

PHOENICIAN NECK-RIDGE JUGS OF THE IRON AGE: A REASSESSMENT OF THEIR SEQUENTIAL STAGES AND CHRONOLOGY

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Abstract: The mushroom-mouthed jugs found in the Phoenician-influenced archaic Western Mediterranean during the Iron Age derive from earlier archetypes which were included in the pottery collection unearthed in Méndez Núñez St., Huelva. These artifacts reflect a chronology for the assemblage that aligns with the Levantine Middle Iron Age. Recent archaeological findings in sites like La Rebanadilla and Utica reinforce this timeline, providing further evidence of the Phoenician pottery's evolution. This study delves into a meticulous examination of the staged development of Phoenician and Levantine neck-ridge jugs, focusing on stratified contexts excavated in the Levantine corridor. By scrutinizing these contexts, a compelling case emerges for the contemporaneous nature of the assemblage of Huelva and the earliest western Phoenician colonies with the Levantine Iron Age IIA period which is dated in the 10th-9th centuries BCE. This challenges previous assessments that had doubt on the synchronization of these archaeological elements. The significance of this revised interpretation lies in its ability to link disparate archaeological discoveries across geographical regions and establish a more cohesive understanding of the development and diffusion of these specific types of pottery. It underscores the interconnection of cultures and trade routes during this period, shedding light on the nuanced relationships between the Western and Eastern Mediterranean during the Iron Age.

Keywords: Phoenician Pottery; Neck-ridge Jugs; Iron Age; Levantine Corridor; Mediterranean; Huelva.

1. INTRODUCTION

The mushroom-mouthed jugs are one of the key types of Phoenician pottery that characterise the Orientalizing or archaic colonial period – 8th-6th centuries BCE – and constitute then one of the diagnostic artifacts of the Iberian and Mediterranean Iron Age. Like storage jars or broad-flanged dishes, it is one of the pottery types that allow us to differentiate chronological periods more easily than with other more conservative and unalterable shapes – bottles, tripod bowls, craters, and cups, among others – thanks to their hypothetical differentiated sequential stages.

The red-slipped mushroom-mouthed jugs, although particularly common in the 7th century BCE with an elongated, stylised, overhanging rim and a pyriform body, began to appear in the 8th century BCE – Strata III-II of Tyre¹ –, based on earlier prototypes also observed in the earliest colonial phases in the western Mediterranean. In fact, one of the clearest markers that illustrate the chronology of the archaeological de-

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1 Bikai 1978.

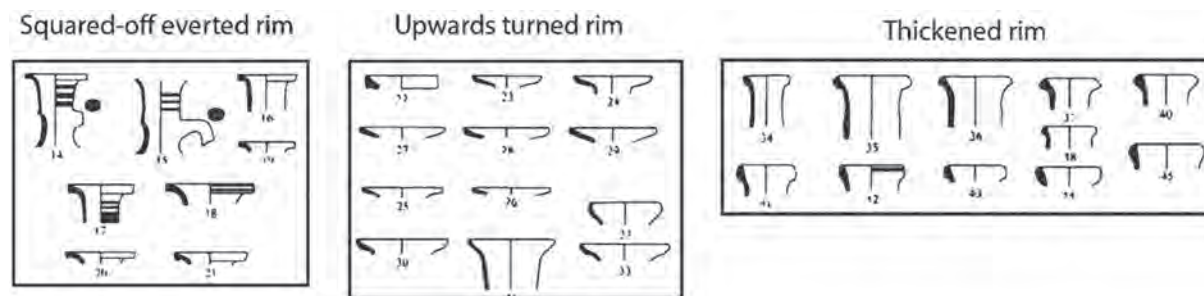


FIG. 1. Phoenician neck-ridge jugs from Huelva (González de Canales Cerisola – Serrano Pichardo – Llompart Gómez 2004, lám. 11).

posits relating to the earliest Phoenician presence in Huelva,² La Rebanadilla³ and Utica,⁴ is the absence of this type of jug. Instead, other archaizing versions appeared in Méndez Núñez Street⁵ – also in Concepción Street⁶ –, without the characteristic ‘mushroom mouth’, which have been assessed to be representative of type 8 of Tyre⁷ and types Dj-4 and Dj-10 of Sarepta,⁸ as well as fragments of handles possibly corresponding to the same type of vessel,⁹ and ring bottoms – type 14 of Tyre.¹⁰

Sixteen years ago, F.J. Núñez Calvo¹¹ presented a very illustrative study on the shapes and the decorative patterns of this type of jug throughout the Iron Age sequence of Levantine Phoenicia mainly using stratified finds of Tyre and contrasting them with numerous funerary contexts from al-Bass and other Lebanese and Cypriot cemeteries. This study was undertaken on the assumption that Phoenician pottery developed through different cultural sequential stages manifest in the different chosen deposits that could be used as reliable chronological markers.¹² Thus, especially departing from the observations made on the stratified jugs of Tyre and its contrast with other funerary assemblages together with other observations made by A. Gilboa and I. Sharon,¹³ F.J. Núñez Calvo considered the existence of up to seven distinct sequenced phases of this kind of Phoenician jugs during the Iron Age. Based on the conclusions reached on the chronology of the different shapes and the decorative attributes, he would later evaluate the group of jugs from Méndez Núñez St. (FIG. 1) indicating a predominant presence of shapes and decorative patterns representatives of the Tyrian strata V-IV and the period III of al-Bass – especially the squared-off everted rims – with some features that could represent a higher chronology but which, in many occasions, could be also residual examples of a later period.¹⁴ More recently, F.J. Núñez Calvo has reconsidered the chronological issue and has suggested that

2 González de Canales Cerisola – Serrano Pichardo – Llompart Gómez 2004.

3 Sánchez Sánchez-Moreno *et al.* 2011, 2012 and Sánchez Sánchez-Moreno – Galindo San José – Juzgado Navarro 2020.

4 López Castro *et al.* 2016; Ben Jerbania 2020; López Castro *et al.* 2020a; López Castro *et al.* 2020b.

5 González de Canales Cerisola – Serrano Pichardo – Llompart Gómez 2004, pl. 11.14-45.

6 González de Canales Cerisola *et al.* 2017, pl. 6.

7 Bikai 1978, pp. 37-40, tab. 6A.

8 Pritchard 1988, p. 140, fig. 47.17.

9 González de Canales Cerisola – Serrano Pichardo – Llompart Gómez 2004, pl. 12.19-22.

10 González de Canales Cerisola – Serrano Pichardo – Llompart Gómez 2004, pls. 11.49 and 12.15-18.

11 Núñez Calvo 2008.

12 Núñez Calvo 2008, pp. 24-25.

13 Gilboa – Sharon 2003.

14 Núñez Calvo 2018a, pp. 115-117 and 165.

the most ancient elements among the jugs of Huelva could be contemporary to the Tyrian strata VII-VIII and the period II of al-Bass.¹⁵

This is a study that aims to complement the observations made by F.J. Núñez Calvo on the Phoenician pottery of Tyre, Cyprus and the Lebanese cemeteries based on the numerous Phoenician imports found in other Levantine stratified sites. We assume that these Levantine stratified contexts are more reliable in terms of chronology – usually including large amounts of pottery sherds and sometimes radiocarbon data, as well as sequenced with other earlier or later assemblages – than those isolated of cemeteries like al-Bass from which only the shapes of vessels and its decoration patterns can be used as chronological anchors. Thanks to this close examination upon these supplementary assemblages of pottery, in addition to addressing the chronological issue of neck-ridge jugs, a clear pattern of relationships emerges as evident between Phoenicia, Cyprus and the rest of the Southern Levant. Notably, it does not only exhibit a close interaction between Phoenician and Cypriot ware – from which the Phoenician pottery develops numerous shapes and decorative patterns –, but also that Phoenician pottery clearly engages extensively with the broader Levantine corridor. This interaction is evident through the shared shaping patterns found across various pottery types stemming from the common Canaanite roots dating back to the Bronze Age. Besides sharing these roots, continuous feedback is clearly developed through the entire Iron Age. Thus, in addition to apparently imported Phoenician jugs throughout the entire Levantine Iron Age sequence, the adoption and adaptation of these jugs in the local repertoire is also noteworthy even in Philistia. Both Phoenician imports and local productions reveal shapes and decorative patterns that allow us to complement and qualify F.J. Núñez Calvo's assumptions about the different evolutionary stages he theorised.

2. IRON AGE I – STAGES A, B, C... AND D?

Phoenician neck-ridge jugs began to be produced during the Early Iron Age based on previous models of local pottery – such as pilgrim flasks – and jugs of Late Helladic IIIB tradition.¹⁶ These early productions were characterised by an oval body decorated with concentric black circles – occasionally in bichrome style, as in a specimen from the cemetery of Khirbet Silm¹⁷ – and with a star motif on the back, as well as an open neck, which P.M. Bikai¹⁸ designated as types JG-9 and JG-10. Among all possibilities, these early productions could constitute the original prototype from which the Phoenician decorated neck-ridge jugs with spherical body common in stratum XIII of Tyre and in numerous Levantine contexts of the Iron Age IB could originate.

The new containers of the Iron Age IB and Tyre XIII, which are particularly illustrative of Phoenician pottery throughout the Levant, counted with a globular body, an unstable base, and a greater predominance of the bichrome decorative style based on reddish circles accompanied with round black lines. The necks were usually open-ended and had a simple or thickened rim¹⁹ besides having the characteristic ridge on their outer face. Together with imports found in Cyprus – Palaeopaphos²⁰ and Salamis²¹ –, this kind of Phoenician jugs seems to find a particularly widespread distribution in the southern Levant during the Iron Age IB and its transition to the Iron Age IIA, possibly finding a partial coexistence with stratum XIII of Tyre. In

15 Núñez Calvo 2018b, pp. 334-336. Núñez Calvo 2023, p. 57, tab. 2.

16 Núñez Calvo 2008, pp. 28-29.

17 Culican 1982, p. 50, n. 4.

18 Bikai 1978, pp. 37-41, pl. 92.

19 Bikai 1978, pls. 33.22, 33.25 and 37.13.

20 Karageorghis 1983, figs. 88 and 108.

21 Yon 1971, pls. 26-27.



FIG. 2. Phoenician bichrome jugs from Tell Keisan 9a-b (Briend – Humbert 1980, pl. 62).

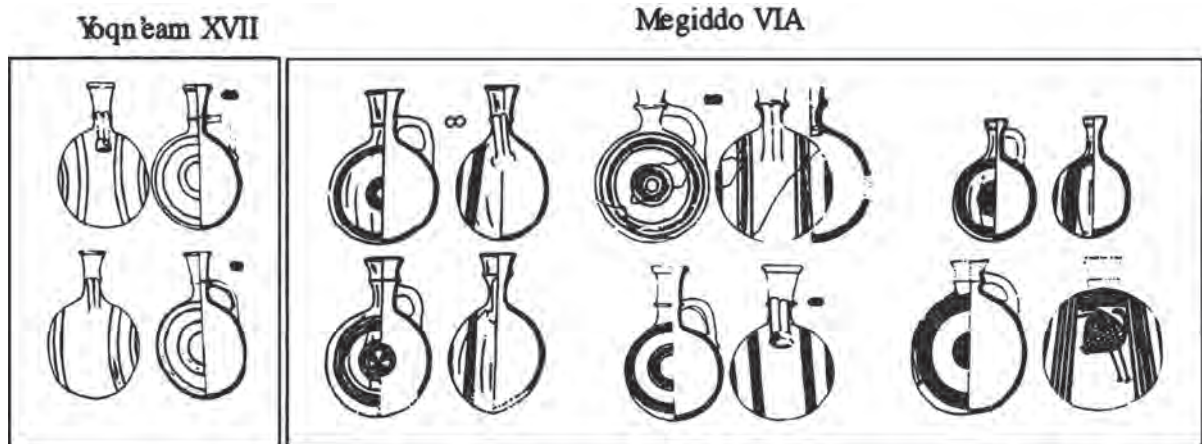


FIG. 3. Phoenician bichrome globular jugs from Yoqne'am XVII and Megiddo VIA (Finkelstein – Ussishkin – Halpern 2000, fig. 11.12; Ben-Tor – Zarzecki-Peleg – Cohen-Anidjar 2005, figs. 17, 28 and 31; Finkelstein – Ussishkin – Halpern 2006, figs. 13.54, 13.56, 13.59 and 13.69; Zarzecki-Peleg 2016, fig. 10).



FIG. 4. Bichrome globular Phoenician jug with stable bottom from Tel Rehov C3a (Mazar – Panitz-Cohen 2020, fig. 28.6 and phot. 28.4).



FIG. 5. Globular monochrome and bichrome Phoenician jugs from Tel Kinrot (Münger – Zangenbert – Pakkala 2011, fig. 20.a-b).

the Acco plain, examples can be found (FIG. 2) in the level 9 of Tell Keisan²² and in the levels XVII-XVI of Yoqne'am²³ (FIG. 3). At least one example of Tell Keisan²⁴ is already treated with external red slip with reserve bands on the body, which is new. They are also frequent in the Jezreel valley, especially in the stratum VIA of Megiddo²⁵ (FIG. 3), in the level C3a of Tel Rehov²⁶ (FIG. 4) – on this occasion already counting with a stable ring-shaped bottom and a small-sized body with a similar parallel in tomb 49 at al-Bass²⁷ – and Beth-Shean.²⁸ There is a formal variety among these jugs in terms of the height and relative dimensions of the neck, as well as in the arrangement of the rim, which often finds parallels in Huelva.

