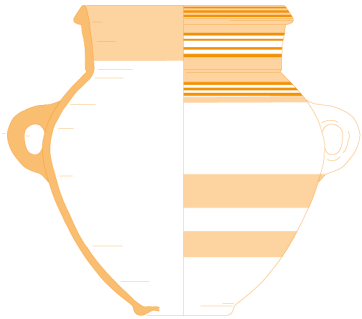
Local amphorae from the Tyrian cemetery of al-Bass: typology, chronology, function and Mediterranean connections



Abstract: A local form of amphora is common among the ceramic containers employed as cinerary urns in the tombs of the Iron Age cemetery at al-Bass in Tyre. This form appeared around the second quarter of the 8th century BCE, in an advanced stage of the Late Iron Age, and represents an apparent novelty in the ceramic array of the central Levant. From a typological perspective, it appears to be a variation of the local plain storage jars, while from a technical point of view, it follows the morphological and decorative traditions of local workshops. Functionally, it seems to be related to contemporary imports of Cypriot amphorae, but it cannot be considered as either an imitation or a substitute for those vessels.

The emergence of these amphorae as a form seems to have been triggered by innovations in wine consumption habits, and their appearance does not seem to be an isolated phenomenon. Other parts of the Mediterranean under direct Levantine influence witnessed similar typological phenomena at this time. This circumstance leads to the assumption that a short-lived trend in wine consumption in the 8th-century-BCE Levant apparently continued to have repercussions overseas.

Keywords: Phoenician amphorae, Cypriot amphorae, Phoenician pottery, funerary customs, wine consumption, Carthaginian pottery, Nuragic pottery, Mediterranean interconnections

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INTRODUCTION

Amphorae of local make became at some point one of the forms used as a cinerary urn for burial in the Iron Age cemetery of al-Bass in Tyre. They appear to be a variation of the plain storage jars rather than of their typological relatives, the decorated storage-jars, with which they should not be confused. The concept of the form is different, and so is its evolution as well as, probably, its function.

Two aspects stand out in any analysis of funerary ceramic sets from the Levantine Iron Age, and the al-Bass cemetery exemplifies both of them. First, there is no ceramic form used specifically as a cinerary urn to the exclusion of all other functions. Second, the vessel forms and types that were used for this purpose are closely linked to the funerary banquet function and, in particular, to wine consumption. Amphorae, both local and imported, play a relevant role in the latter case.

Local amphorae are considered in this paper first from a typological point of view, contextualized within the range of forms represented in the funerary ceramic set identified in the al-Bass graves. The cemetery context for these finds provides the grounds for a sequential and chronological analysis of this form, focusing in particular on its emergence and evolution over time. Next to be considered is the role played by these amphorae within the group of ceramic forms used as cinerary urns in the cemetery. This leads in turn to a discussion of vessel function in the context of the banquet set.

Last but not least, the analysis in this paper focuses on the belated appearance of this form in the central Levantine ceramic array, ending with a discussion of its possible manifestations in other Mediterranean contexts attributed to the 8th century BCE chronological horizon.

THE LOCAL AMPHORA FORM AT THE AL-BASS CEMETERY

The local amphora is the second most relevant form in the funerary ceramic set recovered from the excavation of the al-Bass cemetery in Tyre, which is generally accepted as a reference for understanding the funerary habits and rituals not only of the Levant in particular, but also of the entire 'Phoenician' Mediterranean in general (Aubet 2004; 2010; 2015; Aubet, Núñez, and Trellisó 2014).

THE IRON AGE CEMETERY

Following typical territorial patterns, the necropolis was situated on the mainland, around 1.5 km from the ancient island of Tyre. The limits of the cemetery continues to be elusive, but it most certainly extends under the modern al-Bass refugee camp on the north and west, and runs most probably under the archaeological park on the south and the main road on the east.

The individuals buried in this cemetery are, at least to date, adults of both sexes. The chronological span—altogether 153 burials have been excavated so far—is from the end of the 10th to the first half of the 6th century BCE, representing a distinct sequence of five phases [see below,

Fig. 10]. The first period produced no burials, only scattered material, hence future research at the site could still add scope to the chronological discussion.

THE FUNERARY CERAMIC SET

Cremation was the burial practice followed in the cemetery. Ashes were placed in one or, most of the time, two urns. These jars, together with funerary offerings, were deposited in simple pits dug in the sand, the location of which was marked with a stela on the surface. Funerary gifts commonly consisted of a standardized ceramic set, in some instances accompanied by terracottas (Aubet 2010; 2014; Núñez 2011; 2017). The set included an urn or urns with respective lids, a neck-ridge jug, a decanter-like jug and a cup [*Fig. 1*]. Pilgrim-flasks, *askos*-like jugs and oil lamps occasionally complemented the set of vessels described above, but never as a substitute for any of the standard containers.

The funerary ceramic set is interpreted as vessels that would have been used in the funerary banquet held for the deceased (Aubet 2010; 2014; Núñez 2017). The connection with wine consumption is particularly evident, with an only marginal presence of forms related to food preparation, such as cooking pots, which were used either as an urn (Núñez 2004a: 190, Fig. 105:1) or were part of the grave goods (Aubet, Núñez, and Trellisó 2014: 202, Fig. 2.33: U107-8). Hence, once the banquet was finished and the process of cremation of the remains completed, the ashes were collected and placed in the jars, either one or two, from which wine

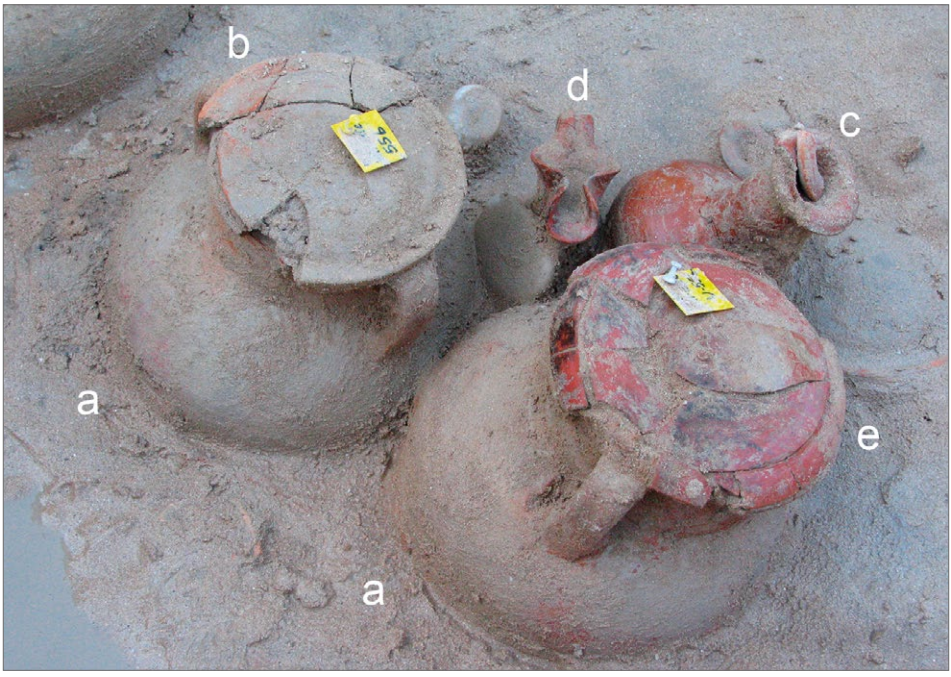

Fig. 1. The funerary set of al-Bass tomb TT240 upon discovery: a–b – urns and lids; c – neck-ridge jar; d – decanter-like jug; e – cup (Tyre Project | photo F.J. Núñez Calvo)

had been consumed during the banquet. In the case of two jars, the cremated bones, accompanied by a scarab, were contained in one of the jars, while the other one was filled with some ashes and charred potsherds.

From a typological perspective, the relationship between the different vessel types and their specific function during the banquet evinces well-established, standardized concepts, shaped by functional, morphological, technical, and decorative factors. The record from the cemetery reveals six different ceramic forms, both local and imported, being assigned the additional function of a cinerary urn (Núñez 2004b; 2014a; 2017) [*Table 1*; *Fig. 2*]. These forms were:

1) kraters of two types (amphoroid and pointed),
2) amphorae,
3) cauldrons,
4) storage jars,
5) tripod-jars and
6) cooking-pots.

Table 1. Local (Loc) and imported (Imp) forms and types employed in al-Bass as cinerary urns

Ceramic form/type	Origin: Loc / Imp	Amount		Total
		Absolute	Relative	
Amphoroid-krater	Loc	137	71.72%	191 / 74.03%
	Imp	54	28.27%	
Pointed krater	Loc	2	100%	2 / 0.77%
	Imp	–	–	
Decorated amphora	Loc	17	51.51%	33 / 12.79%
	Imp	16	48.48%	
Storage jar	Loc	14	100%	14 / 5.43%
	Imp	–	–	
Cauldron	Loc	4	28.57%	14 / 5.43%
	Imp	10	71.43%	
Cooking pot	Loc	3	100%	3 / 1.16%
	Imp	–	–	
Tripod jar	Loc	1	100%	1 / 0.39%
	Imp	–	–	

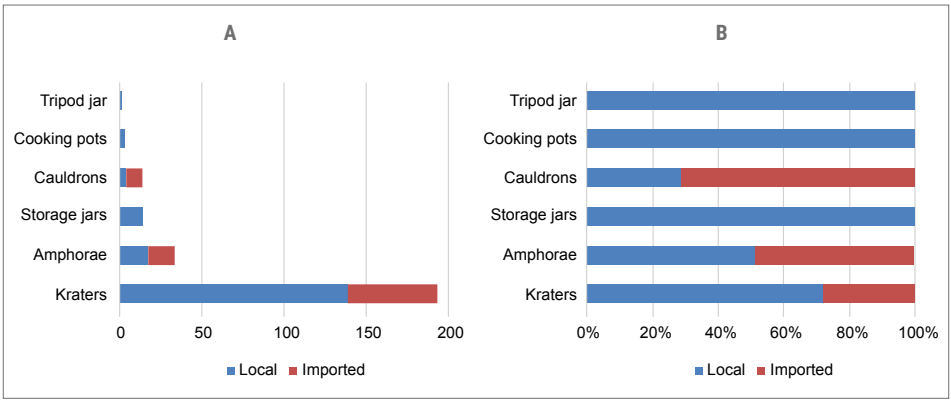

Fig. 2. Percentage share: A – different containers used as cinerary urns; B – local vs. imported (Cypriot) vessels (see ***Table 1***)

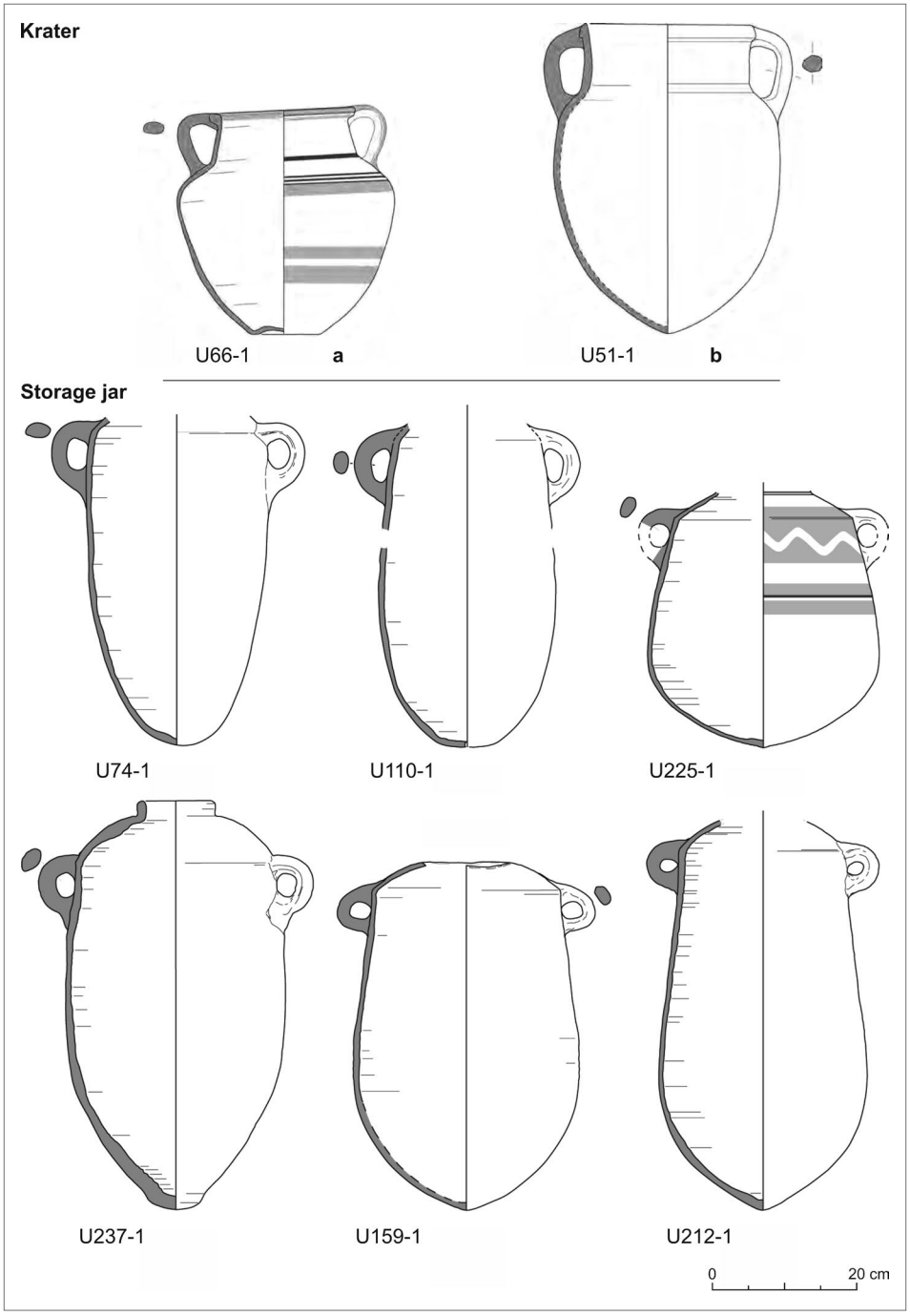

Fig. 3A. Vessels making up the ceramic funerary set from the al-Bass graves: top, krater types: a – amphoroid-krater; b – pointed amphoroid-krater; bottom, storage jars (Tyre Project | plate design F.J. Núñez Calvo)

Kraters

Kraters are the commonest form, represented by two types, of which the amphoroid krater is particularly prolific: 191 examples (74.03% of all of the urns), including 54 Cypriot imports (28.27% of the amphoroid kraters; Aubet and Núñez 2008; Núñez and Aubet 2009) [*Figs 2; 3A:a* top; see *Table 1*]. These jars have bodies on stable bases, distinct shoulders, necks and rims, as well as two opposite handles connecting the shoulder to the rim (Núñez 2004b: 287–291; 2011; 2014a: 271–272, 293–294, 306–309 and 337–338; 2014b). The other krater type, which features a pointed base (Núñez 2004b: 290–291) and two opposite vertical handles connecting the shoulder to the rim, is far less frequent [*Fig. 3A:b* top; *Table 1*].

Storage jars

Storage jars are the third most common group (after local amphorae, for which see below). They count 14 examples (5.43% of all the urns; see *Figs 2; 3A* bottom; see *Table 1*). These are all local jars, produced at Tyre or in one of the other Levantine centers. From a morphological perspective, they present marked shoulders and can be divided into three types based on the shape of the body: triangular [*Fig. 3A*:U74-1], ovoid [*Fig. 3A*:U110-1, U237-1] and baggy [*Fig. 3A*:U159-1, U212-1, U225-1]. One of the baggy storage jars features painted decoration [*Fig. 3A*:U225-1].

