EGYPTIAN STYLE POTTERY DATED TO THE 13TH CENTURY B.C.E. AT HAZOR, MEGIDDO, AND LACHISH: CORPUS, WARE FABRICS, AND TYPOLOGY

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ABSTRACT

This paper is a synopsis of a complete study focused on three main city-states of Canaan, Hazor, Megiddo, and Lachish, during the 13th century BCE¹. It addresses the question of the Egyptian occupation there, beyond the so-called garrisons mainly situated on the Mediterranean Coast². Through a comparative study of the Egyptian-style pottery, an attempt is made to shed light on the actual influence and hegemony of the Egyptian Empire. A typology of the Egyptian forms is first detailed along with an analysis of the ware fabrics, in order to identify the imports and the imitations and to infer some hypothesis about the potters and the sites under study.

INTRODUCTION

Several studies on Egyptian-style pottery in the Egyptian garrisons of Canaan3 during the 14th, the 13th and the 12th centuries BCE were recently published, and this pottery was recognized as a good marker of Egyptian presence or influence.⁴ These studies showed that the bulk of this production actually consisted of local imitations of the Egyptian contemporary vessels and that the Egyptian imports were very few. Moreover, among this production, Egyptian manufacturing and fabric technologies were reproduced by Egyptian potters, or imitated by local potters.⁵ These interesting results concern the Egyptian garrisons,⁶ most of them situated on the Mediterranean coast, which cannot be considered as representative of the LB Canaan culture. On the other hand, this paper is focused on the main city-states of Canaan during this period, taking case study sites situated in three different regions of the hinterland in order to examine the existence of the Egyptian occupation beyond the garrisons.

METHOD

Thanks to recent excavations in Israel,⁷ revealing a reliable stratigraphy and developing scientific methods such as C14 dating, it has been possible to select three relevant archaeological sites as case studies. A synchronistic comparison of 13th century BCE remains has been analyzed for Hazor, Megiddo and Lachish⁸ (Table 1).

According to the publications, all the pottery attributed to the $13^{\rm th}$ century BCE contexts at the selected three sites represents more than 4000 vessels.

STATISTICS

Among the 4000 vessels, 151 vessels (including sherds) have been identified as Egyptian forms. This proportion is much lower than in the Egyptian garrisons in Canaan, which is not surprising. There is also a disparity among the three sites, probably due to their location in three different regions of Canaan (Figure 1 and 2).

WARE FABRICS

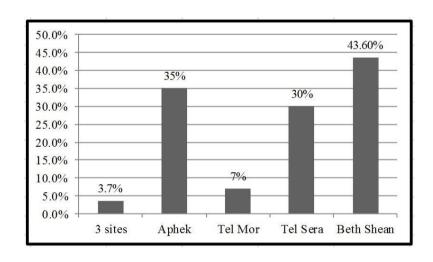
Among the 151 Egyptian vessels, 69 have been directly observed by the author with a binocular lens, and have been sorted by groups (Tables 2, 3 and 4) and illustrated (Plate 1). In many cases, parallels were found in the site or region fabrics, but in a few cases petrographic¹¹ analysis was necessary to identify unknown fabrics and check their provenance.

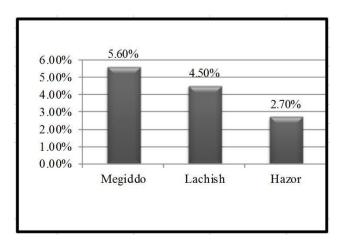
Hazor Fabrics

The 32 vessels from Hazor show a large range of fabrics divided into six groups. Table 2 provides a description¹² of the groups.

Dates BCE	Stratigraphy	Areas/Levels of the Study	Vessels
End 14th-1350	1B-1A	Hazor /Aera P/Phase B-A/Gate	55
End 14th-1350	1B-1A	Hazor/ Aera H/1A-1B/temple	318
End 14th-1350	1B-1A	Hazor/Aera C/1A-1B/Domestic.+temple	197
14th-1350	XIII	Hazor/Aera M/XIII/Compl.Pod.	498
14th-1350	XIII	Hazor/Aera A/XIII/Compl.Cer.	801
End 14th-1350	1B-1A	Hazor/Area F/1A-1B/domestic+ tombs	338
13th century	VII	Lachish/Aera S/VII	199
Late Bronze Age		Lachish/Cemetery 1000/LBII:1005	5
Late Bronze Age		Lachish/Cemetery 500/LBII/570+571	33
13th century	VII	Lachish/FSIII/temple+ around temple	393
13th century	VII	Lachish/P-1/public building	334
13th century	VII	Lachish/Section NE-32/VII	7
13th century	VII	Lachish/VIIB-A/Potter's workshop	13
End 14th-beginning 12th	VIIB	Megiddo/Aera K-7/K-8/domestic	190
13th century	VIIB	Megiddo/Aera AA/VIIB/Palace	31
Late Bronze Age		Megiddo/East Cemetery/tombs LBII	561
14th-13th	VIII-VIIB	I-VIIB Megiddo/F-9/Palace	
		TOTAL	4065

Table 1: Total vessels for the 13th century secure contexts according to the publications9





Figures 1 and 2: Percentages of Egyptian-style pottery and comparison with the Egyptian garrisons in Canaan¹⁰

Fabric	Matrix	Inclusions (F= frequency from 1 to 3)	Reference		
Group HAZ_1	homogeneous brown, yellow or reddish-yellow (according to the conditions of firing)	full of well sorted, angular brown basalt nodules (1 to 2 mm), F(2). Fine-sized inclusions: angular fragments of quartz F(1), well sorted; sub-rounded limestone nodules (up to 1 mm), F(2), well sorted; and rare grey sub-angular nodules (less than 1 mm)	This group could fit with a local fabric identified by D. Ben Shlomo at Hazor (personal communication)		
Group HAZ_2	homogenous red-yellowish matrix, sometimes pink, and characterized by a very fine texture, but similar to Group HAZ_1	fine-sized angular quartz nodules, well sorted, F(2), limestone (up to 1 mm), sub-rounded, F(1), well sorted. Rare and badly sorted brown basalt inclusions			
Group HAZ_3	red to red-yellowish	full of well-sorted limestone. Fine-sized inclusions: rare grey and black nodules, rare red nodules, sub-rounded limestone (about 1 mm), F(1), badly sorted			
Group HAZ_4	yellow-reddish	numerous mineral inclusions: limestone, fine-sized, F(2); red and grey nodules, F(1) well sorted; big angular white or grey limestone (from 3 to 5 mm)	Petrographic analysis revealed a local fabric.		
Group HAZ_5	brown or yellow	fine-sized and rare limestone inclusions, fine-sized, F(2) basalt inclusions, coarse- sized, sub-rounded and badly sorted basalt inclusions	The description is close to Group HAZ_1 and can be considered as local		
Group HAZ_6	The general appearance of the section is yellowish	full of limestone and basalt inclusions of all sizes (fine to 2 mm)	Petrographic analysis revealed a calcareous local fabric rich with inclusions		

Table 2: Hazor fabrics ware groups

Lachish Fabrics

Five different groups of fabrics have been identified at Lachish. Considering that the matrix points to the same source, the Lachish groups differ only in the inclusions (Table 3).

