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**ORÍGENS, EMERGÈNCIA I
DESENVOLUPAMENT
DE LA CERÀMICA HALAF A SÍRIA.**

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3. AREA L. THE SOUNDINGS

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3.1. Description of the site and the work done ¹

The site of Tell Amarna came to be excavated as a result of the Syrian authorities having plans to build a new dam (Teshrine dam), which would create a large artificial lake arriving all the way up to near the Turkish border and theoretically flooding several archaeological sites (see above Pl. 1.2). Geomorphologically, Tell Amarna is located on the right bank of the upper Syrian Euphrates basin on the low terrace extended along both sides of the river with wide fertile plains where many human settlements of diverse periods were strategically placed. The present day average annual rainfall is characterised by conditions between 250 mm and 500 mm, just over the crucial 250 mm isohyets suitable for dry-farming agriculture.

These good conditions made Tell Amarna a suitable site for a regional research project oriented to a better understanding of the organization of the settlement and the chronology of the Halaf period. This is a period that still has serious deficiencies when interpreting the society, not only in terms of origins and chronology but also of economic and social organization. As we will see later on in chapter 12, little research concerning Halaf society has been carried out, especially in the middle Euphrates valley. Investigation at Tell Amarna was focused as a regionally oriented project related to Tell Halula, both of which being located in an ecologically and geographically homogeneous area where are attested many prehistoric sites. The investigation is centred on Halaf period in the middle Euphrates.

The first Halaf remains at Tell Amarna were found in 1992 by the Liège University archaeological expedition, conducted by Ö. Tunca. At that time a survey being held 500 m away, south-east of the main tell, had provided a large quantity of Halaf pottery sherds coming from trenches that had been opened in a very small wadi descending from the nearby mountains (TUNCA, 1993). The existence of a possible Halaf site was confirmed but no further excavations after 1993 were conducted at this place until a cooperation programme between the Liège University archaeological expedition and the Spanish archaeological mission at Tell Halula started in 1997.

The first joint archaeological excavations in this area of Tell Amarna took place in May 1997 with the use of two different strategies. The revision and evaluation of the archaeological material that had been retrieved by the University of Liège expedition in 1992-1993 (named "Chantier L" with L.11-12-13 and 14)

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¹ For the excavation system used at Tell Amarna, see above in this volume chapter 1. Introduction. Abbreviations used: L.: locus; E: East; W: West; N: North; S: South.

and the opening of two new test soundings (L.15a and L.15b) in order to establish any spatial and structural relationships that could be remaining at the site. The results of this first work were published in a preliminary paper (CRUELLES, 1998).

A second archaeological season took place in the same year (September-October 1997), conducted by Walter Cruells with the help of Mercè Ganganells from the *Universitat Autònoma de Barcelona*. At that time, the goals were to establish the approximate dimensions of the site through an intensive surface survey, to find out the range of cultural materials, establish the stratigraphic sequence and to look for any architectural structures. In this way, it would be able to relate artifacts within a habitation context as well as obtaining as many remains and samples as possible to help in understanding the nature of the site and to determine the life span of the settlement.

To reach our goals, we started the archaeological work by organizing two teams conducted by the archaeologists already mentioned along with the help of fifteen workers from the local area. The fieldwork began with a superficial evaluation of the area making a visual survey of about 4,000 square metres before choosing the soundings to be opened (see Pl. 3.1a for a general view of the site).

Unfortunately, the superficial survey of the area did not give positive results and archaeological remains belonging to the Halaf period only appeared inside the course of the present day wadi (located at an average depth of more than 2 m) that divides a large agricultural surface used for the cultivation of pistachio and cereals. Considering the poor information obtained in the survey it was then decided to open new test soundings both inside and outside the wadi course (see Pl. 3.4 for the distribution of soundings). In total 12 new soundings were opened covering a total surface of 65 square metres, eight of them inside the wadi and the other four in the surrounding fields. The total surface of the excavated area, covered by these 12 new soundings added to those opened during the May season, amounts to 68.91 square metres (Table 3.1).

3.2. The soundings and their stratigraphic relationships

In May 1997, two trial trenches (soundings L.15a and L.15b) were opened as a standard method of sampling and testing the depth of the stratification (Pl. 3.4). At that time, the main goals were to confirm the geomorphological analysis in order to understand the nature of the site and to compare it with other Halaf sites.

The location of the soundings was conditioned by the fact that, in the previous soundings, Halaf levels were found at an average depth of 2 m from the actual surface. Based on this, during the second working season, most of the soundings were opened inside the actual wadi course in order to avoid digging recently deposited accumulations. To confirm this, it was decided to open other soundings in the neighbouring fields (L.19, 21, 22 and 23). Only one single sounding (L.21) could be opened in the western part of the wadi due to the fact that fields in that part were planted with crops of pistachio and required lengthy nego-

tiations with the land-owner and the village head-man at the same time, who eventually gave permission to open just a small 2 x 3 m sounding.

Sounding	Date	Extension m ²
L.15a	12/05/1997	3,00
L.15b	12/05/1997	1,00
L.16	20/09/1997	9,60
L.17	21/09/1997	7,50
L.18	21/09/1997	20,00
L.19	26/09/1997	4,00
L.20	02/10/1997	2,40
L.21	04/10/1997	6,00
L.22	05/10/1997	3,00
L.23	09/10/1997	4,50
L.24	12/10/1997	1,40
L.25	12/10/1997	2,80
L.26	12/10/1997	1,96
L.27	12/10/1997	1,75
	Total	68,91

Table 3.1. Total number of soundings and their extension.

In Pl. 3.4 the spatial distribution of all the soundings is shown. The location of the soundings conditioned their individual measurements, thus most of those opened in the wadi course are transversal trenches.

All the soundings have been called by loci numbers, from sounding L.16 to L.27, as well as two others L.15a and L.15b opened in spring 1997. All measurements taken during the archaeological work were related to two main benchmark: point 40000, with coordinates: X: 934,11 m; Y: 191,98 m and altitude 100,15 m (used in soundings held in September 1997), and point 40111 (set up inside the wadi course) with coordinates: X: 925,45 m; Y: 168,55 m and altitude 98,66 m (for soundings L.15a and L.15b). In addition, other temporary benchmarks around the site gave the staff good visibility. These benchmarks are related to the main topographic "G" point at the south of the main tell (see chapter 1. Introduction, in this volume).

Layers have been named in the field with numbers going from the top to the bottom. Sedimentological descriptions, based on components, structure and stratigraphic unit geometry, have been made by simple eye observation. Three different materials more or less identifiable as clay, silt and sand have been used as references to describe sediment composition (cf. KEELEY and MACPHAIL, 1981, p. 228). The term litho-organic is applied to sediments which are, at least partially, anthropic.

3.2.1. The test soundings opened in May 1997 (L.15a and L.15b) (see Pl. 3.4)

Sounding L.15a

With dimensions of 1 x 3 m, this was opened just beside trenches L.11, L.12, L.13 and L.14 that had been opened in 1992 and 1993 by the Liège University team in the southern part of the wadi, and where a thick layer of debris mixed with gravel pockets had been observed in the existing profile. A stratigraphic sequence of this sounding was made starting from 0.50 m over the bed of the present wadi (Pl. 3.5a, profile east) with the following stratigraphic sequence:

Layer 15a.1: light clayish deposit, mixed with some archaeological material appearing under a very thick alluvium deposit.

Layer 15a.2: dark clayish deposit with ashes mixed with gravel pockets. Great quantity of remains apparently *in situ* (due to their flat position).

Layer 15a.3: soft clayish deposit, where several remains of paleofloors were determined. It is the richest layer concerning archaeological remains, also apparently *in situ*.

Layer 15a.4: heterogeneous litho-organic dark compacted deposit, which rapidly transforms into a mixture of brown and red clayish deposit associated with ashes and charcoal fragments.

Layer 15a.5: compacted grey litho-organic deposit. Some archaeological material associated. In contact with virgin soil, reached at a depth of 1.22 m under the actual wadi bed.

No structures were recovered from this sounding but it yielded a great quantity of archaeological material.

Sounding L.15b

With dimensions of 1 x 1 m, this was opened just opposite L.15a in the northern part of the wadi. A new succession of layers was found with no associated structures (Pl. 3.5b, profile north).

Layer 15b.1: dark litho-organic deposits mixed with small stones (max. 20 cm²) associated with archaeological material.

Layer 15b.2: deposit of alluvium and sands, mixed with many archaeological material.

Layer 15b.3: soft dark brown compacted clayish deposit with some small stones and pottery sherds (see Layer 15a.4).

Layer 15b.4: compacted litho-organic grey deposits, with charcoals (see Layer 15a.5).

Layer 15b.5: deposits of red inorganic clayish sediments mixed with sands in contact with virgin soil.

Although the two test squares opened in May 1997 did not reveal any structures, they offered a large amount of important archaeological material. The first test soundings already opened showed that most of the layers were altered in different manners. They were interpreted as an external occupational or depositional debris area of the site, which had been disturbed more than once by water actions bringing alluvium deposits and partially mixing the same archaeological material. Nevertheless most of the remains located *in situ* deposits always appeared in a flat position, especially in Layers 15.3 and 15.4 of both squares.

3.2.2. The test soundings opened in September/October 1997

In September and October of the same year, with the information obtained from the first two soundings, it was decided to open a series of new test soundings just around where the first ones had been opened in order to establish contact with occupational areas. Pl. 3.4 shows the distribution of the new soundings described here.

Sounding L.16

Oriented E/W with dimensions of 6.40 x 1.50 m, it was opened following the course of the wadi. In spite of being very close to soundings L.17 and L.18, both with anthropic layers, here the stratigraphic sequence found was astonishingly different. The wadi cut through practically all of the original succession of different litho-organic deposits that are now only visible in the north profiles of the trench, which is basically a succession of different episodes of deposits of sand, gravel and clays formed by flowing water. Virgin soil appears under these deposits. No structures of any kind were found but a quite large amount of archaeological material is retrieved. Although these remains were isolated in three different layers (according to different alluvium deposits) they should not be understood to be as out of context. Finally, it should be noted that most of the pottery sherds were in good state (not rolled), that means they are not transported by water.

Sounding L.17

With measurements of 5.00 x 1.50 m, this sounding was located inside and along the wadi, very close to sounding L.16 (Pl. 3.1b).

A total of 13 layers were determined in that sounding (some not attested on the profile Pl. 3.5c) although some part of them (Layers 17.1 to 17.5) have been disturbed by the activity of the wadi and gravels and sands are found slashing important parts of the original layers.

Layer 17.6: soft clayish and silty deposit with organic remains, some small stones and many pottery sherds (all of them found in a flat position).

Layer 17.7: compacted reddish coloured clayish deposit.

Layer 17.8: same as 17.7.

Layer 17.9: grey litho-organic deposit with some ashes and charcoal. Archaeological material associated.

Layer 17.10: very compacted brown clayish deposit, with some charcoals.

Layer 17.11: clay and sand deposit, very compacted.

Layer 17.12: heterogeneous layer of dark grey clayish deposit with fragments of charcoals and some ceramic sherds.

Layer 17.13: compacted red clayish sediment with presence of archaeological material. It is newly slashed and full of gravel and sand in the southern part. Underneath virgin soil appears.

Sounding L.18

Initially opened with dimensions of 9.60 x 1.50 m following an E/W axis, it was later enlarged with a new 2.80 x 2.00 m sounding in a N/S direction making a

total of 20 square metres. The sounding was excavated to a maximum depth of 2.70 m to expose what seemed to be a wall line, the single architectural feature remaining *in situ*, although it is disturbed in its southern part.

Due to its large extension, stratigraphy of the sounding is not a vertical consecutive one but a complex of different layers obtained in the complete extension excavated. A total of 18 stratigraphic layers were observed in the entire sounding L.18 (some not attested on the profile Pl. 3.7a).

This trench was the most positive as it offered the single architectural structure at the site. A wall (E1) was found in the western part of the sounding running NW/SE, which had already been partially excavated during the sounding held in 1993, exposing the first 4 lines of stones. It was destroyed in its southern part but still preserves 6 stone lines of a maximum height of 1.20 meters (see Pl. 3.6 and Pl. 3.7a for the plan and the profile). As it can be seen on PL. 3.6, the wall has one preserved face (northeastern) while the eastern and southern faces and areas have been destroyed. The trench was enlarged in a northeasterly direction to follow the wall but no more construction was found. The wall (E1) was constructed with large, well-prepared stones in a sort of dry stone building technique (see Pl. 3.2a). A foundation trench of the wall was observed in the eastern part, which was cutting through at least two archaeological layers (18.7 and 18.9). The archaeological material coming from 18.9.1 (foundation trench) as well as the those coming from inside the wall (18.9.3) is isolated. In contrast, in the southern part of the wall, a thick layer of soft grey clayish deposit is directly related to the structure (Layer 18.10).

Stratigraphic sequence related to the structure is shown in Pl. 3.7a where the west profile of the trench can be observed related to the wall line and associated layers. There is a different sequence from each side of the wall.

Layers 18.1 to 18.3: Heterogeneous deposit of clay, silt and sands.

Layer 18.4: compacted grey clayish deposit.

Layer 18.5: soft and dark litho-organic deposit with large amount of archaeological material.

Layer 18.6: compacted red clay and silt deposit.

Layer 18.7: appearing in the southern part. A soft and dark litho-organic deposit, mixed with some fine beds of sands disturbing it.

Layer 18.8: soft grey litho-organic deposit.

Layer 18.9: reddish coloured clayish deposit related to the wall (E1) in northern part. Large amount of archaeological material associated.

Layer 18.9.1: compacted grey clayish deposit. It belongs to the foundation of the wall (E1) in its northern part.

Layer 18.9.2: beds of dark brown clayish deposit.

Layer 18.9.3: small soft grey sediments coming from inside the wall (E1).

Layer 18.10: soft grey clayish deposit directly related to the southern part of the wall (E1).

Layer 18.11: compacted light grey clayish deposit.

Layer 18.12: heterogeneous deposit of sands and small pebbles. It covers the entire western part of the sounding and has no archaeological remains at all (see Pl. 3.2b). This layer does not appear in the eastern part. Under this layer colluvion covering the natural silt appears.

Layer 18.13: soft red coloured clayish deposit. It appears in the eastern part of the wall (E1).

Layer 18.14: compacted red clayish deposit with some small stones (12x12) and no archaeological remains.

Layer 18.15: compacted dark red clayish deposit. Large amount of associated archaeological material.

Sounding L.19

With measurements of 1.50 x 3.00 m, it was opened in the north of the wadi, on top of the surrounding agricultural fields. The sounding is a succession of heterogeneous deposits of alluvium, clays, compacted silts with no archaeological remains at all. Few pottery sherds were recovered from Layer 19.2 (mixed clayish deposit) in a secondary position, rolled and belonging to very different chronological periods. Although sounding L.19 was very close to L.18, its stratigraphic sequence is surprisingly different and negative.

Sounding L.20

This sounding of 1.20 x 2.00 m was opened in the western area of the wadi and N/S oriented. The sounding cuts transversally across the wadi and did not offer any positive information in spite of a complex stratigraphic sequence (see Pl. 3.3a). The original stratigraphic sequence of the trench was completely cut by the wadi water activity and it is mainly filled by three new alluvium deposits mixed with stones (of 10 cm maximum) but also some pottery sherds, which are completely rolled. In the western part of the trench, it is still possible to see the original stratigraphic sequence with a succession of three thin beds of litho-organic deposits (20.1, 20.2 and 20.3), which offered a large amount of pottery sherds.

Sounding L.21

This test sounding was opened not far from sounding L.18, with measurements of 3.00 x 2.00 m. It was opened, as well as L.19, to confirm the existence of the archaeological layers found in sounding L.18 inside the wadi. The surprise once again was that the sounding did not offer any correspondence to a stratigraphic sequence of L.18. The total depth of the sounding is about 3.30 m and consists of a succession of granular brown sediments alternated with alluvium layers and gravel pockets going down up to the virgin soil. Except for the surface layer, no archaeological material nor structures at all were recovered from this sounding, which was highly disturbed (Pl. 3.3b).

Sounding L.22

This sounding was opened in the agricultural fields surrounding the wadi, with dimensions of 2.00 x 1.50 m. A total of 8 layers were defined but no architectural remains were found (Pl. 3.7b).

Layer 22.1: compacted red clayish deposit.

Layer 22.2: alluvium deposit mixed with dark brown compacted clays.

Layer 22.3: litho-organic deposit.

Layer 22.4: organic brown clayish deposit, with the presence of archaeological material (pottery sherds, faunal and lithic remains) as well as several mudbrick and plastered floor fragments (a sample AM 3649 for microstratigraphic analysis was taken from this layer and commented in chapter 4).

Layer 22.5: alluvium deposit.

Layer 22.6: red and compacted clayish deposit.

Layer 22.7: succession of fine beds of soft red sediments, washed sands mixed with charcoals and small stones.

Layer 22.8: litho-organic grey deposit with ashes and small charcoals.

Below Layer 22.8: virgin soil appears.

Sounding L.23

Located not far from L.22 in the north of the wadi, the sounding was 3.00 m long and 1.50 m wide. Although the sounding is only 5 metres away from L.22, its stratigraphic sequence is radically different. One single layer (23.1) was found, composed of heterogeneous clayish deposits with some small stones (max. 15 cm). Below this layer, virgin soil appears. Sterile trench.

Sounding L.24

It was located in the western part of the wadi with dimensions of 2.00 x 0.70 m. All the possible natural or anthropic layers were here completely destroyed and cut by the activity of the wadi and only two small parts of original layers remained on both lateral sides. This is a sterile trench although several ceramic sherds were retrieved from the rest of the original anthropic deposits.

Sounding L.25

This is the easternmost sounding, near to the asphalt road which follows the right bank of the Euphrates. It was transversally opened on the wadi with dimensions of 4.00 x 0.70 m with the aim of finding information on the possible total extension of the site. It was excavated up to a depth of 1.75 m and found completely disturbed by the alluvium and sand deposits caused by the activity of the wadi (Layers 25.1 and 25.4 of alluvium and sand deposits but with several archaeological material associated). It is considered a negative sounding due to the completely altered sequence.

Small remains of original layers (mostly clayish deposits) were observed in both sides of the trench (25.2 and 25.5 in the eastern part of the wadi and 25.3 and 25.6 in the western part)

Alluvium and sand layers (25.1 and 25.4), offered the largest amount of pottery sherds. Due to their good condition and lack of erosion traces we presume they would come not from a long distance away. No structures were found.

Sounding L.26

Located in the westernmost part of the area, a trench transversal to the wadi was opened with measurements of 2.80 x 0.70 m. After a surface layer, a

single thick alluvium layer appeared with some associated pottery sherds. This is a sterile trench.

Sounding L.27

Opened between soundings L.24 and L.26 in the western part of the wadi with dimensions of 2.50 m x 0.70 m. Under a thin superficial layer the virgin soil appears rapidly with no archaeological remains at all. This is a sterile trench.

3.3. The archaeological material and its distribution

A large amount of archaeological finds (12,983 items) were retrieved from the Tell Amarna soundings. In Fig. 3.1 are a detailed account of each category and the amount of remains, pottery being the largest group with a total amount of 10,622 sherds (81.81% of the total). The second group are lithic remains, both flint and obsidian, with 1,547 items (11.92%) and finally other artifacts, including macrolithic tools and small finds, with 17 items (0.13% of the total). A large amount of faunal remains were also recovered from all soundings and about 800 fragments (6.14%) were analysed (see chapter 11).

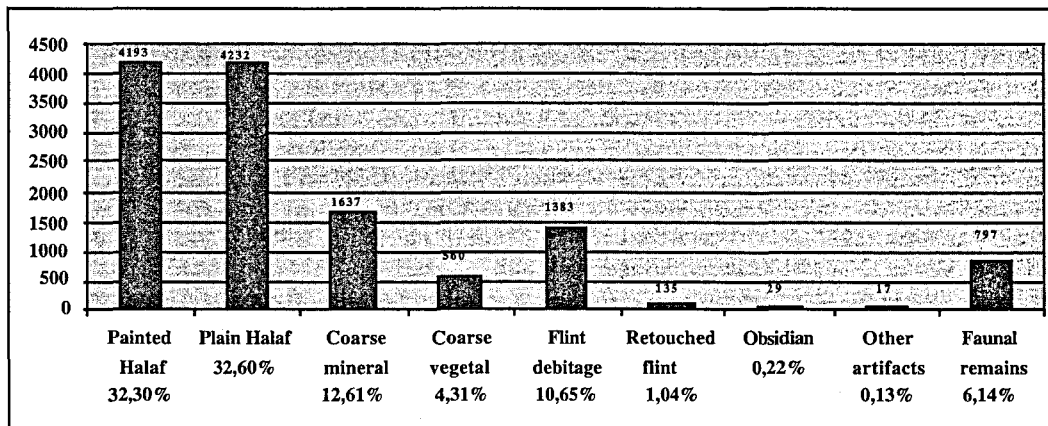


Fig. 3.1. Detailed account of archaeological finds retrieved from Tell Amarna soundings.

The ceramic remains come from the first 1997 season with a total amount of 498 fragments (see Table 3.2) and from the second season with 10,124 fragments (see Table 3.3) making a total of 10,622 fragments, plus 83 sherds from the soundings held in 1993 by the University of Liège expedition team, which are incorporated into the global ceramic study. In Table 3.2 there is a detailed account of all finds recovered per sounding during the May 1997 season. Table 3.3 shows the September 1997 season where 12 soundings were opened and the greatest amount of archaeological material is found.

Locus	Layer	Painted Halaf	Plain Halaf	Coarse Mineral	Coarse Vegetal	Flint Debitage	Flint Retouched	TOTAL
15a	15a.1	49	23	10	4	0	0	86
15a	15a.2	22	18	5	4	5	0	54
15a	15a.3	73	53	26	2	1	0	155
15a	15a.4	5	3	3	1	5	3	20
15a	15a.5	12	13	6		2	0	33
15b	15b.1	6	13	5	2	0	0	26
15b	15b.2	24	20	5	6	2	0	57
15b	15b.3	9	18	8	1	3	0	39
15b	15b.4	18	13	2	2	2	1	38
15b	15b.5	7	6	1	0	0	0	14
	TOTAL	225	180	71	22	20	4	522
	%	43,10	34,48	13,60	4,21	3,83	0,77	100,00

Table 3.2. Distribution of finds by locus and layer from the 1977 May season.

Locus	Layer	Painted Halaf	Plain Halaf	Coarse Mineral	Coarse Vegetal	Flint Debitage	Flint Retouched	Obsidian	Other Artifacts	TOTAL
16	16.2	222	240	81	22	77	4	2		648
16	16.4	41	23	14	1	0	1	0		80
16	16.5	8	10	7	2	2	0	0		29
17	17.2	48	40	51	12	8	2	0		161
17	17.3	445	522	138	55	156	20	2	0	1338
17	17.4	89	115	30	7	52	8	4	0	305
17	17.6	185	177	73	21	46	4	0		506
17	17.7	182	161	73	18	60	5	1		500
17	17.8	142	117	72	8	70	1	3	1	414
17	17.9	47	48	22	7	18	1	0	2	145
17	17.9.1	6	19	4	1	2	1	1		34
17	17.10	30	67	23	3	6	1	0		130
17	17.11	44	53	25	2	5	0	0		129
17	17.12	24	32	19	16	7	0	0		98
17	17.13	21	32	9	12	9	0	0	2	85
17	17.13.1	15	12	3	5	8	0	0		43
18	18.2	6	8	6	4	4	2	1		31
18	18.3	81	87	15	13	28	5	1		230
18	18.4	203	38	42	24	18	2	0		327
18	18.5.1	139	158	61	10	64	8	1	2	443
18	18.5.2	8	14	6	0	21	9	0		58
18	18.6	129	179	72	24	30	8	3		445
18	18.7	69	74	18	2	1	0	0		164
18	18.8	74	36	11	0	37	3	0		161
18	18.9	346	345	121	39	95	12	3	2	963
18	18.9.1	5	6	7	1	3	0	0		22

Locus	Layer	Painted Halaf	Plain Halaf	Coarse Mineral	Coarse Vegetal	Flint Debitage	Flint Retouched	Obsidian	Other Artifacts	TOTAL
18	18.9.2	34	32	21	8	10	1	0		106
18	18.9.3	10	16	4	1	0	0	0		31
18	18.10	100	110	44	8	34	5	0		301
18	18.11	118	117	42	20	31	2	0		330
18	18.12	14	6	0	0	3	1	0		24
18	18.13	114	110	27	12	47	1	0		311
18	18.14	1	0	1	1	0	0	0		3
18	18.15	186	197	51	57	65	1	0		557
19	19.2	17	55	3	1	0	0	0		76
20	surface	26	27	2	2	0	0	0		57
20	20.1	44	28	12	12	6	0	0	1	103
20	20.2	34	50	11	4	8	1	0		108
20	20.3	16	10	1	3	0	0	0		30
21	21.1	8	13	3	1	7	0	0		32
21	21.2	1	1	0	0	0	0	0		2
22	22.3	52	61	22	0	21	3	1	2	162
22	22.4	162	164	68	33	90	10	1	2	530
22	22.5	142	106	86	26	58	5	2	1	426
22	22.6	44	46	40	12	29	1	1		173
22	22.7	73	67	28	11	26	0	0		205
22	22.8	35	47	24	4	11	3	0	1	125
24	24.1	18	10	3	0	4	0	1		36
24	24.2	36	30	15	11	11	0	0	1	104
24	24.3	1	3	0	0	5	0	0		9
25	25.1	11	19	6	0	15	0	0		51
25	25.2	16	20	5	6	3	0	1		51
25	25.3	0	5	4	0	0	0	0		9
25	25.4	25	51	18	0	39	0	0		133
25	25.5	9	31	13	0	6	0	0		59
25	25.6	6	4	5	0	6	0	0		21
26	26.1	2	0	0	0	1	0	0		3
26	26.2	2	2	0	0	0	0	0		4
27	27.1	2	1	0	0	0	0	0		3
	TOTAL	3968	4052	1562	542	1363	131	29	17	11664
	%	34,02	34,74	13,39	4,65	11,69	1,12	0,25	0,15	100,00

Table 3.3. Distribution of finds by locus and layer from the second 1997 season.

3.4. Conclusions on the archaeological works

In terms of stratigraphic sequence, Tell Amarna is a very frustrating place. The estimated extension and characteristics of the site are still unknown. Through the archaeological excavation and the information obtained from geomorphological

and microstratigraphic analysis (see chapters 2 and 4 for analysis results), we know that the site suffered different sorts of destruction processes. The Tell Amarna occupational area has been subject to postdepositional alteration. On the one hand, animal and plant tissues have decomposed and greatly altered the archaeological deposits while a second process has covered the site with a thick alluvium layer (more than 2 m) coming from the erosion of relic terraces from the south *jebel*, which in different areas have greatly disturbed, cutting or mixing, the possible *in situ* occupational layers. The fact is that, in the 27 soundings of nearly 70 square meters that were opened, only one single architectural structure was exposed (a fragment of a wall E1 in sounding L.18).

The wall structure E1 can most likely be attributed to the Halaf period based on the stratigraphic sequence obtained. Layers 18.3, 18.7, 18.8 and 18.9 offer some Halaf archaeological material, although the foundation trench of the wall has cut them. Layer 18.10, in the southern part of the wall, shows a simple compacted soil that is clearly related to the western wall face. Archaeological material retrieved from Layer 18.9.1 (foundation trench) and Layer 18.9.3 (inside the wall structure) also clearly belongs to the Halaf period.

In any case we could conclude that neither complete structures from the site nor the site itself were found; they are probably at an average deep of more than 2 m below the actual surface somewhere around the wadi course and probably very much altered. These are facts that make its discovery highly difficult and increase the cost of any extensive excavation.

As it has been seen, the layers found in all the trenches were both disturbed and mixed with sand and gravel pockets or simply completely cut. In the fields surrounding the wadi and below the ploughing zone, we found a sequence of inorganic sediments, brown/red coloured, compacted and with very few archaeological material that is often chronologically mixed. This could probably be the result of some sort of geological weathering phenomenon, probably acting on the relics of quaternary terraces. These flood layers cover most of the opened soundings inside the wadi.

Microstratigraphic analysis made in a sample coming from sounding L.22, located in the nearby fields (see Pl. 3.4), but not far from the wadi, shows a completely different stratigraphic sequence with no presence of water action as a perturbing factor. In this place, as discussed in chapter 4, two aspects were determined. One has a characteristic occupational disaggregated floor and debris remains coming from domestic activities that were probably carried out in a non-covered building space close to other areas of passage. The second one shows a clear desegregation of the deposits, mainly produced by roots and animals and formed *in situ* as a result of collapsed mud structures. It is worth pointing out that from where the sample was collected at least 0.90 m of sediment deposits were excavated downwards but no architectural remains were found. Sounding L.22 offered up evidence of occupational structures as small pieces of mudbricks and fragments of plastered floors or walls.

Most of the soundings opened inside the wadi yielded a large amount of archaeological remains (mainly ceramic, lithic and faunal) and, in most cases, they were found in a flat position and had no evidence of having been eroded. So we thought that we were in an external area of the site where mainly debris had been deposited. This was due to the fact that several soundings (especially L.15a, L.15b, L.16 and L.17 as well as L.22 very close to the wadi) offered the same layers of homogeneous sediments, very dark coloured and mixed with ashes, apparently *in situ*, although sometimes altered by some gravel pockets.

When looking at the initial and final heights of all the soundings theoretically projected onto a single profile we do see that the approximate paleorelief of the site presents a markedly sloping NE/SW direction of nearly 8 metres (see Fig. 3.2). This inclination forms an integral part of the present landscape and it would be expected that the Halaf settlement of Tell Amarna was situated in between the natural slopes of the *jebel* located to the west and not far from the river Euphrates.

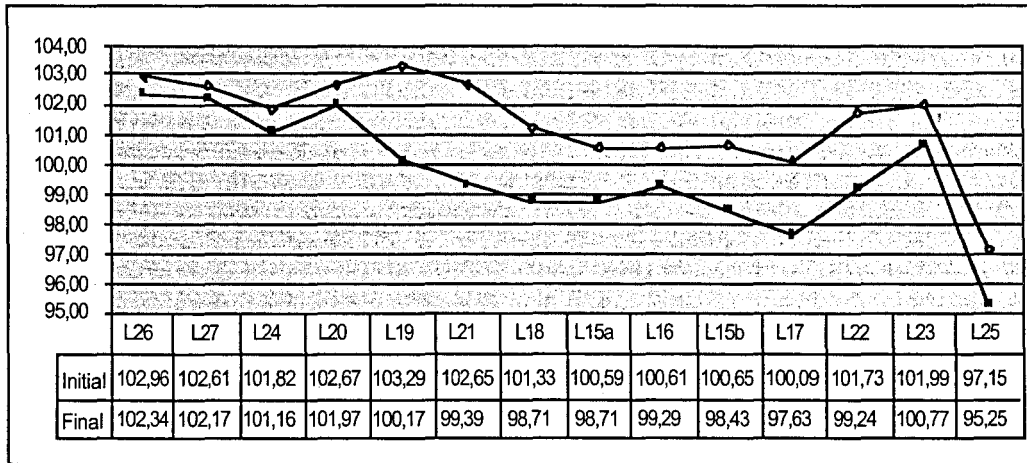


Fig. 3.2. Profile NE/SW with projection of all soundings heights (initial and final).

When analysing the relationships between the soundings, it can be seen that in a relatively small area (approx. 70 square meters) the results and evidence of stratigraphic sequences are very special. While in soundings L.15a, L.15b, L.16, L.17, L.18 and L.22, we found organic sediments with associated archaeological material, in the nearby soundings, L.19, L.20, L.21, L.23, L.24, L.25 and L.26, at very close heights, no evidence of that organic sediment nor of occupational remains were found and a sequence of inorganic and mixed sediments was the general tendency.

Very few *in situ* archaeological layers have been found and similarities between them have been observed in soundings L.15a, L.15b, L.17, L.18 and L.22 within a maximum distance of ten metres between them. Although the sedimentary composition is different, three main *in situ* layers have been recognised at Tell Amarna offering a great amount of archaeological material. The first one (found at

L.15a, Layer 15a.4 and L.15b, Layer 15b.3) is a dark brown litho-organic sediment with remains of ashes and small charcoals. The second one (found at L.15a, Layer 15a.5; L.15b, Layer 15b.4; L.17, Layer 17.9; L.18, Layer 18.8 and L.22, Layer 22.8) is a dark grey compacted litho-organic sediment with small charcoal and a high percentage of archaeological material. The third one (found at L.18, Layer 18.9; L.17, Layer 17.7 and L.22, Layer 22.6) is a compacted reddish sediment also with archaeological material. In Fig. 3.3 we can see the evolution and depths of the layers described. It is important to note that, at a taphonomic level, nearly all the ceramic remains obtained in these layers were found in a flat position with no signs of erosion and only altered by concretions due to the activity of the wadi. As discussed in the chapter 5 on ceramics, many sherds from these specific layers have been refitted as evidence of no great postdepositional movements.

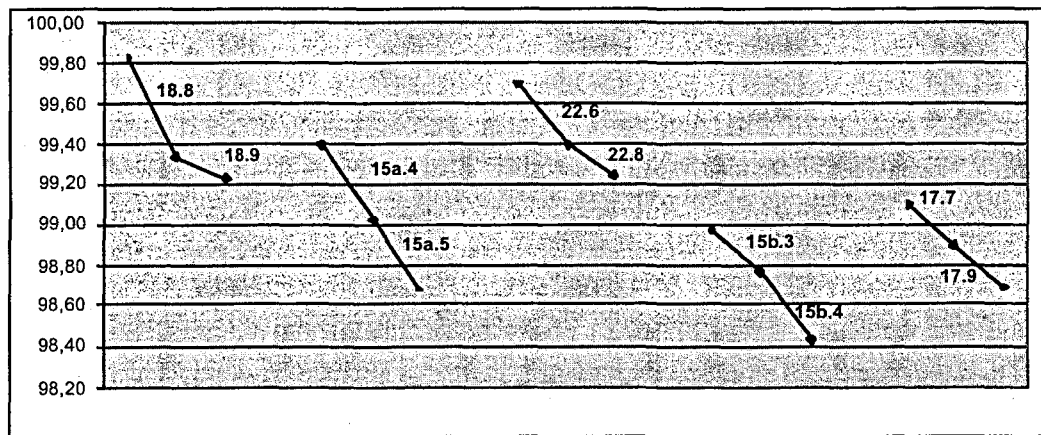


Fig. 3.3. Relations between same homogeneous layers found in different soundings.

In conclusion, we can say that at least three main different layers were localised in different soundings (L.15a/15b/17/18 and 22) containing archaeological material *in situ*. The first two layers composed of a soft, dark brown litho-organic sediment and a dark grey compacted litho-organic sediment could probably belong to external debris areas of the site while the third one, with compacted reddish sediments and associated archaeological material, could belong to a destroyed/eroded construction elements belonging to occupational area of the site. Again, it should be remembered that all these layers were altered and very sharply truncated by flooding with sand and gravel pockets. As evidence of this erosion process the fact is that in sounding L.25 only layers of clean sand and crushed stone deposits mixed with several Halaf pottery sherds were found.

Unfortunately, we still have no clear evidence of the extension of the site, which should be localised at a depth between 2.25 and 2.75 m under the actual surface. The only available thing is the significant archaeological remains assemblage and, once the pottery bulk analysed, the great typological and morphological

homogeneity of the assemblage could be seen. It can be concluded, therefore, that there seems to have been only one single and maybe short occupational phase.

Temporary occupation of Halaf sites has already been reported in the Balikh valley at Tell Damishliyya (AKKERMANS, 1993) where, due to the absence of architectural remains, it has been suggested that these were temporary occupations or were occupied for a short time over a small number of years. As Akkermans points out, there is the possibility of having a seasonal campsite used for specialised subsistence activities. At Umm Qseir, it has also been suggested that it could have been a small, isolated, short-term campsite, inhabited by perhaps 30 people and at one day's walk from the next settlement (HOLE and JOHNSON, 1986-1987, p. 184). The same authors also propose a pattern of pastoralism, perhaps mixed heavily with hunting, for these temporary camps and they think that a mobile component to the Halafian way of life would help to explain the apparent rapidity with which the characteristic ceramics spread over a wide region.

This evidence, the results of the excavations and of the microstratigraphic analysis suggest that the Halaf settlement at Tell Amarna may correspond to a temporary camp (with uncovered simply built structures) or to a small village, rather than to a large permanent occupation of the area.

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a



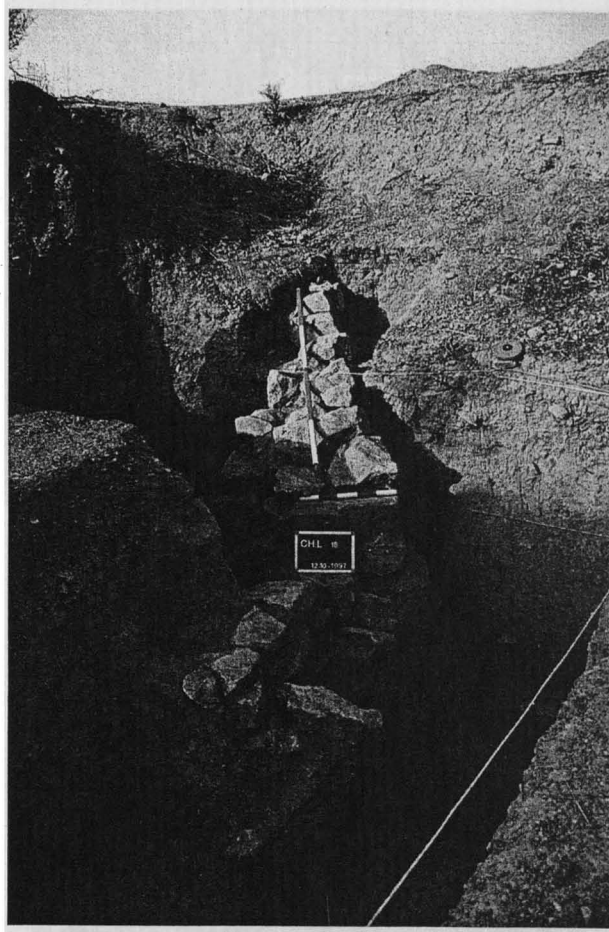
b

Pl. 3.1

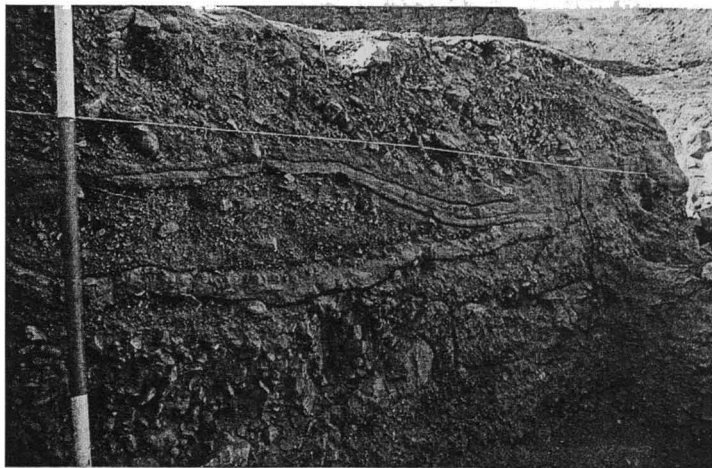
a) General view of the area from the north.

b) General view of the soundings L.16, L.17 and L.18 from the north.

3. AREA L. THE SOUNDINGS



a

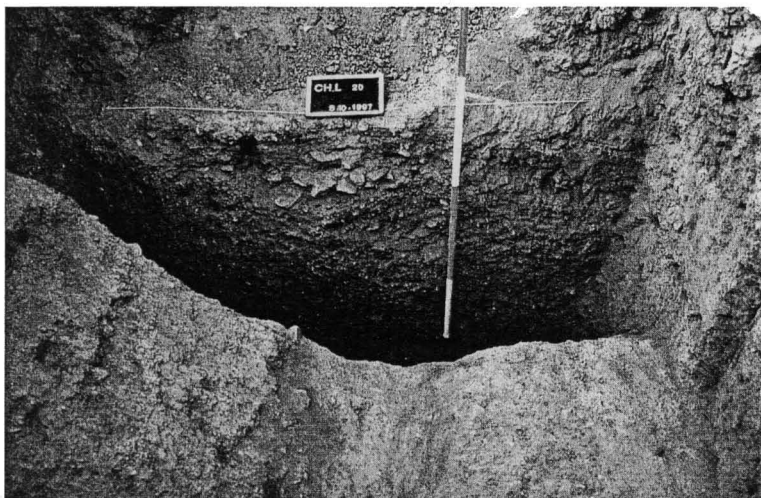


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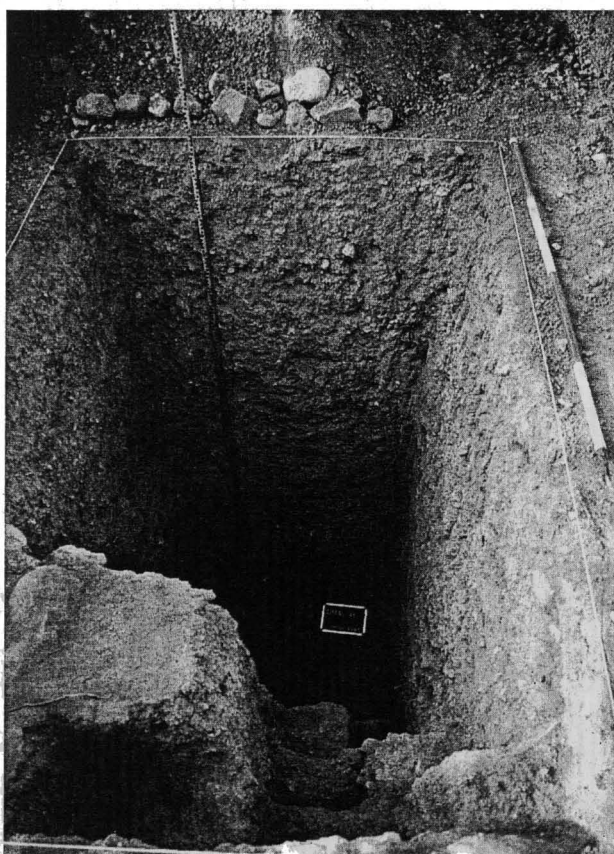
Pl. 3.2

a) View of the wall E1 in L.18 from the east.

b) Profile east in L.18.



a



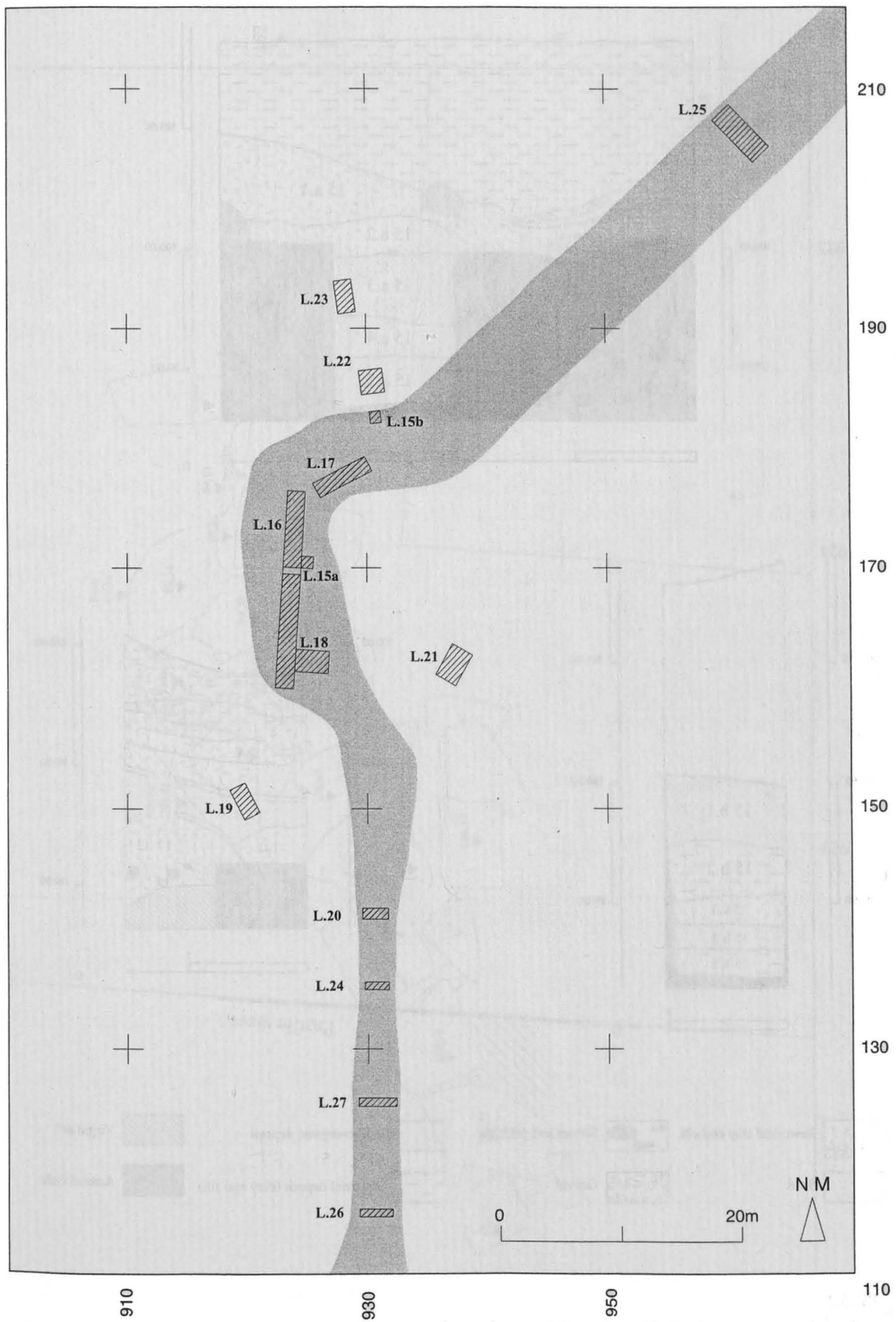
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Pl. 3.3

a) Profile east in L.20.

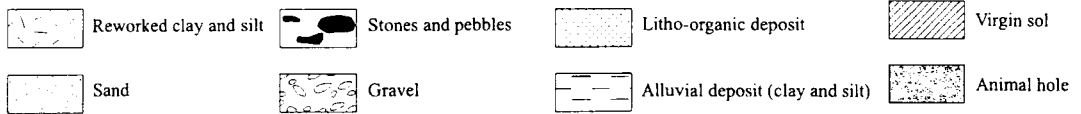
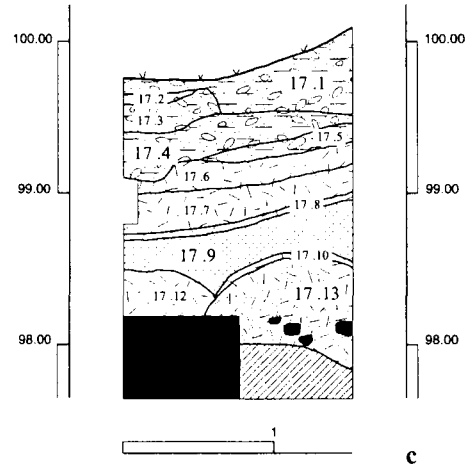
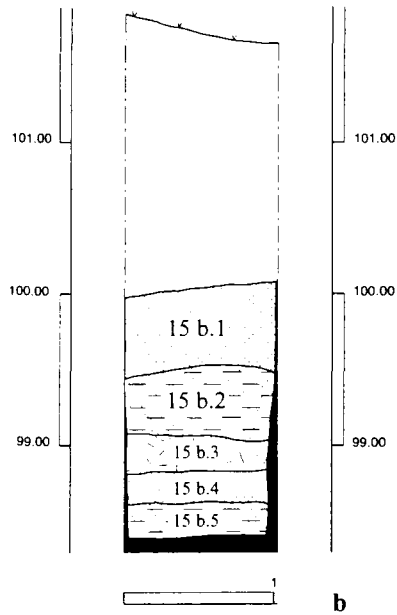
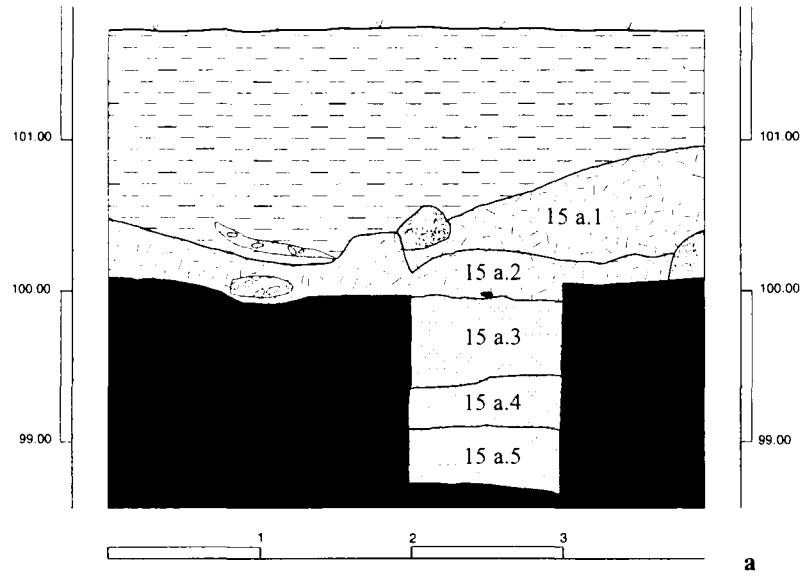
b) View of L.21 close to L18.

3. AREA L. THE SOUNDINGS



Pl. 3.4
Distribution of the opened soundings.

W. CRUELLS



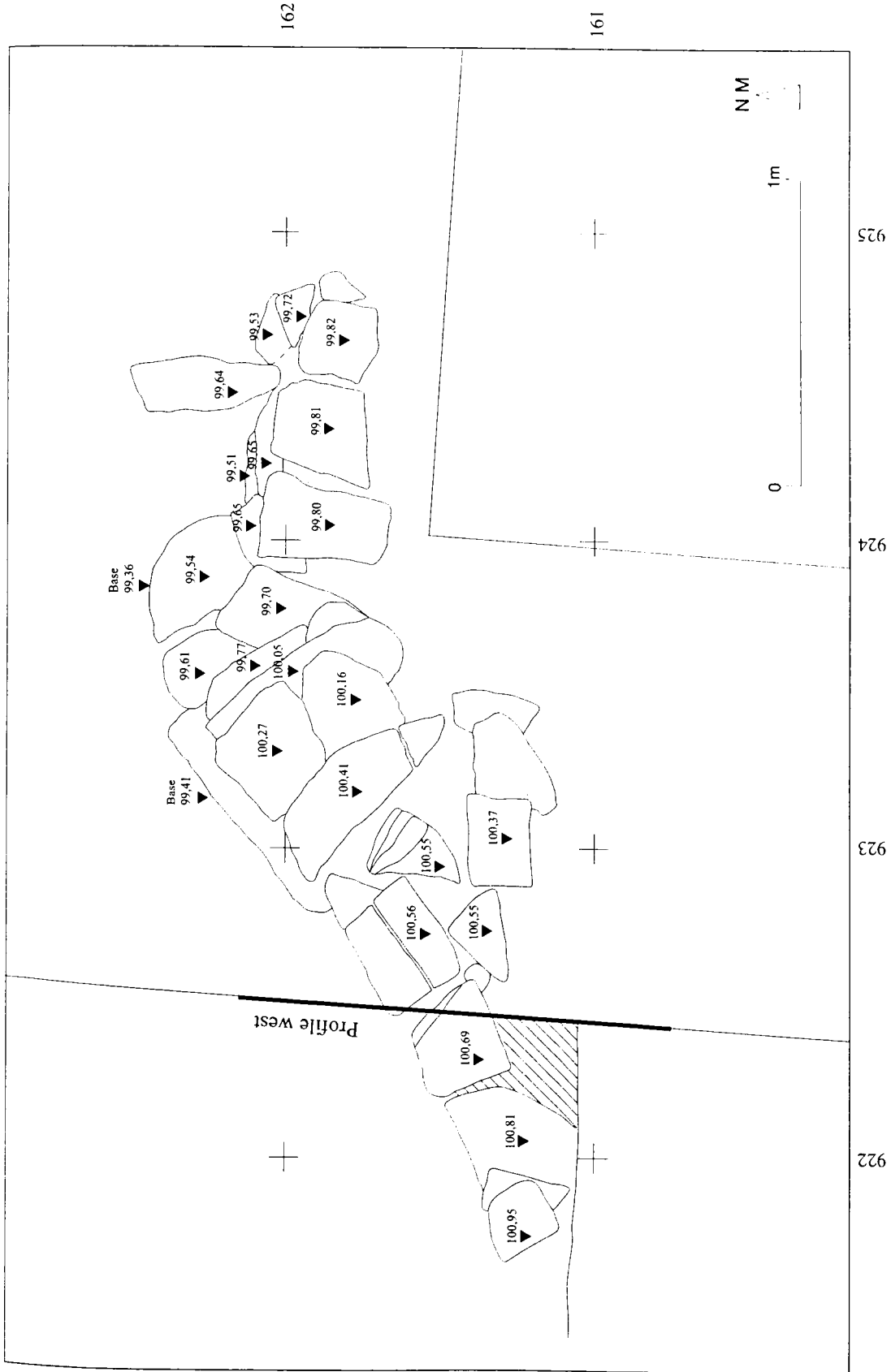
Pl. 3.5

a) Profile east of L.15a (with view of the wadi profile on the upper part) .

b) Profile north of L.15b.

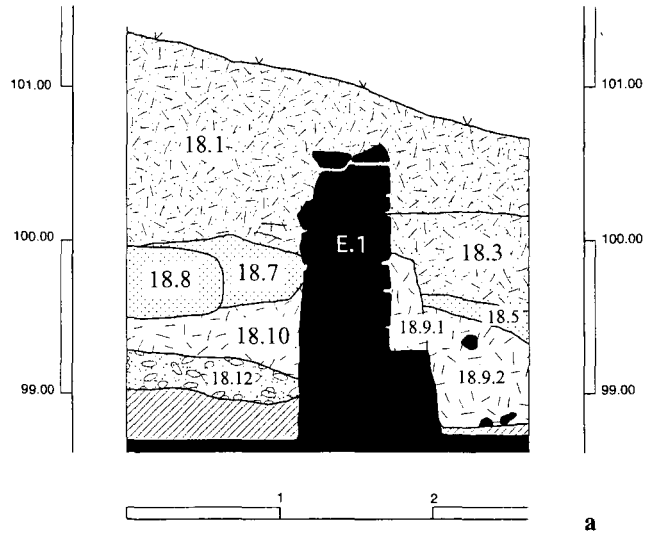
c) Profile north-east of L.17.

3. AREA L. THE SOUNDINGS

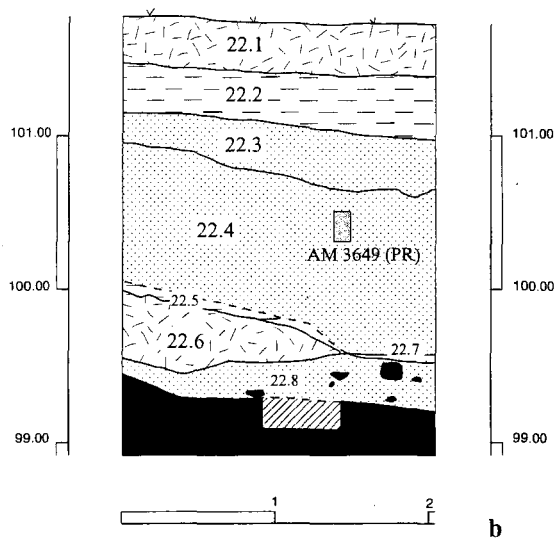


Pl. 3.6
Plan of the wall E1 in L.18.

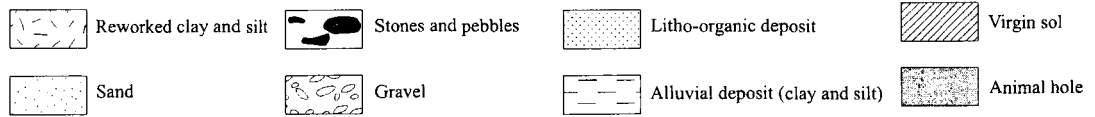
W. CRUELLS



a



b



Pl. 3.7

a) Profile west of L.18 with the wall E1.

b) Profile north of .22.

5. THE POTTERY

W. CRUELLS *

5.1. Ceramic wares

A total of 10,622 sherds were collected either from the two soundings (4 m²) opened in May 1997 (soundings L.15a and L.15b) or from the other 12 soundings totalling 64.91 m² that were opened in September-October 1997 (soundings L.16 to L.27) making a grand total of 68.91 m². This ceramic assemblage completes the remains retrieved during the soundings that were held in 1993 by the Liège University team. The results of this are also analysed and presented here after verifying their typological and chronological homogeneity.