In the Galilee region, a few sherds of globular bodies with bichrome decoration and some fragments of cylindrical necks with simple open rim are preserved in the level IVB of Tel Dan.²⁹ Further south, around the Sea of Galilee, there are also at least two complete specimens with monochrome decoration in Tel Kinrot (FIG. 5) – also with thickened rim³⁰ – and many more examples of bichrome jugs in the tripartite building at Tel Hadar IV.³¹

The spread of these jugs also reached the southern Levant, being frequent in contemporary deposits of Philistine 2 and 3 periods, such as level X at Tel Qasile³² (FIG. 6) – where we also find a first local imitation covered in red slip and decorated in Philistine style³³ characteristic of later cultural stages, as well as

22 Briend – Humbert 1980, pl. 62.4-6 and 62.8.

23 Ben-Tor – Zarzecki-Peleg – Cohen-Anidjar 2005, figs. 1.17.8, 28.1-2, 31.5-7 and 37.11.

24 Briend – Humbert 1980, pl. 62.6.

25 Loud 1948, fig. 80.1-4. Finkelstein – Ussishkin – Halpern 2000, fig. 11.11.3.7. Harrison 2004, pl. 18.1-5. Finkelstein – Ussishkin – Halpern 2006, figs. 13.54.3, 56.8, 59.13 and 69.4. Zarzecki-Peleg 2016, fig. 10. 14-15.

26 Mazar – Panitz-Cohen 2020, fig. 13.4.21.

27 Núñez Calvo 2008, fig. 14, U.49-4.

28 James 1966, fig. 51.11. Panitz-Cohen – Mazar 2009, pls. 55.7, 59.24, 68.8 and 71.19.

29 Ilan 2019, figs. 3.64.3, 3.68.3 and 5.9.1-4.

30 Münger – Zangenbert – Pakkala 2011, fig. 20.a-b.

31 Kochavi 1999, p. 48.

32 Mazar 1985, figs. 41.13 and 45.15, phot. 71.

33 Mazar 1985, fig. 41.11.



FIG. 6. Globular bichrome Philistine jug and Globular bichrome Phoenician jug from Tel Qasile X (Mazar 1985, fig. 41).



FIG. 7. Red-slipped and bichrome Phoenician jugs from Ashkelon (Master – Walton – Yassar-Landau 2020, figs. 6.62 and 82).

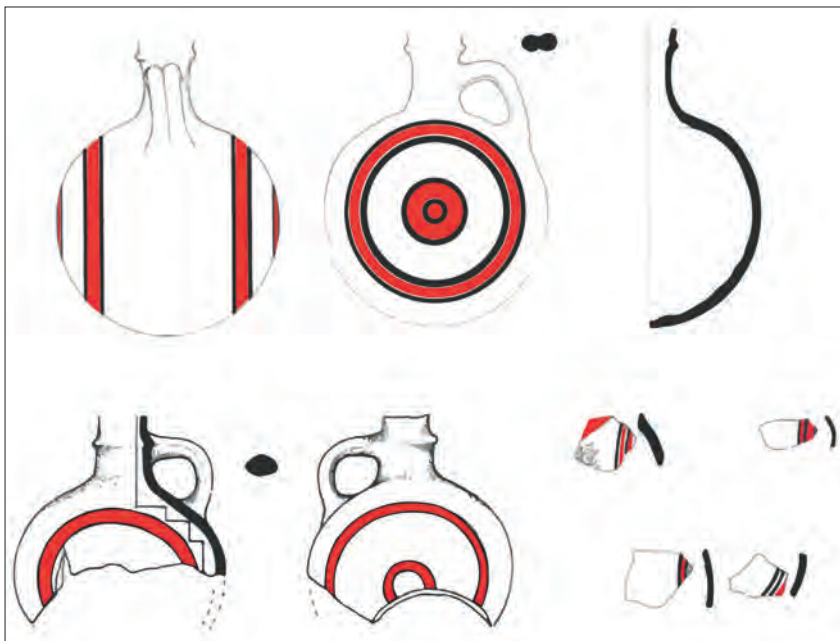


FIG. 8. Phoenician globular jugs and sherds of bichrome Phoenician pottery from Tel Rehov VI (Mazar – Panitz-Cohen 2020, fig. 28.6).

another Phoenician bichrome spouted-strainer jug³⁴ –, in ‘Izbet Sartah³⁵ and even in Tel Masos in the Negev area.³⁶ The phase 17A of Ashkelon (FIG. 7) includes a neck sherd with a cylindrical profile and a thickened triangular rim with a pointed lip covered in red slip,³⁷ which finds formal parallels in Huelva.³⁸ There is also a partially preserved jug with a widened “barrel” type body.³⁹

Besides the Aegean bowl of Protogeometric style found in Tel Hadar,⁴⁰ as well as the close relationship between Phoenician and Cyprus during this same period – reflected in Cypriot imports in Phoenicia, as well as Phoenician imports in Cyprus⁴¹ –, the distribution of this kind of globular jugs throughout the Levant reflects a likely increased commercial activity in coastal Phoenician cities between the 11th-10th centuries BCE – a chronology determined by radiocarbon datasets from Tel Qasile X⁴² and Tel Hadar IV⁴³ –.

3. EARLY IRON AGE IIA – STAGES B, C, D... AND E?

During the next Levantine period – Early Iron Age IIA – associated with the arrival of Cypro-Geometric I and I-II imports, new jugs with a more stable ringed or flattened bottom – stage C⁴⁴ –, which may have appeared exceptionally during the previous horizon – Tel Rehov C3a⁴⁵ – becomes also widespread⁴⁶ – although a significant quantity of jugs of the earlier version with an unstable base are still present⁴⁷ –.

In addition to the Amathus tomb – “robber’s cache” – in which a jug with stable base is documented together with Cypro-Geometric and Aegean Protogeometric pottery,⁴⁸ many other examples found in stratified contexts mostly belonging to the Early Iron Age IIA period stand out in the Levant. In Tel Dor, in addition to the example reported by F.J. Núñez Calvo,⁴⁹ there is a large number of sherds with bichrome decoration – exceptionally monochrome – from levels 8 and 7 of area G that could correspond to this type of jug,⁵⁰ as well as in the close site of Tel Mevorakh.⁵¹ Most of the examples from the Acco plain and the Jezreel valley still have an unstable base as in the earlier period – Stratum IIIC from Tell Qashish⁵² and the level VI of Tel Rehov⁵³ (FIG. 8) –. At Megiddo VB there are only two examples of jugs with unstable base – one of

34 Mazar 1985, fig. 41.12.

35 Finkelstein 1986, figs. 15.15 and 23.12, pl. 10.3.

36 Fritz – Kempinski 1983, pls. 145.1, 146.1 and 153.1.

37 Stager – Master – Aja 2020, fig. 6.62.

38 González de Canales Cerisola – Serrano Pichardo – Llompart Gómez 2004, pl. 11.38, 11.40-41 and 11.43.

39 Stager – Master – Aja 2020, fig. 6.82.1.

40 Kochavi 1999.

41 Bikai 1987. Núñez Calvo 2008.

42 Boaretto *et al.* 2005. Sharon *et al.* 2005 and 2007. Mazar – Bronk Ramsey 2008.

43 Finkelstein – Piasetzky 2003 and 2010. Scott *et al.* 2007. Sharon *et al.* 2007.

44 More recently known as “Hierro Antiguo”. See Núñez Calvo 2023, fig. 8.

45 Mazar – Panitz-Cohen 2020, fig. 13.4.21.

46 Bikai 1978, pl. 31.15.

47 See examples in the stratum X-2 of Tyre. Bikai 1978, pl. 25.12-13 and 15.

48 Desborough 1957.

49 Gilboa – Sharon 2003, fig. 11.5.

50 Gilboa *et al.* 2018, pls. 20.41.36, 20.45.5-13, 20.46.11-2, 20.47.6, 20.48.21-23, 20.50.12-13, 20.51.8-10, 20.54.16 and 20.55.7-14.

51 Stern 1978, fig. 18.10-15.

52 Ben-Tor – Bonfil – Zuckerman 2003, fig. 132.11.

53 Mazar – Panitz-Cohen 2020, figs. 9.8.15, 13.11.7, 17.23, 18.23, 30.24-25, 16.59.7, 18.1.10, 21.14.1 and 28.6.

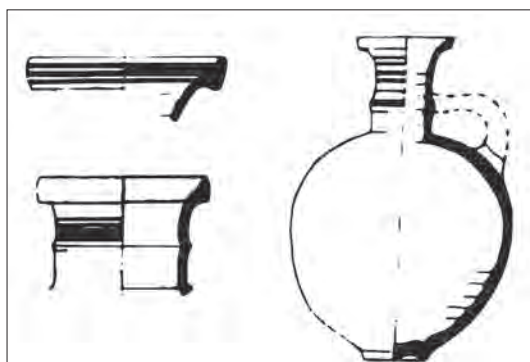


FIG. 9. Globular decorated jugs from Tel Hazor X-IX (Ben-Tor – Ben-Ami – Sandhaus 2012, fig. 5.9).

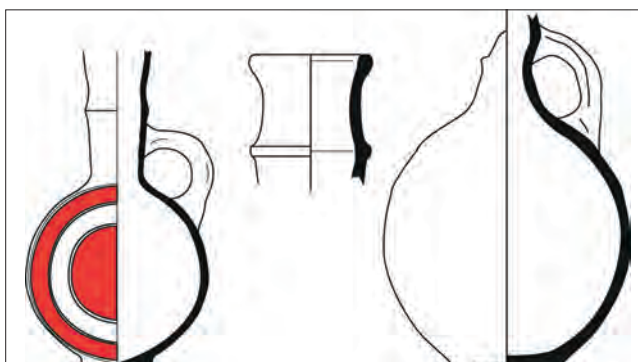


FIG. 10. Globular Phoenician jug and probably local productions of imitation from Tel Michal and 'Izbet Sartah (Herzog – Rapp – Negbi 1989, fig. 7.3 and Finkelstein 1986, fig. 19 and 23).

them is not decorated⁵⁴ – accompanied by a large quantity of red-slipped pottery and Cypriot Black-on-Red imports.⁵⁵

Further north, in the Galilee region, in strata X-IX of Tel Hazor (FIG. 9), there are interesting examples that foreshadow future characteristics announced by F.J. Núñez Calvo⁵⁶ in later horizons. Among other types of imported Phoenician pottery with red slip and bichrome decoration, globular jugs decorated with concentric circles are present – sometimes with an unstable base as in the previous period⁵⁷ –, as well as fragments of cylindrical and open ringed necks, and pointed thickened rims with flattened outer face⁵⁸ that constitute early examples of jugs with squared-off everted rim, which F.J. Núñez Calvo⁵⁹ considered to be typical of the Late Iron Age – stage E – and which are also present in Huelva with examples of a similar profile to those from Tel Hazor.⁶⁰ A few kilometres away, in the Sea of Galilee, 'Ein Gev has also yielded some fragments of similar vessels sometimes decorated with red slip.⁶¹

In Philistia, neck-ridge jugs also continue to appear during the early *New Philistine Decorated Ware* – NPDW – period. In level XIII of Tel Michal (FIG. 10) there is a jug with a relatively large neck in relation to the body – a characteristic component of F.J. Núñez Calvo's stage D – and a stable ringed base.⁶² In the pits of Stratum II at 'Izbet Sartah (FIG. 10) a fragment of a neck with a slightly thickened rim is preserved⁶³ while in the building 109A of the stratum I, a large part of another undecorated jug with a ringed base and without the rim is also preserved.⁶⁴ In Tell es-Safi A/4, on the other hand, a fragment of Phoenician pottery

54 Lamon – Shipton 1939, fig. 36.13. Finkelstein – Ussishkin – Halpern 2000, fig. 1.19.16.

55 Finkelstein – Ussishkin – Halpern 2000, figs. 1.18 and 1.27.

56 Núñez Calvo 2008.

57 Ben-Tor – Ben-Ami – Sandhaus 2012, fig. 5.10.1-3.

58 Ben-Tor – Ben-Ami – Sandhaus 2012, fig. 5.9.12-14.

59 Núñez Calvo 2008.

60 González de Canales Cerisola – Serrano Pichardo – Llopart Gómez 2004, pl. 11.17 and 11.21-22.

61 Mazar *et al.* 1964, figs. 5.6-7 and 7.1-2.

62 Herzog – Rapp – Negbi 1989, fig. 7.3.3.

63 Finkelstein 1986, fig. 19.7.

64 Finkelstein 1986, fig. 23.12.

is attested decorated in bichrome style, not with concentric circles but with horizontal bands and lines⁶⁵ also present in Tyre X-2.⁶⁶

In short, during the early stages of the Levantine Iron Age IIA – through the 10th and part of the 9th century BCE – a permanency can be observed in the production and movement of the classical globular and unstable jugs decorated with concentric circles, as well as the more generalised – although not new – appearance of jugs with a stable ringed base, and the early appearance of characteristics of stage D and E, such as smaller bodies – an example from Tel Michal, to which we can add the example already mentioned from Tel Rehov C3a – or flattened outer rims – examples already mentioned from Tel Hazor –.