Cauldrons

The fourth form, cauldrons of both local and imported Cypriot origin, is defined

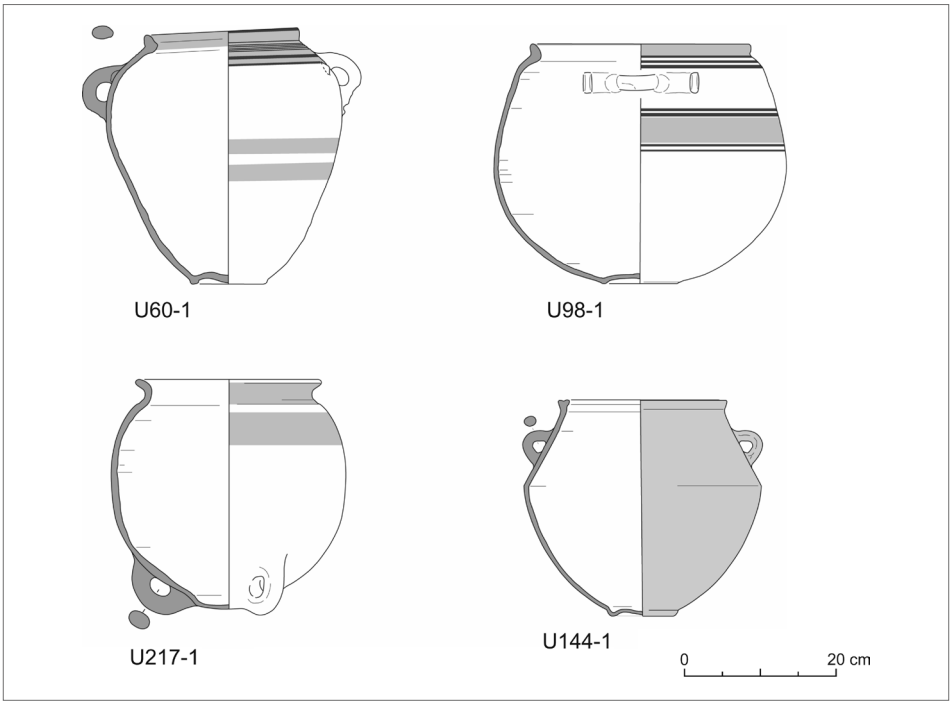

Fig. 3B. Cauldron types from the ceramic funerary set found in the graves at al-Bass (Tyre Project | plate design F.J. Núñez Calvo)

by the absence of a distinct neck. This form is represented by four examples (28.57% of all the jars belonging to this form), corresponding to four well-defined types [*Fig. 3B*; see *Table 1*]. The first displays an inverted piriform body and an everted tapered rim, two opposite vertical handles on the shoulder and a stable base (Núñez 2014a: 312) [see *Fig. 3B*:U60-1]. The second features a piriform body, stable base, distinct shoulder topped by an everted and simple rim, and a horizontal handle located just below the shoulder (Núñez 2014a: 274) [see *Fig. 3B*:U98-1]. In the third type, the body is globular, without handles, on a stable base and with an open, simple rim [see *Fig. 3B*:U217-1].

Finally, the fourth type displays a carinated body and two vertical handles on the shoulder (Núñez 2014z: 338) [see *Figs 2*; *3B*:U144-1; see *Table 1*].

Tripod jar

Probably related to the cauldrons, the tripod jar is represented by just one example (0.39% of all the cinerary urns) [see *Figs 2*; *3C:* bottom U254-1; see *Table 1*). This example displays a globular body standig on three loops, and a cylindrical neck topped by an everted rim.

Cooking pots

Despite the modest number (three vessels, 1.16% of the sample [see *Figs 2*; *3C*; see *Table 1*], cooking pots display two distinct variants: true pots (U54-1 and U198-1) and jars inspired by these pots (U109-1).

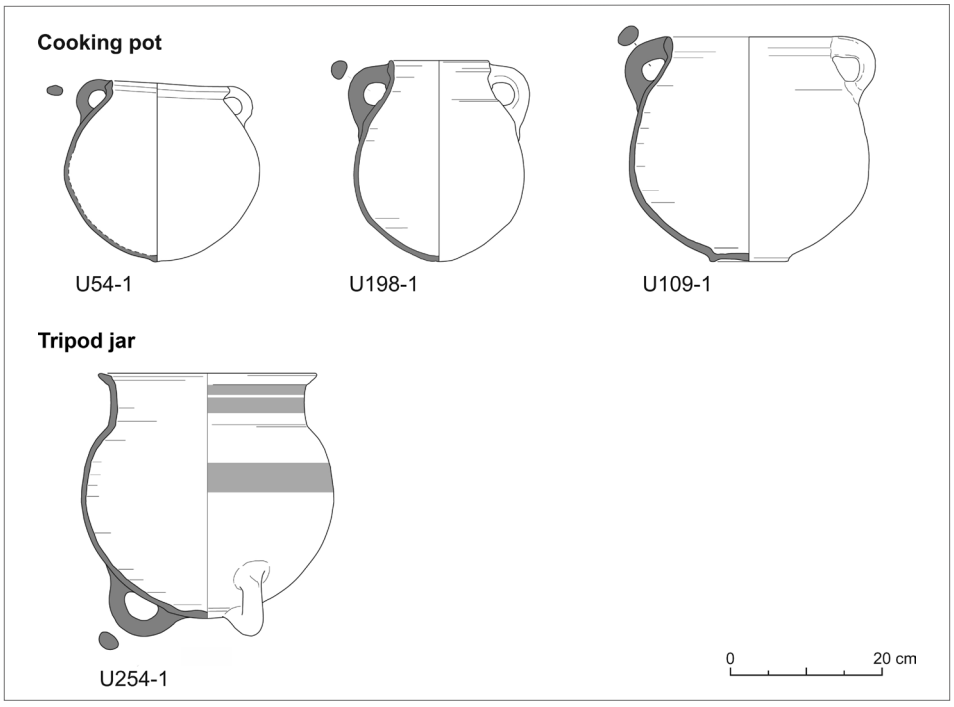

Fig. 3C. Vessels making up the ceramic funerary set from the al-Bass graves: top, cooking pot types; bottom, tripod jar (not to scale) (Tyre Project | plate design F.J. Núñez Calvo)

LOCAL AMPHORAE

The second largest group of vessels used as cinerary urns at the al-Bass cemetery are the local amphorae [see *Figs 3D–3E*; see *Table 1*]. The form is typologically related to the storage jars. It started out probably as a more elaborate version of these jars, more appropriate for domestic, ritual and status-related contexts. A distinct ceramic form developed over time.

MORPHOLOGY

These containers are medium- or large-sized, featuring a closed body, distinct neck, stable base, and two opposing handles on the shoulder. These characteristics (with some reasonable variations) apply in equal measure to some of the vases imported from Cyprus. This definition also helps to avoid confusion with a related form, that is to say, storage-jars with decoration (see *Fig. 3A*:U225-1 for example), which share certain morphological features with their plain counterparts: the same body and rim profile (for example, Bikai 1987: Pl. XXI:584). At other times, the body proportions are different, with a preference for baggy bodies, and necks that are longer than usual (see, for example, Bikai 1987: Pl. XXI:567, 574, or Stern 2015: 460–461, Pl. 4.1.10, 11). In fact, the decorated storage jars are typologically halfway between the plain storage jars and the amphorae.

For their part, the amphora bodies at al-Bass are of an inverted piriform shape with rounded shoulders. The proportions between the height and diameter of the body can vary, but the overall profile remains unchanged. The necks are usually straight and can be either cylindrical,

Fig. 3D. Local amphora (U94-1) (Tyre Project | photo F.J. Núñez Calvo)

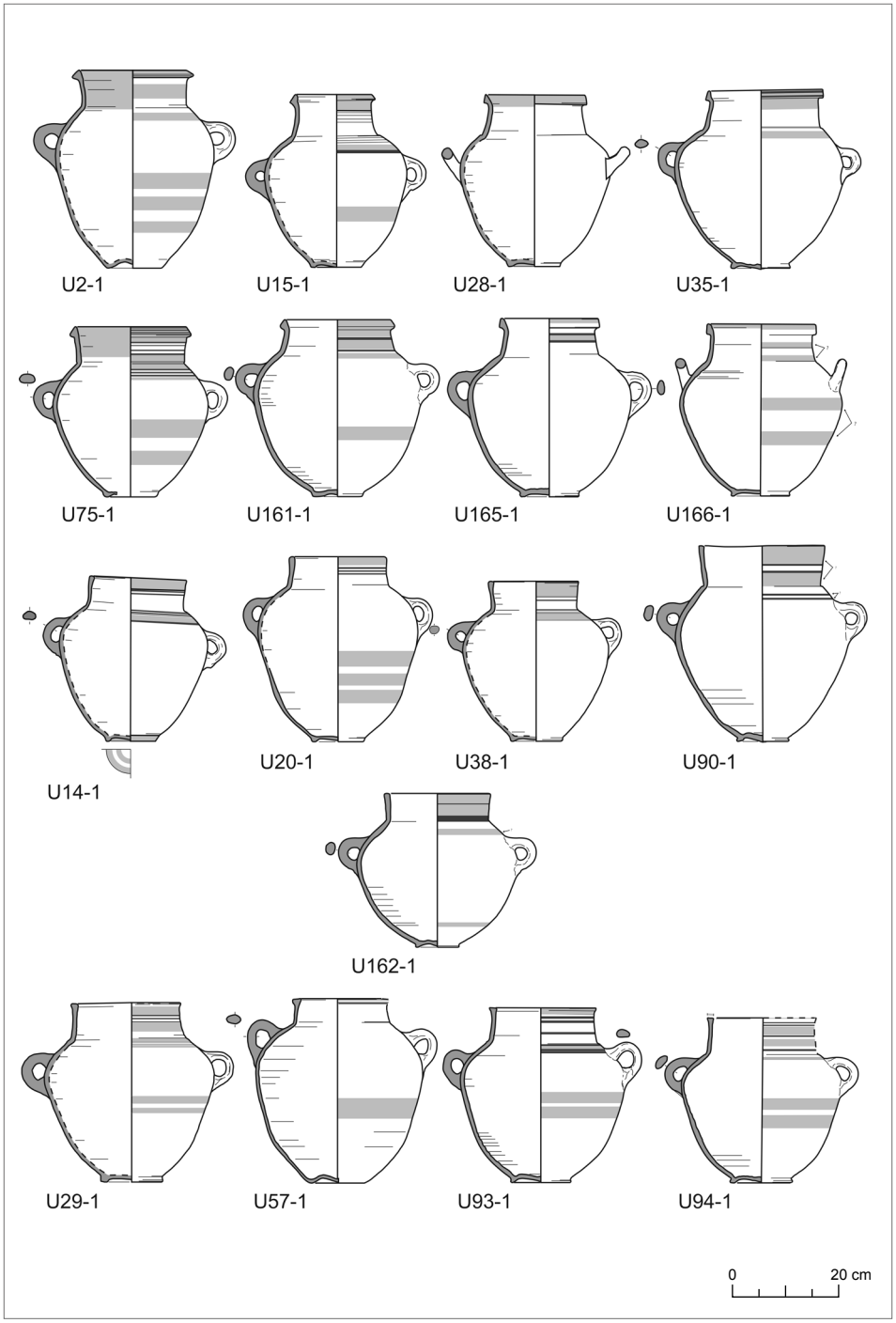

Fig. 3E. Local amphorae from the ceramic funerary set found in the al-Bass graves (Tyre Project | plate design F.J. Núñez Calvo)

inverted or everted [*Fig. 4*]. Almost half of the vessels in this assemblage has an inverted neck, closely followed in number by the everted variant; only one vessel has a cylindrical neck.

Three rim types are associated with these necks: a) simple on the outside, sometimes with a rounded thickening on the inside (five instances, 29.41%) [*Figs 4:a*]; b) with a triangular thickening on the outside, sometimes counterbalanced by a concavity on the inside (eight jars, 47%) [*Figs 4:c*]; or c) a rounded or tapered thickening on the outside, sometimes compensated by a similar feature on the inside (four instances, 23.53%) [*Figs 4:b*]. Overall, the first rim variant appears on cylindrical necks, the triangular variant on both the inverted and everted ones, and the rounded/tapered thickened rims exclusively on the inverted necks.

Handles [see *Fig. 3D*] are located between the shoulder and the lower half of the body; the only exceptions are two vessels with handles attached directly on the shoulder (U57-1, U166-1). Save for two vessels, they are usually arranged in a vertical plane (88.23% of all cases). The vertical handles are rounded in profile and generally symmetrical, although sometimes elongated in their upper part (e.g., U93-1, U57-1). The lower parts can sometimes show some irregularities in the form of notches or deformities (e.g., U38-1 or U161-1). Four different sections are noted: oval (e.g., U35-1; 66.67%), hemispherical (e.g., U93-1; three jars; 20%), rounded (e.g., U38-1; one jar; 13.33%), and flattened on the exterior (e.g., U165-1; 6.67%). As for the two examples of the horizontal variant (e.g., U28-1 and U166-1), the handles in these cases are round in section and attached horizontally to the body.

Finally, the bases are stable and of two types: flat and annular. The latter kind is the most common (15 examples, 88.23%). Sections are four [see *Fig. 3D*]: 1) everted (e.g., U90-1; six instances; 40%), 2) quadrangular (e.g., U15-1; six jars; 40%), 3) beveled on the interior (e.g., U38-1; two jars; 13.33%) and 4) rounded (U75-1; 6.67%). The first variant of the ring bases has two subvariants: 1) quadrangular in profile,

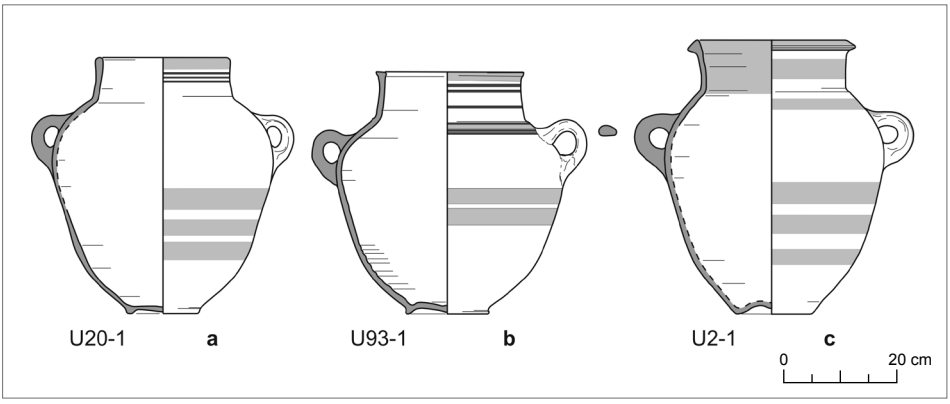

Fig. 4. Local amphorae from the al-Bass cemetery: examples of different body, neck and rim profiles: a – cylindrical neck with simple rim; b – inverted neck with thickened rim; c – everted neck with triangular rim (Tyre Project | plate design F.J. Núñez Calvo)

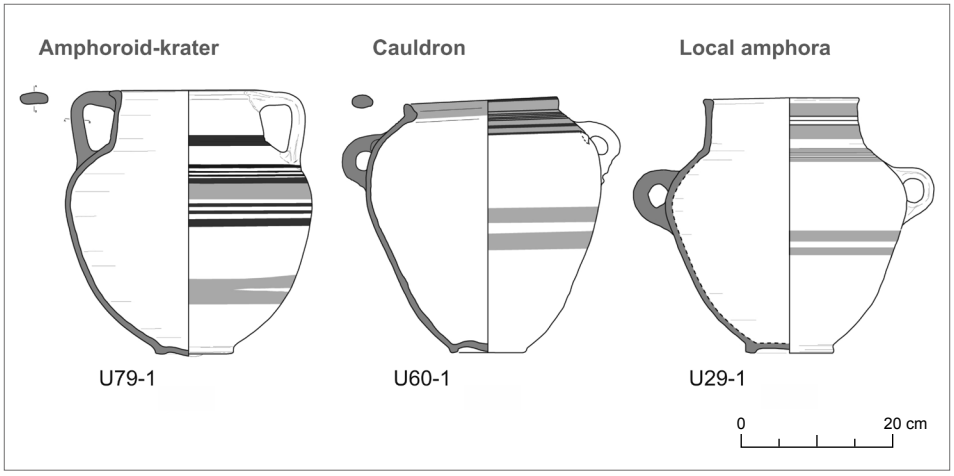

Fig. 5. Differences between locally made vessels found at the al-Bass cemetery (Tyre Project | plate design F.J. Núñez Calvo)

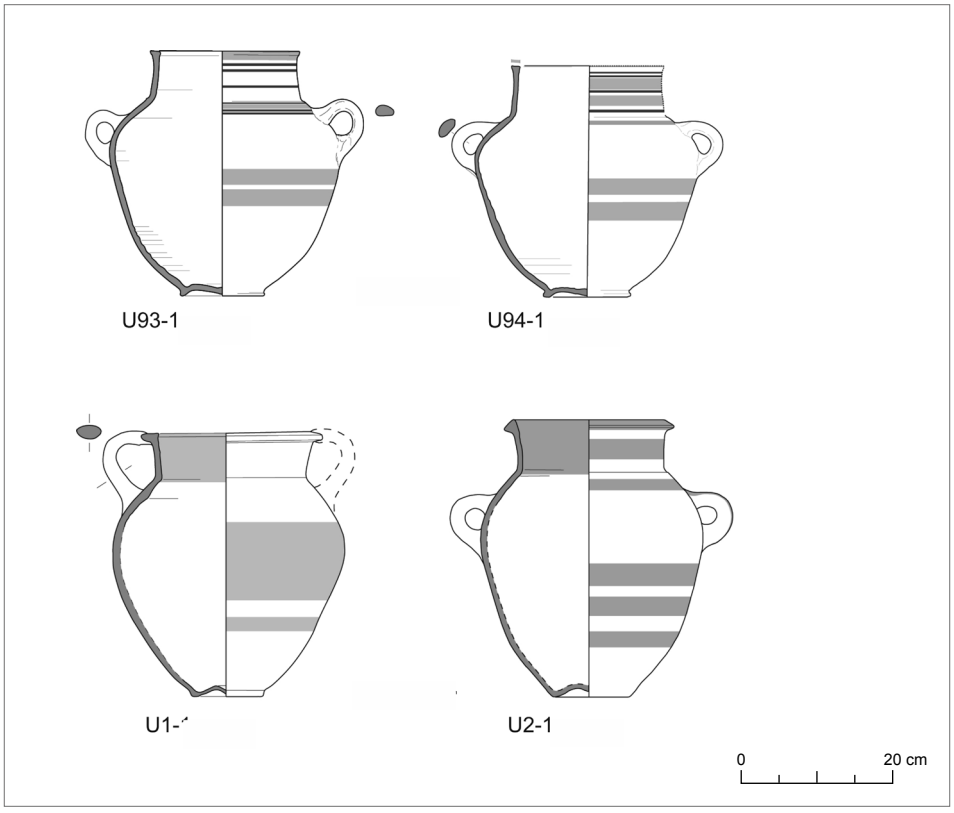

Fig. 6. Two-jar funerary sets from the al-Bass cemetery: top, two amphorae (TT93/94); bottom, amphoroid-krater on left and amphora on right (TT1/2) (Tyre Project | drawing F.J. Núñez Calvo)

resting on a flattened surface (U35-1, U94-1 and U166-1), and 2) standing on a tapered surface (U90-1, U93-1, U162-1 and U165-1). Only two jars have a flat base (U2-1, U57-1) and in both cases, there is an omphalos-like protuberance in the center. This feature is typical on bases of this type, also among the amphoroid kraters [e.g., see *Fig. 3A*].