Megiddo Fabrics

All the samples observed for Megiddo by the author come from Area K. Four of them have been previously identified as imports.¹³ The fabrics can be divided in two local groups (Table 4).

Typology (Plates 2-4)

Egyptian forms identified by the author are presented according to their function¹⁴ and placed into five categories: food or beverage consumption vessel, service vessel, food or industrial preparation vessel, storage and transportation vessel, and ritual vessel. Most of the forms have been described in the above mentioned past publications concerning the Egyptian garrisons in Canaan. The author adds to this typology a number of jars, flasks,

and cult vessels which occur in small quantities in the three citystates under study and are presented for the first time as Egyptian forms. ¹⁵ Parallels in Egypt are mentioned for these types. For each type, Egyptian and imitation of Egyptian fabrics are mentioned every time the author has been allowed to cut a fresh section (see Plate 1 for the fabrics).

Category 1: Consumption

Bowls

The criteria used to identify the Egyptian forms are: base, walls and rim forms, traces of manufacturing technique, decoration and fabric. All together these criteria can define four families¹⁶ of bowls: Egyptian plates, open bowls, rounded bowls and simple bowls.

AE-Egyptian Plates (Pl.2:1): These bowls are shallow with a rounded or flat base and an open sometimes everted rim. Diameters range between 20 and 35cm.

Fabric Matrix Group LAC_1 brown core and reddish-yellow outer bands		Inclusions	Reference The black traces point to firing temperatures of at least 700°C. This group corresponds to Group 1 of the Potter workshop (Magrill and Middleton).* The source is a loess deposit situated next to the Potter Shop.		
		filled with sand (rounded quartz) and quartz inclusions (less than 1 mm), F(3), very well sorted, sandy texture. Other inclusions are limestone grains (about 1 mm), rare and badly sorted; very rare fragments of white to grey shells; and small grey nodules. Very rare elongated and uncoated vegetal inclusions and black traces in the section showing a partial carbonization			
Group LAC_2	grey-light brownish core and outer bands light red	filled with fine-sized, angular and well sorted quartz inclusions vegetal inclusions, F(1 to 3) concentrated in the core, leaving black traces after firing. big limestone inclusions with red spots may occur	This fabric is very similar to the Group LAC_1 with the addition of vegetal inclusions.		
Group LAC_3	homogenous and brown	full of sand and quartz inclusions, more than in Groups LAC_1 and LAC_2. The inclusions are mainly limestone, F(1 to 2), well sorted and very fine-sized (less than 1mm); and rounded to subrounded shells, rare and badly sorted.	Similar to Egyptian fabric Marl F known at Qantir (Aston, 2008, 37). Also observed by Martin (Martin and Barako, 2007, 141). The petrographic analysis of the Lachish samples revealed a local fabric which belongs to the Shephela loess group fabric.		
Group LAC_4	outer bands are redder than in the other groups from Lachish and the core is brown or grey. The matrix is similar to group LAC_3	mainly vegetal inclusions and rare fragments of shells	This group fits well with the "Travertine" fabric described by Cohen-Weinberger at Tel Mor. Petrographic analysis confirms a local source, rich in quartz.		
Group LAC_5	zoned with a grey core tending to olive, texture is sandy	very frequent inclusions of fine quartz. Addition of white/grey shells (1 mm), F(2), rare vegetal inclusions, very badly sorted	similar to Group 2 of the Potter workshop		

Table 3: Lachish fabrics ware groups
*In David Ussishkin, The Renewed Archaeological Excavations at Lachish 1973-1994,
(Monographs of the Institute of Archaeology, Tel Aviv University, 22 Tel Aviv, 2004)

Fabric	Matrix	Inclusions	Reference
Group MEG_1	homogeneous or lightly zoned close to the surface; the color is yellowish-brown or reddish	fine-sized limestone and well-sorted quartz inclusions, rare grey nodules, and rare coarse limestone inclusions (1 to 2 mm), both badly sorted.	This group is very close to Group B identified by Aznar for Iron Age pottery which is a local source (C. Aznar, Exchange Networks in the Southern Levant during the Iron Age II: A Study of Pottery Origin and Distribution, PhD diss. submitted to Harvard University, Cambridge, Massachusetts, 2005)
Group MEG_2	homogeneous and brown. texture is hard, hackly and coarse. The general appearance of the section is dominated by white points like an Egyptian Marl D	numerous different inclusions: quartz, F(2 to 3) fine-sized and angular; grey nodules (1 to 2 mm), F(2), angular to rounded; well sorted sub-angular and red nodules, fine-sized, badly sorted; and fine-sized rare limestone, angular and badly sorted	This group could fit well with local Group C identified by Aznar

Table 4: Megiddo fabrics ware groups

Two of them from Lachish are made of a Nile imitation fabric (LAC_2 and LAC_4). From Hazor one AE is made of Marl imitation fabric (HAZ_3), a petrographic analysis on another one revealed a potential origin from the Hermon region, Transjordan or Lower Galilee.

BO- Open bowls (Pl.2:2): Deeper than the Egyptian plates, these bowls have irregular convex walls and everted or modeled rims. Diameters range between 20 and 30cm.

Two BO from Lachish are made of a Nile imitation fabric (LAC_4) and two others, still from Lachish, are made of a Marl F imitation fabric (LAC_3).

BS- Simple bowls (Pl.2:3): Very similar to the open bowls, these bowls have straight walls and simple rims, their base is flat. Diameter ranges between 13.5 and 32cm.

One BS from Lachish is made of a Marl F imitation fabric (LAC 3).