The ceramic assemblage recovered from these soundings was initially divided into four main categories: fine Halaf painted wares, fine Halaf unpainted wares, mineral tempered coarse ware and vegetal tempered coarse ware (Fig. 5.1). The criteria used to identify the categories are basically macroscopic and related to technique and material. Coarse ware is characterised by coarse material, vegetal or mineral tempered clay, while fine ware (painted or unpainted) is characterised by fine, well-levigated clays, in most cases with no visible temper. Each category was later subdivided into another two groups: diagnostic sherds, including half forms, rims, bases, handles and others, and a second group of non-diagnostic body-sherds. The diagnostic sherds were analysed individually based on morphology and decoration. A total number of 1,769 partial shapes were recovered, forming the typological ceramic corpus of Tell Amarna (see Table 5.1). Individual analysis shows high homogeneity in each category of the ceramic assemblage. In the absence of a relevant stratigraphic sequence, as has already been discussed in chapter 3, the whole pottery bulk has been viewed here as one single period and stratigraphic unit.

The main ceramic category groups at Tell Amarna are the fine painted and fine unpainted ware at 39.47% and 39.84% respectively. Coarse ware amounts to 20.69% of the total. These figures are found at most of the Middle Halaf period Syrian sites, although the criteria used in separating ceramic categories differ a lot from site to site and are in some cases confusing. Coarse ware normally represents a fifth of the total amount of pottery. Percentages of fine painted and fine unpainted ware are variable but normally amount to about 80% of the total. These percentages, as will be commented on later, are also quite similar to other Halafian sites of the same period.

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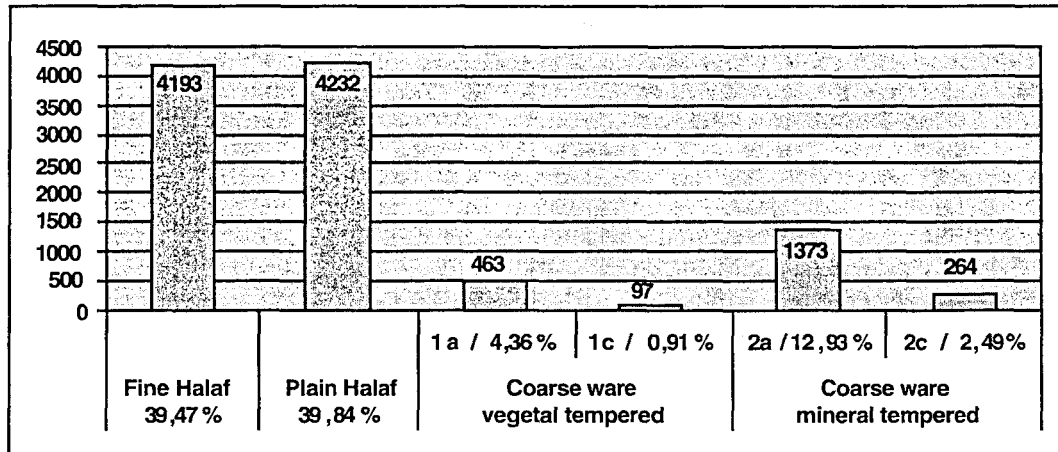


Fig. 5.1. Total number of ceramic fragments recovered according to category.

	Fine Halaf	Plain Halaf	Vegetal tempered		Mineral tempered		Total
			1a	1c	2a	2c	
1/2 form	12	3	0	0	0	0	15
Rims	864	168	34	12	155	44	1277
Bases	80	291	8	3	61	17	460
Handles	7	3	0	0	4	0	14
Other	0	0	0	0	3	0	3
<i>Total</i>	963	465	42	15	223	61	1769
<i>Percentage</i>	54,44	26,29	2,37	0,85	12,61	3,45	100,00

Table 5.1. Total number of diagnostic ceramic fragments recovered according to category.

Nevertheless, when analysing percentage compositions of each ceramic group, we observe some disjunction in the absolute figures in the relationship between body and diagnostic sherds. Table 5.2 shows that there is a significant deviation between two of the variables. On the one hand, the number of rims from fine unpainted ware is, when compared to the average of the other groups, very inferior. On the other hand, the number of bases of the same group is one of the highest in all of the categories. This deviation in the total number of rims of fine unpainted wares could be due to the fact that many fine painted vessels usually have some preserved zones that were unpainted and they could have been included in the counting of fine unpainted sherds. Nevertheless, until recently, sherds with an applied slip have always been directly categorised as fine painted vessels because most of the vessels in this category have nearly always been slipped as a ground for paint. Nowadays we do have clear evidence of fine unpainted vessels with an applied slip as found at Tell Amarna, which will be discussed in section 5.3. At Tell Amarna all sherds without any clear traces of paint have been attributed to the category of fine unpainted ware excepting those ones that, due to postdepositional processes or bad paint adherence, show fugitive traces of paint. In any case, all fragments attributed to this category, have also been sorted consid-

ering the finishing characteristics of the surfaces. The details of these are dealt with in the corresponding section.

	Fine Halaf		Plain Halaf		Vegetal tempered			Mineral tempered			Total		
		%		%	1a	%	1c	%	2a	%		2c	%
Undiagnostic	3230	77,03	3767	89,01	421	90,93	82	84,54	1150	83,76	203	76,89	8853
1/2 form	12	0,29	3	0,07	0	0,00		0,00		0,00		0,00	15
Rims	864	20,61	168	3,97	34	7,34	12	12,37	155	11,29	44	16,67	1277
Bases	80	1,91	291	6,88	8	1,73	3	3,09	61	4,44	17	6,44	460
Handles	7	0,17	3	0,07	0	0,00	0	0,00	4	0,29	0	0,00	14
Others									3	0,22			3
<i>Total</i>	4193		4232		463		97		1373		264		10622
<i>Percentage</i>	39,47		39,84		4,36		0,91		12,93		2,49		100,00

Table 5.2. Percentages and total number of body sherds and diagnostic sherds according to ceramic category.

At the present time, it is rather difficult to find convergent criteria between specialized literature concerning ceramic typological classification that would make either interpretation or further comparison easy. Because of this, it is quite normal to find different descriptive terms for the same ceramic shape. In agreement with other researchers of the period in question, it has been decided to continue using the same terminology that was used in our first preliminary publication (CRUELLES, 1998). Each single shape is compared to shapes that come from other sites of the same period in spite of the fact that different typological descriptions have been used.

The main norms used in this report are briefly outlined below in order to establish a general drawing convention for all Tell Amarna pottery (fine Halaf ware, fine Halaf unpainted ware or plain ware and coarse ware). In all vessel illustrations priority is given to shape and decoration pattern over the diverse drawing conventions in existence. The diameters of all vessels are approximate, due to the fact that they are hand-made and sometimes irregularly shaped, and many of the diameters have been calculated from a preserved 1/5th of the rims. All decoration patterns have been drawn to a single plan (not in perspective). All sherds drawn on a single surface are taken to be external ones. Although the vessels are not thrown on a wheel, drawings have been regularized in both profiles. All decoration motif colours are plain ones although many show bitone effects or lustrous and matt finishings that are not reflected in the plates. Vessels that show bad paint adherence, fugitive patterns or negative designs, and sherds with postdepositional partial loss of paint are illustrated in plates with irregular and incomplete strokes not filling the decoration pattern.

5.2. Fine Halaf painted ware

Fine Halaf painted ware is characterised by a very dense and homogeneous fabric used in the manufacture of a category of painted thin-walled vessels and

large jars. It is a new technique demanding a new specialisation in pottery techniques, especially kiln technology, which had been unknown before this time. In fact, new production techniques were found as well as a characteristic firing pattern that permits the control of kilns to obtain oxidising conditions.

The main traits of this pottery are its fine textured clays, which would have been obtained from water-laid deposits or have been prepared by the potters by levigation (separation of fine from coarse material through water). The mineral temper components are of a very fine grid sand, mica or fine lime particles (80.90% of the total) although many fragments (15.32%) present no visible inclusions at all. Some fragments show porous cores (1.45%) possibly related to fine vegetal particles but it could be the case that these wares were not intentionally vegetal tempered but that it happened accidentally during the process of clay preparation. A percentage of 2.33% show reduced porosity in the cores although they have fine particles of lime or sand as inclusions.

The careful control of firing conditions is noted here and virtually all the painted wares show a completely oxidised fabric and are of classic buff, orange or cream core colours (94.46% of the total). A small percentage of fragments (2.04%) presents a brown or dark grey core as a result of reducing atmosphere conditions while others result of mixed firing procedures showing dark cores and orange buff external surfaces or "sandwich" cores (3.47% of the sample). Overfired fragments showing a greenish colour and sometimes a brittle texture have been found in a very small numbers (about 0.03% of the sample).

The surfaces of these fine painted wares are basically smoothed giving the ceramics very even surfaces. However, this treatment erases traces of previous activities, especially of the manufacturing processes. Before decorating the vessels by painting, a thin slip is often applied to the surface. A slip of the same colour as the fabric or self-slip is the most popular with 59.10% of the total. This is followed by cream coloured slip (17.10%) or whitish coloured slip (12.60%). 11.20% of the sample is painted directly over the carefully smoothed surfaces without the application of any slip at all.

This ware category normally has standard thin walls of 6/8 mm (54.09% of the total) but there are fragments with considerably thinner walls of only 4 mm (1.24 %) and 5 mm (5.54%) as well as other groups of rather thicker ones of 9/10 mm (25.95%) or 11/13 mm (11.70%) with some exceptional ones reaching 14/15 mm (1.46%), which would correspond to large containers. Nevertheless, a real correspondence between size of vessel and thickness of the wall and some form types does not exist. For example, shape 1.1 (flat-based simple bowls) have a range of maximum thickness of 15 mm (e.g. Pl. 5.8, AM 10384) and a minimum of 5 mm (e.g. Pl. 5.9, AM 10519).

The Halaf painted ware is usually recognised for the high quality of decoration patterns applied to a large variety of vessel shapes. The new firing techniques and better-developed kilns allowed the craftsmen to achieve a greater control over paint composition and firing procedures giving high quality painted decorations sometimes characterised by a lustrous appearance. The types of

paints and decoration used as well as analysis carried out to recognise natural pigments will be discussed at the end of this chapter.

The total assemblage of this ceramic category is made up of 4,193 fragments representing 39.47% of the total amount (Fig. 5.2). The diagnostic fragments ($n = 963$ and 22.89% of the total fine painted ware) were analysed in further detail, separated and counted according to possible distinguishable vessel shape, as summarised in Table 5.3.

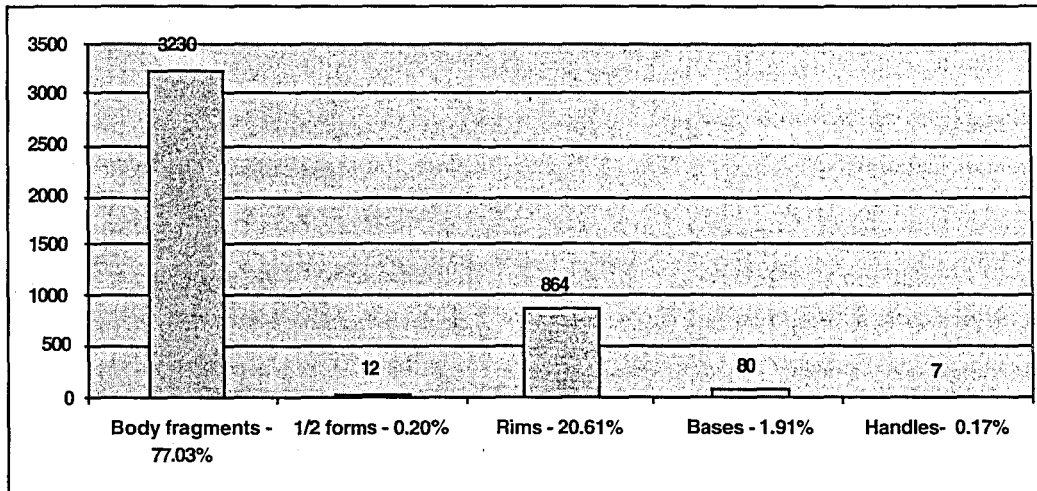


Fig. 5.2. Number and proportion of fine Halaf painted ware fragments.

5.2.1. Classification of shapes

The Tell Amarna excavation yielded a total of 4,193 diagnostic fragments from which only 12 have a half part of the vessel or any reconstructable form. Diagnostic samples include a large quantity of rims (864) and bases (80) from which only 317 fragments are reconstructable or of any value for shape typology (7.56% of the total). Many of the plain rims and the bases have no value for shape typology purposes. Most of the diagnostic sherds that allow a specific shape category to be given have been described as they were found in the field whereas a small quantity ($n = 7$ and 2.17% of the total of recovered shapes) was obtained through refitting sherds from each individual layer.

To make classification easier, the fine Halaf painted wares have been sorted out into four form series (bowls, plates, pots and jars), comprising a total of 17 individual shape types (see Table 5.3 and Pl. 5.1, chart of forms). To avoid long descriptions of shapes and type variations it has been decided to resume definitions by not considering diameter measures as an individualized morphotype. A series of miniature forms and a diverse group, where we have included special decorations, complete the catalogue. In individual descriptions of each shape, a selected set of parallels are quoted in respective plates. These are mainly from the best-known and published sites. Most of the selected parallels cited

belong to Syrian excavated and published sites, to which has been given priority over sites located in Iraq and Turkey.

Table 5.3 shows a complete list of all the shapes recognized at Tell Amarna with the number of examples and percentages of each one. Pl. 5.7 is a typological chart of forms described individually in this chapter.

Fine Halaf painted ware forms	Quantity	Total %	Total Form %	Total Shape	
1.1. Flat-based simple bowls with straight-sided walls	76	23.97	34.39		
1.2. Flat-based simple bowls with slightly flaring walls	12	3.79	5.43		
1.3. Complex bowls with carinated bodies and short flaring rim	43	13.56	19.46		
1.4. Complex bowls with carinated bodies with high and large flaring rim	11	3.47	4.98		
1.5. Hemispherical bowls with curvilinear walls and short flared collar	32	10.09	14.48		
1.6. Hemispherical bowls with rolled or flat rim	12	3.79	5.43		
1.7. Hemispherical bowls with simple pinched rim	10	3.15	4.52		
1.8. Deep hemispherical bowls	4	1.26	1.81	Bowls	Items
1.9. Hole-mouth bowls	21	6.62	9.50	69.72	221
2.1. Flat-based shallow plates with incurving-sided walls and simple pinched rim	4	1.26	25.00		
2.2. Flat-based shallow plates with straight-sided walls and simple pinched rim	6	1.89	37.50	Plates	Items
2.3. Lids	6	1.89	37.50	5.05	16
3.1. Hole-mouth pots with short upright collar	15	4.73	28.30		
3.2. Hole-mouth pots with short and slightly everted collar	19	5.99	35.85	Pots	Items
3.3. Wide mouth globular pots with short and sharply everted simple rim	19	5.99	35.85	16.72	53
4.1. Jars with a high upright neck and simple pinched rim.	10	3.15	37.04	Jars	Items
4.2. Jars with everted/incurving high neck and simple pinched rim	17	5.36	62.96	8.52	27
Total	317	100.00		100.00	317

Table 5.3. Percentages of fine Halaf painted ware forms.

1. Bowls

Bowls are the largest group of vessel form at Tell Amarna with 69.72% of the total. The group is characterised by a wide variety of types separated into 9 different shapes according to morphological traits. The most popular bowl shape at Tell Amarna is the simple bowl with a flat base and straight-sided walls (bowl category 1.1) with 34.39% of forms. Deep hemispherical bowls (bowl category 1.8) are very rare and only represent 1.81%. The characteristics of each bowl form are detailed as well as comparison with other published Halaf assemblages. Although the exact type of vessel shape of some body sherds is sometimes difficult to determine, the combination of morphological traits with painted decoration patterns has often helped to determine the type.

1.1. Flat-based simple bowls with straight-sided walls. The group of flat-based straight-sided bowls is the most representative type ($n = 76$, 23.97% of the total and 34.39% of the bowl forms), as is the case at other sites like Umm Qseir, where it represents 25.90% of the total. This form shows a flat base and straight, flaring walls. All vessels with these characteristics have been included in this category type independently of rim diameters, height, wall direction, and kind of rim or decoration applied. Rim diameters range from 90 to 220 mm, the most popular ones measure between 130 and 160 mm (with an average of 140 mm). One variant has a convex wall and a few others curvilinear ones. The rims are basically simple

although there are some examples of pinched rims as well as flat rims (Pl. 5.8, AM 10384 and Pl. 5.16, AM 10242). Two examples (Pl. 5.8, AM 10384 and AM 10579) have pedestal bases and one of them (Pl. 5.8, AM 10579) has a decoration pattern of cross-hatching lines on the exterior of the base.

The range of designs used for the decoration of these bowl type is very varied. A great percentage of bowls shows a fully painted external surface (Pl. 5.8, AM 10475, AM 10384 and AM 10579; Pl. 5.9, AM 10362; Pl. 5.10, AM 10264, AM 10355, AM 10353, AM 10037 and AM 10555) often with an internal band under the rim but there are also floral motives (Pl. 5.9, AM 10546) or checkerboard patterns (Pl. 5.10, AM 10545). Other bowls, in lesser quantities, display simple or double bands on external surfaces (Pl. 5.9, AM 10599 and AM 10519; Pl. 5.11, AM 10479 and Pl. 5.14, AM 10409, AM 10398 and AM 10418) or single or multiple undulated parallel lines (e.g. Pl. 5.11, AM 10446, AM 10385 and Pl. 5.15, AM 10233). The largest group is represented by bowls decorated with complex motives on their external surfaces: filled triangles, zigzag lines, cross-hatched quatrefoil, dot lines, lines of pendants, stars, multiple vertical lines, schematic and naturalistic bucrania as well as some floating patterns like small oblique lines.

A very fine decorated vessel is AM 10577 (Pl. 5.12) with a horizontal line of cross-hatching on the internal rim and a pattern of checkerboard motif composed of alternating squares filled with stippling with squares of quatrefoils left as reserve on the body vessel.

This form is already known from Early Halaf levels at several sites. At Arpachiyah, it is the most popular form in early levels and also in more recent ones. Mallowan separated the forms from level TT6-10 (late) and TT10 and earlier according to their design pattern, and ascribed the cross-hatched lozenge decoration motif as belonging to the early phase. At Tell Amarna, this form and decoration (e.g. Pl. 5.10, AM 10021) is present in the general context of forms and decorations. This is a very popular form in the catalogues of the Halaf period and it already appears in an early context surviving, with a different decoration pattern variation, into Middle and Late Halaf contexts.

1.2. Flat-based simple bowls with slightly flaring walls. This is a variant of the previous form, with flat bases and pinched rims but the body walls are slightly convex (Pl. 5.8, AM 10383; Pl. 5.11, AM 10400 and AM 10385; Pl. 5.14, AM 10535 and AM 10379). Another variant of this form is the flat-based bowl with slightly curvilinear walls (Pl. 5.13, AM 10368, AM 10031 and AM 10687; Pl. 5.14, AM 10380). This shape amounts to a total of 12 vessels (3.79% of the total and 5.43% of the bowl shapes) and shows a large variety of decoration patterns. Simple decorations are based on single or double horizontal broad bands on the rims and bases while complex patterns are made up of multiple undulated lines or multiple zigzags. Diameters of the rim range between 160 and 240 mm, with an average of 170 mm.

1.3. *Complex bowls with carinated bodies and short flaring rim.* The slightly deep hemispherical bowls with a carinated body and flared and simple rim, with many variable types, have been described differently in specialised literature according to the terminology used by the author; the form is called *Trichterrandbecher* or *Trichterrandschüssel* as a shallow variant (e.g. VON OPPENHEIM, 1943, p. 44, 54, at Tell Halaf), sinuous sided bowl (WATSON and LEBLANC, 1990, p. 59, form 1D at Girikihaciyān), large cream bowl or carinated plate (NIEUWENHUYSE, 2000, p. 174, Khabur survey), bowl with squatted bodies and flaring rim or sinuous sided bowl (TSUNEKI and MIYAKE, eds., 1998, p. 53), or bowl with high flared collar and simple pinched rim (GUSTAVSON-GAUBE, 1981, p. 52, at Shams ed-Din). Davidson (1977, p. 45 and 127), following the descriptive terminology of Shepard (1956), described these vessels as restricted bowls with complex profiles and flaring rim (form 6 at Arpachiyah) and restricted bowls with composite profiles and flaring rim (form 18 of Tell Aqab).

In fact, the origin of this typological form was formed thanks to descriptions made by Mallowan of a ceramic form at Arpachiyah (MALLOWAN and ROSE, 1935, p. 131). This was defined as *the Arpachiyah cream bowl*, whose principal characteristics for determining the form were the *sharply bevelled bases*. In the middle phases at Arpachiyah an evolution of the “cream bowl” appears, that Davidson (1977, p. 46) describes as form 6 and *independent restricted bowls with complex profiles and flaring rims*, a definition that is probably more fitting for this kind of curvilinear bowl. Decoration associated with this form at Arpachiyah (simple bands or lines of bucranea) is, in fact, present on vessels at many Syrian sites of the same period.

In a previous publication on Tell Amarna (CRUELLS, 1998), we described this form and their variants as carinated bowls with flaring neck, “cream bowls” (form 11). Although the typical “cream bowl”, as originally defined at Tell Arpachiyah as bowls with double lower carination and high opened collar, does not exist at Tell Amarna, we do think that this form has evolved to obtain curvilinear body sides with a single carination preserving the typical high open collars. But later, in order to avoid confusion and to make easier current and future comparisons between this form amongst other sites, it was decided to define this form and variables from a geometric morphological point of view and to gather all the bowls with a complex body and everted sides under the generic term of *Complex bowls with carinated bodies and flaring rim* and to add the necessary specific details to each variable. So, at Tell Amarna, we have separated this form into two single types according to the length and direction of the collars. The first group (1.3) is defined as *Complex bowls with carinated bodies and short flaring rim* and a second group (1.4) as *Complex bowls with carinated bodies with high and large flaring rim*.

Although there is no complete vessel, we presume that the bases would be flat (two fragments preserved in the lower part have a flat base, e.g. Pl. 5.24, AM 10571 and AM 10596) even though convex bases could exist.

Complex bowls with carinated bodies and flaring rims are the second most popular bowl form with 13.56% of the total and 19.46% of the bowl shapes. This bowl type varies in rim diameter from 170 to 330 mm, with an average of 250 mm (Pl. 5.18; Pl. 5.19, AM 10009, AM 10560, AM 10609, AM 10435 and AM 10443; Pl. 5.20; Pl. 5.22, AM 10498, AM 10006, AM 10481 and AM 10522; Pl. 5.23, AM 10659, AM 10430, AM 10469 and AM 10251; Pl. 5.25, all except AM 10208). Decoration of this type is reduced to two different patterns: rows of horizontal naturalistic bucrania in between stippled or multiple vertical lines or vertical parallel lines on external surfaces combined with simple horizontal lines and undulated lines on internal areas while the second group displays double horizontal broad bands or lines of cables on external surfaces.

1.4. Complex bowls with carinated bodies with high and large flaring rim.

This form would be a variant of the previous one but it has a larger flaring rim and a base that is probably round (Pl. 5.19, AM 10584; Pl. 5.21; Pl. 5.22, AM 10495 and AM 10482; Pl. 5.23, AM 10550 and Pl. 5.25, AM 10208). This bowl type has a decorative scheme similar to the previous one: the most popular decoration is rows of continuous horizontal schematic bucrania in between stippled or multiple vertical lines or vertical parallel lines on external surfaces combined with simple horizontal line and undulated lines on internal surfaces. It seems that rows of naturalistic bucrania are restricted to forms 1.3 and 1.4 although several are found on form 1.1. Reconstructable vessels belonging to this type amount to 3.47% of the total and 4.98% of the bowl shapes although several undiagnostic small rim fragments could also belong to this category. Rim diameters vary from 140 up to 280 mm, with an average of 230 mm.

1.5. Hemispherical bowls with curvilinear walls and short flared collar.

This vessel is an unrestricted bowl with curvilinear walls and a short neck or collar. Most of these bowls have a short everted neck with a simple pinched rim (Pl. 5.26, 5.27, 5.28, 5.29 and 5.30). This form is very popular at Tell Amarna where it amounts to 10.09% of the total of the shapes and 14.48% of the bowls. Rim diameters vary from 170 mm to very large up to 450 mm, the average being 250 mm. These vessels display simple repetitive decorative motifs, normally covering all or nearly all the external surfaces of the vessels with only three decoration variants: a simple line or band on the rim, a combination of two bands or a line with a band. Several examples show completely painted surfaces. Decoration on internal surfaces is limited to the neck and combines lines on rims with one or several undulated lines, cross-hatching motifs between lines, vertical lines limited by horizontal ones or sometimes bands covering all the neck.

This type is similar to form 5b at Shams ed-Din (*S-curved bowls*) (GUSTAVSON-GAUBE, 1981, p. 51-52 and 139) where it constitutes 32% of the total of the bowls and it is one of the most popular shapes. Decorations applied to these vessels at Shams ed-Din are also very similar to those at Tell Amarna. This form also appears at Tell Halula (CRUELLES, 1996, Fig. 7 form 1F) and it is very popular at Tell Damishliyya in the Balikh valley although where it is des-

cribed as “very large and wide pots or jars with flat or slightly rounded bases” (AKKERMANS, 1986-1987, cat. nos 96-99 and AKKERMANS, 1993, p. 40, Fig. 3.4-10: 13), or in the Khabur valley (NIEUWENHUYSE, 2000, p. 223:7).

1.6. Hemispherical bowls with rolled or flat rim. These bowls are characterised by their short outrolled rim (Pl. 5.31 AM 10477) as well as flared or simple pinched rim (Pl. 5.31 and Pl. 5.32). Two examples (Pl. 5.32, AM 10010 and AM 10195) have the rim completely painted. 12 reconstructable vessels have been counted amounting to 3.79% of the total and 5.43% of the bowls. Rim diameters of this form are quite homogeneous ranging from 210 to 280 mm, with an average of 240 mm.

Decoration related to this shape is normally reduced to simple bands on the external and internal surfaces just under the rim although several examples show a star motif (Pl. 5.31, AM 10576). There is a single example with a double line filled with vertical lines in an irregular shape (Pl. 5.32, AM 10010).

1.7. Hemispherical bowls with simple pinched rim. This is a slightly deep bowl with a hemispherical body and simple pinched rim that appears in two main variants: a large one with a rim diameter up to 33 cm. (Pl. 5.33, AM 10382, AM 10300 and AM 10370) and a second smaller one with a rim diameter up to 12 cm (Pl. 5.33, AM 10424 and AM 10497). Some examples with slightly everted walls emphasize the internal decoration, which is sometimes much richer than the external surfaces (Pl. 5.33, AM 10382 and AM 10497). This form amounts to 3.15% of the total of the forms and 4.52% of the bowls. Rim diameters for this form range from 220 to 330 mm, with an average of 290 mm.

1.8. Deep hemispherical bowls. This is a variant form of the previous one. It has a hemispherical body but is much deeper and the rim has slightly restricted traits that condition the decoration motifs applied. Decoration is basically applied to external surfaces and consists of one or two parallel bands and a simple band located under the lip in the interior (Pl. 5.33, AM 10032; Pl. 5.34, AM 10510, AM 10369, AM 10525 and AM 10363). The number of reconstructable fragments attributed to this type amounts to 1.26% of the total and 1.81% of the bowls. There are significant differences in rim diameters ranging from 100 to 216 mm, with an average of 128 mm.

1.9. Hole-mouth bowls. This is a form of deep bowl, with convex sided walls, slightly restricted and simple pinched rim (Pl. 5.35, AM 10562, AM 10072, AM 10656 and AM 10677; Pl. 5.36, AM 10507, AM 10492 and AM 10403). Some examples have a slightly lower carination (e.g. Pl. 5.35, AM 10511 or Pl. 5.36, AM 10245, AM 10073 and AM 10542) and others have flattened rim (e.g. Pl. 5.35, AM 10678; Pl. 5.36, AM 10421) or bevelled rim (Pl. 5.36, AM 10256, AM 10148 and AM 10401). Although at Shams ed-Din or Umm Qseir this form has a flat base when preserved, we presume round bases could also exist. Decoration of these bowls mostly consists of a horizontal band under the internal

rim while the external surfaces show a varied catalogue of motifs basically geometrical but there are also floral designs. This form with 21 examples, amounts to 6.62% of the total and 9.50% of the bowls. Rim diameters show a wide range from 60 to 140 mm, with an average of 100 mm.

2. *The plates*

Plates are quite uncommon at Tell Amarna amounting to only 5.05% of the total of the forms. All wide-open and shallow vessels have been classified as plates. They have been classified according to their walls. Shape 2.1 with incurving-sided walls amounts 4 items and 25% of the total; shape 2.2 is a flat-based shallow plate with straight-sided walls and simple pinched rim, the most popular type with 37,50% of the forms. Lids have also been included in this category as they are morphologically similar to the plates although it is rather difficult to attribute a specific form and function to them. As it will be seen, lids often show a painted decoration on the underside of the bases that have been interpreted as the upper side when they are put upside-down on the vessel.

2.1. Flat-based shallow plates with incurving-sided wall and simple pinched rim. Shapes of shallow open vessels, with large bases and slightly flaring sides and simple pinched rims have been classified here. Most plates offer a simple decoration based on horizontal bands or are completely painted on external surfaces (Pl. 5.37, AM 10404 and AM 10442). There are other variants that show the external surface of bases decorated with circles (Pl. 5.37, AM 10597). This type amounts to 1.26% of the total vessel shapes and 28.30% of the plates. Rim diameters for these plates are very homogeneous between 200 and 220 mm.

2.2. Flat-based shallow plates with straight-sided walls and simple pinched rim. These are shallow plates wide based with straight or slightly flaring sides and wide open (Pl. 5.37, AM 10610 and AM 10589). They are manufactured with thin walls and mostly decorated on both surfaces. There is a variant with smaller bases and rim diameters (Pl. 5.38, AM 10538, AM 10273 and AM 10339). Large vessels are fully decorated with geometrical motifs on their internal surfaces such as undulated lines or rows of axes, and plain painting on external surfaces. Two examples (Pl. 5.37, AM 10610 and AM 10589) have bases decorated with rays around a circular line or cross lines. The reconstructable vessels of this type amount to 1.89% of the total and 35.85% of the plates. Rim diameters vary from 160 mm up to a larger one at 434 mm (Pl. 5.37, AM 10610).

At Tell Aqab, this shape appears in a Late Halaf context (DAVIDSON, 1977, p. 143) although the form begins at the end of middle phase in shape 16 of shallow bowls with flaring rim and flat bases. Davidson points out that this form seems to be the western counterpart of the Mosul region polychrome plates. Seven examples were found at Tell Aqab in the late phase context and four of them have polychrome painted decoration. The same form appears at Chagar

Bazar (MALLOWAN, 1936, p. 43 and Fig. 21:1) in the Middle Halaf context (level 12) but with monochrome painted decoration.

2.3. *Lids*. Although it is quite difficult to define correctly these kinds of pieces due to the fact that they are morphologically very similar to several types of plates, we have attributed to this category examples with vertical straight-sided walls and flat bases with the underside of the bases decorated. There are only six examples (Pl. 5.38, AM 10581, AM 10575, AM 10661, AM 10590, AM 10540 and AM 10544) although the last one has slightly convex walls. Two of them have the underside of the base decorated with a band circle while another (Pl. 5.38, AM 10590) has a very simple decoration of vertical bands on the wall. The small rim diameters of the vessels varying between 100 and 150 mm indicates that they were probably used to cover angle necked jars. The number of lids amounts to 1.89% of the total and 37.50% of the plates.

An interesting example of lid has a schematic human figure painted on the external surface starting at the base and following up to the rim (Pl. 5.38, AM 10575, see Pl. 5.2). The human figure is located on a preserved unpainted zone and it is painted in mat monochrome black colour over a cream slip. The figure is in front face position, with a triangular shaped body, downward legs and the arms turned upwards showing three fingers on both hands in a dynamic position. Human figures are very exceptional and only very few examples have been found at different sites and are dating from different periods. They have generally been associated with dancing scenes, which appear in many variations from the 9th millennium BP (Nevalla Çori, Çatal Höyük, Kösk Höyük, etc.). An interesting approach to dancing and the beginning of art scenes in the Near East has been carried out by Josef Garfinkel (1998), who concludes that these kind of figures are pictorial expressions of religious ceremonies and rituals, symbolized by dancing motifs as a powerful symbol in the evolution of human societies.

There is a parallel to human figures in the Euphrates valley at Tell Halula (CRUELLS, forthcoming a) where in Middle Halaf levels a body sherd showing a schematic human figure was found. Other parallels of schematic human heads on body sherds are found at Tell Sabi Abyad (AKKERMANS, 1989, Fig. IV.43, 349 and 350) as well as on a fragment of a large jar with two standing human figures, although they are from early Halaf levels (AKKERMANS and LE MIÈRE, 1992, Fig. 21:40).

There is also examples at Tell Halaf (VON OPPENHEIM, 1943, Pl. 60) and at Chagar Bazar (MALLOWAN, 1936, Fig. 23:21 and 22, coming from levels 14 and 15 of early periods). At Arpachiyah, they are in the form of archers (HIJARA, 1978, Pl. 48A and 1980, Fig. 10 n° 342a; BRENIQUET, 1992) and, at Tepe Gawra, they are more stylised (TOBLER, 1950, Pl. 75A, from stratum XVII classified as Obeid). A group of human figures similar to those discovered at Tell Halula and Tell Sabi Abyad is also found at Samarra (HERZFELD, 1941, Fig. 36, group of 5 human figures disposed in a circular way).

2.4. *Bases of plates divers.* Only two examples are described in this category and these are fragments of bases belonging to large vessels but without any information about walls. One of them (Pl. 5.39, AM 10505) has a slightly incurving base and has the underside of the base decorated with multiple parallel lines between a circular double line that probably defines the maximum base diameter and short floating lines.

The fragment AM 10552 (Pl. 5.39) is the most interesting. It has an extraordinarily fine quality painting decoration but the whole vessel shape remains unknown as we only have a fragment of the base. The underside of the base displays a design of realistic gazelles covering the entire surface limited by a circular cross-hatching band, which limits the maximum diameter of the plate (see Pl. 5.1b). The figures are very well defined, and the talent and ability of the individual artist to express the motif is clearly visible. The ceramic fragment is carefully manufactured although the fabric shows fine mineral temper particles (sand and grit) as well as remains of vegetal temper on the external surface but not in the core. The external surface treatment is self-slip and is of a buff colour. On this surface, the animals are painted in a very realistic style and form a group of 5 animals placed in a disorderly fashion all around the base encircled by a line of cross-hatching. The painting is monochrome in mat dark red colour and the cross-hatched circular band is painted in monochrome matt orange colour. The form and proportions of the different parts of the bodies fit within groups of small ruminants such as sheep, goats and gazelles. However, among the characteristic morphological traits that permit the identification of the gazelles are the form and orientation of the horn cover. So the animals, based on these morphological characteristics, would be a group of gazelles.

In general, the catalogue of Halaf painted animal motifs is very large and varied and often includes horses, donkeys, snakes, moufflon, ducks, deer, leopards, birds, etc. These are normally painted in a very simple or schematic way although in several cases the skill of the craftsmanship is very high. Nowadays these kind of realistic painted figures are found at Halaf sites. At Tell Halula (CRUELLES, 2001), a vessel (flat-based and straight-sided walls) with a series of gazelles painted in a realistic manner placed transversally all along the wall has been found in Late Halaf levels. At Chagar Bazar (MALLOWAN, 1936, Fig. 27:5), there is a figure of cervoid, painted in reddish-brown on yellowish clay, from prehistoric levels, although it is much more stylized than the one at Tell Amarna. At Tell Halaf (VON OPPENHEIM, 1943, Pl. 57:1-3 and 5), there are some body sherds showing fragments of possible gazelles. At Tell Sabi Abyad, there is a fine ware globular jar with vertical neck, belonging to the Balikh IIIC period, that shows a row of naturalistic male capricorns (NIEUWENHUYSE, 1997, Fig. 7:15). At Arpachiyah (MALLOWAN and ROSE, 1935, Fig. 77:5), a group of naturalistic drawings of deer is also quoted coming from TT6 levels but there is no information about the vessel. At Yarim Tepe III (MUNCHAEV, MERPERT and BADER, 1984, Fig. 19:1), a vessel with a schematic painting of gazelle is described. At Tell

Baghouz (DU MESNIL DU BUISSON, 1948, p. 21 and 26), a bowl with schematic painting of deer is reported although it is related to the Samarra period.

3. Pots

Pot forms account for 16.72% of the total ware forms and are the second most popular shape at Tell Amarna. As the form is restricted, the painted decoration patterns are exclusively displayed on external surfaces, the interiors are unpainted or simply decorated with a band or line along the rim.

3.1. Hole-mouth pots with short upright collar. This is a restricted pot with a globular body and a short collar; it is a classic shape in Halaf ceramic catalogues (Pl. 5.39 and 5.40). This type amounts to 4.73% of the total and 28.30% of the pots. Pots mostly appear without handles but two examples (Pl. 5.40, AM 10531 and AM 10563) have pierced ledges diametrically opposite (there are parallels at Shams ed Din, GUSTAVSON-GAUBE, 1981, p. 147, Fig. 393-397 and Umm Qseir, TSUNEKI and MIYAKE, eds., 1998, p. 63, Fig. 29:8). Rims are normally pinched and diameters vary from 45 mm up to 130 mm with an average of 100 mm.

Painted decoration is basically applied only on the neck. The most popular decoration is horizontal bands both on interior and exterior surfaces or plain painting on external areas. Others have more complex external surface patterns with lines of arrows, chevrons, undulated lines, cross-hatching pattern, dotted lozenge, stippled lines or vertical lines of triangles between fine vertical bands.

3.2. Hole-mouth pots with short and slightly everted collar. This is a restricted vessel with globular body, a distinct short, slightly open collar usually with pinched rim (Pl. 5.41 and 5.42). This vessel is more popular than the previous form and amounts to 5.99% of the total and 35.85% of the pots. These vessels normally show a simple decoration pattern on the internal surfaces, based on simple horizontal bands or lines restricted to the rims, a combination of simple, undulated lines, a cross-hatching pattern or parallel oblique lines. Two main patterns are present on external surfaces: the first one consists in the application of a distinct decorative pattern on the body with a complex decoration and on the neck with a more simple decoration (e.g. Pl. 5.41, AM 10372, AM 10417 and AM 10508 or Pl. 5.42, AM 10490) and the second one has a complex neck decoration (e.g. Pl. 5.40, AM 10473 and Pl. 5.41, AM 10527 or Pl. 5.42, AM 10683 and AM 10565). Complex motifs are mostly geometrical patterns although there are some vegetal ones (e.g. Pl. 5.42, AM 10287). Rim diameters show significant differences, ranging from 70 mm up to 230 mm with an average of 105 mm.

3.3. Wide mouth globular pots with short and sharply everted simple rim. This is a common form at Tell Amarna with 5.99% of the total and 35.85% of the pots. It is always present in Halaf catalogues. It is a squat bowl with a globular body; some examples show a light carination and sharp everted simple rim, some-

times decorated with lines of small squares (Pl. 5.43, AM 10574) or two fine undulated lines (Pl. 5.43, AM 10524). The few rim diameters recovered vary between 120 and 150 mm. At Tell Amarna few reconstructable vessels belonging to this form exist but there are several body sherds that could be attributed to this type (Pl. 5.43, Pl. 5.44 and Pl. 5.45). This vessel form displays very rich decoration patterns. The interior surfaces of everted rims are sometimes decorated with undulated lines (Pl. 5.43, AM 10524) or a line of small squares filled with dots (Pl. 5.43, AM 10574). External surfaces are fully decorated with checkerboard designs, horizontal lines of stylised bucranea with dots, chevrons, arrows, vertical bucrania, palms, multiple scallops limited by horizontal bands, combinations of chevrons and lozenges, dotted guilloche patterns or alternating horizontal zigzags with floating oblique short lines.

Parallels to this form are found at Shams ed-Din (GUSTAVSON-GAUBE, 1981, p. 56 and 145, Fig. 391-392, form 2 of pots) and at Tell Halula (CRUELLS, 1996, p. 109, form 3A); it is also found at Khirbet esh-Shenef (AKKERMANS, 1993, p. 3.31:14-15, as wide and closed bowls with low, overhanging rims); at Chagar Bazar (MALLOWAN, 1936, p. 47, Fig. 25:4-5, coming from level 12), both examples have a similar decoration to that found at Tell Amarna: the first with a decoration of a double line of filled dotted lozenges similar to AM 10574 (Pl. 5.43) and the second with a decoration of parallel lines of stylized bucranea in between rows of horizontal dot lines similar to AM 10448 (Pl. 5.43). Other examples are found at Tell Halaf (VON OPPENHEIM, 1943, Pl. 12:1,4 and Pl. 19:4-5 and 7), at Umm Qseir (TSUNEKI and MIYAKE, eds., 1998, p. 65-67, Fig. 30-31, form IXc, *squatted jar with shot everted neck*; HOLE and JOHNSON, 1986-1987, p. 216, Fig. I and m) and at other Turkish sites such as Girikihaciyan (WATSON and LEBLANC, 1990, p. 43, Fig. 4:14 and p. 61, Fig. 5.12, form II or squat, bowl-like jar, *Büchsen*). In Iraq, it is worth to mention parallels from Tepe Gawra (TOBLER, 1950, p. 130 and Pl. 115:44-48, from the deposits of Area A in the Northeast base), Yarim Tepe (MUNCHAIEV and MERPERT, 1981, Fig. 62:1-3) and Arpachiyah (HIJARA, 1980, Fig. 7, form 6 from phase 1 or early phase and Fig. 8, form 47, from phase H).

4. The jars

Although angle-necked jars are among the most popular vessel shapes in the Halaf catalogue and relatively present throughout the whole period, there is not one single complete vessel of this form at Tell Amarna where only the necks are preserved. All jars with distinct necks are classified in this section and divided into two different shapes according to the upright or slightly everted neck.

4.1. Jars with a high upright neck and simple pinched rim. As is the case at other sites, very few complete vessels of this form have been found at Tell Amarna. The sample is very fragmentary and makes attribution of the rims to the form difficult. The jars normally show either globular or squatty bodies. This shape presents a high, straight vertical neck (Pl. 5.46, AM 10673, AM 10672 and AM 10583; Pl. 5.47, AM 10644 and AM 10523; Pl. 5.48, AM 10028 and Pl. 5.49).

This is a form which is amongst the most common vessel shapes in Halaf catalogues and at Tell Amarna it makes up 3.15% of the total and 37.04% of the jars.

4.2. *Jars with everted/incurving high neck and simple pinched rim.* This is a variable of the previous shape but shows an everted and sometimes incurving high neck (Pl. 5.46, AM 10573 and AM 10655; Pl. 5.47, AM 10513, AM 10022, AM 10526 and Pl. 5.48, AM 10472 to AM 10029). It is more popular than the previous shape and is represented at Tell Amarna by 5.36% of the total and 62.96% of the jars.

There are two variations of rim diameter: small sized jars with a diameter varying from 110 to 160 mm and a larger variation that ranges between 180 and 220 mm (Pl. 5.48, AM 0028, AM 10029, AM 10434, AM 10549 and AM 10472).

The total amount of jars with neck makes up 8.51% of the total of the forms. This is an inferior figure compared to other sites of the same period; for instance, at Umm Qseir, they represent 25.30% of the total.

Decoration of these vessels is restricted to the neck and the junction with the body. The necks are usually decorated on external surfaces with a single horizontal band on the rim and a second at the bottom of the high neck (Pl. 5.47, AM 10526 and AM 10523; Pl. 5.48, AM 10549 and AM 10028; Pl. 5.49, AM 10478, AM 10572 and AM 10675) or plain painting (e.g. Pl. 5.47, AM 10022; Pl. 5.48, AM 10029; Pl. 5.49, AM 10094 and AM 10406). Two examples (Pl. 5.49, AM 10570 and AM 10675) show horizontal broad lines in between the two horizontal bands. Internal decoration is restricted to the rim with more simple patterns as a broad line, small oblique lines or a combination with swages. Although there is no complete vessel of this form, we presume that decoration could also have been applied to the body, as is the case with the examples found at other Halaf sites. Body sherds AM 10474 and AM 10396 (Pl. 5.45) with vegetal decoration could be a body fragment of an angle-necked jar.

5. *Miniatures*

There are still no clear definitions for attributing a vessel to the miniature category and, although nearly all catalogues of Halaf painted ware have these types of ceramics, very few have been published in this category. At Shams ed-Din miniatures only represent 1.50% of the total and at Umm Qseir there is only one single piece of fine painted ware in the restricted bowl form (TSUNEKI and MIYAKE, eds., 1998, p. 73, Fig. 12). They are unusual vessels both in dimension and in their possible function.

At Tell Amarna, it has been decided to put in this category vessels with a maximum diameter of 80 mm. They normally have a counterpart shape in a larger size. There are 14 miniature vessels (4.5% of the total) and they have been classified in three form series (bowls, pots and jars) comprising a total of five individual shapes (Table 5.4).

Miniatures	Quantity	%
5.1. Flat-based bowl with slightly curvilinear wall	1	7.14
5.2. Hole-mouth bowl	1	7.14
5.3. Hole-mouth pots with short everted neck	3	21.43
5.4. Globular jars with short everted neck	8	57.14
5.5. Flat-based globular jar with internal carination	1	7.14
Total	14	100.00

Table 5.4. Percentages of miniature fine Halaf painted ware vessel forms.

5.1. *Flat-based bowl with slightly curvilinear wall.* There is only one single example of this form that corresponds to a shallow small bowl, with thick walls, pinched rim and irregular manufacture, with a mat red painted decoration. The external surface shows vertical groove lines over a light slip application (Pl. 5.50, AM 10556).

5.2. *Hole-mouth bowl.* This is a restricted bowl with a simple pinched rim and has a counterpart in a larger size (form 1.9). The example AM 10486 (Pl. 5.50) has an external painted decoration of a filled guilloche or stylized bucrania in between a line and a broad band.

5.3. *Hole-mouth pots with short everted neck.* This is a form that also has a larger size counterpart at Tell Amarna (form 3.2). It has a globular body and an unrestricted neck. Decoration on internal surfaces is very simple and restricted to a horizontal cross-hatching line or oblique short oblique lines on the rim. External surfaces have more complex motifs combined with broad horizontal bands (Pl. 5.50, AM 10491; Pl. 5.51, AM 10151 and AM 10325).

5.4. *Globular jars with short everted neck.* This is the most popular form of miniature vessel with 57.14% of the total. It is a small globular restricted jar with a round or flat base and a short, everted neck with a simple pinched rim. These vessels normally display external decoration based on broad bands on the base and rims while the body offers distinct panels such as multiple undulated lines, large cross-hatching or plants. (Pl. 5.50, AM 10551, AM 10657, AM 10532, AM 10536, AM 10669, AM 10585, AM 10445 and AM 10429).

5.5. *Flat-based globular jar with internal carination.* This is a similar form to the previous one but showing a distinct internal carination, which enhances the flat base (Pl. 5.50, AM 10501). It displays an external decoration of a combination of a broad horizontal band and two lines on the base and a line of chevrons.

6. Miscellaneous

There are some other ceramic fragments of distinct character: two curved body sherds with applied handles (Pl. 5.51, AM 10343 and AM 10489) as well as several body sherds with decoration patterns based on rows of dots circles (Pl. 5.51, AM 10387) filled with cross motive (AM 10518) or plain circles with

dots (AM 10517). There is also an incised and painted fragment (Pl. 5.51, AM 10561, see Pl. 5.1c); the exact shape can not be determined clearly but it could probably be related to a globular bowl or pot form. The fragment AM 10343 has a rather thick wall with an applied painted horizontal band that covers a horizontally pierced handle. Fragment AM 10489 has a vertically pierced ledge and the external surface is decorated with a vertical band and a line of cross or stars.

Although only one fragment is attested, the incised and painted ware is very interesting because of its outstanding characteristics. Traditionally, painted and incised decoration was restricted to late Neolithic or Samarra related periods although it seems that from Middle Halaf phases onwards this type of pottery decoration is newly introduced in small quantities. The fragment from Tell Amarna has a pattern of vertical wide bands in the external surface. These are filled with oblique fine incisions limited by vertical painted lines. The upper part has a more solid geometrical figure, probably triangular. The sherd, mineral tempered and of oxidising fabric, is painted with monochrome matt black paint.

In general, fine Halaf pottery is characterised by painted decorations but there are some examples of this ceramic type at several sites albeit in small quantities. Incised and painted vessels are described at Tell Halaf (VON OPPENHEIM, 1943, Pl. 88, especially n° 11) and, at Chagar Bazar (MALLOWAN, 1936, Pl. 3:6), a polychrome incised sherd with fine horizontal ribbing and painted with red and black triangles is described coming from level 6-7. Davidson (1977, p. 131) describes a single polychrome sherd found at Tell Aqab attributed to Middle Halaf decorative technique. It is a jar shoulder from trench 2 with an incised surface, painted in red and black. Two examples have been found in the Khabur survey (NIEUWENHUYSE, 2000, p. 167 and Ill. 21:1-2) coming from Tell Ashnane Sharqi and Aid el-Qerd; they are decorated with monochrome and matt black paint with an incised horizontal combination. In Iraq, at Arpachiyah (MALLOWAN and ROSE, 1935, Pl. 20a), there is an example from TT6 period that consists of a polychrome vessel with a fine horizontal ribbing covering the entire surface and a combination of geometrical designs painted in red and black.

5.2.2. Considerations on paint and decoration

The fine Halaf ceramic is the only single category that displays painting as a decoration or final fabric processing. Nevertheless, two fragments show a mixed technique of incisions in combination with painting, a technique present at other Halafian sites. One example (Pl. 5.51, AM 10561; Pl. 5.1c), already described, has oblique transversal multiple incisions and a black matt band painted on the top. A second example, a miniature bowl (Pl. 5.50, AM 10556), has a vertical groove decoration painted in red over a light slip applied surface.

The majority of Tell Amarna fine painted ware is monochrome although very few examples (less than 0.50% of the total) show bichrome decoration (e.g. Pl. 5.10, AM 10545) with an internal checkerboard pattern painted in matt black and the external surface being fully painted in red over a cream slip.

Within monochrome painted wares, two other main categories have been isolated according to the intensity and regularity of the colours applied offering monotone or polytone effects as a result. The literature on Halaf ceramics presents always discussion about this subject but no analysis has ever been made with the aim of understanding well if polytone effects are really bichrome or rather monochrome paintings with different thickness of colour applied before firing (Pl. 5.2a, AM 3469) (see a discussion on this subject in section 5.5 and the results of the analysis of six pottery sherds in chapter 7).

In monochrome fragments offering monotone effect (76.88% of the total), the thickness of the pigment applied to the vessels is very homogeneous with one single and plain colour as a result. The bitone effect on the monochrome fragments (23.12% of the total), results most likely of differences in the pigment thickness. The variability in colour intensity offering a bitone effect ranges from light black to light brown (in dark pigments) and from a deep red to light orange (in red pigments). In a very few sherds, it appears that the bitone effect could have been intentionally looked for by the potters in order to obtain a sort of bichrome effect (see Pl. 5.2a). This could have been obtained by varying the thickness of the pigment layer, which may inhibit the oxidation/reduction provided by the atmosphere created during firing. In this way, brown bitones, which are the most common, could be the result of a reduced variant of red pigment or a greater oxidation of a black pigment. Only two body sherds show a clear bitone decoration based on horizontal bands, painted in matt black limited by a series of rhombus painted in a light brown.

A third variable analysed at Tell Amarna is the nature of colours and their present state. The paint is found either in matt (being the most popular finishing mode with 83.14% of the total) or lustrous (16.86%). Matt black is the most representative with 41.86% of the total followed by matt red with 19.19% and matt dark brown with 13.37%. Black and red colours are also the most popular with lustrous finishing mode (with 9.88% and 5.52% respectively). In Table 5.5 the ranges of tone type by colours are shown and, although all of them are found either in matt or lustrous, the most significant would be the light brown and orange, which are only found in matt.

Five major pigment colours have been described as the most representative used in decorative painting motifs: black, red, orange, light brown and dark brown. All of these are present in different tonalities probably due to the thickness of pigment applied and to the firing conditions. It is difficult and highly subjective to describe the individualized colours used in every single sherd through a colour range chart. No similar uniformity of colour is present in most of the sherds. Nevertheless, colours are described using a set of standardised descriptive categories and subsequently compared to the *Munsell Soil Color Charts*. The *Munsell* equivalents of the colours of the Tell Amarna pottery sherds described were: black (7.5 YR 2.5/1), red (7.5 R 5/6-5/8 and 10 R 3/6), light brown (10 YR 6/3-7/4), dark brown (10 YR 4/3-5/3) and orange (5 YR 6/6, reddish yellow and 5 YR 5/4, reddish brown).

In general, monochrome black painted wares are the most popular with 48.84% of the painted ware corpus. Monochrome red painted wares account for 30.52% and this is the second largest group. Monochrome dark brown (11.63%), monochrome orange or light red (6.98%) and monochrome light brown (2.03%) are slightly less common. It seems likely that pigments used in painting Tell Amarna wares are very reduced. Hematite and magnetite was used to obtain red colour and magnetite plus charcoal or hematite (depending of the sample analysed) to obtain black colour (see below section 5.5 and chapter 7).

	% Colours	% Monotone	% Bitone	% Matt	% Lustrous
Black	48.84	36.42	14.74	41.86	9.88
Red	30.52	22.25	2.31	19.19	5.52
Light brown	2.03	0.87	1.16	2.03	0.00
Dark brown	11.63	10.12	4.34	13.37	1.16
Orange	6.98	7.23	0.58	6.69	0.29
Total %	100.00	76.88	23.12	83.14	16.86

Table 5.5. Description of colours used in painted decoration with monotone/bitone, matt/lustrous finishing detailed amounts.

Normally, the pigments present a well-adhering state but in some examples (less than 1.00%) fugitive or worn-out paint appears and decoration applied is only preserved in negative (see Pl. 5.2b, AM 3651). Black and red are the pigment colours that show the highest percentage of a bad-adhering state.

The vast majority of Halaf sherds with preserved painting show very varied decoration. The decoration patterns became more complex in middle phases, in contrast to earlier phases of the Halaf period where they are simpler. They present often a combination of different motifs in place of the earlier single and simpler repeated elements. In general, the painted vases may be divided into two main groups: restricted and unrestricted forms. Unrestricted vessels (68.16% of the total) are the largest group at Tell Amarna and are normally decorated on both surfaces. Restricted shapes (forms 1.9/3.1/3.2/3.3/4.1 and 4.2) amount to 31.84% of the total and display decoration basically on external surfaces although many have a simple line or band along the interior rim.

Types of decorative schemes have already been described for each vessel shape. Generally, simple geometrical patterns are the most representative group with a large design corpus based on varying combinations of lines, bands and also dots (simple horizontal lines or bands are the most popular). Complex geometrical designs are also present in the repertoire with motifs like cables, checkerboard, cross-hatching, multiple zigzag, lozenges etc. (see Pl. 5.3). Combinations of bands or lines with swages or pegs are also present and are normally applied on the interior of the rims. Stippled lines, doted lozenges, scallop or guilloches are also popular. Figurative motifs such as stars, flowers or vegetal patterns, horned animals and schematic human figures are also present at Tell Amarna. Some vessel shapes have a repetitive decoration scheme. Bucrania, for example, seems to be restricted to forms 1.3 and 1.4 and normally combines a pattern of simple un-

dulated lines on the internal surface while a row of bucrania in between vertical lines predominates on external surfaces. Form 1.5 shows a very simple decoration pattern based on a simple horizontal band on the exterior surface while in the interior a simple line or a combination with undulated lines predominates. Bowl forms 1.1/1.2/1.7/ and 1.9 display a large variation of motifs covering nearly all the themes. Hole-mouth pots usually display only external decoration but this normally covers all the surface with varied geometrical but also schematic bucrania schemes (see Pl. 5.3 for decoration patterns).

In any case, the analysis of decoration pattern and their frequencies is quite complex and, even in a selective large sample, the motives represented make up an unbiased result. Up to now, few studies concerning the use of decoration patterns in different vessel forms or even their specific location in the vessel have been made. Body sherds, mostly with no indication of the vessel form, can easily be interpreted according to the single motif preserved but, as it has been seen, a single vessel may have several different motifs. Several methods of summarising motif usage as well as sophisticated statistical techniques have been employed (e.g. LEBLANC and WATSON, 1973; VON WICKEDE, 1986; CAMPBELL, 1992) but the nature of the sample is, in most cases, unknown and methodologies of design element analysis could be criticised, especially concerning the way in which design elements are isolated to reduce the subjectivity to a minimum.