In general, the amphorae share many morphological elements with the amphoroid kraters and even with some of the cauldron types. The differences lie in the presence or absence of a neck, and the positioning of the handles [*Fig. 5*]. The morphological similarities are apparently coincidental, resulting from the specific technical resources at the disposal of the potters and a somewhat limited repertoire of morphological features used in their work (Núñez 2014b; 2019). At the core is the inverted piriform body as a basic structural reference. Various ceramic forms and types are developed from this basic shape by the addition or removal of particular elements (on this see below). The frequent presence of conical necks among both amphorae and amphoroid kraters is a good example. However, the special characteristics of some of the rim types related to the amphorae, in particular the simple profiles and triangular thickenings on the outside, represent an important distinctive element in their own right.

In some instances, burials containing two jars in a set, for example, two amphorae as in U93-1 and U94-1 (Aubet, Núñez, and Trellisó 2014: 193, Fig. 2.24) or an amphora and an amphoroid-krater, e.g., tomb TT1/2; Núñez 2004a: 135–136, Figs 50, 51) could produce vessels that are almost 'twins' in the morphological, as well as decorative sense [*Fig. 6*]. They seem to have been produced in the same workshop; they may even represent the same batch. At the same time, at least in the second case, the potter appears to have intended to model two morphologically different jars.

METROLOGY

Absolute and relative values of selected morphological attributes of the local amphorae were studied [*Tables 2, 3*; *Fig. 7*]. The following metrological parameters were considered: total height; height of the body including the base; base height and diameter; diameter of the shoulder; height of the neck; and diameter of the rim. All of the amphorae hitherto discovered at the al-Bass cemetery were measured, notwithstanding certain definitory elements like the rim form and the positioning of the handles. Comparison of the two vessel parameters, absolute and relative, hold considerable potential for the study of Tyrian pottery production in the Iron Age. Observed patterns could indicate which of the two was the reference used by the potter for modelling the jars.

Starting with the total height, the values range from 28.5 cm for the smallest to 36.6 cm for the biggest vessels. The average is 32.4 cm and half of the sample is comprised between 31.1 cm and 33.65 cm. With the exception of the two flat bases, the annular bases are low in height. The values range from 0.5 cm to 1.2 cm, and the average is 0.87 cm, with half of the 15 examples between 0.8 cm and 1 cm. Base diameters vary from 8 cm for the smallest to 11.5 cm for the biggest one, the average is 10 cm and half of the examples fall

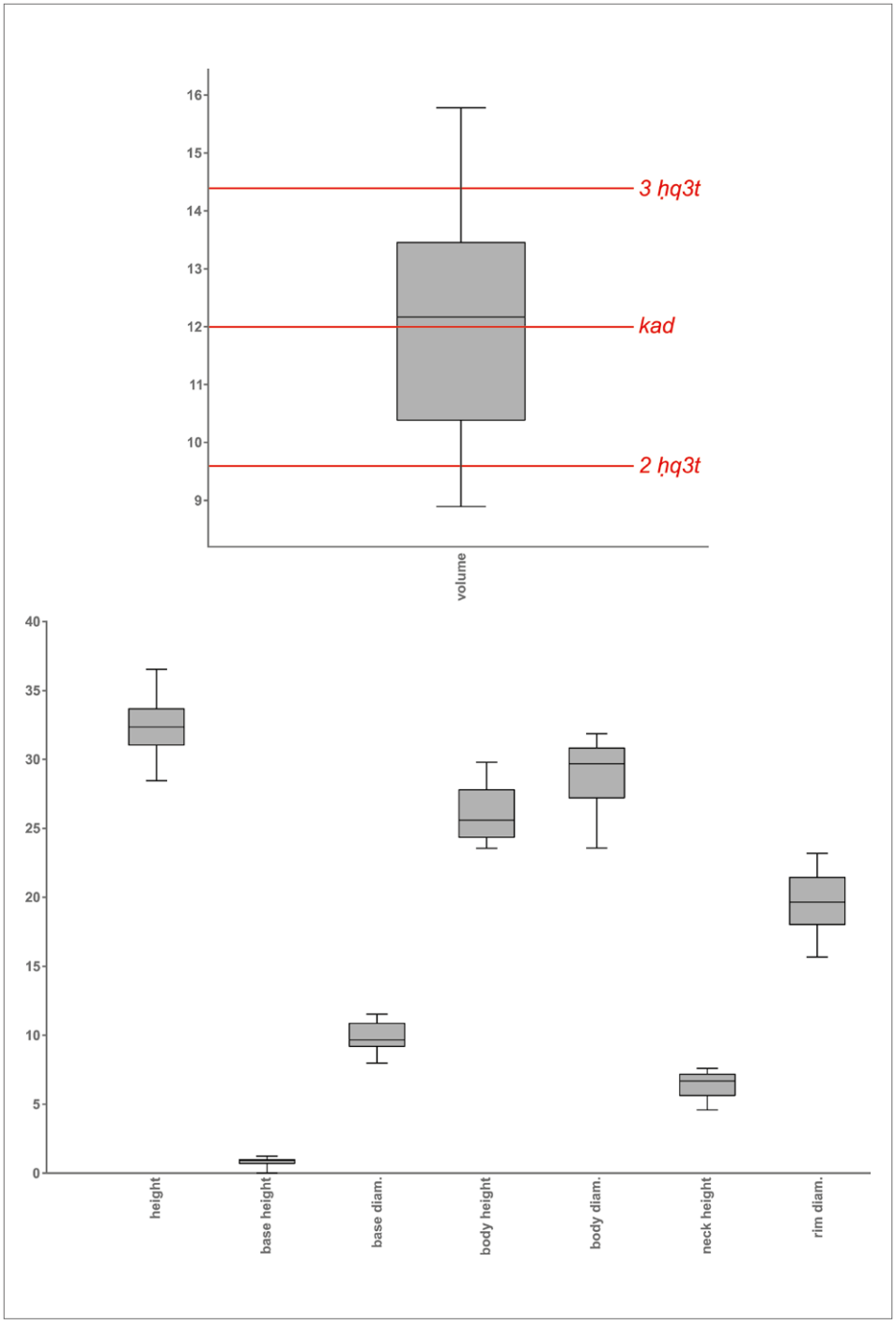

Fig. 7. Distribution of the main morphological attributes of the local amphorae from al-Bass, including capacity up to the rim (top right) (Processing F.J. Núñez Calvo)

between 9.2 cm and 10.9 cm. Regarding body height including bases, the smallest value is 23.6 cm and the highest 29.8 cm, with an average of 26 cm; half of the values fall between 24.4 cm and 27.8 cm. The shoulder diameters vary from 23.6 cm to

Table 2. Absolute and relative values for selected morphological attributes of the amphorae and their distribution over time

Jar number	Height	Body		Base		Base height		Shoulder		Neck		Rim		Capacity liters	Period
	cm	cm	%	cm	%	cm	%	cm	%	cm	%	cm	%		
U038-1	29.6	24.4	**82.4**	9.50	**32.09**	0.80	**2.70**	27.0	**91.2**	5.2	**17.6**	16.7	**56.4**	9.2	**?**
U002-1	36.6	29.8	**81.4**	10.20	**27.86**	0.00	**0.00**	29.4	**80.3**	6.8	**18.6**	22.4	**61.2**	13.2	**IV**
U020-1	34.2	28.6	**83.2**	9.00	**26.31**	0.80	**2.30**	29.6	**86.5**	5.6	**16.4**	18.1	**52.9**	13.3	**IV**
U028-1	31.8	24.3	**76.4**	9.50	**29.87**	0.90	**2.80**	27.9	**87.7**	7.5	**23.6**	19.1	**60.1**	13.3	**IV**
U029-1	33.2	26.5	**79.8**	11.50	**34.64**	1.20	**3.60**	31.4	**94.6**	6.7	**20.2**	20.3	**61.1**	13.3	**IV**
U035-1	33.0	25.6	**77.6**	10.80	**32.73**	1.00	**3.00**	31.3	**94.8**	7.4	**22.4**	21.7	**65.7**	14.2	**IV**
U057-1	34.1	29.5	**86.5**	10.00	**29.32**	0.00	**0.00**	30.8	**90.3**	4.6	**13.5**	17.8	**52.2**	14.1	**IV**
U090-1	36.2	28.7	**78.6**	9.65	**26.66**	0.70	**1.93**	31.9	**88.1**	7.5	**20.7**	23.2	**64.1**	15.8	**IV**
U093-1	32.4	25.9	**79.0**	11.10	**34.26**	0.80	**2.48**	30.4	**93.8**	6.5	**20.1**	19.7	**60.8**	12.3	**IV**
U094-1	30.6	23.8	**77.8**	11.55	**37.74**	0.90	**2.94**	23.6	**77.1**	6.8	**22.2**	20.1	**65.7**	11.8	**IV**
U165-1	33.0	26.3	**79.7**	10.90	**33.03**	0.85	**2.57**	30.2	**91.5**	6.7	**20.3**	18.5	**56.1**	12.2	**IV**
U166-1	31.9	25.0	**78.4**	10.85	**34.01**	0.95	**2.99**	30.1	**94.3**	6.9	**21.6**	20.2	**63.3**	12.0	**IV**
U075-1	31.6	24.8	**78.5**	9.20	**29.11**	1.10	**3.50**	25.6	**81.0**	6.8	**21.5**	22.4	**70.9**	11.2	**IV–V**
U161-1	32.7	27.0	**82.7**	9.10	**27.83**	0.90	**2.75**	30.9	**94.5**	5.7	**17.4**	21.2	**64.8**	13.6	**IV–V**
U162-1	28.5	23.6	**82.8**	8.00	**28.07**	0.50	**1.76**	29.7	**104.2**	4.9	**17.2**	19.7	**69.1**	10.6	**IV–V**
U014-1	30.2	24.4	**80.8**	9.30	**30.79**	1.00	**3.20**	27.5	**91.0**	5.8	**19.2**	18.0	**59.6**	8.9	**V**
U015-1	32.0	24.4	**76.2**	9.20	**28.75**	0.90	**2.80**	26.4	**82.5**	7.6	**23.7**	15.7	**49.1**	9.1	**V**

Table 3. Summary of values for the main morphological attributes of the amphorae from al-Bass
SD – standard deviation; CV – coefficient of variation

Morphological attributes	N	Minimum	1st quartile	Average	Median	3rd quartile	Maximum	SD	CV
Total height	17	28.5	31.1	32.4	32.4	33.6	36.6	2.1	6.5
Body height	17	23.6	24.4	26.0	25.6	27.8	29.8	2.0	7.8
%		**76.2**	**78.1**	**80.1**	**79.7**	**82.5**	**86.5**	**2.7**	**3.4**
Shoulder diameter	17	23.6	27.2	29.0	29.7	30.8	31.9	2.3	8.0
%		**77.1**	**84.5**	**89.6**	**91.0**	**94.4**	**104.2**	**6.7**	**7.5**
Neck height	17	4.6	5.6	6.4	6.7	7.1	7.6	0.9	14.7
%		**13.5**	**17.5**	**19.8**	**20.2**	**21.9**	**23.7**	**0.7**	**13.8**
Rim diameter	17	15.7	18.0	19.7	19.7	21.4	23.2	2.1	10.6
%		**49.1**	**56.2**	**60.8**	**61.1**	**65.2**	**70.9**	**6.0**	**9.8**

31.9 cm, with an average of 29 cm and the first and third quartiles equal to 27.2 cm and 30.8 cm. Neck height ranges from 4.6 cm to 7.6 cm and the average is 6.4 cm, the central quartiles between 5.6 cm and 7.1 cm. As for the rim diameter values, these vary from 15.7 cm to 23.2 cm, while the average is 19.7 cm and the central quartiles between 18 cm and 21.4 cm.

Finally, the capacity of the jars up to the rim ranges from a minimum 8.9 liters to a maximum of 15.8 liters [see *Fig. 7* top]. The average is 12.2 liters and the central quartiles between 10.4 and 13.4 liters. Interestingly, the average value coincides with one of the capacities proposed for the Semitic *kad* (see, for example, Monroe 2016 and Demesticha 2017, both with earlier references) and the range of volumes between the central quartiles offers a variation of only three liters.

The proportions of definitory morphological attributes can be considered as an alternative to the absolute values [see *Tables 2, 3*]. This procedure offers interesting insight into the overall vessel design and the potter's thinking concerning its modeling. The question is what is more relevant in this context: the absolute dimensions of individual parts or their relative proportions?

The total height of a vessel is a reference for all the other parameters. Hence, the base height average is 2.7% of the vessel total (percentiles 2.3% and 3%) and the diameter 30.8% (percentiles 28% and 33.5%). The body height average, including bases when preserved, is 80.1% of the vessel total (percentiles 78.1 and 82.5%), while the average of shoulder diameter is 89.6% (percentiles 84.5 and 94.4%). Finally, the neck height average is 19.8% of the total height (percentiles 17.5 and 21.9%) and rim diameter is 60.8% (percentiles 56.2 and 65.2%).

A comparison of absolute and proportional values for each attribute highlights similar low coefficients of variation (CV). First, the CV value for the total height of the sample is a rather low 6.5%. With regard to the bases, the deviation between the absolute and proportional value is similar for the height (absolute 18.3% and proportional 18.4%) as well as for the diameter (10.1% and 10.5%). The body-to-total-height proportion would be more relevant and this is remarkably lower (3.4% compared to the 7.8% for the absolute value). The data fit very well with the rather low variability of the shoulders (absolute 8% and proportional 7.5%). By contrast, neck height shows a bigger irregularity (CV of the absolute value of 14.7%, and of the proportional one of 12.8%).

Given the relative sequential and, hence, chronological homogeneity of the sample (as indicated below, most of the vessels originated from Period IV of the cemetery), these values are consistent with the morphological nature of the jars. This homogeneity becomes evident in the case of the bodies, a fact that goes beyond their common inverted piriform shape. Consequently, finding a satisfactory explanation for variations, of neck and rim types in particular, is hardly easy. Several factors need to be considered:

1) time elapsed between the production of different vessels;
2) potential participation of more than one local workshop center, despite the homogeneity of local fabrics, which could have affected selected morphological and decorative attributes;

3) intended purpose or function of the jar, including the model(s) that were the inspiration;
4) modelling by hand on the fast wheel, probably using approximate references for the diverse parts;
5) changes or deformations during the shrinkage and firing processes (as in, for example, U14-1 or U35-1; see *Fig. 3E*).

These factors explain some of the existing differences observed in the sample [see *Fig. 3E*], such as U165-1 and U166-1, both from the same tomb and almost identical, and U14-1 and U38-1, found in two different contexts but also almost identical in terms of the morphology and decoration. It also highlights the connection between U2-1, U20-1 and U57-1, with similar bodies and, to some extent, decoration, but featuring different neck and rim types; and between U2-1 and U75-1, which are morphologically almost identical, not so much in the proportions of their respective attributes and decoration. In any case, this assumption leaves the three different neck and rim types, and the two major decorative designs so far recognized (even in morphologically similar jars like U20-1 and U93-1; see below) open to discussion.

TECHNOLOGY, SURFACE TREATMENT AND DECORATION

Any analysis of technical aspects of the ceramic assemblage from the al-Bass cemetery is conditioned by the overall poor state of preservation of the vases. Many of them were affected by the extremely wet environment in which they were deposited for many centuries: body structure is weak, surfaces eroded, the decoration often blurred or coated with concretions (see, for example, *Fig. 3D*). Even so, certain observations can be made. Foremost, the amphorae do not differ much technologically (same as morphologically, as discussed above, and decoratively) from other vases used as cinerary urns at al-Bass. In general terms, their production seems to have engaged moderate resources, which had unavoidable consequences for the manufacturing process, its individual stages and, obviously, the final products.

The fabrics are typically clay of a light orange color, with gray and powdery red inclusions, very fine rounded quartz grains and foraminifera; powdery white inclusions are less frequent. In quality, they range from common to semi-fine, depending on the porosity of the matrix, and the size and quantity of inclusions. The temperature of firing did not exceed 800ºC (Miguel and Buixeda 2013; Lafuente, Miguel, and Pérez 2014; ongoing analyses should result in a precise characteristic of the local fabrics).