- BR- Rounded bowls (P2.1:4): These bowls are hemispherical and often have a red slip; they are smaller in size than the other bowls and appear to have a more careful manufacture. Diameter ranges between 12 and 23cm, although most are around 12cm. One BR from Lachish is made of a Nile imitation fabric (LAC_4) and one BR from Hazor is made of a Marl imitation fabric (HAZ_3).
- CC-HYB carinated cup (Pl.2:5): This form is a hybrid because these bowls appear in Egypt and in Canaan at the same time during the Middle Bronze Age.¹⁷ It is therefore difficult to give an origin to this form. There are only two carinated cups in this corpus dated to LB II from Hazor. These cups are made with a fine and whitish fabric¹⁸ (HAZ_6) recalling some calcareous fabrics used in Egypt.¹⁹ During the Middle Kingdom, this form is made of Nile fabric at Tell el Dab'a in Egypt.²⁰
- GB- Large bowls (Pl.2:6): The rims of these large bowls can be squared off, folded outside about 3cm, complex, or modeled; their diameter ranges between 35 and 50cm, and sometimes more. Horizontal rope impressions or vegetal impressions often occur on their walls close to the rim. These traces show an Egyptian

manufacturing technique to dry the large vessels.²¹

At Lachish, seven GB are made of Nile imitation fabric (LAC_2 and LAC_4), one is Egyptian, made of Marl D fabric, and one is made of a Marl imitation fabric (LAC_3). Petrographic analysis of one GB from Hazor with a squared rim points to a source in the Hermon region, lower Galilee or Transjordan.

Category 2: Service

This category contains only jars of Egyptian forms. Jugs and plates are of local production and tradition in these three sites during the LBIIB.

JOE-Slender ovoid jars (Pl.2:7): With an open rim and a rounded base, this jar is an 18th Dynasty type in Egypt, but some of them have been found in LBIIB contexts in the three sites under study. The height of these vessels ranges from 30 to 52cm.

At Hazor, this jar is decorated with horizontal bands painted in red, black, and blue (Figure 3).²²



Figure 3: The decorated jar JOE from Hazor

A petrographic analysis confirmed that this jar was made of a local fabric from Hazor.

Blue painted vessels in Egypt, however, are elite items whose production appears to have taken place in urban settlements.²³ This statement fits well with the find context of this jar at Hazor. Possibly the blue pigment was used at Hazor (or on a coastal site) to decorate a locally made jar, then the jar was offered at the

- ceremonial complex, or bought by the ceremonial complex for a special purpose (considering that this jar was unique in Hazor).
- JDEC (Pl.2:8): Ovoid body. Straight cut rims, base unknown. Holthoer describes this vessel as a decanter for the wine service.²⁴ The petrographic analysis of this vessel from Hazor revealed that it was made of a local fabric with the addition of basalt.
- JC1A (Pl.3:1): Ovoid large and short body, with a complex rim and molded pointed base.²⁵
- JC1B (Pl.3:2): Cylindrical body and a pointed base; about 3cm of the rim is going back inside the vessel. Horizontal traces of vegetal impressions occur around the body.²⁶
- JC3A (Pl.3:3): Cylindrical body with squared off rim and a pointed base. The body is slightly enlarged close to the base.²⁷
- JC3B (Pl.3:4): According to the reconstruction drawn in the publication, this form shows an ovoid body with a pointed or rounded base and an open rim.²⁸ Only a body sherd remains for this vessel.
- JC4A (Pl.3:5): cylindrical large and very short body with an open and everted rim and a flat to pointed base.²⁹
- JC4B (Pl.3:6): small cylindrical pot with a "bracket" like profile and a flat base.³⁰
- JC4C (Pl.3:7): a cylindrical pot with a carination close to the disc base and an "overflowing rim". Horizontal black painted decorations on the body. There is no exact parallel to this form but it is very close to the form JC4B, with known parallels in Egypt.
- JC5 (Pl.3:8): a very small vase with a cylindrical body, an everted rim and a flat base.³¹
- PJG (Pl.4:1): globular jar with everted rim and rounded base. Similar shapes also occur during EB periods.³²
- PJPI (Pl.4:2): jar with irregular profile, an ovoid body, an open rim and flat base.³³

- GJC (Pl.4:3): biconical jar with long open neck/rim and a rounded base.³⁴ Horizontal painted decoration on the neck. This jar from Lachish is imported; a petrographic analysis has shown that it was made with a Nile B2 fabric.³⁵
- JNC: unidentified sherds of jars showing Egyptian forms of rims and a fabric close to some Egyptian fabrics. A sherd from Hazor is made of Marl D fabric.

Category 3: Preparation

- FP-Flower pots (Pl.4:4): the function of this form comes from their discovery in situ at Tell el-Dab'a³⁶ where they were used as flower pots, but these pots could also have served different functions,³⁷ such as incense burners for example.³⁸ Unfortunately, none of them have been observed by the author.
- SP-Spinning bowls (Pl.4:5): these bowls were used for linen production and in Egypt are usually smaller with the form of a simple bowl. In this corpus, spinning bowls occur only at Lachish and have the particular shape of a large bowl.

Category 4: Transport and Storage

- TA- handled cup (Pl.4:6): the fine and hard fabric and the treatment of the surface with a horizontal or vertical burnish are relevant to recognize this form which is often broken. The only complete vessel found in the sites under study is a decorated faience vessel from the Fosse Temple III at Lachish.³⁹ The bulk of these cups are imported from Egypt⁴⁰ (transport) for its content which could have been a precious unguent. One TA from Megiddo is an import made of Marl D fabric. From Hazor one TA is made of an alabaster imitation fabric (HAZ_6); a petrographic analysis revealed that a second one might originate from the Lebanese coast.
- FL- The Flasks (Pl.4:7): these vessels have recently been found in archaeological contexts which pointed to a transport function;⁴¹ they are also represented as containers in Egyptian tombs (TT162 of Kenamoun). These forms were probably manufactured by Canaanites, Egyptians, Syrians and Cypriots during the LBA. No consensus exists about their origin and it seems that some types of flasks originate

from Egypt.⁴² A typology of Area F flasks at Hazor⁴³ defines four groups (a, b, c and d). Group (b) flasks are Egyptian imitations with a cream or grey slip made in Canaan. This form is characterized by an elliptic profile, two flat handles which fall vertically on the body and a grey/cream slip, with a triangular or rounded rim.⁴⁴ The grey or cream slip on flasks is also mentioned at Lachish where Olga Tufnell suggests some importations.⁴⁵

