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HELLENISTIC STAMPED AMPHORAE FROM BEIRUT (SITE CODE BEY 004)

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Thanks to Dr. John Hayes who was the first to draw our attention to these new type of amphorae and to point out to us the meaning and significance of these stamps.

This short paper discusses a series of Hellenistic stamped amphorae from site BEY 004. The importance of this short survey is that it contributes towards a further understanding of a class of local and regional pale yellowish/yellow-brown amphorae that are distinguished by their shapes that combine both the traditional Phoenician jars in their upper part (especially the ring handles) and the Hellenistic pointed hollow toe. Ribbing or ridging characterizes the surface treatment of these vessels. Ridging is seldom found on west Mediterranean amphorae of the Hellenistic period whereas it is a traditional treatment on east Mediterranean amphorae and jars. It is considered that ridging on the body was probably intended to prevent slippage of the ropes that tied the vessels together (Zemmer A. 1977, 35).

These vessels are mostly neckless but those of the later type have very short necks. Though no complete vessels were found, it was possible to restore complete profiles. They all have the same body shape but differ in size. The earlier amphorae are

taller and broader (66-70 cm high, and about 34 cm across (fig.32), while the later amphorae measure about 50-51 cm high, and 28 cm across (fig.33). However, the major difference among these amphorae are the rim shapes (see catalogue below).

The second distinguishing characteristic of this class of amphorae is the broad ring handle that often bears a stamp of two or three lines of Greek letters. According to Hayes these letters spell out possible Phoenician names and Greek numerals giving date by year. These amphorae span the middle decades of the 2nd century BC (Hayes, 1999).

The stratigraphical contexts of these amphorae show that they began to appear around the late 3rd BC, flourished during the 2nd century BC and continued down to early 1st BC. Their absence from later levels indicates that they may have ceased to be used around mid 1st century BC¹. As a further corroboration of this dating is the occurrence in the same contexts of a well known class of fine vessels which are very common in Hellenistic levels both in western and eastern Mediterranean sites (see Christensen, A. Paparicolaou 1971; Hayes, J.W. 1991; Waagé, O. F. 1948; Gassner, V. 1997; Goldman, H. 1950; Thalmann, J.-P. 1978; Briand, J. 1980; Cox, D. H. 1949; Stern, E. 1995).

¹ In fact, I cannot be sure if these amphorae types continued during the 1st century BC, since the finds from the stratigraphical contexts pointed to a gap in settlement at Beirut from the beginning of 1st century BC to around 27 BC.

This large family of amphorae is the most dominant form of the Hellenistic period. It occurs in considerable quantities in all Beirut sites, and accounts for 83.5 % of all amphorae types. This situation however, does not necessarily imply that we can safely pinpoint the origin of these amphorae to Beirut, since Beirut fabric is quite different from the fabric of the amphorae in question .

A petrological analysis of Beirut ware has been undertaken by Dr Abdul Rahman at AUB (in Saghie, 1996) and shows that Beirut clay is distinguished by its reddish-brown color while the common inclusions consist of quartz, angular rock fragments (mostly shale and silt stone), rare feldspar and opaque iron oxides (see also Dubertret L. 1945, for description of the Beirut sandy clay red soil).

Although no kiln sites have yet been found, several source candidates could be presumed for a ware that ought to have been produced on or near the coast, which is wholly unsurprising, since such vessels would be easy to transport by sea.

Personal investigations have been made for both published and unpublished excavation records in order to pinpoint the most likely origin for these amphorae types. On the basis of published data, none of these forms have yet been identified: Coastal sites include " Oumm el-amed ", 20 km south of Tyre on the southern Phoenician coast (Dunand M. and Duru R. 1962). The excavation of the shrine of Apollo at Tyre (Bikai, Fulco, and Marchand 1996) provide no evidence for the existence of such amphorae .

Further approach, however, in comparing these new types of amphorae with the material coming from the Phoenician sites, has led to the following:

The characteristic Hellenistic Tyrian amphora type (Bikai, *Ibid*, fig. 87: 1-3) has straight conical shoulders meeting the wall at a right angle. The body is bag-shaped with two small loop handles that are attached on the junction between shoulder and upper body. This form continues the Persian

period tradition; it occurs along with our new amphorae types in the Hellenistic levels (2nd century BC). This amphora is very common and is found in almost all Palestinian sites (see Briend, J. 1980, pl. 7., figs. 4 and 8; Stern, E. 1995, fig. 6.38: 1-6 and fig. 6.66: 21 - 22; Berlin, A. 1997, pl. 57, pw 480; Stern 1973: 211-213, Type Hazor: 7-9; Zemmer 1977: 32-35 n^{os}. 27-28) .

On the other hand, no evidence of the new amphorae types (subject of this paper) has been recorded from any of the above mentioned sites, nor does the clay source precisely match any known Palestinian clays. Palestine, therefore, is unlikely to be the origin of the amphorae in question .

Besides there is an essential problem in attributing these forms to Tyre. Surveys have shown a wide distribution of the typical Tyrian amphorae in Palestinian sites. The question is, if these new amphorae types have in fact originated in Tyre, one would expect to find them in Palestinian sites as well, but the evidence is to the contrary. In fact it is astonishing that these amphorae types have such a limited distribution.

Sarepta: no evidence of these amphorae types can be identified though the Tyre amphora type is present (Khalifeh, 1988, pl. 28, SJ-20 A-D).

Inspection of the pottery from the storage room in Byblos showed no existence of these amphorae types. Besides, the fabric is different and does not match the clay of Byblos (Personal investigation).