Turning to the vessel-shaping process, all the principal parts—bases, bodies, shoulders, and necks—were modelled separately and assembled in successive stages. The process is evinced by more or less evident breaks in the body profile (e.g., U2-1, U20-1, and U57-1; see *Fig. 3E*). The same technique has likewise been observed on the kraters (Núñez 2014b). The author has noted a somewhat similar technique applied today by a traditional potter in the village of Bourjein, in the Lebanese Chouf region. The process obviously required planning beforehand: the amount of clay to be used, the tasks to be done and an intrinsic understanding of the relative dimensions needed to

make all the parts compatible (see Docter 1988–1990: 161).

Surfaces were treated in one of two ways: either self-slipping and a simple, more or less careful smoothing, or a clay bath of beige color, the thickness of the coat variable and likewise requiring smoothing. The first option is the most common (58.8% of the recorded vessels used as urns), while the second is about half as much (23.5%). 17.6% of the amphorae were too poorly preserved for the surface treatment to be attributed to either of these categories. So far, red-slipped surfaces have not been recognized.

The decoration of the local amphorae resembles that of amphoroid kraters, in application as much as composition (on this specifically see Núñez 2014b: 75). In all the cases recorded, the decoration is painted and appears on the shoulders, bodies, necks, and, less often, on the rims, handles and bases. The area framed by the handles is singularly undecorated on local amphorae, in contrast to jars of Cypriot provenance (see below).

The decoration of local amphorae is concentrated in the same areas that were reserved for decoration on the amphoroid kraters, that is to say, mainly on the shoulder and the lower half of the body, but additionally also on the neck [see *Fig. 5*]. The explanation for this difference is purely technical: having no handles in this part (unlike the amphoroid kraters), the amphorae could more easily be painted while still on the wheel.

The decorative patterns are for the most part linear, combining red and black, and conditioned by vessel morphology. There are three main registers of decoration: the neck, the narrow band on the shoulder above the top handle attachment, and up to three bands usually below the bottom handle attachment. This creates a perfectly framed, reserved space on the body, between the handles, a space that is apparently empty. A convincing explanation for this is hard to come by, given the nature of the available evidence and in view of decoration sometimes filling this space on the decorated storage jars (see, for example, *Fig. 3A*:U225-1).

Two designs or compositions stand out in particular. The first one (I) consists of the presence on the shoulder of a red band sandwiched between a series of black fillets [*Fig. 8* top]. The same design is repeated on the neck of some vases. For example, while the part on the shoulder of U165-1 cannot be seen due to the state of preservation, the decoration on the neck consists of a red band between black fillets [see *Fig. 3E*]. U2-1 is another example, although apparently lacking the black fillets [see *Fig. 8* top]. A second variant of this neck design has the red band sandwiched between black fillets and additionally divided into two by another black fillet (e.g., U93-1 and U94-1) [see *Fig. 8* top]. A third variant, which can be observed on urns U15-1, U38-1 and, probably, U20-1 and U35-1 [see *Figs 3E; 8* top], consists of a red band on the shoulder, with three black fillets above it and one below. The specificity of this variant is the missing red band from the lower half of the neck; the neck is preserved up to mid-height, where two or three black fillets appear, while red paint covers the remaining space on the neck up to the edge.

This particular decorative design is seldom found outside al-Bass. An am-

phora with horizontal handles from the so-called Storage Room a-b-c in Beirut Zone 003 (Badre 1997: 87, Fig. 45:14) shows a variant of this design consisting of two, very closely spaced parallel black fillets on the neck and a band between black fillets, two above and one below, on the shoulder. The effect resembles closely the decoration on urns U14-1 and U38-1 [see *Fig. 8* top]. Nonetheless, the decoration below the handle of this amphora, comprising a single horizontal

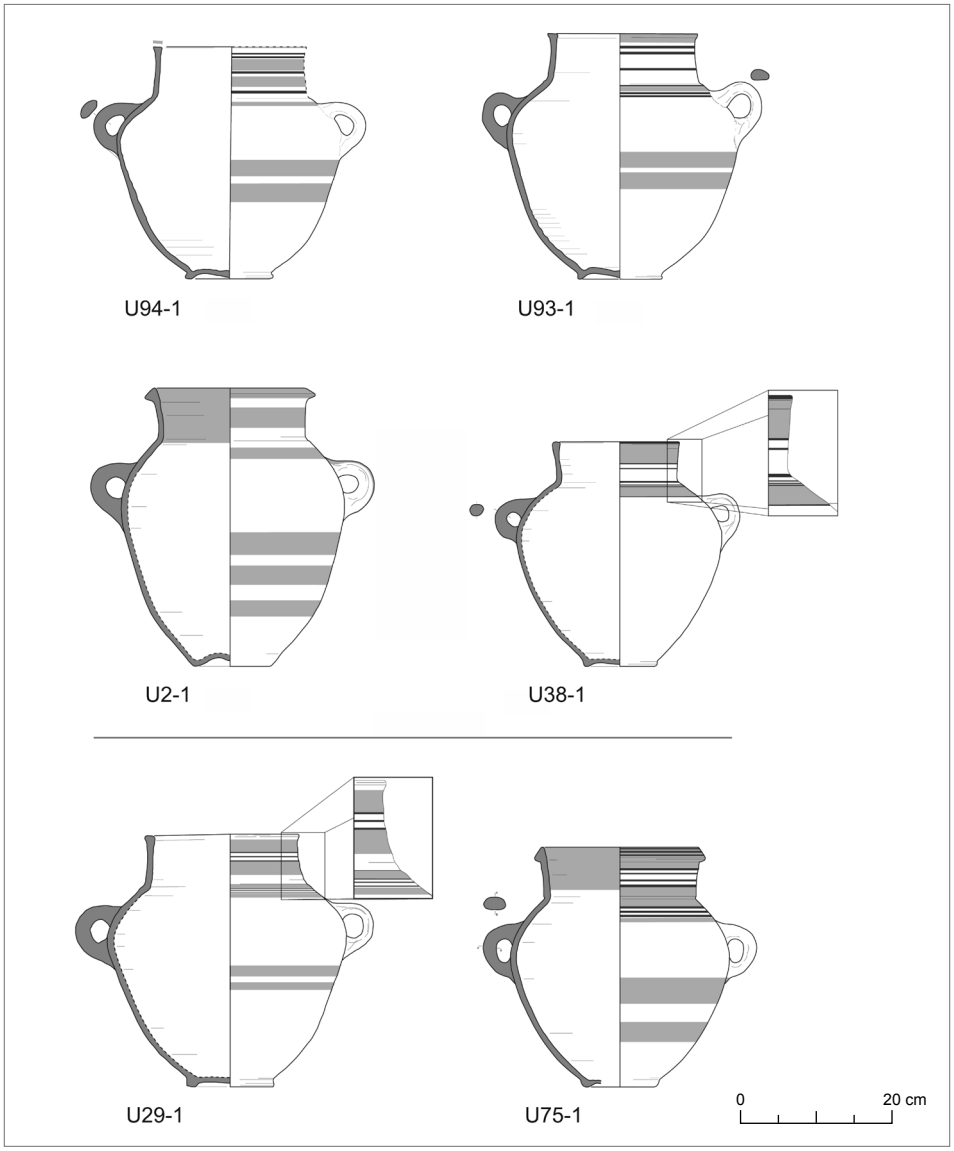

Fig. 8. Two designs of a linear decorative pattern on local amphorae (Tyre Project | plate design F.J. Núñez Calvo)

band of red between black fillets, represents a combination not recognized in the al-Bass material. An amphora from Stratum E2 at Tel Kabri, Palestine (Lehmann 2002: 209, Fig. 5.81:3) shows a red band between contiguous black fillets, which is very similar in character to the Beirut example, even if it does not have any decoration on the shoulder (possibly because of the positioning of a horizontal handle). This could also be the case of a vessel found in Level 5 of Sector II at Tel Kazel, in south coastal Syria (Badre et al. 1994: 305, Fig. 35:b). Finally, the neck of a vase from Kabri shows a red-colored band highlighted with a black fillet below it, a design similar to the one appearing on the lower half of its body and, incidentally, on urn U165-1 from al-Bass [see *Fig. 3E*]. Hazor has yielded another example of this decorative pattern on a possible painted storage jar (Ben-Tor and Bonfil 1997: 262, Fig. III.39:28). Apart from the band between the fillets on the shoulder, the start of the neck is marked with a black fillet, as is the inner side of the rim. In turn, the lower half of the body shows a succession of fillets of the same kind.

The second decorative design (II) consists of two parallel red bands on the shoulder, separated by black fillets,

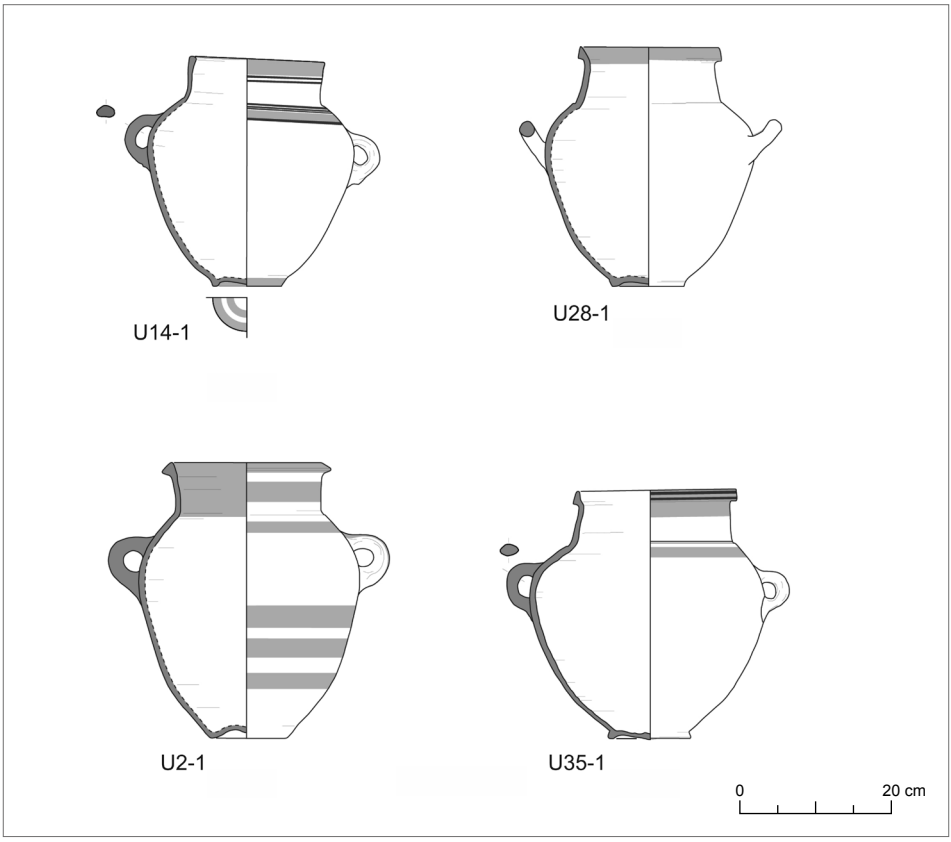

Fig. 9. Examples of secondary decorative resources (Drawing F.J. Núñez Calvo)

of which there are usually three [*Fig. 8* bottom]. At least two variants have also been recorded. The first and simplest consists of a repetition of the design on the neck [*Fig. 8* bottom:U29-1]. The second variant has red paint covering the space between the two sets of bands on the shoulder and upper neck [*Fig. 8* bottom:U75-1].

Examples of this decorative pattern are also rare at other sites. Some dubious parallels come from Hazor, the first one from Stratum VI (Yadin et al. 1960: Pl. LXXI). This vase is morphologically very similar to urn U15-1, but displays a simpler version of the design on the shoulder and a reserved neck. A second possible analogy, from Stratum VA (Yadin et al. 1961: Pl. CCXXI:11), displays two separate bands on the shoulder, the upper of which extends across the lower half of the neck. A third fragment, from Stratum IV (Yadin et al. 1960: Pl. CI:2), would belong to the same variant. This jar lacks the fillets between the bands on the shoulder, and the decoration of the neck is limited to the upper part of the rim. It is possible that this particular design derives from Cypriot models (see below).

Regarding the frequency of these two designs, the first one accounts for 64.7% of the recorded amphorae, while the second one appears on only 11.8% of the set, with 23.5% of the total representing uncertain cases.

Rims, handles and bases bear secondary decoration. The decoration on the rims offers some variability. In some instances, only the upper part of the rim is painted, especially when the rim is simple or displays a rounded thickening on the exterior [*Fig. 9*:U14-1]. The paint can extend inside the neck, either only in its upper part, as in U28-1, or completely, as in U2-1 or U75-1 [see *Figs 8; 9*]. In addition, two horizontal black fillets could appear on the outside of the rim (e.g., U35-1 and U75-1; see *Figs 8*; *9*). The apparent absence of decoration in some parts of the vessel is remarkable. For example, the base of the neck is undecorated (with the exception of the few cases mentioned above). With regard to handles, only U2-1 has them painted with a simple, red, longitudinal band. As for bases, only one jar, U14-1, has the ring completely covered with red paint on the outside and a concentric band on the inside, framing the center [see *Fig. 9*]. U28-1 presents a variant with the whole interior of the base painted red.

PHASING AND CHRONOLOGY

Five phases have been distinguished in the excavated cemetery, spanning a time from the end of the 10th to the middle of the 6th century BCE [*Fig. 10*]. The frequency of burials in the different phases is uneven [*Fig. 11*]. Of the contexts with a secure chronology (134 burials, 87.58% of the sample), more than half represents Period IV (from the second quarter to the end of the 8th century BCE, 72 burials, 53.73% of this group), followed by Period II (from the end of the 10th to the last third of the 9th century BCE; 33 tombs, 24.63%). Periods III (last third of the 9th to first quarter of the 8th century BCE; 15 tombs, 11.19%) and V (end of the 8th to the middle decades of the 6th century BCE; 14 tombs, 10.45%) dem-

onstrate a lesser frequency. The 19 burials without a secure chronology (12.41%) probably belong to the Late Iron Age, namely, Periods III, IV or V, with only two possibly dated to Periods II or III.

The distribution of burials across phases demonstrates a curious clustering in the relatively short Period IV (more than half) and only a very few in the very long Period V. It could, of course, be due to chance, and further excavations could yield a greater number of burials dated to Periods III and V.

Phoenician chronology	Tyre	al-Bass
before 1200 BCE	XV	
		lacking?
after 1100 BCE		
1070–1030 BCE	XIV	
	XIII-2	
	XIII-1	
approx. 950 BCE		Period I
	XII	
	XI	
925–900 BCE		
	X-2	
approx. 873 BCE	X-1	
	IX	
	VIII	Period II
after 840 BCE	VII	
	VI	
825–800 BCE		
	V	Period III
before 760 BCE	IV	
		Period IV
738 BCE	III	
approx. 701 BCE(?)		
approx. 675 BCE		
	II	
		Period V
	I	
after 600 BCE		
approx. 550 BCE		

Fig. 10. Chronology and phasing of settlement in Tyre in the Iron Age (F.J. Núñez Calvo)

Turning to the local amphorae, the category is first attested in graves of Period IV [see *Table 1*]. Only two examples can be assigned, beyond any doubt, to an (early) stage of Period V (end of the 8th to the mid-6th century BCE), with another jar (U75-1) cautiously grouped as uncertain, although probably belonging to this phase. It is one of four jars (with U38-1, U161-1 and U162-1) that are of uncertain date.

This rather narrow chronological distribution of the local amphorae in the al-Bass graves contrasts with the presence of Cypriot counterparts starting from Period II. It becomes even more striking in view of the Bronze Age custom of decorating similar jars (see, for example, Amiran 1970: 132–133, Pl. 41:6, 150–151, Pl. 47; Thalmann 2006: Pl. 89:3, 5 and 6, Pl. 90:1 and 3) [*Fig. 12:a–c*]. Three later examples come from levels corresponding to the transition to the early Iron Age at Tell Kazel. Two of them display horizontal handles (Badre et al. 1994: 305, Fig. 35:b, d, Area II, Level 5) [*Fig. 12:d*], positioned high on the body

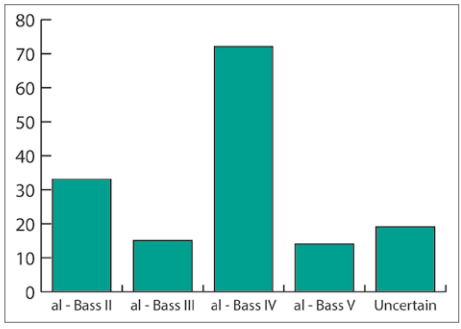

Fig. 11. Burials in the al-Bass cemetery by phase (F.J. Núñez Calvo)

in semblance of the so-called pithoid or piriform vessels from the Mycenaean repertoire (Furumark types FS14 to 51; see Furumark 1972: 20–27, 587–592, Figs 3, 4; Leonard 1994: 12–22); a local version of these was recorded from the same level (Badre et al. 1994: 303–305, Fig. 35:a). The third, from Phase K1 (first half of the 12th century BCE; Badre and Capet 2018: 20), displays a long cylindrical neck, globular body and two opposed vertical handles on the shoulder (Badre and Capet 2018: 36–37, 116–117, Pl. XXX:316) [*Fig. 12:e*].