AMPH- Amphorae

AMPHT1 (Pl.4:8): these storage jars have a funnel neck, an elongated body with two handles and a button shaped, molded base. They are 50cm tall with a neck of about 10cm. 46 This form is produced in Egypt and in Canaan during the LBA.⁴⁷ These storage jars could be imitations of Egyptian vessels (decoration is a Canaanite motive). One AMPHT1 from Lachish is made of a Nile imitation fabric (LAC 4). Another one shows a clear local decoration suggesting that it was an imitation. A fresh break revealed a zoned section with a brown reddish light core and light red outer bands similar to Egyptian Nile fabrics. The texture is soft, fine-sized, smooth and sandy. Mineral inclusions are mainly rounded sand grains; angular and very well sorted quartz inclusions; rare, fine-sized and badly sorted limestone inclusions; and very rare, sub-rounded shell fragments. Vegetal inclusions are elongated and not totally coated (2mm), which points to a firing temperature of about 700°C. Inclusions are concentrated in the core of the section. To conclude, this fabric looks to be Egyptian Nile B2 (Vienna system). ⁴⁸ Note that Nile B2 is the regular fabric for open forms and water containers during the New Kingdom; this statement could confirm that this jar is an import.

AMPHT2 (Pl.4:9): this storage jar with a carinated molded base with a cream slip (the only remains of the vessel), has been reconstructed with two handles, a large funnel neck and a large ovoid body. This sherd from Megiddo is made of Marl D fabric. If the reconstruction of the shape is correct, the vessel can be dated to possibly Ramesses II, period in which they are generally made of Marl D,⁴⁹ but only a body sherd is preserved here.

AMPHT3 (Pl.4:10): these amphorae are less than 40cm high, their neck is large and elongated and rounded at the level of the two handles, the base is flat and there is a cream slip.

AMPHHYB: this type looks very similar to Type 1, with a longer neck and a local decoration (Figure 4). Unfortunately, these jars have been completely restored with plaster at the British Museum in a way that even their original shape remains doubtful. The restoration also prevents any observation of the fabric.



Figure 4: AMPHHYB, Lachish, restored

Category 5: Cult

BU- Incense burner⁵⁰ (Pl.4:11): Only fragments of feet remain at the three sites. One of them at Megiddo is 28cm high suggesting that these vessels could be burners made of an open bowl (missing) and a foot.

Fabric → Category ↓	Local	Egyptian	Imitation Marl Type	Imitation Nile Type	Imitation Alabaster	Lebanese Coast or Cyprus	Hermon, Transjordan or Lower Galilee
Consumption	27	1	6	12	2		2
Cult	1						
Service	6						
Transportation/storage	6	4		2		1	

Table 5: Fabrics used in each category of the typology

DISCUSSION

The proportion of Egyptianized pottery is much lower than in the garrisons. Only five imports occur among the 70 vessels analyzed from these three sites (Table 5). Except for one bowl, it is not surprising that all the imports from Egypt are containers probably filled with some imported goods.

In most of the cases, the fabrics available around the workshops have been used to manufacture Egyptian imitations, but it is interesting to note that, as in the garrisons,⁵¹ potters sometimes preferred to look for specific clay sources, situated even far from their production area to manufacture these vessels, especially at Lachish. At this site, some fabrics use local clay with the addition of special inclusions in order to better imitate the Egyptian fabrics (fabrics LAC_2 and LAC_4). These potters, if not Egyptian themselves, may have had an accurate knowledge of the Egyptian productions that lead them to select particular raw material resources to create imitations of Egyptian pottery. This statement is true for Lachish, like the garrisons situated on the coast, clearly pointing to a stronger Egyptian influence in this region. At the two other sites, however, there is no evidence of such a phenomenon.

Despite this lack of imitated fabrics, the manufacturing techniques used at Hazor and Megiddo show an Egyptian influence. At Hazor where much less attempt is made to imitate the Egyptian fabrics (with the exception of fabrics HAZ_3 and HAZ_6), a few vessels show a good knowledge of the Egyptian manufacturing techniques. For instance, the use of blue pigment for the decoration, of cords to dry large open forms, and strings to cut the base of a bowl on the wheel are typical Egyptian manufacture techniques.⁵² But among about 2000 vessels from the contexts under study at Hazor, the examples of this know how are few. The very small number of vessels showing this kind of feature

and the strikingly good knowledge visible on these vessels suggest that the Egyptian-style production at Hazor was not made by local potters. It is possible to draw a parallel with the pottery production of Tel Batash at the end of the LBA, and consider the possibility of an itinerant potter⁵³ that visited Hazor and sold his products. Coastal sites could have been the place where these itinerant potters came from and they could have travelled to hinterland sites to sell their vessels. At Megiddo, Egyptian manufacturing techniques and fabric imitation exist but are very rare while the Egyptianized shapes often occur. That is to say that the imitation of Egyptian forms is not linked to the imitation of Egyptian fabrics or manufacturing techniques so must be differently interpreted.

As a result of this study, it is possible to define two different degrees of cultural influence in the pottery production in Canaan. The distance to the sea and to the main contemporaneous harbors is a relevant factor which helps to account for different degrees of involvement within the Egyptian Empire. The hinterland potters know less about Egyptian pottery, but are inclined to imitate the shapes, probably seen at the coastal sites or thanks to rare imports. Where the techniques and fabrics can be identified as Egyptian, the potters were probably Egyptian or itinerant merchants originating from the coastal sites. The Egyptian-style pottery of these three sites might have been bought or produced to serve the purpose of receptions for Egyptian officials (probably at Hazor and Megiddo), service of Egyptian deities (at Lachish and possibly in the other two sites) or banquets with Egyptian tradesmen (at Megiddo on the road to Beth Shean).⁵⁴ Each city-state probably had good reasons to manufacture Egyptianized pottery in the context of a regular or occasional relationship with the Egyptians and their culture.

This study shows how complex the culture of Canaan during the LBIIB was, and sheds light on the regional differences in the context of a long term contact between two civilizations.

