PHOENICIAN-TYPE RED SLIP WARES AND THEIR REGIONAL EVOLUTION: THE CASE OF THE LOWER SADO VALLEY (PORTUGAL)

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Abstract: Introduced in the Iberian Peninsula with the arrival of the earliest Phoenician merchants and colonists, red slip table wares became a common occurrence in Phoenician and "Orientalizing" contexts during the Early Iron Age. This is due in a large part to the rapid appearance of local/regional productions throughout southern Iberia which, at first, produced a fairly standardized and transversal repertoire but that soon began introducing variations which in time led to a pronounced regionalization of the production. The Lower Sado valley is a case in point, where the combined analysis of several assemblages allows for a reconstruction of the evolution of red slip productions, from early, Phoenician prototypes to Late Iron Age derivates. Furthermore, a comparison with other well studied Portuguese assemblages clearly illustrates this regionalization process, allowing interesting insights into the adaptation of foreign pottery models and their impact on the evolution of local repertoires.

Keywords: Southern Portugal; Early Iron Age; Phoenician Colonization; Phoenician Pottery; Regionalization.

1. Phoenician-type Red Slip Wares in the Iberian Peninsula: A Brief Overview of Research

Red Slip Wares (RSWs) – relatively fine wares completely or partially covered in a reddish, lustrous clay-based slip, often with a burnished finishing – are a relatively common occurrence in all the areas of the Mediterranean basin touched by Phoenician trade and colonization during the early 1st millennium BCE.[1]

The Iberian Peninsula is no exception. These wares, derived from Levantine prototypes,[2] were in fact introduced early on in the Iberian ceramic repertoire:[3] some Levantine imports seem to be documented in early contexts, from the late 9th to the early 7th century BCE,[4] but the western Phoenician colonies soon began to produce their own RSWs, which in turn were progressively diffused throughout the local communities (see below).

RSWs were recognized early on in Iberian contexts as a result of the work of E. Cuadrado.[5] Nonetheless, it was only with the discovery and excavation of the Phoenician sites of the Mediterranean coast of Andalusia from the 1960's onwards that their cultural and chronological setting came to be fully understood.

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1 Vegas 1999; Peserico 2002; Nigro 2010; Guirguis 2010.

2 Bikai 1978; Núñez Calvo 2010; 2013; 2017; Giardino 2013.

3 Ramon Torres 2010; Núñez Calvo 2013; 2017; 2018.

4 Fernández Jurado 1985, pp. 34-35; Maass-Lindemann 1990; Ruiz Mata 2002, p. 182; González de Canales – Llompart – Serrano 2004, pp. 47-48; Fernández Flores – Rodríguez Azogue 2007, p. 152, fig. 53; Ruiz Mata – Pérez Pérez – Gómez Fernández 2014, p. 101; Torres Ortiz *et al*. 2014, p. 56.

5 Cuadrado 1969, with previous bibliography.

The quality of the stratigraphic and typological sequences obtained in such key sites as Morro de Mezquitilla, Toscanos, Trayamar and Chorreras, among others, established RSWs as one of the best chronological markers for Early Iron Age sites in the coastal areas of the southern Iberian Peninsula.[6]

For this reason, they received significant attention in later research, with the publication of ground-breaking works such as those by I. Negueruela[7] and in particular by P. Rufete Tomico, who studied the RSWs from the important settlement of Huelva, establishing in the process an influential and enduring typological framework for the westernmost assemblages of RSWs.[8]

These seminal studies were followed by further monographic analyses concerning specific relevant assemblages.[9] In this context, it is worth noting that the material from the southern Portuguese territory has received considerable attention,[10] making this area a particularly fertile ground for a comparative analysis.

A general overview of the available evidence promptly suggests that due to its wide geographic distribution the production of these RSWs became increasingly regionalized as time went by, with the emergence throughout the final phases of the Early Iron Age of eminently local/regional repertoires which represent parallel but clearly differentiated evolutions stemming from original and geographically transversal prototypes.[11] Such an evolution can only be duly analysed through a comparative seriation of the available evidence.

The present contribution aims to explore one such process of regionalization of RSW production, namely that which took place in the Lower Sado valley, a discrete geographic region with an apparently autonomous Early Iron Age settlement network (Fig. 1) where the impact of Phoenician colonists and merchants seems clearly attested.[12]

Although no single site in this area has so far yielded a complete, continuous stratigraphic sequence dating to the Iron Age, the entire period seems to be covered by different partial sequences from various sites. By cross-referencing them it is therefore possible to establish an approximation to the overall regional sequence (see below).[13]

Furthermore, as all the sites in this network yielded at least some examples of RSWs, a preliminary seriation of these productions can be established which allows for some exploratory comparisons with other well-established regional series.[14]

2. RSWs in the Iron Age of the Lower Sado Valley: Sites and Contexts

The Early Iron Age (7th-early 5th century BCE) settlement network of the Lower Sado valley comprises five main sites. The most important among these seems to have been the settlement underneath the present-day city of Alcácer do Sal (Fig. 1.1) which has yielded significant elements regarding its Iron Age occupation.

6 Schubart 1976; 2002-2003; see also Niemeyer – Schubart 1969; Maass-Lindemann 1982; 1986; 1997; 2008; 2009; 2017.

7 Negueruela 1980.

8 Rufete Tomico 1988-1989.

9 Ruiz Mata 1986; Mancebo Dávalos 1991-1992; Rouillard – Gailledrat – Sala Sellés 2007; Almagro-Gorbea – Mederos Martín – Torres Ortiz 2008; González Prats 2014.

10 Barros – Cardoso – Sabrosa 1993; Arruda 1999-2000; 2011; Mayet – Silva 2000; Freitas 2005a; 2005b; Calado *et al.* 2013; Sousa 2017; Batalha – Barros 2018.

11 Arruda 1993; Sousa 2017, p. 213.

12 Arruda 1999-2000, pp. 63-100.

13 Silva 2005.

14 Arruda 1999-2000; 2011; Freitas 2005a; 2005b; Sousa 2017.

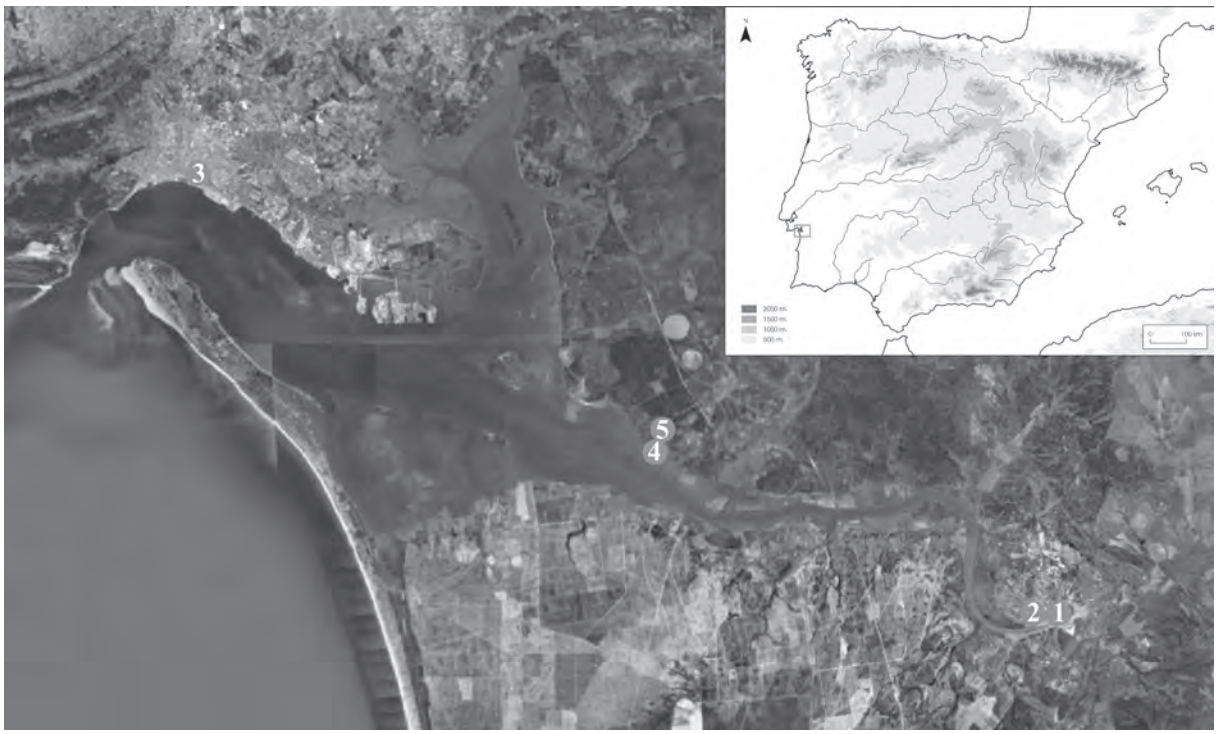

Fig 1. Location of the Lower Sado Iron Age sites studied in the text (by the author): 1. Alcácer do Sal; 2. Olival do Senhor dos Mártires necropolis (Alcácer do Sal); 3. Setúbal; 4. Abul A (Alcácer do Sal); 5. Abul B (Alcácer do Sal).