The available evidence suggests a rather elusive presence of this form in early Iron Age contexts in the Levant. Thus, for example, Megiddo Stratum VIA, contemporary to Stratum XIII in Tyre, has produced only a few cases. One of them displays a carinated body and a typical Late Bronze Age decoration (Loud 1948: Pl. 84:6), while the rest show baggy bodies and a spout on the shoulder (Loud 1948: Pls 84:5, 73:11; Finkelstein, Zimhoni, and Kafri 2000: 249, Fig. 11.3:8, 255, Fig. 11.8:2, 266, Fig. 11.16:2) [*Fig. 12:f*]. Similar examples are known from sites like Tell Qasile (Stratum XI; Mazar 1985: Fig. 30:8), while Stratum XIII in Tyre has yielded only one example of a decorated storage jar, rather than an amphora (Bikai 1978: Pl. XXXIV:10). Later in time, and from contexts of the Iron Age 2a–b in the southern Levant, come similar examples, some of them with red-slipped surfaces. This is the case of jars from Stratum XIV at

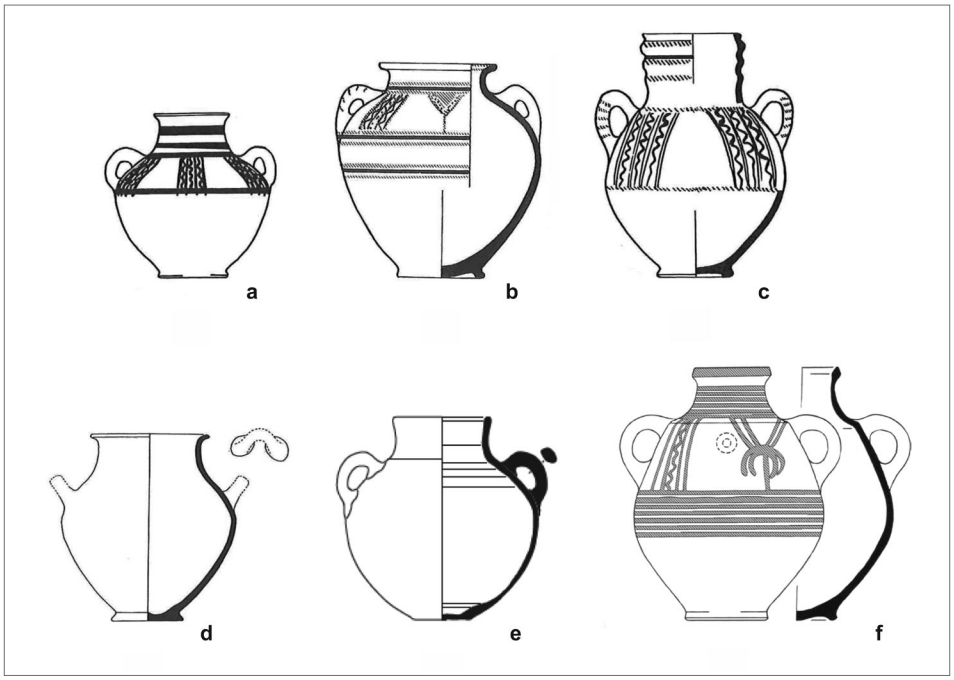

Fig. 12. Late Bronze Age decorated amphorae from the southern Levant (After: a–c – Amiran 1970: 132, Pl. 41:6, p. 150, Pl. 47:3 and 12) and Tell Kazel (d – Badre et al. 1994: 305, Fig. 35:b, e – Badre and Capet 2018: 36–37, 116–117, Pl. XXX:316), and an early Iron Age example from Megiddo (f – Mazar 2015: 50, Pl. 1.1.19:1, Stratum VI). Not to scale (Plate design F.J. Núñez Calvo)

Yoqne'am (Ben-Tor, Zarzecki-Peleg, and Cohen-Anidjar 2005: Fig. I.67:10), Tell Dan Stratum IVA (Biran 1982: 39, Fig. 27:6), Samaria (Kenyon 1957: 103, Fig. 2:1), Tell Fara'h (N) Stratum VIIa (Chambon 1984: Pl. 49:13) or Beersheba Stratum IV (Singer-Avitz 2016: Fig. 11.48:14).

The overall picture for the rest of the Iron Age in the Levant is, in fact, similar to that observed at al-Bass. For example, Tomb IV at the cemetery in the neighboring Tel el-Rachidiyeh, which is contemporary to al-Bass Periods II to IV, has yielded only vessels of Cypriot origin or style (Culican 1982: 69, Fig. 11:c, d; Doumet-Serhal 1982: Pl. V:7, see further 95, Nos 13 and 39). The same situation occurs in Level E in Sarepta (Anderson 1988: Pl. 32:2) and, apparently, in the cemeteries of Achziv (Mazar 2009–2010: 66–67, Fig. 25:10 or 85–86, Fig. 37:2, 9). Close parallels from other Levantine sites come from contexts that

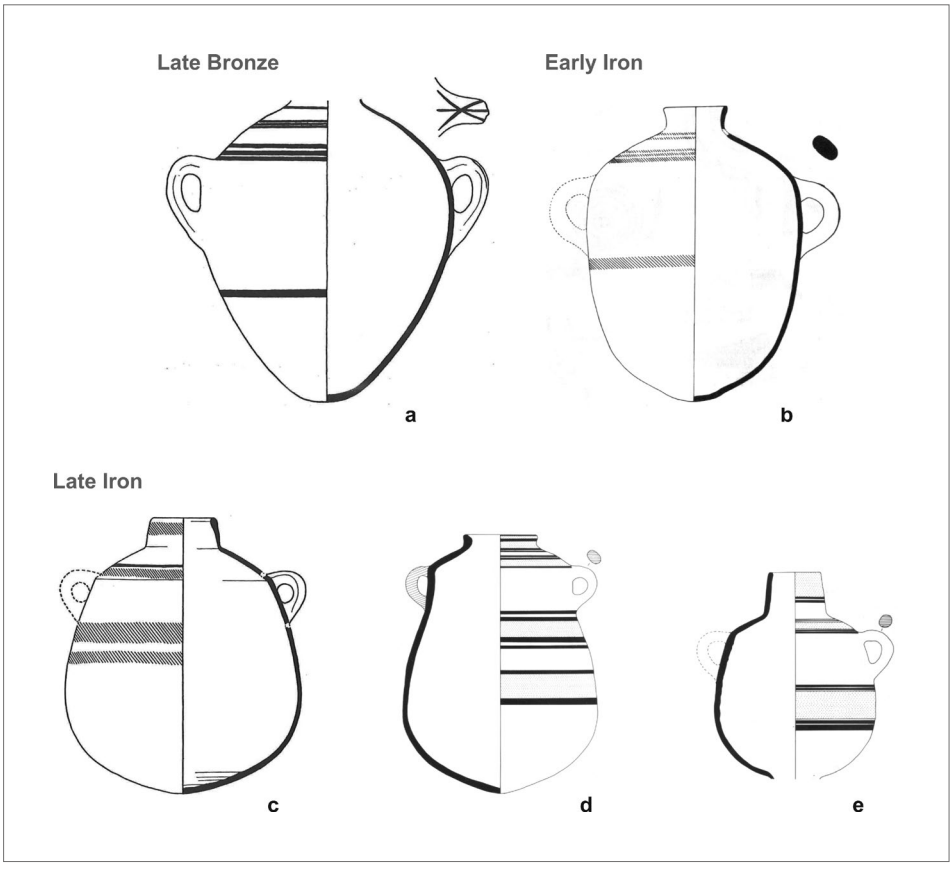

Fig. 13. Decorated storage jars from the Late Bronze (a) and Iron (b–e) Ages: a – Hazor, Stratum 1, Late Bronze II; b – Tyre, Stratum XIII-I, early Iron Age; c – Hazor, Stratum VIII, late Iron Age; d – Kition, late Iron Age; e – Kition, late Iron Age (After: a – Yadin 1958: Pl. CXXIX:1; b – Bikai 1978: Pl. XXXIV:10; c – Yadin et al. 1960: Pl. LIX:4; d – Bikai 1987: Pl. XXI:574; e – Bikai 1987: Pl. XXI:584; plate design F.J. Núñez Calvo)

are contemporary to al-Bass Periods IV and V. This is the case of a specimen from Beirut (Badre 1997: 87, Fig. 45:14), several examples from Level 5 at Tel Keisan (Briend and Humbert 1980: Pl. 43:1a,c,d,e), Tel Kabri (Lehmann 2002: 209, Fig. 5.81:3), some vessels recovered from Hazor strata: VI (Yadin et al. 1960: Pl. LXXI:7; Ben-Tor and Bonfil 1997: 262, Fig. 39:28), VA (Yadin et al. 1961: Pl. CCXXI:1) and IV (Yadin et al. 1960: Pl. CI:2), and Level 6 at al-Mina (Woolley 1938: 152, Fig. 27:12). Likewise, some examples from the interior of northern Syria, e.g., Karkemish (Lehmann 1996: Pl. 51: 316/1) and Deve Hÿük (Lehmann 1996: Pl. 51: 315/1), stand out.

Finally, the morphology and decoration of the vessels from 'Atlit (Johns 1938: 144, Fig. 8:1, Tomb VII, and 147, Fig. 12:3, Tomb XII) seem to be alien to the Levant. Despite calls for a 10th–9th century BCE date for these jars (Regev 2018: 590), the associated finds suggest a chronology more in line with the 7th or even 6th centuries BCE, as indicated in the original publication (Johns 1938: 134).

Therefore, the evidence indicates that between the Late Bronze Age and an advanced stage of the Iron Age, the manufacture of amphorae in Levantine workshops dropped dramatically. With two exceptions: storage jars, already mentioned above, and baggy-shaped amphorae. The former, with or without morphological modifications, were decorated with painted designs [*Fig. 13*]. The practice continued even after the local Tyrian amphorae started to be produced in the 8th century BCE (see, for example, Bikai 1978: Pl. VII:2, 3, 4, from Tyre Stratum III, contemporary to the end of al-Bass Period IV) and continued to be produced, at least, in the 7th century BC. As for the latter, amphorae with baggy bodies and long necks generally had painted decoration and, on occasion, a spout on the level of the shoulder [see *Fig. 12:f*]. It has been shown above that these jars are more common in early Iron Age contexts, but occur later on as well.

FUNCTIONAL ASPECTS

Changes of a functional nature could well have stood behind the apparent disappearance of local amphorae in the early Iron Age and the later reappearance of the type and its implied role in the local ceramic set used for banqueting, also in a funerary context. One should also look at possible prototypes, both local and foreign, for the form.

A few decades ago Ruth Amiran coined the term 'domestic amphora' (Amiran 1970: 142–144), also known as 'table amphora' (Regev 2018). This term refers to a series of containers produced in the Levant from the Middle Bronze Age, typologically and morphologically related to the storage jars and characterized by painted decoration. It includes both decorated storage jars and amphorae, forms that share a similar typological origin, morphological and decorative attributes and, to some extent, also function [*Fig. 14*]. However, the amphora is a special case, primarily because of the specific and unique features that the form presents, such as a stable base, piriform body outline and long neck. The other reason that distinguishes it is the apparent reappearance of the form in the Tyrian ceramic repertoire after 300 years.

POLYFUNCTIONALITY

To better understand the nature of this form, it is necessary to look into the functional aspects. First, let it be said that the Levantine ceramic repertoire never had a specific form intended exclusively for the ashes of the deceased. The remains were deposited at al-Bass in one or two jars, the typology of which was closely related to the funerary banquet and, in particular, to wine consumption. From a functional point of view, these jars were used for: storage/transport, of wine in all probability; the preparation and serving of this beverage; and cooking of other foodstuffs, although the third and last function is less frequent at al-Bass.

It could be assumed that each form was intended for a specific function. Hence, storage jars would have been used for the transport and long-term preservation of the beverage, while the amphorae, an elaborate version of these jars adapted to a domestic context in size and decoration, would have held the wine, conveyed it and served it up. There is sporadic evidence of concavities or beveled profiles on rim interiors which could point to the use of lids of some kind (see, for example, U15-1 [see *Fig. 3E*], U28-1, U35-1 [see *Figs 3E; 9*]; Núñez 2004a:

Fig. 14. Iconographic examples of amphorae in situations of use (a – after Culican 1970: 65, Fig. 1; b – detail from 'Hubar's Amphora', Cyprus National Museum; photo F.J. Núñez Calvo)

151, Fig. 66, 164, Fig. 79 and 170, Fig. 85, respectively), to cover the mouths but not to seal them. Wine would have been prepared for consumption in kraters, cauldrons and handleless jars [see *Figs 3A, 3B, 3C*]. However, the amphoroid and pointed kraters could have been likewise employed for carrying wine in both domestic and ritual contexts, same as amphorae in all likelihood. In most cases, there is no morphological feature on the rim to indicate the use of lids; in fact, the plates used to cover these vessels when they were used as urns rested directly on the upper surface of the rims. However, some cauldrons (like U60-1; see *Fig. 3B*) and selected amphoroid kraters (U53-1 and U95-1; Núñez 2004a: 189, Fig. 104; Aubet, Núñez, and Trellisó 2014: 194, Fig. 2.25, respectively) have rims probably profiled to receive lids covering the contents while in use. Lastly, the cooking function is self-evident, even though none of the examples discovered to date display any evidence of direct fire or heating on the bottom.

The polyfunctional character of certain types is further suggested by burials yielding only one jar (66 instances; 43.14% of all the burials). The most frequently represented form in such cases is the amphoroid krater (46 burials; 73.01% of this group), followed by the amphora (11 burials; 17.46%), and storage jar (two burials; 3.17%). In the lattermost case, vessels are cut at shoulder level, an action that not only made the deposition of human remains inside them easier [see *Fig. 3A*], but also enabled wine to be drawn, thus turning the storage jar into an improvised krater. This kind of usage may have stood behind the emergence of the pointed krater type (Núñez 2011: 287). Other forms—cauldrons, handleless jars and cooking pots—can occur alone in a tomb (1.59% of this group in each case). In the first two instances, their presence alone in the tomb could be explained by the practice of either not depositing the storage jars used for carrying wine to the place of the funerary banquet in the tombs or, failing that, breaking them to use the larger body sherds to protect other grave goods (see below). As for the cooking pot, from a functional point of view it requires no complementary ceramic form.

Burials with two jars of the same type, or of different types, but seemingly sharing the same function, confirm the polyfunctional character of many of the forms. This could be the case of the most frequent vessel combination at al-Bass: one or two amphoroid kraters (93 burials; 60.78% of all the burials), one or two amphorae (21 burials; 13.72%), one or two storage jars (four burials; 2.61%), and a cauldron associated with an amphoroid krater (two instances; 1.31%; Aubet, Núñez, and Trellisó 2014: 171, Fig. 2.2). Moreover, the presence of a cooking pot or its typological variant (as in tomb TT54; Núñez 2004a: 190, Fig. 105) or associated either with an amphoroid krater (for example, tomb TT108/109, in which the krater is a Cypriot import; Aubet, Núñez, and Trellisó 2014: 204, Fig. 2.35) or its pointed variant (unpublished tomb TT197/198), brings up the less clear role of solid food in the funerary ritual (Aubet 2004; 2010; 2014; Núñez 2017). However, the latter case (tomb TT197/198) attests to a combination of food and wine in the ritual.

However, this polyfunctional character demonstrated by some of the forms used as cinerary urns does not affect the division and complementarity of the tasks performed by each one of them separately. It is evident when two different forms appear in the same tomb: an amphoroid krater accompanied by a storage jar (seven instances, of which one jar displays painted decoration; 4.57% of all the burials; Aubet, Núñez, and Trellisó 2014: 185, Fig. 2-16, 205, Fig. 2.36 and 238, Fig. 2.69, respectively), or an amphora (also seven instances; again 4.57% of the sample). In this context, one should consider the use of amphorae to prepare wine for serving. Vessels with particularly wide bodies and rims, e.g., U29-1, U75-1, U90-1, U93-1 or U162-1 [see *Fig. 3E*], could have been well suited for the purpose. At other times, fragments of storage jars in the tombs, protecting the funerary gifts (as in TT61 and TT98; Aubet, Núñez, and Trellisó 2014: 172–173, Figs 2.3, 2.4 as well as 196, Fig. 2.27, respectively), could mean that the wine was carried in those vessels to the place where the funerary banquet was being celebrated and then transferred to more elaborate jars for consumption (see, for example, Núñez 2017: 183, Fig. 6a). This option is particularly relevant in the case of burials with just one jar and especially when the vessel acting as an urn, a cauldron or handleless jar, could not have been used for either transporting or storing wine.

LOCAL VS. CYPRIOT IMPORTED AMPHORAE

Observing the combinations of different vessels used as urns and their confirmed polyfunctionality, one has to wonder what stood behind the reappearance of local amphorae in Period IV and their continued use.

The distribution of local amphorae in the tombs evinces the complementarity of this form with other forms, the amphoroid kraters in particular [*Fig. 15*].