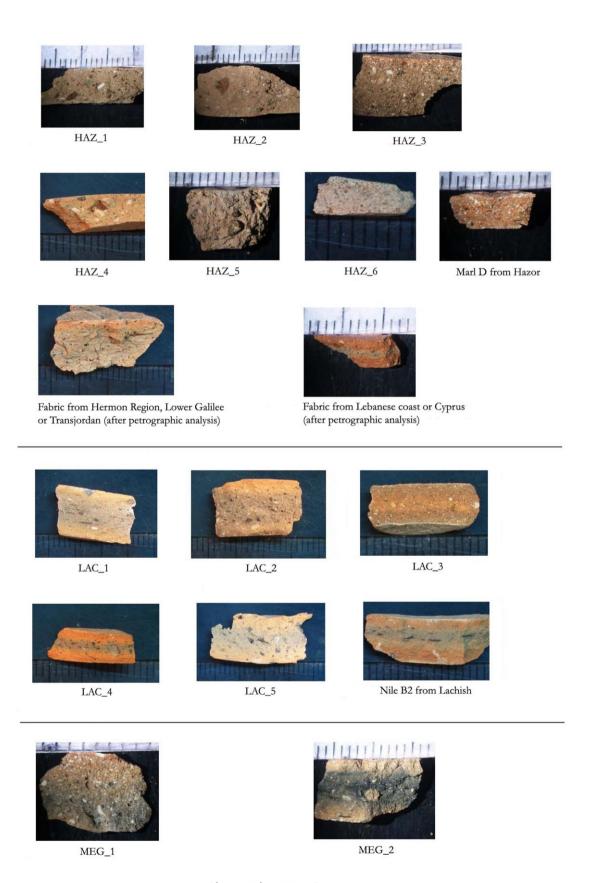


Plate 1: Fabric Ware Groups

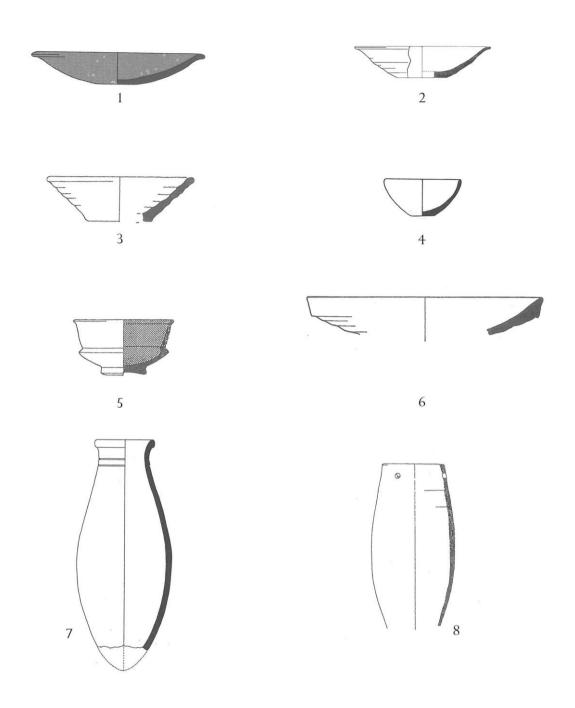


Plate 2: Typology

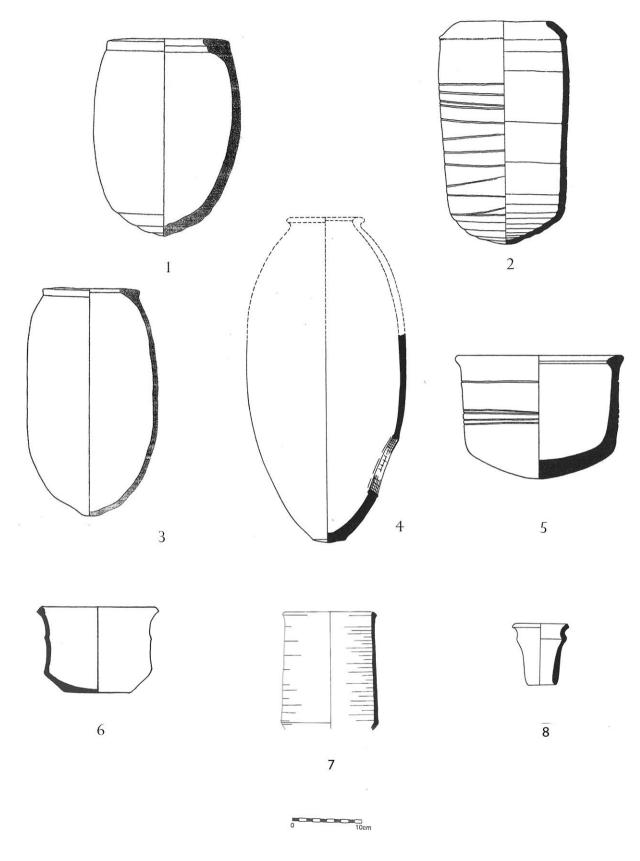


Plate 3: Typology

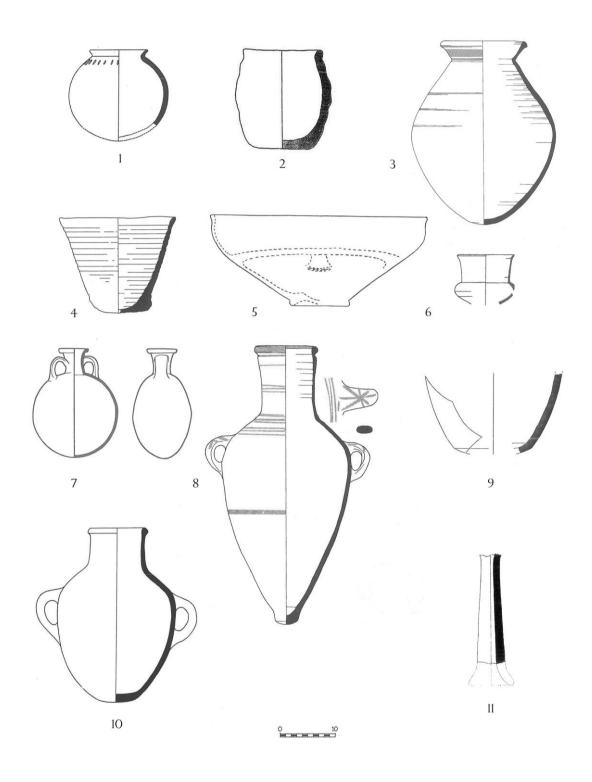


Plate 4: Typology

NOTES

- This paper is a synopsis of the author's published Ph.D dissertation, Katia Charbit Nataf, Céramique et occupation égyptienne au 13ème siècle av. J.C. Etudes de cas de Hazor, Megiddo et Lachish BAR International Series 2490. (Oxford: Archeopress, 2013).
- For an overview of the Egyptian hegemony in Canaan see Micheal G. Hasel, Domination and resistance: Egyptian military activity in the southern Levant, ca. 1300-1185 B.C. (Leiden: Brill, 1998); James M. Weinstein, "The Collapse of the Egyptian empire in the Southern Levant" in William A. Ward and Martha Joukowsky (eds.), The Crisis years: The 12th Century BC. From beyond the Danube to the Tigris (Dubuque, Iowa: Kendall Hunt Publishing Company, 1992), 142-150; Donald.B. Redford, Egypt, Canaan, and Israel in Ancient Times (Princeton: Princeton University Press, 1992); Eliezer Oren, "Governors Residencies in Canaan under the New Kingdom: A Case Study of Egyptian Administration" JSSEA XIV (1984): 37-56; Paul J. Frandsen, "Egyptian Imperialism" in Mogens T. Larsen (ed.), Power and Propaganda: A symposium on Ancient Empires (Copenhagen: Akademisk Forlag, 1979), 167-
- This expression stands for archaeological sites or a building of Egyptian architecture identified as Egyptian residencies by Oren 1984.
- Mario A.S. Martin, "Egyptian and Egyptianized Pottery in Late Bronze Age Canaan. Typology, Chronology, Ware fabric, and Manufacture techniques. Pots and People?" *Egypt and Levant XIV* (2004): 265-284; Mario A.S. Martin, "Egyptian and Egyptian-Style Pottery at Tel Dan," Egypt and the Levant XVII (2007): 191-203; Mario A.S. Martin, "Egyptians at Ashkelon? An Assemblage of Egyptian and Egyptian-Style Pottery", Egypt and the Levant XVIII (2008): 245-274; Mario A.S. Martin, "Egyptian-type Eighteenth Dynasty Pots at Megiddo", Egypt and the Levant XIX (2009): 211-218; Mario A. S. Martin, "A Collection of Egyptian and Egyptian-style Pottery at Beth-Shean" In Manfred Bietak and Ernst Czerny (eds.), The Synchronisation of Civilisations in the Eastern Mediterranean in the Second Millennium B.C. III. Proceedings of the SCIEM 2000 -2nd EuroConference, Vienna, 28th of May - 1st of June 2003 (Wien: Verlag der Österreichischen Akademie der Wissenschaften, 2007), 375-388.
- ⁵ Martin 2004, 2007, 2008, 2009.
- ⁶ Like Beth Shean, Tel Mor, Tel Aphek, and Tel El-Ajjul.
- The Hebrew University excavations at Hazor and Tel Aviv University excavations at Megiddo and Lachish.