It has been said that fine Halaf painted pottery could have represented a mode of communication and the decorations go beyond the level of assertive style to reflect particular social rules. In the same way, Halaf pottery could have been an item of social identification, forming part of a new period of globalisation when newly rising complex societies begin to appear developing new socio-economic organisation patterns.

5.3. Fine Halaf unpainted ware

Fine Halaf unpainted ware is always present at all Halaf period sites and is often the largest group. At Tell Amarna, it makes up the main category of the pottery with 4,232 fragments (39.84% of the total), slightly more than the group of fine Halaf painted ware (39.47%). This percentage slightly differs from that found at other Halaf sites of the same period. At Tell Halula (CRUELLES, forthcoming a), plain ware makes up 33.68% of the total, at Umm Qseir, in the Khabur valley, it is clearly superior and this group represents 48.40% of the total thus making the largest group of pottery (TSUNEKI and MIYAKE, eds., 1998, p. 74). At Chagar Bazar, the new complete stratigraphic sequence (CRUELLES, forthcoming b) offers 41.46% of unpainted ware against 42.24% of fine Halaf painted ware and 16.30% of coarse ware (although here the total is from early to Late Halaf levels). At Arpachiyah (MALLOWAN and ROSE, 1935, p. 172), Halaf unpainted ware is "certainly not more than 10 per cent of the whole" but after Mallowan "in general the unpainted pottery was all very coarse". Davidson states that at Tell Aqab (DAVIDSON, 1977, p. 108) "the ratio of Halaf painted sherds to Halaf unpainted ones at the site is 1 to 1.35 in terms of number of sherds" but claims that "the

figures are not meaningful in respect to the ratio of painted to plain Halaf vessels as most of the unpainted sherds are in fact the body fragments of the larger types of Halaf painted wares". As it has happened with coarse ware, fine Halaf unpainted ware has traditionally been ignored or inadequately handled in general pottery studies and has often been described in the same categories as fine painted wares, medium coarse ware or common ware. At Shams ed-Din (GUSTAVSON-GAUBE, 1981), the common ware accounts for 85% of the total; this is the proportion of painted to plain wares with a ratio of 3:1. At Girikihaciyan, plain ware is included within the description of coarse ware. This fact makes difficult to compare this important category of wares between the different sites. Notwithstanding, it seems clear that there is a general similarity between the forms of the unpainted Halaf ware and the fine Halaf painted ware at many Halaf sites. Nearly all the vessel shapes found in unpainted wares at Tell Amarna have a counterpart in painted ware so the general discussion about ware typology is in the section devoted to fine Halaf painted ware.

The unpainted ware has very similar characteristics to the fine Halaf painted ware. It is hand-made, it generally presents a well levigated and fine textured clay, with inclusions basically of mineral type (lime or sand) but very fine (0.2 mm) (78% of the total). In some cases, it is vegetal tempered (7% of the total) and 14% of the sherds have no visible inclusions. Most of the sherds included in the vegetal temper group normally present cores with small pores, which could be the result of contamination or an unintentional presence of vegetal elements in clays before the vessels were made.

They generally present very good firing conditions made in an oxidizing atmosphere (91% of the total) and the complete process of firing in those controlled conditions results in orange buff and cream coloured materials. Several fragments (about 8%) show darker coloured fabrics due to incomplete oxidizing conditions, while very few fragments show evidence of a process of over-firing conditions with porous surfaces and greenish coloured cores. Also a few sherds show a "sandwich" pattern (brown-orange-brown coloured) due to mixed firing conditions. The surface of these ceramics is basically smoothed (86% of the total) but other fragments have also been detected which have had a thin self or applied light slip (14%). These fragments, their presence and attribution, will be discussed again later.

The preservation state of this pottery is generally good although several sherds present calcareous adherences and very few are rolled towards a secondary position. Some other fragments show a greenish coloured fabric and deformed bodies, which could be the result of over-firing.

The thickness of the walls can be generally divided into two groups: the walls of small vessels like bowls, plates and several pots are 6 to 9 mm thick while those of big jars are rather thick and range from 10 to 13 mm. Most of the 4,232 ceramic fragments belonging to this category are body sherds (89% of the total) (Table 5.3) while the most numerous reconstructable forms within the fragments are bases ($n = 291$ and 6.88%). There are only three complete shapes (0.07% of

the total), three handles (0.07%) and 168 rims (3.97% of the total) that is a relatively low number when compared to ratios of other series. There is a significant deviation observed between the total amounts of rims in this group in relation to other categories. The total number of rims in this category (3.97% of the total) is clearly inferior to the ratios of 20.61% in fine Halaf painted ware or 11.15% in coarse ware. All the rims were sorted and analysed individually and when ascribed into this category no visible remains of painting were observed. Body fragments were sorted and counted according to material and also surface treatment and it is possible that a certain amount of these sherds, that have been classified as unpainted Halaf, belongs to reserved zones of fine Halaf painted vessels.

12% of the total of 4,232 sherds have applied light slip as surface treatment while the rest (88%) shows smoothened surface treatment. Several authors propose that fragments with applied slip could belong to a reserved zone of Halaf painted ware but at Tell Amarna some complete vessels have been found with an applied slip similar to those applied to Halaf painted vessels before applying decoration (e.g. Pl. 5.52, AM 10594 and AM 10593 and Pl. 5.4a).

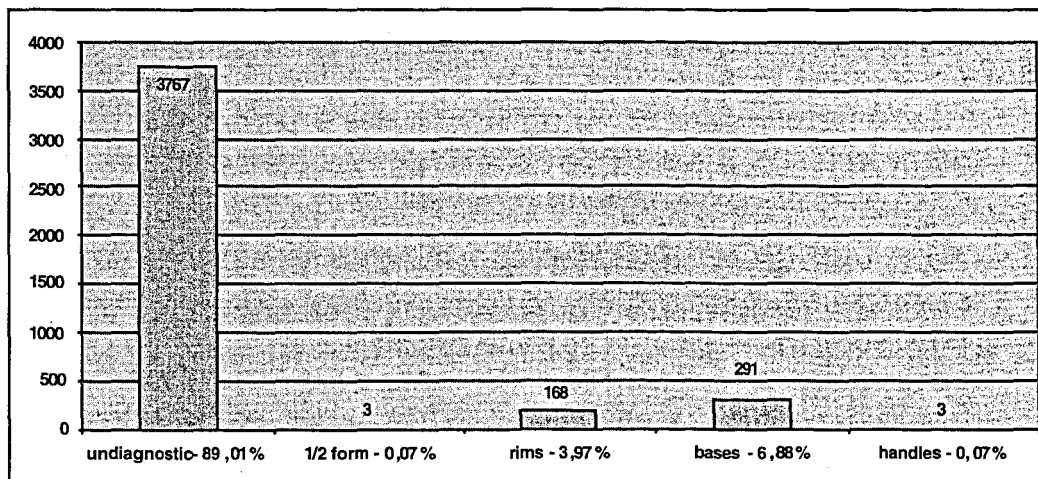


Fig. 5.3. Total number of fine Halaf unpainted sherds retrieved from the site.

5.3.1. Classification of shapes

Of the total 4,232 pottery sherds ascribed to this category, only 10.99% are diagnostic fragments with the following relative proportions of the diagnostic sherds: rims 3.97% (n = 168) and bases 6.88% (n = 291). It has only been possible to recover 29 reconstructable shapes (0.61% of the total). It is worth noting that most of the unpainted reconstructable shapes are also present in the main catalogue of fine Halaf painted ware.

Within the group of reconstructable shapes, classification moves down to 7 individual types summarised in Table 5.6.

Shape	Quantity	%
Flat-based straight-sided bowls	5	17.24
Low flat-based bowls or trays	2	6.90
Carinated, straight-sided bowls	2	6.90
Globular hole-mouth bowl	1	3.45
Hemispherical bowls with curvilinear walls	7	24.14
Hole-mouth pots with short and slightly everted collar	5	17.24
Jars with neck	7	24.14
Total	29	100

Table 5.6. Percentages of fine unpainted Halaf ware individual types.

Flat-based straight-sided bowls. This shape, very popular throughout all the Halaf period on fine painted and unpainted wares, has flat base and straight-sided walls varying in rim diameter and the height of the vessel (Pl. 5.52, AM 10594, AM 10593 and AM 10679). This form category is found at other sites like at Tell Arpachiyah in the level before TT10 or at Tepe Gawra from level XVIII. At Girikihaciyan this shape is called *flaring-sided bowls* and is the most common plain ware bowl form making up 12.48% of all forms.

Low flat-based bowls or trays. This type is a wide-open and shallow vessel and is similar to the previous shape. It has a flat base and open straight-sided walls and is represented by two examples that have 18 cm and 14 cm maximum in diameter (Pl. 5.52, AM 10671 and AM 10666). A similar example is described at Tepe Gawra, as coming from the Northeast base, although it has slightly convex walls.

Carinated, straight-sided bowls. From the two examples, one (Pl. 5.52, AM 10407) is an open low carinated bowl with straight sides.

Globular hole-mouth bowl. This is a form present in all ware categories at Tell Amarna. One example (Pl. 5.52, AM 10649) has a restricted globular body and a simple inward rim. The parallel to this form in fine painted and also coarse ware normally has a flat base. This form was described at Shams ed-Din as *medium hole-mouth bowl* in the *common ware* category and it is also present at Khirbet esh-Shenef or at Girikihaciyan.

Hemispherical bowls with curvilinear walls. This is a form of shallow bowl with curvilinear walls. They normally have short pinched rim or simple rim (Pl. 5.53, AM 10682, AM 10652, AM 10648, AM 10668 and Pl. 5.54, AM 10647). It is also a very popular form in the catalogue of fine painted wares where the parallels are mentioned. At Shams ed-Din, within the *common ware* category, there is a parallel to this form described as *medium to large bowl with short, simple pinched flared rim*.

Hole-mouth pots with short and slightly everted collar. This type of pot has a restricted globular shape with a short and everted collar or neck and a simple rim (Pl. 5.53, AM 10643 and AM 10411). The vessel AM 10643 (Pl. 5.4b) has

parallels at Khirbet esh-Shenef or at Tell Arpachiyah (in level before TT10) and at Girikihaciyah where it is described as *flared rimmed bowls*.

Jars with neck. This is also a popular shape in fine painted wares. They have globular bodies and short and vertical neck (Pl. 5.54, AM 10667) or slightly everted neck (Pl. 5.54, AM 10651, AM 10465, AM 10464, AM 10452 and Pl. 5.55, AM 10653, AM 10509 and Pl. 5.4b). The form with a short everted neck is found at Shams ed-Din where it is described as *flared rim or sinuous-sided bowls* inside the *common ware* category.

Base fragments. All bases recovered in unpainted ware belong to flat shapes (Pl. 5.55) and no examples of rounded bases have been found. Due to the fact that the thickness of bases and body sherds in this ware category are very similar, it is difficult to distinguish round bases from body sherds and this could explain their absence. In any case, it seems that flat bases are the most popular throughout the Halaf period. Amongst the flat bases, we found shapes which could fit with simple globular bowls (Pl. 5.55, AM 10650, AM 10453 and AM 10439) while others (Pl. 5.55, AM 10646, AM 10456) with possible shapes of open bowls with straight-sided walls. Base fragments AM 10454 and AM 10645 (Pl. 5.55) could belong to small bowls or miniatures.

5.4. The coarse ware

Traditionally, coarse ware assemblages from settlements of the Halaf period have either been marginally handled or ignored in global pottery studies even though this ware category is a regular component of general assemblages from the Halaf period. Recently, however, this ware category has been incorporated into detailed studies especially concerned with the earlier phases of the Halaf period, called "Proto-Halaf", "Transitional", "Hassuna III" or "Samarra". The catalogue of coarse ware is very wide and varied, and contains all the categories present in previous Late Neolithic phases.

The vast majority of sites with early Halaf phases show a percentage of around 80% of coarse ware while new, fine-painted ceramics only represent 20% of the total amount. In accordance with the evolution of the Halaf period these percentages change from reaching amounts completely opposite to those at the beginning. At most sites with Middle or Late Halaf levels, the amount of coarse ware does not normally exceed a fifth of the total pottery amount, while fine Halaf painted and unpainted ware can reach up to 80%.

As already mentioned, the criteria used in categorizing assemblages from the Halaf period have usually differed from site to site. This means that there are sites where unpainted Halaf ware is not considered in general descriptions, coarse ware is superficially described or sometimes mixed into the same group as unpainted fine ware and only fine Halaf painted wares are widely described.

At Tell Amarna, coarse ware constitutes a fifth of the total ceramic ensemble (20.68% of the total) with 2,197 sherds having been retrieved from the

site in good condition and only a small part of them rolled towards secondary deposition. The percentage is similar to that observed at Tell Halula with 20.19% and Tell Damishliyya, in the Balikh, with 16% (mainly found in pit K19) at the same period. At sites like Umm Qseir in the Khabur area, coarse ware represents 12%, at Tell Aqab 14%, and at Chagar Bazar 10.28%, all slightly inferior to the Tell Amarna figure of 20.68%. At Shams ed-Din, it is quite inferior totalling only 6% of the total.

When studying this category of ware, an important characteristic is the nature of the fabrics between Early Halaf phases and Middle/Recent ones. In early phases a greater variety of fabrics was found (simple coarse ware, burnished ware, slipped ware, incised and impressed ware, Dark Faced Burnished wares, Pattern burnished, early painted ware, "husking tray"), which are the result of evolution from previous Late Neolithic phases. During Middle and Late Halaf periods, the variability of ware is reduced considerably to two main categories only: simple coarse ware and burnished ware (made from different kinds of clays, which differ according to whether the inclusions are vegetal, mineral or mixed).

At Tell Amarna, all the pottery from this group was sorted and counted, and then received treatment to identify and classify it starting from simple criteria according to fabric and shape. In that way, undiagnostic fragments received a more simple treatment than diagnostic ones which were sorted according to other criteria such as the absence or presence of inclusions, the treatment of surfaces and fabric colours.

The coarse ware group is technologically different from both the fine painted ware and the unpainted ware of the Halaf period. Most of it shows mineral inclusions ($n = 1637$ and 74.51%) but also vegetal inclusions ($n = 560$ and 25.49%), and the surfaces are never decorated but usually treated by smoothing/polishing or burnishing. The walls are rather thicker than the other two categories and normally exceed an average of 10 mm. The coarse ware was sorted into four main categories: vegetal tempered simple coarse wares, mineral tempered simple coarse wares, vegetal tempered burnished coarse wares and mineral tempered burnished coarse wares. The individual diagnostic fragments were also analysed morphologically.

Coarse ware is basically manufactured from granular textured, not very well-prepared clay and shows dark or grey cores mainly due to reducing firing conditions (71%) but oxidising is also present (17%) with red/orange cores, and mixed firing conditions (12%), which show a black central core and an reddish colour in the external surfaces. Determination of firing conditions and maximum temperatures requires special analysis, so the fragments were sorted using simple visual criteria according to the colours of the cores. The fragments that show a dark core (black or dark grey) have been associated with reducing firing and belong to pottery fired in simple kilns or on open fires. Red, orange or cream cores indicate that the pot from which the sherd derives was fired in oxidising conditions and was probably subjected to a very high temperature for a short time in a kiln where the temperature could be adjusted and controlled. The vessels fired in mixed

conditions have been fired first in reducing atmosphere but with an oxidation during the final phase of the process.

Technologically, all coarse ware is hand-made and contains vegetal or mineral inclusions which are added to make the clay less elastic, reducing shrinking and helping to distribute heat evenly through the vessel, thus avoiding cracking during firing or when it is used for cooking. The method of shaping was reconstructed through the traces of applied techniques observed in several fragments. Diverse shaping techniques like moulding, coiling or pinching could have been used in the manufacture of Tell Amarna coarse ware. Moulding could have been used in the manufacture of the flat bases of pots and pinching could also have been a good technique for building a vessel, forming the wall by pinching the clay between thumb and fingers, although no clear evidence has been found to show that this was used. Several pottery sherds show traces of the adhesion of coils (see Pl. 5.5a, AM 3606). This technique made by adding coils, one above the other, is relatively simple and does not require much experience. Sometimes the vessels are made thinner by pinching the clay between thumb and fingers or by patting the external surfaces. In addition, several broken elongated conical ledge handles that are found have helped in understanding techniques and how they were applied to the body (see Pl. 5.5b, AM 3607).

	Vegetal tempered				Mineral tempered				Total	%
	1s	%	1b	%	2s	%	2b	%		
Undiagnostic	421	90,93	82	84,54	1150	83,76	203	76,89	1856	84,48
Rims	34	7,34	12	12,37	155	11,29	44	16,67	245	11,15
Bases	8	1,73	3	3,09	61	4,44	17	6,44	89	4,05
Handles	0	0,00	0	0,00	4	0,29	0	0,00	4	0,18
Others	0	0,00	0	0,00	3	0,22	0	0,00	3	0,14
		100,00		100,00		100,00		100,00		100,00
Total	463		97		1373		264		2197	
Percentage	21,07		4,42		62,49		12,02		100	

Table 5.7. Percentages of fragments detailing fabric composition and diagnostic ascription (s = smoothed simple coarse ware; b = burnished ware)

The coarse pottery sherds recovered at Tell Amarna were sorted and counted into broad categories in order to obtain a basic record of all the sherds (Table 5.7). The main category is the undiagnostic sherds ($n = 1856$ and 84.48%) while diagnostic sherds ($n = 341$ and 15.52%) have been analysed individually and sorted into rims ($n = 245$ and 11.15%), bases ($n = 89$ and 4.05%), handles ($n = 4$ and 0.18%) and others ($n = 3$ and 0.14%).

Because of the fragmentation of the pottery, the most significant morphological criteria are the shape of rims, bases, the presence or absence of handles as well as certain parts of the bodies. From diagnostic fragments reconstructable shapes were obtained, which permitted the attribution of a particular form. This will be dealt with below.

5.4.1. Simple coarse ware

The simple coarse ware with vegetal inclusions amounts to 463 sherds (21.07% of the total coarse ware assemblage) from which 421 (90.93%) are undiagnostic fragments and 42 (9.07%) diagnostic (see Table 5.7). Within the diagnostic fragments, 34 are rims (7.34%) and 8 (1.73%) are bases.

The simple coarse ware is hand-made, with granular textured generally not well prepared clays and, basically, with vegetal temper of small size, although several sherds were both vegetal and mineral tempered. The majority of the vegetal tempered simple coarse ware was fired in a reducing atmosphere and shows a distinct black section (79% of the total). Some fragments are incompletely reduced and show a dark grey core (14%). The orange coloured cores indicating an oxidising atmosphere are very few (7%). The vast majority of surfaces show evidence of a simple scraping although others seem not to have had any surface treatment. Surfaces are mainly of a brown/dark brown colour (in more than 3/4) but orange and cream colours are also present. The thickness of the walls varies from 10 mm up to a maximum of 25 mm, the standard being 10/14 mm.

The simple coarse wares with mineral inclusions amounts to 1,373 sherds (62.49% of the total). 1,150 (83.76%) are undiagnostic and 223 (16.24%) are diagnostic fragments. Rims (70.45% of the fragments) are the most representative diagnostic forms of the group, followed by bases (22.73%) and handles (1.82%).

This category has very similar characteristics to the previous group especially where clays, firing systems, thickness of the walls and treatment and surface colours are concerned. The main difference is the inclusion of mineral particles (basically sand and grit), which, in most cases, is of medium size (0,5 mm) but there is also a larger size (1 mm). The cores of the vast majority are black (72% of the total) but there are also some incompletely reduced fragments with grey cores (14%) and some are orange buff that is the result of an oxidising atmosphere (14%).

5.4.2. Burnished coarse ware

The burnished coarse ware group amounts to a total of 361 fragments (16.43% of the total of coarse ware). 97 of the fragments have as temper vegetal inclusions (28.77%) and 264 mineral inclusions (73.13%). Within the vegetal inclusions group are 82 fragments undiagnostic (84.54%) while the diagnostic ones are only 15 (15.46%). Undiagnostic fragments with mineral inclusions come to 203 (76.89%) and diagnostic ones amount to a total of 61 fragments (23.11%).

The fabric of this group has characteristics quite similar to the previous one. It is hand-made, from granular textured not well levigated clay, and rather dense in mineral examples. It is normally well fired and has a dark core due to a reducing atmosphere although several sherds present oxidising cores.

The main characteristic of this group lies in the treatment of the surface, which normally shows a good burnished finishing, generally on external parts of the vessels and occasionally with a burnished band on internal rims (Pl. 5.6a,

AM 3608). When the vessel is mineral tempered, mainly sand and grit of medium size is used (0,5 mm).

5.4.3. Classification of shapes

The coarse ware sample consists mainly of sherds with only two complete vessels and few reconstructable shapes. Although coarse ware represents 20.68% of the total ceramic bulk (n = 10622), diagnostic fragments only amount to 3.21% (n = 341) and only a few (n = 32 and 1.46%) allow us to obtain several parameters concerning rim or base diameters. The catalogue of shapes made from coarse ware is not extensive and is restricted to four forms, all of them present in other similar ensembles coming from sites with a similar datation. It is worth noting that coarse ware forms have their counterparts in fine painted wares.

Within the group of reconstructable shapes the classification moves down to 6 individual types summarised in Table 5.8.

Shape	Quantity	%
Globular hole-mouth bowls	29	60.42
Globular hole-mouth bowls with short neck	3	6.25
Shouldered jar with upright neck	1	2.08
Open bowls	4	8.33
Low flat-based bowls	2	4.17
Bases	9	18.75
Total	48	100.00

Table 5.8. Percentages of Halaf period coarse ware individual types.

Globular hole-mouth bowls. This shape is the largest coarse ware form making 60.42% of the total. No complete vessel of this category has been found and only details about rim diameters are available. These bowls are characterised by a restricted shape with simple pinched or rounded rims (Pl. 5.56, AM 10632, AM 10617, AM 10620 and AM 10621; Pl. 5.57, AM 10613 and AM 10614; Pl. 5.58, AM 10449 and AM 10450; Pl. 5.59, AM 10608, AM 10607, AM 10624 and AM 10433), although there are also several examples with flattened rims (Pl. 5.56, AM 10623; Pl. 5.57, AM 10413, AM 10622 and AM 10635 and Pl. 5.58, AM 10432), occasionally inward-bevelled rims (Pl. 5.56, AM 10690 and AM 10606; Pl. 5.58, AM 10603) and examples with flat and pinched rim (Pl. 5.59, AM 10618). This shape is very popular in other sites of the same period (e.g. Shams ed-Din: GUSTAVSON-GAUBE, 1981, p. 167, Fig. 563-570 and p. 169, Fig. 571-585; Khirbet esh-Shenef: AKKERMANS, 1993, Fig. 3.35:57-58; Umm Qseir: TSUNEKI and MIYAKE, eds., 1998, p. 79, Fig. 35:1-6). No complete form is present at Tell Amarna but, when compared with other sites of the same period, we can presume that bases were mostly flat (e.g. Umm Qseir: TSUNEKI and MIYAKE, eds., 1998, p. 77, Fig. 34:5).

Globular hole-mouth bowls with short neck. These have been found in small quantities and are characterised by a short, vertical collar (Pl. 5.58,

AM 10642) or by a short and everted collar (Pl. 5.60, AM 10602 and Pl. 5.6.b, AM 10602) with a vertically pierced lug handle.

Shouldered jar with upright neck. There is only one example (Pl. 5.58, AM 10627) with a short upright neck. Given its 37 mm rim diameter, it could have belonged to a sort of miniature vessel. At Shams ed-Din (GUSTAVSON-GAUBE, 1981, p. 71 and 161, Fig. 522) a similar form (form 1 of jar), but in medium coarse ware, was found.

Open bowls. There are only two examples: one has a flat rim (Pl. 5.59, AM 10616) and the other has curvilinear sides and a pinched rim (Pl. 5.59, AM 10634).

Low flat-based bowls. There are only two examples. One would have been a small flat-based straight-sided bowl (Pl. 5.60, AM 10600 and Pl. 5.6c) while the other example would have been a small plate, with a flat base and straight vertical sided walls (Pl. 5.60, AM 10601). The same shape is present at other Halafian sites (e.g. Tell Halula: CRUELLS, 1996, p. 109, Fig. 7, form 2a; Chagar Bazar: MALLOWAN, 1936, Fig. 20:12, from level 15; Umm Qseir: TSUNEKI and MIYAKE, eds., 1998, p. 77, Fig. 34:1).

Bases. Most of the bases recovered belong to flat forms and probably to simple globular bowls or straight-sided bowls (see Pl. 5.60). The form AM 10633 (Pl. 5.60) would have been a miniature.

Handles. Very few examples of handles have been retrieved from the site. Two of them belong to a short ledge handle type used on globular hole-mouth bowls and probably located under the rim (Pl. 5.60, AM 10629 and AM 10638) and a third (Pl. 5.60, AM 10602) is vertically pierced and associated with hole-mouth globular bowls with short open neck.

5.4.4. Function

A special characteristic of the coarse ware in contrast to fine Halaf ware is their functional purpose. Traditionally, ware for domestic functions is separated into two main categories: ware which, thanks to the characteristics of the material, could be used for cooking purposes on fireplaces and other ware of fabric components that do not resist the thermic shock. Of course, these conditions do not define the ware according to their specific fabric characteristics. The fact that a coarse ware vessel is able to receive direct fire does not determine its specific purpose. The purpose is determined directly by the user.

In general, coarse ware does not seem to have had table purposes as a main final objective when compared with the large catalogue of forms and sizes of fine ware. Simple and burnished mineral tempered wares seem to be good enough for cooking purposes and their specific fabric and firing conditions made them

possible to resist thermic shock without breaking. Several burnished mineral wares have dark coloured lower external parts, probably as the result of being in contact with open fires.

5.5. Some technological traits of the Tell Amarna pottery

The ceramic assemblage of Tell Amarna described in section 5.1 was first of all analysed macroscopically on the basis of fabric, firing, surface treatment, decoration patterns and colours used as well as general measures. Four different major groups were obtained: fine Halaf painted ware, fine Halaf unpainted ware, mineral tempered simple coarse ware and vegetal tempered simple coarse ware. A description of each one is found in the corresponding section.

A second stage of the analysis concerned a sample collection of 32 pottery fragments selected from each isolated group as well as 8 soil samples (obtained from the site but also from mudbricks from the Bronze Age settlement at Tell Amarna). Criteria used to select the samples were twofold. Firstly, giving priority to the four major categories established and secondly choosing inside each group the main differences in fabric that were to be observed macroscopically.

This sample collection was made up of 21 sherds of fine painted ware, 3 sherds of fine unpainted ware and 8 coarse ware sherds of different composition (see Table 5.9 for an individual description of the sherds) all of them coming from soundings L.17 and L.18 that had provided the largest amounts of ceramic sherds. These samples were submitted to X-ray diffraction and petrographic analysis and the results are fully commented on in chapter 6.

The first macroscopical analysis and the results of the microscopic analysis described in detail in chapter 6 have produced several specific results which allow a better understanding of the dynamics of pottery production at Tell Amarna.

The fine ware group of ceramics of Tell Amarna is characterised by very fine textured clays, which could have been obtained from water-laid deposits or prepared by the potters by levigation (separation of fine from coarse material through water). They have neither visible inclusions nor any presence of small mineral particles that form an integral part of the clays used, although some fragments have a porous core (1.45% of the total), possibly related to fine vegetal particles. On the basis of the petrographic analysis, 8 samples in Subgroup Ib, belonging to fine painted ware but with a very fine fabric, show possible evidence of vegetal temper. But these wares were probably not intentionally vegetal tempered and the inclusions were accidentally mixed to the clay during the process of clay preparation.

The coarse ware is made of a coarse and granular fabric and seems to belong to a single technological group of ware. In mineral tempered coarse ware, the inclusions observed form an integral part of the clays used while in the vegetal tempered coarse ware an intentional inclusion of vegetal remains is observed. No specific links between temper used and shape have been observed. Therefore,

Sample	Sounding	Level	Description	Petrographic Group
AM 3617	L.18	18.7	oxidising core, cream slip, dark read paint	Ia
AM 3618	L.18	18.3	light greenish core, eroded black paint	II
AM 3619	L.18	18.5	light cream core	Ia
AM 3620	L.18	18.9	light orange core, cream slip, mat read paint	Ia
AM 3621	L.18	18.10	light greyish core, cream slip, mat black paint	Ib
AM 3622	L.18	18.10	light greenish core, self slip, mat black paint	III
AM 3623	L.18	18.10	light greenish core, self slip, mat black paint	Ia
AM 3624	L.18	18.9	light greenish core, cream slip, mat black paint	Ia
AM 3625	L.18	18.11	cream core, self slip, eroded mat black paint	Ia
AM 3626	L.18	18.11	light orange core, self slip, mat red paint	Ia
AM 3627	L.18	18.11	light grey core, light slip, mat black paint	Ib
AM 3628	L.18	18.11	light orange core, self slip, mat red paint	Ib
AM 3629	L.18	18.5	dark cream core, light slip, eroded mat black paint	IV
AM 3630	L.18	18.5	cream core, light slip, black mat paint	IV
AM 3631	L.18	18.6	light orange core, cream slip, lustrous paint bitone	Ia
AM 3632	L.18	18.6	grey core, dark slip, lustrous black paint	Ib
AM 3633	L.18	18.13	dark grey core, smoothed	Ia
AM 3634	L.18	18.8	greyish core, smoothed, eroded black mat paint	Ib
AM 3635	L.18	18.9	oxidising core, cream, slip, mat brown paint	Ib
AM 3636	L.18	18.9	light cream core, self slip, black mat paint	IV
AM 3637	L.17	17.6	orange/cream core, self slip, eroded dark paint	Ib
AM 3638	L.17	17.7	burnished mineral coarse ware	Id
AM 3639	L.17	17.7	polished mineral coarse ware	V
AM 3640	L.17	17.7	polished mineral coarse ware	Ib
AM 3641	L.17	17.8	burnished vegetal temper coarse ware	Ic
AM 3642	L.17	17.6	burnished vegetal temper coarse ware	Ic
AM 3643	L.17	17.6	polished vegetal temper coarse ware	Ic
AM 3644	L.17	17.6	burnished vegetal temper sandwich core/grey-orange	Ia
AM 3645	L.17	17.10	polished vegetal temper, grey/cream core	Ic
AM 3646	L.18	18.5	fine plain Halaf orange core, light slip	Ia
AM 3647	L.18	18.5	fine plain Halaf orange core, light slip	Ia
AM 3648	L.18	18.5	fine plain Halaf grey core, light slip	Ia

Table 5.9. List of samples collected for analysis and their attribution to the petrographic groups
Top: fine Halaf painted wares; middle: coarse wares; bottom: fine Halaf unpainted wares.

presence of vegetal inclusions is not associated with wall thickness differences as these are similar in all coarse ware sherds (this ranges from 7 to 29 mm in both categories).

The analysis carried out demonstrates that nearly all the Tell Amarna ceramic production shows a very high ratio of similarity in mineral components. Most of the ceramic and sediment samples analysed are characterized by a mineral composition mainly based on the presence of small elements like limestone and quartz but there is also the presence of mica and remains of volcanic elements. Differences in temper and fabric between clays used in fine wares and coarse wares could have come about either by an accurate process of material preparation for the fine ware or by obtaining the clay from a second source or through adding temper for the coarse ware. The homogeneity of the sediments and sherds ana-

lysed support the theory that Tell Amarna potters normally used clays from the immediate surroundings to produce ceramic wares and that small differences in composition observed between fine wares and coarse wares could be simply due to different supply necessities. One single sample (AM 3639), a polished coarse ware, seems to have a different mineral composition with the presence of elements of metamorphic origin, not found in the sediment analysis (Table 5.9).

These analytical results suggest a local source for the clay and could lead to the conclusion that the vast majority of Tell Amarna wares, both fine ware and coarse ware, were manufactured locally. Furthermore, the presence of a few sherds with greenish cores and of brittle texture as well as some vitrified sherds could be the result of over-firing conditions and this could indicate the presence of kilns at the site.

As it has been commented on before, one of the most significant technological improvements concerning ceramics in the Halaf period was the new firing procedure that allowed high quality products to be obtained. This was achieved by exerting strict control on the new type of kilns that allowed to get a complete oxidising atmosphere. Where firing conditions are concerned, analysis made on the samples shows that the ceramics from Tell Amarna were fired at a relatively high temperature, about 800° and most probably not surpassing 850°.

Through analysis of certain traces of the applied techniques, different observations have been achieved concerning the manufacture of vessels. Coarse wares were all hand-made with a technique that does not require a high degree of specialisation nor high quality of clay. The larger size of temper in coarse ware makes the clay less elastic, reduces shrinking and distributes the heat evenly through the pot, preventing cracking when used for cooking purposes. Here we can remember that vessels from this group often have great differences in wall thickness as well as traces of coils found in several sherds. We can assume that the most likely technique used in coarse ware was putting coils possibly around a mould. Differences in wall thickness could be the result of obtaining a higher vessel by pinching the successive lines of coils.

Traces of shaping in fine wares are very scarce; it appears that they were mostly erased after processes of surface finishing. No research has been done concerning experimental manufacture of vessels but it can be presumed that fine wares, with softer clays, could have been manufactured by moulding and pinching. This technique allows wall thickness to be checked everywhere in the vessel, thus obtaining very thin walls. The fine Halaf vessels at Tell Amarna exhibit a remarkably high degree of craftsmanship. Even there is no clear indication of internal spiral finger-marks of throwing, the possibility of the use of slow wheels or rotating bases has not been definitely rejected.

About 40% of the total ceramic assemblage at Tell Amarna was painted as the final surface treatment. Painting was done prior to firing and applied in most cases over a slip, by dipping the pot upside down in a clay slip made of a mixture of clay and water either with or without the addition of a colouring agent. As a result, the colour of the surfaces is darker, lighter or similar to that of the core.

Parallel to X-ray diffraction and petrographic analysis to obtain information on the raw material composition, other analysis on pigments was held in order to establish their nature. Six samples were chosen (see GILBERT, in this volume Table 7.1 and Table 5.10 for description) with the objective of having information about different aspects of the final treatment of the fine painted Halaf wares of Tell Amarna: first of all, composition of each individual pigment used; secondly problematic about monochrome and polychrome painting technique with specific reference to monotone and polytone effects, and to the dual final finishing processes mode (matt and lustrous).

Sample	Sherd description
AM 3465	Red lustrous painting on slip
AM 3466	Red matt painting on slip
AM 3467	Black lustrous painting on slip
AM 3468	Black matt painting
AM 3469	Bitone painting (black and red) on slip
AM 3470	Bitone painting (black and brown) on slip

Table 5.10. Description of the six samples analysed.

Analysis comes to the conclusion that for the total of the sherds analysed, either black or red paints, the pigments that were used are basically composed of iron oxides and of small quantities of charcoal in some cases. Composition of the pigments from the six examples analysed can be seen in Table 5.11 and the results conclude that magnetite was largely used to obtain dark black colour and, in some cases, a small quantity of charcoal is also present. On the other hand, it seems that red colour was obtained with a mixture of magnetite and hematite. Results of X-ray Fluorescence Analysis made on samples from Umm Qseir (TSUNEKI and MIYAKE, eds., 1998, p. 71, held by Mochizuki) points out to the same conclusion: "all pigments which expressed various colours are iron oxidised" and "it seems likely that differences of colours (ranging from reddish-brown, dark brown to black) depend not on the kind of pigment but on the conditions of firing".

On the basis of the macroscopical observation, the greatest amount of pottery sherds analysed have monochrome paintings although several sherds (less than 0.50% of the total) show a bichrome painting effect with decoration patterns based in clear and deep black and red colours.

The most complex decorative techniques are the monotone and polytone effects found in a large quantity of sherds. At Tell Amarna monotone effects amount to 76.88% of the total and bitone to 23.12%. At the nearest site Shams ed-Din, the ratios are quite different with 51% in monotone paints and 45% consisting of bitones. Differences in percentages could also be attributed to the fact that most of the sherds are of small dimensions (7/8 cm²) and a complete image of a vessel could not be represented. It has been observed that, in complete vessels, it is also possible to see bitone effects on some part of the vessel although it seems most likely that the original intention was to obtain a single colour and monotone effect.

Inventory number	Indication of the analysed zone	Results of the analyses
AM 3465	#1: pale zone	Hematite + Magnetite
	#2: darker zone	Hematite + Magnetite
AM 3466	#1: darker zone	Hematite + Magnetite
	#2: pale zone	Hematite + Magnetite
	#3: pale slip	Very poorly defined spectrum but presence of CaCO ₃
AM 3467	#1: dark bright zone	Mainly Magnetite + a component not yet identified
	#1 bis: another spot of the same zone	Magnetite + Carbon
	#2: less darker zone red crystal	Hematite + Magnetite
	#2 bis: less darker zone black crystal	On the surface: Magnetite; in depth: Hematite + Magnetite; on the pottery itself: Magnetite
AM 3468	Various dark zones	Mainly Magnetite
AM 3469	#1: dark zone	Hematite α + Carbon + Magnetite + unidentified component (see AM 3467)
	#2: pale zone	Hematite + Magnetite (as AM 3465 and AM 3466)
AM 3470	# 1 and #2: same colour	Mainly Magnetite

Table 5.11. Results of the analysis of the samples
(after GILBERT, chapter 7 in this volume, Table 7.2)

It seems likely that most of the bitone effects could be the result of irregular application and different thickness in the pigments. Nevertheless, analyses are quite complex and the results point out to the possibility that two different pigments could be used in sherds showing clear bitone effects (e.g. AM 3469, AM 3470, AM 3466 and AM 3468) and it appears that darker zones are richer in magnetite and the paler zones contain more hematite. Although it is difficult to come to a clear decision, the analysis results lead to propose that in all likelihood two different pigments were used in the analysed bitone sherds.

The final appearance of the painting has also been analysed. Even though many sherds were quite altered, they could be separated into basically two main groups: lustrous and matt. At Tell Amarna matt monochrome fine wares are the most popular with 83.14% of the total whereas lustrous monochrome fine wares amount to 16.86% of the total, while all lustrous wares are rare at Shams ed-Din and only represent 4% of the total.

Glossy paintings on monochrome fine wares appear in black (9.88%), red (5.52%), dark brown (1.16%) and orange (0.29%). The evidence from the Balikh valley suggest that the development of lustrous paintings took place during the earliest stages of the Halaf, representing about 40% in the Balikh IIIB phase

(LE MIÈRE and NIEUWENHUYSE, 1996) and becoming dominant in the Balikh IIIC phase onwards (NIEUWENHUYSE, 1997). It seems that the lustre could have been achieved by exerting a strict control over paint composition and firing procedures (NOLL, 1991; STEINBERG and KAMILI, 1984; VAN AS and JACOBS, 1989).

5.6. Concluding remarks

The ceramic assemblage at Tell Amarna is large and characteristic enough to be compared with a wide range of Halafian sites and to allow to approach aspects such as relative chronology and technological ceramic processes.

As discussed in previous sections, fine unpainted ware and coarse ware are present everywhere from the earliest phases of the Halaf period up to the latest ones, although in different percentages according to the phase. The coarse and unpainted ceramic assemblage of Tell Amarna is quite similar to other Halafian sites and fits well with the Middle Halaf phase. Coarse ware is restricted to only two categories (simple coarse ware and simple burnished ware) with shapes that last for a long period, while their percentage figures fit well with some other sites of the same phase.

Unpainted ware is an important component of Halaf assemblages but unfortunately, in most cases, it has not been analysed individually and the repertoire of forms is very scarce. A large percentage of sherds that probably belong to this ware category could have been included within a group of unpainted areas of fine painted sherds. This and other considerations have been discussed in section 5.3. In any case, many shapes recovered in this ware category are present in fine painted ware catalogues and fit well with other sites described as Middle Halaf period sites (Shams ed-Din, Tell Halula, Girikihaciyān, Arpachiyah, etc.).

The total number of fine Halaf painted vessels with a recognized shape at Tell Amarna amounts to 317. The catalogue comprises 17 different shapes divided into four main categories although each form may have several types of the shapes already described. In Fig. 5.4, we can see the main amount per form. The bowls are the most representative with 69.72% of the total. This is followed by form 3 of pots with 16.72%, the second most popular one. Jar forms represent 8.52% of the total and plates and lids, form 2, represent 5.05%.

When looking at the general inventory of shapes of the Early Halaf period, we see that several shapes continue into the middle phases. This is the case of the straight-sided and flat-based bowl (e.g. Tell Amarna shape 1.1); although decoration patterns applied are radically different, they are less deep and the percentage declines in later phases. The so-called "cream bowl" is present at Tell Amarna in its evolved shape (form 1.4 of Tell Amarna); its classical shape, which is distinguished by a double carinated profile, is absent, although it is very popular in Middle Halaf period sites and found at the nearby sites as Tell Halula and Shams ed-Din in the Euphrates valley. Hemispherical bowls with flat or rounded bases (form 1.7 of Tell Amarna) and jars with flaring necks are also present in the early stages of the Halaf period and continue during the Middle Halaf period with minor differences especially concerning decoration patterns, measures or types of rims.

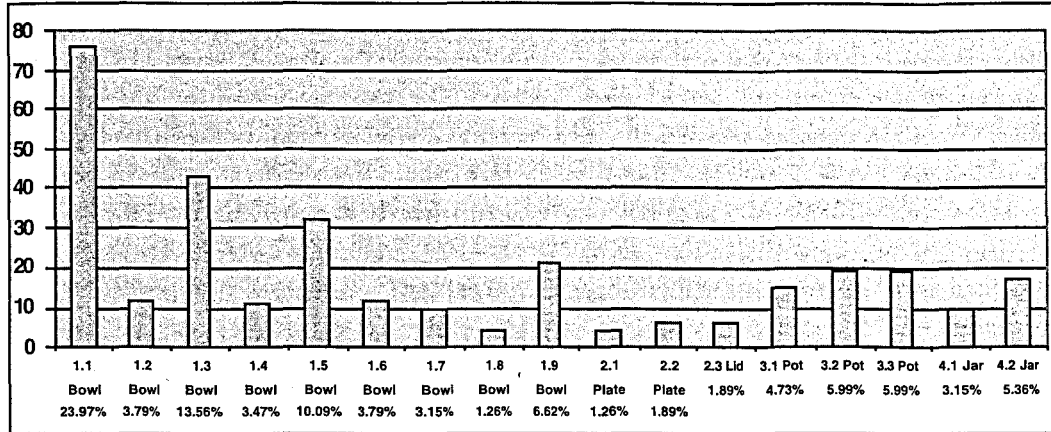


Fig. 5.4. Total number and percentages of the main vessel shapes.

The largest vessel shape at Tell Amarna is the simple flat-based bowl with straight-sided or flaring walls (forms 1.1 and 1.2) with 27.76% of the total. This shape is also very popular at other sites like Tell Aqab (11%) or Umm Qseir (shape II: 25.90%, reaching 32.30% in phase 1a). The second most popular shape is a complex bowl with carinated body and flaring rim (form 1.3); it is an evolution of the previous cream bowls and amounts to 13.56% of the total. The third corresponds to a hemispherical bowl with curvilinear walls (form 1.5) with 10.09% of the total. A variation of the cream bowl, form 1.4, amounts only to 3.47% and is nearly always associated with rows of vertical bucrania as a decoration pattern. The forms 1.3, 1.4, 1.5 and 1.6 of the bowls are absent in Early Halaf levels but they appear in many Middle Halaf sites and are very popular at Tell Amarna. Other new shapes appearing are the plates, lids and hole mouth pots.

Traditionally, studies on the Halaf period have been made on ceramic and typological analysis. Many scholars have divided the Halaf period into different phases not only according to the typological traits of the pottery but also to the decoration patterns applied. This discussion will be enlarged on later, but here we are interested in summing up the comparison of the general catalogue of shapes and decorations from Tell Amarna with other similar sites.

In order not to enlarge the discussion comparing Tell Amarna ceramic assemblage to other Halafian sites, we have preferred here to centre discussion exclusively on Syrian Halafian sites (Table 5.12), even though many other sites in Turkey or Iraq offer wide parallels that have already been commented on in section 5.1. When comparing at an interregional level, it is true that there are differences in shape and in that the decoration was applied within the different areas analysed but they also share a large range of common Halafian traits.

When comparing Tell Amarna with other Halaf sites in the Balikh, especially Tell Damishliyya and Khirbet esh-Shenef, we see that many Tell Amarna shapes are found at both sites. It has been said that Tell Damishliyya belongs to the Balikh III C and the early 5th millennium BC and Khirbet esh-Shenef to Balikh

IIID period and around mid-5th millennium BC (AKKERMANS, 1993, p. 134). In any case, when looking at the pottery of Khirbet esh-Shenef, it seems that several shapes and decoration patterns belong more likely to the early phases of the Halaf period (e.g. AKKERMANS, 1993, Fig. 3.31:21-22). The S-shaped profile bowls, a shape found in many Middle Halaf sites, is the most representative (AKKERMANS, 1993, Fig. 3.29 and 3.30) but the so-called bow rim jars are also present (Fig. 3.33:39-41). This is said to represent the so-called Halaf Ubaid Transitional phase at Tell Aqab (DAVIDSON, 1977, p. 154). At Tell Amarna, S-shaped bowls (form 1.3) are the second largest form, but there is no presence of early shapes and decorations nor bow-rim jars. At Tell Damishliyya, there seems to have been several vessels more typical of the early phase (already noted by AKKERMANS, 1986-1987, p. 44) like a high neck jar and several different decoration patterns. The S-shaped bowls and the straight-sided bowls are also present; the large and wide pot or jar with flat or rounded bases is very popular (AKKERMANS, 1993, Fig. 3.34-10-13). This last shape is also very popular at Tell Amarna (shape 1.5, with 10.09% of the total) and seems to appear in Middle Halaf phases. We could conclude that the repertoire of shapes at Tell Amarna closely resembles those of both Balikh sites in many shapes and percentages, but the Balikh sites have probably a longer occupation sequences than at Tell Amarna: Damishliyya has been attributed to a Middle Halaf period and Khirbet esh-Shenef to a late period.

In the Khabur valley, Tell Aqab seems to reveal an apparently continuous prehistoric occupation extending from somewhere in the early stages of the Halaf period, through the lifetime of that culture, and on into the subsequent Ubaid culture (DAVIDSON and WATKINS, 1981, p. 4). The Middle Halaf phase at Aqab is represented by trenches 3 and 2, and there seems to exist a clear-cut ceramic tradition between the early and middle phases. Davidson (1977, p. 115) points out that ceramics from the Middle Halaf period at Tell Aqab show differences between trench 3, which seems typologically earlier, and trench 2, and could be subdivided into two new sub-phases. The number of straight-sided bowls at Aqab middle phase sharply declines from 70% to 11% while shape and decoration changes. Classical "cream bowls" disappear at trench 2 although new shapes appear and, in general, the pottery of this phase is quite clearly a development out of the already existing Halaf tradition (DAVIDSON, 1977, p. 130). At Tell Amarna shape 1.1 (straight-sided bowl) represents 23.97% of the total, clearly over the 11% at Tell Aqab, and similar to the 25.90% at Umm Qseir (shape II), but coincides with the absence of classical "cream bowls". Form 18 appears in the middle phase at Tell Aqab and represents 7% of the total, it is the third most popular shape. At Tell Amarna this shape (1.3) represents 13.56% of the total and is the second largest group. Hemispherical bowls represent 54% of the total at Tell Aqab, it is the largest group with a ratio extremely high compared to Tell Amarna (18.29% and shapes 1.5-1.8). In the late middle phase context new shapes appear, like form 7 of a saucer, form 16 of plates or form 14 of jars with bevelled rims and all of them are present at Tell Amarna. On the contrary, form 8 of bowl with a

pedestal base or form 19, deep bowls with disc base, are completely absent at Tell Amarna. Finally, as far as decoration is concerned, few painted and incised examples appear later (at Tell Amarna there is one single example) as well as polychrome paints (absent at Tell Amarna). With regard to pattern designs, most of those present at Tell Aqab are also popular at other Halafian sites with the notable exception of natural bucrania not found at Tell Aqab but present at other Khabur sites.

The site of Umm Qseir, excavated in 1986 (HOLE and JOHNSON 1986-1987), has been re-excavated and recently published (TSUNEKI and MIYAKE, eds., 1998). It offers a large catalogue of Halaf wares. Most of the corpus of Tell Amarna is present at Umm Qseir, but there are quite few differences. Hemispherical bowls with curvilinear walls, Tell Amarna shape 1.5, seem to be absent at Umm Qseir although they are present at other Halafian sites, which have been surveyed recently in the area (NIEUWENHUYSE, 2000, p. 223-27). The classical "cream bowl" (shape IV) and the pedestal bowls (shape VII) are absent at Tell Amarna. Also, deep bowls with convex sided walls (shape VIa), present at Umm Qseir, have no parallel at Tell Amarna in its slightly carinated shape and associated decoration pattern of dots and rows of arrows (TSUNEKI and MIYAKE, eds., 1998, Fig. 28:1-2 and 5). Bowls with alternate panels of dots and quatrefoils decoration pattern on deep hemispherical bowls (HOLE and JOHNSON, 1986-1987, p. 212, s and t) resemble rather shapes and motifs belonging to a later phase of the Halaf period as it has already been pointed out by Hole and Johnson (1986-1987, p. 179). In spite of these shape differences, the occupation at Umm Qseir has been dated by Tsuneki and Miyake (1998) to the Middle Halaf period because the "Halaf strata lies directly on virgin soil and is covered by the late Chalcolithic strata. That is to say, the whole Halaf pottery assemblage from Tell Umm Qseir can be safely dealt with as Middle Halaf, without considering any intrusions either from previous or from subsequent Halaf periods". Indeed, the two radiocarbon dates, which will be commented on in chapter 12, fit well with the Middle Halaf period.

Excavations at Chagar Bazar, conducted by Mallowan between 1935 and 1937, made a substantial contribution to the initial identification of the northern Mesopotamian archaeological assemblages and artifactual sequence thanks to the so-called "Prehistoric Pit" with its deep sequence of the Halaf period and 3rd millennium BC levels (MALLOWAN, 1936, 1937, 1947). The excavations on this site are resumed since 1999 by a joint expedition. During the 1999 and 2000 seasons, a section of 2 m wide on the south side of the "Prehistoric Pit" is cleaned, from the top until virgin soil with a total depth of more than 10 m. The aim was to gain a better understanding of the chrono-stratigraphy of the prehistoric layers described by Mallowan. The pottery from these two seasons is presently under analysis and will be published fully in the near future (CRUELLES, forthcoming b). At the moment, it seems that there is a great concordance between Tell Amarna pottery and the Middle Halaf wares at Chagar Bazar.

Mallowan (1936, p. 10) states that levels 6-12 comprise a homogeneous period and that objects found there correspond very closely to those found in TT6-10 at Arpachiyah. Levels 6-7 would be on a parallel with Arpachiyah TT6-7 (Late Halaf phase) and level 12 is datable to the Middle Halaf period (Arpachiyah TT8-10) in spite of the presence of some examples of polychrome pottery and white stipple decoration mixed with early pottery types (1936, p. 13). Nevertheless, as Mallowan points out (1936, p. 42), polychrome paintings at Chagar Bazar "were usually obtained by using a single pigment; a light application of the brush produced a red colour in the firing, a heavier application of the brush and a thicker coat of paint turned black in the firing". In the absence of pigment analysis many polychrome sherds at Chagar Bazar could in fact be bitone. We have already discussed bitone effect in section 5.2.2 and stated that sherds showing a bichrome result with a single pigment are very scarce and most of the pieces with bitone effect are produced in the same pattern, this most likely happened accidentally rather than as a final objective. Finally, it seems that in level 12 a copper bead was found (1936, p. 10) and that in level 15 the first settlement is attested with the presence of Samarra wares and a few Halaf sherds with naturalistic bucranium designs. The data published by Mallowan are somewhat anomalous because the probable mixing of artifacts coming from different levels.

Nevertheless, Davidson (1977, p. 95) points out that level 12 yielded a range of painted pottery which can best be compared to Middle Halaf phase pottery at Arpachiyah as well as the possibility of a break in the cultural sequence between levels 12 and 13, as pottery from level 12 seems quite different from that of the earlier levels, both in shape and decoration.

Most of the repertoire of forms at Chagar Bazar is present at Tell Amarna and decoration patterns are also similar. Straight-sided bowls, hemispherical bowls, jars with flaring necks, jars with bevelled rims are forms from Chagar Bazar that are present at Tell Amarna. Again differences occur in classical "cream bowl" and bowls with pedestal base, present at Chagar Bazar and absent at Tell Amarna.

Finally, Halafian sites in the upper Syrian Euphrates valley are restricted to Shams ed-Din and Tell Halula. At Shams ed-Din, excavated in the 70s (GUSTAVSON-GAUBE, 1981), four occupational levels were recognized although most of the artifactual material was collected and recorded by day, thus inhibiting a stratigraphic context. Most of the Tell Amarna shapes are present in the Shams ed-Din repertoire but several shapes found at Shams ed-Din are absent at Tell Amarna, like the large pot or jar bow rimmed (shape 6h) and pedestal bowls, these are more likely belonging to a later phase of the Halaf. Two examples of classical "cream bowls" (shape 5c) are reported, type which are not found at Tell Amarna. As Davidson pointed out (1977, p. 323), the Euphrates valley Halaf pottery consistently shows strong stylistic links with the Khabur sites, especially with Tell Halaf. Davidson also argues that Shams ed-Din could have imported ceramics from the Khabur area owing to their chemical composition. But it seems to us that a wider series of analysis is necessary to clarify the existence of interregional trade networks. In summary, the Halaf occupation at Shams ed-Din is correlated with

the late Middle and Late Halaf phases of the Tell Aqab sequence and to phase IV of Arpachiyah.

Tell Amarna	Shams ed-Din	Tell Halula	Khirbet esh-Shenef	Tell Damishliyya	Tell Halaf	Chagar Bazar	Tell Aqab	Umm Qseir
1.1	1a	1A	+	+	+	+	1	IIa
1.2	1a	1D		+		+	1	IIc
1.3	5e	1E	+	+	+	+	18	Vb
1.4	5e	+	+		+	+		Vd
1.5	5b	1F	+	+				
1.6	3			+				VIb
1.7	2a	+	+				3	IIIb
1.8	2c	1C	+		+		3	IIIc
1.9	7	1G	+	+		+		VIa
2.1	1	2A					7	Id
2.2	1				+	+	16	Ib
2.3	+	+	+		+	+	12	X
3.1	3a	+	+		+	+	4	IXa
3.2	1a	3B	+		+	+	4	IXb
3.3	2e	3A	+		+	+	14	IXc
4.1	6c	4A	+	+	+	+		IXb
4.2	6b		+	+	+			IXb

Table 5.12. Comparison of Tell Amarna set of shapes with other Syrian Halafian sites.

Tell Halula is excavated since 1991, mainly in its PPNB levels (MOLIST, 1996). Although there is no complete and correlative Halaf stratigraphic sequence, thanks to the diverse open areas excavated during the last few years along the site, four main phases have been observed. These range from an initial Proto-Halaf stage to a later phase of the Halaf period (phases IV to VII). The Tell Amarna repertoire of shapes fits well into Tell Halula phase VI (Middle Halaf period) (see in this volume, chapter 12, Fig. 12.1) and nearly all the shapes found at Tell Amarna are present at Tell Halula (CRUELLES, 1996; CRUELLES, 2001; CRUELLES, forthcoming a). Still, classical “cream bowls” (i.e. a double carinated bowl) are present at Halula phase VI but absent in the Tell Amarna repertoire. Characteristic elements of Halula phase VII (Late Halaf) like red wares, real bichrome or bow rim jars and new forms with different fabric are not present at Tell Amarna (except for a few bichrome sherds).

The main criteria for the division between the Middle and Late Halaf phases are the presence/absence of certain shapes as well as the presence/absence of some decoration patterns. Indeed, each phase of the Halaf period has its own characteristic pottery shapes and decoration patterns and, during the transition from one phase to another, new shapes and decoration patterns appear, even if there is a general continuity in the ceramic traditions. However, the transition from Middle to Late Halaf phases is still not very clearly established, because there are regional variations and the stratigraphic sequences are incomplete or, in certain areas, totally absent.

Nevertheless, it is usually accepted that the appearance of real bichrome or polychrome paintings as well as the characteristic white stipple decoration are indicators of the later phases of the Halaf period, in spite of the fact that many sites have some examples of these painting decorations in Middle Halaf phases (e.g. Shams ed-Din, Chagar Bazar, Tell Aqab...). As Davidson (1977, p. 38) argues, the most obvious technological innovation of the Arpachiyah middle phase is the development of true polychrome decoration.

Most of the pottery shapes and decorations found at Tell Amarna are attested at many Syrian sites. But, at Tell Amarna, we found very few bichrome sherds, no white stipple decoration, but there is a large amount of pieces with bitone effect, which results most likely from an irregular application of the pigment before firing. The rim bow jars, also accepted as belonging to later phases of the Halaf period, are completely absent at Tell Amarna.