4. LATE IRON AGE IIA – STAGES B, C, D... AND E?

The Late Iron Age IIA is an extraordinary important period of the Levant in which Phoenician pottery is specially distributed in form of abundant red-slipped cups – *Samaritan Ware* –, as well as neck-ridge jugs with spherical bodies, among other types⁶⁷ that, moreover, will normally be adapted to the local productions of the Levantine sites.

F.J. Núñez Calvo⁶⁸ proposed that a new series of jugs, mainly characterized by new thickened and bevelled rims with a triangular profile and pointed lip, was generated during the period marked by strata X-VI from Tyre, the period II of al-Bass and the strata D2-1 from Sarepta – stage D⁶⁹ –. However, this feature of the rim has an important precedent in Ashkelon (FIG. 7), which also featured a cylindrical neck and red-slipped surface,⁷⁰ as we have seen. Besides that, if we look at the assemblage of jugs from Tyre⁷¹ – strata X-VI – and the period II of al-Bass,⁷² besides the remain of globular unstable jugs we find new stable bodies of smaller relative size respecting the neck, this last being generally narrower and more elongated – a feature also previously announced by the specimen noted from Tel Michal⁷³ and by another one from Tel Rehov C3a⁷⁴ –. In addition to the now popular triangular-sectioned thickened rims, there are also upwards turned lips with open and flared necks – which had also been announced by earlier jugs such as the appointed example from Tel Rehov level C3a – and simple direct rims with open necks. There is also a greater presence of red slip surface under the decorative paint designs – a feature already observed on some local Philistine imitation jugs and imports at Tel Qasile X and Ashkelon 17A⁷⁵ –. However, among the found examples of jugs in contexts belonging to the Levantine Iron Age IIA, many are also documented with features that correspond to the later sequential stage theorised by F.J. Núñez Calvo – stage E⁷⁶ – which suggests that actually both sets of features – stages D and E – were partially current. That is to say, that jugs with a more balanced relative size between the body and the neck, a decoration based on horizontal bands – this feature, nonetheless, very poorly attested in extra-Phoenician Levantine productions – instead of concentric circles,

65 Maeir 2012, pl. 13.15.6.

66 Bikai 1978, pl. 25.9.

67 Stern 2015.

68 Núñez Calvo 2008, pp. 38-49, figs. 13-14.

69 More recently known as “Hierro Medio”. See Núñez Calvo 2023, fig. 8.

70 Master – Walton – Yassur-Landau 2020, figs. 6.62. See *supra*.

71 Bikai 1978, pls. 20, 22-23 and 25. Núñez Calvo 2008, fig. 13.

72 Núñez Calvo 2008, fig. 14.

73 Herzog – Rapp – Negbi 1989, fig. 7.3.

74 Mazar – Panitz-Cohen 2020, fig. 28.6.

75 Mazar 1985, fig. 41. Master – Walton – Yassur-Landau 2020, fig. 6.62.

76 More recently known as “Hierro Tardío A”. See Núñez Calvo 2023, fig. 8.

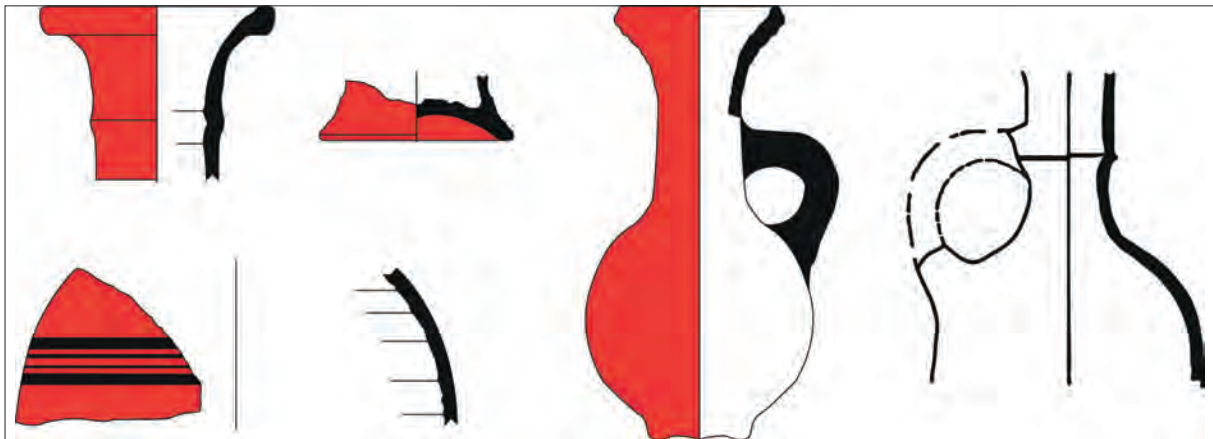


FIG. 11. Phoenician red-slipped neck-ridge jugs from Tell Abu Hawam and not decorated from Tell Keisan 7 (Herrera González – Gómez Toscano 2004, lám. 28 and Briend – Humbert 1980, pl. 51).

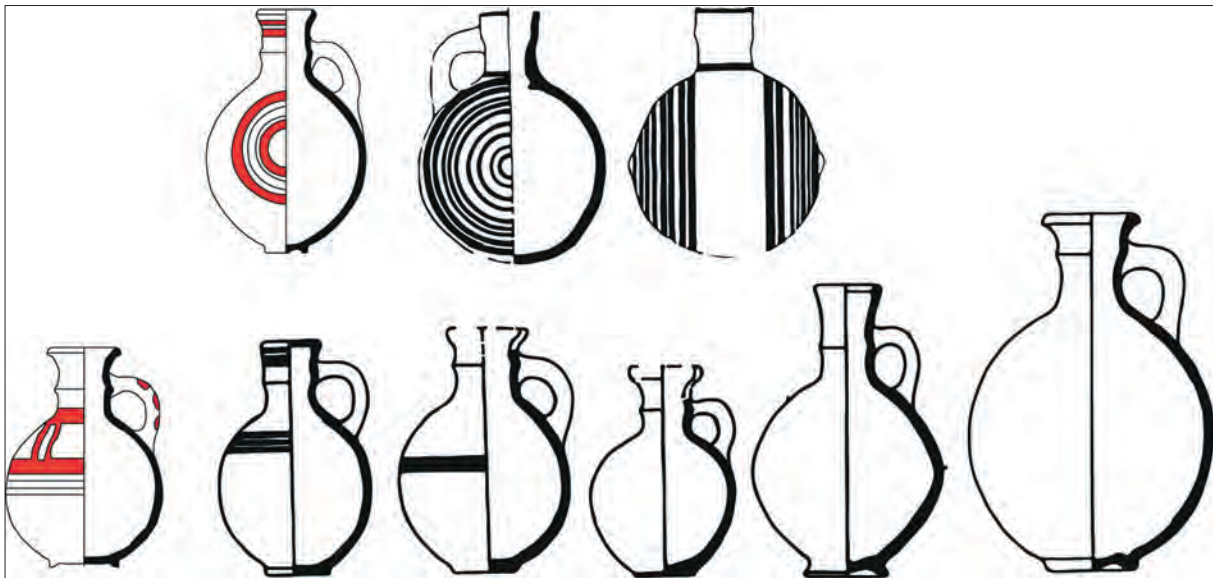


FIG. 12. Globular monochrome decorated Phoenician jugs and decorated and non-decorated local productions from Megiddo VA-IVB (Lamon – Shipton 1939, figs. 6 and 7; Loud 1948, figs. 88 and 90).

and squared-off everted rims – stage E – are present throughout the Levant during the Late Iron Age IIA together with examples that fit more into the “earlier” stage D. Therefore, the elements pointed in the jugs from Méndez Núñez St.⁷⁷ shall be reconsidered in terms of chronology.

Outside the Lebanese region, in the plain of Acco, numerous examples can be found in stratum III at Tell Abu Hawam⁷⁸ (FIG. 11). On one occasion, a jug with a squared-off everted rim is observed,⁷⁹ while

77 Núñez Calvo 2018a.

78 Herrera González – Gómez Toscano 2004, pl. 28.

79 Herrera González – Gómez Toscano 2004, n. 242.

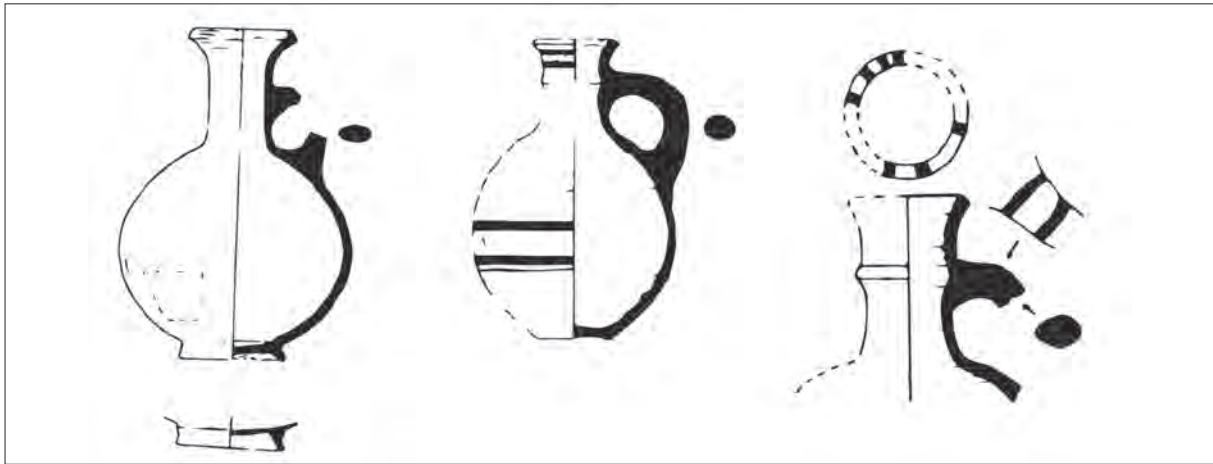


FIG. 13. Neck-ridge jugs from Tell Ta'anek (Rast 1978, figs. 39.2-3, 40.1 and 62.8).

in another instance, a jug with a small body and no painted decoration features a triangular bevelled rim.⁸⁰ Additionally, at least one incomplete example has been recognized in the level 7 of Tell Keisan⁸¹ (FIG. 11), along with a multitude of decorated sherds – though not always corresponding to neck-ridge globular jugs – in phase 6 of area G at Tel Dor,⁸² in the coast of Carmel.

Jugs found in the levels XV and XIV of Yoqne'am in the Jezreel Valley are illustrative, featuring thickened rims with a certain formal diversity in the profile, along with numerous decorated sherds.⁸³ Another example from the level A-VII of Tell Qiri also provides insight.⁸⁴ Within one of the pits at Tell Qashish – locus 253 –, an archaizing monochrome example with an unstable base was discovered, showing the continuity of the use of the ancient versions.⁸⁵

In Megiddo VA-IVB (FIG. 12), a jug stands out with red painting decoration on both the body and the neck.⁸⁶ It features an angled rim and an incurved bevelled lip. It is accompanied by another monochrome jug with an archaizing globular body and an unstable base. The monochrome black decoration consists of multiple concentric circles.⁸⁷ These jugs are accompanied by potential local undecorated productions of the same prototype,⁸⁸ sometimes exhibiting a biconical body.⁸⁹ These variations may include a monochrome painting style with horizontal black lines⁹⁰ or a bichrome painting style with red bands and black lines on the back of the handle, as well as a bevelled rim.⁹¹

80 Herrera González – Gómez Toscano 2004, n. 243.

81 Briend – Humbert 1980, pl. 51.3.

82 Gilboa *et al.* 2018, pls. 20.56.28, 20.60.12, 20.61.1-32, 20.63.15-19, 20.66.6-7, 20.67.4-6, 20.69.4-8, 20.70.8-19, 20.75.9, 20.75.17-23, and 20.76.1.