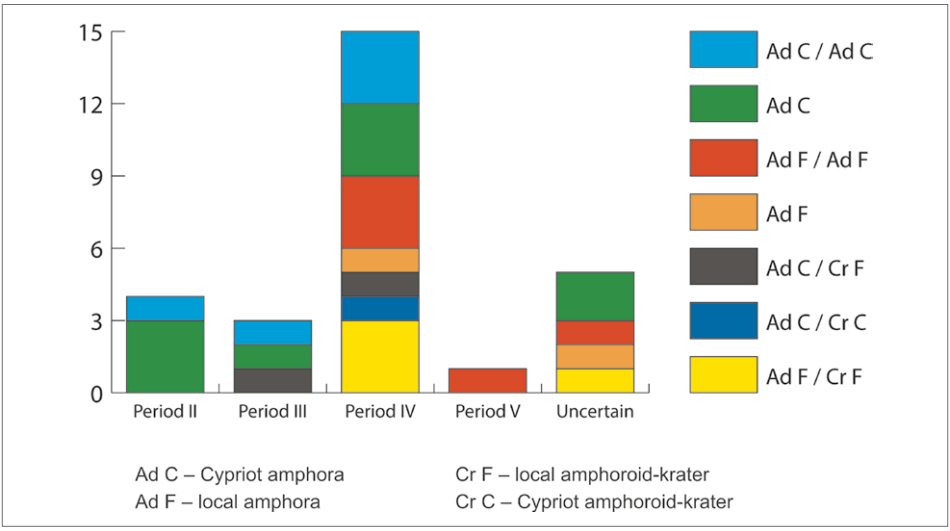

Fig. 15. Chronological distribution of burials from the al-Bass cemetery yielding local and Cypriot amphorae (F.J. Núñez Calvo)

Hence, only one out of the 11 burials that have produced local examples of amphorae yielded one jar (TT90), and in three burials both urns belonged to this type (TT14/15, TT28/29 and TT93/94). The combination of an amphora with an amphoroid krater is relatively more frequent (six instances: TT1/2, TT20/21, TT57/59, TT75/76, TT161/162 and TT165/166) and no other combinations have been recorded to date (the eleventh case, TT38, is uncertain, because probably out of context).

The appearance of local amphorae in an advanced phase of the Late Iron Age could tentatively be explained by their role as substitutes for the imported counterparts, a changeover that could have been caused by any number of commercial, social or even ritual reasons.

The imported Cypriot amphorae from the al-Bass tombs represented two main types (Núñez 2004b: 297–300; Aubet and Núñez 2008; Núñez and Aubet 2009: 404, 405, Fig. 1:2, 3; Núñez 2014a: 271–272, Fig. 3.14, 310–312, Fig. 3.74). The first one is characterized by high necks topped by

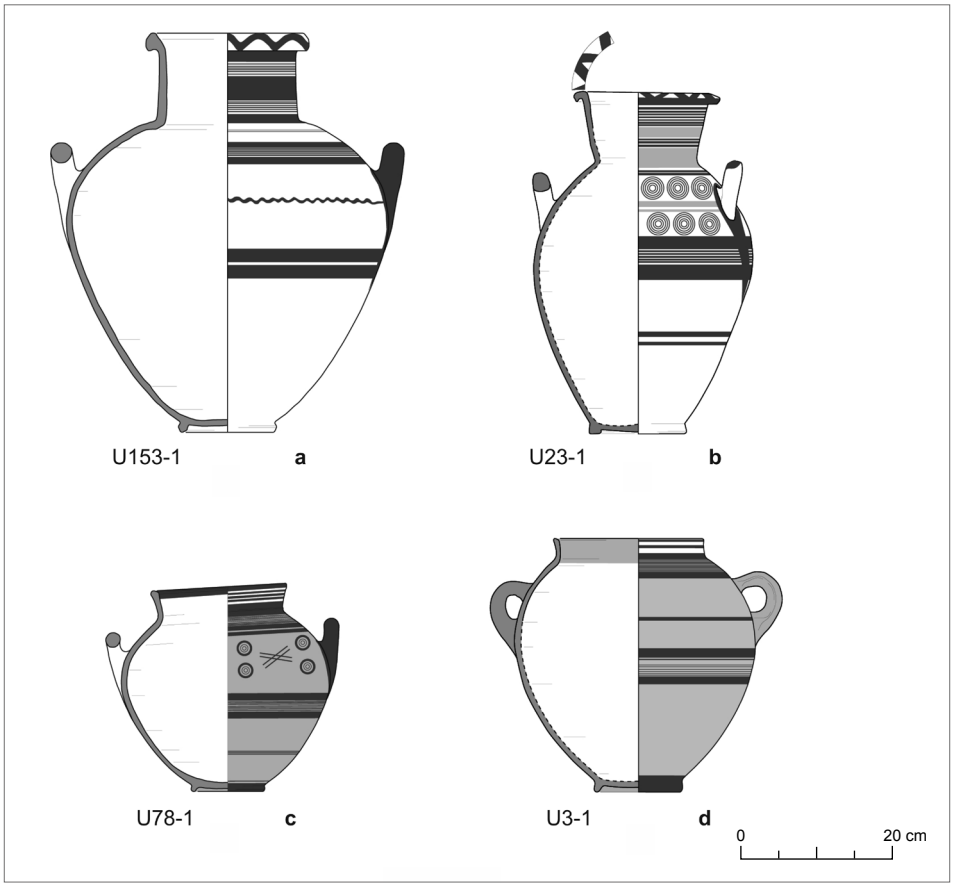

Fig. 16. Cypriot amphorae from al-Bass: belly-handled type (a – White-Painted IV ware; b – Bichrome IV ware) and collar-neck type (c – Black-on-Red II ware; d – Black-on-Red II ware) (Tyre Project | plate design F.J. Núñez Calvo)

marked rims [*Fig. 16:a,b*]. It corresponds with Gjerstad's belly-handled amphorae (Gjerstad 1960: 120, Fig. 14), and its prototype is Mycenaean, appearing in the ceramic repertoire of the early Late Helladic IIIC period and becoming popular in the Late Helladic IIIC Middle period (Furumark 1972: 36, Fig. 8, FS 58, 594–595; Mountjoy 1986: Table III, FS 58; 2001: 97, 104, Figs 277 and 278). It appeared in the Cypriot ceramic array in the Late Cypriot III phase, specifically, the so-called Proto White-Painted ware (Furumark 1944: 240–248; Gjerstad 1944; 1948: 282–283; Kling 1989: 147–148). Examples of this type found in the al-Bass cemetery have an inverted piriform body with wide or stylized shoulder, annular base, two horizontal handles on opposite sides, attached on the shoulder, a neck with cylindrical or everted walls and a rim that could be thickened on the outside or everted relative to the line of the neck.

The second Cypriot type is characterized by a wide-shouldered body, annular base, two handles on the shoulder on opposite sides, arranged either horizontally or vertically, as well as a wide and short neck with straight or everted walls, and finished with a simple or slightly thickened rim on the inside [*Fig. 16:c,d*]. It corresponds to jars with horizontal/vertical handles (Gjerstad 1948: 112–113, Figs 4, 5) and derives its origins from the Mycenaean ceramic repertoire, where it is known as a late storage jar or collar-necked jar (Furumark 1944: 240–247; 1972: 33–38, Fig. 9, FS 63–64; Gjerstad 1944; 1948: 282; Mountjoy 1986: 125). This type appeared for the first time during the Late Helladic IIIB1 period (Mountjoy 1986: 125, Table 3, FS 63–64), but became more popular from the early Late Helladic III period (Mountjoy 2001: 91–93, Fig. 234, 96, Fig. 253). It, too, was adopted into the Cypriot ceramic repertoire in Late Cypriot III, and continued through the Cypro-Geometric I into later periods (Furumark 1944; Gjerstad 1944; 1948: 282). Gjerstad believed that the variant with vertical handles was influenced by the Levantine ceramic repertoire.

Interestingly, none of the Mycenaean variants of the amphora, whether high- or low-necked, horizontally or vertically handled, has hitherto been registered in the Levant (see, for example, Leonard 1994). This was the case, for example, of Furumark's form FS49, typical of early Helladic IIIC1 (Furumark 1972: 23, 27, 592, Fig. 4), form FS 62 or 'late storage vessel' dated to the Helladic IIIC (Furumark 1972: 37–38, 594, Fig. 9) and types FS 73 and FS 74, the so-called 'vessels with vertical handles on the body', present in the Mycenaean repertoire from the Helladic IIB to IIIC1 (Furumark 1972: 34–35, 596, Fig. 7). Perhaps these amphorae, whether Cypriot or Mycenaean, were not needed because the market was supplied with a local version of the decorated amphorae. Alternatively, wine drinking habits could have been different and did not require containers of this kind. Hence also their infrequent presence in later contexts.

The earliest recorded example, preceding the al-Bass burials, is a high-necked amphora from the early Iron Age Stratum E at Sarepta (Anderson 1988: 394, Pl. 32:2, White-Painted I ware). A vessel of the same type, recorded at Tel Dor, is later, dated to the transitional Iron 1/2 level (Gilboa and Sharon 2003: 22 and 35, Fig. 11:17, White-Painted IB/II ware; Gilboa, Sharon,

and Boaretto 2008: 154; see also Gilboa 2018: 243, Pl. 20.78:2, 3). An amphora found at Tyre in Stratum X-2 is slightly later (Bikai 1978: Pl. XXVIII:9, White-Painted II ware), corresponding to the beginning of Period II at the al-Bass cemetery and, in general, to the Middle Iron Age in the central Levant. Other examples dated to the Late Iron Age come, for example, from Tell el-Rachidiyeh (Doumet-Serhal 1982: Pl. V:7), Beirut (Badre 1997: 78, Fig. 39:8, 89, Fig. 46:1), level E2a at Kabri (Lehmann 2002: Pl. 5.82:7) and Tell Keisan, Level 4 (Briend and Humbert 1980: Pl. 32:10).

Six Cypriot amphorae were found in four burials from al-Bass Period II (Núñez 2004a; Aubet, Núñez, and Trellisó 2014) [see *Figs 16, 17, 18*]. Of these instances, five are belly-amphorae (U61, U97-1, U107-1, U180-1, and U181-1) and one a collar-neck variant (U216). These jars, similar in terms of morphology and decoration, represent White-Painted III ware, typical of the Cypro-Geometric III period. Where the body is preserved (U61-1, U97-1, U107-1, U180-1, and U181-1), it is a smooth inverted piriform shape with broad shoulders and a high and relatively narrow neck, while the rim is everted and horizontal. The decorative pattern is similar as far as could be observed, representing Gjerstad's so-called zone style. In two cases, a linear motif appears in the handle area (a straight

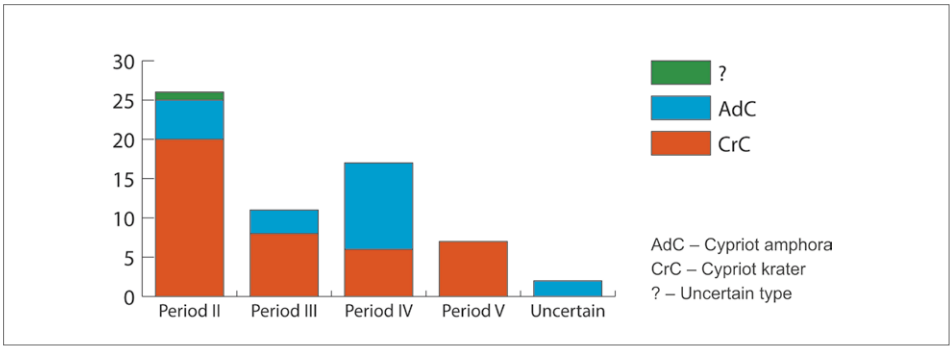

Fig. 17. Relationship between imported amphoroid kraters and amphorae over time (F.J. Núñez Calvo)

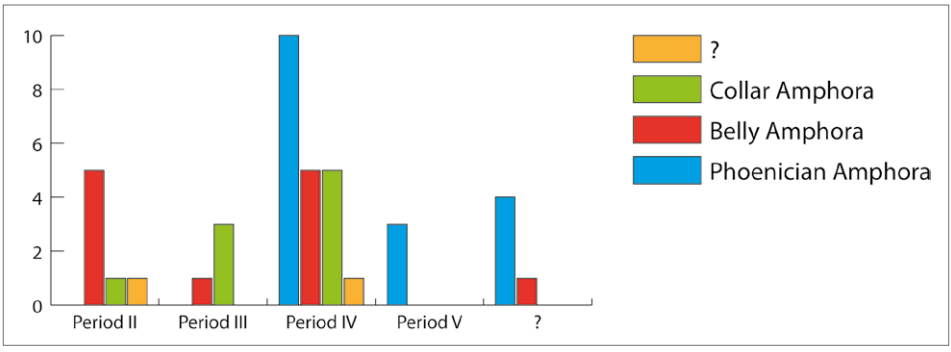

Fig. 18. Relationship between local amphorae and the two varieties of Cypriot amphorae over time (F.J. Núñez Calvo)

horizontal line in U107-1 and a wavy one in U97-1, U180-1 and U216-1), and in two others there is a triglyph on the shoulder (U25-1 and U97-1).

The picture is similar for Period III. Two of the recovered examples are collar-necked amphorae (U3-1 and U5-1), with broad, smoothly curving, inverted piriform bodies and relatively short necks with the rim edges slightly thickened on the inside. A third jar belongs to the belly-amphora type (U206-1), morphologically hardly different from the earlier ones. The last jar (U19-1; Núñez 2004a: 155, Fig. 70:1) could have belonged to a variant squatter in appearance.

From the point of view of the decoration, the assemblage includes White-Painted wares (U206-1) along with two new categories: the so-called Black-on-Red II (IV) ware (U3-1 [see *Fig. 16:d*] and U5-1), and Bichrome IV ware (U19-1). All of the listed wares from this phase are dated to the Cypro-Archaic I period. The so-called zone style underwent changes with regard to the design of the space around the handles; two examples still show a horizontal band, either (U206-1) or straight (U3-1), while another one shows a series of concentric circles arranged in an indeterminate pattern (U5-1; Núñez 2004a: 139, Fig. 54:1). The last vessel (U19-1) reveals the same decorative approach, although there does not seem to be any pattern in the handle area save for some protuberances imitating metal rivets on either side of the top end of the handle.

The latest examples of Cypriot amphorae at al-Bass come from Period IV. There are five each of the belly-handled and the collar-neck types. The belly-handled type has three variants. The first shows body-to-neck proportions in harmony with vessels from earlier periods (e.g., U64-1), although there are examples that stand out for their larger size (U153-1; see *Fig. 16:a*). The second variant (U23-1; see *Fig. 16:b*) is a much more stylized version of the previous one, while the third has a stunted appearance (U158-1). In addition to rims derived from previous types, that is, those with a horizontal disposition (as in U23-1), a new form of the rim shows an external, rounded thickening, generally provided with a concavity on the inside.

As for the other type, two main variants of the collar-necked amphorae were recorded. The first of these, which is also more numerous, shows a greater similarity in terms of morphology, although not so much in dimensions or proportions of the different parts. Meanwhile, the second variant is characterized by a stunted form and shorter rim. Apart from this, all the vessels show straight rims lacking an obvious thickening, while some of them have vertically set handles.

The Cypriot amphorae from Period IV are all of Cypro-Archaic I date and represent White-Painted IV, Bichrome IV and Black-on-Red II (IV) wares. The decorative pattern is still the so-called zone style, and the area around the handles is decorated much as in the Period III vessels, notably with a linear motif such as a smooth and wavy line, or more or less complex combinations of sets of concentric circles.

The relevance of this form in the cemetery is made clearer by contextualizing it with the rest of the jars used as cinerary urns [see *Figs 17*, *18*, *19*]. In

Period II, 23 out of 33 burials (69.69%) have either one or two imported cinerary urns, of which the best represented form is the amphoroid krater (20 examples; 43.48% of all cinerary urns hitherto recorded for Period II and 76.92% of the imported cinerary urns). The local urns are represented mostly by amphoroid kraters, followed by storage jars and cauldrons. Therefore, in this case, Cypriot amphorae are of secondary importance with regard to the imported amphoroid kraters. Practically the same proportions between imported and local vessels have been recorded for Period III. Nine out of 15 registered burials contained one or two imported cinerary urns (60%) and of these, Cypriot amphoroid kraters constituted the bulk with seven examples (63.63%). Among the amphorae, the collar-necked variant (three examples) dominated over the belly type (one example). As for the local set, save for just one plain storage jar, all of the urns were amphoroid-kraters (15 vessels). The evidence for Period IV is more representative. Only 12 of 72 excavated burials produced either one or two imported cinerary urns (16.67%), demonstrating an obviously changing trend. Six vessels were amphoroid-kraters while 11 were amphorae, five each of the belly and collar-neck variants (one jar could not be ascribed to any particular variant). As for the local vessels, amphoroid kraters continued to be more frequently used as cinerary urns; amphorae are a distinct second, while storage jars (one with painted decoration) and cauldrons are seldom observed. In the last phase, Period V, only three of 14 burials produced either one or two imported urns, and all of these represented imported amphoroid kraters (21.42% of the total).