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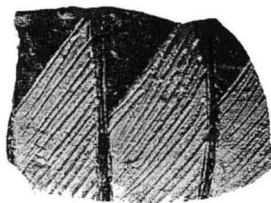
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a



b

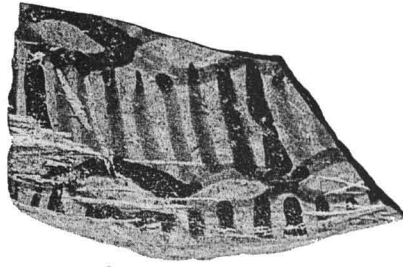


c

Pl. 5.1 (Scale: ca 1/2)

- a) Sherd of monochrome fine Halaf painted ware with human figure (AM 10575).
- b) Sherd of monochrome fine Halaf painted ware with realistic animal figures (AM 10552).
- c) Sherd of the incised and painted fragment (AM 10561).

5. THE POTTERY



a



b

Pl. 5.2 (Scale: ca 1/1)

a) Monochrome painted body sherd with bichrome intentionally effect (AM 3469).

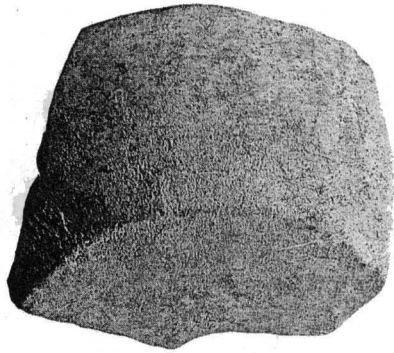
b) Example of fugitive paint (AM 3651).



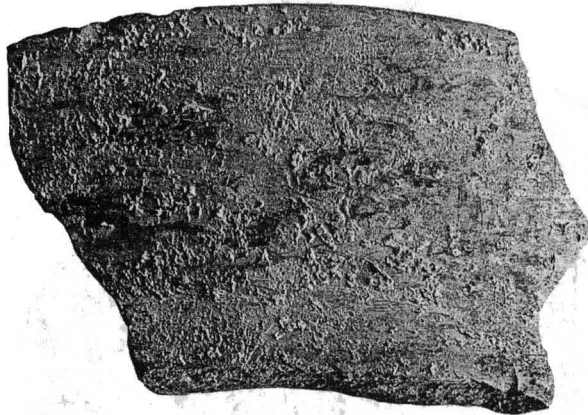
Pl. 5.3. Different decoration patterns (Scale: ca 1/2)

- a) Left, rows of eggs and dots and vertical parallel fine lines under two horizontal lines under the rim; middle, rows of small cross and filled triangles; right, dots circles on horizontal line and band (AM 10848, AM 10856, AM 10902).
- b) Oblique chevrons, zigzag and cross-hatching patterns (AM 10904, AM 10778, AM 10850).
- c) Complex bowl with carinated body with a decoration based on a row of naturalistic bucrania separated by double fine vertical lines and bands under the rim and in carination angle (AM 10521).
- d) Bowl with a chequer pattern of stippled squares alternating with squares containing quatrefoil design (AM 10577).
- e) Wide mouth globular pot with ondulated lines covering the rim and herringbone pattern on horizontal bands (AM 10524).
- f) Fragment of a globular pot with a band painted under the rim and the rest of the pot covered by a fish-scale pattern (AM 10685).

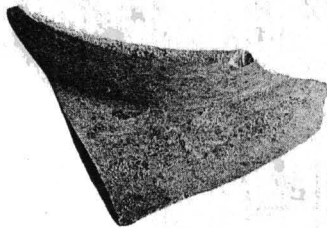
5. THE POTTERY



a



b



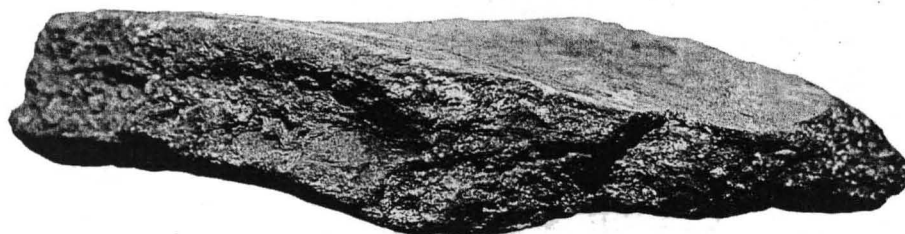
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Pl. 5.4 (Scale: ca 1/2)

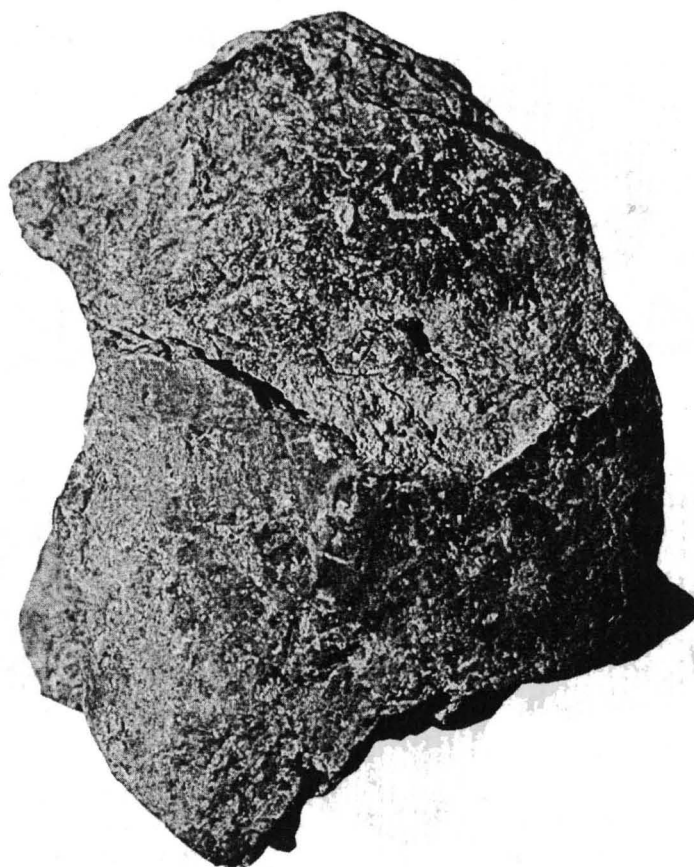
a) Flat based straight-sided bowl (AM 10593) with slip applied in external surface.

b) Jar with neck (AM 10651).

c) Hole mouth pot (AM 10643).



a



b

Pl. 5.5 (Scale: ca 1/1)

a) Traces of adhesion of coils technique (AM 3606).

b) Negative of an applied conical ledge handle (AM 3607).

5. THE POTTERY



a



b



c

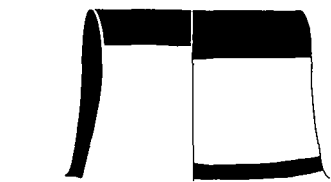
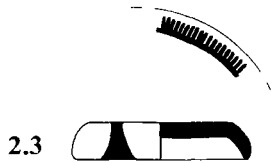
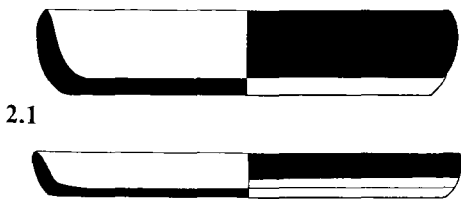
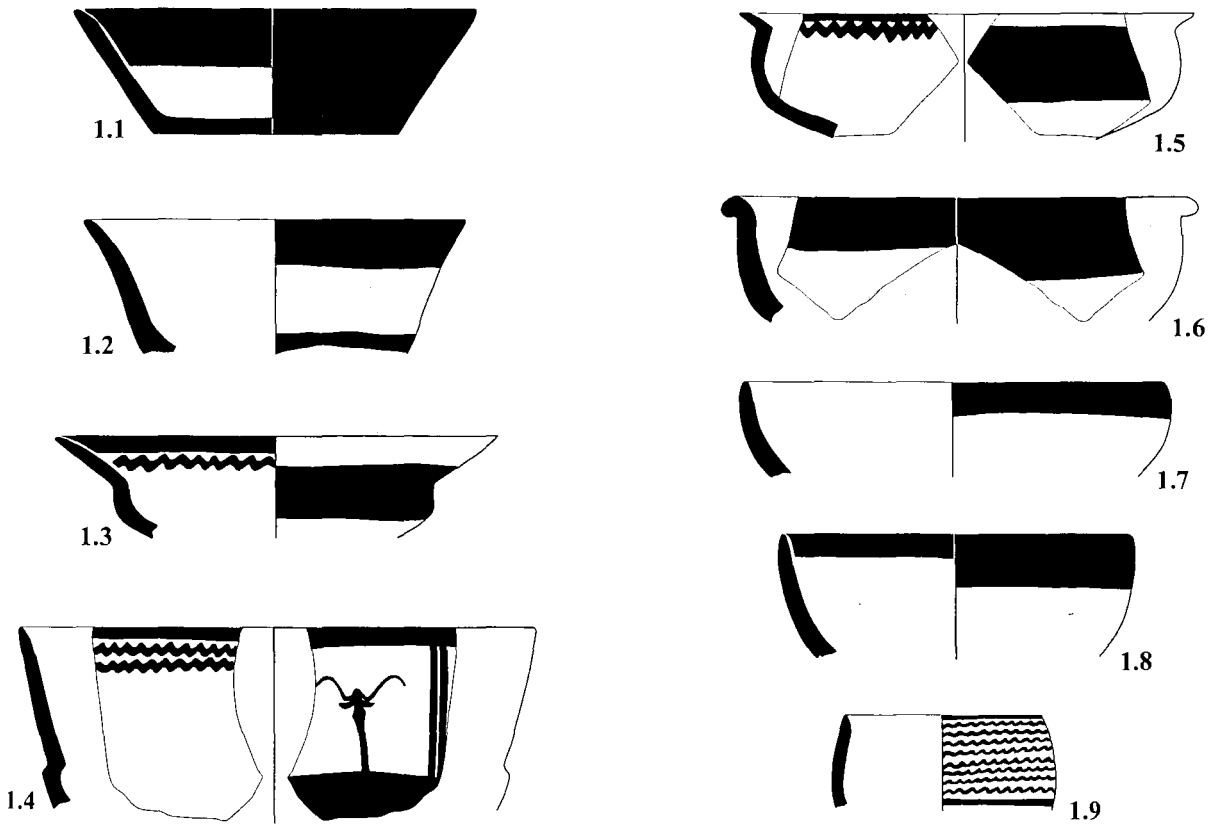
Pl. 5.6. (Scale: ca 1/2)

- a) Mineral tempered coarse ware body sherd with a burnished external surface (AM 3608).
- b) Globular hole-mouth bowl with a vertical pierced handle (AM 10602).
- c) Low flat-based bowl with burnished surfaces and remains of concretions (AM 10600).

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- 1.1. Flat-based simple bowls with straight-sided walls.
- 1.2. Flat-based simple bowls with slightly flaring walls.
- 1.3. Complex bowls with carinated bodies and short flaring rim.
- 1.4. Complex bowls with carinated bodies with high and large flaring rim.
- 1.5. Hemispherical bowls with curvilinear walls and short flared collar.
- 1.6. Hemispherical bowls with rolled or flat rim.
- 1.7. Hemispherical bowls with simple pinched rim.
- 1.8. Deep hemispherical bowls.
- 1.9. Hole-mouth bowls.
- 2.1. Flat-based shallow plates with incurving-sided walls and simple pinched rim.
- 2.2. Flat-based shallow plates with straight-sided walls and simple pinched rim.
- 2.3. Lids.
- 3.1. Hole-mouth pots with short upright collar.
- 3.2. Hole-mouth pots with short and slightly everted collar.
- 3.3. Wide mouth globular pots with short and sharply everted simple rim.
- 4.1. Jars with a high upright neck and simple pinched rim.
- 4.2. Jars with everted/incurving high neck and simple pinched rim.

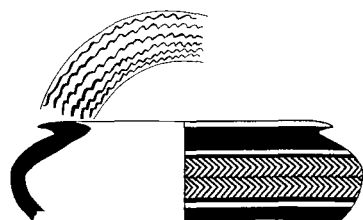
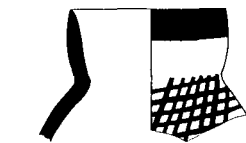
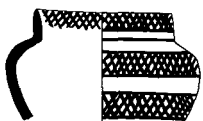
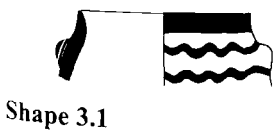
5. THE POTTERY



Shape 4.1



Shape 4.2

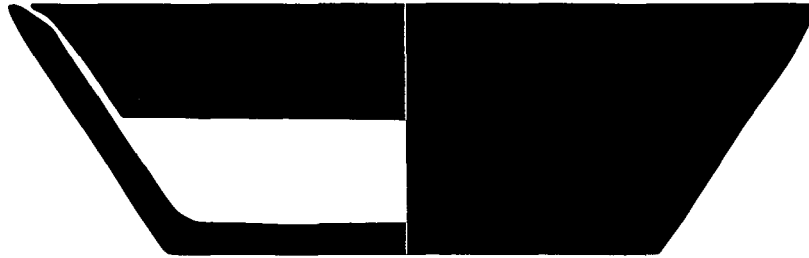


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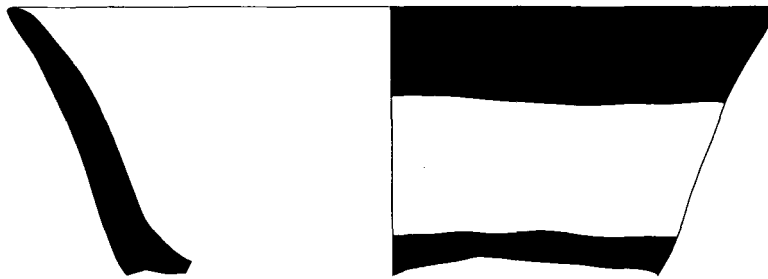
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Inv. n°	Condition	Temper	Firing	Treatment	Colour fabric	Colour paint	M/B/P	Mo/Bi	Ma/Lu	Comparanda	Form
AM 10475	altered	mineral	oxidising	light slip	orange	black	monochrome	monotone	matt	Shams ed-Din (GUSTAVSON-GAUBE, 1981, p. 133, Fig. 258, 260 and 261); Tell Halula (CRUELLS, 1996, p. 109, Fig. 7, form 1A; CRUELLS, 2001, p. 157, Fig. 4-8); Yunus/Carchemish (DIRVANA, 1944, Pl. 69:7, 8 and 11); Girkihaciyan (WATSON and LEBLANC, 1990, p. 57, Fig. 4.7, form 1B); Tell Turtu (BRENIQUET, 1991, p. 32, Pl. 13:2-4); Ain et-Tell (MATTHEWS <i>et al.</i> , 1978, p. 132, Fig. 5.65); Umm Qseir (TSUNEKI and MIYAKE, eds., 1998, p. 45 and Fig. 23, form IIa of bowl; HOLE and JOHNSON, 1986-1987, p. 214, Fig. j and n); Chagar Bazar (MALLOWAN, 1936, p. 44 and Fig. 23:2); Tell Halaf (VON OPPENHEIM, 1943, Pl. 10:26-29); Tell Aqab (DAVIDSON, 1977, p. 111, Pl. 19, form 1) Sabi Abyad (LE MIERE and NIEUWENHUYSE, 1996, p. 267); Tell Damishliyya (AKKERMANS, 1993, p. 40, Fig. 3.5:20); Yarim Tepe II (MERPERT and MUNCHAEV, 1987, p. 31, Fig. 14:1-2, p. 32, Fig. 16:3 and Fig. 17:1); Arpachiyah (MALLOWAN and ROSE, 1935, Fig. 72).	1.1
AM 10383	altered	mixed	oxidising	smoothed	cream	black	monochrome	bitone	matt	Shams ed-Din (GUSTAVSON-GAUBE, 1981, p. 48 and p. 133, Fig. 263, form 1a of flared bowls); Tell Halula (CRUELLS, 1996, p. 109, Fig. 7, form 1D); Tell Damishliyya (AKKERMANS, 1986-1987, p. 62, Pl. 16:105; AKKERMANS, 1993, p. 40, Fig. 3.5:19-21); Umm Qseir (TSUNEKI and MIYAKE, eds., 1998, p. 50 and Fig. 23:14-23, form IIc; HOLE and JOHNSON, 1986-1987, p. 214, Fig. p. b, c and d); Chagar Bazar (MALLOWAN, 1936, Pl. 2:4, examples of polychrome vessels with slightly convex walls from level 6); Yunus/Carchemish (DIRVANA, 1944, Pl. 69:5); Girkihaciyan (WATSON and LEBLANC, 1990, p. 58, Fig. 4.8, form 1C); Arpachiyah (MALLOWAN and ROSE, 1935, Fig. 57:2); Tell Aqab (DAVIDSON, 1977, p. 134, Pl. 26); Yarim Tepe II (MERPERT and MUNCHAEV, 1987, p. 31, Fig. 14:3 and p. 32, Fig. 16:5-6).	1.2
AM 10384	good	mixed	oxidising	self slip	cream	dark brown	monochrome	monotone	matt	Shams ed-Din (GUSTAVSON-GAUBE, 1981, p. 61 and p. 155, Fig. 458); Khirbet esh-Shenef (AKKERMANS, 1993, p. 109, Fig. 3.42:141); Umm Qseir (TSUNEKI and MIYAKE, eds., 1998, p. 61, Fig. 28); Arpachiyah (MALLOWAN and ROSE, 1935, Fig. 58).	1.1
AM 10579	altered	mineral	oxidising	smoothed	orange	black	monochrome	monotone	matt	<i>Ibid.</i> AM 10384.	1.1

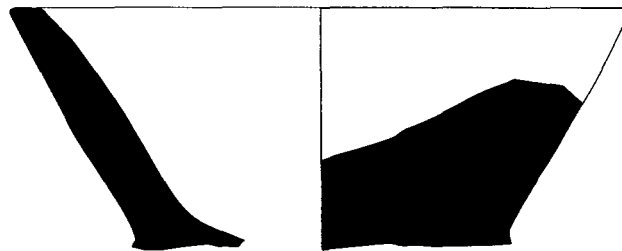
5. THE POTTERY



AM 10475



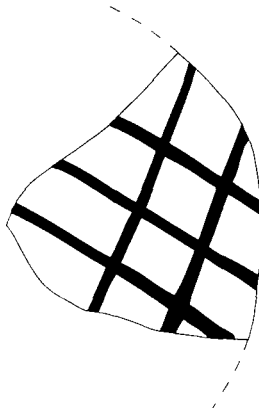
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AM 10384



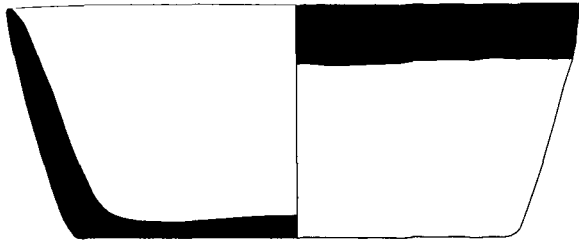
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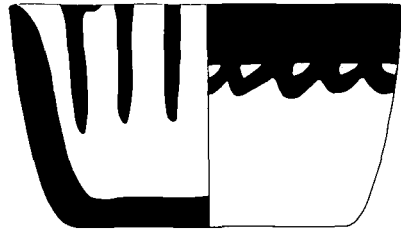
Pl. 5.8
Monochrome fine Halaf painted ware (Scale: 1/2).

Inv. n°	Condition	Temper	Firing	Treatment	Colour fabric	Colour paint	M/B/P	Mo/Bi	Ma/Lu	Comparanda	Form
AM 10599	altered	invisible	oxidising	self slip	orange	black	monochrome	monotone	matt	Shams ed-Din (GUSTAVSON-GAUBE, 1981, p. 133, Fig. 258, 260-261); Tell Halula (CRUELLS, 1996, p. 109, Fig. 7, form 1A; CRUELLS, 2001, p. 157, Fig. 4-8); Yunus/Carchemish (DIRVANA, 1944, Pl. 69:7, 8 and 11); Girikihacyan (WATSON and LEBLANC, 1990, p. 57, Fig. 4.7, form 1B); Tell Tutlu (BRENIQUET, 1991, p. 32, Pl. 13:2-4); Ain et-Tell (MATTHEWS <i>et al.</i> , 1978, p. 132, Fig. 5.65); Umm Qseir (TSUNEKI and MIYAKE, eds., 1998, p. 45 and Fig. 23, form 1a of bowl); HOLE and JOHNSON, 1986-1987, p. 214, Fig. j and n); Chagar Bazar (MALLOWAN, 1936, p. 44 and Fig. 23:2); Tell Halaf (VON OPPENHEIM, 1943, Pl. 10:26-29); Sabi Abyad (LEMIÈRE and NIEUWENHUYSE, 1996, p. 267); Tell Damishliyya (AKKERMANS, 1993, p. 40, Fig. 3.5:20); Yarim Tepe II (MERPERT and MUNCHAEV, 1987, p. 31, Fig. 14:1-2, p. 32, Fig. 16:3 and p. 32, Fig. 17:1); Arpachiyah (MALLOWAN and ROSE, 1935, Fig. 72).	1.1
AM 10165	altered	mineral	oxidising	smoothed	orange	dark brown	monochrome	monotone	matt	<i>Ibid.</i> AM 10599.	1.1
AM 10592	good	mineral	oxidising	self slip	orange	dark brown	monochrome	bitone	matt	<i>Ibid.</i> AM 10599.	1.1
AM 10463	altered	mineral	oxidising	self slip	orange	dark brown	monochrome	monotone	matt	<i>Ibid.</i> AM 10599.	1.1
AM 10362	good	mineral	oxidising	self slip	orange	black	monochrome	monotone	matt	<i>Ibid.</i> AM 10599.	1.1
AM 10543	altered	mineral	oxidising	smoothed	orange	black	monochrome	bitone	matt	<i>Ibid.</i> AM 10599.	1.1
AM 10519	altered	mineral	reducing	self slip	grey	black	monochrome	monotone	lustrous	<i>Ibid.</i> AM 10599.	1.1
AM 10546	altered	mineral	oxidising	self slip	orange	dark brown	monochrome	monotone	matt	Shams ed-Din (GUSTAVSON-GAUBE, 1981, p. 48 and p. 133, Fig. 263, form 1a of flared bowls); Tell Halula (CRUELLS, 1996, p. 109, Fig. 7, form 1D); Tell Damishliyya (AKKERMANS, 1986-1987, p. 62, Pl. 16:105; AKKERMANS, 1993, p. 40, Fig. 3.5:19-21); Umm Qseir (TSUNEKI and MIYAKE, eds., 1998, p. 50 and Fig. 23:14-23, form IIc; HOLE and JOHNSON, 1986-1987, p. 214, Fig. p. b, c and d); Chagar Bazar (MALLOWAN, 1936, Pl. 2:4, examples of polychrome vessels with slightly convex walls from level 6); Yunus/Carchemish (DIRVANA, 1944, Pl. 69:5); Girikihacyan (WATSON and LEBLANC, 1990, p. 58, Fig. 4.8, form 1C); Arpachiyah (MALLOWAN and ROSE, 1935, Fig. 57:2); Tell Aqab (DAVIDSON, 1977, p. 134, Pl. 26); Yarim Tepe II (MERPERT and MUNCHAEV, 1987, p. 31, Fig. 14:3 and p. 32, Fig. 16:5-6).	1.2
AM 10520	altered	mineral	oxidising	self slip	orange	black	monochrome	monotone	matt	<i>Ibid.</i> AM 10599.	1.1
AM 10586	altered	mineral	oxidising	cream slip	orange	black	monochrome	monotone	matt	<i>Ibid.</i> AM 10599.	1.1
AM 10658	good	mineral	oxidising	cream slip	orange	orange	monochrome	monotone	matt	<i>Ibid.</i> AM 10599.	1.1

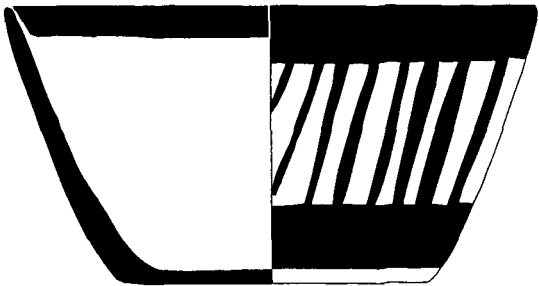
5. THE POTTERY



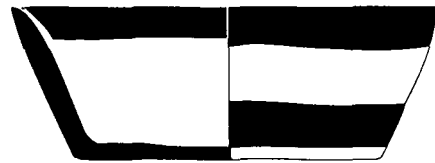
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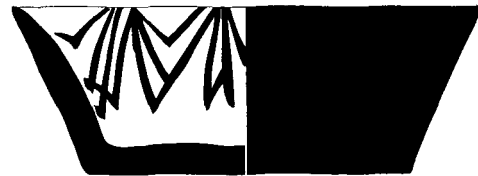
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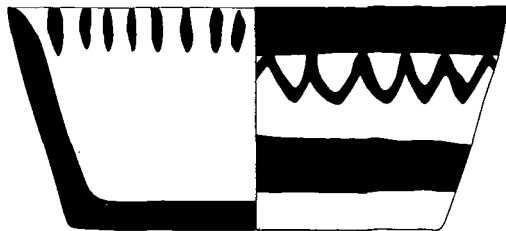
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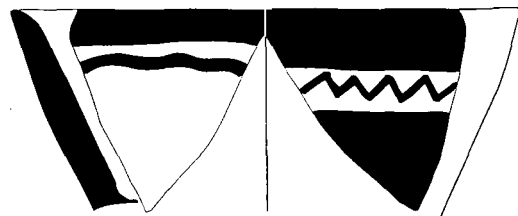
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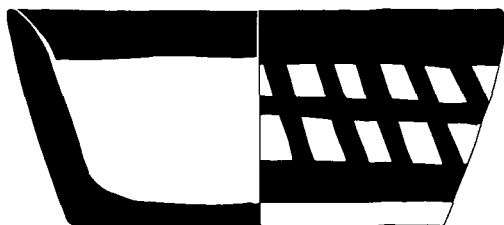
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AM 10592



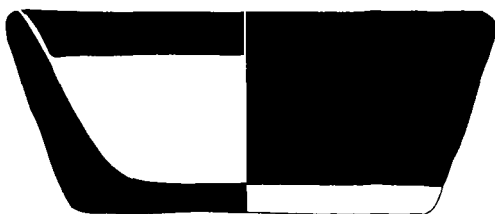
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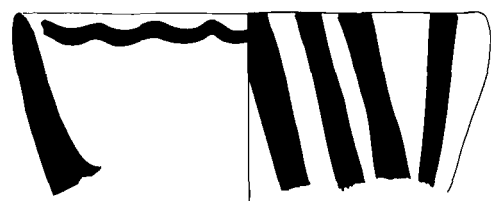
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AM 10586



AM 10362

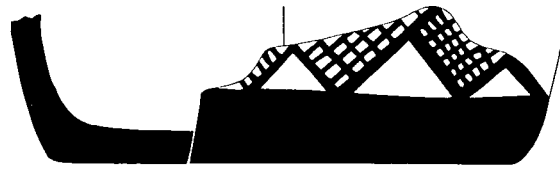


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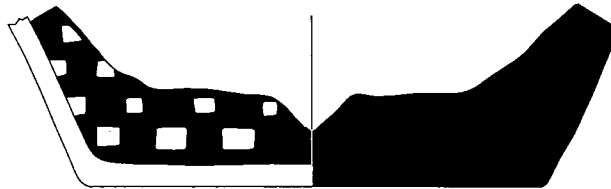
Pl. 5.9
Monochrome fine Halaf painted ware (Scale : 1/2).

Inv. n°	Condition	Temper	Firing	Treatment	Colour fabric	Colour paint	M/B/P	Mo/Bi	Ma/Lu	Comparanda	Form
AM 10021	good	mineral	oxidising	cream slip	orange	light brown	monochrome	monotone	matt	Shams ed-Din (GUSTAVSON-GAUBE, 1981, p. 133, Fig. 258, 260 and 261); Tell Halula (CRUELLS, 1996, p. 109, Fig. 7, form 1A; CRUELLS, 2001, p. 157, Fig. 4-8); Yunus/Carchemish (DIRVANA, 1944, Pl. 69:7, 8 and 11); Girkihciyan (WATSON and LEBLANC, 1990, p. 57, Fig. 4.7, form 1B); Tell Turlu (BRENIQUET, 1991, p. 32, Pl. 13:2-4); Ain et-Tell (MATTHEWS <i>et al.</i> , 1978, p. 132, Fig. 5.65); Umm Qseir (TSUNEKI and MIYAKE, eds., 1998, p. 45 and Fig. 23, form IIa of bowl; HOLE and JOHNSON, 1986-1987, p. 214, Fig. j and n); Chagar Bazar (MALLOWAN, 1936, p. 44 and Fig. 23:2); Tell Halaf (VON OPPENHEIM, 1943, Pl. 10:26-29); Tell Aqab (DAVIDSON, 1977, p. 111, Pl. 19, form 1) Sabi Abyad (LE MIERE and NIEUWENHUYSE, 1996, p. 267); Tell Damishliyya (AKKERMANS, 1993, p. 40, Fig. 3.5:20); Yarim Tepe II (MERPERT and MUNCHAEV, 1987, p. 31, Fig. 14:1-2, p. 32, Fig. 16:3 and Fig. 17:1); Appachiyah (MALLOWAN and ROSE, 1935, Fig. 72).	1.1
AM 10545	altered	mineral	oxidising	smoothed	orange	red	bichrome	monotone	matt	<i>Ibid.</i> AM 10021.	1.1
AM 10264	good	mineral	oxidising	self slip	orange	red	monochrome	monotone	matt	<i>Ibid.</i> AM 10021.	1.1
AM 10355	good	mineral	oxidising	self slip	orange	red	monochrome	bitone	lustrous	<i>Ibid.</i> AM 10021.	1.1
AM 10353	good	mineral	oxidising	self slip	orange	black	monochrome	monotone	matt	<i>Ibid.</i> AM 10021.	1.1
AM 10037	altered	mineral	oxidising	self slip	orange	black	monochrome	monotone	matt	<i>Ibid.</i> AM 10021.	1.1
AM 10555	altered	invisible	oxidising	smoothed	orange	black	monochrome	bitone	matt	<i>Ibid.</i> AM 10021.	1.1

5. THE POTTERY



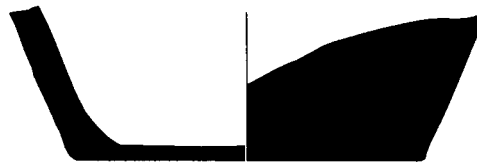
AM 10021



AM 10545



AM 10264



AM 10355



AM 10353



AM 10037

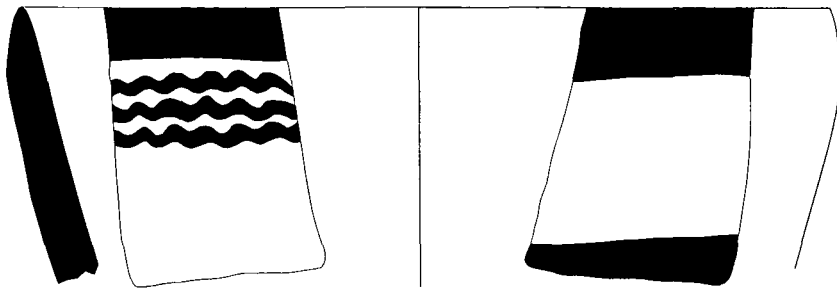


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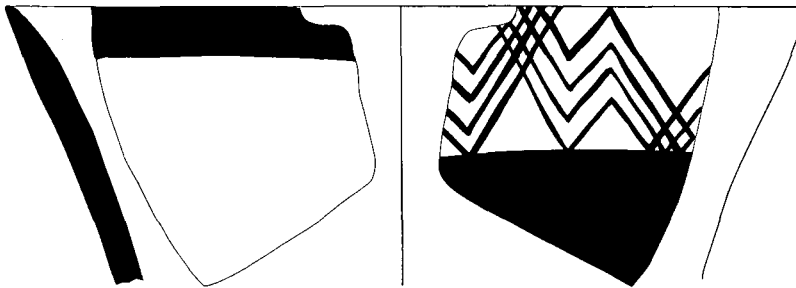
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Inv. n°	Condition	Temper	Firing	Treatment	Colour fabric	Colour paint	M/B/P	Mo/Bi	Ma/Lu	Comparanda	Form
AM 10479	altered	mineral	oxidising	cream slip	orange	black	monochrome	monotone	matt	Shams ed-Din (GUSTAVSON-GAUBE, 1981, p. 133, Fig. 258, 260-261); Tell Halula (CRUELLS, 1996, p. 109, Fig. 7, form 1A; CRUELLS, 2001, p. 157, Fig. 4:8); Yunus/Carchemish (DIRVANA, 1944, Pl. 69:7, 8 and 11); Girikihacyan (WATSON and LEBLANC, 1990, p. 57, Fig. 4.7, form 1B); Tell Turlu (BRENIQUET, 1991, p. 32, Pl. 13:2-4); Ain et-Tell (MATTHEWS <i>et al.</i> , 1978, p. 132, Fig. 5.65); Umm Qseir (TSUNEKI and MIYAKE, eds., 1998, p. 45 and Fig. 23, form 1a of bowl); HOLE and JOHNSON, 1986-1987, p. 214, Fig. j and n); Chagar Bazar (MALLOWAN, 1936, p. 44 and Fig. 23:2); Tell Halaf (VON OPPENHEIM, 1943, Pl. 10:26-29); Sabi Abyad (LE MIERE and NIEUWENHUYSE, 1996, p. 267); Tell Damishiyya (AKKERMANS, 1993, p. 40, Fig. 3.5:20); Yarim Tepe II (MERPERT and MUNCHAEV, 1987, p. 31, Fig. 14:1-2, p. 32, Fig. 16:3 and p. 32, Fig. 17:1); Arpachiyah (MALLOWAN and ROSE, 1935, Fig. 72).	1.1
AM 10400	altered	mineral	oxidising	self slip	cream	black	monochrome	monotone	matt	Shams ed-Din (GUSTAVSON-GAUBE, 1981, p. 48 and p. 133, Fig. 263, form 1a of flared bowls); Tell Halula (CRUELLS, 1996, p. 109, Fig. 7, form 1D); Tell Damishiyya (AKKERMANS, 1986-1987, p. 62, Pl. 16:105; AKKERMANS, 1993, p. 40, Fig. 3.5:19-21); Umm Qseir (TSUNEKI and MIYAKE, eds., 1998, p. 50 and Fig. 23:14-23, form 1c); HOLE and JOHNSON, 1986-1987, p. 214, Fig. p, b, c and d); Chagar Bazar (MALLOWAN, 1936, Pl. 2:4, examples of polychrome vessels with slightly convex walls from level 6); Yunus/Carchemish (DIRVANA, 1944, Pl. 69:5); Girikihacyan (WATSON and LEBLANC, 1990, p. 58, Fig. 4.8, form 1C); Arpachiyah (MALLOWAN and ROSE, 1935, Fig. 57:2); Tell Aqab (DAVIDSON, 1977, p. 134, Pl. 26); Yarim Tepe II (MERPERT and MUNCHAEV, 1987, p. 31, Fig. 14:3 and p. 32, Fig. 16:5-6).	1.2
AM 10580	altered	mineral	oxidising	self slip	orange	black	monochrome	monotone	matt	<i>Ibid.</i> AM 10479.	1.1
AM 10446	altered	mineral	oxidising	cream slip	orange	red	monochrome	monotone	lustrous	<i>Ibid.</i> AM 10479.	1.1
AM 10500	altered	mineral	oxidising	cream slip	orange	black	monochrome	monotone	matt	<i>Ibid.</i> AM 10479.	1.1
AM 10385	altered	mineral	oxidising	self slip	cream	black	monochrome	monotone	matt	<i>Ibid.</i> AM 10400.	1.2

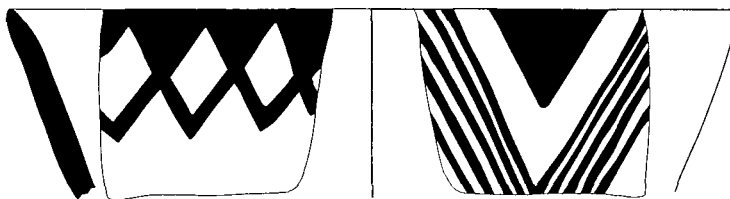
5. THE POTTERY



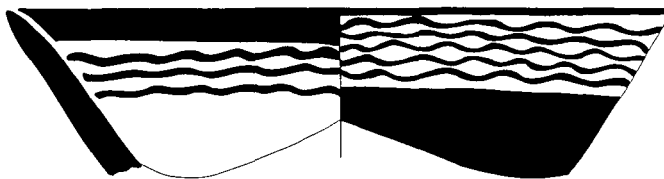
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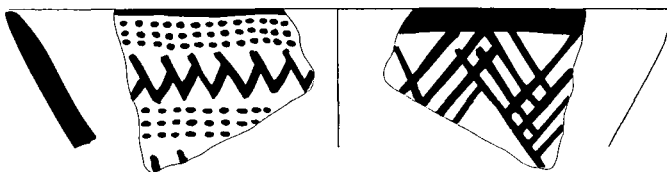
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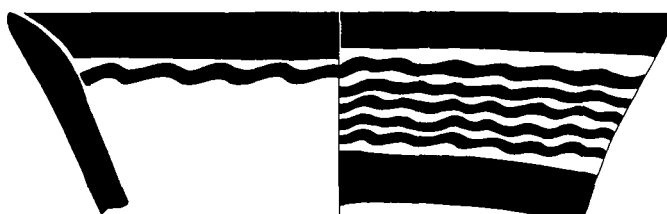
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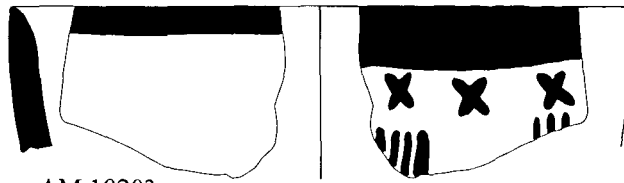
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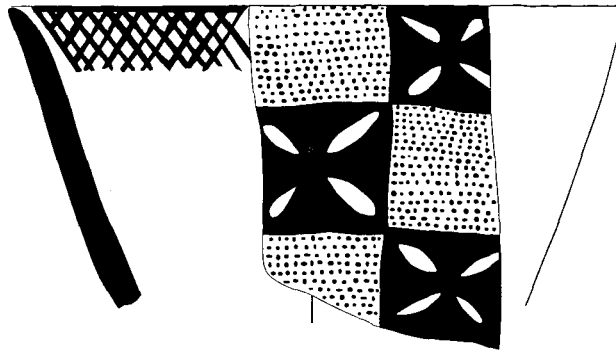
AM 10385

Inv. n°	Condition	Temper	Firing	Treatment	Colour fabric	Colour paint	M/B/P	Mo/Bi	Ma/Lu	Comparanda	Form
AM 10203	good	mineral	oxidising	self slip	orange	black	monochrome	monotone	matt	Shams ed-Din (GUSTAVSON-GAUBE, 1981, p. 133, Fig. 258, 260-261); Tell Halula (CRUELLS, 1996, p. 109, Fig. 7, form 1A; CRUELLS, 2001, p. 157, Fig. 4.8); Yunus/Carchemish (DIRVANA, 1944, Pl. 69:7, 8 and 11); Girikihaciyan (WATSON and LEBLANC, 1990, p. 57, Fig. 4.7, form 1B); Tell Turlu (BRENIQUET, 1991, p. 32, Pl. 13:2-4); Ain et-Tell (MATTHEWS <i>et al.</i> , 1978, p. 132, Fig. 5.65); Umm Qseir (TSUNEKI and MIYAKE, eds., 1998, p. 45 and Fig. 23, form 1a of bowl; HOLE and JOHNSON, 1986-1987, p. 214, Fig. j and n); Chagar Bazar (MALLOWAN, 1936, p. 44 and Fig. 23:2); Tell Halaf (VON OPPENHEIM, 1943, Pl. 10:26-29); Sabi Abyad (LE MIÈRE and NIEUWENHUYSE, 1996, p. 267); Tell Damishliyya (AKKERMANS, 1993, p. 40, Fig. 3.5:20); Yarim Tepe II (MERPERT and MUNCHAEV, 1987, p. 31, Fig. 14:1-2, p. 32, Fig. 16:3 and p. 32, Fig. 17:1); Arpachiyah (MALLOWAN and ROSE, 1935, Fig. 72). <i>Ibid.</i> AM 10203.	1.1
AM 10577	good	mineral	oxidising	self slip	orange	black	monochrome	monotone	matt	<i>Ibid.</i> AM 10203.	1.1
AM 10074	good	mineral	oxidising	self slip	orange	orange	monochrome	monotone	matt	<i>Ibid.</i> AM 10203.	1.1
AM 10471	altered	mineral	oxidising	light slip	orange	black	monochrome	monotone	matt	<i>Ibid.</i> AM 10203.	1.1
AM 10419	altered	mineral	oxidising	self slip	orange	black	monochrome	bitone	matt	<i>Ibid.</i> AM 10203.	1.1
AM 10578	concretions	mineral	oxidising	self slip	orange	orange	monochrome	monotone	matt	Shams ed-Din (GUSTAVSON-GAUBE, 1981, p. 48 and p. 133, Fig. 263, form 1a of flared bowls); Tell Halula (CRUELLS, 1996, p. 109, Fig. 7, form 1D); Tell Damishliyya (AKKERMANS, 1986-1987, p. 62, Pl. 16:105; AKKERMANS, 1993, p. 40, Fig. 3.5:19-21); Umm Qseir (TSUNEKI and MIYAKE, eds., 1998, p. 50 and Fig. 23:14-23, form 11c; HOLE and JOHNSON, 1986-1987, p. 214, Fig. p. b, c and d); Chagar Bazar (MALLOWAN, 1936, Pl. 2:4, examples of polychrome vessels with slightly convex walls from level 6); Yunus/Carchemish (DIRVANA, 1944, Pl. 69:5); Girikihaciyan (WATSON and LEBLANC, 1990, p. 58, Fig. 4.8, form 1C); Arpachiyah (MALLOWAN and ROSE, 1935, Fig. 57:2); Tell Aqab (DAVIDSON, 1977, p. 134, Pl. 26); Yarim Tepe II (MERPERT and MUNCHAEV, 1987, p. 31, Fig. 14:3 and p. 32, Fig. 16:5-6).	1.2

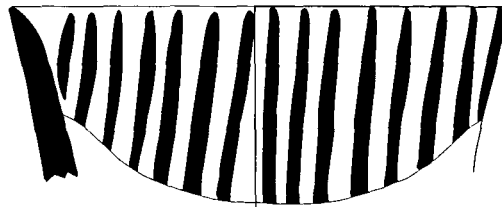
5. THE POTTERY



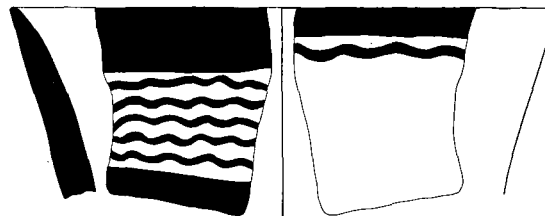
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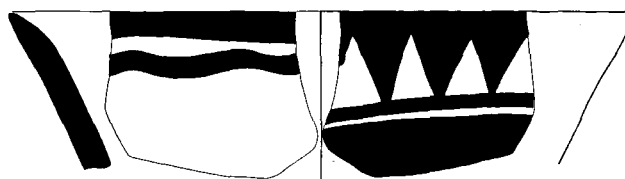
AM 10577



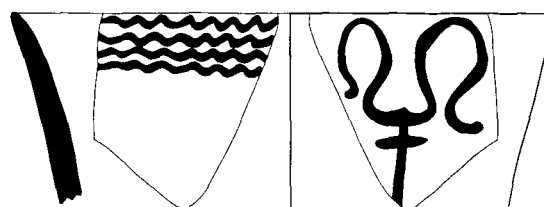
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AM 10471



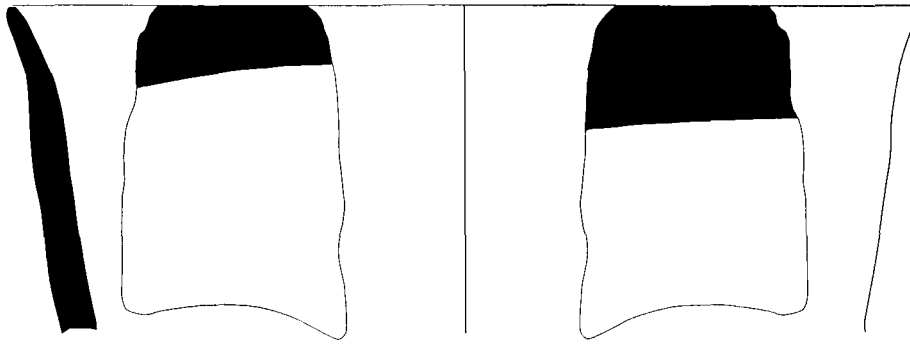
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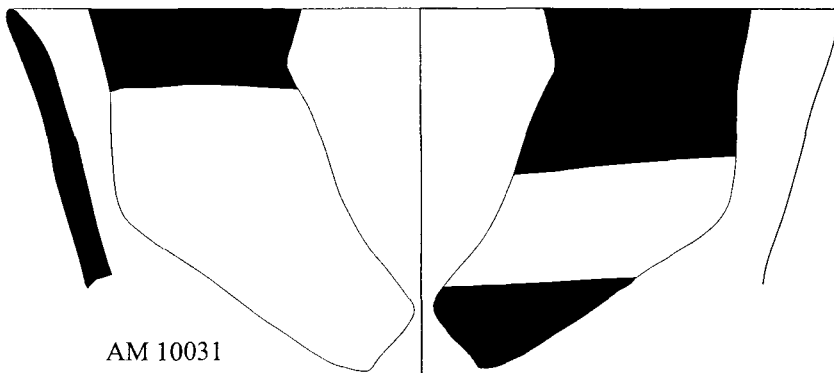
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Inv. n°	Condition	Temper	Firing	Treatment	Colour fabric	Colour paint	M/B/P	Mo/Bi	Ma/Lu	Comparanda	Form
AM 10368	altered	mineral	oxidising	cream slip	orange	black	monochrome	monotone	matt	Shams ed-Din (GUSTAVSON-GAUBE, 1981, p. 48 and p. 133, Fig. 263, form 1a of flared bowls); Tell Halula (CRUELLS, 1996, p. 109, Fig. 7, form 1D); Tell Damishliyya (AKKERMANS, 1986-1987, p. 62, Pl. 16:105; AKKERMANS, 1993, p. 40, Fig. 3.5:19-21); Umm Qseir (TSUNEKI and MIYAKE, eds., 1998, p. 50 and Fig. 23:14-23, form IIc; HOLE and JOHNSON, 1986-1987, p. 214, Fig. p. b, c and d); Chagar Bazar (MALLOWAN, 1936, Pl. 2.4, examples of polychrome vessels with slightly convex walls from level 6); Yunus/Carchemish (DIRVANA, 1944, Pl. 69:5); Girkihaciyān (WATSON and LEBLANC, 1990, p. 58, Fig. 4.8, form 1C); Arpachiyah (MALLOWAN and ROSE, 1935, Fig. 57:2); Tell Aqab (DAVIDSON, 1977, p. 134, Pl. 26); Yarim Tepe II (MERPERT and MUNCHAEV, 1987, p. 31, Fig. 14:3 and p. 32, Fig. 16:5-6).	1.2
AM 10031	good	mineral	oxidising	self slip	orange	dark brown	monochrome	monotone	matt	<i>Ibid.</i> AM 10368	1.2
AM 10687	concretions	mineral	oxidising	cream slip	orange	black	monochrome	monotone	matt	<i>Ibid.</i> AM 10368	1.2
AM 10676	altered	mineral	oxidising	smoothed	orange	black	monochrome	monotone	matt	Shams ed-Din (GUSTAVSON-GAUBE, 1981, p. 133, Fig. 258, 260-261); Tell Halula (CRUELLS, 1996, p. 109, Fig. 7, form 1A; CRUELLS, 2001, p. 157, Fig. 4:8); Yunus/Carchemish (DIRVANA, 1944, Pl. 69:7, 8 and 11); Girkihaciyān (WATSON and LEBLANC, 1990, p. 57, Fig. 4.7, form 1B); Tell Turlu (BRENIQUET, 1991, p. 32, Pl. 13:2-4); Ain et-Tell (MATTHEWS <i>et al.</i> , 1978, p. 132, Fig. 5.65); Umm Qseir (TSUNEKI and MIYAKE, eds., 1998, p. 45 and Fig. 23, form 1Ia of bowl; HOLE and JOHNSON, 1986-1987, p. 214, Fig. j and n); Chagar Bazar (MALLOWAN, 1936, p. 44 and Fig. 23:2); Tell Halaf (VON OPPENHEIM, 1943, Pl. 10:26-29); Sabi Abyad (LEMIÈRE and NIEUWENHUYSE, 1996, p. 267); Tell Damishliyya (AKKERMANS, 1993, p. 40, Fig. 3.5:20); Yarim Tepe II (MERPERT and MUNCHAEV, 1987, p. 31, Fig. 14:1-2, p. 32, Fig. 16:3 and p. 32, Fig. 17:1); Arpachiyah (MALLOWAN and ROSE, 1935, Fig. 72).	1.1
AM 10185	good	mineral	oxidising	self slip	orange	black	monochrome	monotone	matt	<i>Ibid.</i> AM 10676	1.1

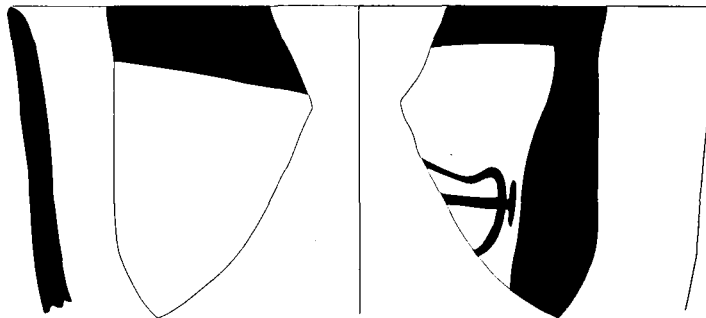
5. THE POTTERY



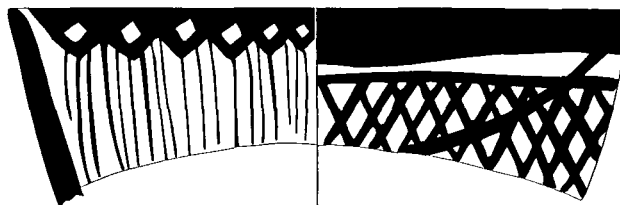
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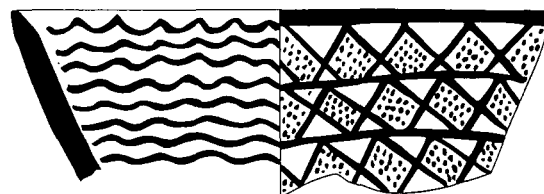
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AM 10687



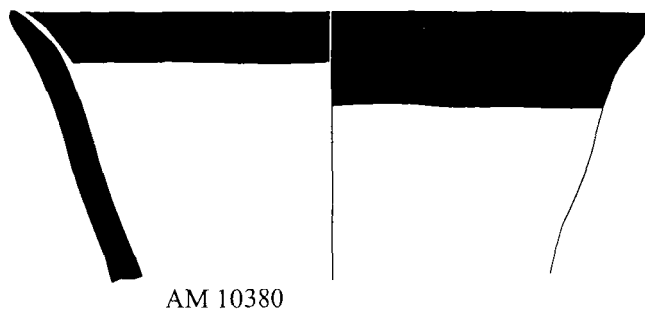
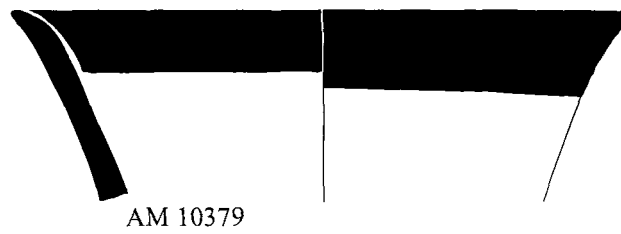
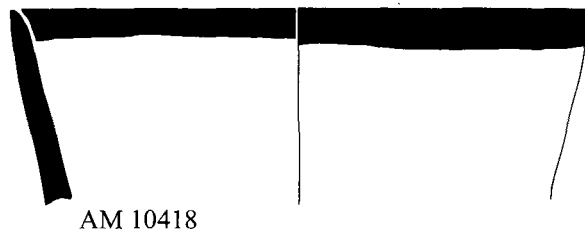
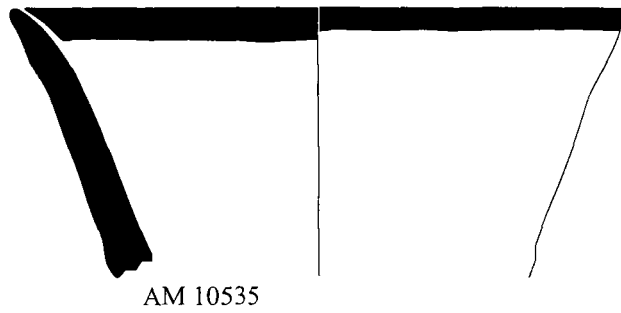
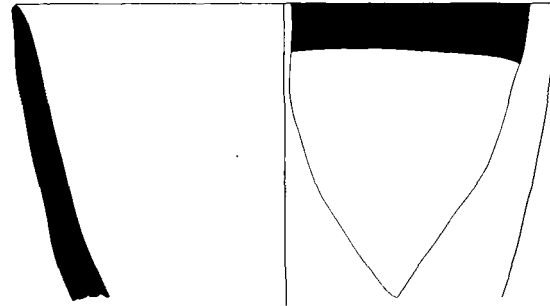
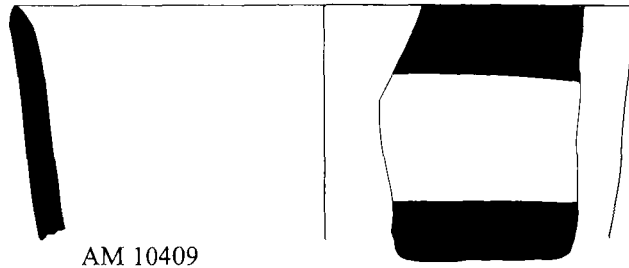
AM 10676



AM 10185

Inv. n°	Condition	Temper	Firing	Treatment	Colour fabric	Colour paint	M/B/P	Mo/Bi	Ma/Lu	Comparanda	Form
AM 10409	altered	mineral	oxidising	self slip	orange	red	monochrome	monotone	matt	Shams ed-Din (GUSTAVSON-GAUBE, 1981, p. 133, Fig. 258, 260 and 261); Tell Halula (CRUELLS, 1996, p. 109, Fig. 7, form 1A; CRUELLS, 2001, p. 157, Fig. 4-8); Yunus/Carchemish (DIRVANA, 1944, Pl. 69:7, 8 and 11); Girikihacyan (WATSON and LEBLANC, 1990, p. 57, Fig. 4.7, form 1B); Tell Turtu (BRENIQUET, 1991, p. 32, Pl. 13:2-4); Ain et-Tell (MATTHEWS <i>et al.</i> , 1978, p. 132, Fig. 5.65); Umm Qseir (TSUNEKI and MIYAKE, eds., 1998, p. 45 and Fig. 23, form IIa of bowl; HOLE and JOHNSON, 1986-1987, p. 214, Fig. j and n); Chagar Bazar (MALLOWAN, 1936, p. 44 and Fig. 23:2); Tell Halaf (VON OPPENHEIM, 1943, Pl. 10:26-29); Tell Aqab (DAVIDSON, 1977, p. 111, Pl. 19, form 1) Sabi Abyad (LE MIÈRE and NIEUWENHUYSE, 1996, p. 267); Tell Damshliyya (AKKERMANS, 1993, p. 40, Fig. 3.5:20); Yarim Tepe II (MERPERT and MUNCHAEV, 1987, p. 31, Fig. 14:1-2, p. 32, Fig. 16:3 and Fig. 17:1); Arpachiyah (MALLOWAN and ROSE, 1935, Fig. 72).	1.1
AM 10398	altered	mineral	oxidising	self slip	cream	black	monochrome	monotone	matt	<i>Ibid.</i> AM 10409.	1.1
AM 10535	concretions	mineral	mixed	self slip	orange	black	monochrome	monotone	matt	Shams ed-Din (GUSTAVSON-GAUBE, 1981, p. 48 and p. 133, Fig. 263, form 1a of flared bowls); Tell Halula (CRUELLS, 1996, p. 109, Fig. 7, form 1D); Tell Damshliyya (AKKERMANS, 1986-1987, p. 62, Pl. 16:105; AKKERMANS, 1993, p. 40, Fig. 3.5:19-21); Umm Qseir (TSUNEKI and MIYAKE, eds., 1998, p. 50 and Fig. 23:14-23, form IIc; HOLE and JOHNSON, 1986-1987, p. 214, Fig. p. b, c and d); Chagar Bazar (MALLOWAN, 1936, Pl. 2:4, examples of polychrome vessels with slightly convex walls from level 6); Yunus/Carchemish (DIRVANA, 1944, Pl. 69:5); Girikihacyan (WATSON and LEBLANC, 1990, p. 58, Fig. 4.8, form 1C); Arpachiyah (MALLOWAN and ROSE, 1935, Fig. 57:2); Tell Aqab (DAVIDSON, 1977, p. 134, Pl. 26); Yarim Tepe II (MERPERT and MUNCHAEV, 1987, p. 31, Fig. 14:3 and p. 32, Fig. 16:5-6).	1.2
AM 10418	altered	mineral	oxidising	self slip	orange	black	monochrome	bitone	matt	<i>Ibid.</i> AM 10409.	1.1
AM 10379	altered	mineral	oxidising	self slip	cream	dark brown	monochrome	monotone	matt	<i>Ibid.</i> AM 10535.	1.2
AM 10380	altered	mineral	oxidising	self slip	cream	black	monochrome	monotone	matt	<i>Ibid.</i> AM 10535.	1.2

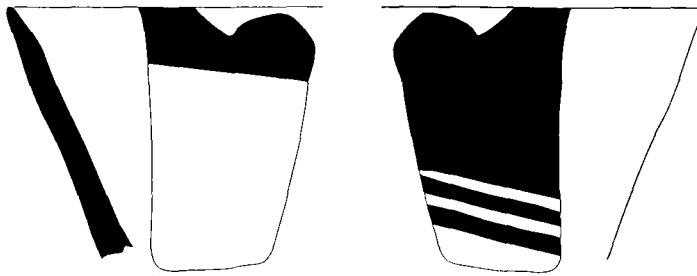
5. THE POTTERY



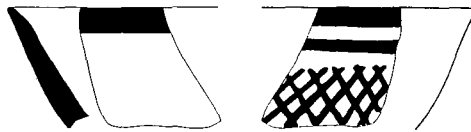
Pl. 5.14
Monochrome fine Halaf painted ware (Scale: 1/2).