83 Ben-Tor – Zarzecki-Peleg – Cohen-Anidjar 2005, figs. 1.56.1, 1.57.8-10, 1.57.34-35, 1.57.38, 1.65.21 and 1.68.4.

84 Ben-Tor *et al.* 1987, fig. 27.9.

85 Ben-Tor – Bonfil – Zuckerman 2003, fig. 146.6.

86 Loud 1948, fig. 88.15.

87 Loud 1948, fig. 90.7.

88 Lamon – Shipton 1939, figs. 6.146, 7.171 and 7.174.

89 Lamon – Shipton 1939, fig. 7.171.

90 Lamon – Shipton 1939, figs. 6.147 and 7.172.

91 Lamon – Shipton 1939, fig. 8.177.

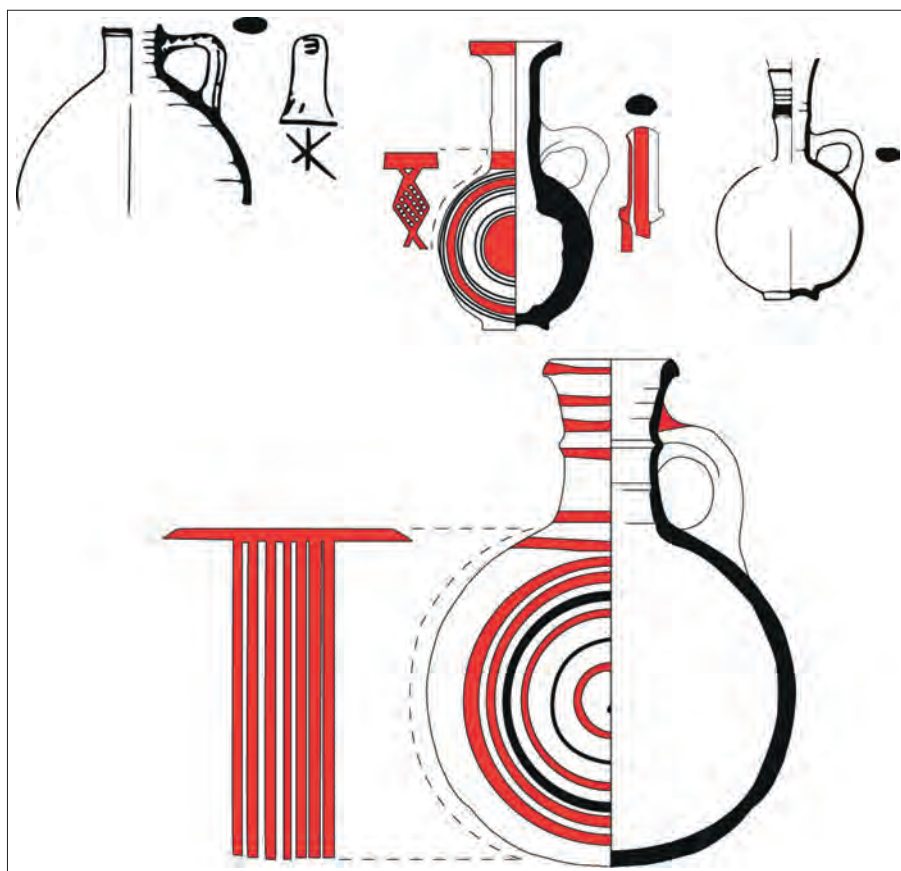


FIG. 14. Globular Phoenician bichrome decorated jugs and Phoenician bichrome decorated barrel-jug from Tel Rehov V-IV (Mazar – Panitz-Cohen 2020, fig. 28.7 and phot. 28.4).

there are classic jugs with an unstable bottom⁹⁶ and at least one example with an elongated cylindrical neck and a squared-off everted rim on the outside⁹⁷ similar to another example from Tell Abu Hawam⁹⁸ and another one from Huelva⁹⁹ (FIG. 15) which in theory correspond to the Late Phoenician Iron Age represented by strata V-IV of Tyre according to the assumptions of F.J. Núñez Calvo.¹⁰⁰ On the other hand, there is an important local production of untreated or red-slipped local pottery that follows Phoenician models (FIG. 16). They usually have a cylindrical or slightly open neck with a thickened rim and a spherical, oval, or slightly biconical body in strata C2 and C1 – local type JG74a –. Unlike those of Megiddo or Tell Ta’anek,

There is also a large number of similar jugs in the period IIB of Tell Ta’anek (FIG. 13), sometimes with a simple not thickened rim upon a flared neck,⁹² together with other semi-complete examples with a thickened rim, sometimes also bevelled,⁹³ which could correspond to local productions based on the Phoenician models.

It is in the levels V and IV of Tel Rehov (FIG. 14) that the largest number of vessels and fragments of Phoenician import decorated with red slip and/or bichrome painting style are preserved.⁹⁴ Here, besides specimens with flared and elongated thin-walled necks,⁹⁵

92 Rast 1978, fig. 62.8.

93 Rast 1978, figs. 39.2-3 and 40.1.

94 Mazar – Panitz-Cohen 2020, fig. 28.7.

95 Mazar – Panitz-Cohen 2020, fig. 28.7.16.

96 Mazar – Panitz-Cohen 2020, fig. 28.7.22.

97 Mazar – Panitz-Cohen 2020, fig. 28.7.21.

98 Herrera González – Gómez Toscano 2004, n. 242.

99 González de Canales Cerisola – Serrano Pichardo – Llompart Gómez 2004, pl. 11.16-17.

100 Núñez Calvo 2008 and 2018a.

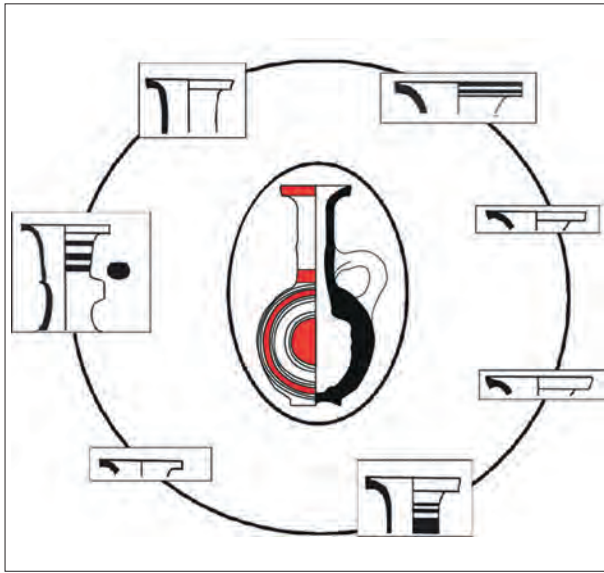


FIG. 15. Globular jug from Tel Rehov with squared-off rim surrounded by similar squared-off rims from Huelva (Mazar – Panitz-Cohen 2020, fig. 28.7; González de Canales Cerisola – Serrano Pichardo – Llompart Gómez 2004, pl. 11).

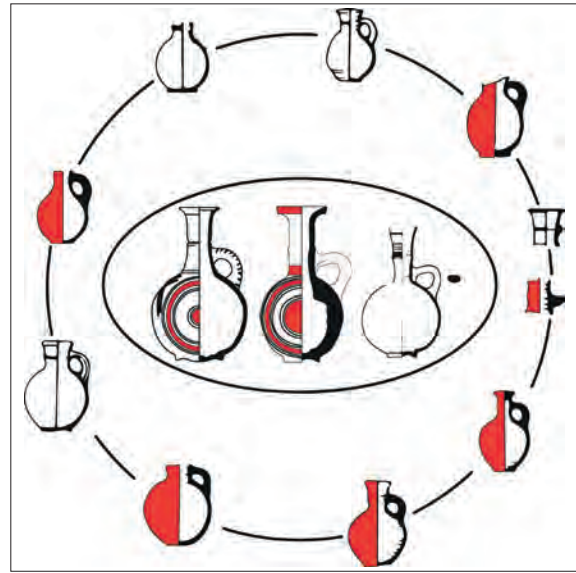


FIG. 16. Phoenician bichrome jugs and local adaptations covered or non-covered with red slip from Tel Rehov V-IV (Mazar – Panitz-Cohen 2020, figs. 13.33, 13.51, 13.59, 13.67, 13.101, 13.106, 13.129, 13.141 and 28.7).

they are not usually treated with painting decoration.¹⁰¹ Among them there is also a version with a wider neck and a wider body – local type JG74a1 –.¹⁰²

In the close site of Tel ‘Amal (FIG. 17) there is also a diversity of red-slipped neck-ridge jugs decorated with horizontal black bands, possibly also being local productions.¹⁰³ At least on two occasions¹⁰⁴ they have a squared-off everted rim – in one case grooved on the outside¹⁰⁵ –. The extraordinary diversity in the shape of rims is also clear in Tell Balâtah.¹⁰⁶ In Tell el-Farah – level VIIb – (FIG. 18) there is an example with stable bottom and bichrome painting decoration,¹⁰⁷ together with semi-complete jugs without surface treatment with thickened bevelled rims,¹⁰⁸ and a more archaising jug with monochrome painting decoration of concentric circles, unstable base and a tapered overlapping rim.¹⁰⁹ In Samaria – period III –, on the other hand, there are also examples of jugs with a squared-off everted rim¹¹⁰ as in Tel Rehov or Tell Abu Hawam.¹¹¹

101 Mazar – Panitz-Cohen 2020, figs. 13.33.8, 13.43.14, 13.48.11, 13.51.5, 13.59.5, 13.67.3, 13.69.5, 13.74.3 and 13, 13.79.1, 13.93.9, 13.94.2, 13.101.4, 13.106.3-4, 13.129.9-10, and 13.141.10-11.

102 Mazar – Panitz-Cohen 2020, figs. 13.67.1-2, 13.116.19, 13.121.18, 13.142.1 and 21.13.1.

103 Levy – Edelstein 1972, figs. 12.8-9, 11 and 13-14.

104 Levy – Edelstein 1972, figs. 12.8 and 14.

105 Levy – Edelstein 1972, fig. 12.8.

106 Campbell 2002, fig. 274.6-9.

107 Chambon 1984, pls. 48.1.

108 Chambon 1984, pl. 49.15-16.

109 Chambon 1984, pl. 50.5.

110 Crowfoot – Crowfoot – Kenyon 1957, fig. 5.1.

111 See *supra*.

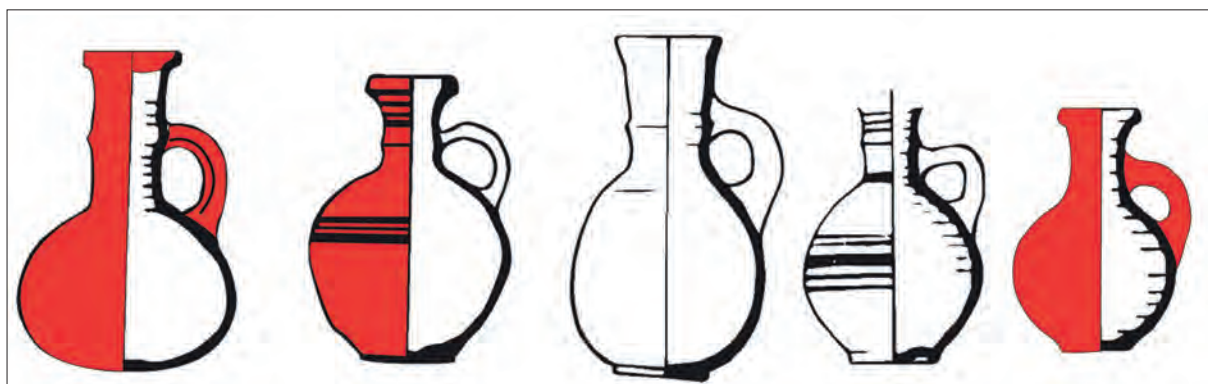


FIG. 17. Neck-ridge jugs from Tel 'Amal (Levy – Edelstein 1972, fig. 12).

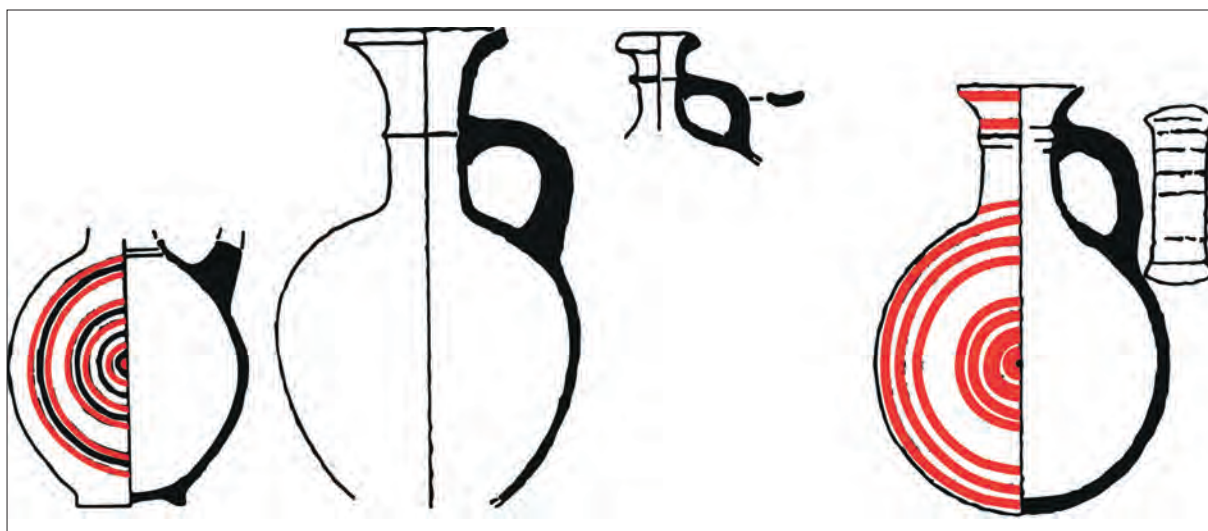


FIG. 18. Neck-ridge jugs from Tell el-Farah VIIb (Chambon 1984, pls. 48-50).

In the Galilee region, however, the frequency of this type of jug is reduced compared to the earlier period. In Tel Hazor, there is only one decorated bevelled thickened rim that could correspond to this kind of jug.¹¹² A single specimen has also been published from the stratum IVA of Tel Dan,¹¹³ which is waiting for a detailed publication.