Several areas of this settlement have in fact been studied archaeologically[15] but only one such study has been fully published. This excavation, undertaken by the team of the Museu de Arqueologia e Etnografia do Distrito de Setúbal (MAEDS) in a small area within the city's medieval Castle,[16] did however identify an important occupation sequence dating to the Iron Age.

This sequence was divided into two broad phases:[17] Phase III corresponds to an Early Iron Age occupation of unclear but possibly early date (7th century BCE?), while Phase IV corresponds in all likelihood to an early stage of the Late Iron Age (second half of the 5th century BCE).

RSWs are documented in both phases (Fig. 2), although they are much more common in Phase III, accounting for 9,1% of the pottery in the lower layer from this phase (C.3) and for 5,3% in the more recent layer (C.9). In Phase IV there is a considerable decrease in the number of RSWs, which account for a mere 0,9% of the pottery in its lowest layer (C.8) being altogether absent in the more recent one (C.7). As for the repertoire, it comprises exclusively open shapes, including several variants of broad rim plates and carinated bowls which will be discussed in more detail below.

A second site that has yielded RSWs is the necropolis of Olival do Senhor dos Mártires (Fig. 1.2), the main funerary area of the settlement of Alcácer do Sal.[18] Although scarce (some 20 fragments in total,

15 Paixão 2001; Gomes 2008.

16 Silva *et al.* 1980-1981.

17 Silva *et al.* 1980-1981, pp. 171-188.

18 Gomes 2016.

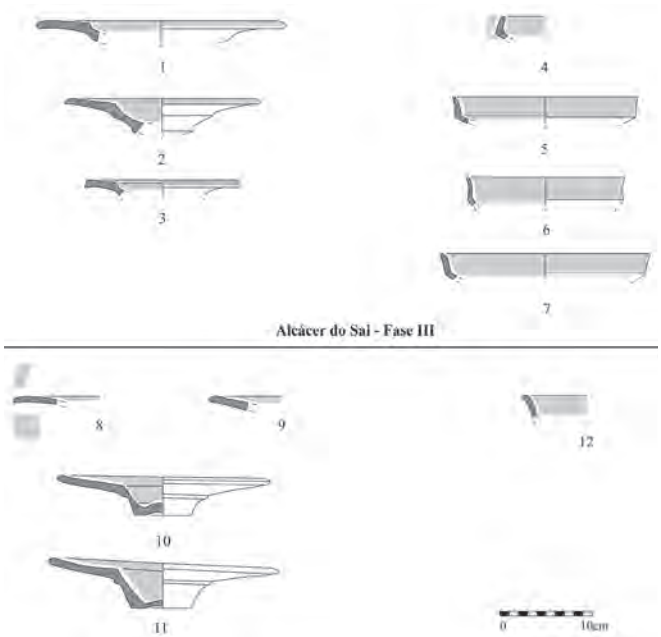

Fig. 2. Red slip wares from Alcácer do Sal; selected examples (after Silva *et al.* 1980-1981, p. 173, fig. 13; p. 174, fig. 14; p. 177, fig. 17; adapted).

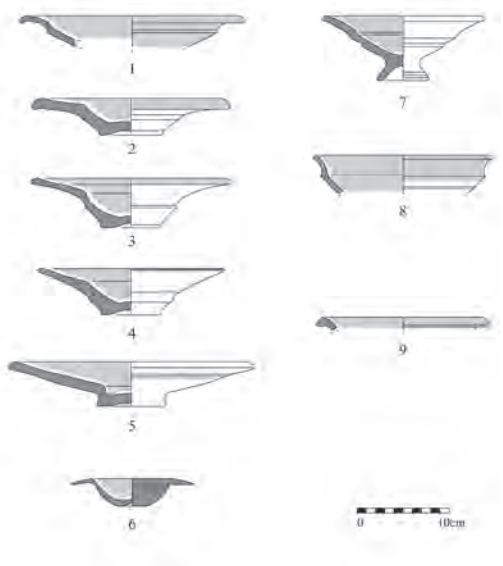

Fig. 3. Red slip wares from the Olival do Senhor dos Mártires necropolis; selected examples (after Gomes 2016, p. 173, Tab. 3).

for a minimum number of 12 individual vessels), the RSWs from this funerary site (Fig. 3) seem to cover a relatively long period of time, from the mid-7th to the 5th or early 4th century BCE.[19]

The unfortunate lack of stratigraphic information regarding most of the excavations undertaken in the site[20] precludes a clear contextualization of this material, and a fine quantification of the RSWs within the overall pottery assemblage of each phase is impossible. In general terms, however, RSWs can be considered comparatively rare in the necropolis (2,4% of the entire pottery assemblage). Typologically, the broad-rim plate and carinated bowl variants are once again nearly exclusive.

The third site in this network is the settlement underneath the city of Setúbal (Fig. 1.3).[21] The earliest data regarding the Iron Age occupation of this area comes from a small excavation which took place in Travessa dos Apóstolos in the 1980's;[22] the sequence documented in this area was divided into three phases, with RSWs being present in all of them (Fig. 4.1-3).[23]

In Phase I, dating to a transitional phase between the Late Bronze Age and the Early Iron Age (late 8th-early 7th century BCE?) where wheel-made pottery is very rare in general, RSWs are represented by a single piece (0,5% of the pottery assemblage), while in Phase II, of uncertain chronology but clearly corresponding to an Early Iron Age horizon, the representation of RSWs rises to 1,4% of the total assemblage.[24] Late RSWs were

19 Gomes 2016, pp. 170-185.

20 Correia 1972a; 1972b; Paixão 1983; 2014.

21 Soares – Silva 1986; Silva *et al.* 2014; Silva 2018.

22 Soares – Silva 1986.

23 Soares – Silva 1986, p. 97.

24 Soares – Silva 1986, p. 97.

also documented in this sequence's Phase III (Late Iron Age), where a single piece was documented.[25] Once again, only open shapes (plates, bowls and cups) are represented in this site.

More recently, other excavations in the Historical Centre of Setúbal[26] have also reached Iron Age levels. RSWs are, however, quantitatively residual in the assemblages retrieved in these new areas, being represented by a single vessel in each of them (Fig. 4.4-5).[27]

The fourth site considered here is Abul A (Alcácer do Sal) (Fig. 1.4). This small emporium, usually considered as a Phoenician enclave dependant on Alcácer do Sal, was occupied in two successive phases between the mid-7th and the early 6th century BCE.[28]

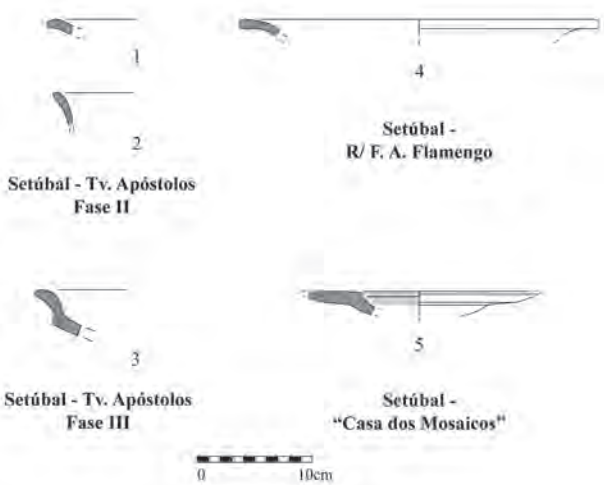

Fig. 4. Red slip wares from Setúbal; selected examples (nos. 1-3 after Soares – Silva 1986, pp. 98-99, figs. 7-8; no. 4 after Silva *et al.* 2014, p. 167, fig. 6; no. 5 after Silva 2018, p. 68, fig. 3; adapted).