A visit to Tell Arqa excavations (thanks to Dr. Thalmann who showed me the pottery from the site and made available the published material (Thalmann 1978 - Lehmann 1994), provided a negative evidence. Not a single sherd of this type of amphorae was found there.

One encounters the same condition on coastal sites in Cyprus, especially that in Paphos (Hayes 1991). In fact I had no access to pottery from other Cypriot sites.

The pale yellowish semi-fine fabric of Phoenician tradition may suggest that these vessels could have

originated in the Sidon region, and it may be assumed that this city had more influence on Beirut (Hayes *Ibid*, 2). We have to take into consideration El Nabi Younes, in Jijé and Khaldé sites which may play important roles in providing Beirut with these vessels .

Archaeological evidence from new excavations in the Tyre / Sidon regions is needed to verify the issue of the provenance of these new amphorae types.

The Berytians may have imported clays and temper from neighboring regions to be produced in their own kilns. This may explain the considerable quantities that have been attested from all Beirut sites.

Dishes, plates, lamps and other forms of semi-fine vessels which have occurred in the same contexts along with these amphorae (very similar in fabric) have also been found in most Hellenistic sites, in particular the Palestinian and Lebanese sites; the manufacture of these vessels might be attributed to the same source as the amphorae. Samples of these semi-fine vessels which have been tested by both petrographic and neutron activation analyses (NAA) present a chemical pattern similar to that of some pottery from north Palestinian coastal sites. (Berlin 1998: 77).

All samples submitted for thin sectioning revealed a fine, dense clay matrix with mineral temper (fine sand), fragmentary and crushed gastropod shells, and occasional clam shells (Rautman 1997: 216-27, fig. 2). This would indicate that the temper, and probably the clay source as well, should be on or quite close to the coast.

THE STAMPS

The study of stamp impressions is very important to archaeologists as dating evidence and for determining the provenance of amphorae. Apparently these stamps were made by impressing a die into the soft clay of the vessels before firing in the kiln at workshops where the amphorae were made; the stamp was usually set on the top of the handle (Grace 1934; 1947; 1961).

Many stamped handles have been found in site Bey 004, but only samples of ten stamp impressions were selected for the purpose this paper. Generally, our stamps are distinguished from the Greek and regional stamped amphorae by the square shape of the stamp impressions. Almost all of the stamp impressions bear the symbol **L** followed by short Greek inscriptions ². Sometimes letters at either edge of the stamp fail to get impressed. This happens because the die with its flat surface (the stamp) gets impressed on a curved ring handle.

The occurrence of character **L** as a symbol on Greek impressions is generally seen on Egyptian coinage, both under the Ptolemies and under the Roman Emperors. This sign is also used in papyrus inscriptions showing that the characters, which follow it, are numerals ³. In Egyptian terms the character **L** means ETOYΣ (year), and the numerals are sometimes preceded by this word, for instance, ETOYΣ ΠΑΓ: year 133 (Head B.V. 1911). (see table 1).

This mode of expressing dates is taken from "Head B.V. 1911".

- 2 The Greek inscription stamping on local amphora type appears to belong to the Greek tradition of stamping storage jars.
- 3 The same sign (L) is sometimes found on Palestinian stamps (see Dor 1995) and Phoenician inscriptions (see *Syria Tome LIX* 1982) .

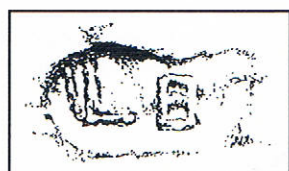
Table 1. The mode of expressing dates is as follows :

GREEK LETTERS	GREEK LETTERS	CORRESPONDING VALUE	
A	α	1	Units
B	β	2	
Γ	γ	3	
Δ	δ	4	
E	ε	5	
(ς)	(ς)	6	
Z	ζ	7	
H	η	8	
Θ	θ	9	
I	ι	10	Tens
K	κ	20	
Λ	λ	30	
M	μ	40	
N	ν	50	
Ξ	ξ	60	
O	ο	70	
Π	π	80	
(Ο)	(ο)	90	
P	ρ	100	Hundred
Σ	σ	200	
T	τ	300	
Υ	υ	400	
Φ	φ	500	
X	χ	600	
Ψ	ψ	700	
Ω	ω	800	
(Ϡ)	(Ϡ)	900	

The selected stamp impressions, found on the upper curved part of the handle, are generally square-shaped but a few are oval or rectangular. The variety of the inscriptions show that many dies have been used. They all have Greek letters; very few have the inscription combined with monograms (fig. 10).

The short Greek inscriptions following the **L** symbol must be read as numbers, as mentioned above. On some examples, however, the symbol **L** has been dropped from the beginning of the inscription and the short Greek inscription then might indicate a personal name.

Most of the stamps (1:1) bearing the symbol **L** are presented as follows:

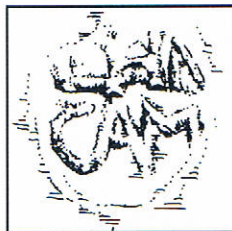


1. Near rectangular-shaped stamp (2.4cm x 1.4cm), which contains the symbol **L** with letter **B** (*beta*) - **LB** = year 2⁴; the remaining (if any) not preserved. There is a vertical stroke (|) appearing before symbol **L** that may refer to an abbreviation of a numerical value (Avi-Yunah 1940).



2. Near square-shaped (3.1cm x 2.1cm) impressed in two lines, which contains the symbols **LB** with an uncertain letter that may, with letter **B**, build up the definite date of producing this amphora type. The short Greek inscription in the lower line consists of four letters, the possible word **CAMM** (**A**)⁵, which occurred frequently on many stamps of this type could either be for a common name or a

combination of both name and symbol which could refer to the contents of the amphorae ⁶.