On the other hand, in the southern Levant, numerous examples of Phoenician neck-ridge globular jugs continue to appear – most of them could also be local productions –. See a clear example appeared in a tomb of Khirbet Bir el-Kharayib a few kilometres east of Aphek with horizontal bands of bichrome style and squared-off rim.¹¹⁴ In Gezer II/6B-A (FIG. 19) there is a semi-complete red slipped jug with widened shoulders,¹¹⁵ as well as in the level VIIB-A with some fragments of decorated thickened rims

112 Ben-Tor – Ben-Ami – Sandhaus 2012, fig. 18.28.

113 Arie 2008, fig. 11.1.

114 Cappella 2020, fig. 8.

115 Dever *et al.* 1974, pl. 31.13.

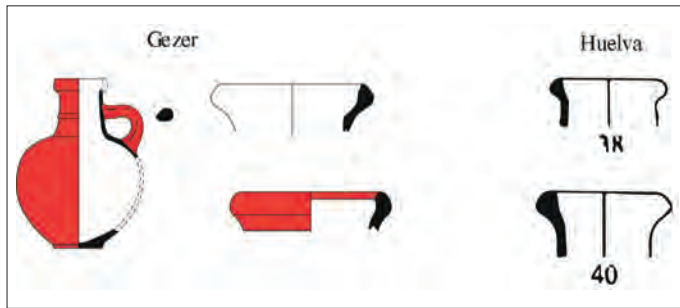


FIG. 19. Neck-ridge jugs from Gezer (Dever *et al.* 1974, pl. 31 and Gitin 1990, pls. 8-9) and Huelva (González de Canales Cerisola – Serrano Pichardo – Llompart Gómez 2004, lám. 11).

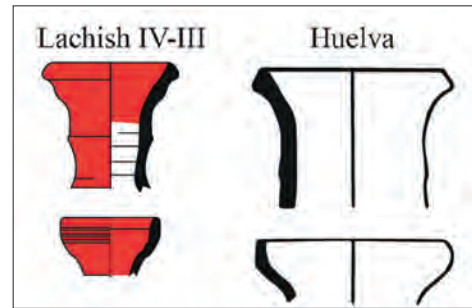


FIG. 20. Neck-ridge jugs from Lachish and Huelva (González de Canales Cerisola – Serrano Pichardo – Llompart Gómez 2004, lám. 11 and Ussishkin 2004, fig. 25.54).

that seem to correspond to the same kind of jug¹¹⁶ and which have very close parallels in Huelva.¹¹⁷ In Beer-Sheva V there are some sherds decorated with concentric circles and bands in the Phoenician bichrome style,¹¹⁸ while in Lachish IV-III there are some rims with red slip,¹¹⁹ which also have parallels in Huelva¹²⁰ (FIG. 20).

As far as the Philistine area is concerned, in addition to some possible Phoenician imports, local productions of globular jugs with an unstable base covered in red slip and decorated in Late Philistine style are more widespread. In the levels IVB and IVA of Tel Miqne (FIG. 21), in addition to apparent Phoenician imports decorated in bichrome style,¹²¹ there are also local imitations of red-slipped neck-ridge jugs. They are usually reproduced in miniature and with unstable bases,¹²² which continue the regional tradition already observed at Tel Qasile X. One of the miniature examples with a stable base without painted decoration is probably a Phoenician import.¹²³

In the levels V-IV of Tel Batash (FIG. 22) there are also local productions imitating the Phoenician models with a Philistine bichrome painting style and red-slipped surface.¹²⁴ More local imitations – generally with an unstable base – of red slipped and painted surface are presented at Beth-Shemesh 4¹²⁵ (FIG. 23), Tell es-Safi A/3¹²⁶ (FIG. 24), Tell el-Hammam – here with a globular body, unstable base, and monochrome painting of possible Cypriot manufacture¹²⁷ – and Tel Masos.¹²⁸

116 Gitin 1990, pls. 8.3-4 and 9.11.

117 González de Canales Cerisola – Serrano Pichardo – Llompart Gómez 2004, pl. 11.38, 11.40 and 11.45.

118 Aharoni 1973, pl. 54.20.

119 Ussishkin 2004, fig. 25.54.5-6.

120 González de Canales Cerisola – Serrano Pichardo – Llompart Gómez 2004, plate 11.32 and 11.36-37.

121 Dothan – Garfinkel – Gitin 2016, fig. 5.114.5.

122 Dothan – Garfinkel – Gitin 2016, figs. 5.96.13-14; 5.111.8-9 and 5.114.14.

123 Dothan – Garfinkel – Gitin 2016, fig. 5.111.7.

124 Mazar – Panitz-Cohen 2001, pls. 12.8, 79.10 and 79.15.

125 Bunimovitz – Lederman 2016, figs. 6.53 and 6.74.2.

126 Maeir 2012a, pl. 14.12. 4-5.

127 Collins – Kobs – Luddeni 2015, fig. 8.9.

128 Fritz – Kempinski 1983, pls. 139.10, 142.8, 146.1 and 148.1.

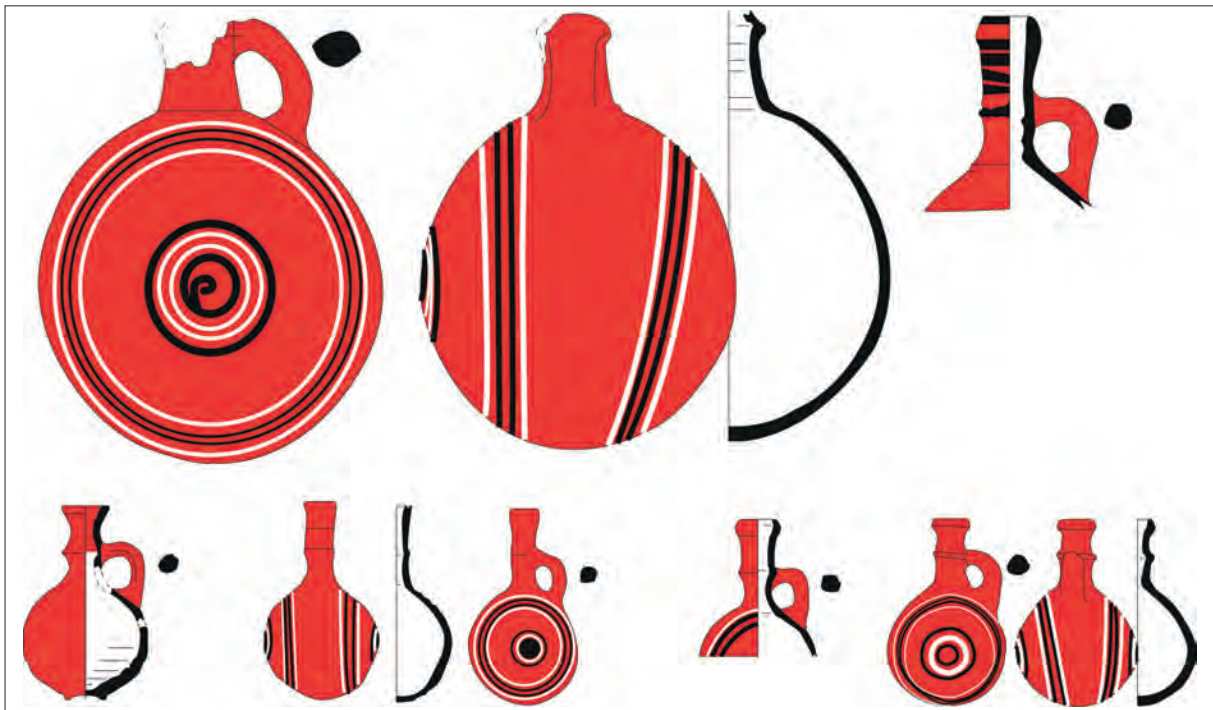


FIG. 21. Neck-ridge jugs and juglets from Tel Miqne (Dothan – Garfinkel – Gitin 2016, figs. 5.96, 5.111 and 5.114).



FIG. 22. Neck-ridge decorated jugs from Tel Batash (Mazar – Panitz-Cohen 2001, pls. 12, 79 and 88).

Outside the Levant, in addition to the tombs 55 and 63 from Palaeopaphos-Skales¹²⁹ and tomb 79 from Lefkandi¹³⁰ appointed by F.J. Núñez Calvo,¹³¹ there are more jugs in stratified deposits from Kition-Bamboula. In Phase I there is a fragment with monochrome decoration, as well as a shoulder fragment

129 Karageorghis 1983.

130 Popham – Lemos 1996: pls. 79, 103 and 109.

131 Núñez Calvo 2008, pp. 43-45.

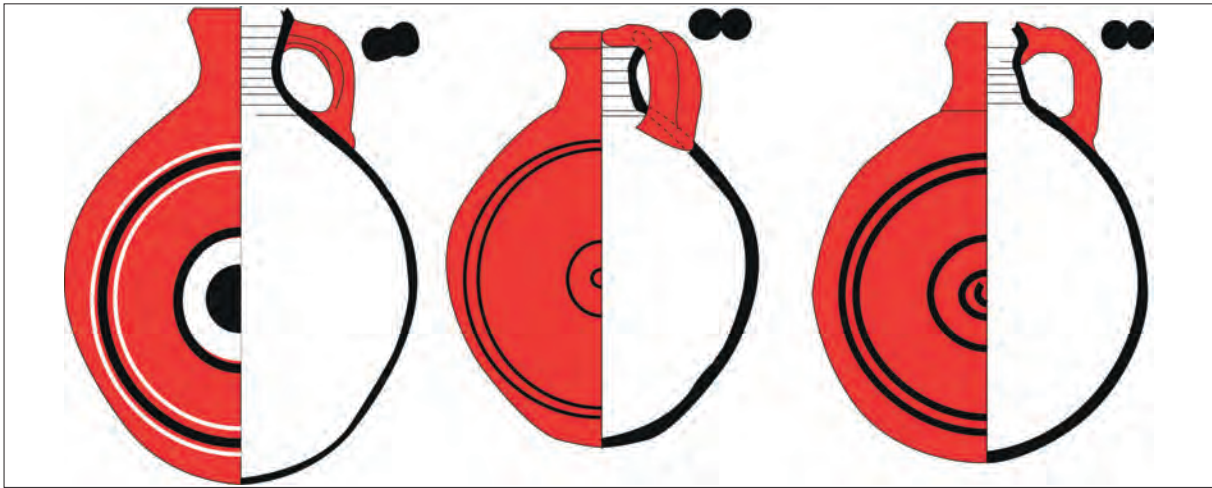


FIG. 23. Neck-ridge decorated jugs from Beth-Shemesh 4 (Bunimovitz – Lederman 2016, figs. 6.53 y 6.74.2) and Tel Masos (Fritz – Kempinski 1983, pls. 142.8 and 148.1).

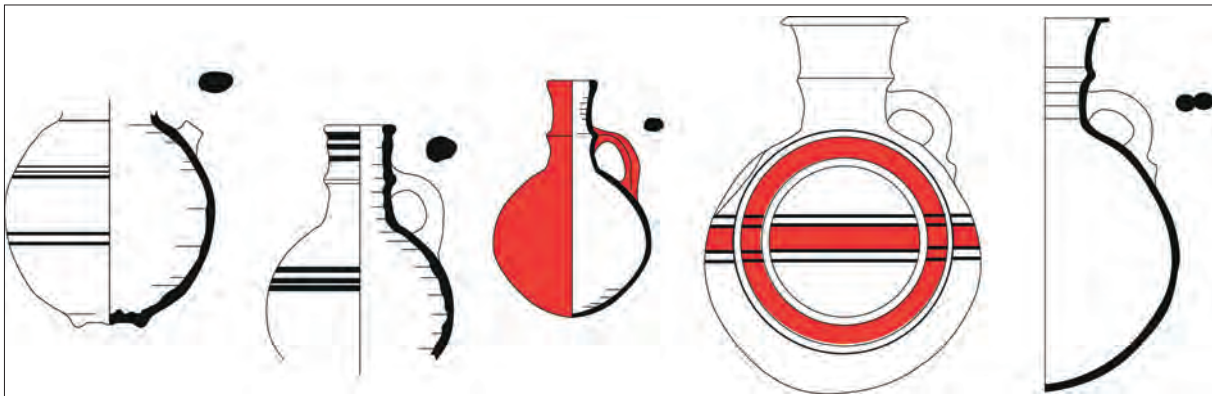


FIG. 24. Neck-ridge decorated jugs from Tell es-Safi (Maier 2012, pl. 14.12.4-5) and Tel Masos (Fritz – Kempinski 1983, pls. 139.10 and 146.1).

with a handle start and a horizontal strip painted, and a fragment of a neck which also counts with the start of a red-slipped handle.¹³² In Phase II there are only a few ringed bottoms treated with red slip.¹³³

Therefore, what can be observed in the pottery of the Levantine Iron Age IIA is an adoption by the different Levantine regions of the Phoenician productions of neck-ridge globular jugs that had previously been especially popular since the Iron Age IB with unstable bases. There is an immense diversity of shapes, technics, and decoration styles in the Levantine Iron Age IIA. There are globular, rounded or biconical bodies, sometimes with broadened shoulders; stable ringed bases – especially in the Philistine region, on the other hand, a continuity of jugs with unstable bases is attested among local productions – and usually thickened bevelled rims of triangular profile with the complementary presence of other squared-off or upwards turned rims with a pointed lip which find parallels in the assemblage of Huelva.