RSWs are abundant among the pottery repertoire retrieved in the site, being well represented throughout the complex's different construction and use phases (Fig. 5) albeit in different amounts and percentages[29] and with a clearly higher representation in Phase I (third quarter of the 7th century BCE) (11,8% in Sub-Phase IB-IC and 9,7% in Sub-Phase C[30]) than in Phase II (late 7th-early 6th century BCE)[31] (3,8% in Sub-phase IIC and 5,7% in the Sub-Phase IIC – Abandonment[32]). Typologically, the repertoire is quite limited, being entirely composed of variants of broad rim plates and carinated bowls.[33]

The fifth and last site analysed in this contribution, Abul B (Alcácer do Sal) (Fig. 1.5), is a small open-air ritual complex founded during the last quarter of the 6th century and used throughout the 5th century BCE.[34] RSWs are considerably rarer in this site than in its predecessor, Abul A, but are nonetheless represented in both of its stratigraphic horizons,[35] amounting to no more than 1,4% of the total pottery retrieved (1,8% in Layer 2[36]). The limited repertoire once again features plates and cups, but also *paterae* (Fig. 6).[37]

Despite some limitations – chief among which are the small excavated (and published) areas in Alcácer do Sal and Setúbal and the absence of contextual data for Olival do Senhor dos Mártires – the combined consideration of all these sites allows for a broad characterization of the overall evolution of the material culture in the Lower Sado valley from the early/mid-7th until the 5th/early 4th century BCE.

25 Soares – Silva 1986, p. 97.
26 Silva *et al.* 2014; Silva 2018.
27 Silva *et al.* 2014, p. 166; Silva 2018, p. 67.
28 Mayet – Silva 2000.
29 Mayet – Silva 2000, table 1.
30 Mayet – Silva 2000, table 1; no data for Sub-phase IA-IB.
31 Mayet – Silva 2000, pp. 33-38.
32 Mayet – Silva 2000, table 1; no data for Sub-phase IC-IIA and IIB.
33 Mayet – Silva 2000, pp. 33-38.
34 Mayet – Silva 2000, pp. 177-229.
35 Mayet – Silva 2000, tables 19-20.
36 Mayet – Silva 2000, table 19.
37 Mayet – Silva 2000, pp. 179-181.

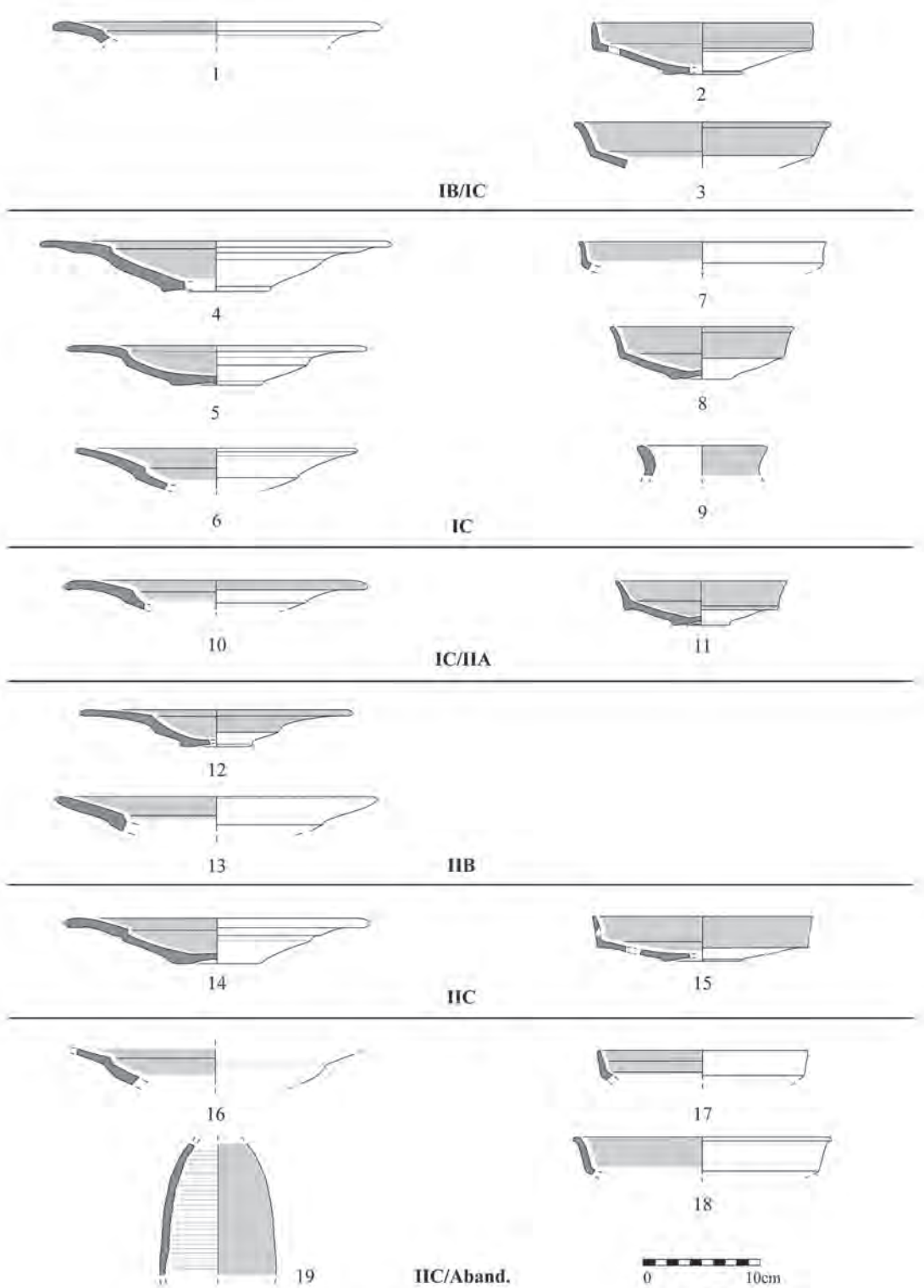

Fig. 5. Red slip wares from Abul A; selected examples (after Mayet – Silva 2000, p. 85, fig. 14; pp. 88-89, figs. 17-18; p. 100, fig. 29; p. 102, fig. 31; p. 109, fig. 38; p. 118, fig. 47; adapted).

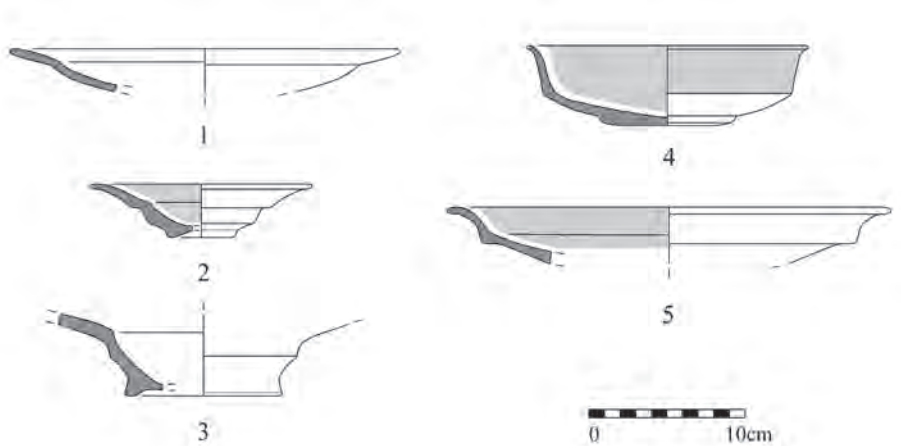

Fig. 6. Red slip wares from Abul B; selected examples (after Mayet – Silva 2000, p. 196, fig. 65; p. 208, fig. 77; adapted).