- I would like to thank Israel Finkelstein, my advisor, David Ussishkin and Amnon Ben Tor who gave me the permission to study this material. I would also like to thank Sylvie Marchand who introduced me to New Kingdom Egyptian pottery and Sharon Zuckerman for her help.

- This study includes Megiddo V (which was in publication in 2012) and the forthcoming publication of the Late Bronze Age pottery of Hazor with the permissions of the authors.
- Mario A.S. Martin, The Egyptian and Egyptian Style Pottery. Aspects of the Egyptian Involvement in Late Bronze Age and Early Iron Age Canaan. A Case Study. Unpublished Ph.D Dissertation. (Vienna: University of Vienna, 2005). See page 275 for the statistics tables for the garrisons.
- David Ben Shlomo of the Hebrew University of Jerusalem performed the petrographic analysis for this study.
- For the description the author used the methodology of Clive Orton, Paul Tyers and Alan Vince, *Pottery in Archaeology* (Cambridge: Cambridge University Press, 1993), pages 136 and 238 for the description of the inclusions. The measures of frequency is noted 1, 2 and 3 corresponding to 1-10%, 10-20% and 20-30% as a maximum. Sorting measures have been defined in A. Barraclough, "Quaternary sediment analysis: a deductive approach at A-level", *Teaching Geography* 17 (1992):15-18, and can be simplified with three notations: poorly sorted, well sorted and very well sorted.
- Mario A.S. Martin has identified these three vessels as Egyptian imports in Megiddo V (Personal communication before the publication).
- 14 The function of each vessel is discussed in order to understand this classification.
- Based on the typologies in Martin 2004; Ann E. Killebrew, Ceramic Craft and Technology during the Late Bronze and Early Iron Ages: The relationship between Pottery Technology, Style, and Cultural Diversity. Unpublished Ph.D. Dissertation. (Jerusalem: Hebrew University, 1998); Ann E. Killebrew, "New Kingdom Egyptian-Style and Egyptian Pottery in Canaan: implications for Egyptian Rule in Canaan during the 19th to early 20th Dynasties," in Gary Knopper and Antoine Hirsch (eds.), Egypt, Israel and the Ancient Mediterranean World: Essays in Honor of Donald B. Redford (Leiden: Brill, 2004), 309-343; Carolyn Higgingbotham, Egyptianization and Elite Emulation in Ramesside Palestine. Governance and Accommodation on the Imperial Periphery (Leiden: Brill, 2000).
- This typology is intentionally simplified in order to get a clearer view of the corpus for an archaeological interpretation. Inside each type, some variations do exist.
- At Lachish one vessel is dated to the MBA, Olga Tufnell, Lachish III (Tell el-Duweir): the Iron Age (Oxford: Oxford University Press, 1953), Pl.17.12:4; at Megiddo one is dated to MBIII/LBI, Israel Finkelstein, David Ussishkin, and Baruch Halpern (eds.) Megiddo IV: The 1998-2002 Seasons (Tel Aviv: Tel Aviv University, 2006), Pl.12.2: 18.