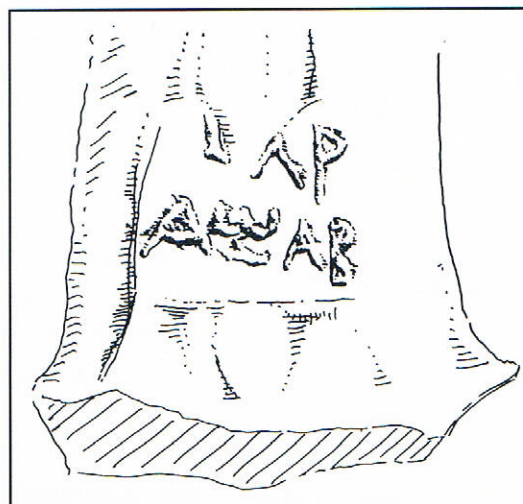
3. Near oval-shaped frame (2.6cm x 2.3cm) which may contain symbol **L** (upper part not well preserved) with possible **H** (*eta*) and **A** (*lambda*) letters - **HA**= year 38; followed by word **CAMMA** written in abbreviated formula (**CAM**).



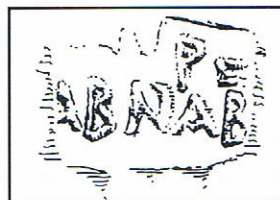
4. Square-shaped frame (2.6cm x 1.8cm) with round corners. This stamp contains symbol **L** (but with ρ head) and letter **M** (*mou*) - **LM** = year 40; followed by word **CAMMA** which appears in two lines. The three exhibited styles of expressing the word **CAMMA** show that three different dies have been used to represent **CAMMA** in a particular way. It is also probable that such an alphabet of punches were used by the potters for the individual letters which enable them to make new dies of professional appearance in short order (Grace 1935).



5. Near square-shaped stamp (2.5cm x 2.0cm) with round corners, which contains symbol **L** with letters ϵ (*epsilon*) and **K** (*kamma*) - **LEK** = year 25; followed by abbreviated word of two letters **BA** which may refer to a personal name.



6. Near square-shaped stamp (3.3cm x 2.7cm) which contains the symbol **L** (not well preserved) with letter **A**- **LA** = year 30; followed by five letters: **PAΨAB**, which appear in two lines; the letters which are unidentified, may indicate, as well, abbreviated names: **PAΨ**=?, **AB** = (**ABΔOiM** ?) fig. 6.



7. Square stamp (2.7cm x 2.0) impressed with two lines; the symbol **L** with the probable numeral letter, above left, which are never preserved. Letter **P** with an unidentified symbol appears in the same line. This symbol could be a wedge ⁷ for the separation of two words which often appears in Greek inscriptions; or may also be an acrophonic abbreviation for artab (αρταβη), a measure of capacity used in Palestine measuring between 25 and 45 litres (Stern 1995). The short Greek inscription that con-

4 See Dor 1995, pp. 481- 487 for comparable examples with reference to LB.

5 Some stamp impressions which contain personal names (local potters' names) were written in full or in various abbreviated formulae.

6 See Dor 1995.

7 The wedge is a very common symbol on stamps of the Dor group (see Dor 1995).

sist of five letters in the second line **ABNAB** could be separated into two abbreviated words: **ABN** = son?, and **AB** = **ABΔOIM**? (personal name).



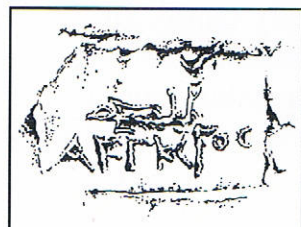
8. Near rectangular stamp (3.5cm x 1.5cm) impressed with one line, which contains an inscription of six letters

that could be read as a full name = **ABΔOIM** (manufacturer name).



9. Near rectangular stamp (2.5cm x 1.3cm) impressed only with two letters: **M** (not well preserved) and the probable **Φ**. These two letters

which are not clear, may be read as monograms in the form of letters **MΦ**⁸, which are probably used as a conventional sign representing official stamps of the province (Stern 1982).



10. Rectangular-shaped frame (1.9cm x 3.0cm) bearing a miscellaneous stamp, which is similar to the well known stamped Greek transport amphorae

as to their stamps, but with probable Phoenician letters written in a reversed way. Above the inscription appears an unidentified monogram.

Considering the **L** and the following character(s) on the stamps as dating evidence, we may suggest to what era they may have belonged; but since we have no evidence whether Berytus had an era of its own similar to that of Sidon and Tyre, we have to rely on the latter sites for dating.

For this reason two main points must be taken into consideration:

- The nearest city that could have had influence on Beirut during the Hellenistic period.
- Matching the possible chronological evidence from the stamp with the typological and stratigraphical evidence already noted above.

The Seleucid and Ptolemaic eras (312/11 & 311/10 BC)⁹ would certainly be too early for the date derived from the stratigraphical evidence (2nd century BC). Turning to local eras, especially

those of Tyre: a. the era that begins in 267 BC is also still a little early and does not match the dating criteria. b. the following era of Tyre (126/5 BC) is most probably too late for the typological and stratigraphical evidence encountered.

The era of Sidon that begins in 202 BC would be more preferable, because if we consider, for example, fig. 3: **LHA** to be read as = year 38, the resulting date would be = 164 BC (165?) which matches very well with the date derived from the typological and stratigraphical evidence.