Inv. n°	Condition	Temper	Firing	Treatment	Colour fabric	Colour paint	M/B/P	Mo/Bi	Ma/Lu	Comparanda	Form
AM 10378	altered	mineral	oxidising	cream slip	orange	dark brown	monochrome	monotone	matt	Shams ed-Din (GUSTAVSON-GAUBE, 1981, p. 133, Fig. 258, 260 and 261); Tell Habula (CRUELLS, 1996, p. 109, Fig. 7, form 1A; CRUELLS, 2001, p. 157, Fig. 4:8); Yunus/Carchemish (DIRVANA, 1944, Pl. 69:7, 8 and 11); Girikhaciyan (WATSON and LEBLANC, 1990, p. 57, Fig. 4, 7, form 1B); Tell Turlu (BRENQUET, 1991, p. 32, Pl. 13:2-4); Ain et-Tell (MATTHEWS <i>et al.</i> , 1978, p. 132, Fig. 5.65); Umm Qseir (TSUNEKI and MIYAKE, eds., 1998, p. 45 and Fig. 23, form IIa of bowl; HOLF and JOHNSON, 1986-1987, p. 214, Fig. j and n); Chagar Bazar (MALLOWAN, 1936, p. 44 and Fig. 23:2); Tell Halaf (VON OPPENHEIM, 1943, Pl. 10:26-29); Tell Aqab (DAVIDSON, 1977, p. 111, Pl. 19, form 1) Sabi Abyad (LE MIÈRE and NIEUWENHUYSE, 1996, p. 267); Tell Damishliyya (AKKERMANS, 1993, p. 40, Fig. 3.5:20); Yarim Tepe II (MERPERT and MUNCHAEV, 1987, p. 31, Fig. 14:1-2, p. 32, Fig. 16:3 and Fig. 17:1); Arpachiyah (MALLOWAN and ROSE, 1935, Fig. 72).	1.1
AM 10393	altered	mineral	oxidising	self slip	cream	black	monochrome	monotone	matt	<i>Ibid.</i> AM 10378.	1.1
AM 10410	altered	mineral	oxidising	self slip	orange	red	monochrome	monotone	matt	<i>Ibid.</i> AM 10378.	1.1
AM 10462	altered	mineral	oxidising	self slip	orange	black	monochrome	monotone	matt	<i>Ibid.</i> AM 10378.	1.1
AM 10233	good	mineral	oxidising	self slip	orange	red	monochrome	monotone	matt	<i>Ibid.</i> AM 10378.	1.1
AM 10414	altered	mineral	oxidising	cream slip	orange	black	monochrome	monotone	matt	<i>Ibid.</i> AM 10378.	1.1

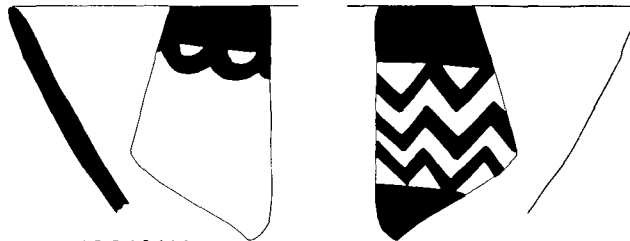
5. THE POTTERY



AM 10378



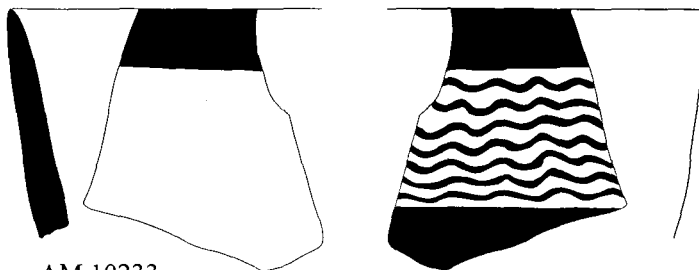
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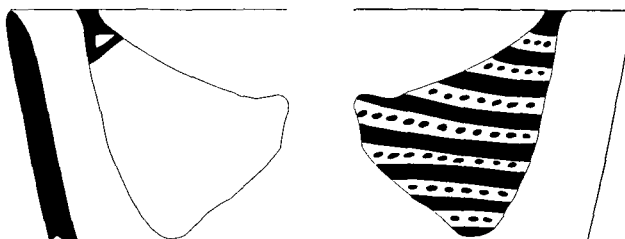
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AM 10462



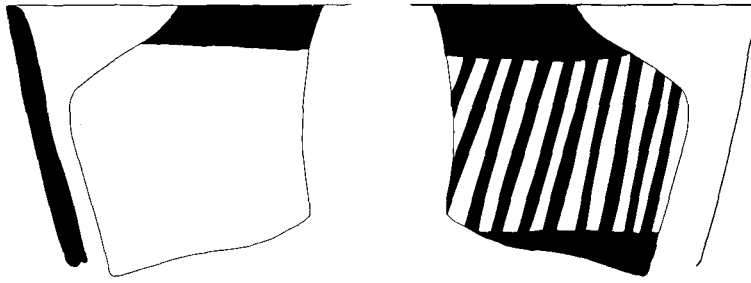
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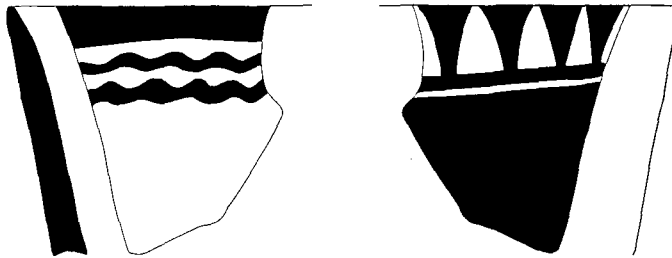
AM 10414

Inv. n°	Condition	Temper	Firing	Treatment	Colour fabric	Colour paint	M/B/P	Mo/Bi	Ma/Lu	Comparanda	Form
AM 10242	good	mixed	oxidising	self slip	orange	red	monochrome	bitone	matt	Shams ed-Din (GUSTAVSON-GAUBE, 1981, p. 133, Fig. 258, 260 and 261); Tell Halula (CRUELLS, 1996, p. 109, Fig. 7, form 1A; CRUELLS, 2001, p. 157, Fig. 4.8); Yunus/Carchemish (DIRVANA, 1944, Pl. 69:7, 8 and 11); Girikhaciyan (WATSON and LEBLANC, 1990, p. 57, Fig. 4.7, form 1B); Tell Turlu (BRENIQUET, 1991, p. 32, Pl. 13:2-4); Ain et-Tell (MATTHEWS <i>et al.</i> , 1978, p. 132, Fig. 5.65); Umm Qseir (TSUNEKI and MIYAKE, eds., 1998, p. 45 and Fig. 23, form 1a of bowl; HOLE and JOHNSON, 1986-1987, p. 214, Fig. j and n); Chagar Bazar (MALLOWAN, 1936, p. 44 and Fig. 23:2); Tell Halaf (VON OPPENHEIM, 1943, Pl. 10:26-29); Tell Aqab (DAVIDSON, 1977, p. 111, Pl. 19, form 1) Sabi Abyad (LE MIÈRE and NIEUWENHUYSE, 1996, p. 267); Tell Damishliyya (AKKERMANS, 1993, p. 40, Fig. 3.5:20); Yarim Tepe II (MERPERT and MUNCHAEV, 1987, p. 31, Fig. 14:1-2, p. 32, Fig. 16:3 and Fig. 17:1); Arpachiyah (MALLOWAN and ROSE, 1935, Fig. 72).	I.1
AM 10316	good	mineral	oxidising	self slip	orange	red	monochrome	monotone	matt	<i>Ibid.</i> AM 10242.	I.1
AM 10349	altered	mineral	oxidising	self slip	orange	black	monochrome	bitone	lustrous	<i>Ibid.</i> AM 10242.	I.1
AM 10483	altered	mixed	oxidising	cream slip	orange	red	monochrome	monotone	matt	<i>Ibid.</i> AM 10242.	I.1
AM 10255	altered	mineral	oxidising	self slip	orange	red	monochrome	monotone	matt	<i>Ibid.</i> AM 10242.	I.1

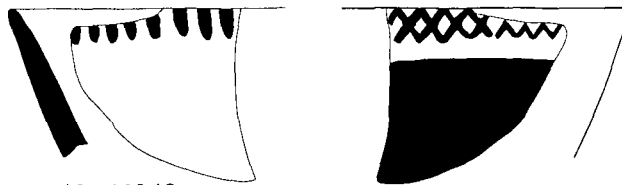
5. THE POTTERY



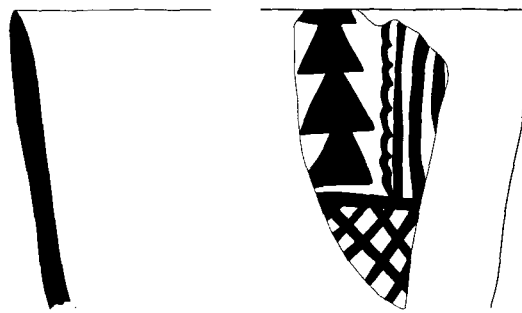
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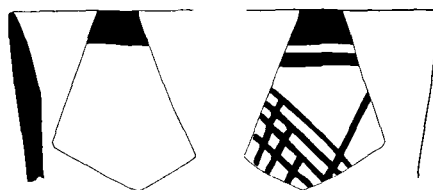
AM 10316



AM 10349



AM 10483



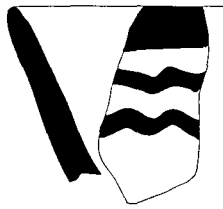
AM 10255

Pl. 5.16

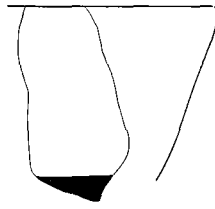
Monochrome fine Halaf painted ware (Scale: 1/2).

Inv. n°	Condition	Temper	Firing	Treatment	Colour fabric	Colour paint	M/B/P	Mo/Bi	Ma/Lu	Comparanda	Form
AM 10392	altered	mixed	oxidising	self slip	orange	dark brown	monochrome	monotone	matt	Shams ed-Din (GUSTAVSON-GAUBE, 1981, p. 133, Fig. 258, 260 and 261); Tell Habula (CRUELLS, 1996, p. 109, Fig. 7, form 1A; CRUELLS, 2001, p. 157, Fig. 4:8); Yunus/Carchemish (DIRVANA, 1944, Pl. 69-7, 8 and 11); Girikihaciyan (WATSON and LEBLANC, 1990, p. 57, Fig. 4.7, form 1B); Tell Turlu (BRENJQUET, 1991, p. 32, Pl. 13:2-4); Ain et-Tell (MATTHEWS <i>et al.</i> , 1978, p. 132, Fig. 5.65); Umm Qseir (TSUNEKI and MIYAKE, eds., 1998, p. 45 and Fig. 23, form IIa of bowl; HOLE and JOHNSON, 1986-1987, p. 214, Fig. j and n); Chagar Bazar (MALLOWAN, 1936, p. 44 and Fig. 23:2); Tell Halaf (VON OPPENHEIM, 1943, Pl. 10:26-29); Tell Aqab (DAVIDSON, 1977, p. 111, Pl. 19, form 1) Sabi Abyad (LE MIÈRE and NIEUWENHUYSE, 1996, p. 267); Tell Damshliyya (AKKERMANS, 1993, p. 40, Fig. 3.5:20); Yarim Tepe II (MERPERT and MUNCHAEV, 1987, p. 31, Fig. 14:1-2, p. 32, Fig. 16:3 and Fig. 17:1); Arpachiyah (MALLOWAN and ROSE, 1935, Fig. 72).	1.1
AM 10352	good	mineral	oxidising	cream slip	orange	orange	monochrome	monotone	matt	<i>Ibid.</i> AM 10392.	1.1
AM 10359	good	mineral	oxidising	self slip	orange	black	monochrome	monotone	matt	<i>Ibid.</i> AM 10392.	1.1
AM 10324	altered	mineral	oxidising	cream slip	orange	red	monochrome	bitone	matt	<i>Ibid.</i> AM 10392.	1.1
AM 10402	altered	mineral	oxidising	self slip	orange	red	monochrome	monotone	matt	<i>Ibid.</i> AM 10392.	1.1
AM 10280	altered	mineral	oxidising	self slip	orange	black	monochrome	monotone	matt	<i>Ibid.</i> AM 10392.	1.1
AM 10366	good	mixed	oxidising	cream slip	orange	dark brown	monochrome	monotone	matt	<i>Ibid.</i> AM 10392.	1.1
AM 10390	altered	mineral	oxidising	self slip	orange	black	monochrome	monotone	lustrous	<i>Ibid.</i> AM 10392.	1.1

5. THE POTTERY



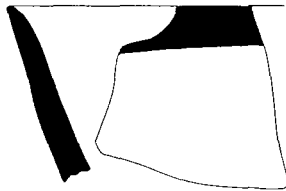
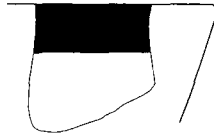
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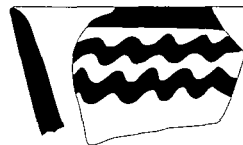
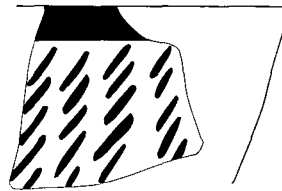
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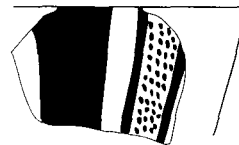
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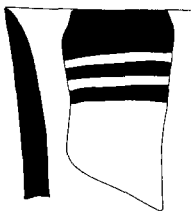
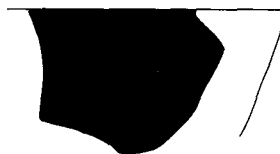
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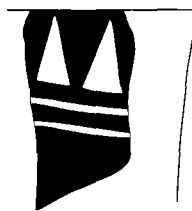
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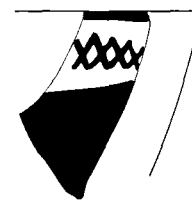
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AM 10366

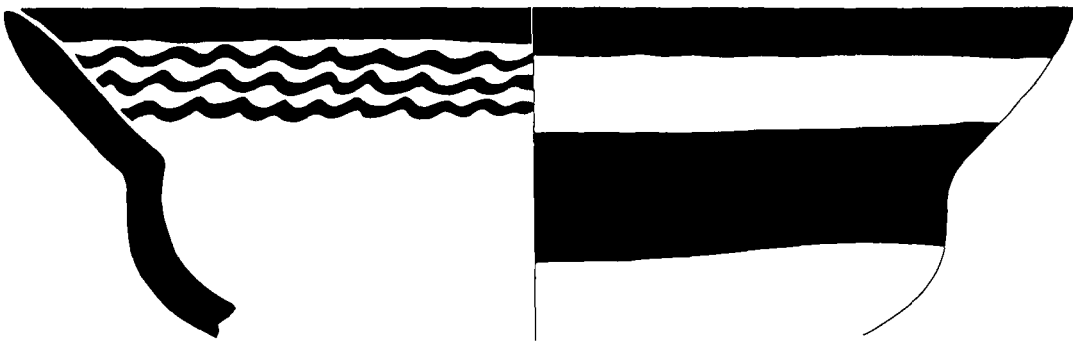


AM 10390

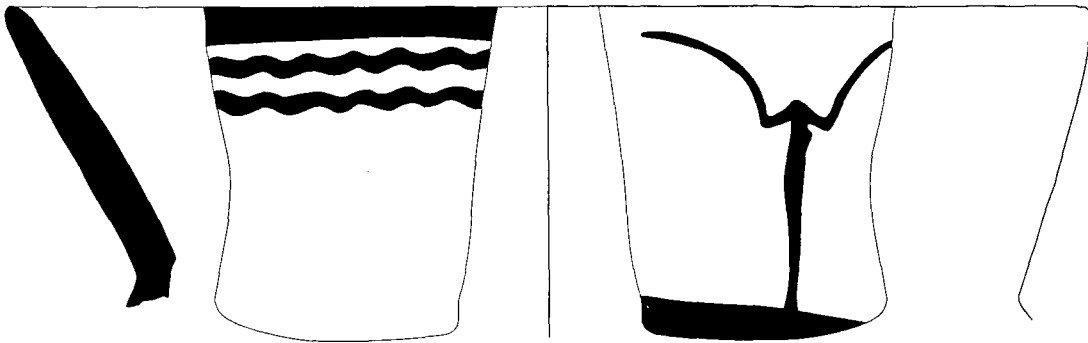


Inv. n°	Condition	Temper	Firing	Treatment	Colour fabric	Colour paint	M/B/P	Mo/Bi	Ma/Lu	Comparanda	Form
AM 10569	good	mineral	oxidising	cream slip	orange	dark brown	monochrome	monotone	matt	Shams ed-Din (GUSTAVSON-GAUBE, 1981, p. 51-52, p. 68, p. 141, Fig. 335-336 and p. 159, Fig. 491); Tell Halula (CRUELLS, 1996, p. 109, Fig. 7, form 1E; CRUELLS, 2001, p. 157, Fig. 4:10); Tilbeshar (BRENIQUET, 1998, p.150, Pl. 2.3); Tell Turlu (BRENIQUET, 1991, p. 32, Pl. 13:10-11); Girkilactyan (WATSON and LEBLANC, 1990, p. 59, Fig. 4.9, form 1D); Khirbet esh-Shenef (AKKERMANS, 1993, p. 96, Fig. 3.29 and p. 97, Fig. 3.30); Sabi Abyad (NIEUWENHUYSE, 1997, Fig. 8:14); Tell Damishliyya (AKKERMANS, 1993, p. 39, Fig. 3.4:14); Tell Halaf (VON OPPENHEIM, 1943, Pl. 7:1-2 and Pl. 21:5-10); Chagar Bazar (MALLOWAN, 1936, Fig. 21.2, from levels 12-13); Tell Aqab (DAVIDSON, 1977, p. 127, form 18); Arpachiyah (MALLOWAN and ROSE, 1935, Fig. 54.4 and Fig. 66.5); Umm Qseir (HOLE and JOHNSON, 1986-1987, p. 213; TSUNEKI and MIYAKE, eds, 1998, p. 53, form Vb); Khabur survey (NIEUWENHUYSE, 2000, p. 174 and Ill. 9); Yarim Tepe II (MERPERT and MUNCHAEV, 1987, p. 33, Fig. 19:3-4).	1.3
AM 10135	good	mineral	oxidising	self slip	cream	black	monochrome	monotone	matt	<i>Ibid.</i> AM 10569.	1.3
AM 10318	good	mineral	oxidising	self slip	orange	red	monochrome	monotone	matt	<i>Ibid.</i> AM 10569.	1.3
AM 10566	altered	mineral	oxidising	self slip	orange	black	monochrome	monotone	matt	<i>Ibid.</i> AM 10569.	1.3
AM 10332	good	mineral	oxidising	self slip	orange	black	monochrome	monotone	matt	<i>Ibid.</i> AM 10569.	1.3

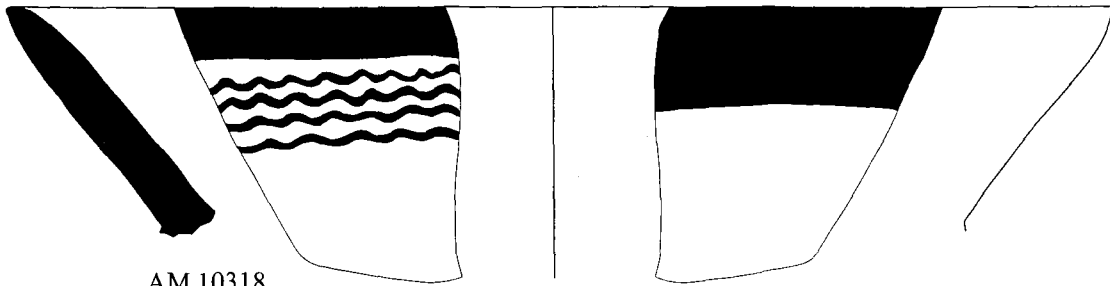
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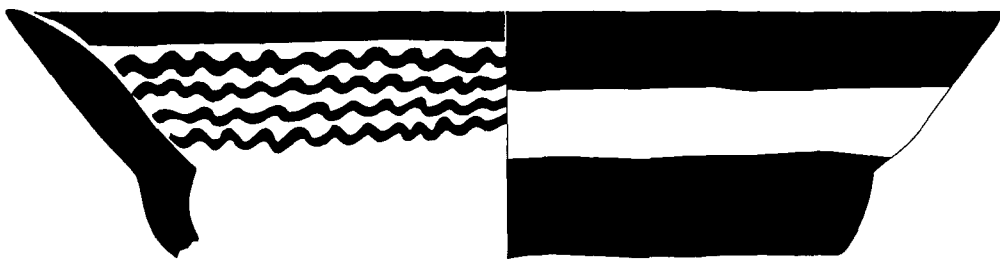
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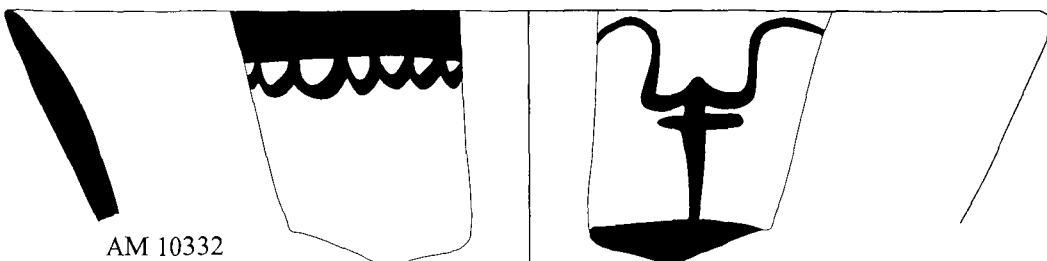
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AM 10318



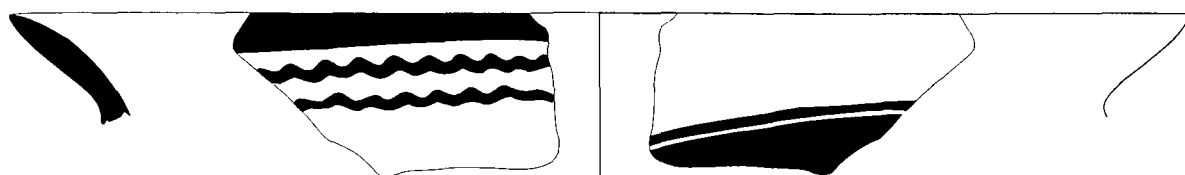
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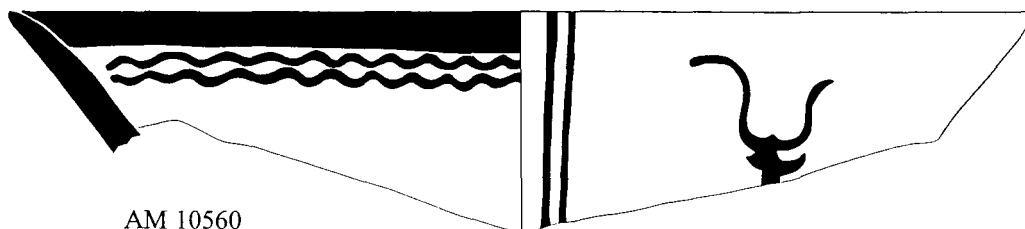
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Inv. n°	Condition	Temper	Firing	Treatment	Colour fabric	Colour paint	M/B/P	Mo/Bi	Ma/Lu	Comparanda	Form
AM 10009	altered	mineral	mixed	self slip	cream	dark brown	monochrome	monotone	matt	Shams ed-Din (GUSTAVSON-GAUBE, 1981, p. 51-52, p. 68, p. 141, Fig. 335-336 and p. 159, Fig. 491); Tell Hatula (CRUELLS, 1996, p. 109, Fig. 7, form 1E; CRUELLS, 2001, p. 157, Fig. 4:10); Tilbeshar (BRENIQUET, 1998, p. 150, Pl. 2:3); Tell Turlu (BRENIQUET, 1991, p. 32, Pl. 13:10-11); Girikhiacyan (WATSON and LEBLANC, 1990, p. 59, Fig. 4.9, form 1D); Khirbet esh-Shenef (AKKERMANS, 1993, p. 96, Fig. 3.29 and p. 97, Fig. 3.30); Sabi Abyad (NIEUWENHUYSE, 1997, Fig. 8:14); Tell Damishliyya (AKKERMANS, 1993, p. 39, Fig. 3.4:14); Tell Halaf (VON OPPENHEIM, 1943, Pl. 7:1-2 and Pl. 21:5-10); Chagar Bazar (MALLOWAN, 1936, Fig. 21:2, from levels 12-13); Tell Aqab (DAVIDSON, 1977, p. 127, form 18); Arpachiyah (MALLOWAN and ROSE, 1935, Fig. 54:4 and Fig. 66:5); Umm Qseir (HOLE and JOHNSON, 1986-1987, p. 213; TSUNEKI and MIYAKE, eds., 1998, p. 53, form Vb); Khabur survey (NIEUWENHUYSE, 2000, p. 174 and Ill. 9); Yarim Tepe II (MERPERT and MUNCHAEV, 1987, p. 33, Fig. 19:3-4).	1.3
AM 10560	concretions	mineral	oxidising	self slip	orange	black	monochrome	monotone	matt	<i>Ibid.</i> AM 10009.	1.3
AM 10609	concretions	mineral	oxidising	self slip	orange	black	monochrome	bitone	matt	<i>Ibid.</i> AM 10009.	1.3
AM 10435	altered	mixed	oxidising	light slip	orange	black	monochrome	monotone	lustrous	<i>Ibid.</i> AM 10009.	1.3
AM 10443	altered	mineral	oxidising	light slip	orange	red	monochrome	monotone	lustrous	<i>Ibid.</i> AM 10009.	1.3
AM 10584	altered	mineral	oxidising	cream slip	orange	black	monochrome	bitone	matt	Shams ed-Din (GUSTAVSON-GAUBE, 1981, p. 68 and p. 159, Fig. 492-494, form 2 of fine ware bowls); Yunus/Carchemish (WOOLLEY, 1934, p. 152, Fig. 53, form 11; DIRVANA, 1944, Pl. 70:6 and Pl. 71:1-3); Tilbeshar (BRENIQUET, 1998, p. 150, Pl. 2:3); Tell Turlu (BRENIQUET, 1991, p. 32, Pl. 13:10-11); Girikhiacyan (WATSON and LEBLANC, 1990, p. 59, form 1D); Sabi Abyad (LEMIERE and NIEUWENHUYSE, 1996, p. 261, Fig. 3.37:10, small cream bowl); Khirbet esh-Shenef (AKKERMANS, 1993, p. 97, Fig. 3.30:11); Tell Damishliyya (AKKERMANS, 1993, p. 40, Fig. 3.8:42; AKKERMANS, 1986-1987, p. 65, Pl. 19:128); Chagar Bazar (MALLOWAN, 1936, Fig. 21:2, from levels 12-13); Umm Qseir (TSUNEKI and MIYAKE, eds., 1998, p. 59, Fig. 27:8, form Vd, sinuous sided bowl with high neck); Tell Kurdu (ASLIHAN <i>et al.</i> , 2000, p. 210, Fig. 27:7).	1.4

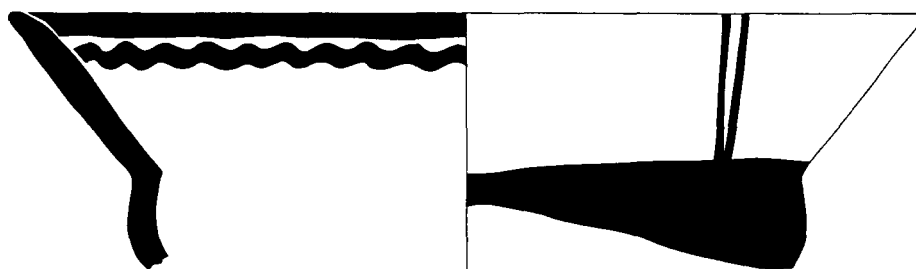
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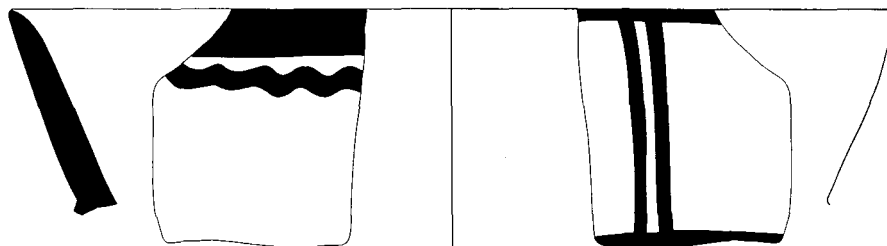
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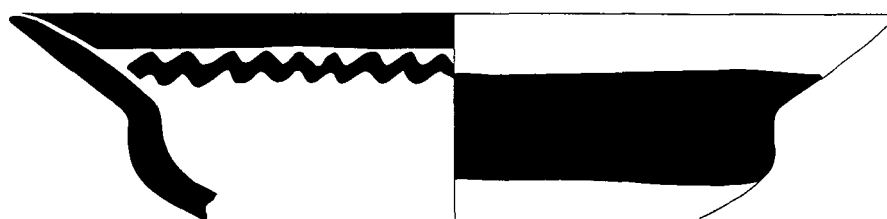
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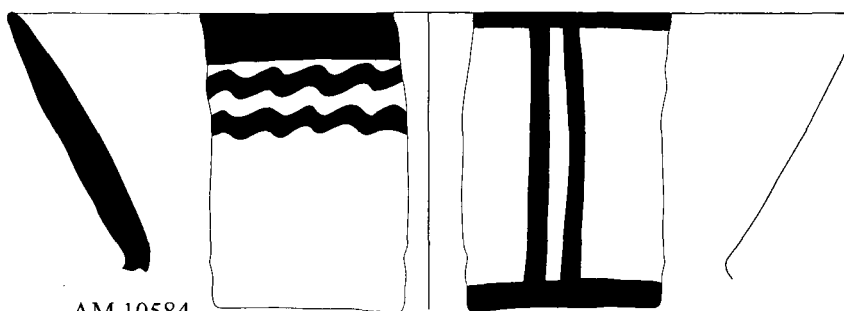
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AM 10435



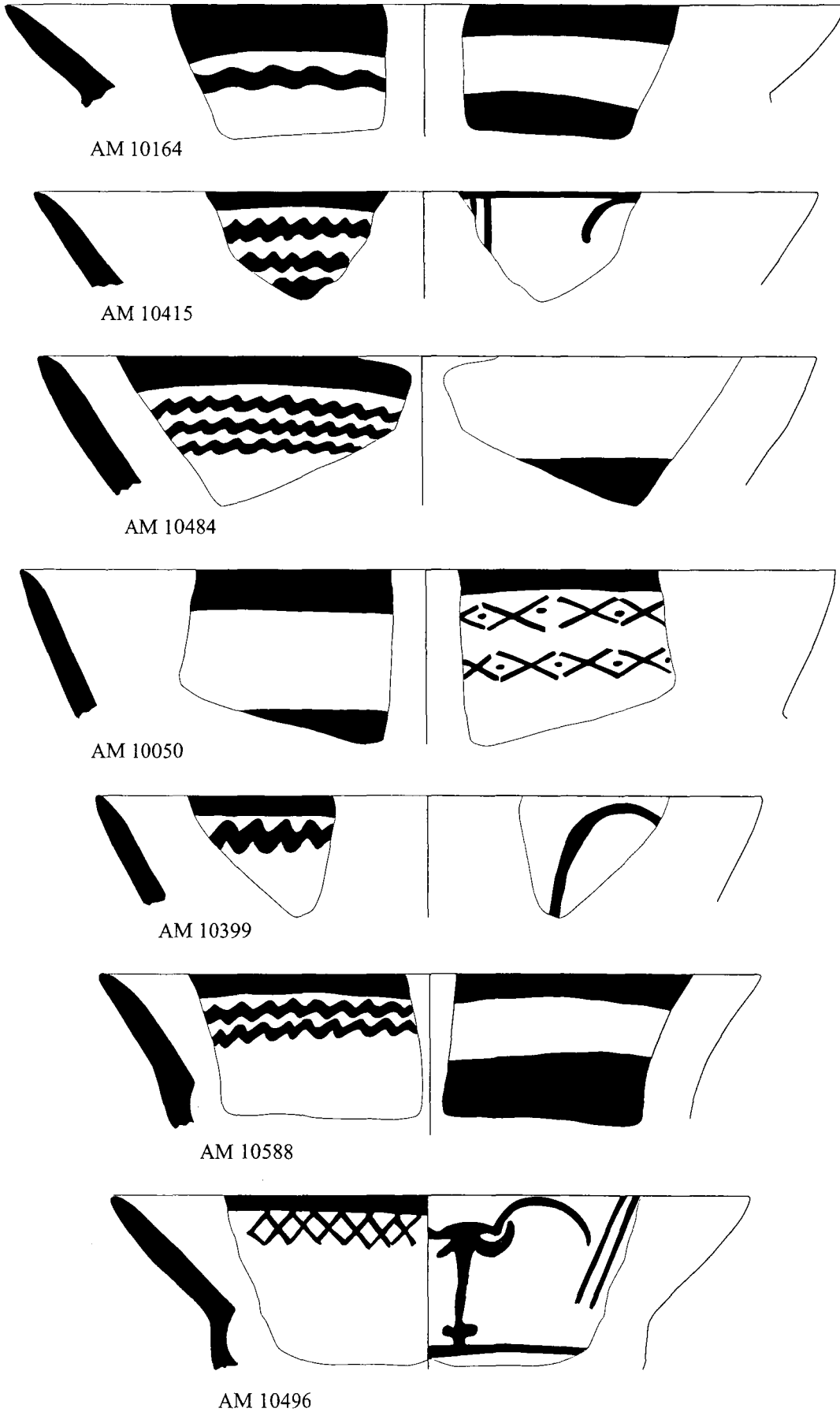
AM 10443



AM 10584

Inv. n°	Condition	Temper	Firing	Treatment	Colour fabric	Colour paint	M/B/P	Mo/Bi	Ma/Lu	Comparanda	Form
AM 10164	altered	mineral	oxidising	self slip	orange	orange	monochrome	monotone	matt	Shams ed-Din (GUSTAVSON-GAUBE, 1981, p. 51-52, p. 68, p. 141, Fig. 335-336 and p. 159, Fig. 491); Tell Habula (CRUELLS, 1996, p. 109, Fig. 7, form 1E; CRUELLS, 2001, p. 157, Fig. 4:10); Tell Amarna (CRUELLS, 1998, form 11); Tilbeshar (BRENIQUET, 1998, p.150, Pl. 2:3); Tell Turlu (BRENIQUET, 1991, p. 32, Pl. 13:10-11); Girikihaciyan (WATSON and LEBLANC, 1990, p. 59, Fig. 4.9, form 1D); Khirbet esh-Shenef (AKKERMANS, 1993, p. 96, Fig. 3.29 and p. 97, Fig. 3.30); Sabi Abyad (NIEUWENHUYSE, 1997, Fig. 8:14); Tell Damishliyya (AKKERMANS, 1993, p. 39, Fig. 3.4:14); Tell Halaf (VON OPPENHEIM, 1943, Pl. 7:1-2 and Pl. 21:5-10); Chagar Bazar (MALLOWAN, 1936, Fig. 21:2, from levels 12-13); Tell Aqab (DAVIDSON, 1977, p. 127, form 18); Arpachiyah (MALLOWAN and ROSE, 1935, Fig. 54:4 and Fig. 66:5); Umm Qseir (HOLE and JOHNSON, 1986-1987, p. 213; TSUNEKI and MIYAKE, eds., 1998, p. 53, form Vb); Khabur survey (NIEUWENHUYSE, 2000, p. 174 and Ill. 9); Yarrum Tepe II (MERPERT and MUNCHAEV, 1987, p. 33, Fig. 19:3-4).	1.3
AM 10415	altered	mineral	oxidising	self slip	orange	red	monochrome	monotone	matt	<i>Ibid.</i> AM 10164.	1.3
AM 10484	altered	mineral	mixed	self slip	grey	black	monochrome	monotone	matt	<i>Ibid.</i> AM 10164.	1.3
AM 10050	good	mineral	oxidising	cream slip	orange	dark brown	monochrome	bitone	matt	<i>Ibid.</i> AM 10164.	1.3
AM 10399	altered	mineral	oxidising	self slip	cream	black	monochrome	monotone	matt	<i>Ibid.</i> AM 10164.	1.3
AM 10588	altered	invisible	reducing	self slip	grey	black	monochrome	monotone	matt	<i>Ibid.</i> AM 10164.	1.3
AM 10496	altered	mineral	oxidising	cream slip	orange	black	monochrome	monotone	matt	<i>Ibid.</i> AM 10164.	1.3

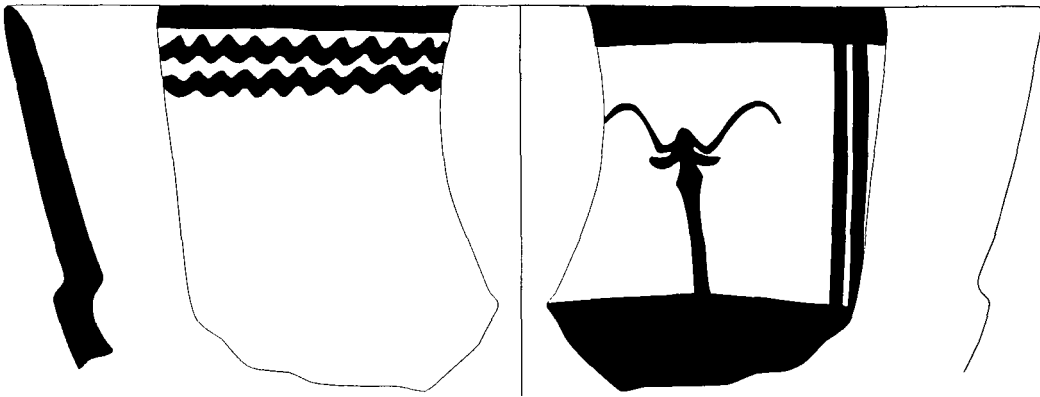
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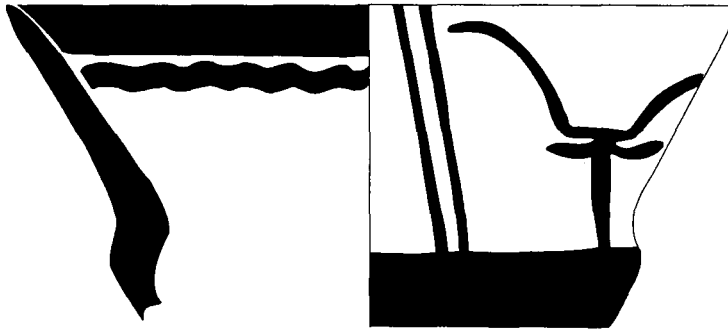
Pl. 5.20
Monochrome fine Halaf painted ware (Scale: 1/2).

Inv. n°	Condition	Temper	Firing	Treatment	Colour fabric	Colour paint	M/B/P	Mo/Bi	Ma/Lu	Comparanda	Form
AM 10521	good	mineral	oxidising	light slip	orange	black	monochrome	monotone	matt	Shams ed-Din (GUSTAVSON-GAUBE, 1981, p. 68 and p. 159, Fig. 492-494, form 2 of fine ware bowls); Yunus/Carchemish (WOOLLEY, 1934, p. 152, Fig. 53, form 11; DIRVANA, 1944, pl. 70-6 and pl. 71-1-3); Tilbeshar (BRENIQUET, 1998, p. 150, pl. 2:3); Tell Turlu (BRENIQUET, 1991, p. 32, pl. 13:10-11); Girikihaciyan (WATSON and LEBLANC, 1990, p. 59, form 1D); Sabi Abyad (LE MIÈRE and NIEUWENHUYSE, 1996, p. 261, Fig. 3.37:10, small cream bowl); Khirbet esh-Shenef (AKKERMANS, 1993, p. 97, Fig. 3.30:11); Tell Damishliyya (AKKERMANS, 1993, p. 40, Fig. 3.8:42; AKKERMANS, 1986-1987, p. 65, pl. 19:128); Chagar Bazar (MALLOWAN, 1936, Fig. 21:2, from levels 12-13); Umm Qseir (TSUNEKI and MIYAKE, eds., 1998, p. 59, Fig. 27:8, form Vd, sinuous sided bowl with high neck); Tell Kurdu (ASLIHAN <i>et al.</i> , 2000, p. 210, Fig. 27:7).	1.4
AM 10381	altered	mineral	oxidising	cream slip	orange	red	monochrome	monotone	matt	<i>Ibid.</i> AM 10521.	1.4
AM 10476	altered	mineral	oxidising	self slip	green	black	monochrome	monotone	matt	<i>Ibid.</i> AM 10521.	1.4
AM 10558	altered	mineral	oxidising	light slip	orange	black	monochrome	monotone	matt	<i>Ibid.</i> AM 10521.	1.4

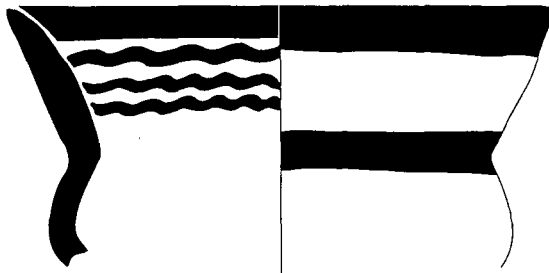
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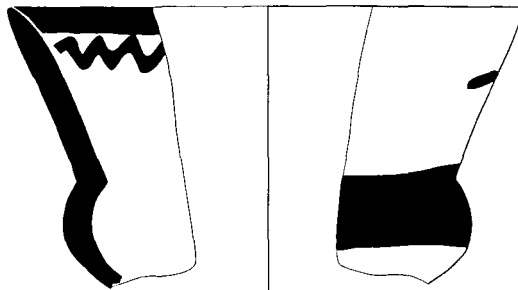
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AM 10381



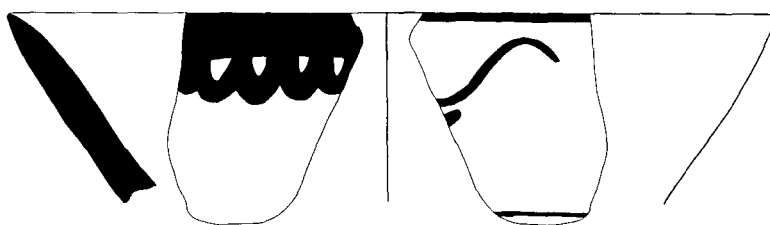
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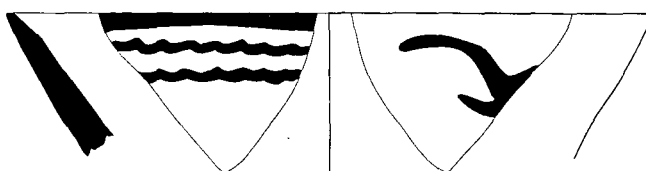
AM 10558

Inv. n°	Condition	Temper	Firing	Treatment	Colour fabric	Colour paint	M/B/P	Mo/Bi	Ma/Lu	Comparanda	Form
AM 10498	altered	mineral	oxidising	cream slip	orange	black	monochrome	monotone	matt	Shams ed-Din (GUSTAVSON-GAUBE, 1981, p. 51-52, p. 68, p. 141, Fig. 335-336 and p. 159, Fig. 491); Tell Halula (CRUELLS, 1996, p. 109, Fig. 7, form 1E; CRUELLS, 2001, p. 157, Fig. 4:10); Tilbeshar (BRENIQUET, 1998, p. 150, Pl. 2:3); Tell Turlu (BRENIQUET, 1991, p. 32, Pl. 13:10-11); Girikihacyan (WATSON and LEBLANC, 1990, p. 59, Fig. 4.9, form 1D); Khirbet esh-Shenef (AKKERMANS, 1993, p. 96, Fig. 3.29 and p. 97, Fig. 3.30); Sabi Abyad (NIEUWENHUYSE, 1997, Fig. 8:14); Tell Damishliyya (AKKERMANS, 1993, p. 39, Fig. 3.4:14); Tell Halaf (VON OPPENHEIM, 1943, Pl. 7:1-2 and Pl. 21:5-10); Chagar Bazar (MALLOWAN, 1936, Fig. 21:2, from levels 12-13); Tell Aqab (DAVIDSON, 1977, p. 127, form 18); Arpachiyah (MALLOWAN and ROSE, 1935, Fig. 54:4 and Fig. 66:5); Umm Qseir (HOLE and JOHNSON, 1986-1987, p. 213; TSUNEKI and MIYAKE, eds., 1998, p. 53, form Vb); Khabur survey (NIEUWENHUYSE, 2000, p. 174 and Ill. 9); Yarim Tepe II (MERPERT and MUNCHAIEV, 1987, p. 33, Fig. 19:3-4). <i>Ibid.</i> AM 10498.	1.3
AM 10006	good	mineral	oxidising	self slip	orange	black	monochrome	monotone	matt	<i>Ibid.</i> AM 10498.	1.3
AM 10481	good	mineral	oxidising	light slip	orange	black	monochrome	monotone	matt	<i>Ibid.</i> AM 10498.	1.3
AM 10522	altered	mineral	oxidising	light slip	orange	black	monochrome	monotone	matt	<i>Ibid.</i> AM 10498.	1.3
AM 10495	altered	mineral	oxidising	self slip	orange	red	monochrome	monotone	matt	Shams ed-Din (GUSTAVSON-GAUBE, 1981, p. 68 and p. 159, Fig. 492-494, form 2 of fine ware bowls); Yunus/Carchemish (WOOLLEY, 1934, p. 152, Fig. 53, form 11; DIRVANA, 1944, Pl. 70:6 and Pl. 71:1-3); Tilbeshar (BRENIQUET, 1998, p. 150, Pl. 2:3); Tell Turlu (BRENIQUET, 1991, p. 32, Pl. 13:10-11); Girikihacyan (WATSON and LEBLANC, 1990, p. 59, form 1D); Sabi Abyad (LE MIÈRE and NIEUWENHUYSE, 1996, p. 261, Fig. 3.37:10, small cream bowl); Khirbet esh-Shenef (AKKERMANS, 1993, p. 97, Fig. 3.30:11); Tell Damishliyya (AKKERMANS, 1993, p. 40, Fig. 3.8:42; AKKERMANS, 1986-1987, p. 65, Pl. 19:128); Chagar Bazar (MALLOWAN, 1936, Fig. 21:2, from levels 12-13); Umm Qseir (TSUNEKI and MIYAKE, eds., 1998, p. 59, Fig. 27:8, form Vd, sinuous sided bowl with high neck); Tell Kurdu (ASLIHAN <i>et al.</i> , 2000, p. 210, Fig. 27:7).	1.4
AM 10482	good	mineral	oxidising	light slip	orange	red	monochrome	monotone	lustrous	<i>Ibid.</i> AM 10495.	1.4

5. THE POTTERY



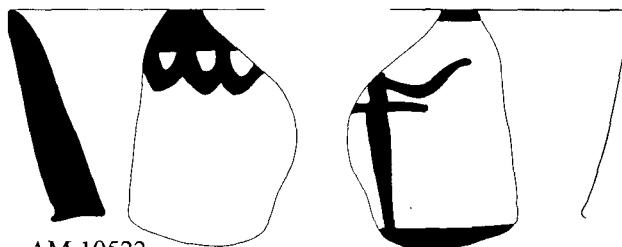
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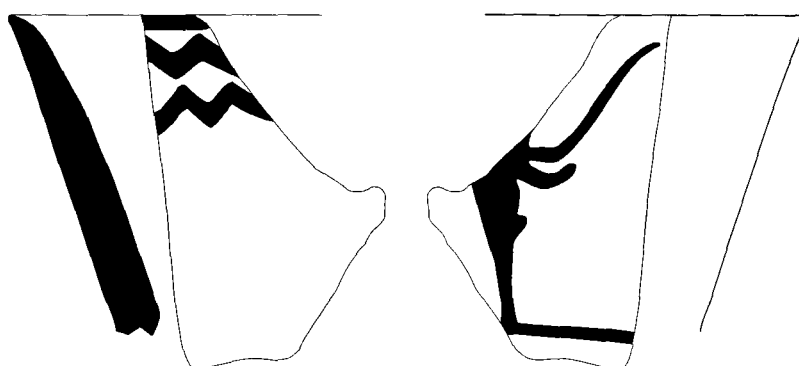
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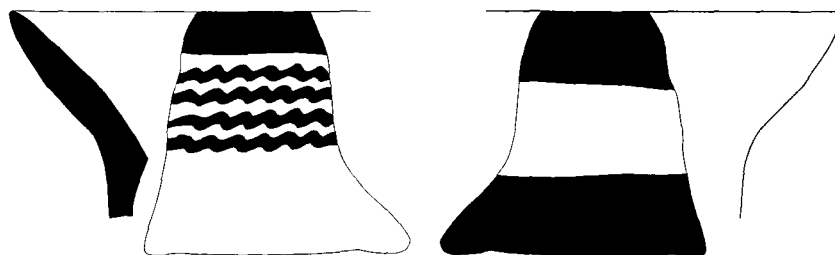
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AM 10522



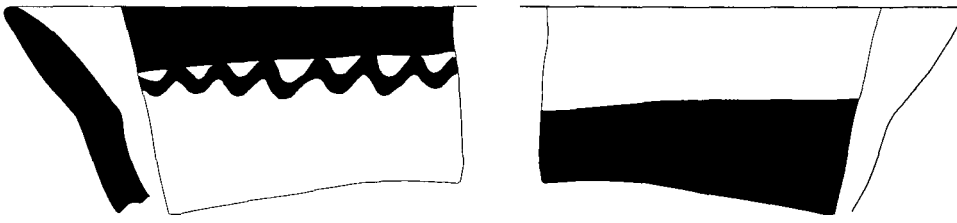
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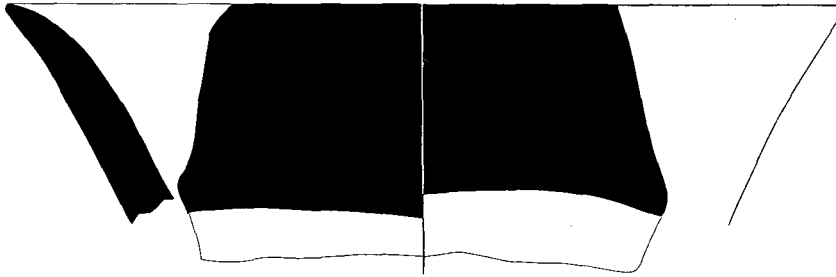
AM 10482

Inv. n°	Condition	Temper	Firing	Treatment	Colour fabric	Colour paint	M/B/P	Mo/Bi	Ma/Lu	Comparanda	Form
AM 10659	altered	mineral	reducing	smoothed	orange	dark brown	monochrome	monotone	matt	Shams ed-Din (GUSTAVSON-GAUBE, 1981, p. 51-52, p. 68, p. 141, Fig. 335-336 and p. 159, Fig. 491); Tell Halula (CRUELLS, 1996, p. 109, Fig. 7, form 1E; CRUELLS, 2001, p. 157, Fig. 4:10); Tibeshar (BRENIQUET, 1998, p. 150, Pl. 2:3); Tell Turlu (BRENIQUET, 1991, p. 32, Pl. 13:10-11); Girkihaciyan (WATSON and LEBLANC, 1990, p. 59, Fig. 4:9, form 1D); Khirbet esh-Shenef (AKKERMANS, 1993, p. 96, Fig. 3:29 and p. 97, Fig. 3:30); Sabi Abyad (NIEUWENHUYSE, 1997, Fig. 8:14); Tell Damishliyya (AKKERMANS, 1993, p. 39, Fig. 3:4:14); Tell Halaf (VON OPPENHEIM, 1943, Pl. 7:1-2 and Pl. 21:5-10); Chagar Bazar (MALLOWAN, 1936, Fig. 21:2, from levels 12-13); Tell Aqab (DAVIDSON, 1977, p. 127, form 18); Arpachiyah (MALLOWAN and ROSE, 1935, Fig. 54:4 and Fig. 66:5); Umm Qseir (HOLE and JOHNSON, 1986-1987, p. 213); TSUNEKI and MIYAKE, eds., 1998, p. 53, form Vb); Khabur survey (NIEUWENHUYSE, 2000, p. 174 and Ill. 9); Yarim Tepe II (MERPERT and MUNCHAEV, 1987, p. 33, Fig. 19:3-4).	1.3
AM 10430	altered	mineral	oxidising	self slip	orange	red	monochrome	bitone	lustrous	<i>Ibid.</i> AM 10659.	1.3
AM 10469	altered	mineral	oxidising	light slip	orange	red	monochrome	monotone	lustrous	<i>Ibid.</i> AM 10659.	1.3
AM 10550	altered	invisible	oxidising	cream slip	orange	black	monochrome	monotone	matt	Shams ed-Din (GUSTAVSON-GAUBE, 1981, p. 68 and p. 159, Fig. 492-494, form 2 of fine ware bowls); Yunus/Carchemish (WOOLLEY, 1934, p. 152, Fig. 53, form 11; DIRVANA, 1944, Pl. 70:6 and Pl. 71:1-3); Tell Turlu (BRENIQUET, 1991, p. 32, Pl. 13:10); Girkihaciyan (WATSON and LEBLANC, 1990, p. 59, form 1D); Sabi Abyad (LE MIERE and NIEUWENHUYSE, 1996, p. 261, Fig. 3:37:10, small cream bowl); Khirbet esh-Shenef (AKKERMANS, 1993, p. 97, Fig. 3:30:11); Tell Damishliyya (AKKERMANS, 1993, p. 40, Fig. 3:8:42; AKKERMANS, 1986-1987, p. 65, Pl. 19:128); (MALLOWAN, 1936, Fig. 21:2, from levels 12-13); Umm Qseir (TSUNEKI and MIYAKE, eds., 1998, p. 59, Fig. 27:8, form Vd, sinuous sided bowl with high neck); Tell Kurdu (ASLIHAN <i>et al.</i> , 2000, p. 210, Fig. 27:7).	1.4
AM 10251	good	mineral	oxidising	self slip	orange	red	monochrome	monotone	matt	<i>Ibid.</i> AM 10659.	1.3

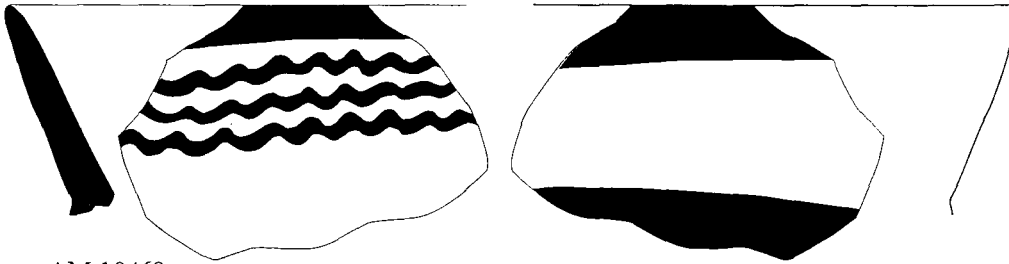
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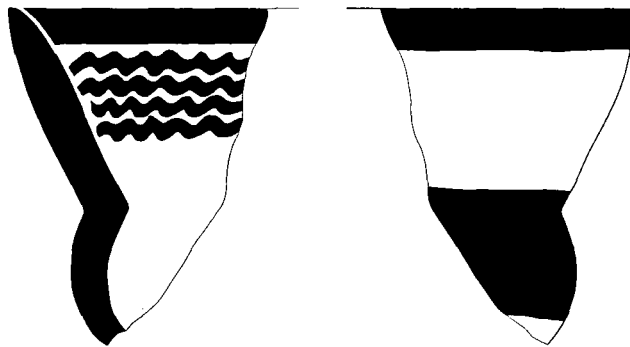
AM 10659



AM 10430



AM 10469



AM 10550



AM 10251

Pl. 5.23
Monochrome fine Halaf painted ware (Scale: 1/2).