	G.I – Und.	I.A.1	I.A.2	I.A.3	I.B.1	I.B.2	I.C	I.D.1	I.D.2	I.D.3	I.E	II.A	II.B – Und.	II.B.1	II.B.2	II.C	III.A	III.B	III.C	Und.
Alcácer do Sal – Phase III	20	2				5?	2						2	8	4					5
Alcácer do Sal – Phase IV	4					1?			1?	3					3					
OSM				2	1	3		1	6		1	1			3				1	1
Setúbal – Apóstolos – Phase I		1?																		
Setúbal – Apóstolos – Phase II		1												1						
Setúbal – Apóstolos – Phase III																1				
Setúbal – Flamengo		1?																		
Setúbal – Casa dos Mosaicos		1																		
Abul A – Phase IA/IB		1	1																	
Abul A – Phase IB/IC	2	1?												3	1					
Abul A – Phase IC	8	1	2	3										5	3		1			1
Abul A – Phase IC/IIA		1												1						
Abul A – Phase IIB		1		2																
Abul A – Phase IIC	1		2			2								4						1
Abul A – Phase IIC/Aband.	2				2?									1	1			1		3
Abul B – Structure 1	1							1												
Abul B – Layer 2	2	1		2											1	1				
Total	40	12	5	9	3	11	2	1	7	3	1	1	2	23	16	2	1	1	1	11

Fig. 7. Distribution of shapes per site. Quantifications (minimum number of individuals) are based on fully published (*i.e.*, illustrated) vessels (by the author).

For RSWs a preliminary outline of their regional sequence can be attempted, albeit with one important *caveat* related to the small samples documented in some sites and stratigraphic contexts (Fig. 7), which means that they cannot be considered entirely representative of the array of shapes possibly in use at any given moment.

This means, of course, that new shapes and variants may yet be identified in the future; meanwhile, however, a preliminary typological survey can nonetheless be established, as we shall see in the following pages.

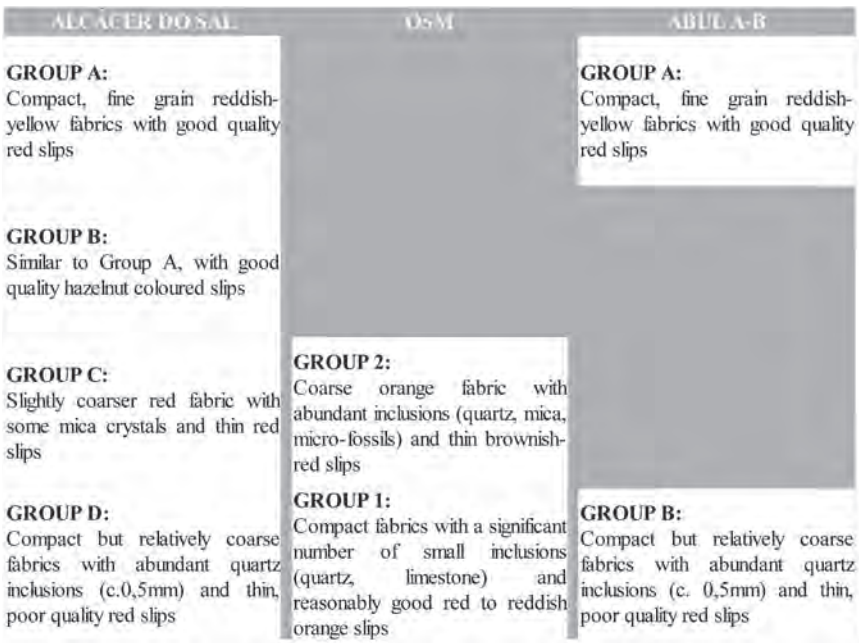

Fig. 8. Fabric groups defined for red slip wares from Alcácer do Sal (after Silva *et al.* 1980-1981, p. 182), Olival do Senhor dos Mártires (after Gomes 2016, pp. 170-172) and Abul (after Mayet – Silva 2000, pp. 34-35) and their possible equivalences.

3. The Lower Sado RSWs: Towards a Regional Sequence

3.1. *Some Methodological Remarks*

Before addressing the typological evolution of RSWs in the Lower Sado it is necessary to explain some of the methodological options underlying the following analysis.

First, it should be mentioned that the issue of production groups will not be stressed throughout this contribution. This is in part justified by its focus on typological development and evolution; however, this option is also a result of the difficulty to conciliate the different groups of production defined for each of the aforementioned sites.

In fact, production groups have been defined at different times and with slightly different criteria for the RSWs from Alcácer do Sal,[38] Abul A and B[39] and Olival do Senhor dos Mártires,[40] and without new direct analysis no clear-cut correspondences can be established between them. Nonetheless, the main characteristics of each of the production groups from those sites and their possible equivalences are represented in Fig. 8.

A second methodological remark regards the construction of the typological proposal presented in the following pages (Fig. 9). Given the goals of this contribution it was decided that the material should be divided into broad shape families (plates, cups, closed vessels) which are noted as Groups.

In order to better reflect the internal development of each of these Groups they were sub-divided into Series which correspond to the main steps in their typological evolution. When necessary, these Series were in turn divided into specific Types which account for the diversity of the material while giving some clues as to the choices and influences which shaped the evolution of regional RSWs. The resulting seriation is presented in detail in the following pages.