TYPOLGY

The present typology represents an examination of the series of jars saved from Room 127, deposits 9008,9010,9012 in square VI J situated on the northern side of the excavation. At the start of that examination, three main types were recognized by the rim shape and body size. Two of these types are divided into two or more subtypes. The first two are distinguished by their rims which are set directly on the rounded shoulders (fig. 11-18/19-23). These are normally about 65-70 cm in height, and 34 cm across. The latter has a short neck and is about 51.5 cm in height and about 28 cm across.

TYPE 1 is divided into three subtypes:

TYPE 1A (figs. 11-12) represented by its simple square rim, which is slanted towards the outside.

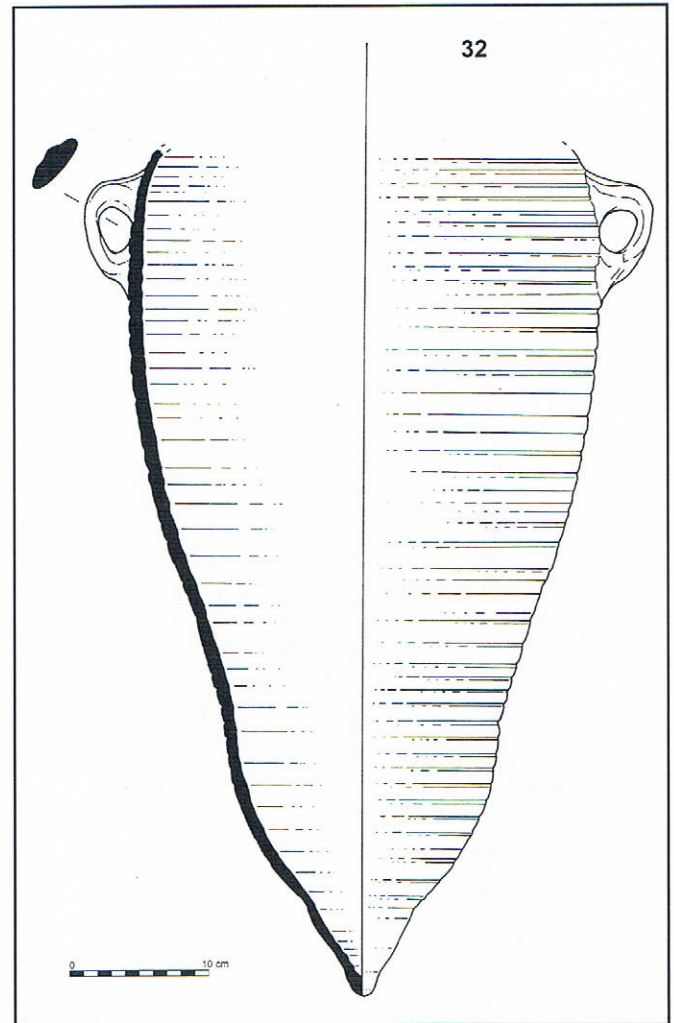
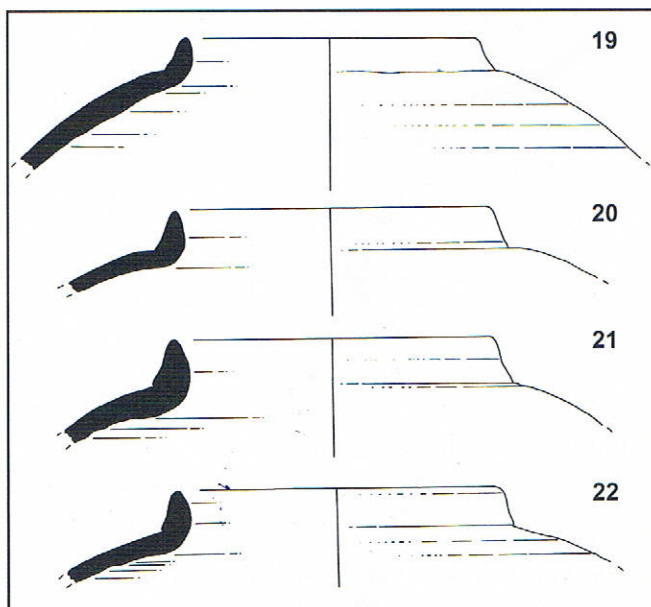
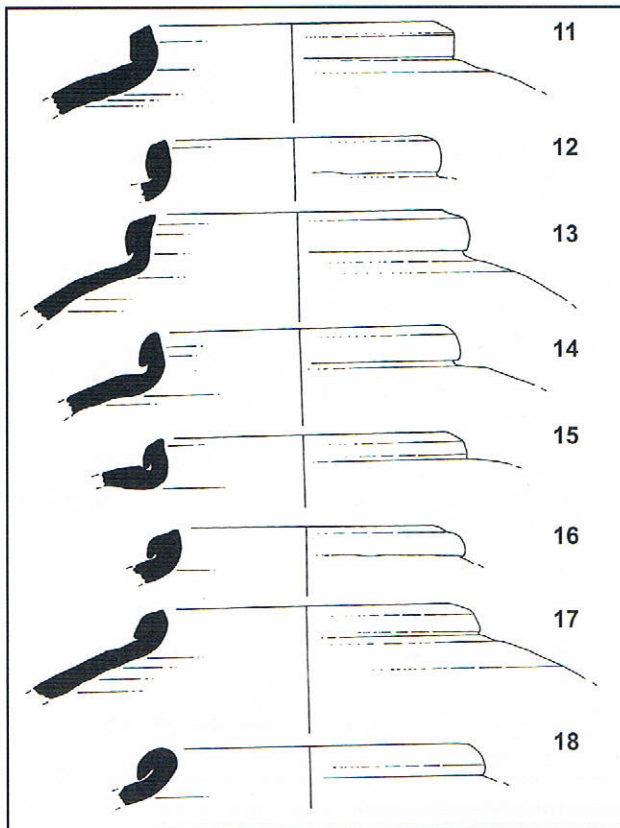
TYPE 1B (figs. 13-16) has short, folded rim, slightly square in section, ending in round point.

