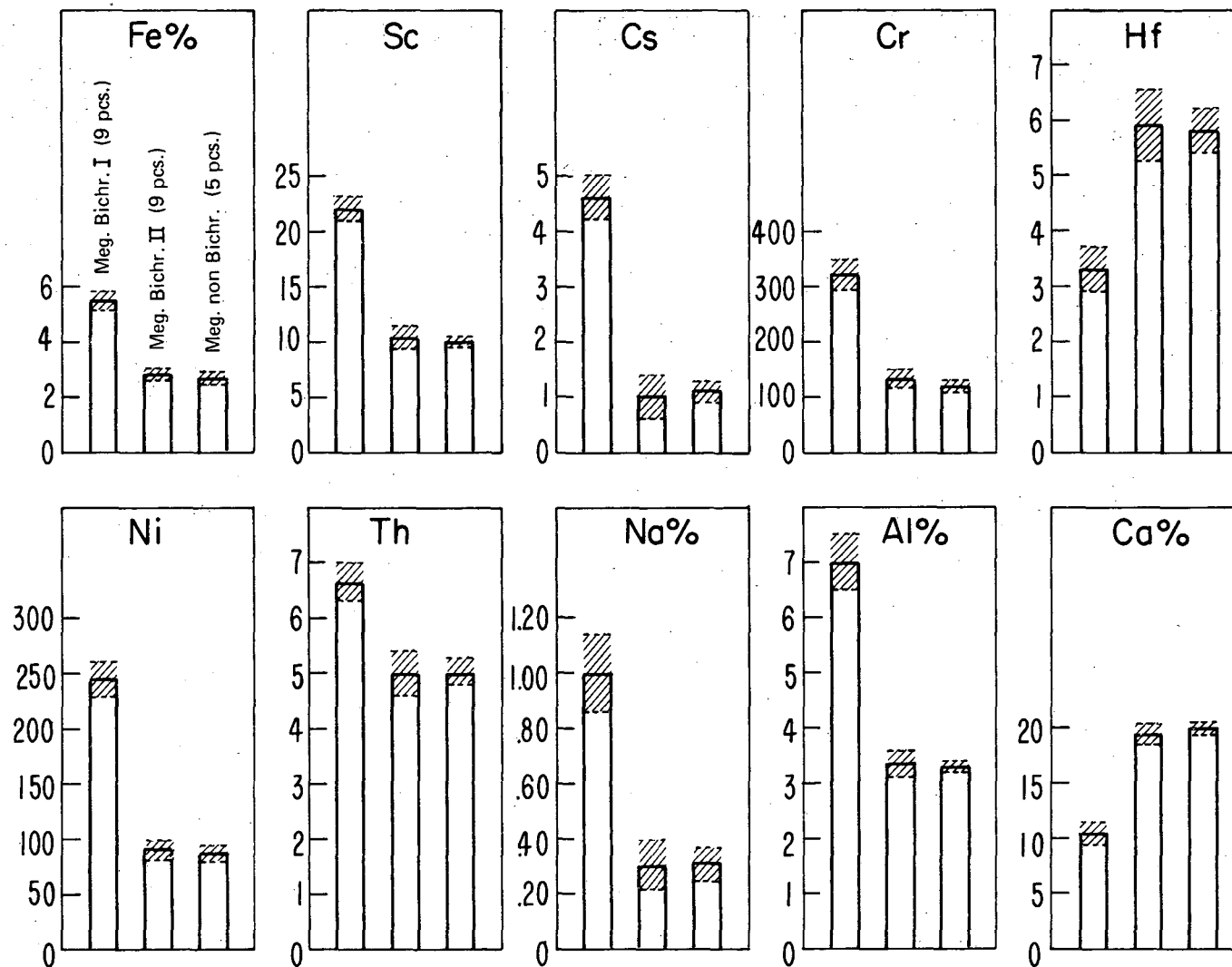
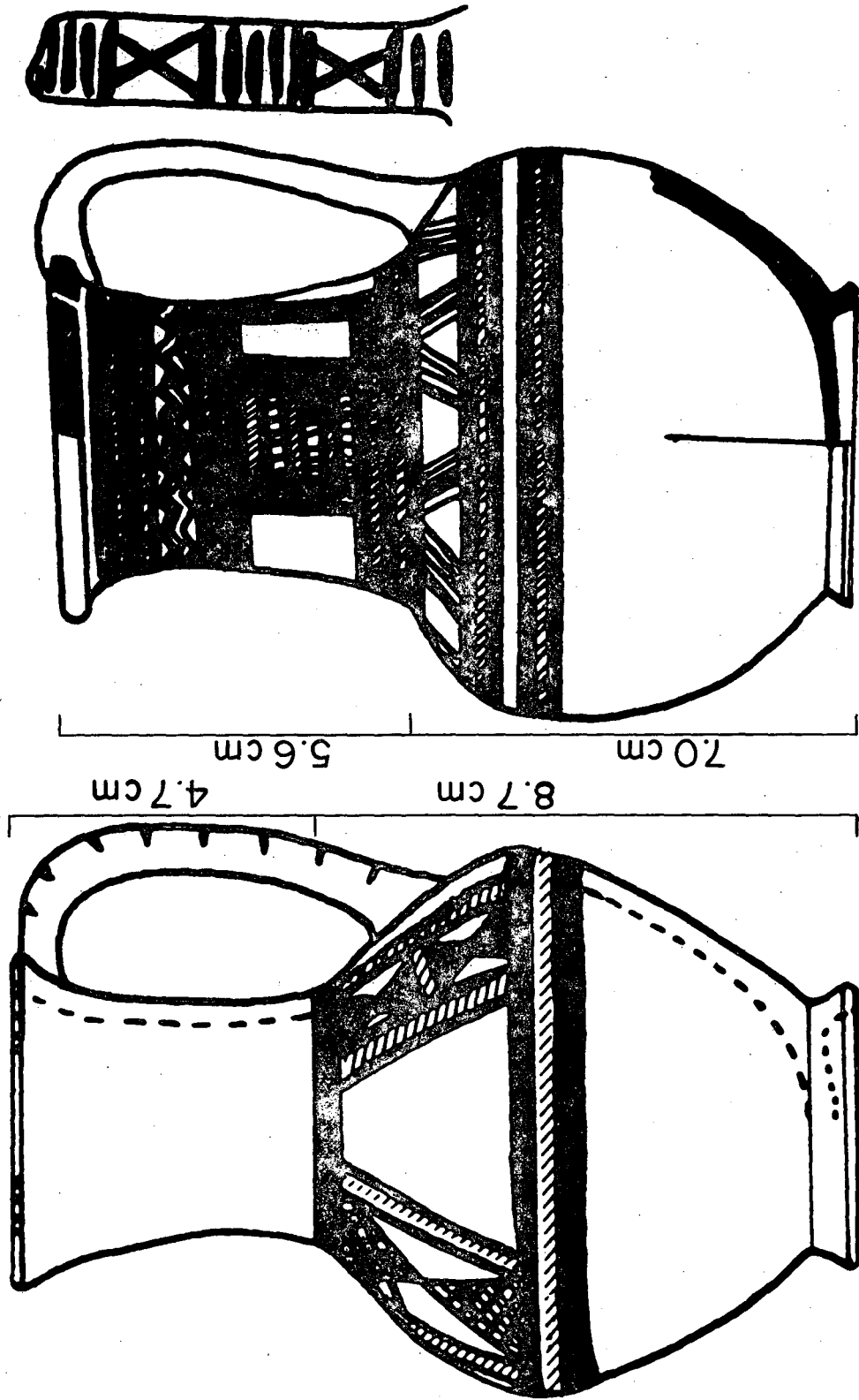