38 Silva *et al.* 1980-1981, p. 182.

39 Mayet – Silva 2000, pp. 34-35.

40 Gomes 2016, pp. 170-171.

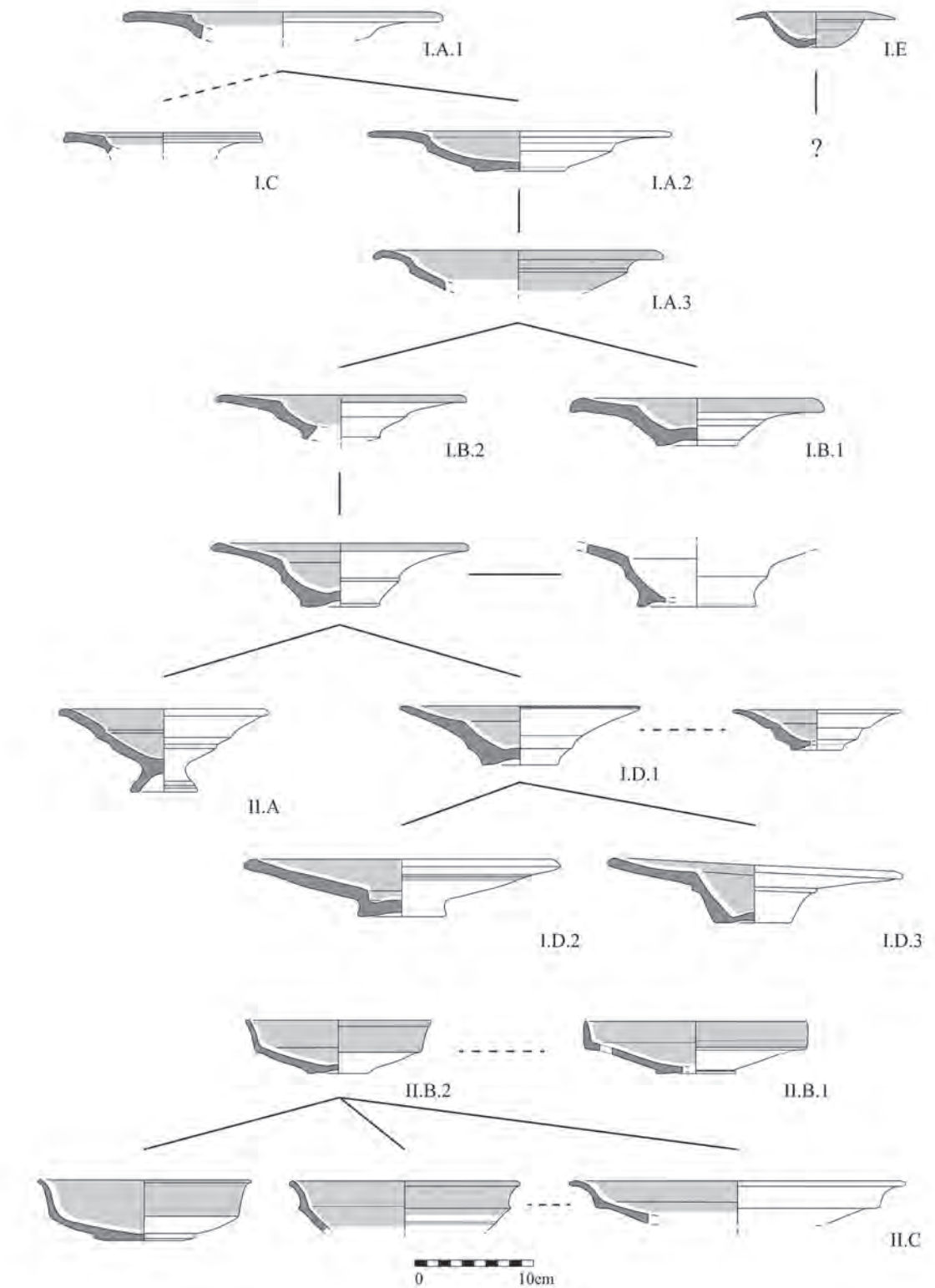

Fig. 9. Lower Sado red slip wares; typology and proposed evolution (by the author).

3.2. *RSWs in the Lower Sado: A Typological Survey*

3.2.1. Group I – Plates

3.2.1.1. Series I.A – Plates with Convex Broad Rims

3.2.1.1.a. Type I.A.1 – Plates with Smooth Profiles and Sub-horizontal Broad Rims

This is a very well-known type of plate documented throughout the Western Phoenician world.[41] Its main typological features are its relatively shallow, spherical cap shaped body and its broad, sub-horizontal rims which show a typically convex profile.

Both these features vary over time, with the bodies becoming increasingly sectioned until they develop a markedly carinated aspect[42] (see below Type I.A.2), while the rims tend to become broader and to occupy a proportionally larger portion of the diameter.[43]

In the Lower Sado these plates may be present in Abul A since Phase IB/IC[44] (Fig. 5.1) but they are clearly attested only on this site's Phase IC[45] (Fig. 5.4) as well as in Alcácer's Phase III[46] (Fig. 2.1). Both contexts can be dated to the second half of the 7th century BCE. In both sites they appear in association with plates from Types I.A.2 and I.B.2 and also, in Alcácer, from Type I.C.

Further examples are however documented in Setúbal, in contexts dated to the early 6th century BCE (Fig. 4.4-5), although at least one of these examples[47] shows particular morphological features (shallow body, flat rim, internal angle between rim and body marked by a protrusion) (Fig. 4.5) which can reflect an *in situ* evolution of the type.

In any case, both their contexts and their typological features suggest these pieces correspond to one of the earliest types of RSW vessels documented in the Lower Sado, dating back at least to the third quarter of the 7th century BCE.[48]

It is not however impossible that this shape – or its narrow rim prototype – was introduced earlier, as RSW plates are also documented in Setúbal's Phase I, which dates to the Late Bronze Age/ Early Iron Age transition (late 8th-early 7th century BCE?),[49] and in Abul A's Phase IA/IB, dated to the mid-7th century.[50] The material from these contexts is however too fragmentary to allow for a secure classification.

3.2.1.1.b. Type I.A.2 – Plates with Carinated Profiles and Sub-horizontal Broad Rims

While in other western Iberian assemblages the appearance of plates with carinated profiles is considered to be a late development associated with other typological changes, namely in the size and shape of the rim,[51] in the Lower Sado valley this doesn't seem to be the case.[52]

41 Schubart 1976; 2002-2003; Ramon Torres 2010; Giardino 2017, p. 70, pls. XVIII-XXIII; see also Núñez Calvo 2013; 2018.

42 Rufete Tomico 1988-1989.

43 Schubart 1976; 2002-2003; see also Mayet – Silva 2000, pp. 35-36.

44 Mayet – Silva 2000, fig. 14, no. 13.

45 Mayet – Silva 2000, fig. 17, no. 49.

46 Silva *et al.* 1980-1981, fig. 14, nos. 64-65.

47 Silva 2018, fig. 3, no. 1.

48 Mayet – Silva 2000, pp. 35-36.

49 Soares – Silva 1986, p. 97.

50 Mayet – Silva 2000, fig. 12, no. 1

51 Rufete Tomico 1988-1989, p. 391; Ruiz Mata – Pérez Pérez 1995, fig. 23.

52 See also Freitas 2005a.

Carinated profiles are in fact documented in this area since the earliest horizons of Abul A (Phase IA/IB[53]). In this site there are also numerous examples combining this type of profile with "classic" convex broad rim shapes, an association found throughout Abul A's sequence, from Phase IC to Phase IIC[54] (Fig. 5.5). Further examples could also be present in Alcácer's Phase III.[55]

The contextual association of these plates with those from Type I.A.1 commented above further emphasises the early development of carinated profiles in the Lower Sado RSW repertoire by comparison with other sites, such as Huelva, where they appear to develop later.[56]

3.2.1.1.c. Type I.A.3 – Plates with Carinated Profiles and Oblique Broad Rims

Although strictly related to the previous types, the plates collected in Type I.A.3 differ from their counterparts of Types I.A.1 and I.A.2 due to the angle of their rim: these plate rims present a markedly oblique orientation instead of the "classical" sub-horizontal development of the previous types.[57]

This feature is not however exclusive to the Lower Sado RSWs,[58] as the material from Huelva shows a similar trend since the late 7th century which becomes further accentuated in the 6th century BCE.[59] Plates with oblique rims are also documented in Castro Marim during the 6th century BCE.[60]

In the area studied here this characteristic can also be traced back to the 7th century BCE as demonstrated by their presence in Abul A's Phase IC[61] (Fig. 5.6) Other examples have been identified in the necropolis of Olival do Senhor dos Mártires, unfortunately without known contexts[62] (Fig. 3.1).

This type of plates can be considered as an early intermediate stage between the more transregional model represented by Types I.A.1 and I.A.2 and the later, more regional models collected bellow in Series I.D.

A later variant of this shape may however be present in Abul B's Layer 2[63] (Fig. 6.3). This piece is deeper and shows a characteristic low ring foot, a morphological feature usually present in later productions, as is the case of this piece whose context dates to the 5th century BCE.

3.2.1.2. Series I.B – Plates with Concave Broad Rims

3.2.1.2.a. Type I.B.1 – Shallow Plates with Sub-horizontal Broad Rims

More than an evolution, Series I.B runs to a large extent in parallel with Series I.A whose transregional prototypes it clearly shares. The morphological similarities between the two series are in fact striking, and only the shape of their rims sets the plates from this series apart from their Series I.A counterparts.

53 Mayet – Silva 2000, fig. 12, no. 2.

54 Mayet – Silva 2000, fig. 17, nos. 47-48, fig. 31, no. 191, fig. 38, no. 255.

55 Silva *et al.* 1980-1981, fig. 13, nos. 83-85.

56 Rufete Tomico 1988-1989.

57 Schubart 1976; Rufete Tomico 1988-1989, fig. 1.

58 Giardino 2017, p. 70, pls. XXIII-XXXI.

59 Rufete Tomico 1988-1989, figs. 7-8.

60 Freitas 2005a, fig. 35.

61 Mayet – Silva 2000, fig. 17, nos. 50-51.

62 Gomes 2016, pp. 173-175.

63 Mayet – Silva 2000, fig. 77, no. 90.

The presence of concave rims seems however to be significant: this morphological detail is very rare in Western Phoenician RSW repertoires,[64] and could be regarded as a regional particularity of the Lower Sado and Lower Tagus productions.[65]

As for Type I.B.1, it is represented so far by a single example from the necropolis of Olival do Senhor dos Mártires[66] (Fig. 3.2). This piece is characterized by its small dimensions, its shallow body with an incipiently carinated profile and its concave, broad rim.