W. CRUELLS

Inv. n°	Condition	Temper	Firing	Treatment	Colour fabric	Colour paint	M/B/P	Mo/Bi	Ma/Lu	Comparanda	Form
AM 10571	altered	plant	oxidising	self slip	orange	black	monochrome	monotone	matt	Shams ed-Din (GUSTAVSON-GAUBE, 1981, p. 51-52, p. 68, p. 141, Fig. 335-336 and p. 159, Fig. 491); Tell Halula (CRUELLS, 1996, p. 109, Fig. 7, form 1E; CRUELLS, 2001, p. 157, Fig. 4:10); Tilbeshar (BRENIQUET, 1998, p.150, Pl. 2:3); Tell Turlu (BRENIQUET, 1991, p. 32, Pl. 13:10-11); Girkhiacyan (WATSON and LEBLANC, 1990, p. 59, Fig. 4:9, form 1D); Khirbet esh-Shenef (AKKERMANS, 1993, p. 96, Fig. 3:29 and p. 97, Fig. 3:30); Sabi Abyad (NIEUWENHUYSE, 1997, Fig. 8:14); Tell Damishiyya (AKKERMANS, 1993, p. 39, Fig. 3:4:14); Tell Halaf (VON OPPENHEIM, 1943, Pl. 7:1-2 and Pl. 21:5-10); Chagar Bazar (MALLOWAN, 1936, Fig. 21:2, from levels 12-13); Tell Aqab (DAVIDSON, 1977, p. 127, form 18); Arpachiyah (MALLOWAN and ROSE, 1935, Fig. 54:4 and Fig. 66:5); Umm Qseir (HOLE and JOHNSON, 1986-1987, p. 213; TSUNEKI and MIYAKE, eds., 1998, p. 53, form Vb); Khabor survey (NIEUWENHUYSE, 2000, p. 174 and Ill. 9); Yarim Tepe II (MERPERT and MUNCHAEV, 1987, p. 33, Fig. 19:3-4).	1.3
AM 10596	good	invisible	oxidising	self slip	orange	red	monochrome	monotone	matt	<i>Ibid.</i> AM 10571.	1.3
AM 10335	good	mineral	oxidising	self slip	orange	red	monochrome	monotone	lustrous	<i>Ibid.</i> AM 10571.	1.3
AM 10487	altered	mineral	oxidising	cream slip	orange	black	monochrome	bitone	lustrous	<i>Ibid.</i> AM 10571.	1.3
AM 10076	good	mixed	oxidising	self slip	orange	black	monochrome	monotone	matt	<i>Ibid.</i> AM 10571.	1.3
AM 10196	good	mineral	oxidising	self slip	orange	dark brown	monochrome	monotone	matt	<i>Ibid.</i> AM 10571.	1.3

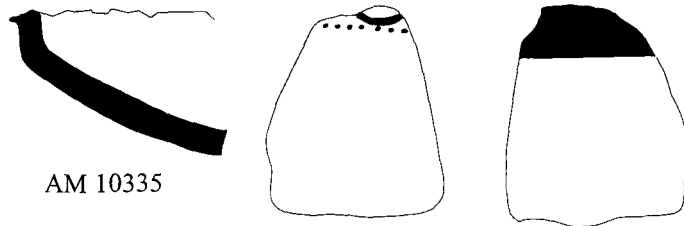
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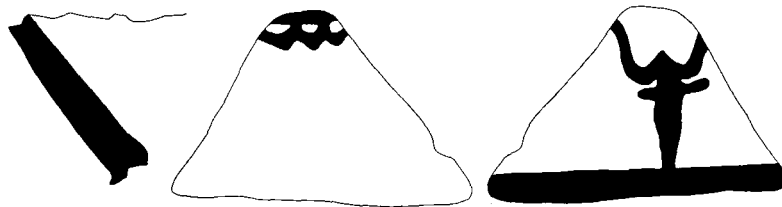
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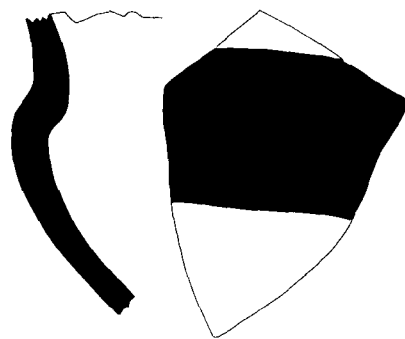
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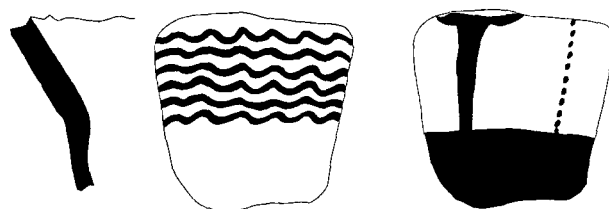
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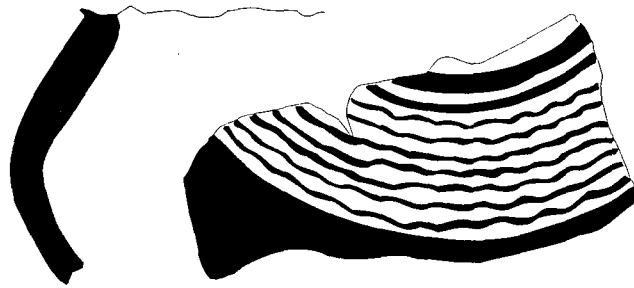
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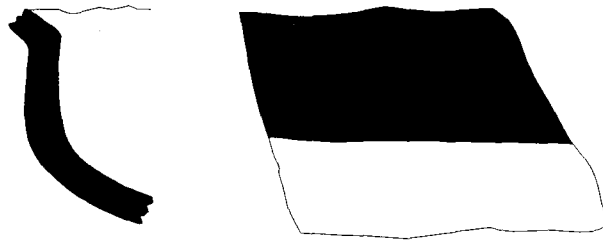
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Inv. n°	Condition	Temper	Firing	Treatment	Colour fabric	Colour paint	M/B/P	Mo/Bi	Ma/Lu	Comparanda	Form
AM 10686	concretions	mineral	oxidising	cream slip	orange	red	monochrome	monotone	lustrous	Shams ed-Din (GUSTAVSON-GAUBE, 1981, p. 51-52, p. 68, p. 141, Fig. 335-336 and p. 159, Fig. 491); Tell Halula (CRUELLS, 1996, p. 109, Fig. 7, form IE; CRUELLS, 2001, p. 157, Fig. 4:10); Tilbeshar (BRENIQUET, 1998, p. 150, Pl. 2:3); Tell Turlu (BRENIQUET, 1991, p. 32, Pl. 13:10-11); Girikihacyan (WATSON and LEBLANC, 1990, p. 59, Fig. 4.9, form 1D); Khirbet esh-Shenef (AKKERMANS, 1993, p. 96, Fig. 3.29 and p. 97, Fig. 3.30); Sabi Abyad (NIEUWENHUYSE, 1997, Fig. 8:14); Tell Damishliyya (AKKERMANS, 1993, p. 39, Fig. 3.4:14); Tell Halaf (VON OPPENHEIM, 1943, Pl. 7:1-2 and Pl. 21:5-10); Chagar Bazar (MALLOWAN, 1936, Fig. 21-2, from levels 12-13); Tell Aqab (DAVIDSON, 1977, p. 127, form 18); Arpachiyah (MALLOWAN and ROSE, 1935, Fig. 54-4 and Fig. 66:5); Umm Qseir (HOLE and JOHNSON, 1986-1987, p. 213; TSUNEKI and MIYAKE, eds., 1998, p. 53, form Vb); Khabur survey (NIEUWENHUYSE, 2000, p. 174 and III. 9); Yarim Tepe II (MERPERT and MUNCHAEV, 1987, p. 33, Fig. 19:3-4).	1.3
AM 10684	concretions	mineral	oxidising	light slip	orange	light brown	monochrome	bitone	matt	<i>Ibid.</i> AM 10686.	1.3
AM 10438	concretions	mineral	oxidising	cream slip	orange	black	monochrome	monotone	lustrous	<i>Ibid.</i> AM 10686.	1.3
AM 10208	good	mineral	oxidising	self slip	orange	black	monochrome	monotone	matt	Shams ed-Din (GUSTAVSON-GAUBE, 1981, p. 68 and p. 159, Fig. 492-494, form 2 of fine ware bowls); Yunus/Carchemish (WOOLLEY, 1934, p. 152, Fig. 53, form 11; DIRVANA, 1944, Pl. 70:6 and Pl. 71:1-3); Tilbeshar (BRENIQUET, 1998, p. 150, Pl. 2:3); Tell Turlu (BRENIQUET, 1991, p. 32, Pl. 13:10-11); Girikihacyan (WATSON and LEBLANC, 1990, p. 59, form 1D); Sabi Abyad (LEMIÈRE and NIEUWENHUYSE, 1996, p. 261, Fig. 3.37:10, small cream bowl); Khirbet esh-Shenef (AKKERMANS, 1993, p. 97, Fig. 3.30:11); Tell Damishliyya (AKKERMANS, 1993, p. 40, Fig. 3.8:42; AKKERMANS, 1986-1987, p. 65, Pl. 19:128); Chagar Bazar (MALLOWAN, 1936, Fig. 21:2, from levels 12-13); Umm Qseir (TSUNEKI and MIYAKE, eds., 1998, p. 59, Fig. 27:8, form Vd, sinuous sided bowl with high neck); Tell Kurdu (ASLIHAN <i>et al.</i> , 2000, p. 210, Fig. 27:7).	1.4
AM 10053	altered	mineral	oxidising	self slip	orange	black	monochrome	monotone	matt	<i>Ibid.</i> AM 10686.	1.3

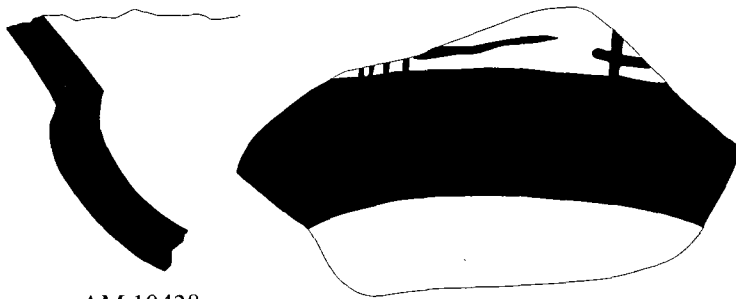
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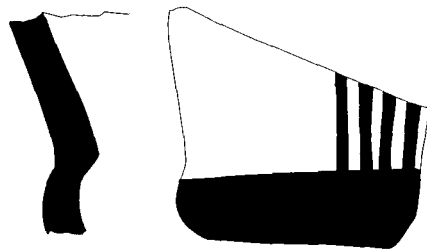
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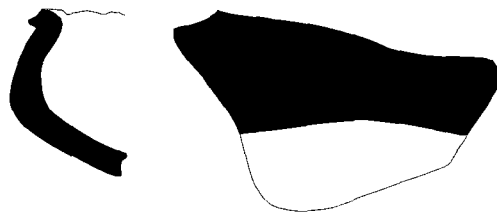
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AM 10438



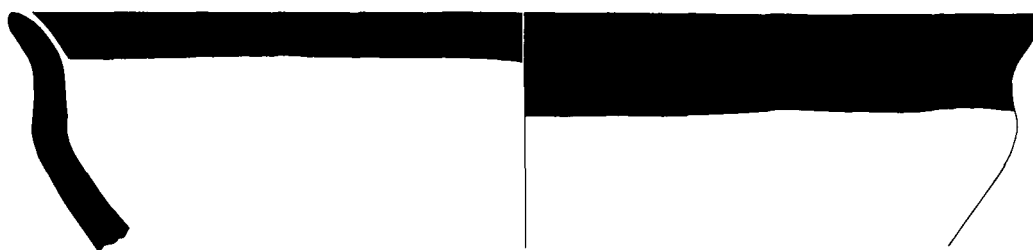
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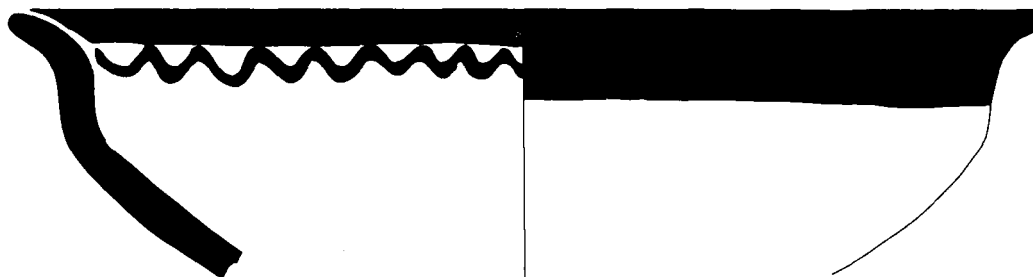
AM 10053

Inv. n°	Condition	Temper	Firing	Treatment	Colour fabric	Colour paint	M/B/P	Mo/Bi	Ma/Lu	Comparanda	Form
AM 10547	altered	mineral	oxidising	smoothed	orange	red	monochrome	monotone	matt	Shams ed-Din (GUSTAVSON-GAUBE, 1981, p. 51-52 and p. 139); Tell Halula (CRUELLS, 1996, p. 109, Fig. 7, form 1F; CRUELLS, 2001, p. 157, Fig. 4:11); Tell Damishliyya (AKKERMANS, 1986-1987, p. 61, Pl. 15:96-99; AKKERMANS, 1993, p. 39, Fig. 3.4:10-13); Khabur survey (NIEUWENHUYSE, 2000, p. 223, III. 9:7); Tell Turlu (BRENIQUET, 1991, p. 32, Pl. 13:8); Girnikhaciyan (WATSON and LEBLANC, 1990, p. 57 and Fig. 4:8); Yunus/Carchemish (DIRVANA, 1944, Pl. 70:3).	1.5
AM 10665	concretions	mineral	oxidising	smoothed	orange	orange	monochrome	monotone	matt	<i>Ibid.</i> AM 10547.	1.5
AM 10674	altered	mineral	oxidising	light slip	orange	light brown	monochrome	bitone	matt	<i>Ibid.</i> AM 10547.	1.5
AM 10663	good	mineral	oxidising	smoothed	orange	orange	monochrome	monotone	matt	<i>Ibid.</i> AM 10547.	1.5
AM 10568	altered	mineral	oxidising	self slip	orange	red	monochrome	bitone	matt	<i>Ibid.</i> AM 10547.	1.5

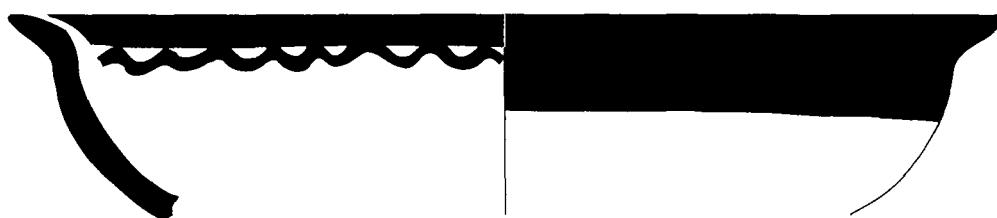
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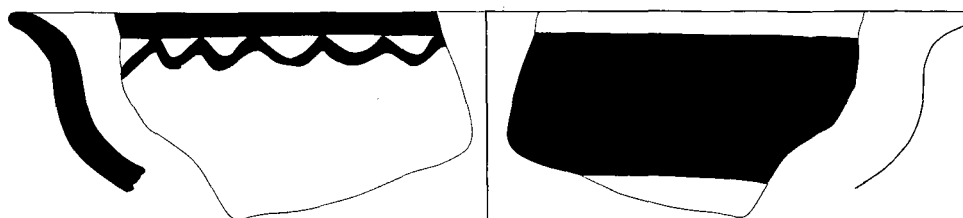
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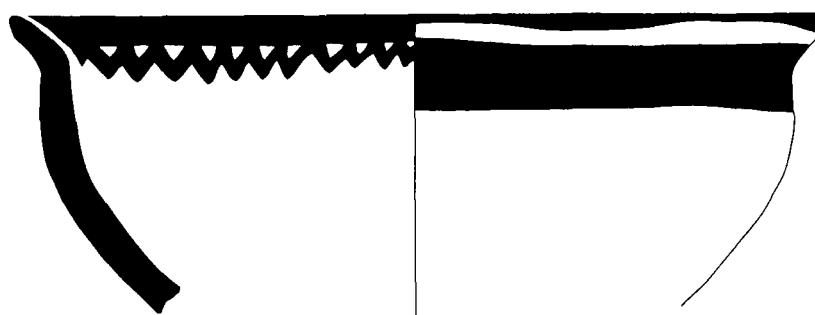
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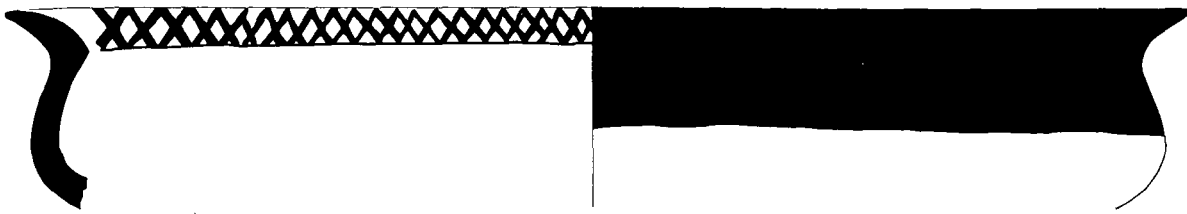


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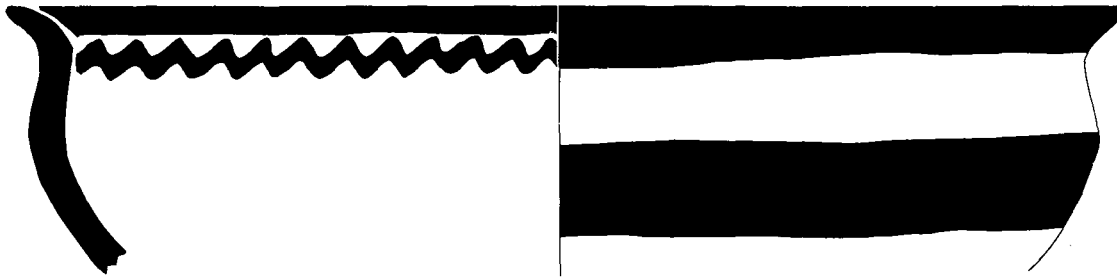
Pl. 5.26
Monochrome fine Halaf painted ware (Scale: 1/2).

Inv. n°	Condition	Temper	Firing	Treatment	Colour fabric	Colour paint	M/B/P	Mo/Bi	Ma/Lu	Comparanda	Form
AM 10530	altered	mineral	oxidising	self slip	orange	black	monochrome	monotone	matt	Shams ed-Din (GUSTAVSON-GAUBE, 1981, p. 51-52 and p. 139); Tell Halula (CRUELLS, 1996, p. 109, Fig. 7, form 1F; CRUELLS, 2001, p. 157, Fig. 4:11); Tell Damshiyya (AKKERMANS, 1986-1987, p. 61, Pl. 15:96-99; AKKERMANS, 1993, p. 39, Fig. 3.4:10-13); Khabur survey (NIEUWENHUYSE, 2000, p. 223, III. 9:7); Tell Turhu (BRENIQUET, 1991, p. 32, Pl. 13:8); Girkhaciyan (WATSON and LEBLANC, 1990, p. 57 and Fig. 4.8); Yunus/Carchemish (DIRVANA, 1944, Pl. 70:3).	1.5
AM 10598	good	invisible	oxidising	self slip	orange	black	monochrome	monotone	matt	<i>Ibid.</i> AM 10530.	1.5
AM 10529	altered	mineral	oxidising	cream slip	orange	black	monochrome	monotone	matt	<i>Ibid.</i> AM 10530.	1.5
AM 10554	altered	invisible	oxidising	self slip	orange	black	monochrome	bitone	matt	<i>Ibid.</i> AM 10530.	1.5
AM 10459	altered	mineral	oxidising	light slip	cream	black	monochrome	bitone	matt	<i>Ibid.</i> AM 10530.	1.5

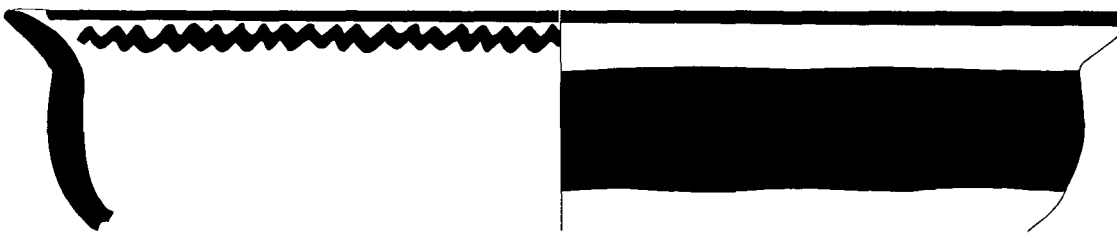
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AM 10530



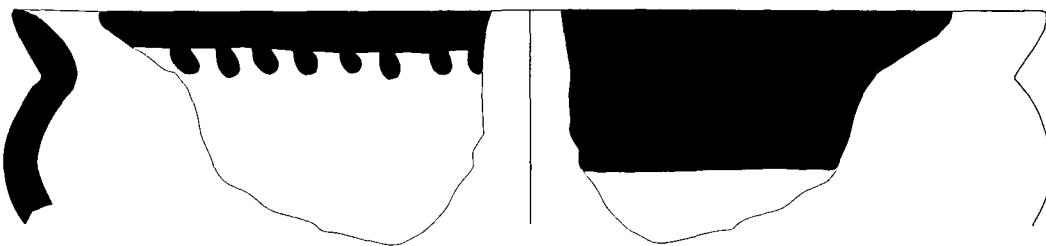
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AM 10529



AM 10554

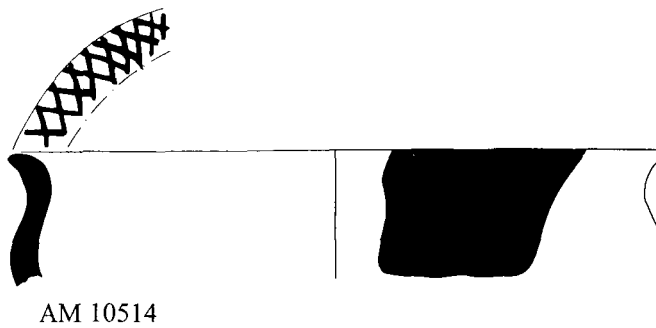
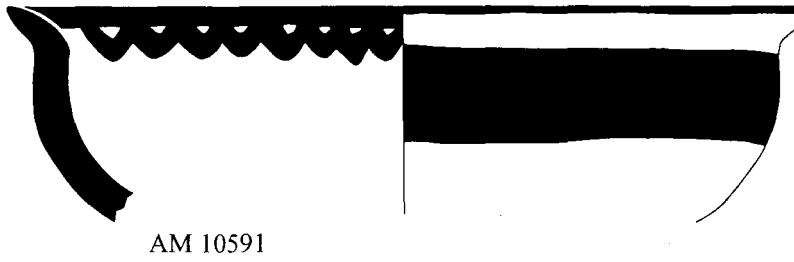
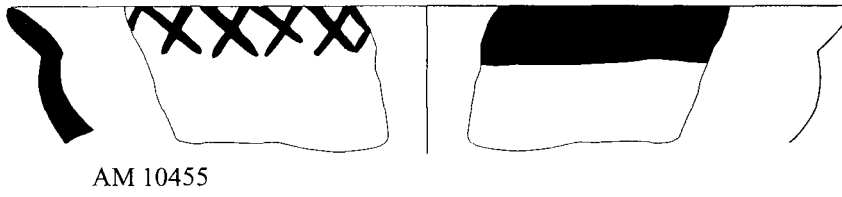


AM 10459

Pl. 5.27
Monochrome fine Halaf painted ware (Scale: 1/2).

Inv. n°	Condition	Temper	Firing	Treatment	Colour fabric	Colour paint	M/B/P	Mo/Bi	Ma/Lu	Comparanda	Form
AM 10582	altered	mineral	oxidising	cream slip	orange	black	monochrome	bitone	matt	Shams ed-Din (GUSTAVSON-GAUBE, 1981, p. 51-52 and p. 139); Tell Halula (CRUELLS, 1996, p. 109, Fig. 7, form 1F; CRUELLS, 2001, p. 157, Fig. 4:11); Tell Damishliyya (AKKERMANS, 1986-1987, p. 61, Pl. 15:96-99; AKKERMANS, 1993, p. 39, Fig. 3.4:10-13); Khabur survey (NIEUWENHUYSE, 2000, p. 223, III. 9:7); Tell Turlu (BRENIQUET, 1991, p. 32, Pl. 13:8); Girikhaçıyan (WATSON and LEBLANC, 1990, p. 57 and Fig. 4:8); Yunus/Carchemish (DIRVANA, 1944, Pl. 70:3).	1.5
AM 10299	good	mineral	oxidising	self slip	orange	black	monochrome	monotone	matt	<i>Ibid.</i> AM 10582.	1.5
AM 10455	altered	mineral	oxidising	self slip	orange	black	monochrome	monotone	matt	<i>Ibid.</i> AM 10582.	1.5
AM 10591	altered	plant	oxidising	self slip	orange	orange	monochrome	monotone	matt	<i>Ibid.</i> AM 10582.	1.5
AM 10539	altered	mineral	oxidising	self slip	orange	light brown	monochrome	bitone	matt	<i>Ibid.</i> AM 10582.	1.5
AM 10514	altered	mineral	oxidising	light slip	orange	red	monochrome	monotone	matt	<i>Ibid.</i> AM 10582.	1.5

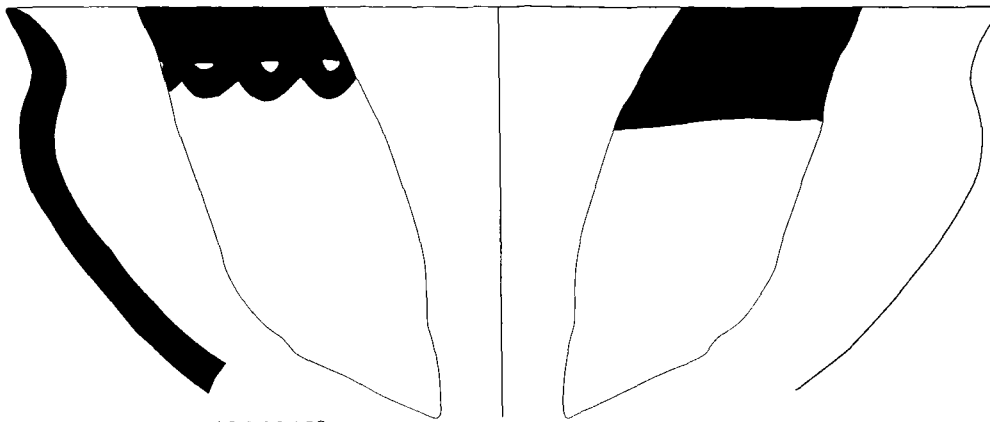
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Pl. 5.28
Monochrome fine Halaf painted ware (Scale: 1/2).

Inv. n°	Condition	Temper	Firing	Treatment	Colour fabric	Colour paint	M/B/P	Mo/Bi	Ma/Lu	Comparanda	Form
AM 10458	altered	mineral	oxidising	self slip	orange	dark brown	monochrome	bitone	matt	Shams ed-Din (GUSTAVSON-GAUBE, 1981, p. 51-52 and p. 139); Tell Hatula (CRUELLS, 1996, p. 109, Fig. 7, form 1F; CRUELLS, 2001, p. 157, Fig. 4:11); Tell Damishliyya (AKKERMANS, 1986-1987, p. 61, Pl. 15:96-99; AKKERMANS, 1993, p. 39, Fig. 3.4:10-13); Khabur survey (NIEUWENHUYSE, 2000, p. 223, Ill. 9:7); Tell Turlu (BRENIQUET, 1991, p. 32, Pl. 13:8); Girikihaciyān (WATSON and LEBLANC, 1990, p. 57 and Fig. 4:8); Yunus/Carchemish (DIRVANA, 1944, Pl. 70:3).	1.5
AM 10376	good	mixed	oxidising	cream slip	cream	red	monochrome	monotone	matt	<i>Ibid.</i> AM 10458.	1.5
AM 10447	good	mineral	oxidising	light slip	orange	black	monochrome	bitone	lustrous	<i>Ibid.</i> AM 10458.	1.5
AM 10534	concretions	mineral	oxidising	self slip	orange	red	monochrome	monotone	matt	<i>Ibid.</i> AM 10458.	1.5
AM 10437	concretions	mineral	oxidising	light slip	cream	black	monochrome	monotone	matt	<i>Ibid.</i> AM 10458.	1.5

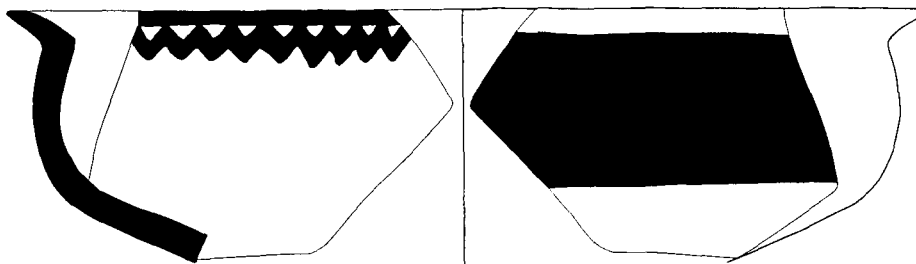
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AM 10458



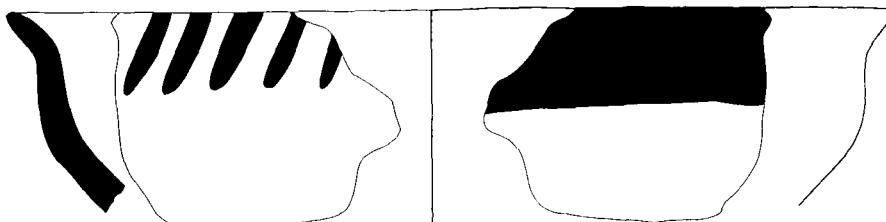
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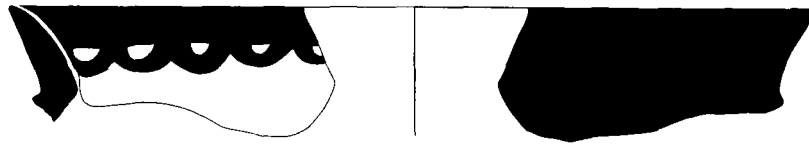
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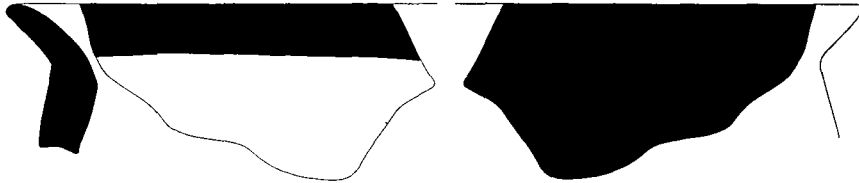
AM 10437

Inv. n°	Condition	Temper	Firing	Treatment	Colour fabric	Colour paint	M/B/P	Mo/Bi	Ma/Lu	Comparanda	Form
AM 10428	altered	mixed	oxidising	self slip	orange	black	monochrome	bitone	matt	Shams ed-Din (GUSTAVSON-GAUBE, 1981, p. 51-52 and p. 139); Tell Halula (CRUELLES, 1996, p. 109, Fig. 7, form 1F; CRUELLES, 2001, p. 157, Fig. 4:11); Tell Damishliyya (AKKERMANS, 1986-1987, p. 61, Pl. 15:96-99; AKKERMANS, 1993, p. 39, Fig. 3.4:10-13); Khabur survey (NIEUWENHUYSE, 2000, p. 223, Ill. 9:7); Tell Turlu (BRENIQUET, 1991, p. 32, Pl. 13:8); Girikhaciyan (WATSON and LEBLANC, 1990, p. 57 and Fig. 4.8); Yunus/Carchemish (DIRVANA, 1944, Pl. 70:3).	1.5
AM 10408	altered	mineral	oxidising	self slip	orange	red	monochrome	monotone	matt	<i>Ibid.</i> AM 10428.	1.5
AM 10062	altered	mixed	oxidising	smoothed	orange	orange	monochrome	monotone	matt	<i>Ibid.</i> AM 10428.	1.5
AM 10416	altered	mineral	oxidising	self slip	orange	black	monochrome	monotone	matt	<i>Ibid.</i> AM 10428.	1.5
AM 10436	altered	mineral	oxidising	light slip	orange	dark brown	monochrome	bitone	matt	<i>Ibid.</i> AM 10428.	1.5

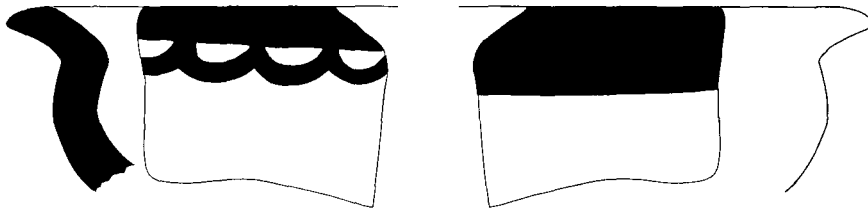
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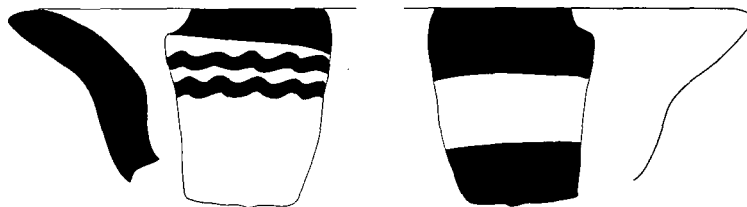
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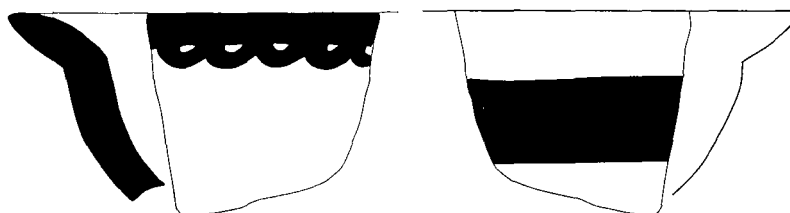
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AM 10062



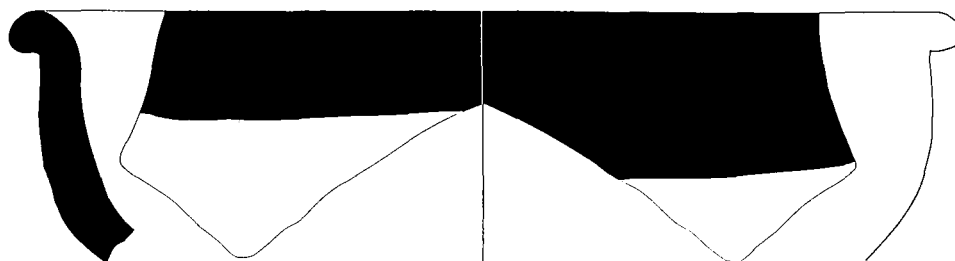
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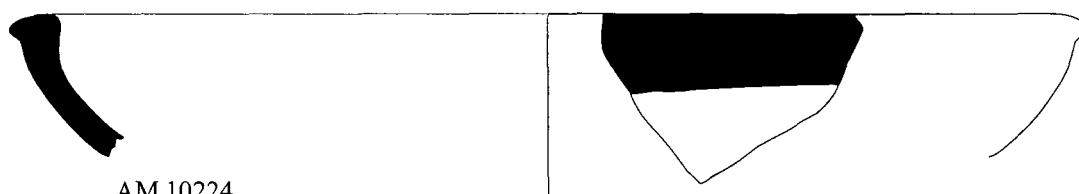
AM 10436

Inv. n°	Condition	Temper	Firing	Treatment	Colour fabric	Colour paint	M/B/P	Mo/Bi	Ma/Lu	Comparanda	Form
AM 10477	altered	mineral	oxidising	light slip	orange	black	monochrome	monotone	matt	Shams ed-Din (GUSTAYSON-GAUBE, 1981, p. 50 and p. 135, Fig. 285-289, form 3); Umm Qseir (TSUNEKI and MIYAKE, eds, 1998, p. 58 and 61, Fig. 28:7-9, form VIb).	1.6
AM 10224	good	mixed	oxidising	smoothed	cream	black	monochrome	monotone	matt	<i>Ibid.</i> AM 10477.	1.6
AM 10260	good	mineral	oxidising	smoothed	orange	red	monochrome	monotone	matt	<i>Ibid.</i> AM 10477.	1.6
AM 10576	good	mineral	oxidising	self slip	orange	black	monochrome	monotone	matt	<i>Ibid.</i> AM 10477.	1.6
AM 10680	concretions	mineral	oxidising	self slip	orange	dark brown	monochrome	monotone	lustrous	<i>Ibid.</i> AM 10477.	1.6

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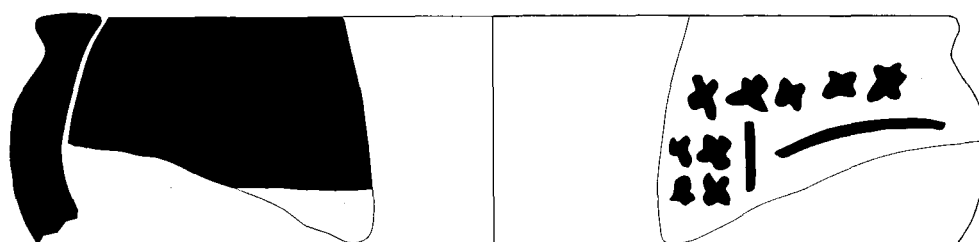
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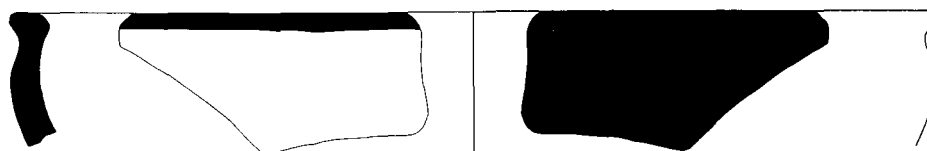
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AM 10260



AM 10576



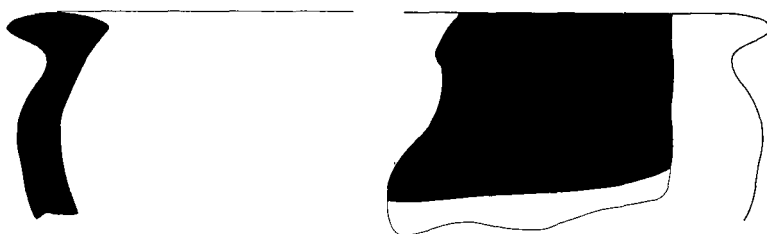
AM 10680

Inv. n°	Condition	Temper	Firing	Treatment	Colour fabric	Colour paint	M/B/P	Mo/Bi	Ma/Lu	Comparanda	Form
AM 10493	altered	mineral	oxidising	cream slip	orange	dark brown	monochrome	monotone	matt	Shams ed-Din (GUSTAVSON-GAUBE, 1981, p. 50 and p. 135, Fig. 285-289, form 3); Umm Qseir (TSUNEKI and MIYAKE, eds., 1998, p. 58 and 61, Fig. 28:7-9, form VIb).	1.6
AM 10494	altered	mineral	oxidising	cream slip	orange	black	monochrome	monotone	matt	<i>Ibid.</i> AM 10493.	1.6
AM 10010	good	mineral	oxidising	self slip	cream	black	monochrome	bitone	matt	<i>Ibid.</i> AM 10493.	1.6
AM 10195	good	mineral	oxidising	smoothed	orange	dark brown	monochrome	bitone	matt	<i>Ibid.</i> AM 10493.	1.6

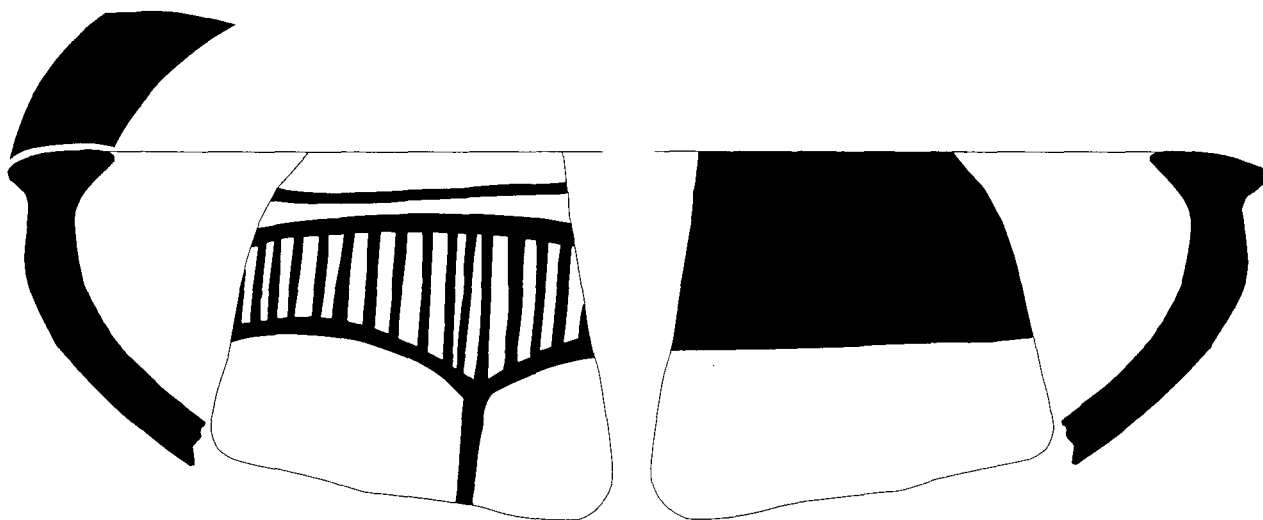
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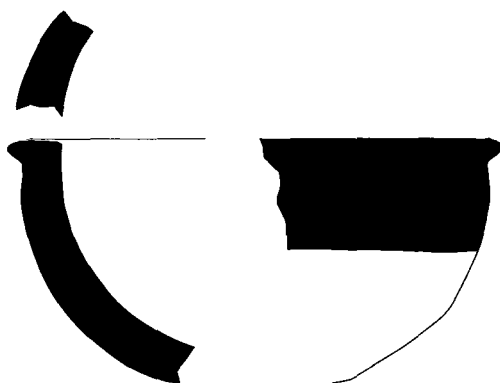
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AM 10493



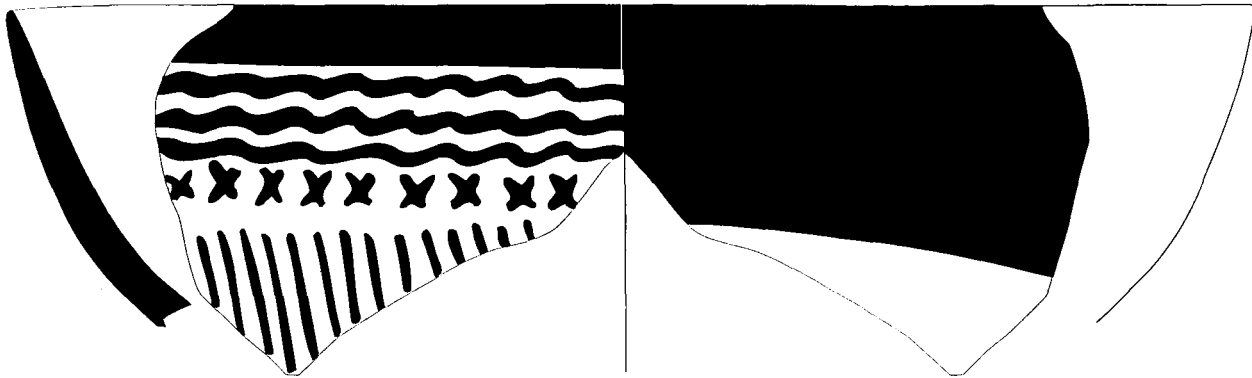
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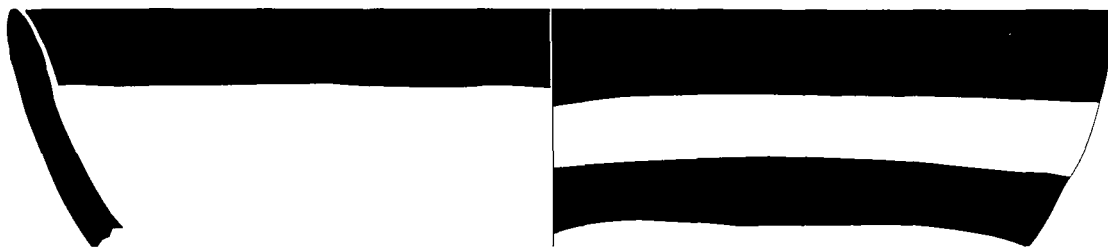
AM 10195

Inv. n°	Condition	Temper	Firing	Treatment	Colour fabric	Colour paint	M/B/P	Mo/Bi	Ma/Lu	Comparanda	Form
AM 10382	altered	mineral	mixed	smoothed	cream	dark brown	monochrome	bitone	matt	Shams ed-Din (GUSTAVSON-GAUBE, 1981, p. 49 and p. 133, Fig. 272-274, form 2a); Khirbet esh-Shenef (AKKERMANS, 1993, p. 99, Fig. 3.32:28-29); Tell Damshliyya (AKKERMANS, 1986-1987, p. 62, Pl. 16:102); Umm Qseir (TSUNEKI and MIYAKE, eds., 1998, p. 52 and p. 55, Fig. 25, form IIIc, for larger vessels and form IIIa, p. 52 and Fig. 24:9-16); Khabur survey (NIEUWENHUYSE, 2000, form 1111, p. 171, Ill. 4:1-4).	1.7
AM 10300	good	mineral	oxidising	self slip	orange	dark brown	monochrome	monotone	matt	<i>Ibid.</i> AM 10382.	1.7
AM 10370	altered	mineral	oxidising	self slip	cream	black	monochrome	monotone	matt	<i>Ibid.</i> AM 10382.	1.7
AM 10032	altered	mixed	mixed	self slip	grey	black	monochrome	monotone	matt	<i>Ibid.</i> AM 10382.	1.7
AM 10424	altered	mineral	oxidising	self slip	orange	red	monochrome	monotone	matt	<i>Ibid.</i> AM 10382.	1.7
AM 10497	altered	mineral	oxidising	self slip	orange	red	monochrome	monotone	matt	<i>Ibid.</i> AM 10382.	1.7

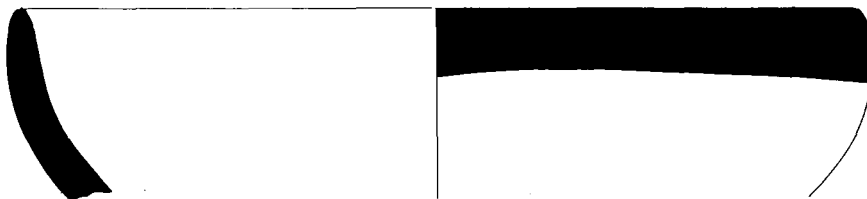
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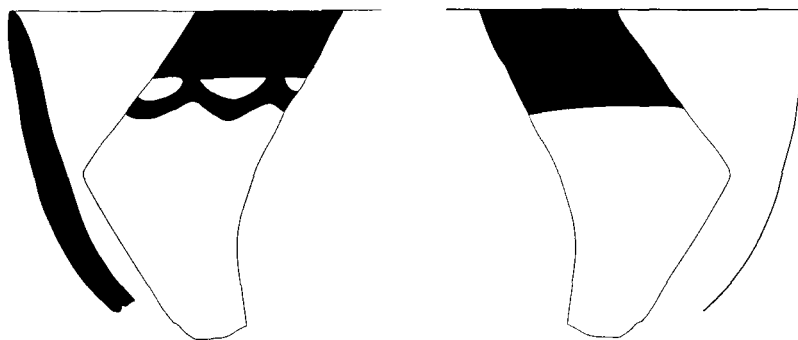
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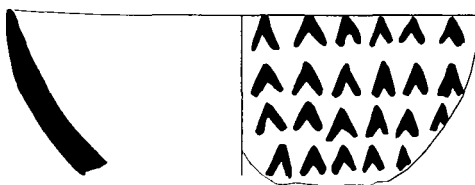
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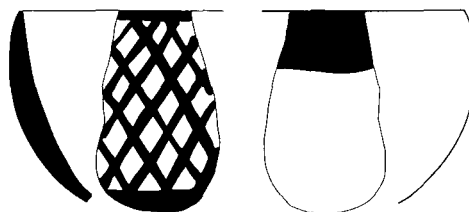
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AM 10032



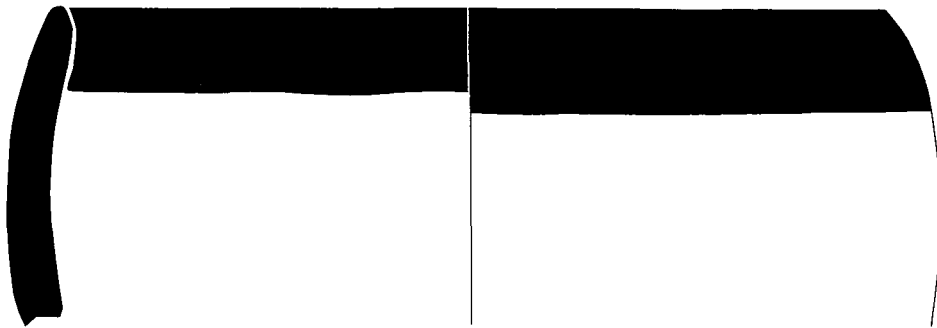
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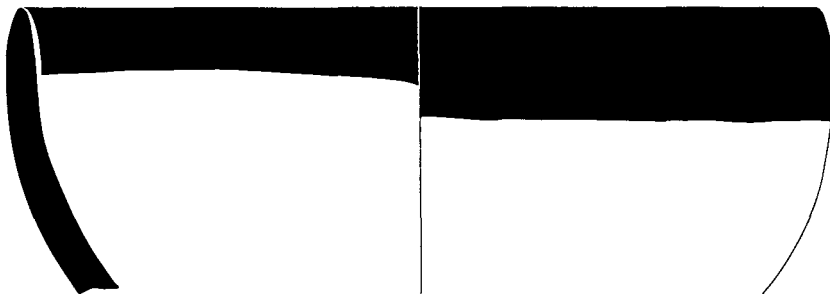
AM 10497

Inv. n°	Condition	Temper	Firing	Treatment	Colour fabric	Colour paint	M/B/P	Mo/Bi	Ma/Lu	Comparanda	Form
AM 10510	altered	mineral	oxidising	cream slip	orange	dark brown	monochrome	monotone	matt	Shams ed-Din (GUSTAVSON-GAUBE, 1981, p. 49 and p. 133, Fig. 269-270); Tell Halula (CRUELLS, 1996, p. 109, Fig. 7, form 1C); Tell Damishiyya (AKKERMANS, 1993, p. 40, Fig. 3.5:16); Chagar Bazar (MALLOWAN, 1936, Fig. 23:3, from level 12); Umm Qseir (TSUNEKI and MIYAKE, eds., 1998, p. 52 and p. 55, Fig. 25:9-12, form IIIc); Khabur survey (NIEUWENHUYSE, 2000, p. 172 and III. 6).	1.8
AM 10369	altered	mineral	oxidising	self slip	orange	red	monochrome	monotone	matt	<i>Ibid.</i> AM 10510.	1.8
AM 10525	altered	mineral	oxidising	self slip	orange	black	monochrome	bitone	matt	<i>Ibid.</i> AM 10510.	1.8
AM 10363	altered	mineral	mixed	cream slip	cream	black	monochrome	monotone	matt	<i>Ibid.</i> AM 10510.	1.8

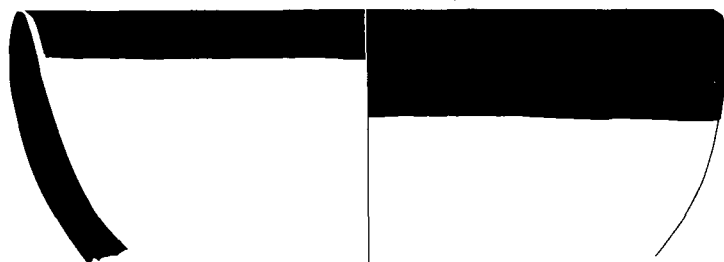
5. THE POTTERY



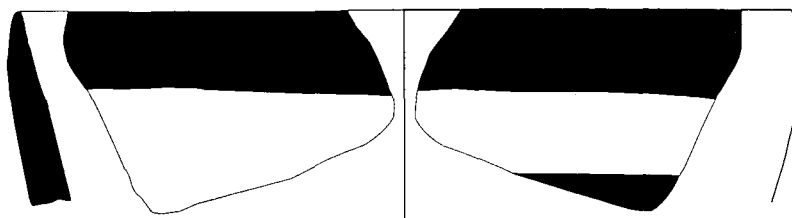
AM 10510



AM 10369



AM 10525



AM 10363

Pl. 5.34

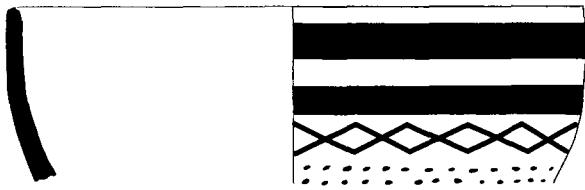
Monochrome fine Halaf painted ware (Scale: 1/2).