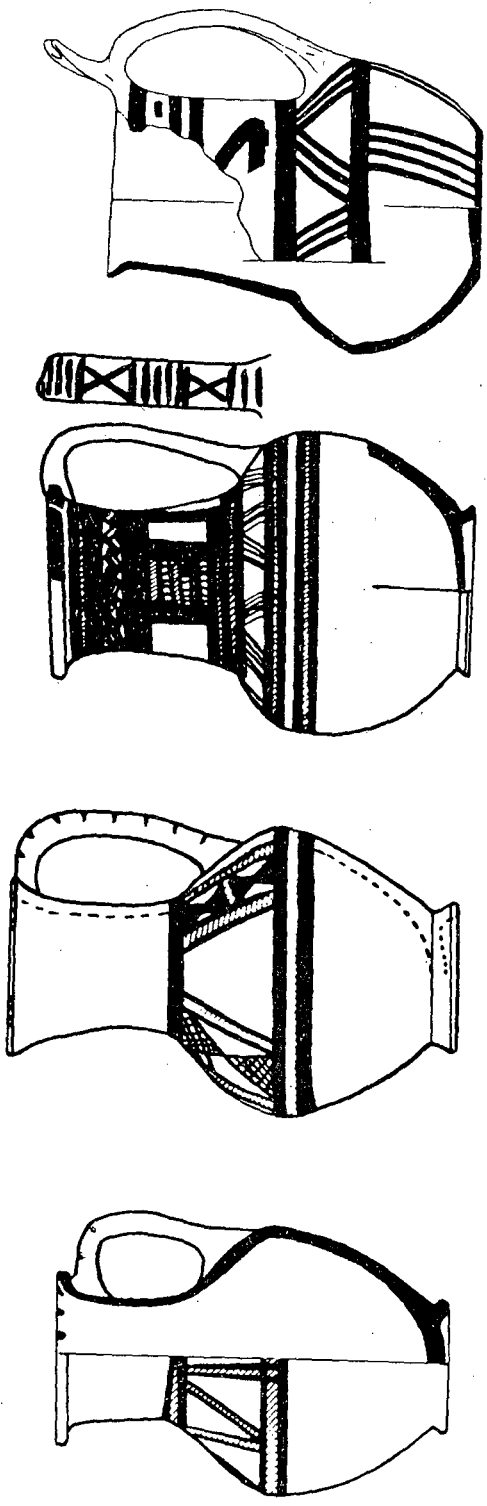
Fig. 2

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Fig. 3



XBL 765-1866

Fig. 4

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