Unfortunately, the exact context of this vessel is unknown. Its chronology is therefore difficult to establish and can only be assessed by some partial parallels found in other areas. Roughly comparable plates (without concave rims) are in fact documented in Castillo de Doña Blanca (Puerto de Santa María, Cádiz)[67] and in Morro de Mezquitilla (Veléz-Málaga)[68] in contexts dated to the late 6th or early 5th century BCE.[69]

3.2.1.2.b. Type I.B.2 – Plates with Carinated Profiles and Broad Rims

These plates are very similar to their Type I.A.3 counterparts, although they present broader and characteristically concave rims. Examples have been documented in Abul A's Phase IIB (Fig. 5.13) and possibly in this site's abandonment horizon[70] (Fig. 5.16), in Alcácer's Phase III[71] (Fig. 2.2) and in the necropolis of Olival do Senhor dos Mártires[72] (Fig. 3.3). Other, less clear examples could be present in Alcácer's Phase IV[73] (Fig. 2.9).

This type of plate is also well documented in the Lower Tagus, in Quinta do Almaraz (Almada),[74] which further emphasizes its possible nature as a specifically regional production. One further example of this type of plate which could, as a hypothesis, be related to the Lower Sado/Lower Tagus productions was documented in the necropolis of Galeado (Odemira) on the coast of Alentejo.[75]

Well characterized examples of plates from this type appear only in contexts dating to the late 7th-early 6th century BCE, but the type may have had a longer life span, reaching Alcácer's Phase IV (see above) which dates to the Late Iron Age.[76]

In fact, and from a morphological point of view, it is not difficult to propose a direct relationship between these plates and others belonging to later chronological horizons. The types collected in Series I.D, and in particular in Type I.D.2 (see below), seem in fact to show a somewhat exaggerated development of features already present in these earlier vessels which could indicate both types are closely related within the regional RSW sequence.

64 See, however, Pellicer 2007, fig. 28.

65 Barros – Cardoso – Sabrosa 1993, p. 177; Batalha – Barros 2018, fig. 5.

66 Gomes 2016, p. 175.

67 Ruiz Mata – Pérez Pérez 1995, fig. 26.

68 Schubart – Maass-Lindemann 1979, fig. 12.

69 Gomes 2016, p. 175.

70 Mayet – Silva 2000, fig. 31, nos. 192-193, fig. 37, no. 354.

71 Silva *et al.* 1980-1981, fig. 13, no. 66.

72 Gomes 2016, pp. 176-177.

73 Silva *et al.* 1980-1981, fig. 17, no. 192.

74 Barros – Cardoso – Sabrosa 1993, p. 177; Batalha – Barros 2018, fig. 5.

75 Beirão – Gomes 1983, pp. 223-224.

76 Silva *et al.* 1980-1981, pp. 171-188.

3.2.1.3. Series I.C – Plates with Broad Rims and Fluted Lips

Broad rim plates with fluted lips are not uncommon in West Phoenician RSW repertoires.[77] In the Lower Sado, however, this type of plate has only been documented in the settlement of Alcácer do Sal, and more specifically in its Phase III[78] (Fig. 2.3).

RSW plates with fluted lips are well attested in the Phoenician sites of the Iberian Peninsula since the mid- to late 8th century BCE,[79] but they only become more widespread in the Far West in the late 7th century, being particularly common in the 6th century BCE as demonstrated by the data from Huelva,[80] Castro Marim[81] but also possibly Lisbon.[82] The examples from Alcácer do Sal's Phase III[83] should also be attributed to this period.

Series I.C plates, clearly corresponding to a transregional model, appear not to have been particularly popular in the Lower Sado, and they do not seem to have left a permanent imprint in the local RSW development sequence.

3.2.1.4. Series I.D – Plates with Conical Profiles

3.2.1.4.a. Type I.D.1 – Shallow Plates with Conical Profiles

In a late stage of the Early Iron Age the tendency for oblique rims seems to have known further developments which resulted in the appearance of pieces with a roughly conical profile. In these pieces the outside angle of the rim is so similar to that of the plate's body that they would be almost indistinguishable if it wasn't for the presence of more or less marked ridges separating them, which also give these pieces a markedly carinated aspect.

Examples of this type of plate were exhumed in Abul B's Structure 1[84] (Fig. 6.2) and in Olival do Senhor dos Mártires' Tomb 12/80[85] (Fig. 3.4). This last piece was found in association with a Type I.B.2 plate, suggesting a chronology no later than the mid-6th century BCE, while the example from Abul B should be dated to the late 6th or even the 5th century BCE.

This chronological nuance could account for the more complex profile of the piece from Abul B. In other areas of the western Iberian Peninsula, namely the Lower Tagus, a tendency towards growing morphological complexity has in fact been noted for late productions of RSWs.[86]

The appearance of plates with conical profiles at the beginning of the Late Iron Age has also been documented in Castro Marim:[87] this site's Type II.B.5 plates show, however, slightly different morphological traits,[88]

77 Schubart 1976, pls. XXVII-XXXVI; Rufete Tomico 1988-1989, pp. 390-391; Aubet *et al.* 1999, fig. 60; Rouillard – Gailledrat – Sala Sellés 2007, fig. 178, nos. 9-10, fig. 206, nos. 9-10, fig. 219, no. 16; Ramon Torres 2010, figs. 3-4; Torres Ortiz *et al.* 2014, fig. 14; Giardino 2017, pls. XX, XXII, XXIII, XXV, XXVI, XXVIII, XXIX, XXX, XXXIV.

78 Silva *et al.* 1980-1981, fig. 13, nos. 67-79.

79 Ramon Torres 2010, p. 223; Torres Ortiz *et al.* 2014, pp. 65-66, fig. 14.

80 Rufete Tomico 1988-1989, pp. 390-391.

81 Freitas 2005a, fig. 35.

82 Sousa 2016, p. 173, fig. 6, no. 14.

83 Silva *et al.* 1980-1981, figs. 13-15.

84 Mayet – Silva 2000, fig. 65, nos. 1-2.

85 Gomes 2016, pp. 177-179.

86 Barros – Cardoso – Sabrosa 1993; Arruda 2011; Sousa 2017; Batalha – Barros 2018.

87 Freitas 2005a, pp. 31-34.

88 Freitas 2005a, pp. 31-34.

more akin to those documented in other contemporary assemblages[89] suggesting a parallel but independent evolution of each area's RSW plates at this late stage of their development.

As for their position in the overall RSW sequence of the Lower Sado, it is hard to assess this type's relationship with other, later productions collected below in Types I.D.2 and I.D.3. It would appear they both share a common precedent (Type I.B.2?) but their relationship is unclear. As a hypothesis, they could be considered parallel but rather unrelated developments stemming from similar models.

3.2.1.4.b. Type I.D.2 – Plates with Deep Conical Reservoirs and Very Broad Concave Rims

Plates presenting deep conical central reservoirs and very broad concave rims separated externally from said reservoirs by a pronounced ridge are so far exclusive to the Lower Sado RSW repertoire. No known parallels have thus far emerged in other areas for these peculiar pieces, documented exclusively in Alcácer's Phase IV[90] (Fig. 2.10-11).

As mentioned before, the main morphological traits of these plates seem to be a somewhat exaggerated development of some features present in earlier types, such as a growth in height with a corresponding increase in depth of the central reservoir, the development of broader and more markedly concave rims and the apposition of prominent ridges on the outside of the vessels' bodies signalling the division between body and rim.

The context of these pieces seems to suggest they emerged in the beginning of the Late Iron Age, very likely in the mid- to late 5th century BCE. Their development can therefore be put in parallel with that of the more traditional fish plates, which follow transregional models more closely.

3.2.1.4.c. Type I.D.3 – Fish Plates

Fish plates can be seen as the final stage in the evolution of Phoenician-type RSW plates. In these vessels the broad rim has developed to the point where it forms the largest portion of the pieces. The Lower Sado examples present roughly straight but slightly concave profiles and a characteristic central reservoir, rather shallow and cylindrical in shape.

The development of fish plates seems to have been a complex process in which the internal evolution of RSW plates, on the one hand, and the influence of Attic prototypes,[91] on the other, played a significant part.