TYPE 1C (figs. 17-18) has short folded rim, rounded in section.

This type is characterized by its stamped handles indicating a date around mid 2nd century B.C. (see above). The ware is probably of regional manufacture (Sidon?), sandy fabric, made of yellowish red to buff clay with fine lime stones, quartz grains and few black and red inclusions. All three subtypes have a long, spindle-shaped body ending in pointed hollow spike, with round shoulders and a pair of ring handles, mostly stamped, attached to the upper body (fig. 34).

⁸ The practice of employing seals inscribed either with personal names to designate ownership or office, or with monograms is also known in the Persian period and may have continued to be used during the Hellenistic period.

TYPE 1A appeared in late 3rd century and flourished into the 1st half of the 2nd century B.C. when it was slightly modified with Types 1b and 1c: the rim shows the folding in section with its pronounced round point on top. This modified rim seems to be later than the square rim.



TYPE 2 is characterized by its vertical rim ending in a sharp point (triangular in profile). The body shape is similar to that of type 1 and comes from the same manufacture, which indicates a close link with type 1. This type of jar is probably stamped and it seems that it does not appear before the turn of mid 2nd century B.C. and continued to the end of the century.

TYPE 3 related vessel, lacking the stamps, is divided into three subtypes. These are present in almost the same fabric, but differ in clay color, probably due to the kiln exposure.

TYPE 3A (figs. 23-26) represented by its very short conical neck, and vertical flanged rim ending in slightly sharp point.

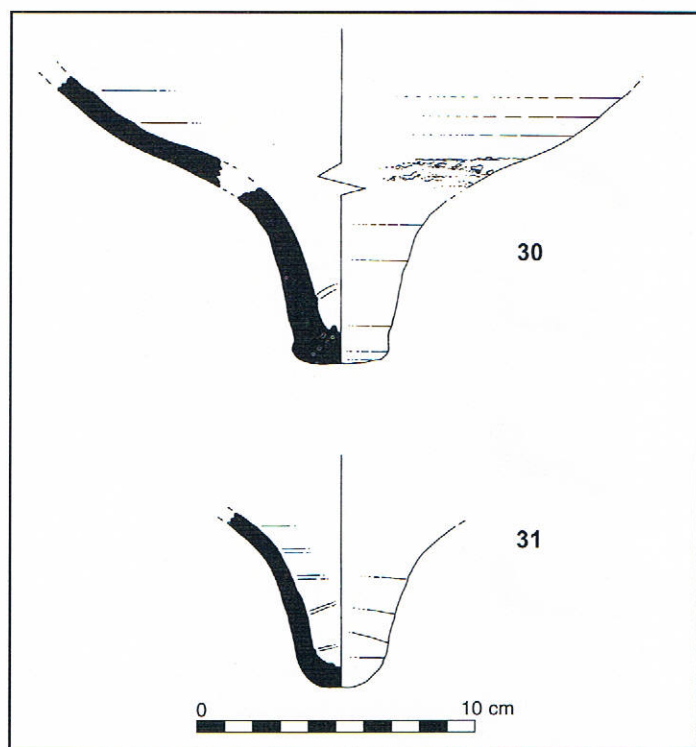
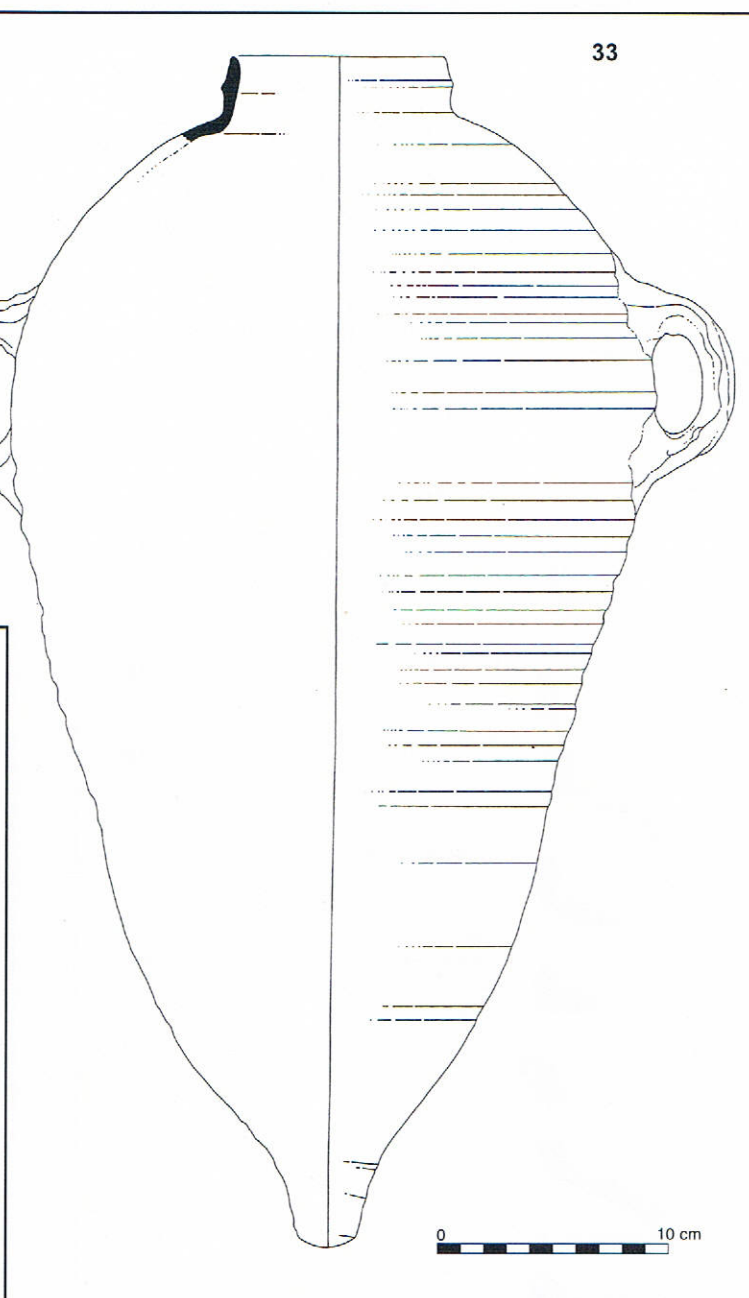
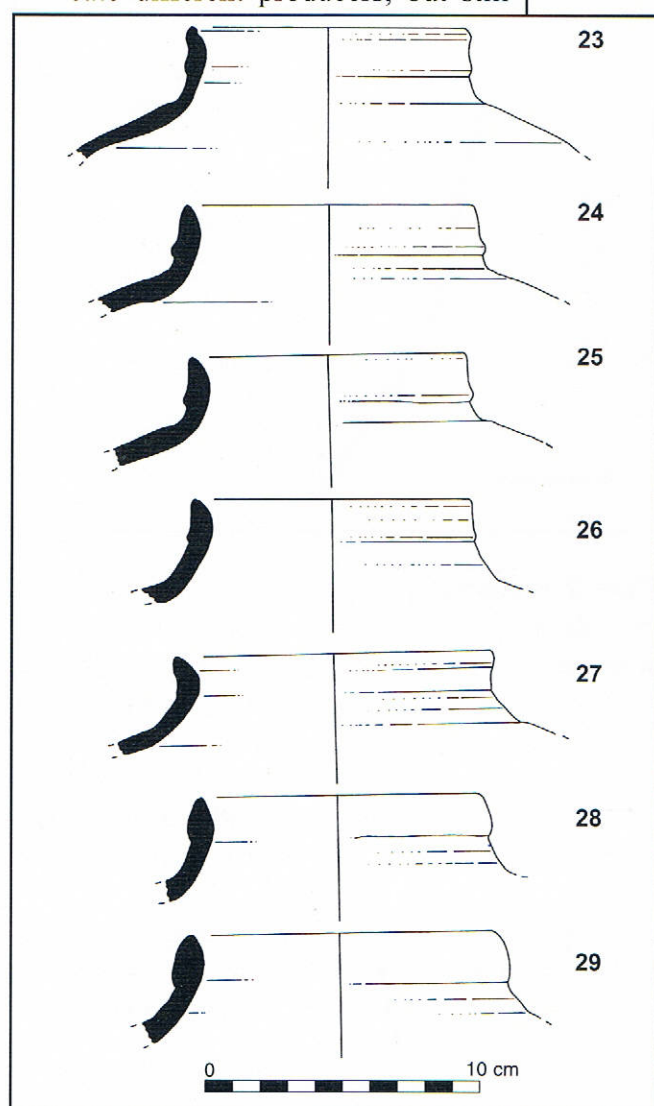
TYPE 3B (fig. 27) has wider mouth with flaring, flanged rim and short conical neck.