Inv. n°	Condition	Temper	Firing	Treatment	Colour fabric	Colour paint	M/B/P	Mo/Bi	Ma/Lu	Comparanda	Form
AM 10562	altered	mineral	oxidising	self slip	orange	black	monochrome	bitone	matt	Shams ed-Din (GUSTAVSON-GAUBE, 1981, p. 53 and p. 143, Fig. 354-370, form 7); Tell Halula (CRUELLES, 1996, p. 109, Fig. 7, form 1G); Khirbet esh-Shenef (AKKERMANS, 1993, p. 99, Fig. 3.32:34-36); Umm Qseir (TSUNEKI and MIYAKE, eds., 1998, p. 56 and p. 61, Fig. 28:1-5, form VIa); Chagar Bazar (MALLOWAN, 1936, Fig. 22, from levels 10-12); Khabur survey (NIEUWENHUYSE, 2000, p. 171 and III. 4); Tell Turlu (BRENIQUET, 1991, Pl. 12 and 13, levels III/IV); Yunus/Carchemish (WOOLLEY, 1934, p. 152, Fig. 3, form 7; DIRVANA, 1944, Pl. 68); Girikihaciyān (WATSON and LEBLANC 1990, p. 59, form 1E); Arpachiyah (MALLOWAN and ROSE, 1935, Fig. 60:1,3,5,6, Fig. 64:1, Fig. 66:6-7, Fig. 71:8-9 and 10, deep bowls with flat bases but also round bases most of them coming from level TT6).	1.9
AM 10678	good	mineral	reducing	smoothed	grey	black	monochrome	monotone	lustrous	<i>Ibid.</i> AM 10562.	1.9
AM 10511	altered	mineral	oxidising	self slip	cream	black	monochrome	monotone	matt	<i>Ibid.</i> AM 10562.	1.9
AM 10072	good	mineral	oxidising	self slip	green	black	monochrome	monotone	matt	<i>Ibid.</i> AM 10562.	1.9
AM 10656	good	invisible	oxidising	self slip	cream	black	monochrome	bitone	matt	<i>Ibid.</i> AM 10562.	1.9
AM 10677	altered	mineral	oxidising	self slip	cream	dark brown	monochrome	bitone	lustrous	<i>Ibid.</i> AM 10562.	1.9

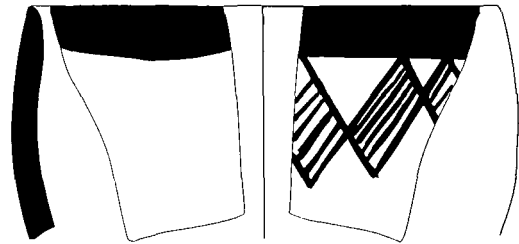
5. THE POTTERY



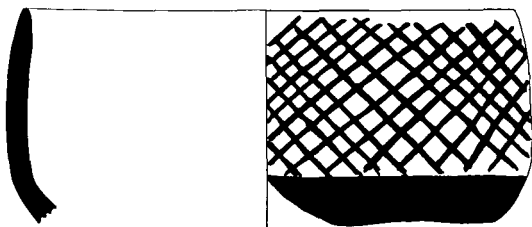
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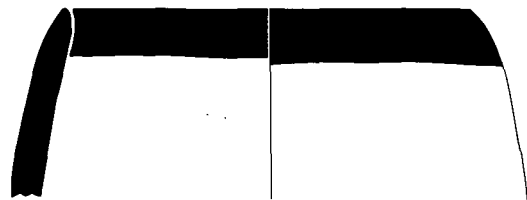
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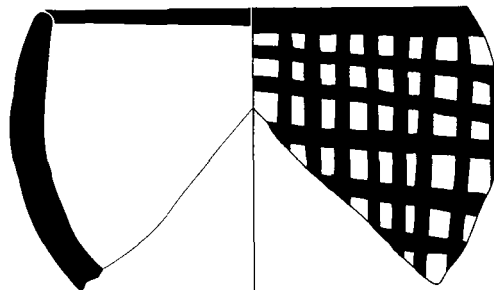
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AM 10511



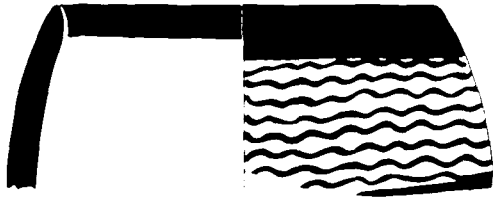
AM 10656



AM 10677

Inv. n°	Condition	Temper	Firing	Treatment	Colour fabric	Colour paint	M/B/P	Mt/Bi	Mt/Lu	Comparanda	Form
AM 10507	altered	mineral	oxidising	self slip	cream	orange	monochrome	monotone	matt	Shams ed-Din (GUSTAVSON-GATHE, 1981, p. 53 and p. 143, Fig. 354-370, form 7), Tell Habla (CRUELLS, 1996, p. 109, Fig. 7, form 16), Khirbet esh-Shenef (AKKERMANS, 1993, p. 99, Fig. 3 32 34-36), Umm Qseir (USISEKI and MIYAKE, eds., 1998, p. 56 and p. 61, Fig. 28 1-5, form Vla), Chagar Hazar (MALLOWAN, 1936, Fig. 22, from levels 10-12), Khabur survey (SHEWESHUSSE, 2000, p. 171 and III 4), Tell Turlu (BRESNICEI, 1991, Pl. 12 and 13, levels III IV), Yunus Carhemish (WOODLEY, 1934, p. 152, Fig. 3, form 7), DIRVANA, 1944, Pl. 68), Girkhacyan (WALSON and LEBLANC, 1990, p. 59, form 1F), Arpachiyah (MALLOWAN and ROSE, 1935, Fig. 60 1,3,5,6, Fig. 64 1, Fig. 66.6-7, Fig. 71 8-9 and 10, deep bowls with flat bases but also round bases, most of them coming from level II 6)	1 9
AM 10492	altered	mineral	oxidising	light slip	orange	black	monochrome	bitone	matt	<i>Ibid.</i> , AM 10507.	1 9
AM 10245	good	mineral	oxidising	smoothed	orange	black	monochrome	monotone	matt	<i>Ibid.</i> , AM 10507.	1 9
AM 10073	good	mineral	oxidising	self slip	orange	orange	monochrome	monotone	matt	<i>Ibid.</i> , AM 10507.	1 9
AM 10148	good	mineral	oxidising	self slip	orange	black	monochrome	bitone	matt	<i>Ibid.</i> , AM 10507.	1 9
AM 10256	good	mineral	oxidising	self slip	orange	red	monochrome	bitone	matt	<i>Ibid.</i> , AM 10507.	1 9
AM 10421	altered	mineral	mixed	cream slip	brown	dark brown	monochrome	monotone	matt	<i>Ibid.</i> , AM 10507.	1 9
AM 10403	altered	mineral	oxidising	self slip	cream	red	monochrome	monotone	matt	<i>Ibid.</i> , AM 10507.	1 9
AM 10401	altered	mineral	oxidising	self slip	cream	black	monochrome	monotone	lustrous	<i>Ibid.</i> , AM 10507.	1 9
AM 10542	altered	mineral	oxidising	light slip	orange	black	monochrome	monotone	matt	<i>Ibid.</i> , AM 10507.	1 9

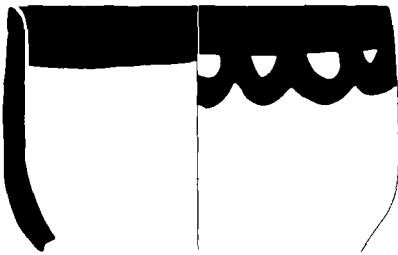
5. THE POTTERY



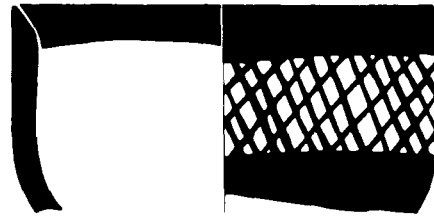
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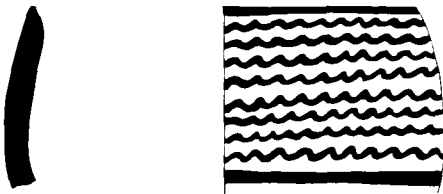
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AM 10245



AM 10073



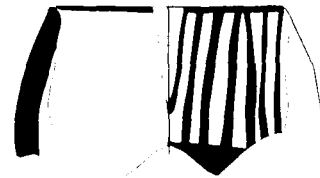
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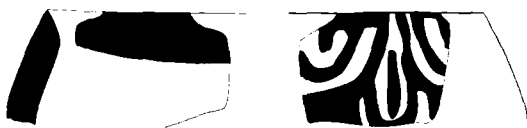
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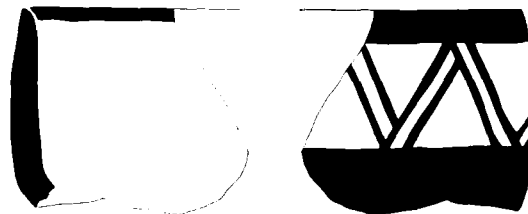
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AM 10403



AM 10401



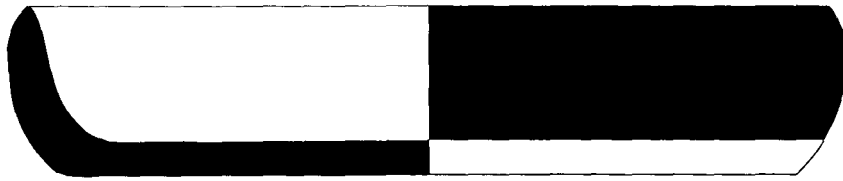
AM 10542

Pl. 5.36

Monochrome fine Halaf painted ware (Scale: 1/2).

Inv. n°	Condition	Temper	Firing	Treatment	Colour fabric	Colour paint	M/B/P	Mo/Bi	Ma/Lu	Comparanda	Form
AM 10404	altered	mineral	oxidising	self slip	cream	black	monochrome	monotone	matt	Yunus/Carchemish (WOOLLEY, 1934, p. 152, Fig. 3, form 1; DIRVANA, 1944, Pl. 69:12); Tell Turlu (BRENIQUET, 1991, p. 29, Pl. 10:2); Tell Halula (CRUELLS, 1996, p. 109, Fig. 7, form 2A); Shams ed-Din (GUSTAVSON-GAUBE, 1981, p. 48 and p. 133, Fig. 254-256, form 1 of plates); Tell Damishliyya (AKKERMANS, 1986-1987, p. 62, Pl. 16:104); Umm Qseir (TSUNEKI and MIYAKE, eds., 1998, p. 45 and Fig. 22:14-20, saucers or form 1d).	2.1
AM 10442	altered	mineral	oxidising	self slip	orange	red	monochrome	monotone	matt	<i>Ibid.</i> AM 10404.	2.1
AM 10597	altered	mineral	oxidising	self slip	orange	orange	monochrome	monotone	matt	<i>Ibid.</i> AM 10404.	2.1
AM 10377	altered	mineral	oxidising	self slip	cream	red	monochrome	monotone	lustrous	<i>Ibid.</i> AM 10404.	2.1
AM 10610	concretions	mineral	oxidising	light slip	orange	black	monochrome	monotone	matt	Tell Halaf (VON OPPENHEIM, 1943, Pl. 22:2-5); Arpachiyah (MALLOWAN and ROSE, 1935, Pl. 17, polychrome saucer from level TT6); Shams ed-Din (GUSTAVSON-GAUBE, 1981, p. 48 and p. 133, Fig. 257, form 1 of plates); Umm Qseir (TSUNEKI and MIYAKE, eds., 1998, p. 44 and Fig. 22:3-4, in their 1b form); Sabi Abyad (AKKERMANS, 1989, Fig. IV.28, n. 205); Tell Aqab (DAVIDSON, 1977, p. 143, form 16, in Late Halaf context); Chagar Bazar (MALLOWAN, 1936, p. 43 and Fig. 21:1); Tell Kurdu (ASLIHAN <i>et al.</i> , 2000, p. 209, Fig. 26:9).	2.2
AM 10589	altered	mineral	oxidising	self slip	orange	black	monochrome	bitone	lustrous	<i>Ibid.</i> AM 10610.	2.2

5. THE POTTERY



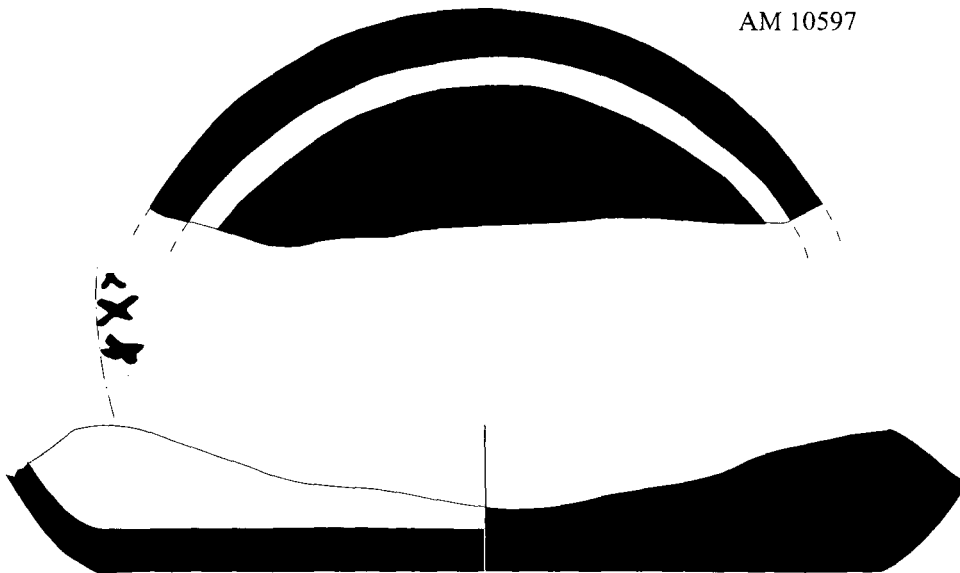
AM 10404



AM 10442



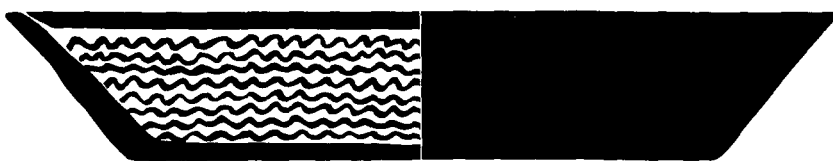
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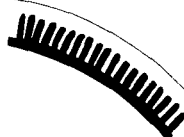
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AM 10589 éch. 1/4

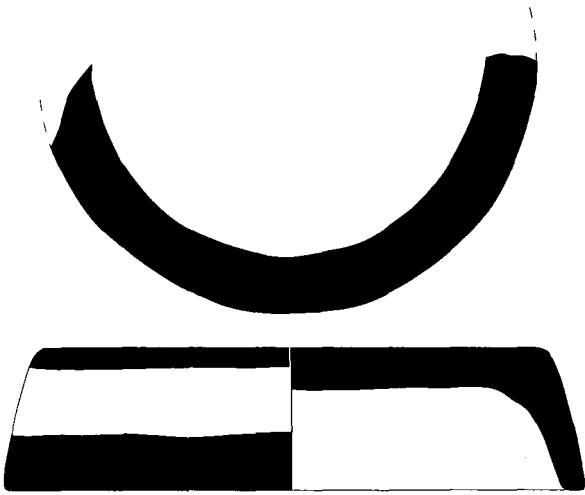


AM 10610 éch. 1/4



Inv. n°	Condition	Temper	Firing	Treatment	Colour fabric	Colour paint	M/B/P	Mo/Bi	Ma/Lu	Comparanda	Form
AM 10581	altered		oxidising	self slip	orange	black	monochrome	monotone	matt	Shams ed-Din (GUSTAVSON-GAUBE, 1981, p. 61 and p. 155, Fig. 463-464); Khirbet esh-Shenef (AKKERMANS, 1993, p. 102, Fig. 3.35:61); Chagar Bazar (MALLOWAN, 1936, Fig. 25:1-3, from level 12); Tell Halaf (VON OPPENHEIM, 1943, Pl. 86:1-6); Umm Qseir (TSUNEKI and MIYAKE, eds., 1998, p. 68 and Fig. 32:1-6, form X); Arpachiyah (MALLOWAN and ROSE, 1935, Fig. 58:1, from level TT6); Yarim Tepe III (MUNCHAEV, MERPERT and BADER, 1984, p. 42, Fig. 18:3, from Halaf level 3); Tepe Gawra (TOBLER, 1950, Pl. 118:69); Tell Kurdu (ASLIHAN <i>et al.</i> , 2000, p. 207, Fig. 25:6).	2.3
AM 10661	good	mineral	oxidising	smoothed	orange	dark brown	monochrome	monotone	matt	<i>Ibid.</i> AM 10581.	2.3
AM 10575	altered	plant	oxidising	cream slip	orange	black	monochrome	monotone	matt	<i>Ibid.</i> AM 10581.	2.3
AM 10273	good	mineral	oxidising	self slip	orange	red	monochrome	monotone	matt	Tell Halaf (VON OPPENHEIM, 1943, Pl. 22:2-5); Arpachiyah (MALLOWAN and ROSE, 1935, Pl. 17, polychrome saucer from level TT6); Shams ed-Din (GUSTAVSON-GAUBE, 1981, p. 48 and p. 133, Fig. 257, form 1 of plates); Umm Qseir (TSUNEKI and MIYAKE, eds., 1998, p. 44 and Fig. 22:3-4, in their 1b form); Sabi Abyad (AKKERMANS, 1989, Fig. IV.28, n. 205); Tell Aqab (DAVIDSON, 1977, p. 143, form 16, in Late Halaf context); Chagar Bazar (MALLOWAN, 1936, p. 43 and Fig. 21:1); Tell Kurdu (ASLIHAN <i>et al.</i> , 2000, p. 209, Fig. 26:9).	2.2
AM 10538	concretions	mineral	oxidising	self slip	orange	red	monochrome	monotone	matt	<i>Ibid.</i> AM 10273.	2.2
AM 10590	altered	mineral	oxidising	smoothed	orange	red	monochrome	monotone	matt	<i>Ibid.</i> AM 10581.	2.3
AM 10544	altered	mineral	oxidising	self slip	orange	red	monochrome	monotone	matt	<i>Ibid.</i> AM 10581.	2.3
AM 10540	altered	mineral	oxidising	self slip	orange	black	monochrome	monotone	matt	<i>Ibid.</i> AM 10581.	2.3
AM 10339	good	mineral	oxidising	cream slip	orange	black	monochrome	bitone	lustrous	<i>Ibid.</i> AM 10273.	2.2

5. THE POTTERY



AM 10581



AM 10661



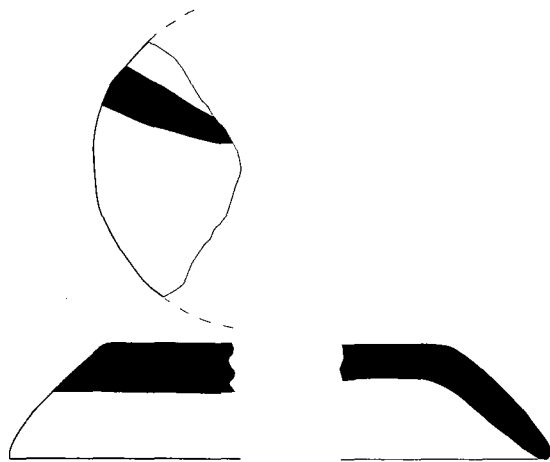
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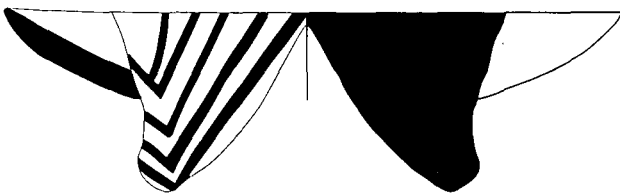
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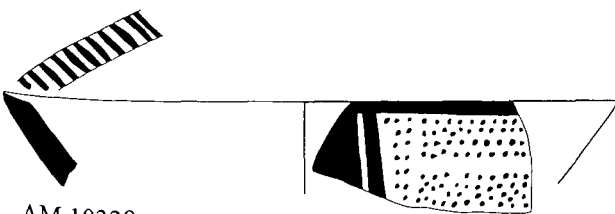
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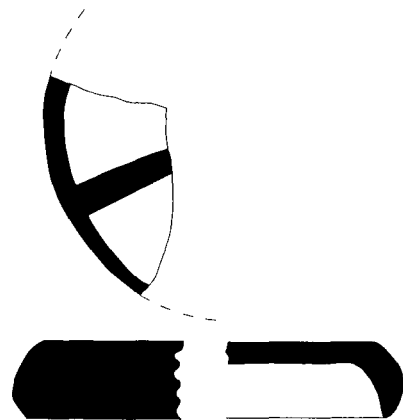
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AM 10273



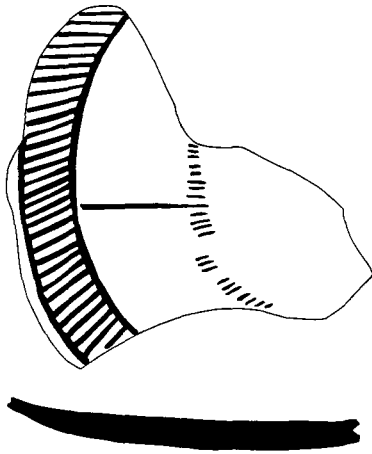
AM 10339



AM 10540

Inv. n°	Condition	Temper	Firing	Treatment	Colour fabric	Colour paint	M/B/P	Mo/Bi	Ma/Lu	Comparanda	Form
AM 10505	good	mineral	oxidising	self slip	orange	black	monochrome	monotone	lustrous		2
AM 10552	concretions	mineral	oxidising	self slip	orange	red	monochrome	monotone	matt		2
AM 10664	altered	mineral	oxidising	cream slip	cream	black	monochrome	bitone	matt	Shams ed-Din (GUSTAVSON-GAUBE, 1981, p. 54-55 and p. 145, Fig. 376-377, and p. 56 and p. 147, Fig. 393-397, wide-mouth, squat globular pot with short flared collar); Khirbet esh-Shenef (AKKERMANS, 1993, p. 101, Fig. 3.34:49-52); Umm Qseir (TSUNEKI and MIYAKE, eds., 1998, p. 64, Fig. 29:5-7, form IXa of jars with short and vertical necks); Khabur survey (NIEUWENHUYSE, 2000, p. 175 and Ill. 10:11-12 and Ill. 11:1, form 13 of jars); Yunus/Carohemish (DIRVANA, 1944, Pl. 72:2-5); Girikihacyan (WATSON and LEBLANC, 1990, p. 62, form IIIc); Tell Kurdu (ASLJHAN <i>et al.</i> , 2000, p. 207, Fig. 25:10-11).	3.1
AM 10537	altered	mixed	oxidising	cream slip	orange	red	monochrome	monotone	matt	<i>Ibid.</i> AM 10664.	3.1
AM 10405	altered	mineral	oxidising	self slip	cream	red	monochrome	monotone	matt	<i>Ibid.</i> AM 10664.	3.1
AM 10533	good	mineral	oxidising	self slip	orange	dark brown	monochrome	monotone	matt	<i>Ibid.</i> AM 10664.	3.1
AM 10374	altered	mixed	oxidising	self slip	cream	red	monochrome	monotone	matt	<i>Ibid.</i> AM 10664.	3.1
AM 10371	altered	mixed	oxidising	self slip	orange	red	monochrome	monotone	matt	<i>Ibid.</i> AM 10664.	3.1

5. THE POTTERY



AM 10505



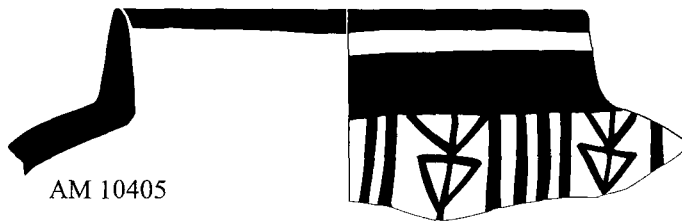
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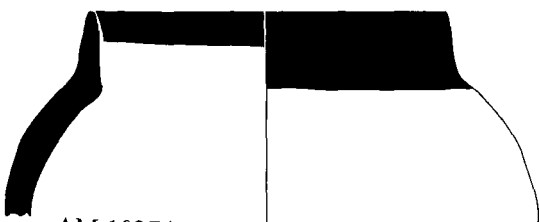
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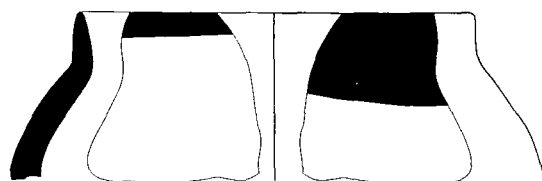
AM 10405



AM 10533



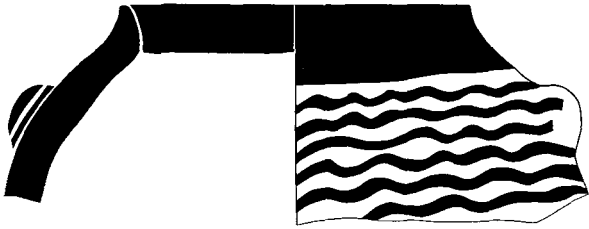
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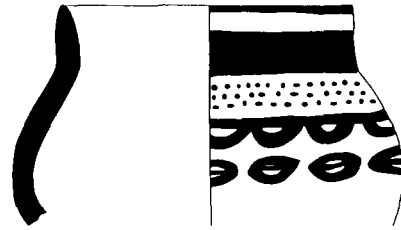
AM 10371

Inv. n°	Condition	Temper	Firing	Treatment	Colour fabric	Colour paint	M/B/P	Mo/Bi	Ma/Lu	Comparanda	Form
AM 10531	concretions	mineral	oxidising	cream slip	orange	black	monochrome	monotone	matt	Shams ed-Din (GUSTAVSON-GAUBE, 1981, p. 54-55 and p. 145, Fig. 376-377, and p. 56 and p. 147, Fig. 393-397, wide-mouth, squat globular pot with short flared collar); Khirbet esh-Shenef (AKKERMANS, 1993, p. 101, Fig. 3.34:49-52); Umm Qseir (TSUNEKI and MIYAKE, eds., 1998, p. 64, Fig. 29:5-7, form IXa of jars with short and vertical necks); Khabur survey (NIEUWENHUYSE, 2000, p. 175 and Ill. 10:11-12 and Ill. 11:1, form 13 of jars); Yunus/Carchemish (DIRVANA, 1944, Pl. 72:2-5); Girikihacyan (WATSON and LEBLANC, 1990, p. 62, form IIIC); Tell Kurdu (ASLIHAN <i>et al.</i> , 2000, p. 207, Fig. 25:10-11).	3.1
AM 10563	altered	plant	oxidising	self slip	orange	dark brown	monochrome	monotone	matt	<i>Ibid.</i> AM 10531.	3.1
AM 10564	altered	mineral	oxidising	self slip	orange	dark brown	monochrome	monotone	matt	<i>Ibid.</i> AM 10531.	3.1
AM 10557	altered	mineral	oxidising	smoothed	orange	orange	monochrome	bitone	lustrous	<i>Ibid.</i> AM 10531.	3.1
AM 10473	altered	mineral	oxidising	light slip	orange	black	monochrome	monotone	matt	Tell Halula (CRUELLS, 1996, p. 109, Fig. 7, form 3B); Shams ed-Din (GUSTAVSON-GAUBE, 1981, p. 69 and p. 169, Fig. 504-506, form 1a of pot in fine ware category and p. 145, Fig. 377-378 of common ware); Khirbet esh-Shenef (AKKERMANS, 1993, p. 100, Fig. 3.33:42-46); Khabur survey (NIEUWENHUYSE, 2000, p. 175, form 1301 and Ill. 10:11-12); Chagar Bazar (MALLOWAN, 1936, Fig. 22:1, from level 9); Umm Qseir (TSUNEKI and MIYAKE, eds., 1998, p. 66 and Fig. 29:12-15, under form IXb of jar).	3.2
AM 10595	altered	mineral	oxidising	self slip	orange	black	monochrome	monotone	matt	<i>Ibid.</i> AM 10473.	3.2

5. THE POTTERY



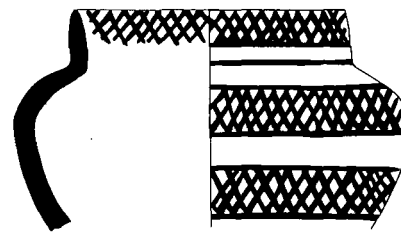
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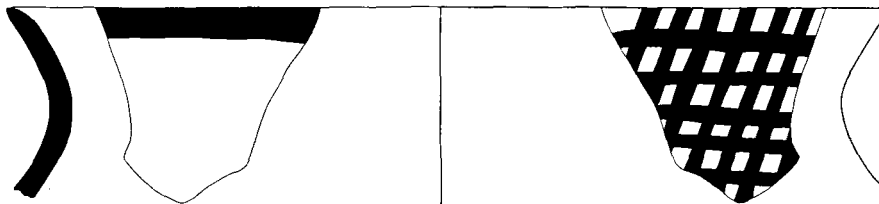
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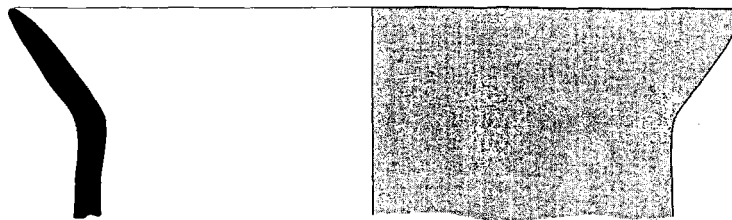
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AM 10557



AM 10473



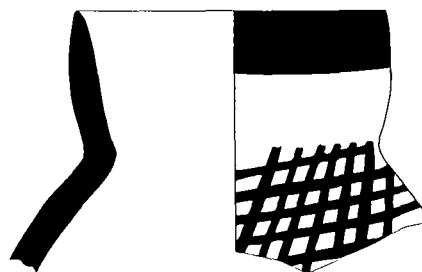
AM 10595

Inv. n°	Condition	Temper	Firing	Treatment	Colour fabric	Colour paint	M/B/P	Mo/Bi	Ma/Lu	Comparanda	Form
AM 10548	altered	invisible	oxidising	self slip	orange	black	monochrome	monotone	matt	Tell Halula (CRUELLS, 1996, p. 109, Fig. 7, form 3B); Shams ed-Din (GUSTAVSON-GAUBE, 1981, p. 69 and p. 169, Fig. 504-506, form 1a of pot in fine ware category and p. 145, Fig. 377-378 of common ware); Khirbet esh-Shenef (AKKERMANS, 1993, p. 100, Fig. 3.33:42-46); Khabur survey (NIEUWENHUYSE, 2000, p. 175, form 1301 and Ill. 10:11-12); Chagar Bazar (MALLOWAN, 1936, Fig. 22:1, from level 9); Umm Qseir (TSUNEKI and MIYAKE, eds., 1998, p. 66 and Fig. 29:12-15, under form IXb of jar).	3.2
AM 10559	altered	mineral	oxidising	self slip	orange	black	monochrome	bitone	matt	<i>Ibid.</i> AM 10548.	3.2
AM 10527	concretions	mineral	oxidising	cream slip	black	black	monochrome	monotone	lustrous	<i>Ibid.</i> AM 10548.	3.2
AM 10567	altered	mineral	oxidising	self slip	orange	red	monochrome	monotone	matt	<i>Ibid.</i> AM 10548.	3.2
AM 10417	altered	mineral	oxidising	light slip	orange	black	monochrome	bitone	matt	<i>Ibid.</i> AM 10548.	3.2
AM 10372	altered	mineral	oxidising	self slip	orange	black	monochrome	bitone	matt	<i>Ibid.</i> AM 10548.	3.2
AM 10508	altered	-	oxidising	self slip	orange	red	monochrome	monotone	matt	<i>Ibid.</i> AM 10548.	3.2
AM 10163	altered	mineral	oxidising	self slip	orange	black	monochrome	monotone	matt	<i>Ibid.</i> AM 10548.	3.2

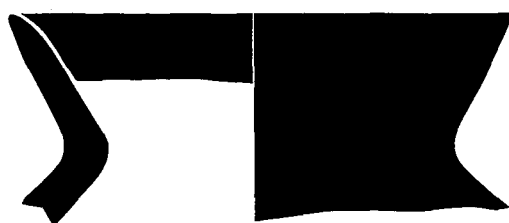
5. THE POTTERY



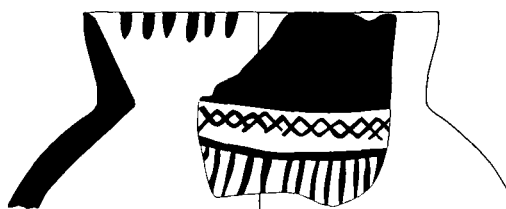
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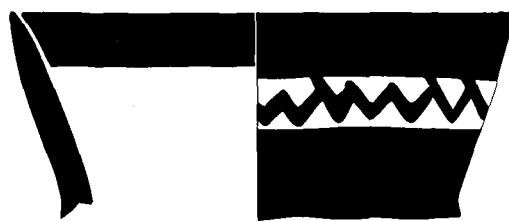
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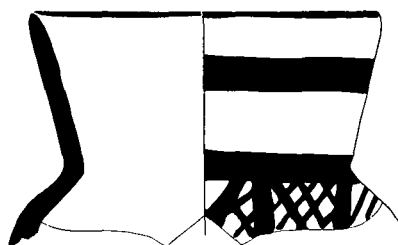
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AM 10372



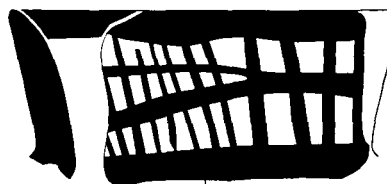
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AM 10508



AM 10567



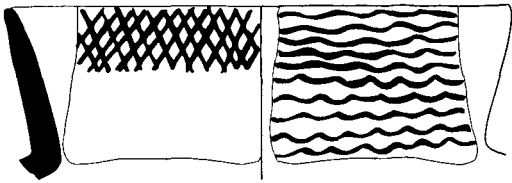
AM 10163

Pl. 5.41

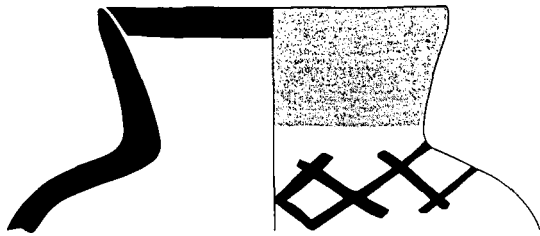
Monochrome fine Halaf painted ware (Scale: 1/2).

Inv. n°	Condition	Temper	Firing	Treatment	Colour fabric	Colour paint	M/B/P	Mo/Bi	Ma/Lu	Comparanda	Form
AM 10683	altered	mineral	oxidising	self slip	orange	orange	monochrome	monotone	matt	Tell Hahia (CRUELLS, 1996, p. 109, Fig. 7, form 3B); Shams ed-Din (GUSTAVSON-GAUBE, 1981, p. 69 and p. 169, Fig. 504-506, form 1a of pot in fine ware category and p. 145, Fig. 377-378 of common ware); Khirbet esh-Shenef (AKKERMANS, 1993, p. 100, Fig. 3.33:42-46); Khabur survey (NIEUWENHUYSE, 2000, p. 175, form 1301 and Ill. 10:11-12); Chagar Bazar (MALLOWAN, 1936, Fig. 22:1, from level 9); Umm Qseir (TSUNEKI and MIYAKE, eds., 1998, p. 66 and Fig. 29:12-15, under form IXb of jar).	3.2
AM 10587	altered	mineral	oxidising	smoothed	orange	orange	monochrome	monotone	matt	<i>Ibid.</i> AM 10683.	3.2
AM 10541	altered	mineral	oxidising	smoothed	orange	black	monochrome	monotone	matt	<i>Ibid.</i> AM 10683.	3.2
AM 10565	good	mineral	oxidising	self slip	orange	black	monochrome	monotone	matt	<i>Ibid.</i> AM 10683.	3.2
AM 10490	altered	mineral	oxidising	cream slip	orange	black	monochrome	monotone	matt	<i>Ibid.</i> AM 10683.	3.2
AM 10504	good	mineral	oxidising	cream slip	cream	red	monochrome	monotone	lustrous	<i>Ibid.</i> AM 10683.	3.2
AM 10194	altered	mineral	mixed	cream slip	grey	red	monochrome	monotone	matt	<i>Ibid.</i> AM 10683.	3.2
AM 10287	altered	mineral	oxidising	self slip	orange	black	monochrome	bitone	matt	<i>Ibid.</i> AM 10683.	3.2

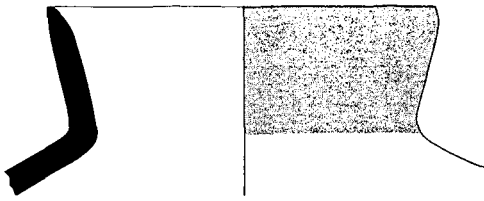
5. THE POTTERY



AM 10683



AM 10587



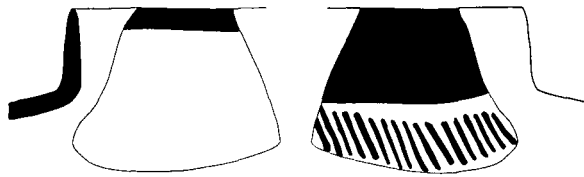
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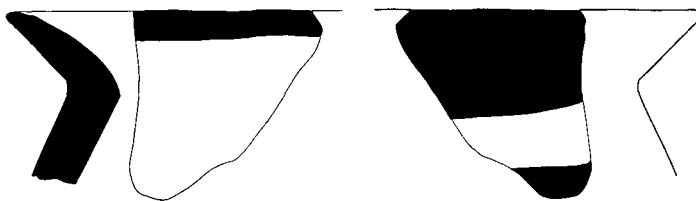
AM 10565



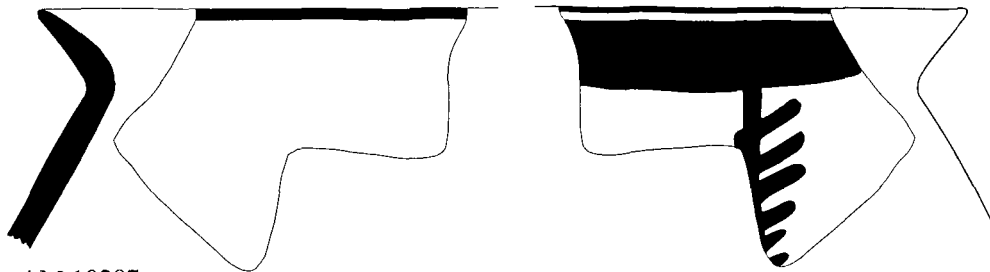
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AM 10504



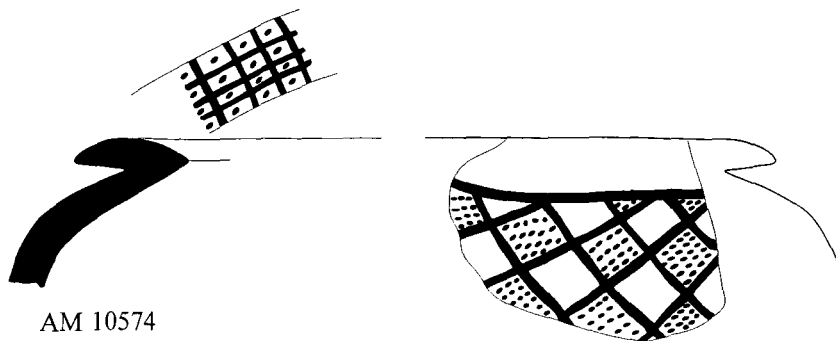
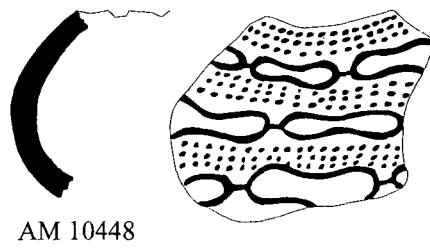
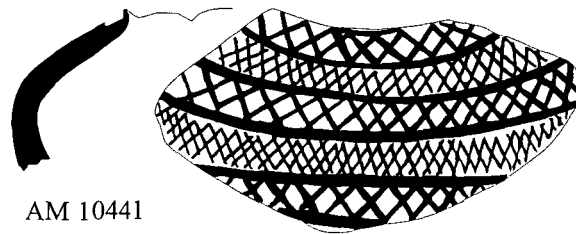
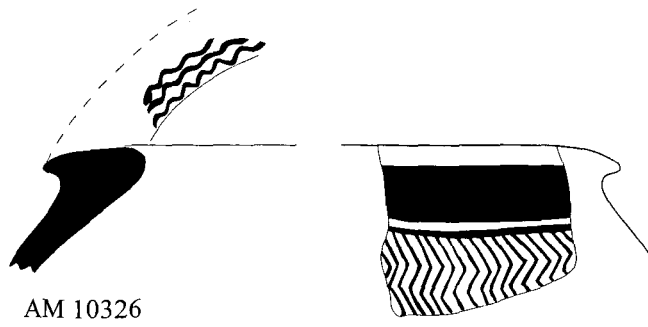
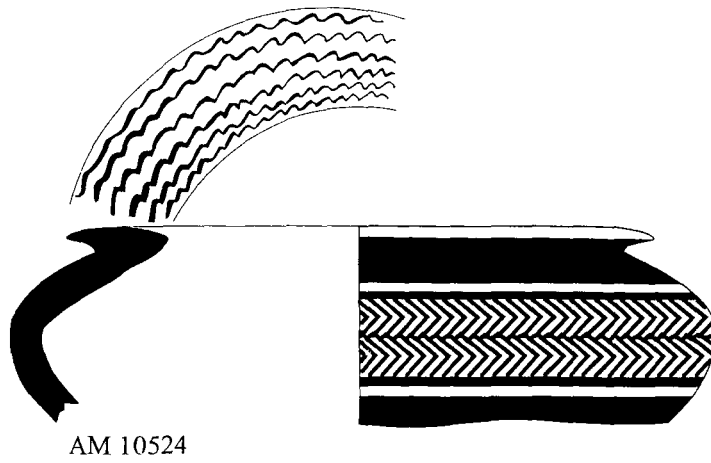
AM 10194



AM 10287

Inv. n°	Condition	Temper	Firing	Treatment	Colour fabric	Colour paint	M/B/P	Mo/Bi	Ma/Lu	Comparanda	Form
AM 10524	good	mineral	oxidising	self slip	orange	dark brown	monochrome	bitone	lustrous	Shams ed-Din (GUSTAVSON-GAUBE, 1981, p. 56 and p. 145, Fig. 391-392, pots form 2e); Tell Halula (CRUELLS, 1996, p. 109, Fig. 7, form 3A; CRUELLS, 2001, p. 157, Fig. 4:14); Khirbet esh-Shenef (AKKERMANS, 1993, p. 98, Fig. 3.31:14-15, wide and closed bowls with low, overhanging rims); Chagar Bazar (MALLOWAN, 1936, p. 47, Fig. 25:4-5, from level 12, both with a similar decoration found at Tell Amama; the first one with a decoration of a double line of filled dotted lozenges similar to vessel AM 10574 and the second with a decoration of parallel lines of stylized bucranea in between rows of horizontal dot lines similar to Tell Amarna vessel AM 10448); Tell Halaf (VON OPPENHEIM, 1943, Pl. 12:1-4 and Pl. 19:4-5-7); Umm Qseir, (TSUNEKI and MIYAKE, eds., 1998, p. 65-67, Fig. 30-31, form IXc, squatted jar with short everted neck; HOLE and JOHNSON, 1986-1987, p. 216, Fig. 1 and m); Girikihacyan (WATSON and LEBLANC, 1990, p. 43, Fig. 4, 14 and p. 61, Fig. 4.12, form II, squat, bowl-like jar, <i>Büchsen</i>); Tepe Gawra (TOBLER, 1950, p. 130 and Pl. 115:44-48, coming from the deposits of Area A in Northeast base); Appachiyah (MALLOWAN and ROSE, 1935, Fig. 64:7); Yarım Tepe (MUNCHAEV and MERPERT, 1981, Fig. 62:1-3); Appachiyah (HUJARA, 1980, Fig. 7, form 6 from phase 1 or early phase and Fig. 8, form 47, from phase H).	3.3
AM 10326	good	plant	oxidising	self slip	orange	red	monochrome	monotone	lustrous	<i>Ibid.</i> AM 10524.	3.3
AM 10441	good	mineral	reducing	light slip	grey	black	monochrome	monotone	mat	<i>Ibid.</i> AM 10524.	3.3
AM 10448	good	mineral	oxidising	light slip	orange	red	monochrome	monotone	lustrous	<i>Ibid.</i> AM 10524.	3.3
AM 10574	altered	mineral	oxidising	self slip	orange	black	monochrome	monotone	mat	<i>Ibid.</i> AM 10524.	3.3

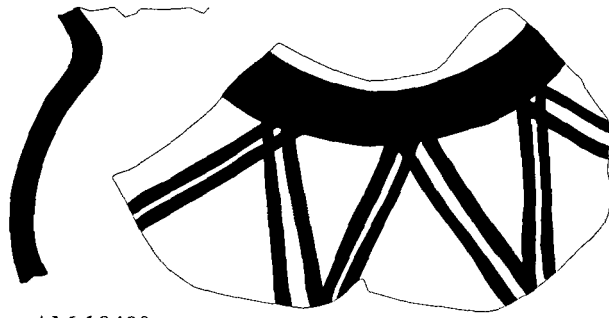
5. THE POTTERY



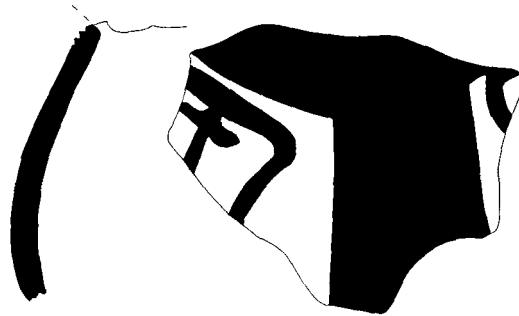
Pl. 5.43
Monochrome fine Halaf painted ware (Scale: 1/2)

Inv. n°	Condition	Temper	Firing	Treatment	Colour fabric	Colour paint	M/B/P	Mo/Bi	Ma/Lu	Comparanda	Form
AM 10480	altered	mineral	oxidising	light slip	orange	red	monochrome	monotone	matt		3.3
AM 10350	altered	mineral	oxidising	self slip	orange	orange	monochrome	monotone	matt		3.3
AM 10027	good	invisible	oxidising	light slip	orange	red	monochrome	monotone	matt		3.3
AM 10395	altered	mixed	oxidising	self slip	grey	orange	monochrome	monotone	matt		3.3
AM 10425	altered	mineral	oxidising	self slip	orange	black	monochrome	monotone	lustrous		3.3

5. THE POTTERY



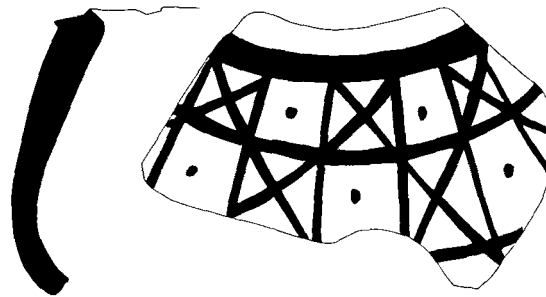
AM 10480



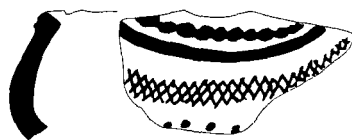
AM 10350



AM 10027



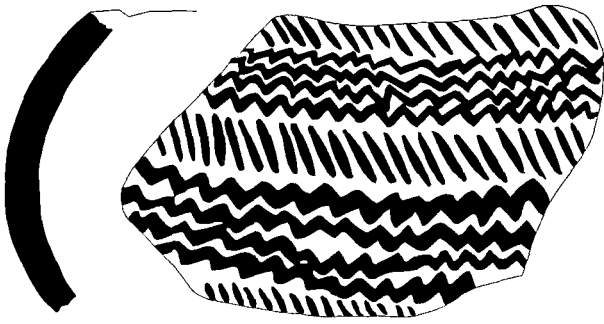
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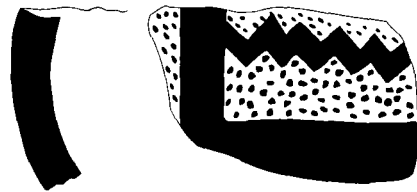
AM 10425

Inv. n°	Condition	Temper	Firing	Treatment	Colour fabric	Colour paint	M/B/P	Mo/Bi	Ma/Lu	Comparanda	Form
AM 10431	good	mineral	reducing	cream slip	brown	dark brown	monochrome	monotone	matt		3.3
AM 10440	altered	mineral	oxidising	light slip	orange	red	monochrome	monotone	lustrous		3.3
AM 10474	altered	mineral	oxidising	light slip	orange	black	monochrome	monotone	matt		3.3
AM 10397	good	mineral	oxidising	self slip	cream	red	monochrome	monotone	lustrous		3.3
AM 10426	good	mineral	oxidising	self slip	orange	black	monochrome	monotone	lustrous		3.3
AM 10396	good	mineral	oxidising	self slip	cream	black	monochrome	monotone	matt		3.3
AM 10685	good	mineral	oxidising	self slip	orange	black	monochrome	bitone	matt		3.3
AM 10662	concretions	invisible	oxidising	smoothed	orange	black	monochrome	bitone	matt		3.3
AM 10688	altered	mineral	oxidising	smoothed	orange	dark brown	monochrome	bitone	matt		3.3

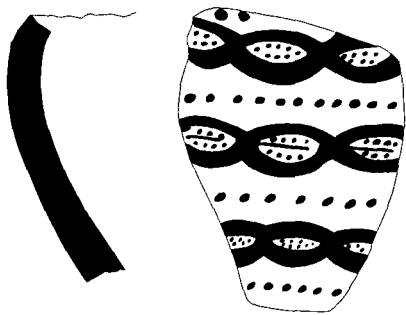
5. THE POTTERY



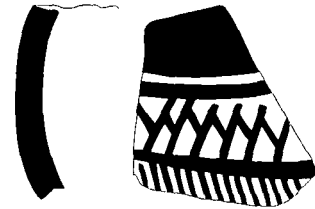
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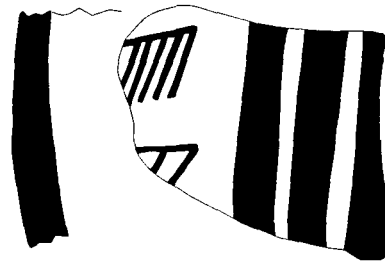
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AM 10440



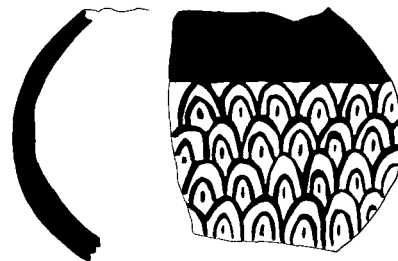
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AM 10396



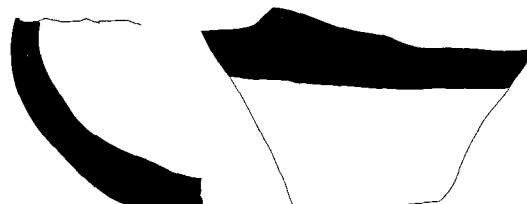
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AM 10685



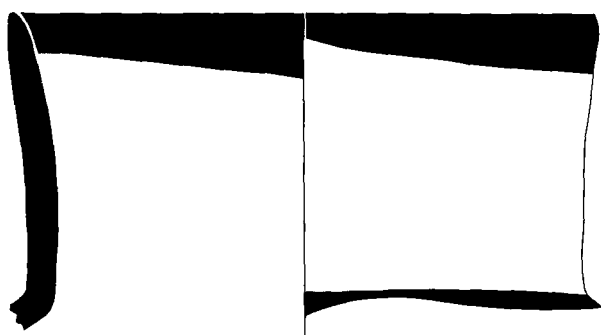
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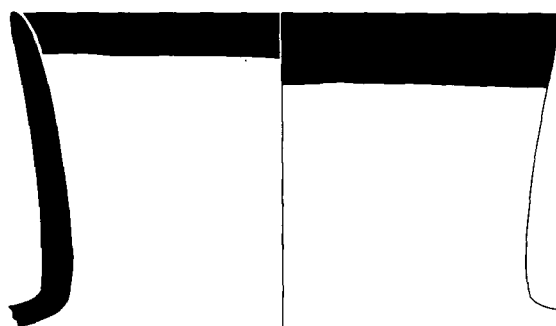
AM 10688

Inv. n°	Condition	Temper	Firing	Treatment	Colour fabric	Colour paint	M/B/P	Mo/Bi	Ma/Lu	Comparanda	Form
AM 10673	altered	mineral	oxidising	cream slip	orange	dark brown	monochrome	monotone	mat	Tell Halula (CRUELLS, 1996, p. 109, Fig. 7, form 4A); Shams ed-Din (GUSTAVSON-GAUBE, 1981, p. 57 and p. 149, Fig. 408-409, form 6c); Umm Qseir (TSUNEKI and MIYAKE, eds., 1998, p. 66 and Fig. 30:1 and 3, form IXb).	4.1
AM 10672	altered	mineral	oxidising	cream slip	orange	dark brown	monochrome	bitone	mat	<i>Ibid.</i> AM 10673.	4.1
AM 10573	altered	mineral	oxidising	self slip	orange	black	monochrome	bitone	mat	Shams ed-Din (GUSTAVSON-GAUBE, 1981, p. 56 and p. 175, Fig. 613, form 5 of pot in fine wares and p. 149, Fig. 410-412 of common ware); Khirbet esh-Shenef (AKKERMANS, 1993, p. 100, Fig. 3.33:37-38); Tell Damishliyya (AKKERMANS, 1986-1987, p. 63, Pl. 17:109-112; AKKERMANS, 1993, p. 40, Fig. 3.5:25 and 26); Umm Qseir (TSUNEKI and MIYAKE, eds., 1998, p. 66 and Fig. 30:2, form IXb); Arpachiyah (MALLOWAN and ROSE, 1935, Fig. 65:3, from level pre-TT6); Girkhaciyan (WATSON and LEBLANC, 1990, p. 61, form IIIA).	4.2
AM 10583	altered	invisible	oxidising	self slip	orange	orange	monochrome	monotone	mat	<i>Ibid.</i> AM 10673.	4.1
AM 10655	good	invisible	oxidising	self slip	orange	dark brown	monochrome	monotone	mat	<i>Ibid.</i> AM 10573.	4.2

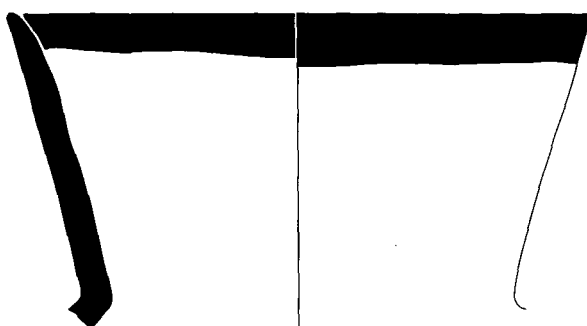
5. THE POTTERY



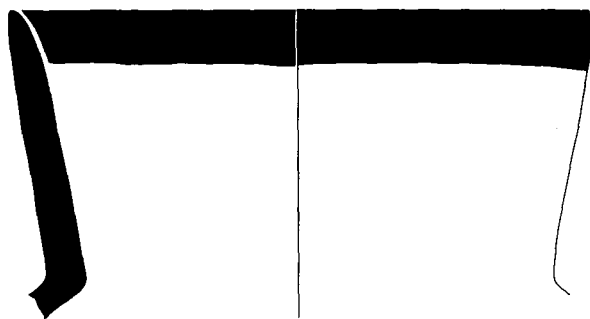
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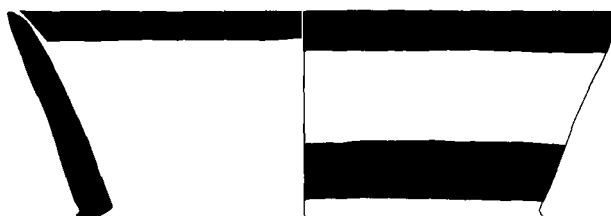
AM 10672



AM 10573



AM 10583



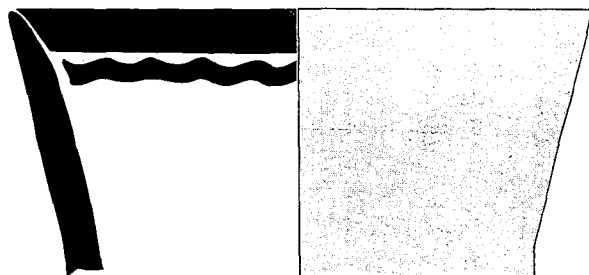
AM 10655

Inv. n°	Condition	Temper	Firing	Treatment	Colour fabric	Colour paint	M/B/P	Mo/Bi	Ma/Lu	Comparanda	Form
AM 10513	altered	mineral	oxidising	self slip	orange	red	monochrome	monotone	matt	Shams ed-Din (GUSTAVSON-GAUBE, 1981, p. 56 and p. 175, Fig. 613, form 5 of pot in fine wares and p. 149, Fig. 410-412 of common ware); Khirbet esh-Shenef (AKKERMANS, 1993, p. 100, Fig. 3.33:37-38); Tell Damishliyya (AKKERMANS, 1986-1987, p. 63, Pl. 17:109-112; AKKERMANS, 1993, p. 40, Fig. 3.5:25 and 26); Umm Qseir (TSUNEKI and MIYAKE, eds., 1998, p. 66 and Fig. 30:2, form IXb); Arpachiyah (MALLOWAN and ROSE, 1935, Fig. 65:3, from level pre-TT6); Girikihaciyan (WATSON and LEBLANC, 1990, p. 61, form IIIA).	4.2
AM 10022	altered	mineral	oxidising	self slip	orange	dark brown	monochrome	bitone	matt	<i>Ibid.</i> AM 10513.	4.2
AM 10526	concretions	mineral	oxidising	cream slip	black	black	monochrome	monotone	matt	<i>Ibid.</i> AM 10513.	4.2
AM 10644	good	invisible	oxidising	cream slip	orange	orange	monochrome	monotone	matt	Tell Halula (CRUELLS, 1996, p. 109, Fig. 7, form 4A); Shams ed-Din (GUSTAVSON-GAUBE, 1981, p. 57 and p. 149, Fig. 408-409, form 6c); Umm Qseir (TSUNEKI and MIYAKE, eds., 1998, p. 66 and Fig. 30:1 and 3, form IXb).	4.1
AM 10523	altered	mineral	oxidising	self slip	orange	black	monochrome	monotone	matt	<i>Ibid.</i> AM 10644.	4.1