Type I.D.3 corresponds to what may be considered the "Punic" fish plate type, which, despite the popularity of its "Hellenizing" counterpart, is well documented among the pottery repertoires of the Late Iron Age communities of southwestern Iberia, being produced not only in RSWs[92] but also in common, painted and grey wares,[93] among others.

These plates are well documented in these various productions throughout the Late Iron Age, at least from the mid-5th to the 3rd century BCE,[94] although RSW examples seem to be rare after the mid-4th century BCE.

89 Schubart 2002-2003, fig. 15.

90 Silva *et al.* 1980-1981, fig. 17, nos. 186-187, 191.

91 MacPhee – Trendall 1987.

92 *e.g.* Freitas 2005a, p. 31.

93 *e.g.* Sousa 2009, fig. 87; Sousa – Arruda 2010, figs. 22-24; Gomes – Arruda 2013, pp. 32-35.

94 Gomes – Arruda 2013, p. 32.

In the Lower Sado this type of plate is particularly well documented in the necropolis of Olival do Senhor dos Mártires[95] (Fig. 3.5) but can also possibly be present in Alcácer's Phase IV,[96] which would indicate they were in use during the second half of the 5th century BCE.

3.2.1.5. Series I.E – Hemispherical Plates with Broad Pending Rim

This series is represented in the Lower Sado valley by a single piece from the necropolis of Olival do Senhor dos Mártires (Fig. 3.6) which seems altogether intrusive in the regional RSW development sequence. Unfortunately, the current state of preservation of this plate, which has been the object of extensive restauration works, does not allow for an analysis of its fabric. It is therefore possible that this piece was imported.

As for its morphological characteristics, it is formed by a spherical cap shaped body with an *omphalos* base and by a very broad, almost perpendicular rim. Its wine-red slip is of particularly good quality despite showing some evidences of fire alterations.

This shape is very uncommon in western RSW repertoires, being represented only in Mogador (Morocco)[97] and in Cerro de la Tortuga (Málaga).[98]

The vessel from Olival do Senhor dos Mártires seems to have been used as the cover for a "Cruz del Negro" type urn in Tomb 11, excavated by V. Correia.[99] The characteristics of the associated container and of the remaining material which can be attributed to that tomb[100] suggest a chronology in the late 7th or early 6th century BCE.

3.2.2. Group II – Cups and *Paterae*

3.2.2.1. Series II.A – Stemmed Cups

Stemmed cups, represented in the Lower Sado by a single piece from Olival do Senhor dos Mártires[101] (Fig. 3.7), can in a sense be considered a variant of Type I.B.2 plates. They differ however from those plates due to the steeper angle of the rim – which would become indistinguishable from the body if it wasn't for the presence of grooves signalling their separation both internally and externally – and especially because of the addition of a high hollow conical stem.

This type of cup is very uncommon in the western Iberian RSW repertoires. The only close parallels for the piece from Olival do Senhor dos Mártires were documented in the necropolis of Medellín (Badajoz) in contexts dated to the 6th century BCE.[102]

Despite not being previously attested in this area this shape was considered typical of the western coast of Portugal;[103] this seems to be due to the presence of a developed stem, a feature that is very rare in RSW assemblages in general but comparatively common in the late Lower Tagus productions.[104] This

95 Gomes 2016, p. 179.

96 Silva *et al.* 1980-1981, fig. 17, no. 189.

97 Jodin 1966, p. 116.

98 López Malax-Echeverría 1973.

99 Correia 1972b.

100 Gomes 2016, Anexo II.

101 Gomes 2016, p. 181.

102 Almagro Gorbea – Mederos Martín – Torres Ortiz 2008, p. 602.

103 Almagro Gorbea – Mederos Martín – Torres Ortiz 2008, p. 602.

104 Barros – Cardoso – Sabrosa 1993; see also Arruda 2011; Sousa 2017.

hypothesis is now reinforced by this example from the Lower Sado, which is altogether identical to the Medellín cups.

Furthermore, a handmade piece which exactly copies the morphology of these cups has recently been documented in the inner Alentejo region, in the Hortinha dolmen (Alandroal), whose Iron Age re-use was dated to the 5th century BCE.[105] The geographical position of this find could reinforce the idea of a diffusion route between the Lower Sado/Lower Tagus region and the Middle Guadiana valley.

3.2.2.2. Series II.B – Carinated Cups

3.2.2.2.a. Type II.B.1 – Carinated Cups with Sub-vertical Lips

Although not as abundantly represented as the plates, carinated cups are one of the more widespread and representative typological groups in the Western Phoenician RSW repertoires.[106]

The variant with sub-vertical lips – that is to say, shallow pieces in which the rim is separated from the body by a near 90º inflexion – is particularly characteristic, being relatively common in colonial contexts dating to the 7th and early 6th centuries BCE.[107] This shape is also well documented in the Iberian Far West, namely in Huelva,[108] Castro Marim[109] and Lisbon.[110]

During this same period these cups were also well represented in the Lower Sado, namely in Abul A, where they appear in contexts from Phases IB/IC, IC, IC/IIA and IIC, as well as in the site's abandonment horizon[111] (Fig. 5.2, 7, 11, 15, 17). Further examples can be found in the Castle of Alcácer do Sal, during that site's Phase III[112] (Fig. 2.4-6).

In Abul A a possible evolution from examples with pointed, vertical rims to slightly outturned rims may be documented, as the latter only appear from Phase IC onwards. The evidence for this is, however, limited. If such a trend does exist, it could result from this shape's close relationship with its counterparts with outturned lips (Type II.B.2) which are also present since the early stages of the regional RSW sequence, as we shall see.

3.2.2.2.b. Type II.B.2 – Carinated Cups with Outturned Lips

Although strictly related to the previous type, in Type II.B.2 cups the lip's insertion angle is more acute, giving place to more open profiles. Their rims are also generally outturned. Furthermore, these cups tend to be deeper than their vertical lip counterparts. A large portion of the pieces from this type also have larger diameters than Type II.B.1 cups.

105 Mataloto 2010-2011, fig. 11.

106 See Ramon Torres 2010, fig. 3; Giardino 2017, pp. 122-124, pls. XCVII-C.

107 Jodin 1966, pp. 85-87; Maass-Lindemann 1982, pl. 4; Ruiz Mata – Pérez Pérez 1995, fig. 17; Aubet *et al.* 1999, figs. 60, 69, 80; Ramon Torres 2010, fig. 3; González Prats 2014, tipo 19.

108 Rufete Tomico 1988-1989, p. 21.

109 Freitas 2005a, fig. 35.

110 Arruda 1999-2000, fig. 67; Sousa 2017, fig. 2.

111 Mayet – Silva 2000, fig. 14, nos. 17-19, fig. 18, nos. 65-69, fig. 29, no. 170, fig. 38, nos. 259-262, fig. 47, no. 358.

112 Silva *et al.* 1980-1981, fig. 14, nos. 98-100, 102-103.

This type of cup is equally frequent in Western Phoenician colonial contexts.[113] In the Western Iberian Peninsula, they are well documented in Huelva,[114] Castro Marim[115] and in the Lower Tagus, namely in Almaraz[116] and in Lisbon.[117]

They appear to be documented since a very early date[118] but remain present until at least the late 7th or early 6th century BCE.[119] The earliest examples from the Lower Sado are part of this later phase. Type II.B.2 cups have in fact been retrieved in Abul A, in contexts corresponding to the site's Phases IB/IC and IC, as well as to its abandonment phase[120] (Fig. 5.3, 8, 18). Further examples have been exhumed in Alcácer do Sal, both in the settlement's Phases III[121] and IV[122] (Fig. 2.7, 12).

Some examples from the necropolis of Olival do Senhor dos Mártires[123] seem to correspond to a later stage of this shape's evolution (Fig. 3.8). These vessels, deeper and with larger diameters than their earlier counterparts, can be seen as a regional development, possibly dating to the 6th century, with good parallels in the Tagus estuary.[124] Yet another late variant of this type, with a smoother profile, can also be found in Abul B[125] (Fig. 6.4).

These cups can be seen as the predecessors of certain types of outturned rim *paterae* which become relatively common in later stages of the regional RSW repertoires[126] and which are also well-documented in the Lower Sado (see below, Series II.C).