It is obvious from this review of the frequency of the different types of imported vessels used as cinerary urns in successive phases of the cemetery that amphoroid kraters were the predominant form with amphorae always taking a secondary position in the ranking. It is likewise interesting to observe the dramatically changing proportions between imported amphoroid kraters and amphorae in Period IV, a trend highlighted by the massive accrual of local amphorae at this stage. From a logical point of view, local amphorae could have substituted

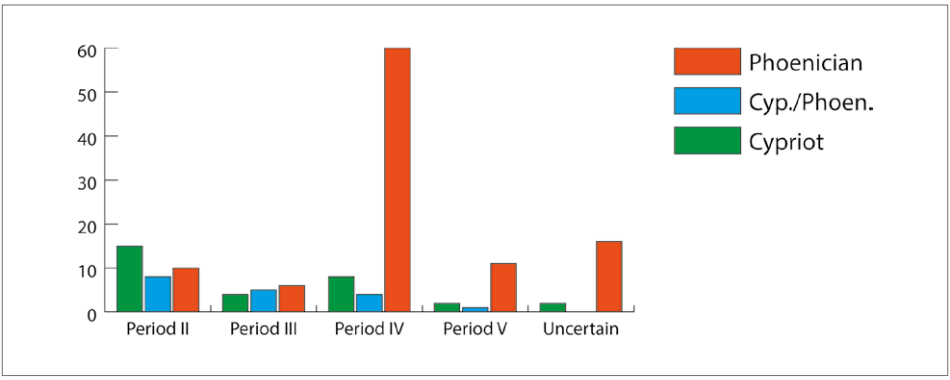

Fig. 19. Provenance of vessels used as urns in the al-Bass tombs by period (F.J. Núñez Calvo)

for their Cypriot counterparts in a situation in which imported vessels could not meet the demand. However, it could also be that Tyrian society developed a taste for this particular form, be it imported or local.

The local amphorae apparently have many morphological attributes in common with the Cypriot belly-handled amphorae. Those similarities are not restricted to the marked character of the neck; one cannot overlook the resemblance between the triangular rims on some of the local jars and the rim profiles of some Cypriot vessels. The horizontal handles on the shoulder of two of the local jars (U28-1 and U166-1; see *Fig. 3E*) are likewise noteworthy, because it is a trait not usually encountered in the Levantine Phoenician repertoire.

There is one further morphological aspect to consider, with probable functional repercussions. Certain morphological attributes of the Cypriot collar-neck amphorae, like the wide body, are shared by local amphorae with simple rims (e.g., U162-1; see *Fig. 3E*), although a direct correlation is not always possible. For example, some of the widest examples of imported collar-neck amphorae, including those with very short necks (for example, U216-1 from Period II, U3-1 from Period III, or U78-1 and U117-1, both from Period IV), could be morphologically connected with the local cauldrons, a form with poor representation in the local ceramic repertoire at al-Bass (compare *Fig. 3B* with *Fig. 16:c,d*). The local variant with rounded or tapered thickenings on the rim exterior represents a different case. These jars seem to find their inspiration among the local amphoroid kraters (especially in the case of U57-1, the rim profile of which is typical of the type) or else they were produced using the local ceramic syntaxes (compare, for example, *Fig. 5*:U79-1 with *Fig. 3E*:U57-1).

The similarities to be observed in the decoration are just as limited. As indicated above, the composition of the decoration on the local amphorae is well established and adapted to their profile, similarly as in the case of amphoroid kraters or cauldrons. However, of the two design patterns recognized on local vessels, only the less frequent one could be considered a simplification or adaptation of the linear design on some Cypriot amphorae, especially the two parallel bands with a variable number of fillets in between, which is a design of Aegean-Cypriot rather than Levantine origin. Even so, jars with this pattern of decoration keep to the local norm of leaving the handle zone free of any decorative motifs.

Therefore, considering the theoretical functional range of local amphorae in the context of wine drinking in Tyre, and relationship of these vessels to their imported counterparts, the idea of local vessels substituting directly for the Cypriot version becomes less plausible. Few of the local examples appear to imitate or to be inspired by the Cypriot prototypes; some of the imported vessels have greater morphological affinity with the local cauldrons; and during Period IV, despite the evident reduction in imported ceramics in the tomb sets, the Cypriot amphora is more frequent than the amphoroid krater of the same origin. Finally, the predominant custom of placing only one Cypriot amphora in a tomb, observed across chronological

phases at the cemetery, is replicated by the local amphorae in only one instance. Besides, for the rest, their combinations with other forms, local or imported, do not show significant changes compared to the local counterparts.

REASON: CHANGING WINE-DRINKING HABITS

The new role of amphorae in the funerary contexts, at least in Tyre, should probably be linked to changes in wine-drinking habits. This would explain a relatively larger demand for amphorae in general, regardless of their origin.

The Levantine ceramic array connected with wine preparation and consumption underwent relevant changes during the Middle Iron Age, that is, between the end of the 10th and the last third of the 9th century BCE (Núñez 2018: 146–156; 2020: 32–35). First and foremost, metal prototypes appear to have inspired a number of new ceramic types and surface treatments (Núñez 2020: 32–35). The types included decanters (Bikai 1987: Pl. XIV, except for Nos 370 and 379; Pl. XV:364) and wide drinking vessels (Bikai 1978: Pls XIX:1–8, XXIII:4, XXVI:7), whereas surface treatment included red-slipped and burnished surfaces, frequently combined with applied decoration imitating elements like rivets, moldings at the base of the neck, and tubular or geminated handles (Anderson 1988: 344–355; Núñez 2020: 36, Fig. 4n). These innovations coincided in time with the gradual disappearance of other types and decorative resources typical of the Iron Age, such as strainer-spout jugs (Bikai 1987: Pl. VIII:115, 116, 117, 118, and 119), pilgrim flasks (Núñez 2020: Figs 36, 4:l) and, as far as decoration goes, bichrome concentric patterns on the bellies of forms like the neck-ridge jugs (Anderson 1988: 335–337, Style III). Forms like the amphoroid krater became more and more popular as part of the same process (Núñez 2014b). The influence in this particular instance came, most probably, from Cypriot vessels, which represent the first examples of this form in al-Bass. However, as indicated above, this form existed in the Levantine repertoire since the beginning of the Iron Age.

These changes must have been linked to new ways of preparing, serving and consuming wine, although it cannot be said whether this was triggered by the appearance of new kinds of wine, maybe wines that did not need to be strained, hence the gradual disappearance of the strainer-spout jugs. Change was progressive and was mirrored by the morphological and decorative transformation of the ceramic forms involved. Decanters are a good example, showing a shift in preferences from cylindrical to conical necks (Núñez 2020: 36, Fig. 4d vs. Fig. 4f, g). Another example are the drinking cups, the main features of which became well established by the end of the 9th century BCE, when the key morphological characteristics of the hemispherical and flat bowls were established (Núñez 2020: 38, 40, Fig. 7p–u). Bowls of the Late Iron Age were modelled on these two types. The emergence of the local amphorae, apparently in the 8th century BCE, is thus just another step in the transformation process described here.

Before the appearance of these amphorae, the local repertoire of the Iron Age had apparently lacked a form of this

kind. In fact, cauldrons, deep bowls (none of which have hitherto been found at al-Bass), some amphoroid kraters and storage jars, decorated or not, were the only big containers for wine storage, preparation and consumption. Imported vessels were rather scarce in this scenario. However, some southern Levantine contexts have proved relevant for the discussion, yielding the above-mentioned stable amphorae, usually with baggy bodies, relatively long necks, and a tubular spout on their shoulders [see *Fig. 12:f*]. The evidence on hand neither affirms or denies the existence of these forms also in the central Levant, but the shape survived through the Iron 2a period in the southern Levant (Ben-Tor and Zarzecki-Peleg 2015: 176, Pl. 2.2.14:1–3). It was subsequently replaced by globular jars with two or three vertical handles, rising up from the shoulder to a ridge at mid-height on the neck (Ben-Tor and Zarzecki-Peleg 2015: Pl. 2.2.14:5–7, 10–11 and 14). These jars either retained a spout on the shoulder or substituted it for a feature that could have allowed a dipper to be inserted (Amiran 1970: 243, 245, Pl. 81:13 and 14; Ben-Tor and Zarzecki-Peleg 2015: 179, Pl. 2.2.15:6–7; Tappy 2015: 207, Pl. 2.3.8:4; Herzog and Singer-Avitz 2015: 231, Pl. 2.4.6:6, 245, Pl. 2.4.15:7) [*Fig. 20:a*].

These jars seem to be directly connected to amphorae of the so-called Late Philistine Decorated Ware (LPDW) or Ashdod Ware (Ben-Shlomo 2014: 724–725; Gitin 2015: 264–265, 277, Pl. 2.5.8:1–4, 6) [*Fig. 20:b*]. They display globular or ovoid bodies, vertical or conical necks articulated by a central ridge, two vertical handles from the shoulder to the said ridge and surfaces covered with a vertically burnished red slip. Painted decoration appears on the bodies and the upper half of the neck, following the linear designs that combine parallel horizontal bands with a number of fillets in between, sometimes on a white background. This type is likewise typical of Iron 2a–b contexts, which could be dated, following the low chronology, between the late 10th and 8th centuries BCE. The emergence of this type is believed to have been influenced from the central Levant (Ben-Shlomo, Shai, and Maeir 2004: 20), this despite the existence

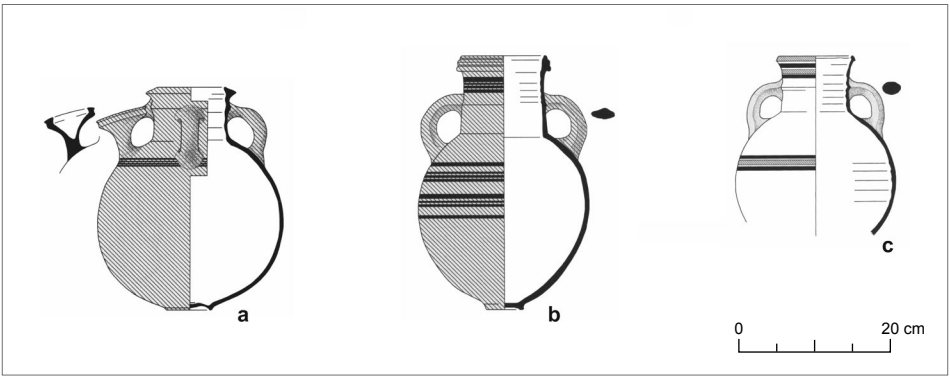

Fig. 20. Southern Levant neck-ridge jars (a – Tell Far'ah Stratum VIId; b – Tell el-Safi Stratum A3; c – Tell Abu Hawam Stratum III (a – after Tappy 2015: 207, Pl. 2.3.8:4; b – after Gitin 2015: 277, Pl. 2.5.8:2; c – after Lehmann 2015: 132, Pl. 2.1.9:1; plate design F.J. Núñez Calvo)

of certain types in the southern part of the region, either provided with one handle like in Samaria (for example, Kenyon 1957: 103, Fig. 2:4, period I/II) or with two (for example, Ben-Tor and Zarzecki-Peleg 2015: 177, Pl. 2.2.14: 10, from Tell Rehov Stratum IV), which seem to follow a tradition of big containers with a ridge on the neck, one handle (like Mazar 2015: 53, Pl. 1.1.21: 10, from Megiddo Stratum VIA), or two handles and a base that is either stable (see, for example, Mazar 2015: 50, Pl. 1.1.19:6, from Tell Dan Stratum IVB) or rounded (Mazar 2015: 51, Pl. 1.1.20:1, from Tell Hadar Stratum II and Megiddo Stratum VIA).

Establishing a more precise date for the emergence of the LPDW amphorae in the Iron 2a period is relevant to the discussion, given the alleged central Levantine influence shaping their origin. The published evidence is insufficient to form an opinion in this regard. However, assuming the validity of the idea of influences coming from the central Levant, the only type that comes close is the neck-ridge jug with a vertical rim, a variant that appears in the final stages of the 9th century BCE (Núñez 2008: 46–48; 2008–2009; 2018: 114–117). In addition, the chronology of the strata that serve as a reference is under discussion (Finkelstein and Singer-Avitz 2001; 2004; Ben-Shlomo 2003), making the situation even more complicated. Therefore, with the evidence at hand, any central Levantine influence on the LPDW ware in general and the amphorae in particular, should be reconsidered. Instead, the appearance of the LPDW amphorae could represent a regional version of a series of jars with a ridge on the neck and one or two handles (see, for example, the jar from Samaria mentioned before, or Ben-Tor and Zarzecki-Peleg 2015: 177, Pl. 2.2.14: 10). Probably, even the jars with three handles and the spout-like device on their shoulders could be related to them. In this context, it is important to note that some neck-ridge jugs and, in particular, those with vertical rims in the central Levant became in some instances bigger in size (Saidah 1966: 69, Nos 23, 24; 1977: 140, No. 9; Bikai 1978: Pl. XIV:8, from Tyre Stratum IV; Núñez 2004a: 155, Fig. 70:2; Aubet, Núñez, and Trellisó 2014: 230, Figs 2.61: U147-3, 244, 2.75: U167-3), a phenomenon that can extend itself to the open-rimmed type of these jugs (Aubet, Núñez, and Trellisó 2104: 212, Fig. 2.43: U120-3). However, this phenomenon is more common at the close of the Middle Iron Age and the first stage of the Late Iron Age, contemporary to the latest stages of al-Bass Period II and all of Period III.

A jar from Stratum III at Tell Abu Hawam (Herrera and Gómez 2004: 317, Pl. XXXIII:277; Lehmann 2015: 132, Pl. 2.1.9:1) [*Fig. 21:c*] could serve as a reference for the phenomenon in the southern Levant and links with the repertoire of lands to the north and, probably, to the west. This jar belongs to the specimens with one or two handles mentioned above and has a vertical neck and two opposite vertical handles connecting the shoulder to the ridge on the neck, a cylindrical neck with a slightly open rim, topped by an inverted lip with a tapered profile. The decoration is identical with that seen on neck-ridge jugs with vertical necks from the same phase: a band on the belly between black fillets, a design

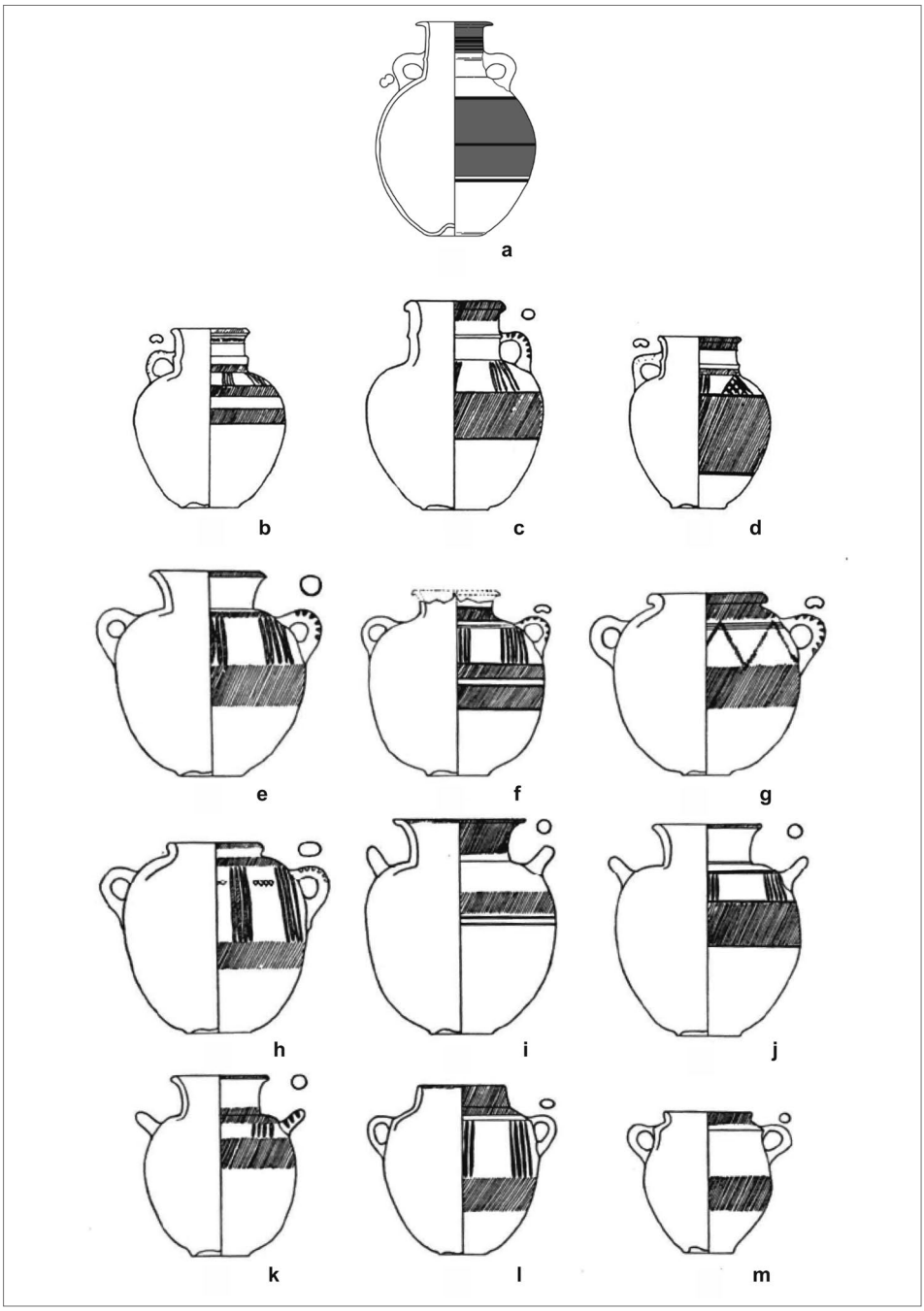

Fig. 21. Mediterranean parallels: a – neck-amphora from the Iberian Peninsula, Cerro de Alarcón; b–d – Carthaginian neck-ridge jugs, *tophet* of Salambo; e–m – Carthaginian amphorae, *tophet* of Salambo. Not to scale (After: a – Ramon 2010: 245, Fig. 4:73; b–d – Harden 1937: 65, Fig. 3:m–o; e–m – Harden 1937: 65, Fig. 1:a-l; plate design F.J. Núñez Calvo)