- The fabric does not look Egyptian, but the surface is treated in order to imitate Egyptian fine productions.
- ¹⁹ Sylvie Marchand, personal communication.
- Some parallels include Thebes: David Aston, Pottery from the Late New Kingdom to the Early Ptolemaic Elephantine XIX. Archäologische Veröffentlichungen 95. (Mainz am Rhein: Philipp von Zabern, 1999), fig.20: f, this cup is a perfect parallel to the cups of Hazor and is dated to the reign of Ramses II by David A. Aston. Deir el Medineh: Georges Nagel, La Céramique du Nouvel Empire à Deir el Médineh. Tome I. Tome X. (Le Caire: l'Institut Français d'Archéologie Orientale du Caire, 1938), Tomb 1182: 9, the foot is higher. Tell el Dab'a: David A. Aston, "Amphorae in new Kingdom Egypt" Egypt and Levant XIV (2004): 1-39. Qantir: David A. Aston, Die Keramik des Grabungsplatzes Q I, Teil 1: Corpus of Fabrics Wares and Shapes, Die Grabungen des Pelizaeus Museums Hildesheim in Qantir-Pi-Ramesse, Band I, (Mainz am Rhein: Philipp von Zabern, 1998), 124-125, fig.222. Elephantine: David A. Aston, Pottery from the Late New Kingdom to the Early Ptolemaic Period. Elephantine XIX. Archäologische Veröffentlichungen 95. (Mainz am Rhein: Philipp von Zabern, 1999), Fig.20: f. Nubia: Rostislav Holthoer, New Kingdom Pharaonic Sites: The Pottery. The Scandinavian Joint Expedition to Sudanese Nubia 5:1. (Copenhagen: Munksgaard, 1977), Type CC3/Flattened base.
- ²¹ Martin 2004, 279.
- Cobalt pigment are described by Andrew J. Shortland, Colin A. Hope, and Micheal S. Tite, "Cobalt Blue Painted Pottery from the 18th Dynasty Egypt", in Marino Maggetti and Bruno Messiga (eds.), Geomaterials in Cultural Heritage, Geological Society of London Special Publication 257 (London: Geological Society of London, 2006), 91-99.
- ²³ See Julia Budka "Festival Pottery from New Kingdom Egypt" in Bettina Bader and Mary F. Ownby (eds.), Functional Aspects of Egyptian Ceramics in their Archaeological Context. (Leuven: Peeters, 2013), 185-213.
- Parallels at Qantir: Aston 1999, vs.96. Nubia: Holthoer 1977, type WD1 slender: I-R/0/g-h. Soleb: Mission Michela Schiff Giorgini, Clément Robichou, and Jean Leclant, Soleb II: les necropoles, (Florence: Sansoni, 1971), Pl.XIV:20.
- Parallels at Saqqara, Tomb Chapel of Paser and Raia: Janine Bourriau and David A. Aston, "The Pottery" In Geoffrey T. Martin, *The Tomb Chapels of Paser and Raia at Saqqara*, EES Excavation memoir 52, (London, 1985), 32-55 and Pl.37: 105.
- Parallels at Qantir: Aston 1998, Fig.608, only a rim sherd establishes this parallel, the walls and the base could be different. The traces of manufacture on this jar and the form of the rim show an Egyptian influence for this type.

- Parallels at Amarna: Pamela Rose, The Eighteen Dynasty Pottery Corpus from Amarna. EES Excavation Memoir 83 (London: Egypt Exploration Society, 2007), MF 1.5:
- Parallels in Nubia: Holthoer 1977, types "FU2 shortnecked" and "JO1 ordinary, rough version".
- Parallels at Amarna: Rose 2007, 225, SF5.1: 331. Tomb Chapel of Paser and Raia: Bourriau and Aston 1985, vs.122. Tomb of Tia and Tia at Saqqara: Geoffrey T. Martin (ed.), The Tomb of Tia and Tia. A Royal Monument of the Ramesside Period in the Memphite Necropolis. EES Excavation Memoir 58 (London: Egypt Exploration Society, 1997), Fig.126: 209.
- Parallels at Amarna: Rose 2007, 219, SE 13.3: 298. Memphis: Janine Bourriau and Kathryn Eriksson, *The Survey of Memphis, Vol. IV: Kom Rabia: The New Kingdom Pottery.* EES Excavation Memoir 93. (London, Egypt Exploration Society, 2010), Fig.63: 4.6.3.
- Parallels at Riqqeh: Reginald Engelbach, Margaret Alice Murray, and William M.F. Petrie, Riqqeh and Memphis VI (London: School of Archaeology in Egypt, 1915), Pl. XXXV: 14. Gurob: William M.F. Petrie, Archibald H. Sayce, Edward L. Hicks, F. C. J. Spurrell, Francis L. Griffith, and John P. Mahaffy, Illahun, Kahun and Gurob, 1888-90 (London: D. Nutt, 1891), Pl.XVIII: 55.
- Parallels for LB/New Kingdom periods at Amarna: Pamela Rose 2007, vs.489. Saqqara, Tomb of Horemheb: Janine Bourriau, David A. Aston, Maarten Raven, and René van Walsem, *The Tomb of Horemheb, commander-in-chief of Tut'ankamun, vol.III: The New Kingdom Pottery* (London: Egypt Exploration Society, 2005), Fig.8: 4. Rifeh, Tomb 223: William M.F. Petrie, *Gizeh and Rifeh* (London: School of Archaeology in Egypt, 1907), Pl.XXVII J.: 334. Qantir: Aston 1998, 218-219, Fig. 680.
- ³³ Parallels at Qantir: Aston 1998, 204-205, Fig. 606.
- Parallels at Rifeh, dated to Tuthmosis III: Petrie 1907, Pl.XXVIII: 332 and 330, for the XVIIIth-XIXth Dynasties: Petrie 1907, Pl.27L: 393. Riqqeh: Engelbach et al. 1915, Pl.XXXVI: 31n and 39g. All the parallels in Egypt are smaller than the Lachish jar.
- David Ussishkin, The Renewed Archaeological Excavations at Lachish 1973-1994, Vol. IV. Monographs of the Institute of Archaeology, Tel Aviv University, 22. (Tel Aviv: Institute of Archaeology, 2004), Table 36.4: 54.
- Manfred Bietak, Josef Dorner, Irmgard Hein, and Peter Janosi, "Neue Grabungsergebnisse aus Tell el-Dab'a und Ezbet Helmi im östlichen Nildelta (1989-1991)," Egypt and the Levant IV (1994): 9-80.
- Adolf Erman and Hermann Ranke, La civilisation égyptienne. Translation by Charles Mathien. (Paris: Payot, 1980), 468.
- Holthoer 1977, 83, claims that the traces come from a secondary use as an incense burner.
- ³⁹ Tufnell 1953, Plate 1:10.
- ⁴⁰ Martin 2004, 272.