TYPE 3C (fig. 28-29) has a thickened rim with a round point at the top and a short conical neck.

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with thicker walls. Although type 3 preserves the same body shape of those of types 1 and 2, it differs in size and fabric (similar ware but varies in frequency, size and sorting). These distinctions of fabric and size indicate different producers, but still



within the same region. Its smooth and hard-fired surface fits more comfortably into an unstamped series.

TYPE 3 is represented by a well-preserved example (fig.35) from the American University of Beirut Museum collection (AUB, accession n° 155). The findspot indicates a date ranging from

around c. BC 135 to 100 +.

CATALOGUE

Table 2. Quantified list of Amphorae RBHB from deposits VI G 9008,10,12 for all amphorae types.

Amph. Type	Rim	Base	Handle	Body	Total
New amphorae type	41	14	97	2479	2631
Tyre amph.	2	-	1	27	30
Basket amph.	-	3	7	9	19
Local amph.	4	-	-	12	16
North African amph.	-	-	5	83	88
Rhodian amph.	4	2	7	211	224
Knidian amph.	1	-	1	13	15
Koan amph.	-	-	2	-	2
Unclass.amph.	2	1	3	119	125

SQUARE RIM JAR

11. 9012 / 3- Jar, Type 1a. Single rim fragment. D. rim 10.0, Th. 0.8. Reddish yellow clay [5YR 6/6]. Sandy, with fine lime stones, sub-rounded quartz grains and some rounded black and red inclusions. Simple square rim sits directly on the rounded shoulder (fig. 11).

12. 9012 /6- Jar, Type 1a. Single rim fragment. D. rim 9.0, Th. 0.6. Reddish yellow clay [5YR 6/6]. Same fabric. Slightly square rim, more rectangular (fig.12).

13. 9012 /1- Jar, Type 1b. Single rim fragment. D. rim 10.0, Th. 0.6. Reddish yellow clay [5YR 6/6]. Same fabric. Slightly square rim, rolled to a hooked outer lip, with a pointed inner lip (fig.13).