repeated on the upper half of the neck; in addition, the lip is painted red (for example, Stern 2015: 467, Pl. 4.1.16:2, 6, 7, 475, Pl. 4.1.22:5). The connection between this jar and the neck-ridge jugs with vertical rim, including the decoration, is evident. Despite the problematic dating of the stratum (Herrera and Gómez 2004: 147–164), this vessel could be attributed to an advanced stage of the Middle Iron Age. In other words, it would be broadly contemporary with an advanced stage of al-Bass Period II (roughly second half of the 9th century BCE). In any case, the Tell Abu Hawam evidence is not enough to decide the direction of the influence: whether it influenced the Philistine amphorae, was itself influenced by the latter, or represented a regional version of the same phenomenon. However, it serves as a reference for a somewhat similar phenomenon that occurred overseas, namely, the so-called 'neck-amphorae'. These jars are also known as the 'Cruz del Negro' urns from the cremation cemetery of this name in the province of Seville where they were first identified (Maass-Lindemann 1985: 235; Belén and Pereira 1985: 316–323; Torres 2008: 631; González Prats 2011: 602–638), and appeared in several centers located in the central Mediterranean, north Africa and Iberia [*Fig. 21:a*]. This is not the place to analyze the connections between the Levantine jars and those overseas types. However, there are three relevant points relative to these jars and connected to the discussion at hand. First, in terms of the morphology and decoration, these jars seem to derive from the Phoenician neck-ridge jug with vertical rim rather than the southern Levant prototypes. Second, their presence in overseas cemeteries is proof that they were used in the funerary banquet and, hence, are part of the ceramic set used for wine preparation and consumption in those ambients. Third, they exemplify the phenomenon of oversized jugs becoming big enough to need a second handle and, even, take over the role of cinerary urns from other containers (Harden 1937: 65, Fig. 3:m–p) [*Fig. 21:b–d*].

MEDITERRANEAN CONNECTIONS

Looking for possible connections with other regions of the Mediterranean, one should first look to Cyprus. Despite the short distance, it is remarkable that Iron Age contexts from the Levant have produced very few examples of the Cypriot amphora with a high neck and vertical handles, at least as far as the published evidence is concerned. One possible find of this kind is a jar from Level E at Hama (Fugmann 1958: Fig. 188: 5A842; Lehmann 1996: Pl. 51:317/1). This ceramic type could easily be related to the Canaanite stable amphorae of the Late Bronze Age given its morphological features and, in particular, the long neck and the vertical handles [see *Fig. 22*]. Gjerstad considered the appearance of this type in the Cypriot repertoire to be a consequence of Levantine influences during the Late Cypriot III period (1225–1050 BCE) (Gjerstad 1960: 113). In any case, the form, with diverse variants over time, lasted in the Cypriot ceramic repertoire until the Cypro-Archaic II [*Fig. 22*]. Similar to what happened previously with the Late Bronze Age versions

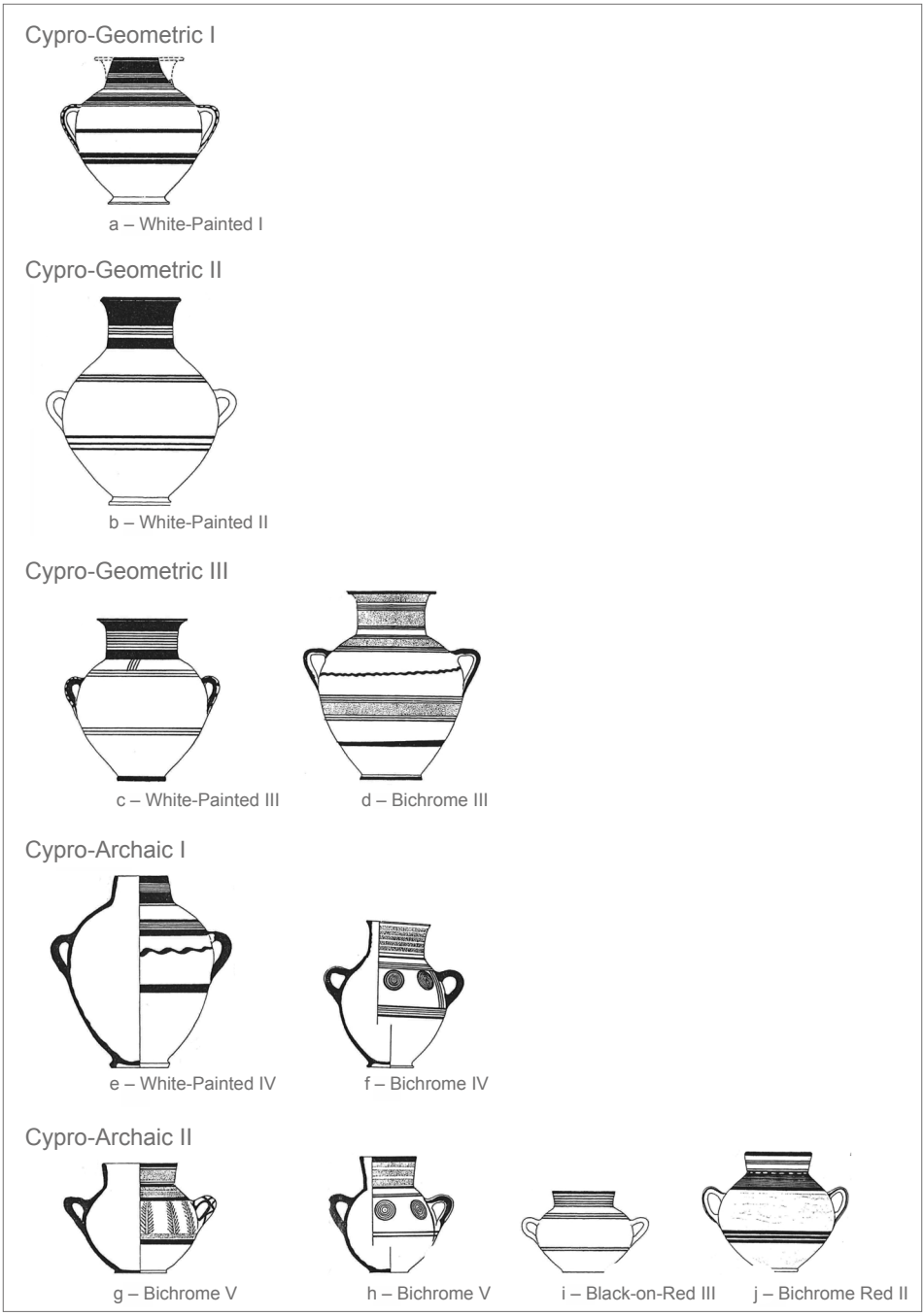

Fig. 22. Evolution of the amphora with vertical handles in Iron Age Cyprus (After: a – Gjerstad 1948: 282, Fig. V:5; b – Gjerstad 1948: Fig. XIV:4; c – Gjerstad 1948: Fig. XX:4; d – Gjerstad 1948: Fig. XXIV:1; e – Gjerstad 1948: Fig. XXX:1; f – Gjerstad 1948: Fig. XXXVI:1; g–h – Gjerstad 1948: Fig. LI:3–4; i – Gjerstad 1948: Fig. LII:14; j – Gjerstad 1948: Fig. LV:9; plate design F.J. Núñez Calvo)

of the Mycenaean and Cypriot amphorae, the possible explanation for the apparent scarcity of these jars in Levantine contexts could be that the respective populations did not have a proclivity for them.

A series of amphorae with characteristics very close to those of the amphorae from al-Bass appeared in diverse areas of the central Mediterranean (see, for instance, Orsingher 2015 for its use in the *tophet*). Later examples of this type are found in Carthage in roughly contemporaneous contexts [see ***Fig. 21:d, e, h–j; l, m***]. Their bodies are globular or inverted piriform, and they have long necks and two opposed handles on the shoulders, sometimes vertical and sometimes horizontal. The painted decoration follows the same linear patterns seen on the Tyrian amphorae, but the necks are left reserved or covered almost completely with red paint, the handles receive transversal strokes, a rather archaizing feature, and the handle zone is covered with sets of vertical triglyphs in black (see the analysis in Spagnoli 2019: 50–53). It is remarkable that this decorative element is typical on vessels of central Mediterranean wares, such as adaptations of Aegean drinking bowls, based mainly on Late Geometric and Subgeometric prototypes (Briese and Docter 1998; Docter 2014), which represent another of the particularities of this geographical region. Some of the Carthaginian amphora types are morphologically very similar to the cauldrons from al-Bass (for example, ***Fig. 22:f***,g). They reveal the same decorative pattern, consisting of horizontal lines combined with triglyphs in the handle zone, although in one case it is replaced with a zigzag motif [see ***Fig. 22:g***].

In the context of this discussion, one should recall similar jars from domestic and funerary contexts in Sicily and Sardinia. Jars from 8th-century-BCE contexts in Sicily, Mozia with its *tophet* (Orsingher 2016: 286, 302, Pl. 1:3) and the Kothon area (Spagnoli 2019: 24, Fig. 3.7, Pl. 2:1–2, 34, Pl. 7:1) [***Fig. 23:a***] demonstrate morphological and decorative characteristics that are very similar to those of the jars from Carthage.As for the Phoenician presence in Sardinia, it has been dated to the end of the 9th or the first half of the 8th century BCE (Núñez 2017: 20, Fig. 6). Possibly the earliest evidence comes from Sardinia, namely, Sant'Imbenia (Rendeli 2017, with further references) and Sulcis, nowadays Sant'Antioco (Guirguis and Unali 2016; Guirguis 2019). At both sites similar jars have been recovered from domestic and funerary contexts: the *tophet* of Sulcis (Bartoloni 1988: 165, Fig. 2g) [***Fig. 23:b***] and the Nuragic settlement of Sant'Imbenia (variant with horizontal handles; Oggiano 2000: 258, Fig.9:1). However, the focus here is on a form from the local ceramic repertoire that is morphologically closely akin to jars from Carthage and even from Tyre: the so-called *vaso a collo* from the Nuragic ceramic repertoire of the Late and Final Bronze Age in Sardinia (Campus and Leonelli 2000: 436–441, 446–453, Pls 246–261) [***Fig. 24***]. Bodies are globular, oval or piriform, necks markedly vertical with regard to the shoulder, rims simple and everted, with tapered lips, and two vertical handles, usually of the '*a gomito rovescio*' type, attached at the widest point of the body. Vessel surfaces are plain, often grayish-black in color due to firing in a reduction atmosphere, or coated with a thick red slip. Vessels are usually burnished. This

form is typical in Late Bronze and Iron Age contexts on the island and, despite the resemblance to Phoenician counterparts, the technical, morphological and decorative features are typically Nuragic. Despite the heated debate around Sardinian chronology for this period (compare, for example, Depalmas and Melis 2010: 169, Table 11.1, with Guidi 2008: 176, Pl. 1) one cannot refrain from noting some obvious connections between the jars from the island and from Carthage in this early period, especially as there are other points in common, like the morphological relationship between the so-called Sant'Imbenia jars (Oggiano 2000; de Rosa, Garau, and Rendeli 2018) and the early Carthaginian storage jars (Docter 2007: 620–629). It is interesting to note that these Sardinian jars, the production of which followed Nuragic technical and morphological parameters, functioned as containers for

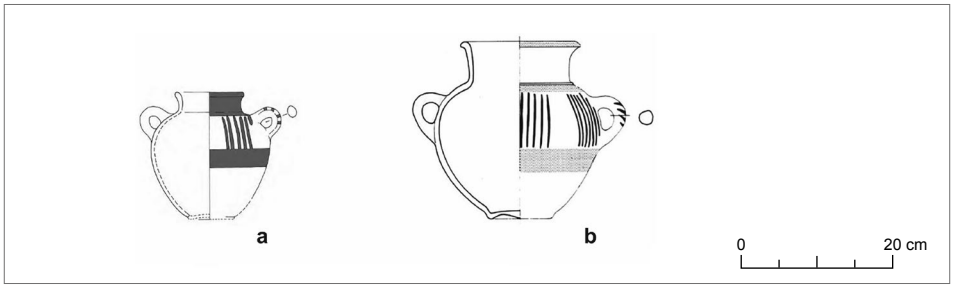

Fig. 23. Phoenician amphorae from the Central Mediterranean: a – Mozia; b – tophet of Sulci (a – after Spagnoli 2019: 105, Pl. 7:1; b – after Bartoloni 1988: 174, Fig. 2:g; plate design F.J. Núñez Calvo

Fig. 24. Nuragic *vaso a collo* from the Flumenelongu site in Sardinia (Museo Archeologico della Città, Alghero; photo F.J. Núñez Calvo)

wine produced on the island, and have been found in central Mediterranean and Iberian contexts (Botto 2013; de Rosa, Garau, and Rendeli 2018; Oggiano and Pedrazzi 2019).

Finally, there is no evidence of Phoenician amphorae, either brought to the Iberian Peninsula or made there. Instead, the region seems to have had a preference for the neck-amphorae mentioned above.

The possible relationships between the different amphora varieties from all over the Mediterranean is an open issue, heavily dependent on the dating of finds of Levantine and overseas jars. Establishing the order in which the forms appeared and their mutual relationship requires a concordance of different and sometimes controversial chronologies or rather chronological approaches that are very different from one another. This is naturally beyond the scope of this paper.One should note, however, an evident boom in new amphora types at the end of the 9th and in the 8th century, which apparently did not last too long in the Levant, but was continued in the central and western Mediterranean. It is not so well manifested in Tyre, given the limited number of tombs from Period V at al-Bass. The above-mentioned jar from Beirut, from a 7th-century BCE context, could constitute an exception. Neither is this phenomenon very clear in the rest of the Levant, despite the examples found at Tel Keisan, Kabri or Hazor. Besides, there seems to be some limited continuation in Philistia during the Iron 2c period (Gitin 2015: 392–393, 411, Pl. 3.5.9:1–3).

CONCLUSIONS

Excavation of the al-Bass cemetery in Tyre revealed a new local ceramic form, described as an amphora, which began to be used as a cinerary urn in some of the tombs starting apparently from the second quarter of the 8th century BCE. This form is morphologically and functionally related to the category of painted storage jars. Whether intentionally or inadvertently, it repeats a ceramic form that disappeared from the region apparently in the last stages of the Late Bronze Age and remained absent through the initial stages of the Early Iron Age.

The characteristics of this new vessel type are typical of other big containers produced in Tyrian workshops. Therefore, the form has to be considered as a local phenomenon despite indubitable links with Cypriot wares and, in particular, with the so-called belly-amphora. In this sense, there are certain obvious morphological and decorative features that are shared: body and neck form, positioning of the handles and what seems to be a modified Cypriot decorative pattern, the latter appearing on only a few examples.

The appearance of local amphorae in burial contexts in the al-Bass cemetery cannot be considered as a simple substitution of local wares for imported ones, despite the presence of Cypriot amphorae in tombs from earlier phases. This is because when the local amphorae appeared, the number of Cypriot examples exceeded even that of the amphoroid-krater, which had always held an eminent place in the quantitative ranking of vessels from the tombs. Besides, the contexts yielding local amphorae are not much different from

those established for the local amphoroid kraters. Therefore, rather than being a substitute from a typological, functional or contextual point of view, the local amphorae coexisted with Cypriot vessels, and both formed part of a Mediterranean-wide phenomenon with broader repercussions. This phenomenon consisted of different amphora types which emerged in the southern Levant and other parts of the Mediterranean throughout the 9th century BCE and in the first half of the 8th century BCE. Philistine amphorae, Carthaginian amphorae, neck-amphorae from the Iberian Peninsula and perhaps also the Nuragic so-called *vasi a collo* would have all been part of this broader phenomenon, which was triggered by presumed changes in wine consumption habits, itself caused either by changes of the wine itself, of the ways in which it was prepared and served or even perhaps the vessels used in this process.

Setting aside the issue of Mediterranean-wide connections, which could be considered somewhat far-fetched at this point, the case of the local amphorae from the al-Bass cemetery brings to attention a tentative new trend in wine consumption that spread to most parts of the Mediterranean and the Atlantic regions (Iberian and North African shores). Therefore, the amphorae from Tyre and Carthage, the neck-amphorae from the central and western Mediterranean, the amphorae from Philistia and Cyprus, and even Sant'Imbenia in Sardinia, would all be an echo of these new trends.

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