- Flasks have been found in the Uluburun ship. Their number (about 60) points to a trade of some goods in these containers, which could be figs according to Cemal Pulak, "The Uluburun Shipwreck and Late Bronze Age Trade" in Joan Aruz, Kim Benzel and Jean M. Evans (eds.), Beyond Babylon, Art, Trade and Diplomacy in the Second Millennium B.C. (New Haven: Yale University Press, 2008), 321.
- Holthoer 1977, 99. Holthoer considers that it has been introduced in Egypt during the campaigns of Amenhotep II in the 15th century BCE.
- Yigael Yadin and Shimon Angress, Hazor II: an account of the second season of excavations, 1956 (Jerusalem: Magnes Press, Hebrew University, 1960), 146-148.
- Parallels at Deir el Balah: Katia Charbit Nataf, La céramique égyptienne à la fin du Bronze recent en Canaan, Paris 1, Mémoire de Master 2 (Université paris 1 La Sorbonne, unpublished 2007), 70. Beth Shean: Charbit Nataf 2007, 67. Tel Mor: Tristan Barako, "Coexistence and Impermeability: Egyptians and Philistines in Southern Canaan during the Twelfth Century BCE," in Manfred Bietak, Ernst Czerny, Irene Kaplan, and Angela Schwab (eds), The Synchronisation of Civilisations in the Eastern Mediterranean in the Second Millennium B.C. III. Proceedings of the SCIEM 2000 — 2nd EuroConference, Vienna 28th of May - 1st of June 2003 (Vienna: Verlag der Osterreichischen Akademie der Wissenschaften, 2007), 509-16, Fig.3.29: 4 and 5. Tel Aphek: Yuval Gadot, Aphek-Antipatris II, The Remains of the Acropolis The Moshe Kochavi and Pirhiya Beck excavations. Monographs of the Institute of Archaeology, Tel Aviv University, 27. (Tel Aviv: Institute of Archaeology, 2009), Fig.8.47: 5, 6, 7, Fig.8.51: 12, fig.8.55: 1, fig.8.59: 11, fig.8.65: 6. Amarna: T. Eric Peet and C. Leonard Woolley, The City of Akhenaten I (London: Egypt Exploration Fund 1923), Pl.51: XXXVIII/91 and 1014; Rose 2007, Fig.638, Type MH 1.1. Qantir: Aston 1998, Fig.2683, Fig.2681, 1944, 2740 and 2796. Thebes Mortuary temple of Merenptah: David A. Aston, Untersuchungen im Totentempel des Merenptah in Theben Bd. IV, The Pottery. Beiträge zur Ägyptischen Bauforschung und Altertumskunde 17. (Mainz am Rhein: Philipp von Zabern, 2008), 45-311, Fig.23: a. Gurob: Guy Brunton and Reginald Engelbach, Gurob (London: British School of Archaeology in Egypt, 1927) Pl.39: 93D and U. Deir el-Medineh: Nagel 1938, Fig.25: 119. Rifeh: Petrie 1907, Pl. XXVIIk.: 391. Qantir: Aston 1998, vs.1691, 1944, 1945 and Aston 1999, vs.47, 48, 79. Dakhla: Sylvie Marchand and Pierre Tallet, "Ayn Asil et l'oasis de Dakhla au Nouvel Empire", BIFOA (1999): 307-352., Fig.21. Nubia, Debeira East: Holthoer 1977, Pl.22, Fig.176/12:05 and Soleb: Shiff Giorgini 1971, Pl.XV: 28.
- ⁴⁵ Tufnell 1953, 217.
- Parallels at Garrisons and harbors in Canaan, Deir El Balah: Trude Dothan, Excavations in the Cemetery of

Deir el Balah. QEDEM 10. (Jerusalem: Institute of Archaeology, Hebrew University of Jerusalem, 1979), tomb 114 and in the domestic areas. Tell Abu Hawam: Jacqueline Balensi, Les fouilles de R.W. Hamilton à Tel Abu Hawam (Strasbourg: Université des Sciences Humaines, 1980), fig.12: 7. A similar storage jar imported from Egypt has also been found at Akko. Within Egypt, according to David A. Aston, "Amphorae in new Kingdom Egypt," Egypt and Levant XIV (2004): 1-39, this type is type B1c; an example comes from the tomb of Tutankhamen. Its base is generally molded and the fabric is Marl D (according to the Vienna System). 18th Dynasty, at Amarna: Rose 2007, vs.589. Saqqara, Tomb of Horemheb: Bourriau et al. 2005, Fig.Fig.55. 19th Dynasty at Deir El Medineh: Nagel 1938, Tomb 1172-1174: 4. Qantir: Aston 1998, vs.1955. Dakhla: Collin Hope, Mark Eccelston, Pamela Rose and Janine Bourriau, "Oases amphorae of the New Kingdom, in Egypt and Nubia: gifts of the desert" in Renee Freedman (ed.), Egypt and Nubia: Gift of the Desert (London: British Museum Press, 2002), Fig.3: j, the decoration looks to be similar to the Lachish vessels. Nubia: Holthoer 1977, Type AO 1 slender/tall necked.

- ⁴⁷ Aston 2004, 187.
- Janine Bourriau, Umm el-Ga'ab: Pottery from the Nile valley Before the Arab Conquest. Exhibition organized by the Fitzwilliam Museum, Cambridge. 6 October to 11-December 1981 (Cambridge: Cambridge University Press, 1981) and Dorothea Arnold, Janine Bourriau, and Hans-Åke Nordström, An Introduction to Ancient Egyptian Pottery (Mainz am Rhein: Philipp von Zabern, 1993).
- Aston 2004, 191, Type B2; M.A.S. Martin is defending this hypothesis in Megiddo V.
- Parallels at Saqqara: Bourriau and Aston 1985, vs.129 with a separation for the food and the incense. Amarna: Rose 2007, vs.34, 35, 36 and 37. Deir-el-Medineh: Nagel 1938, Tomb 1153-55, p.61: 8, 16, Tomb 1164, p.73. Riqqeh: Engelbach, Murray and Petrie 1915, Pl.XXXVIII:88p. Nubia: Holthoer 1977, 107 and 185/507: 10, 185/166: 3, 318/0: 7.
- 51 See Anat Cohen-Weinberger, "Petrographic Analysis of the Egyptian Forms from Stratum VI at Tel Beth-Shean" in Seymour Gitin, Amihay Mazar, and Ephrain Stern (eds), Mediterranean Peoples in Transition. Thirteenth to Early Tenth Centuries BCE (Jerusalem: Israel Exploration Society, 1998), 406-412.
- ⁵² Martin 2004, 278-279.
 - Nava Panitz-Cohen, "The Organization of Ceramic Production during the Transition from the Late Bronze to the Early Iron Ages: Tel Batash as a test case" In Christoph Bachhuber and R. Gareth Roberts (eds), Forces of Transformation: the end of the Bronze Age in the Mediterranean (Oxfored: Oxbow Books, 2009), 184-190, defends the existence of traveling potters in Canaan during the Late Bronze Age.
- ⁵⁴ Charbit Nataf 2012, 119-122.