132 Caubet – Fourrier – Yon 2015, fig. 1.1.3-5.

133 Caubet – Fourrier – Yon 2015, fig. 9.1.90-91.

5. LATE IRON AGE IIA TO IIB – STAGE E?

According to the original interpretation of F.J. Núñez Calvo,¹³⁴ it theoretically was from the period represented by the strata V-IV of Tyre and the period III of the cemetery of al-Bass, as well as the Late Salamis period of Cyprus, when a series of new shapes and decorative styles were produced in the repertoire of Phoenician neck-ridge jugs – stage E –. Firstly, during this period new vessels theoretically made their debut in which the proportional size of the body and the neck would be more balanced than previously. However, this dimensional balance was present in numerous already attested imported Phoenician jugs of earlier Levantine layers, such as Megiddo VA-IVB or Tel ‘Amal.¹³⁵ On the other hand, a characteristic squared-off everted rim – which hypothetically appeared from now on – has also been observed in previous periods and contexts – mainly Tel Hazor and Tel Rehov¹³⁶ –. The replacement of the previously predominant bichrome decoration by red-slip that supposedly took place from this stage has also been observed in specimens of earlier deposits, such as those of Ashkelon and Tel ‘Amal.¹³⁷ However, the stilted-rim jugs¹³⁸ which begins to appear in stratum IV of Tyre – which, incidentally, are noteworthy absent in Huelva – do seem to be absent in previous periods of the Levant.

In addition to Tyre, al-Bass and the tomb 1 of Salamis, that F.J. Núñez Calvo¹³⁹ pointed out, there are numerous stratified deposits of the Iron Age IIA and IIB Levantine stages and the Cypro-Geometric III and Cypro-Archaic I stages of Cyprus, besides those already indicated here, where these kind of features of the stage E are present in imported or locally produced Phoenician jugs, while the previous versions of the earlier stages do not definitely disappear. The phase III of Kition-Bamboula, for example, still counts with jugs with spherical bodies decorated with concentric bands and circles among other examples.¹⁴⁰ In the earliest levels of Kition-Kathari – floors I-3, 3 and 3-2A – similar jugs as the attested in the already noted Levantine Iron Age IIA contexts are also still present,¹⁴¹ with no observed typological-sequential break.

In the rest of the Levantine corridor, the classic versions of jugs continue to appear, as well as “new” jugs with a squared-off everted rim and more balanced neck and body, throughout the latest stages of the Iron Age IIA and throughout the Iron Age IIB. For example, one example from Tell el-Hammam¹⁴² and another from Ashdod X-IX¹⁴³ – Late Iron Age IIA –, as well as from Jemmeh¹⁴⁴ and Tell el-Fār‘a¹⁴⁵ – Iron Age IIB – (FIG. 25) are clearly illustrative.

Hence, in Huelva can be observed a generalised presence of rims, lips, and necks which might belong to the Levantine Iron Age IIA horizon and strata X-VI of Tyre, with some shapes, especially those with squared-off rims, which will continue to frequently appear in later horizons – in fact, in Tyre they are more frequent in strata V-IV, which mark the transition towards the Levantine Iron Age IIB –. However, the absence of types particularly characteristic of the later period – Iron Age IIB –, such as mushroom-mouthed

134 Núñez Calvo 2008, fig. 19.

135 See *supra*.

136 See *supra*.

137 See *supra*.

138 Bikai 1978, pl. 14.8.

139 Núñez Calvo 2008, pp. 49-58.

140 Caubet – Fourrier – Yon 2015, figs. 17 and 31.1.162-164.

141 Karageorghis 2003, pl. 5.2-6.

142 Collins – Kobs – Luddeni 2015, pl. 210.21.

143 Dothan – Ben-Shlomo 2005, fig. 3.85.12.

144 Ben-Shlomo – Van Beek 2014, fig. 11.12.g.

145 Lehmann *et al.* 2018, fig. 11.16.

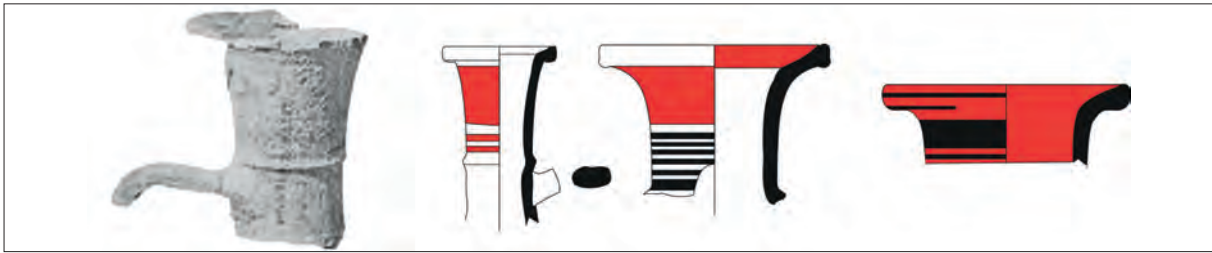


FIG. 25. Phoenician decorated jugs with rectangular rim from Tell el-Hammam (Collins – Kobs – Luddeni 2015, pl. 210), Ashdod X-IX (Ben-Shlomo 2005, fig. 3.85), Jemmeh (Bergoffen 2014, fig. 11.12) and Tell el-Fār'a (Lehmann *et al.* 2018, fig. 11).

jugs or sausage-like storage jars, determines a generalised contemporaneity with the Levantine Iron Age IIA. Regarding Phoenicia and Cyprus, this is a long period divided in various typological-sequential stages by F.J. Núñez Calvo – stages C, D and E; Kouklia and Salamis¹⁴⁶ –, although it does not always find correspondences in the assemblages of jugs documented in Levantine sites other than Tyre and Phoenician cemeteries. Far from being a clearly serial and sequenced production of different shapes and decoration styles more or less exclusive – or at least predominant – of specific stages, there is rather an incessant overlapping throughout the Levantine and Phoenician sequences of the Middle Iron Age, with a constant appearance of ancient models and the arrival of ‘modern’ ones earlier than previously assumed.

6. IRON AGE IIB – STAGES E AND F

It is from the cultural horizon marked by the III-II strata of Tyre and the Levantine Iron Age IIB – Kition horizon in Cyprus¹⁴⁷ –, as well as a second phase of colonization in the Mediterranean linked to the foundation of numerous Phoenician settlements – Cadiz, Morro de Mezquitilla, Carthage and Sulcis, among others – around the late 9th century BCE that the first mushroom-mouthed jugs were produced, with a horizontal rim that occasionally counted with a overhanging lip.

In Tyre, these jugs now tend to feature a predominant decorative style in horizontal strips rather than concentric circles¹⁴⁸ – although this is not its first occurrence – while the globular bodies are replaced by new pyriform bodies with a carinated or oval shoulder.¹⁴⁹ On the other hand, in addition to mushroom-mouthed jugs, there is also attested a new shape of stilted-rim jugs with a biconical neck, with the lower wall of the neck more compact and with the decoration arranged on the upper part – type JG1 from Tyre –.¹⁵⁰ Sometimes they have a thickened rim and thickened walls in the form of bottles.¹⁵¹ These new forms can also be seen on floor 3 at Kition-Kathari.¹⁵²

As usually happens with new shapes and types, mushroom-mouthed jugs began to timidly appear actually before, in stratum IV of Tyre – types 4 and 5¹⁵³ –, as well as in phase 12 of Tel Shiqmona which is

146 Núñez Calvo 2008, fig. 6.

147 Bikai 1987, p. 69.

148 Bikai 1978, pl. 5.14-17.

149 Bikai 1978, pls. 5.19-23 and 6.4-5.

150 Bikai 1978, pls. 5.1-8, 6.6 and 6.8-9.

151 Bikai 1978, fig. 5.9-11.

152 Bikai 2003, pl. 5.8-11.

153 Bikai 1978, tab. 6^aA.

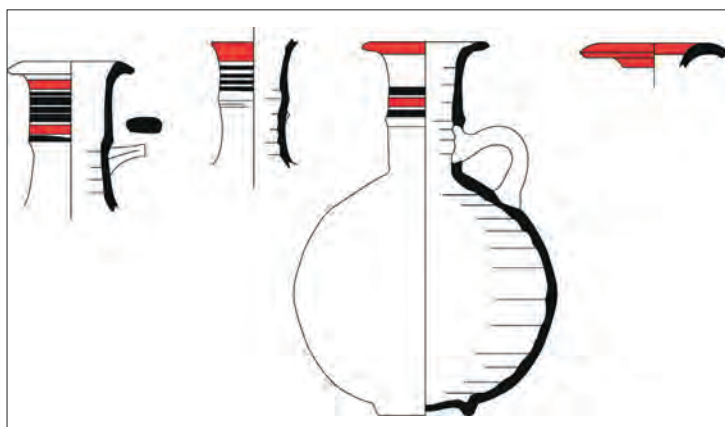


FIG. 26. Phoenician jugs from Ashdod IX-VIII, VIII y VII (Dothan – Freedman 1967, fig. 37; Dothan 1971, fig. 60; Ben-Shlomo 2005, figs. 3.94 and 3.102).



FIG. 27. Phoenician jugs from Tell Shiqmona 12 and Horvat Rosh Zayit I (Shalvi – Gilboa 2023, fig. 11.8; Gal – Alexandre 2000, fig. 3.122.28).

sequentially ascribed to Levantine Iron Age IIA¹⁵⁴ (FIG. 27), to become much more frequent during strata III and II of Tyre. Throughout the Iron Age IIB it seems there was a gradual replacement of the globular jugs decorated with bichrome painting by other jugs with a pyriform body and a carinated shoulder covered with red slip, although the ancient models did not definitively cease to appear.¹⁵⁵ For example, the two tombs of al-Bass – 3/5 and 28/29 – theoretically representative of the transition between the previous stage – stage E – and the later – stage F –¹⁵⁶ have mushroom-mouthed jugs with slightly open widened necks decorated with horizontal bands and globular bodies. What is observed apparently later in the strata III and II of Tyre, in addition to the adoption of more oval and stylised bodies, is the adoption of necks with a more undulating conical profile.¹⁵⁷

“Transitional” mushroom-mouthed jugs with globular bodies have been documented especially in the levels IX-VIII, VIII and VII of Ashdod¹⁵⁸ (FIG. 26). A sherd with an overhanging rim completely covered with red slip¹⁵⁹ may correspond to a narrow-necked jug typical of Tyrian strata III-II. Another similar example of overhanging rim has been found in Stratum I of Horvat Rosh Zayit, that preserves a large part of the neck¹⁶⁰ (FIG. 27). On the other hand, in the chamber 4 of the level V at Et-Tell – Bethsaida – there were collected at least two red-slipped jugs with a pyriform body and a carinated shoulder, which, however, have a widened cylindrical neck and a sloping everted but not hanging rim.¹⁶¹

154 Shalvi – Gilboa 2023, fig. 11.8. See another – possibly intrusive – mushroom-mouthed jug in the stratum E of Sarepta II, Y. Anderson 1988, pl. 31.15.

155 See this transition through the periods tagged as “Hierro Tardío A and B”. Núñez Calvo 2023, fig. 8.

156 Núñez Calvo 2008, pp. 59-60, fig. 27. See also the tombs 64/78 and 70/71. Aubet Semmler – Núñez Calvo – Trellisó Carreño 2014, figs. 2.6 and 2.13.

157 Núñez Calvo 2008, figs. 26.7-8 and 11.

158 Dothan – Freedman 1967, fig. 37.23. Dothan 1971, fig. 60.3. Ben-Shlomo 2005, figs. 3.94.8 and 3.102.4.

159 Ben-Shlomo 2005, fig. 3.94.8.

160 Gal – Alexandre 2000, fig. 3.122.28. See again the possibly intrusive similar mushroom-mouthed jug of Sarepta II, Y stratum E. Anderson 1988, pl. 31.15.