14. 9012 /2- Jar, Type 1b. Single rim fragment. D. rim 10.0, Th. 0.6. Reddish yellow clay [5YR 6/6]. Same fabric. Similar rim shape, but smaller and more vertical (fig.14).

15. 9012 /4- Jar, Type 1b. Single rim fragment. D. rim 10.0, Th. 0.6. Reddish yellow clay [5YR 6/6]. Same fabric. Similar to above but smaller and sunk into the shoulder (fig. 15).

16. 9012 /7- Jar, Type 1b. Single rim fragment. D. rim 9.0, Th. 0.6. Reddish yellow clay [5YR 6/6]. Same fabric. Short, folded rim with a finger groove on top. (fig. 16).

17. 9012 /5- Jar, Type 1c. Single rim fragment. D. rim 10.0, Th. 0.6. Yellowish red clay [5YR 5/6]. Same fabric. Short folded rim, splayed on top. (fig. 17).

18. 9012 /8- Jar, Type 1c. Single rim fragment. D. rim 10.0, Th. 0.5. Yellowish red clay [5YR 5/6]. Same fabric. Short, folded rim, rounded on top. (fig. 18).

VERTICAL RIM JAR

19. 9010 /8 - Jar, Type 2. Two joining fragments preserve about 1/3 rim and shoulder. D. rim 10.0, Th. 0.8. Yellowish red clay [5YR 5/6]. Sandy with fine lime stones, sub-rounded quartz grains and some rounded black and red inclusions.

Vertical rim ending in a sharp point at top (triangular in profile). Round shoulder with shallow ribbing.

20. 9010 /10 - Jar, Type 2. Single rim fragment. D. rim 11.0, Th. 0.5. Reddish yellow clay [5YR 6/6]. Sandy with fine lime stone and quartz grains (same inclusions). Rim triangular in section.

21. 9010 /9 - Jar, Type 2. Single rim fragment. D. rim 11.0, Th. 0.6. Reddish yellow clay [5YR 6/6]. Same fabric. Thicker rim and walls.

22. 9010 /11- Jar, Type 2. Single rim fragment. D. rim 11.0, Th. 0.6. Yellowish brown core [2.5 Y 6/3], reddish yellow margin [5YR 6/6]; surfaces smoothed and covered with cream wash. Same fabric. Short rim ending at top in round point.

FLANGED RIM JAR

23. 9010 /3 - Jar, Type 3a. Five joining fragments preserve 2/3 of the rim. D. rim 9.8, Th. 0.3 - 0.5. Hard-fired, thin-walled. Dark greyish brown core [10YR 4/2], interior margin: reddish brown [5YR 4/3], interior and exterior surfaces fired reddish yellow [5YR 6/6]. Gritty, fine lime and abundant fine and medium quartz grains with some red and black inclusions. Vertical, slightly everted rim with a flange on outer face, and short neck meet the shoulder with a ridge and marked with a narrow groove on inner lip (fig. 23).

24. 9010 /2 - Jar, Type 3a. Single rim and shoulder fragment. D. rim 10.4, Th. 0.7. Red clay [2.5 YR 4/8]. Smooth surface. Same fabric. Vertical rim with a flange on outer face and short neck (fig. 24).

25. 9010 /5 - Jar, Type 3a. Single rim fragment. D. rim 10.0, Th. 0.7. Red clay [10 R 5/8]. Same fabric. Slightly everted rim with a flange on outer face. Short neck meeting the shoulder with a shallow ridge (fig. 25).

26. 9010 /4 - Jar, Type 3a. Single rim fragment. D. rim 10.0, Th. 0.6. Red clay [2.5 YR 5/8]. Same fabric. Similar to 7010 /2, but with higher conical neck (fig. 26).

27. 9010 /1 - Jar, Type 3b. Two non-joining rim fragments. D. rim 11.4, Th. 0.5. Hard-fired. Thin-walled. Red clay [2.5 YR 5/6], surface fired very pale brown [10 YR 7/4]. Spongy, smooth surface. Same fabric. Small folded, everted rim with short conical neck joins the rounded shoulder with a shallow finger groove (fig. 27).

28. 9010 /7 - Jar, Type 3c. Single rim fragment. D. rim 10.0, Th. 0.6. Red clay [2.5 YR 4/6]. Soapy surface. Same fabric. Vertical, swollen rim with short conical neck (fig. 28).

29. 9010 /6 - Jar, Type 3c. Single rim fragment. D. rim 11.0, Th. 0.8 -9. Red clay [2.5 YR 5/8] with pink wash [7.5 YR 7/4] on exterior. Spongy. Almost same fabric. Thick-walled. Thickened rim with ribbed, short neck (fig. 29).

30. 9010 /16 - Jar Two non-joining fr. preserve base and part of lower body (fig.30).

31. 9010 /17 - Jar. Single base fr.(fig. 31).

CONCLUSIONS

Survey of the present material shows that these amphorae are the dominant amphorae type in deposits dated to the mid Hellenistic period (2nd Century BC). A rough estimate of the quantities from 7008, 7010 and 7012 deposits gives a figure of c. 83.5 % of the total amphora RBHB (see above).

The argument has its flaws and the phenomenon still requires more reasoned explanation regarding the origin of these amphorae (Hayes.1999).

This is obviously the case of Beirut as these amphorae were found in large quantities there. Moreover, these amphorae are rarely found as exports anywhere, especially in the neighboring regions (very few fragments occur in Kamid El Loz site, personal investigation thanks to Prof. Dr. Marlies Heinz who showed me the pottery from the site); also it has not reached Palestinian sites nor sites north of Beirut (e.g. Byblos and Arqa).