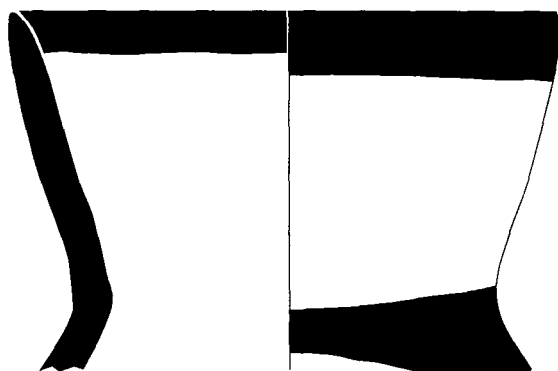
5. THE POTTERY



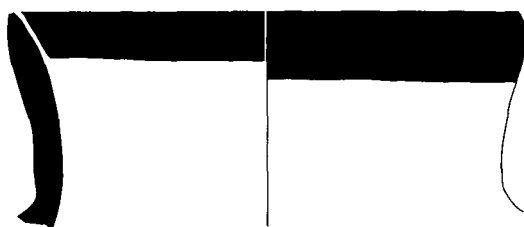
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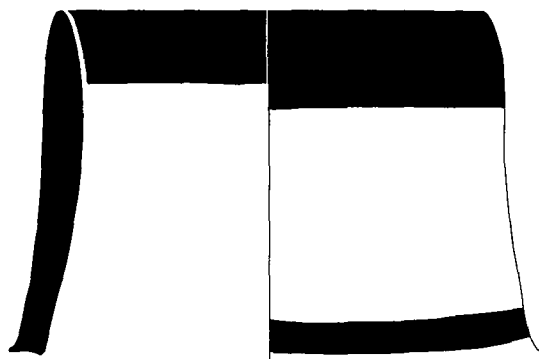
AM 10022



AM 10526



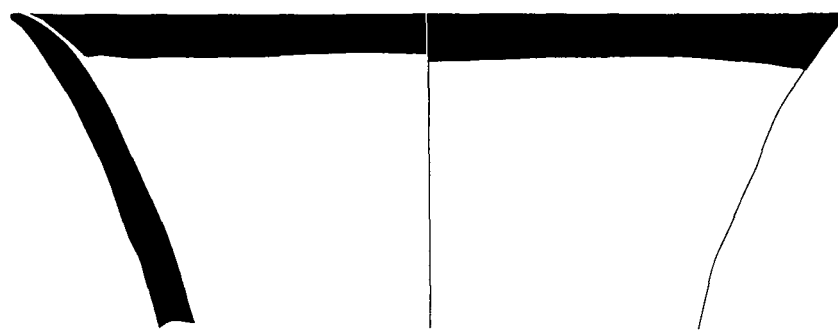
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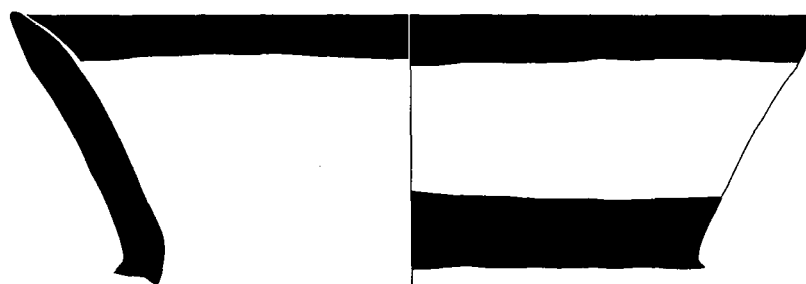
AM 10523

Inv. n°	Condition	Temper	Firing	Treatment	Colour fabric	Colour paint	M/B/P	Mo/Bi	Ma/Lu	Comparanda	Form
AM 10472	altered	mineral	oxidising	light slip	orange	black	monochrome	monotone	matt	Shams ed-Din (GUSTAVSON-GAUBE, 1981, p. 56 and p. 175, Fig. 613; form 5 of pot in fine wares and p. 149, Fig. 410-412 of common ware); Khirbet esh-Shenef (AKKERMANS, 1993, p. 100, Fig. 3.33:37-38); Tell Damishliyya (AKKERMANS, 1986-1987, p. 63, Pl. 17:109-112; AKKERMANS, 1993, p. 40, Fig. 3.5:25 and 26); Umm Qseir (TSUNEKI and MIYAKE, eds., 1998, p. 66 and Fig. 30:2, form IXb); Arpachiyah (MALLOWAN and ROSE, 1935, Fig. 65:3, from level pre-TT6); Girikihacyan (WATSON and LEBLANC, 1990, p. 61, form IIIA).	4.2
AM 10549	altered	invisible	oxidising	self slip	orange	black	monochrome	bitone	matt	<i>Ibid.</i> AM 10472.	4.2
AM 10434	altered	mineral	oxidising	self slip	orange	red	monochrome	monotone	matt	<i>Ibid.</i> AM 10472.	4.2
AM 10029	altered	mineral	oxidising	cream slip	orange	dark brown	monochrome	monotone	matt	<i>Ibid.</i> AM 10472.	4.2
AM 10028	good	mineral	oxidising	cream slip	orange	black	monochrome	bitone	matt	Tell Halula (CRUELLS, 1996, p. 109, Fig. 7, form 4A); Shams ed-Din (GUSTAVSON-GAUBE, 1981, p. 57 and p. 149, Fig. 408-409, form 6c); Umm Qseir (TSUNEKI and MIYAKE, eds., 1998, p. 66 and Fig. 30:1 and 3, form IXb).	4.1

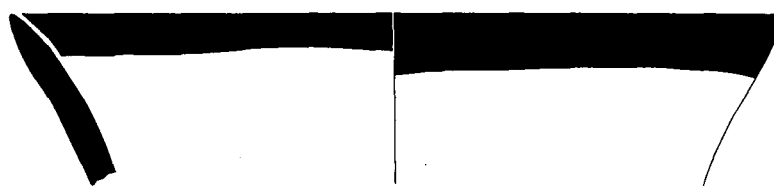
5. THE POTTERY



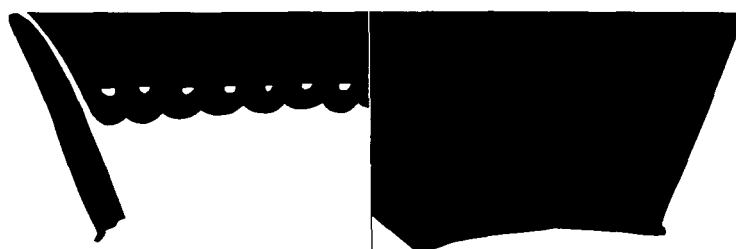
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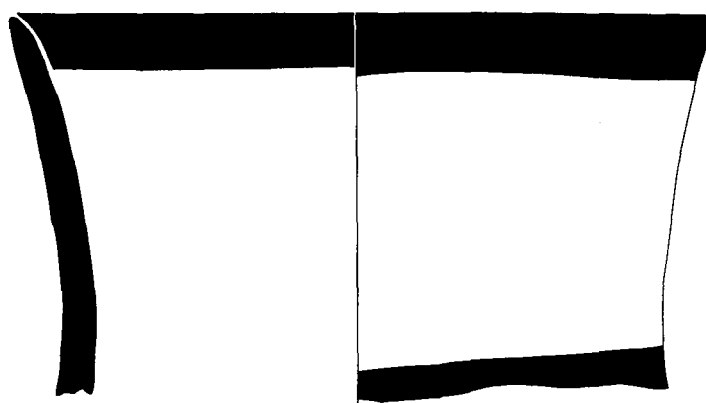
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AM 10434



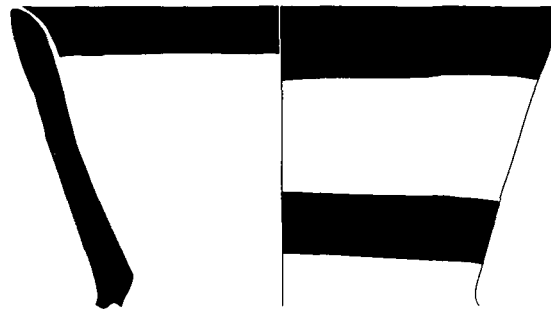
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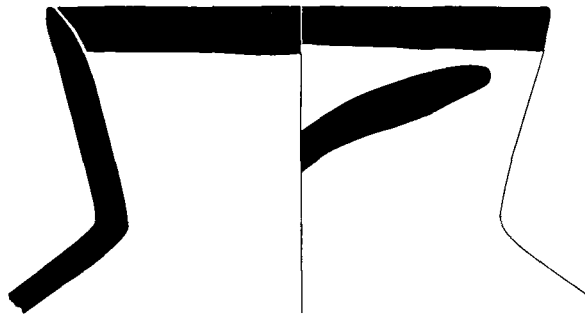
AM 10028

Inv. n°	Condition	Temper	Firing	Treatment	Colour fabric	Colour paint	M/B/P	Mo/Bi	Ma/Lu	Comparanda	Form
AM 10478	altered	mineral	oxidising	light slip	cream	black	monochrome	monotone	matt	Shams ed-Din (GUSTAVSON-GAUBE, 1981, p. 56 and p. 175, Fig. 613, form 5 of pot in fine wares and p. 149, Fig. 410-412 of common ware); Khibet esh-Shenef (AKKERMANS, 1993, p. 100, Fig. 3.33:37-38); Tell Damishiyya (AKKERMANS, 1986-1987, p. 63, Pl. 17:109-112; AKKERMANS, 1993, p. 40, Fig. 3.5:25 and 26); Umm Qseir (TSUNEKI and MIYAKE, eds., 1998, p. 66 and Fig. 30:2, form IXb); Arpachiyah (MALLOWAN and ROSE, 1935, Fig. 65:3, from level pre-II6); Girikihaciyan (WATSON and LEBLANC, 1990, p. 61, form IIIA).	4.2
AM 10570	altered	mineral	oxidising	cream slip	orange	black	monochrome	bitone	matt	<i>ibid.</i> AM 10478.	4.2
AM 10572	altered	mineral	oxidising	self slip	orange	black	monochrome	monotone	matt	<i>ibid.</i> AM 10478.	4.2
AM 10675	altered	mineral	oxidising	light slip	orange	orange	monochrome	monotone	matt	Tell Halula (CRUELLS, 1996, p. 109, Fig. 7, form 4A); Shams ed-Din (GUSTAVSON-GAUBE, 1981, p. 57 and p. 149, Fig. 408-409, form 6c); Umm Qseir (TSUNEKI and MIYAKE, eds., 1998, p. 66 and Fig. 30:1 and 3, form IXb).	4.1
AM 10094	altered	mineral	oxidising	self slip	orange	black	monochrome	monotone	lustrous	<i>ibid.</i> AM 10675.	4.1
AM 10406	altered	mineral	oxidising	self slip	orange	black	monochrome	monotone	matt	<i>ibid.</i> AM 10478.	4.2

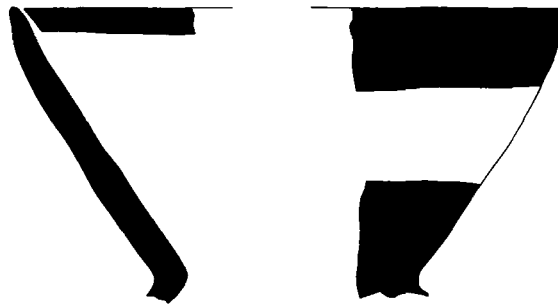
5. THE POTTERY



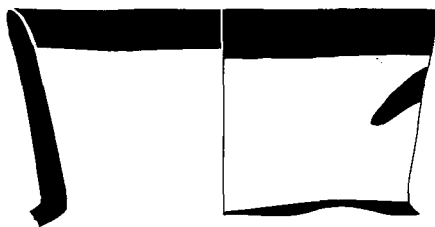
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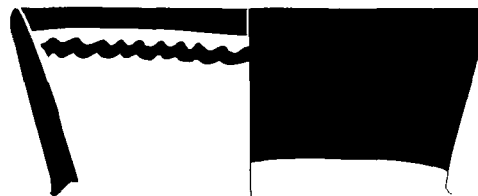
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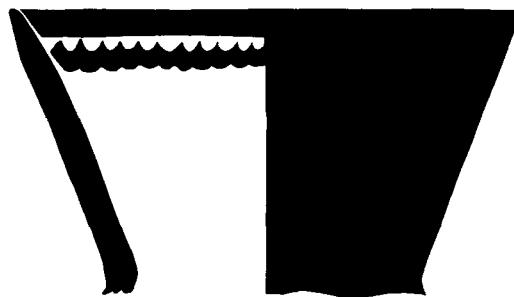
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AM 10675



AM 10094

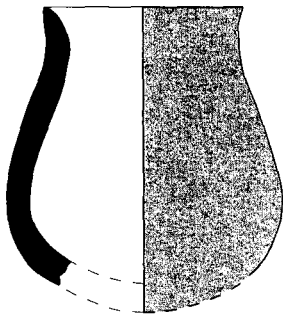


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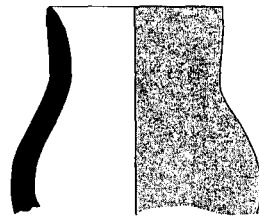
Pl. 5.49
Monochrome fine Halaf painted ware (Scale: 1/2).

Inv. n°	Condition	Temper	Firing	Treatment	Colour fabric	Colour paint	M/B/P	Mo/Bi	Ma/Lu	Comparanda	Form
AM 10551	altered	mineral	oxidising	smoothed	orange	red	monochrome	monotone	matt	Shams ed-Din (GUSTAVSON-GAUBE, 1981, p. 63 and p. 157, Fig. 481-482 and p. 175, Fig. 620, described as small pot or jar with a flared to slightly flared collar, form 2a); Arpachiyah (MALLOWAN, 1935, Fig. 42:5, 11 and 12) .	5.4
AM 10657	altered	invisible	oxidising	smoothed	cream	light brown	monochrome	bitone	matt	<i>Ibid.</i> AM 10551.	5.4
AM 10532	altered	mixed	oxidising	smoothed	orange	black	monochrome	bitone	matt	<i>Ibid.</i> AM 10551.	5.4
AM 10536	altered	mixed	oxidising	smoothed	orange	dark brown	monochrome	monotone	matt	<i>Ibid.</i> AM 10551.	5.4
AM 10669	altered	mineral	mixed	smoothed	grey	dark brown	monochrome	monotone	matt	<i>Ibid.</i> AM 10551.	5.4
AM 10585	altered	mineral	oxidising	self slip	orange	red	monochrome	bitone	matt	<i>Ibid.</i> AM 10551.	5.4
AM 10556	altered	mineral	oxidising	self slip	orange	orange	monochrome	monotone	matt	Chagar Bazar (MALLOWAN, 1936, p. 41 and Fig. 20:16, from level 7); Arpachiyah (MALLOWAN and ROSE, 1935, Fig. 42:7-9).	5.1
AM 10486	altered	mineral	oxidising	light slip	orange	red	monochrome	monotone	lustrous	Shams ed-Din (GUSTAVSON-GAUBE, 1981, p. 62 and p. 157, Fig. 476, although with walls slightly curvilinear).	5.2
AM 10491	altered	mineral	oxidising	self slip	orange	black	monochrome	monotone	matt	Shams ed-Din (GUSTAVSON-GAUBE, 1981, p. 62 and p. 157, Fig. 478-479, form 1a of pots).	5.3
AM 10445	altered	mineral	oxidising	light slip	orange	red	monochrome	monotone	matt	<i>Ibid.</i> AM 10551.	5.4
AM 10429	altered	mineral	oxidising	self slip	orange	red	monochrome	monotone	matt	<i>Ibid.</i> AM 10551.	5.4
AM 10501	altered	mineral	oxidising	cream slip	orange	black	monochrome	bitone	matt		5.5
AM 10358	good	mineral	oxidising	self slip	orange	black	monochrome	monotone	matt		

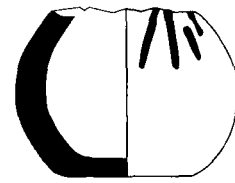
5. THE POTTERY



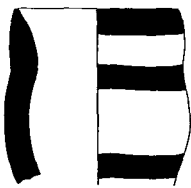
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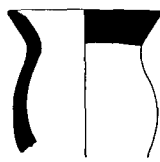
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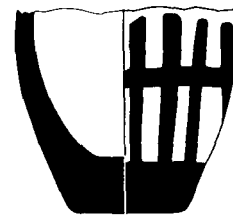
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AM 10536



AM 10669



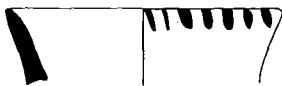
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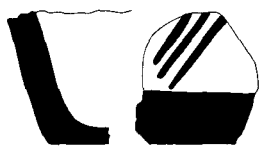
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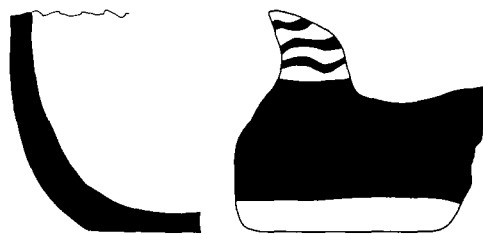
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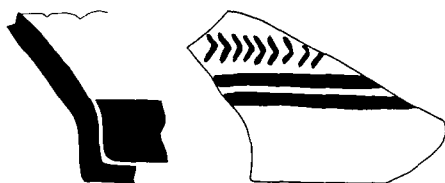
AM 10491



AM 10429



AM 10445



AM 10501



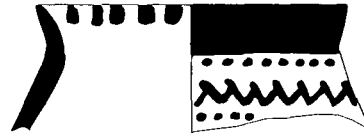
AM 10358

Inv. n°	Condition	Temper	Firing	Treatment	Colour fabric	Colour paint	M/B/P	Mo/Bi	Ma/Lu	Comparanda	Form
AM 10151	altered	mineral	oxidising	cream slip	orange	black	monochrome	monotone	matt	Shams ed-Din (GUSTAVSON-GAUBE, 1981, p. 62 and p. 157, Fig. 478-479, form 1a of pots).	5.3
AM 10325	good	mineral	oxidising	self slip	orange	red	monochrome	monotone	lustrous	<i>Ibid.</i> AM 10151.	5.3
AM 10343	good	mineral	oxidising	cream slip	orange	black	monochrome	monotone	matt		
AM 10561	altered	mineral	oxidising	smoothed	orange	black	monochrome	monotone	matt	Tell Halaf (VON OPPENHEIM, 1943, Pl. 88, especially n° 11); Chagar Bazar (MALLOWAN, 1936, Pl. 3.6); Khabur survey (NIEUWENHUYSE, 2000, p. 167 and III. 21:1-2, coming from T. Asthane Sharqi and Aid el Qerd); Arpachiyah (MALLOWAN and ROSE, 1935, Pl. 20a).	
AM 10489	altered	mineral	oxidising	self slip	orange	red	monochrome	monotone	matt		
AM 10517	good	mineral	oxidising	light slip	orange	black	monochrome	monotone	lustrous		
AM 10518	altered	mineral	oxidising	light slip	orange	orange	monochrome	monotone	matt		
AM 10387	altered	mineral	oxidising	self slip	orange	light brown	monochrome	monotone	matt		

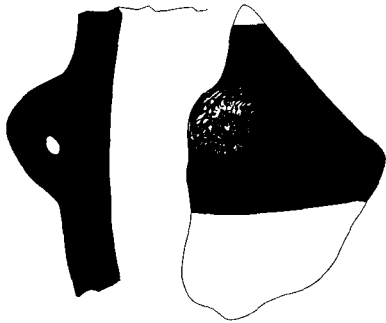
5. THE POTTERY



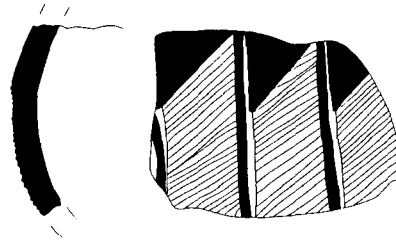
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AM 10325



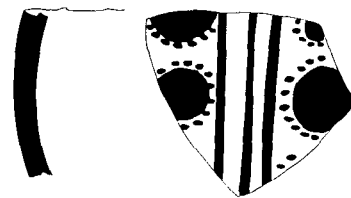
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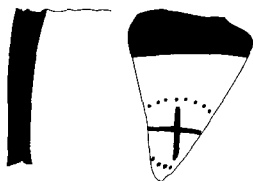
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AM 10489



AM 10517



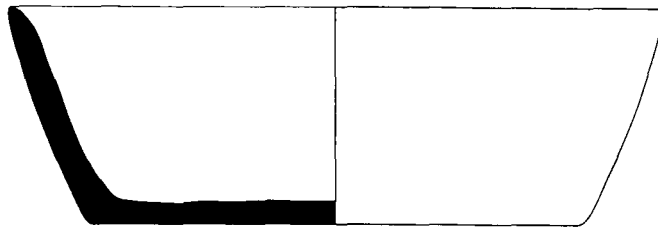
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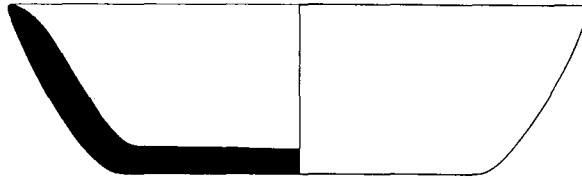
AM 10387

Inv. n°	Locus	Condition	Inclusions	Firing	Surface treatment	Colour fabric	Comparanda
AM 10594	18	altered	invaluable	oxidising	slip	orange	Apachiyah (MALLOWAN and ROSE, 1935, p. 173, Fig. 79:4, in level before TT10); Tepe Gawra (TOBLER, 1950, p. 133 and Pl. 119:77, from level XVIII); Girikihacyan (WATSON and LEBLANC, 1990, p. 72, Fig. 5.2, form 1B).
AM 10593	18	good	mineral	oxidising	slip	orange	<i>Ibid.</i> AM 10594.
AM 10679	17	good	mineral	reducing	smooth	orange	<i>Ibid.</i> AM 10594.
AM 10671	16	good	mineral	oxidising	smooth	orange	Tepe Gawra (TOBLER, 1950, p. 129 and Pl. 114:30, coming from the Northeast base, although it has the walls slightly convex).
AM 10666	18	altered	mineral	oxidising	smooth	orange	<i>Ibid.</i> AM 10671.
AM 10407	L15a	good	mineral	oxidising	smooth	brown	
AM 10649	18	good	mineral	oxidising	smooth	buff	Shams ed-Din (GUSTAVSON-GAUBE, 1981, p. 141, Fig. 341-343, described as medium holemouth bowl in the common ware category); Khirbet esh-Shenef (AKKERMANS, 1993, p. 102, Fig. 3.35: 56); Girikihacyan (WATSON and LEBLANC, 1990, p. 74, Fig. 5.1.1, hole mouth pot).

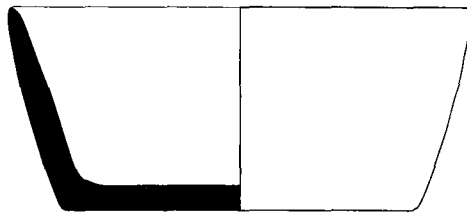
5. THE POTTERY



AM 10594



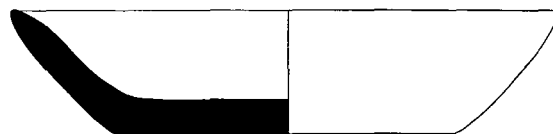
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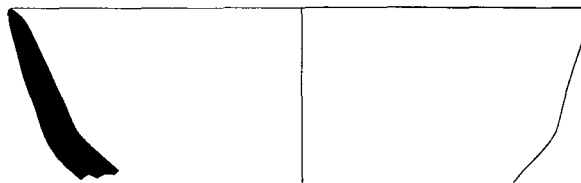
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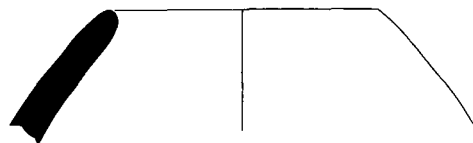
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AM 10666



AM 10407

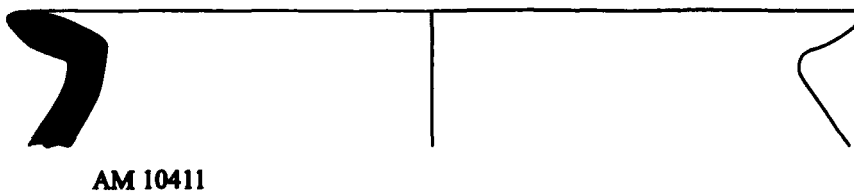
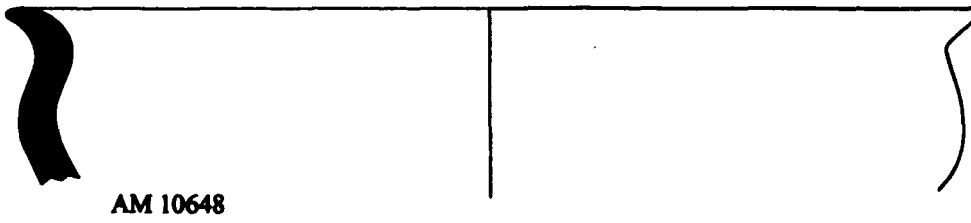
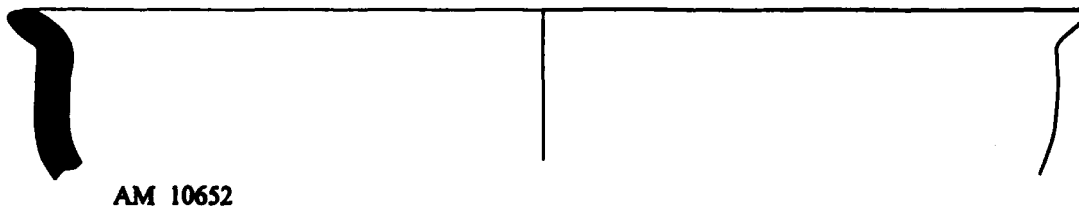
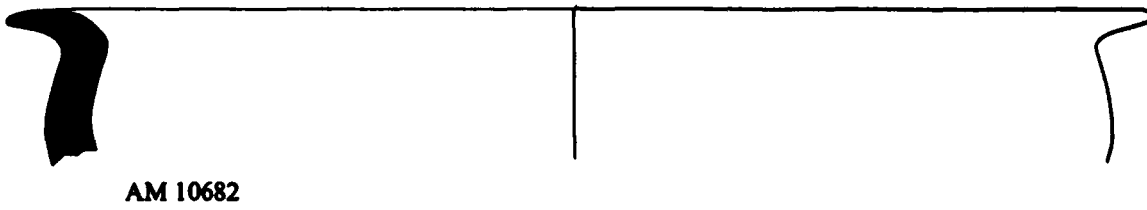
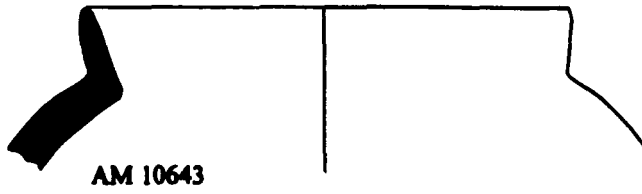


AM 10649

Inv. n°	Locus	Conditions	Inclusions	Firing	Surface treatment	Colour fabric	Comparanda
AM 10643	17	good	mineral	oxidising	smooth	buff	Khirbet esh-Sheuef (AKKERMANS, 1993, p. 101, Fig. 3.34-49); Arpechiyah (MALLOWAN and ROSE, 1935, p. 173, Fig. 79-2, in level before TT10); Gimkhaciyan (WATSON and LEBLANC, 1990, p. 72, Fig. 5.3.2).
AM 10682	24	good	mineral	oxidising	smooth	orange	Shams ed-Din (GUSTAVSON-GAUBE, 1981, p. 137, Fig. 296-297).
AM 10652	18	altered	mineral	oxidising	smooth	orange	<i>Ibid.</i> AM 10682.
AM 10648	18	good	mineral	oxidising	smooth	orange	<i>Ibid.</i> AM 10682.
AM 10668	22	altered	mineral	oxidising	smooth	orange	<i>Ibid.</i> AM 10682.
AM 10411	L15a	altered	mineral	oxidising	smooth	buff	<i>Ibid.</i> AM 10643.

W. CRUELLS

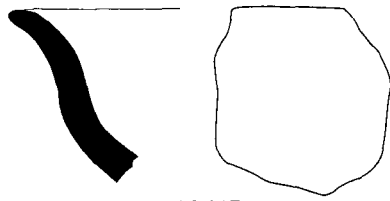
5. THE POTTERY



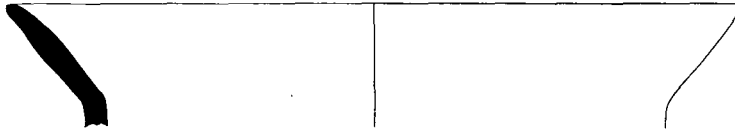
Pl. 5.53
Fine Halaf unpainted plain ware (Scale: 1/2).

Inv. n°	Locus	Condition	Inclusions	Firing	Surface treatment	Colour fabric	Comparanda
AM 10647	17	good	invaluable	oxidising	slip	orange	Shams ed-Din (GUSTAVSON-GAUBE, 1981, p. 137, Fig. 296-297).
AM 10651	18	good	mineral	oxidising	smooth	orange	Shams ed-Din (GUSTAVSON-GAUBE, 1981, p. 151, Fig. 419-424 and p. 153, Fig. 432-435).
AM 10667	16	concretions	mineral	oxidising	smooth	orange	<i>Ibid.</i> AM 10651.
AM 10465	L15a	altered	mineral	oxidising	smooth	orange	<i>Ibid.</i> AM 10651.
AM 10464	L15a	altered	mineral	oxidising	smooth	orange	<i>Ibid.</i> AM 10651.
AM 10452	L15b	altered	mineral	oxidising	smooth	orange	<i>Ibid.</i> AM 10651.

5. THE POTTERY



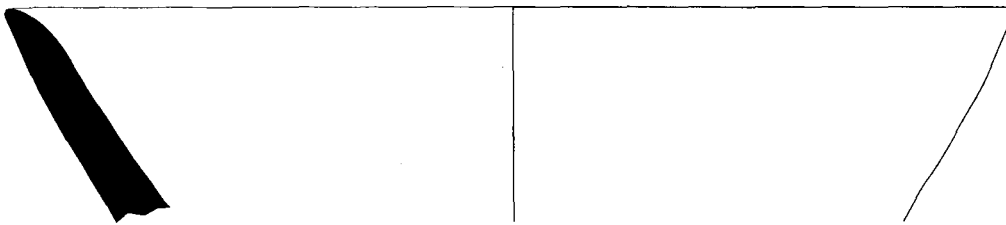
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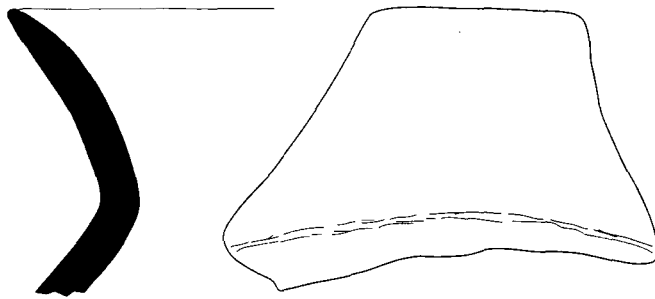
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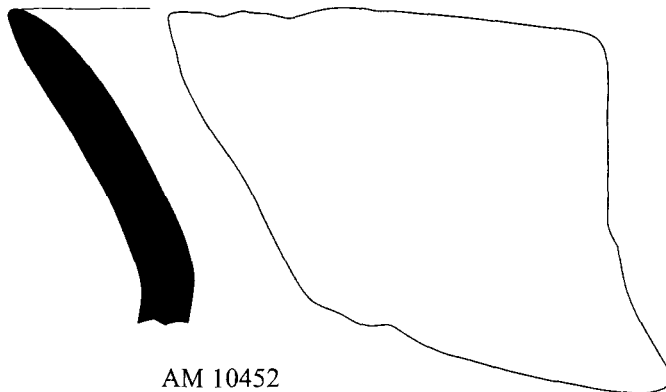
AM 10667



AM 10465



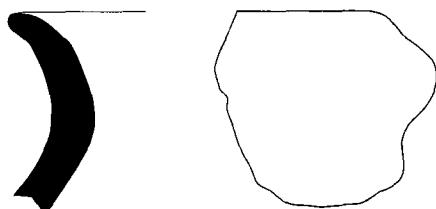
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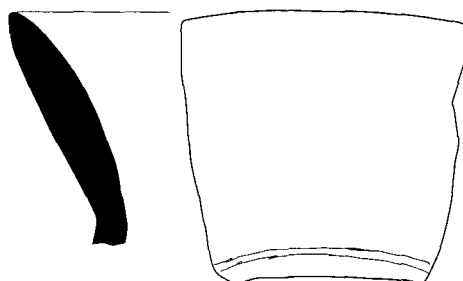
AM 10452

Inv. n°	Locus	Condition	Inclusions	Firing	Surface treatment	Colour fabric	Comparanda
AM 10653	18	good	mineral	oxidising	smooth	orange	Shams ed-Din (GUSTAVSON-GAUBE, 1981, p. 151, Fig. 419-424 and p. 153, Fig. 432-435).
AM 10509	L15a	good	mineral	oxidising	smooth	orange	<i>Ibid.</i> AM 10653.
AM 10646	17	good	mineral	oxidising	smooth	orange	Shams ed-Din (GUSTAVSON-GAUBE, 1981, p. 155, Fig. 440-442).
AM 10454	L15b	good	mineral	mixed	smooth	grey	<i>Ibid.</i> AM 10646.
AM 10645	17	good	invaluable	oxidising	smooth	buff	<i>Ibid.</i> AM 10646.
AM 10650	18	good	mineral	oxidising	smooth	buff	
AM 10466	L15a	altered	mineral	oxidising	smooth	orange	
AM 10453	L15b	altered	mineral	oxidising	smooth	orange	
AM 10456	L15b	altered	mineral	oxidising	smooth	orange	
AM 10439	L15b	altered	mineral	oxidising	smooth	orange	Shams ed-Din (GUSTAVSON-GAUBE, 1981, p. 155, Fig. 457).

5. THE POTTERY



AM 10653



AM 10509



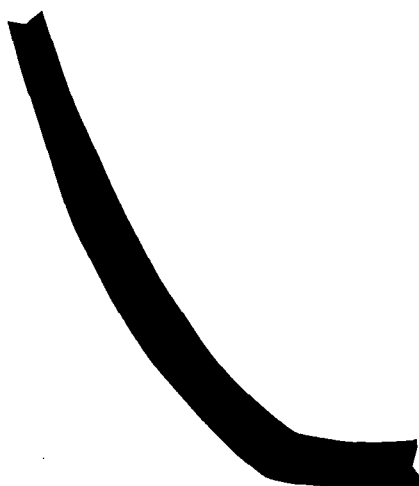
AM 10646



AM 10454



AM 10645



AM 10650



AM 10466



AM 10453



AM 10456



AM 10439

Pl. 5.55

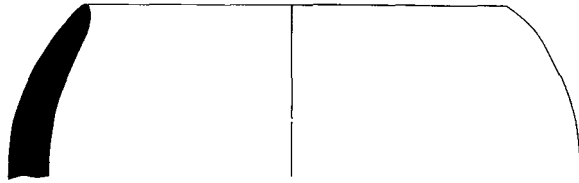
Fine Halaf unpainted plain ware (Scale: 1/2).

Inv. n°	Locus	Condition	Inclusions	Firing	Surface treatment	Colour fabric	Comparanda	Type
AM 10632	17	altered	plant	reducing	polished	black	Shams ed-Din (GUSTAVSON-GAUBE, 1981, p. 167, Fig. 563-570 and p. 169, Fig. 571-585); Khibbet esh-Shenef (AKKERMANS, 1993, p. 102, Fig. 3.35:57-58); Umm Qseir (TSUNEKI and MIYAKE, eds., 1998, p. 79, Fig. 35:1-6).	1a
AM 10690	17	good	mixed	reducing	polished	black	<i>Ibid.</i> AM 10632.	1a
AM 10617	22	good	mineral	reducing	polished	grey	<i>Ibid.</i> AM 10632.	2a
AM 10620	22	altered	plant	reducing	polished	grey	<i>Ibid.</i> AM 10632.	1a
AM 10621	22	good	mixed	reducing	burnished	grey	<i>Ibid.</i> AM 10632.	1c
AM 10623	22	good	plant	mixed	polished	black	<i>Ibid.</i> AM 10632.	1a
AM 10606	18	concretions	mineral	oxidising	burnished	black	<i>Ibid.</i> AM 10632.	2c

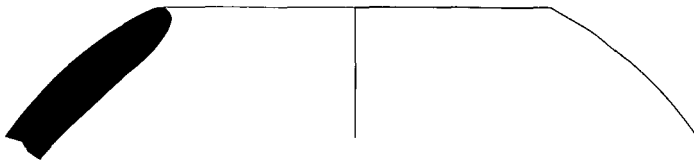
5. THE POTTERY



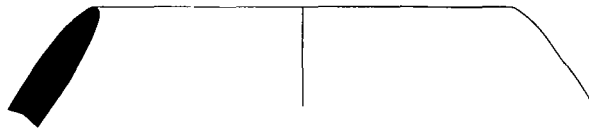
AM 10632



AM 10690



AM 10617



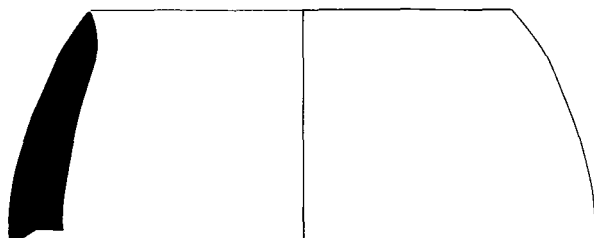
AM 10620



AM 10621



AM 10623



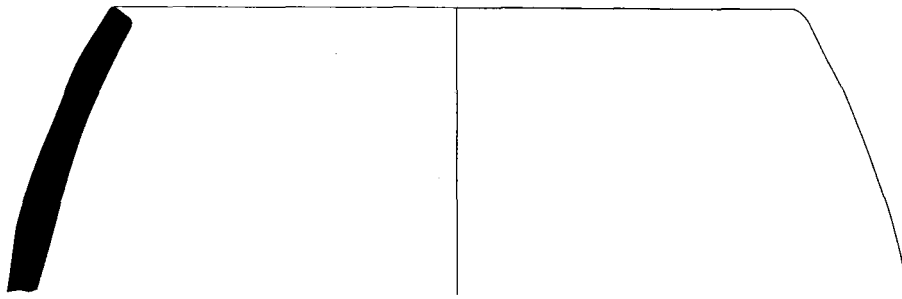
AM 10606

Pl. 5.56

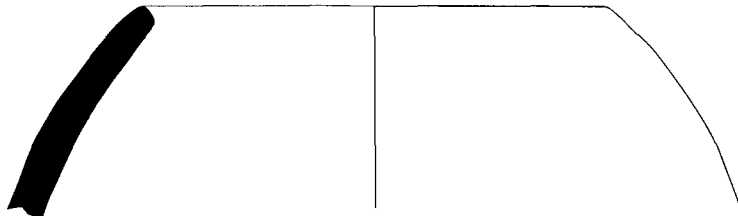
Coarse ware (Scale: 1/2).

Inv. n°	Locus	Condition	Inclusions	Firing	Surface treatment	Colour fabric	Comparanda	Type
AM 10413	L15a	altered	plant	reducing	polished	black	Shams ed-Din (GUSTAVSON-GAUBE, 1981, p. 167, Fig. 563-570 and p. 169, Fig. 571-585); Khirbet esh-Shenef (AKKERMANS, 1993, p. 102, Fig. 3.35:57-58); Umm Qseir (TSUNEKI and MIYAKE, eds., 1998, p. 79, Fig. 35:1-6).	1a
AM 10622	22	good	plant	reducing	burnished	brown	<i>Ibid.</i> AM 10413.	1c
AM 10635	17	good	mineral	reducing	burnished	black	<i>Ibid.</i> AM 10413.	2c
AM 10613	22	altered	mineral	reducing	burnished	black	<i>Ibid.</i> AM 10413.	2c
AM 10614	22	altered	mineral	reducing	polished	buff	<i>Ibid.</i> AM 10413.	2a

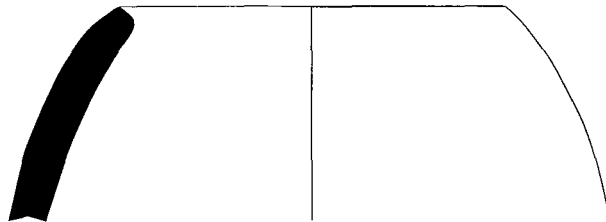
5. THE POTTERY



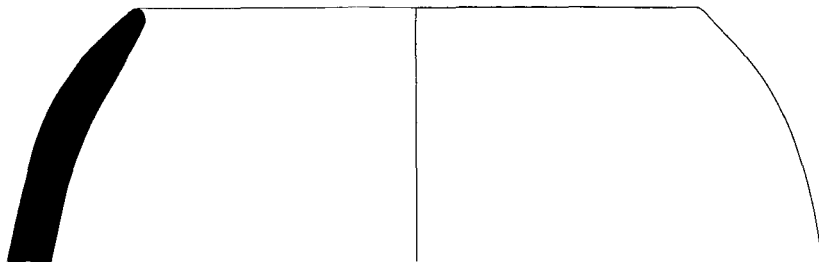
AM 10413



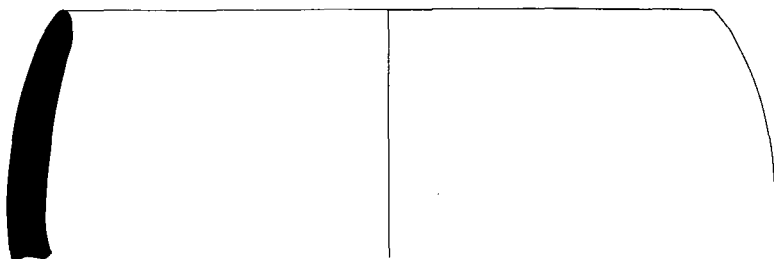
AM 10622



AM 10635



AM 10613



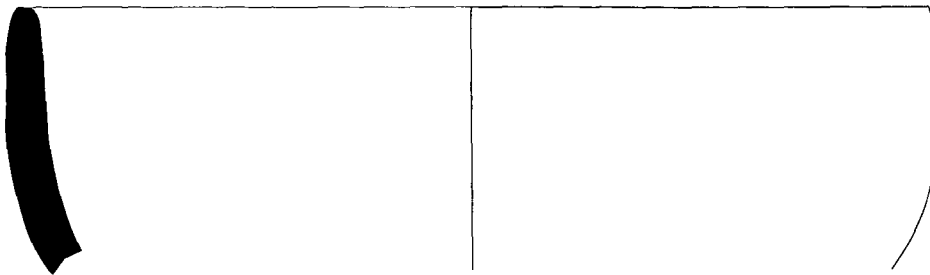
AM 10614

Pl. 5.57

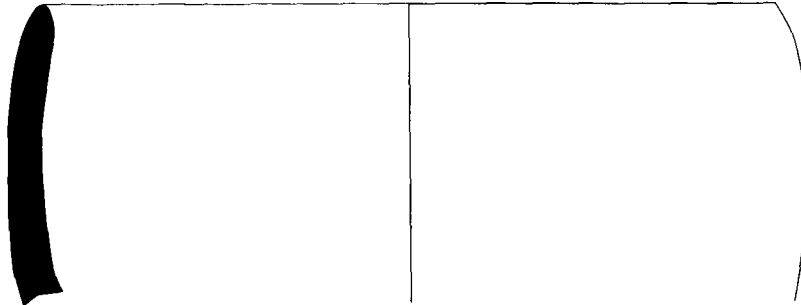
Coarse ware (Scale: 1/2).

Inv. n°	Locus	Condition	Inclusions	Firing	Surface treatment	Colour fabric	Comparanda	Type
AM 10432	L15a	good	mineral	oxidising	burnished	dark brown	Shams ed-Din (GUSTAVSON-GAUBE, 1981, p. 167, Fig. 563-570 and p. 169, Fig. 571-585); Khirbet esh-Shenef (AKKERMANS, 1993, p. 102, Fig. 3.35:57-58); Umm Qseir (TSUNEKI and MIYAKE, eds., 1998, p. 79, Fig. 35:1-6).	2c
AM 10449	L15b	good	plant	reducing	polished	black	<i>Ibid.</i> AM 10432.	1c
AM 10450	L15b	altered	mineral	reducing	burnished	black	<i>Ibid.</i> AM 10432.	2c
AM 10603	18	concretions	mineral	reducing	burnished	black	<i>Ibid.</i> AM 10432.	2c
AM 10627	17	good	plant	reducing	burnished	black	Shams ed-Din (GUSTAVSON-GAUBE, 1981, p. 71 and p. 161, Fig. 522).	1c
AM 10642	18	good	plant	reducing	polished	black	Shams ed-Din (GUSTAVSON-GAUBE, 1981, p. 71 and p. 161, Fig. 521).	1a

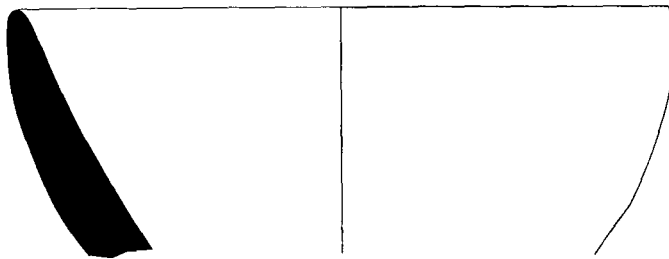
5. THE POTTERY



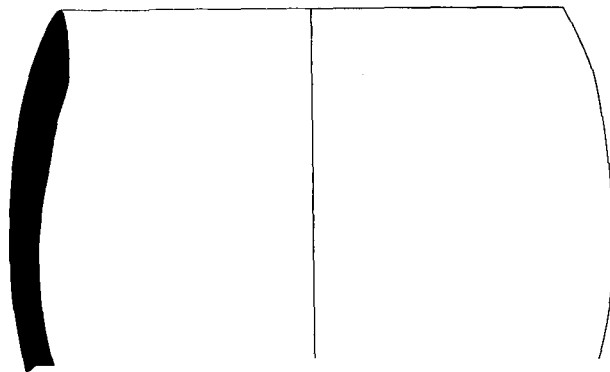
AM 10432



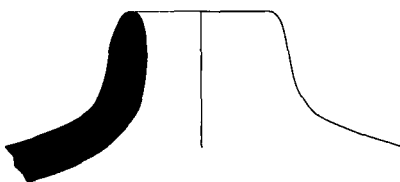
AM 10449



AM 10450



AM 10603



AM 10627

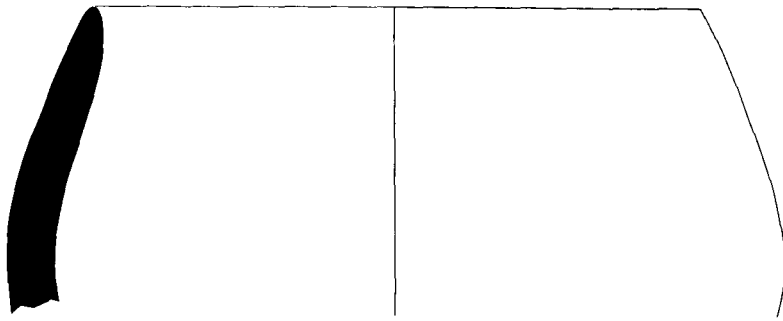


AM 10642

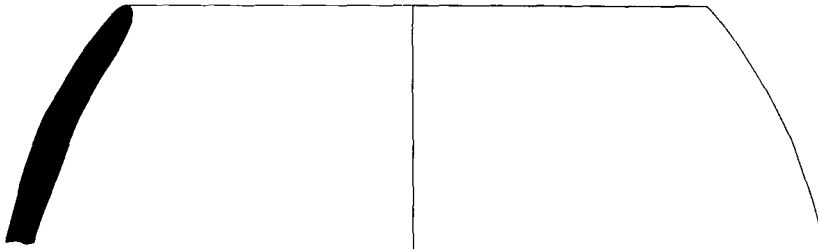
Inv. n°	Locus	Condition	Inclusions	Firing	Surface treatment	Colour fabric	Comparanda	Type
AM 10608	18	concretions	mineral	oxidising	burnished	black	Shams ed-Din (GUSTAVSON-GAUBE, 1981, p. 167, Fig. 563-570 and p. 169, Fig. 571-585); Khirbet esh-Shenef (AKKERMANS, 1993, p. 102, Fig. 3.35:57-58), Umm Qseir (TSUNEKI and MIYAKE, eds., 1998, p. 79, Fig. 35:1-6).	2c
AM 10607	18	concretions	mineral	oxidising	burnished	black	<i>Ibid.</i> AM 10608.	2a
AM 10616	22	good	mineral	reducing	polished	grey		2a
AM 10634	17	altered	mixed	mixed	polished	black		1a
AM 10618	22	altered	mineral	reducing	burnished	grey	<i>Ibid.</i> AM 10608.	2c
AM 10624	22	good	plant	reducing	polished	black	<i>Ibid.</i> AM 10608.	1a
AM 10433	L15a	altered	plant	mixed	polished	black	<i>Ibid.</i> AM 10608.	1c

W. CRUELLS

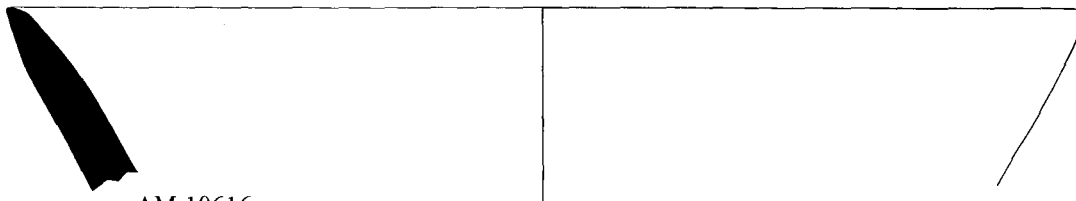
5. THE POTTERY



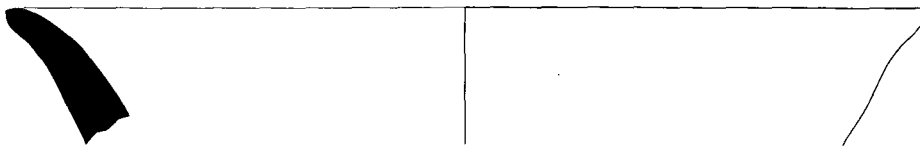
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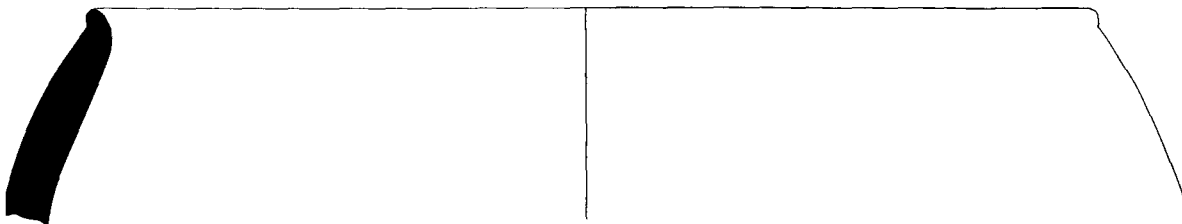
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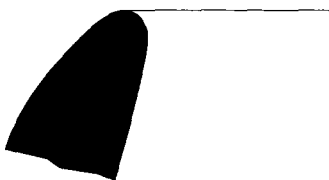
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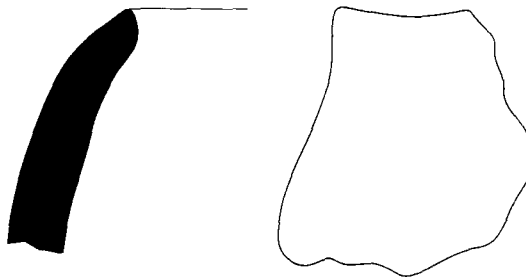
AM 10634



AM 10618



AM 10624



AM 10433

Inv. n°	Locus	Condition	Inclusions	Firing	Surface treatment	Colour fabric	Comparanda	Type
AM 10625	17	good	plant	oxidising	polished	orange	Shams ed-Din (GUSTAVSON-GAUBE, 1981, p. 171, Fig. 587-589).	1a
AM 10631	17	good	plant	reducing	polished	black	<i>Ibid.</i> AM 10625.	1a
AM 10639	18	good	mineral	reducing	polished	grey	<i>Ibid.</i> AM 10625.	2a
AM 10604	18	concretions	plant	reducing	polished	black	<i>Ibid.</i> AM 10625.	1a
AM 10605	18	concretions	plant	reducing	burnished	black	<i>Ibid.</i> AM 10625.	1c
AM 10633	17	good	mineral	reducing	polished	black	<i>Ibid.</i> AM 10625.	2a
AM 10451	L15b	altered	mineral	mixed	burnished	black	<i>Ibid.</i> AM 10625.	2a
AM 10629	17	good	mineral	reducing	polished	black		2a
AM 10638	18	altered	mineral	reducing	polished	black		2a
AM 10602	22	concretions	mineral	reducing	polished	grey		2a
AM 10600	22	concretions	mineral	reducing	burnished	black	Tell Halula (CRUELLS, 1996, p. 109, Fig. 7, form 2A); Chagar Bazar (MALLOWAN, 1936, Fig. 20-12, from level 15); Umm Qseir (TSUNEKI and MIYAKE, eds., 1998, p. 77, Fig. 34:1).	2c
AM 10601	22	concretions	mixed	reducing	burnished	black	<i>Ibid.</i> AM 10600.	2c

5. THE POTTERY



AM 10625



AM 10633



AM 10631



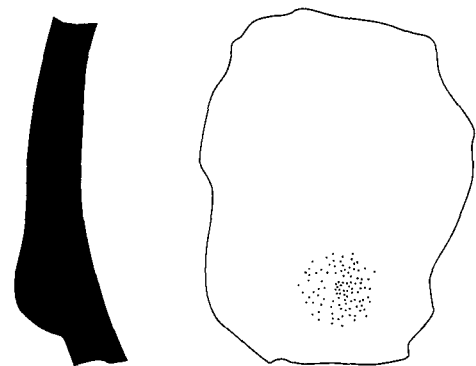
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AM 10639



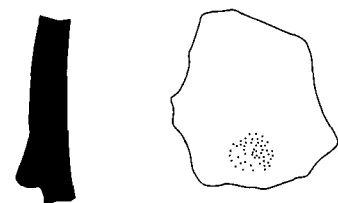
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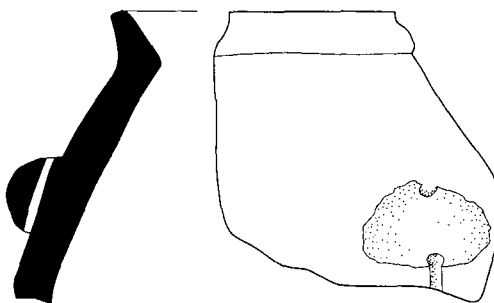
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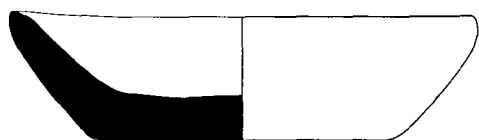
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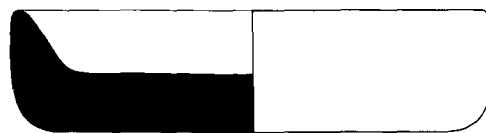
AM 10638



AM 10602



AM 10600



AM 10601