161 Arav 2009, fig. 1.100.

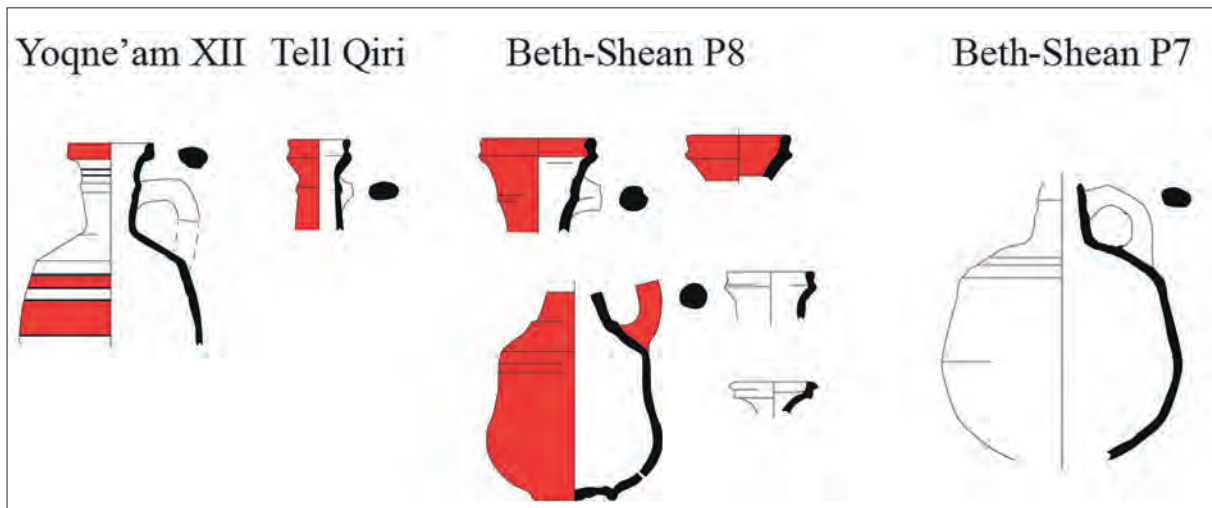


FIG. 28. Levantine decorated, red-slipped and non-decorated jugs from Yoqne'am, Tell Qiri and Beth-Shean (Ben-Tor *et al.* 1987, fig. 22.17; Mazar 2006, pl. 22.6-7, 26.4-6 and 40.8; Ben-Tor – Zarzecki-Peleg – Cohen-Anidjar 2005, fig. 178.12).

In the rest of the Levantine corridor there is no clear evidence of a large number of Phoenician imports during the Iron Age IIB, although local productions (FIG. 28) share some features with the Phoenician versions – pyriform body with a carinated and grooved shoulder and frequent treatment with red slipped surface –. They however show important formal features that differ, such as the rim, with a vertical lip, sometimes thickened with a prominence at the base, forming a groove on the outer face – a profile already observed previously in one of the Tel 'Amal jugs¹⁶² –, while more archaizing versions still occur sometimes.¹⁶³

At Yoqne'am XII there is a carinated shoulder jug with a pyriform body and bichrome decoration with the typical groove on the vertical rim.¹⁶⁴ Another similar example, although with a more elongated lip, was found in the level V of Tell Qiri,¹⁶⁵ as in the level P-8 at Beth-Shean,¹⁶⁶ where they are accompanied by at least one pyriform body with a red-slipped carinated shoulder¹⁶⁷ – another similar specimen without preserved rim in level P-7¹⁶⁸ –. They are also frequent in the level A-3 of Tel Rehov¹⁶⁹ as local type JG55 – some examples are also found in the levels B-2 and J-3¹⁷⁰ –, as well as in the levels VIId and VIId-e of Tell el-Farah.¹⁷¹ The production of this type of jug also occurs in the southern Levant, as in the level II at Beer-Sheva.¹⁷²

162 Levy – Edelstein 1972, fig. 12.

163 “Ancient” jugs with a thickened triangular rim and globular body – local JG74a type –, continue to assiduously appear in the levels A-3, A-4, B-2 and B-3 of Tel Rehov. See Mazar – Panitz-Cohen 2020, pls. 7.6.3-7, 7.7.10, 9.24.1-2 and 9.28.1.

164 Ben-Tor – Zarzecki-Peleg – Cohen-Anidjar 2005, fig. 178.12.

165 Ben-Tor *et al.* 1987, fig. 22.17.

166 Mazar 2006, pls. 22.6-7 and 26.4-5.

167 Mazar 2006, pl. 26.6.

168 Mazar 2006, pl. 40.8.

169 Mazar – Panitz-Cohen 2020, pls. 7.8.1-6.

170 Mazar – Panitz-Cohen 2020, pls. 11.6.14 and 46.2.5.

171 Chambon 1984, pl. 61.27-30.

172 Herzog – Singer-Avitz 2016, figs. 12.83.3, 12.38.3, 12.50.8-11, 12.57.7, 12.60.12-13, 12.61.1-3, 12.76.12-13, 12.77.20, 12.86.12, 12.94.7 and 12.118.9-11.

7. HUELVA AND THE PHOENICIAN COLONIES IN THE MEDITERRANEAN

Based on the made observations throughout the Iron Age sequence in Phoenicia and the Levant, it is worth reconsidering the assessment made upon the material from Huelva based on the formal features of, among other vessels, its neck-ridge jugs. As F.J. Núñez Calvo¹⁷³ has considered, there is an occurrence of vessels whose characteristics are representative of several theoretically sequential evolutionary stages of the Iron Age. For example, the jugs with a thickened rim with a usual triangular profile¹⁷⁴ – one more case in Concepción St.¹⁷⁵ –, as well as the jugs with a direct rim and an open neck¹⁷⁶ and those with an upwards turned rim and an open upper neck¹⁷⁷ could correspond indistinctly to evolutionary stages B, C and D in which these shapes predominated before the appearance of the squared-off rims of the stage E¹⁷⁸ – see one more example in tomb 1 of Cortijo de San Isidro¹⁷⁹ (FIG. 29) –. However, the squared-off everted rims appear, although less frequently, in Levantine archaeological contexts of the Early and Late Iron Age IIA, such as Tel Hazor X-IX or Tel Rehov VI-IV, which, at least in terms of the general periodization of the Levant, could correspond to the Tyrian strata XII-IV. In other words, they do not necessarily reflect specially the strata



FIG. 29. Phoenician neck-ridge jug from Cortijo de San Isidro (Juzgado Navarro – Sánchez Sánchez-Moreno – Galindo San José 2016, fig. 5).

V-IV of Tyre, the third period of al-Bass and the end of the Salamis period of Cyprus, although the locally stratified distribution documented in Tyre by P.M. Bikai can trigger that feeling. This could be attributed to the limited and biased assemblage provided by the excavations of Tyre, and to its contrast with essentially funerary contexts. These contexts share no direct chronological relationship with Tyrian strata – and with other stratified Levantine contexts –, other than the formal and decorative features of their containers. Contrary to what is often assumed, these features do not represent a strictly defined chronology due to their prolonged period of use.

It is difficult therefore to date the assemblage of Huelva to an exact Levantine Iron Age chronological stage, although most of it suggests an approximate chronology with the Iron Age IIA

173 Núñez Calvo 2018a, 2018 and 2023.

174 González de Canales Cerisola – Serrano Pichardo – Llompart Gómez 2004, pl. 11.34-45.

175 González de Canales Cerisola *et al.* 2017, pl. 6.6.

176 González de Canales Cerisola – Serrano Pichardo – Llompart Gómez 2004, pl. 11.27. González de Canales Cerisola *et al.* 2017, pl. 6.7, 6.10-11 and 6.14.

177 González de Canales Cerisola – Serrano Pichardo – Llompart Gómez 2004, pl. 11.23-26 and 11.28-33. González de Canales Cerisola *et al.* 2017, pl. 6.5, 6.9 and 6.12-13.

178 González de Canales Cerisola – Serrano Pichardo – Llompart Gómez 2004, pl. 11.14-22. González de Canales Cerisola *et al.* 2017, pl. 6.4.

179 Juzgado Navarro – Sánchez Sánchez-Moreno – Galindo San José 2016, fig. 5.

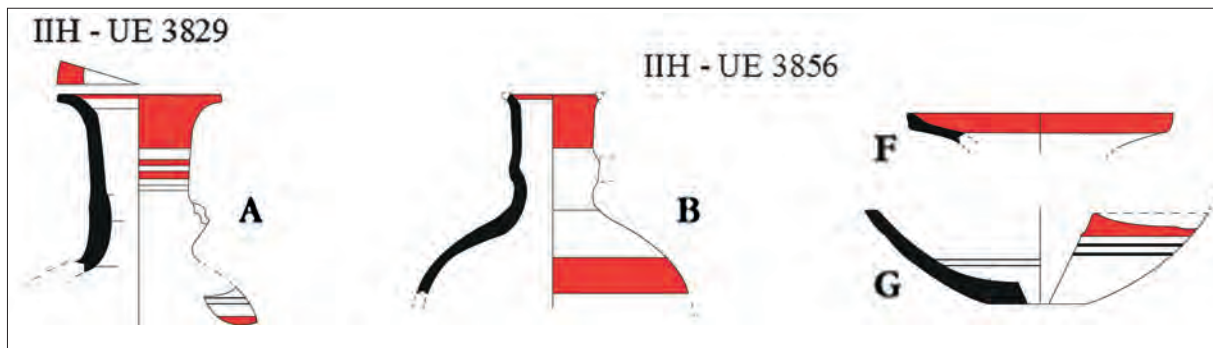


FIG. 30. Phoenician neck-ridge jugs from Sant'Antioco (Guirguis – Unali 2016, fig. 6).

and the strata XII-IV of Tyre, rather than Tyrian strata VIII/VII-IV as F.J. Núñez Calvo¹⁸⁰ and F. Cappella¹⁸¹ have recently proposed. Cultural features of the Levantine Iron Age IIA – Cypro-Geometric and Aegean pottery, development of red-slipped “Samaritan” ware and pyriform storage jars with short vertical rims – are present in Tyre from the stratum XII.¹⁸²

Nevertheless, later horizons of Phoenician colonisation reflect a clearer chronology which seems to correspond to the transition between the Iron Age IIA-IIB and possibly the Tyrian strata IV-III. This transitional stage was represented by the jugs of tombs 3/5, 28/29, 64/78 and 70/71 of al-Bass¹⁸³ and the layers IX-VIII, VIII and VII of Ashdod,¹⁸⁴ as we have seen.

In the Middle Mediterranean this stage is reflected by several jugs found in the *vano* IIH of Sant'Antioco (FIG. 30). In addition to jugs with a squared-off everted rim, there is one example of a stilted-rim jug and an upwards-turned rim with a vertical tapered lip.¹⁸⁵ Another fragment possibly representative of this chronological stage, with an open mouth upon a sloping open neck, is attested in the US 74 of Astarté Street in Tunisia,¹⁸⁶ dated by radiocarbon dating in the 9th century BCE.¹⁸⁷

This same transitional period can also be seen in the earliest colonial levels documented in the South of the Iberian Peninsula. In general, the new jugs are based on the models previously present in Huelva and Cortijo de San Isidro, with elongated horizontal rims with rectangular profile, a flared upper neck, a spherical body and painted decoration of horizontal bands in a bichrome style. It is especially evident in phase II of Teatro Cómico, where in some cases “old-fashioned” bevelled or thickened rims with a triangular profile remain.¹⁸⁸ Although less numerous and fragmentary, there are also examples found in Cánovas del Castillo St. – one horizontal rim¹⁸⁹ – and Ancha St. – fragments of conical necks and spherical bodies¹⁹⁰ –. In Castillo de Doña Blanca they use to have red slipped surface instead of bichrome painting decoration, as well as a

180 Núñez Calvo 2018b, pp. 334-336. Núñez Calvo 2023, p. 57, tab. 2.

181 Cappella 2022.

182 Bikai 1978, pls. 14-32.

183 Núñez Calvo 2008, pp. 59-60, fig. 27. Aubert Semmler – Núñez Calvo – Trellisó Carreño 2014, figs. 2.6 and 2.13.

184 Ben-Shlomo 2005, figs. 3.94.8 and 3.102.4.

185 Guirguis – Unali 2016, fig. 6.

186 Maraoui Telmini *et al.* 2020, fig. 5. Cat.14:013/95.

187 Maraoui Telmini *et al.* 2020, tab. 4.

188 Torres Ortiz *et al.* 2014, fig. 5.c-d.

189 Córdoba Alonso – Ruiz Mata 2005, fig. 9.5.

190 Ruiz Mata – Pérez Pérez – Gómez Fernández 2020, fig. 8.A.1-5.

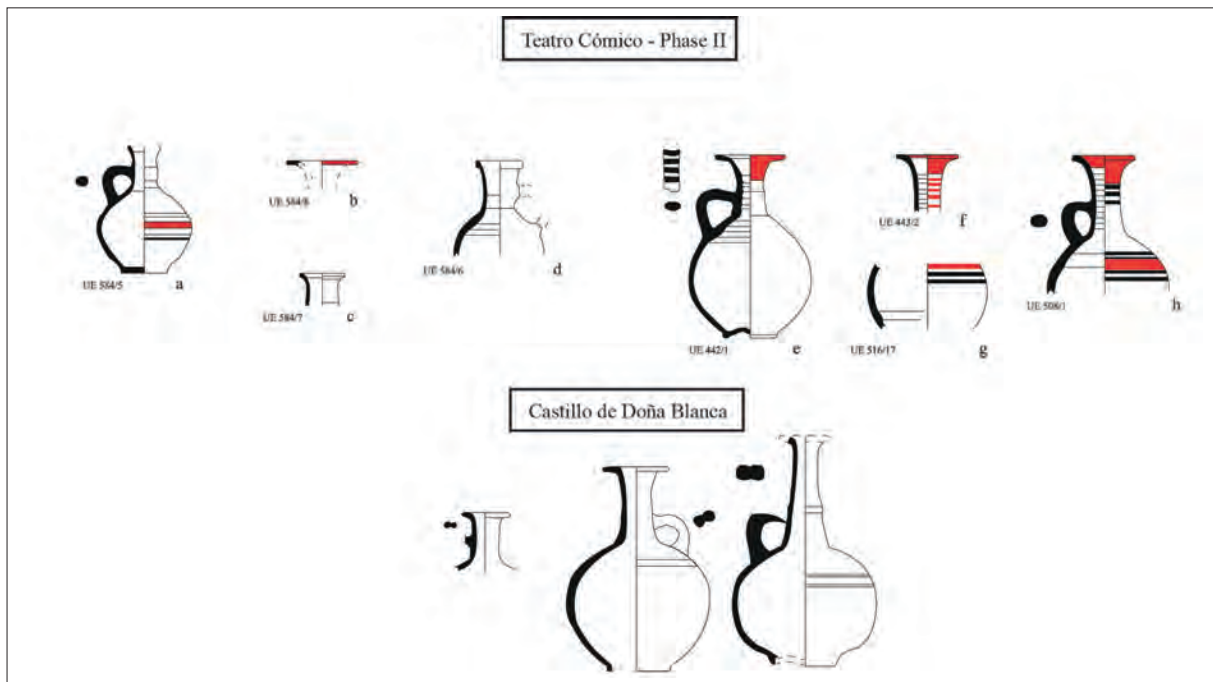


FIG. 31. Phoenician jugs from Teatro Cómico and Castillo de Doña Blanca (Torres Ortiz *et al.* 2014, fig. 5; Ruiz Mata – Pérez Pérez 2020, fig. 6.1).