Both fabrics and typological development of these amphorae suggest that they were produced by several potters in the mid Hellenistic period. Chemical analysis is essential to be able to provide the raw data needed to determine the production spot.

The origin of these vessels can not be determined, but the variety of their clays may indicate that they come from different centers within the same region. The considerable presence of these amphorae (fragmentary) suggests a possible neighboring area to the South of Beirut.

In all, these new forms and fabrics may indicate a major change in the economic panorama of the region that comes about by the 2nd century BC. It is important that further work needs to focus on defining the local and regional amphorae and the fabrics of important sites in the Tyre and Sidon region. Not that these are the only unexplored major ports on the coast or inland. The Beqaa valley's role in the local economy is also completely unknown, especially Baalbeck, which is a very interesting site to be investigated.

BIBLIOGRAPHY

Avi-Yunah, M.,

1940, *Abbreviations in Greek inscriptions. The Near East, 200 B.C.-A.D. 1100* (QADP Supplement to Vol. 9), Jerusalem, 114.

Berlin, A. M.,

1997a 'The Plain Wares, pp. 1-211, in *Tel Anafa II, I: The Hellenistic and Roman Pottery*: *Journal of Roman Archaeology* Supplementary Series 10, Part 2.1. Ann Arbor: Kelsey Museum of Archaeology.

1998, 'From Monarchy to Markets: The Phoenicians in Hellenistic Palestine'. *BASOR*, pp. 75-88.

Bikai, P. M., Fulco, W.J., and Marchand J.,

1996, 'Tyre, The Shrine of Apollo', Amman, Jordan.

Briend, J.,

1980, 'Vestiges hellénistiques', *Tell Keisan* (Orbis Biblicus et Orientalis, Series Archaeologica 1), Freiburg-Göttingen-Paris.

Papanicolaou, A. Ch.,

1971, 'Les poteries hellénistiques', *Hama, Fouilles et Recherches 1931-1938, vol. 3,2: Les poteries hellénistiques et les terres sigillées orientales*. Copenhagen.

Cox, D. H.,

1949, *The Excavations at Dura-Europos (Final Report IV), Part I, Fascicle 2: 'The Greek and Roman Pottery'*. Yale University.

Dubertret, L.,

1945, *Géologie du site de Beyrouth*, Délégation générale de France au Levant, Beyrouth.

Dunand, M., and Duru, R.,

1962, *Oumm el-Amed, une ville de l'époque hellénistique aux échelles de Tyr*. République Libanaise. Direction générale des Antiquités. Études et documents d'archéologie 4, Paris.

Gassner, V.,

1997, *Das Südtor der Tetragonos-Agora, [Forschungen in Ephesos XIII/I/I]*, Wien.

Gebara C.,

1982, 'Fouilles de Khaldé', *Archéologie au Levant, Recueil à la mémoire de Roger Saidah*, CMO 12, Arch. 9, Lyon, p. 409-419.

Grace, V. R.,

1934, 'Stamped Amphora Handles Found in 1931-1932', *Hesperia* 3, 197-310.

1935, 'The Die Used for Amphora Stamps', *Hesperia* 4, 421-429.

1947, 'Wine Jar', *The Classical Journal* 42, 443-452.

1961, 'Excavations of the Athenian Agora, Amphoras and the Ancient Wine Trade', Picture Book N°. 6, Princeton.

Grace, V. R., and Savvatiannou-Petropoulakou, A.,

1970, 'Les Timbres amphoriques Grecs,' in *Exploration Archéologique de Délos, XXVII, l'îlot de la Maison des Comédiens*, Paris, 277-382.

Hayes, J. W.,

1991, 'The Hellenistic and Roman Pottery' *Paphos III*, Nicosia.

1999, 'Aspect of Hellenistic/Roman pottery finds from site BEY 004 and their connections', [Text for conference paper], *ARAM conference*, Beirut.

Head B.V.,

1911, *Historia Numorum: A manual of Greek Numismatics*, Oxford.

Herbert, C. Sh., (edit.)

1997, 'Tel Anafa II,i, The Hellenistic and Early Roman', *Journal of Roman Archaeology* 10, part II, Ann Arbor MI.

Jones, F. F.,

1950 'The Pottery', in M. Goldman, *Excavations at Gözlü Küle, Tarsus: The Hellenistic and Roman Periods*, Princeton, pp. 149-297.

Khalifeh, I. A.,

1988, *Sarepta II, The Late Bronze and Iron Age Periods of Area II, X*, Beyrouth.

Lehmann, O.,

1994, *Tell Arqa, Classification Préliminaire de la Céramique Hellénistique de Tell Arqa* (Mémoire de DEA), Paris.

Saghieh, M., 1996, 'BEY 001 and 004: A preliminary report', 23-59, *BAAL*, DGA, Beirut.

Stern, E.,

1982, *Material Culture of the Land of the Bible in the Persian Period, 538-332 B.C.*, Jerusalem.

1995, *Excavations at Dor*, Vol. I B, Jerusalem, 481-487.

Thalmann J.-P.,

1987, 'Rapport Préliminaire; Campagnes I-III (1972-1974)', *Syria LV*, Paris.

Waagé, O. F.,

1948, *Antioch-on-the-Orontes IV, Part One, Ceramics and Islamic Coins*, Princeton, London.

Whitbread, I. K.,

1995, 'Greek Transport Amphorae' *A Petrological and Archaeological Study*, Great Britain, 31-34.

Zemmer, A.,

1977, *Storage Jars in Ancient Sea Trade*, Haifa.