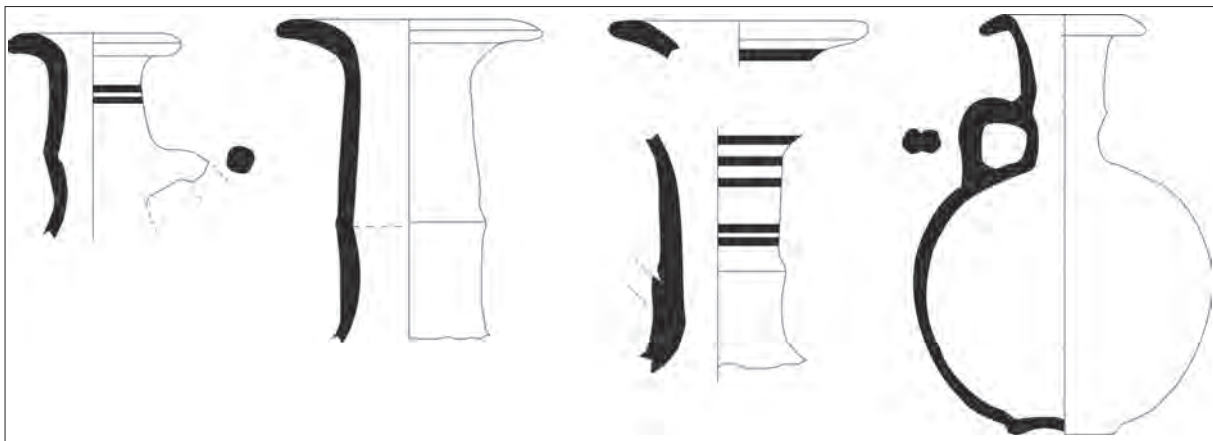


FIG. 32. Phoenician jugs from Morro de Mezquitilla B1a and B1b1 (Schubart – Maaß-Lindemann 2017, taf. 45).

more globular body, a more cylindrical neck – sometimes rather elongated and narrowed – and a doubled handle¹⁹¹ (FIG. 31). Perhaps because of being later versions than those of phase II of Teatro Cómico, Cánovas del Castillo St. and Ancha St., as F. Cappella¹⁹² has also recently suggested – also noting its theoretical contemporaneity with the phase B1b1 of Morro de Mezquitilla –. Similar red-slipped jugs to that of Castillo de

191 Ruiz Mata – Pérez Pérez 2020, fig. 6.1.1-4.

192 Cappella 2022.

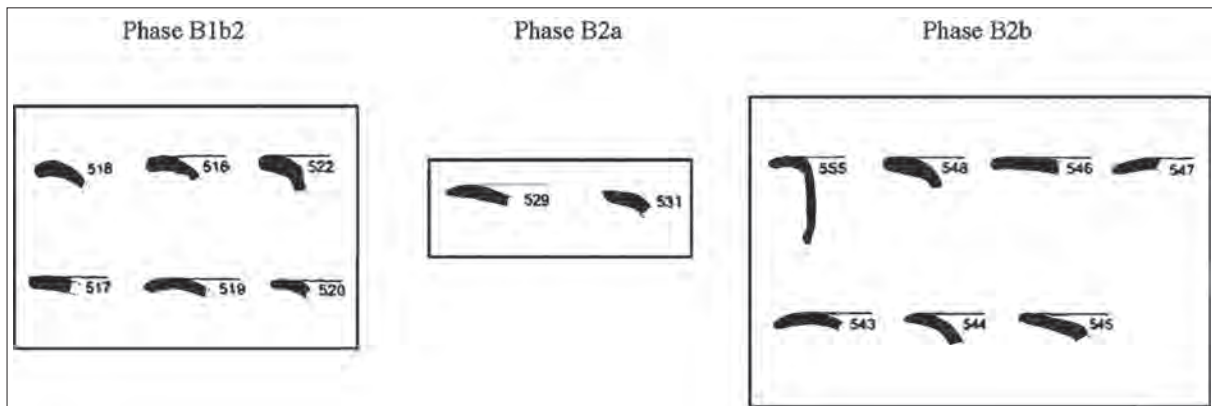


FIG. 33. Mushroom-mouthed jug's rims from Morro de Mezquitilla (Schubart – Maaß-Lindemann 2017, taf. 95-96).

Doña Blanca have also been attested in the cemetery of Ayamonte – tombs 2, 5 and 9 –.¹⁹³

In the region of Malaga, on the other hand, there is an important group of fragments and semi-complete containers resembling the jugs of phase II of Teatro Cómico. These are found in phases B1a and B1b1 at Morro de Mezquitilla (FIG. 32). It's worth noting that F. Cappella¹⁹⁴ considers this last level to be later and contemporaneous with the “Phoenician quarter” at Castillo de Doña Blanca. The containers of Morro de Mezquitilla are nonetheless quite different. They are treated with an external red slip and adorned with painted bi-chrome decoration.¹⁹⁵ In terms of shape, they are characterized by cylindrical or slightly open necks – types K2 and K4 – and a typically hanging rim, finding parallels in Carthage – rue Ibn Chabâat¹⁹⁶ –.

Although being usually in a more fragmented state, in the immediately later colonial phases represented by the levels B1b2, B2a and B2b of Morro de Mezquitilla¹⁹⁷ (FIG. 33), Chorreras,¹⁹⁸ Lixus,¹⁹⁹ the phase III under the Decumanus Maximus of Carthage²⁰⁰ or the *vano* IIF of Sant'Antioco²⁰¹ – M2 horizon

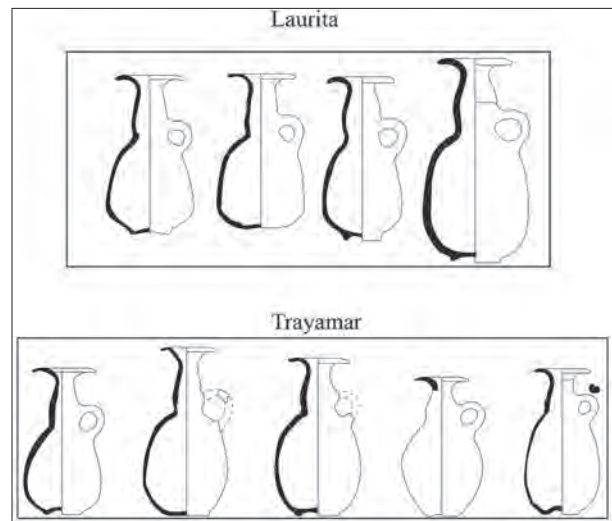


FIG. 34. Mushroom-mouthed and red-slipped jugs from Laurita and Trayamar (Pellicer Catalán 2007, figs. 22, 23, 31, 32 and 87).

193 Marzoli – García Teyssandier 2019, figs. 52.c, 53.d, 54.c, 61.e, 63.c, 64.c 65.c, 179.g, 180.f and 181.c.

194 Cappella 2022, fig. 1.

195 Schubart – Maaß-Lindemann 2017, taf. 45-46.

196 Vegas 1999, abb. 5.17-19.

197 Schubart – Maaß-Lindemann 2017, taf. 95-96.

198 Maaß-Lindemann 1983, abb. 1.1-2.

199 Belén Deamos *et al.* 2001, figs. 6 and 12. Álvarez García *et al.* 2001, fig. 3.7.

200 Niemeyer – Docter – Schmidt 2007, abb. 133.1072.

201 Guirguis 2022, fig. 7.c.

of J. Ramon Torres²⁰² – there is a gradual adoption of a more elongated and stylised profile of the rim in the mushroom-mouthed jugs, which will eventually adopt the profile of a pyriform or oval body and a cylindrical neck with an undulating wall – like those observed in the cemetery of Laurita,²⁰³ and the cemetery of Trayamar²⁰⁴ (FIG. 34) – which fully correspond to the predominant Tyrian versions between strata III, II and I – stages F and G of F.J. Núñez Calvo²⁰⁵ – contemporary with the Levantine Iron Age IIB and IIC – 9/8th and 7th centuries BCE –.

8. CONCLUSIONS

While the limited assemblage of pottery published by P.M. Bikai²⁰⁶ from the stratigraphy of Tyre may suggest a predominantly sequential and linear evolution, especially when compared with assemblages primarily from Levantine and Cypriot cemeteries based on typological features, it is essential to recognize potential biases in this interpretation. This interpretation – which also aligns with the Cypriot horizons proposed by P.M. Bikai²⁰⁷ – arises from a constrained dataset used for analysis. A more comprehensive analysis involving a larger number of containers from stratified contexts in the Levant may further clarify this matter.

The key features of some of the theorized sequential stages may have appeared in Levantine contexts chronologically earlier than that suggested by F.J. Núñez Calvo, although the ancient models continued to appear later. For example, the remain unstable-base jugs of the stage B throughout the Levantine Iron Age IIA is illustrative. However, numerous features theoretically belonging to later stages, such as smaller bodies with ringed stable bases – stage D –, might appear as early as during the Levantine Iron Age IB period – Tel Rehov C3a –. This could correspond to stratum XIII of Tyre, rather than the suggested strata X-VI. Additionally, squared-off everted rims characteristic of stage E might emerge as early as during the Early Iron Age IIA Levantine period – Tel Hazor X-IX –. This could correspond to Tyrian strata XII-XI, rather than strata V-IV, and to the period I of al-Bass, not period III. It is worth noting however that squared-off everted rims continued to appear as late as during the Iron Age IIB in sites such as Jemmeh and Tell el-Far'a.

The ¹⁴C dates from Huelva²⁰⁸ dating back to the 10th-9th centuries cal BC are not therefore certainly contradicted by the typological-sequential chronology of the associated pottery assemblage, at least as far as the neck-ridge jugs are concerned. It is sustained by the complementary dates obtained from La Rebanadilla²⁰⁹ and from Utica²¹⁰ associated with typologically similar assemblages of pottery collected – unlike the assemblage of Huelva – from archaeologically stratified contexts – although neck-ridge jugs are still missing in publications –.

On the other hand, there appears to be greater clarity regarding the transition between Stage E and F according to F.J. Núñez Calvo. This transition could develop between strata IV-III of Tyre, corresponding to the Late Iron Age IIA and Early Iron Age IIB in the Levant, which apparently took place during the late 9th century BCE. This transition also aligns with early western Phoenician archaeological levels, primarily observed in

202 Ramon Torres 2010.

203 Pellicer Catalán 2007, figs. 22.d, 23.d, 31.h and 32.g.

204 Pellicer Catalán 2007, fig. 87.

205 Núñez Calvo 2008.

206 Bikai 1978.

207 Bikai 1987.

208 Nijboer – van der Plicht 2006. Marzoli – Sánchez Sánchez-Moreno – Galindo San José 2016. Pérez-Jordá *et al.* 2017. González de Canales Cerisola – Montañó Justo – Llompard Gómez 2020.

209 Sánchez Sánchez-Moreno *et al.* 2012. Marzoli – Sánchez Sánchez-Moreno – Galindo San José 2016.

210 López Castro *et al.* 2016, 2020a and 2020b.

Cádiz, Morro de Mezquitilla, Cronario of Sant'Antioco, and Carthage. The initial widespread appearance of jugs with cylindrical or slightly open necks, decorated with horizontal designs in the bichrome style and featuring spherical bodies, gradually gives way – perhaps during the 8th century BCE – to their replacement by new red-slipped jugs. These new red-slipped jugs also exhibit a globular body and elongated neck – in Ayamonte or Castillo de Doña Blanca –, as well as an oval or pyriform body with a carinated grooved shoulder – in Laurita or Trayamar –. They further present a narrow neck with a curved and undulating profile, along with increasingly elongated and pendant rims. This stylistic shift, first observed in strata III, II, and I of Tyre, becomes particularly frequent in the later stages of Phoenician colonization in the western and central Mediterranean, determining the birth of the generally known as mushroom-mouthed Phoenician jugs.

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