3.2.2.3. Series II.C – Carinated *Paterae*

These very large and shallow carinated *paterae* with outturned rims make their appearance in the RSW repertoires of the Iberian Far West at the beginning of the Late Iron Age. They seem to be a regional development, as most of the known examples were documented in the Lower Tagus, where a stemmed variety is also often found,[127] and in the Lower Sado.

113 Jodin 1966, fig. 18; Schubart – Niemeyer 1976, p. 20; Maass-Lindemann 1982, pl. 5; Ruiz Mata – Pérez Pérez 1995, fig. 17; Aubet *et al.* 1999, fig. 52; Rouillard – Gailledrat – Sala Sellés 2007, fig. 190; González Prats 2014, tipo 17; Torres Ortiz *et al.* 2014, figs. 4, 13; Giardino 2017, pp. 122-124, pls. CII and following.

114 Rufete Tomico 1988-1989, fig. 4.

115 Freitas 2005a, fig. 35.

116 Barros – Cardoso – Sabrosa 1993, p. 179; Batalha – Barros 2018, figs. 6-7.

117 Arruda 2011, fig. 2; Sousa 2017, fig. 3.

118 Ruiz Mata – Pérez Pérez 1995, fig. 17; Torres Ortiz *et al.* 2014, fig. 4.

119 Freitas 2005a, fig. 35.

120 Mayet – Silva 2000, fig. 14, no. 16, fig. 18, nos. 62-64, fig. 47, nos. 356-357.

121 Silva *et al.* 1980-1981, fig. 14, nos. 97, 101, 104-106, 109.

122 Silva *et al.* 1980-1981, nos. 195-197.

123 Gomes 2016, pp. 182-183.

124 Barros – Cardoso – Sabrosa 1993, p. 178; Arruda 1999-2000, fig. 66, fig. 119, no. 2; Sousa 2017, fig. 3, nos. 7-8; Batalha – Barros 2018, fig. 6.

125 Mayet – Silva 2000, fig. 77, no. 92.

126 Barros – Cardoso – Sabrosa 1993; Arruda 2011, fig. 3; Sousa 2017, fig. 5, nos. 7-8; Batalha – Barros 2018, fig. 5.

127 Barros – Cardoso – Sabrosa 1993, pp. 180-181; Arruda 1999-2000, fig. 66; 2011, fig. 3; Sousa 2017, fig. 5, nos. 7-8; Batalha – Barros 2018, fig. 5.

In this region they are somewhat less common but are nonetheless attested in Abul B[128] (Fig. 6.5) and in Setúbal, in Travessa dos Apóstolos's Phase III[129] (Fig. 4.3). Both these examples can be attributed to the 5th century BCE with some degree of security.

It is unclear whether the aforementioned pieces were an integral part of the regional evolution of RSWs during the second half of the 1st millennium BCE or if they correspond to Lower Tagus productions which found their way into the neighbouring Lower Sado.

Either way, they can be considered representative of the continued taste for RSWs in this later phase and are in keeping with the general trend towards the complexification of profiles and the exaggeration of morphological details introduced in earlier stages which can be inferred from the available documentation for the Lower Sado productions.

3.2.3. Group III – Closed Vessels

3.2.3.1. Series III.A – Jugs

Closed vessels are comparatively rare in the Western Phoenician RSW repertoires in general, but particularly so in the known assemblages of the Atlantic Far West.[130] In this regard the Lower Sado is no exception, and very little evidence of closed RSW vessels has so far come to light in this area.

Nonetheless, two possible jugs of unspecified typology have been documented in Abul A.[131] Only one of these pieces, exhumed in the site's abandonment horizon, has been published with an illustration;[132] unfortunately, only a fragment of this vessel's ovoid body is known (Fig. 5.19), and its exact typological classification is therefore uncertain.

As a hypothesis this piece could be identified as a mushroom-lipped jug, a very characteristic shape documented throughout the Phoenician world[133] but rare in the Portuguese territory.[134] Other classifications cannot however be excluded.

3.2.3.2. Series III.B – Pots

Another RSW closed vessel was also identified in Abul A, in this case in a context corresponding to the site's Phase IC[135] (Fig. 5.9). This piece is very fragmentary, being represented by a fragment of a thick, outturned rim only.

It has nonetheless been classified as an example of I. Negueruela's Type V.[136] This type of vessel is not particularly well characterized, and little further examples have been compiled in later RSW typologies. As an alternative, this piece could be compared to Castro Marim's Type VI.A,[137] Huelva's Type V.1[138] or to the

128 Mayet – Silva 2000, fig. 77, no. 93.

129 Soares – Silva 1986, no. 16.

130 Freitas 2005a, fig. 35; Arruda 2011; Sousa 2017, p. 220.

131 Mayet – Silva 2000, p. 38.

132 Mayet – Silva 2000, fig. 47, no. 362.

133 Peserico 1996.

134 See Maia 2000; 2003; Freitas 2005a, p. 37.

135 Mayet – Silva 2000, fig. 18, no. 70.

136 Negueruela 1980.

137 Freitas 2005a, pp. 37-38.

138 Rufete Tomico 1988-1989, pp. 382-383.

Lower Guadalquivir's Type IX,[139] which correspond to small, roughly globular containers with strangled necks and outturned rims.

Considering its context, the piece from the Lower Sado should be dated to the third quarter of the 7th century BCE, a chronology that is also consistent with the aforementioned parallels.

3.2.3.3. Series III.C – Large Containers?

A further, albeit problematic example of a possibly closed RSW vessel has been documented in the necropolis of Olival do Senhor dos Mártires. This piece is very incomplete, being represented by a fragment of an outturned rim showing a peculiar triangular shape[140] (Fig. 3.9). No exact parallels have been documented for this piece, which could correspond to a large container or an urn of an unspecifiable typology.

4. The Regionalization of RSWs in Western Iberia: Final Remarks

The sequence presented in the previous pages clearly reveals a series of particularities of the Lower Sado RSWs which become quite striking when compared with the repertoires of other Portuguese sites, such as Lisbon[141] (Fig. 10), Almaraz[142] (Fig. 11) or Castro Marim[143] (Fig. 12).

First of all, it is worth noting the absence of some shapes or groups, such as the hemispherical bowls,[144] the incurved rim bowls[145] or the shouldered bowls,[146] which are fairly common in other Portuguese assemblages as well as in other areas of the Iberian Peninsula.[147]

It is tempting to see this absence as the result of a selection process in which only some specific shapes were locally adopted and, in time, adapted. Nonetheless, it is more likely that it is the result of the so far incomplete knowledge of local RSW repertoires and that at least some of these absences will be overcome when further contexts and materials are studied and published.

In fact, the presence in Abul A of a painted-ware cup[148] whose morphology is a clear copy of RSW incurved rim bowl models[149] strongly suggests this shape was locally known, although so far no examples have been identified.

Apart from these noticeable absences, a comparison between the Lower Sado RSWs (Fig. 9) and those from other Portuguese sites (Figs. 10-12) shows that in the first stages of the Early Iron Age they all shared a set of common, transregional models, as was to be expected. These include two basic groups: horizontal rim plates and carinated cups.

It is perhaps worth introducing here a short note regarding the (immediate) origin of these transregional models, an issue which has not been dealt with extensively in the previous pages first and foremost due to lack of concrete data to support an in-depth discussion. At this point, however, it should be pointed out that a

139 Mancebo Dávalos 1996, p. 362.

140 Gomes 2016, pp. 183-184.

141 Sousa 2017.

142 Barros – Cardoso – Sabrosa 1993; Batalha – Barros 2018.

143 Freitas 2005a.

144 Barros – Cardoso – Sabrosa 1993, p. 180; Freitas 2005a, Group I.A; Sousa 2017, fig. 3, no. 11; Batalha – Barros 2018, fig. 7.

145 Sousa 2017, fig. 3, no. 10.

146 Freitas 2005a, Groups IV.A and especially IV.B.

147 See, for example, Rufete Tomico 1988-1989.

148 Mayet – Silva 2000, fig. 20, no. 75.

149 Mayet – Silva 2000, fig. 20, no. 75; see also Sousa 2017, fig. 3, no. 10.

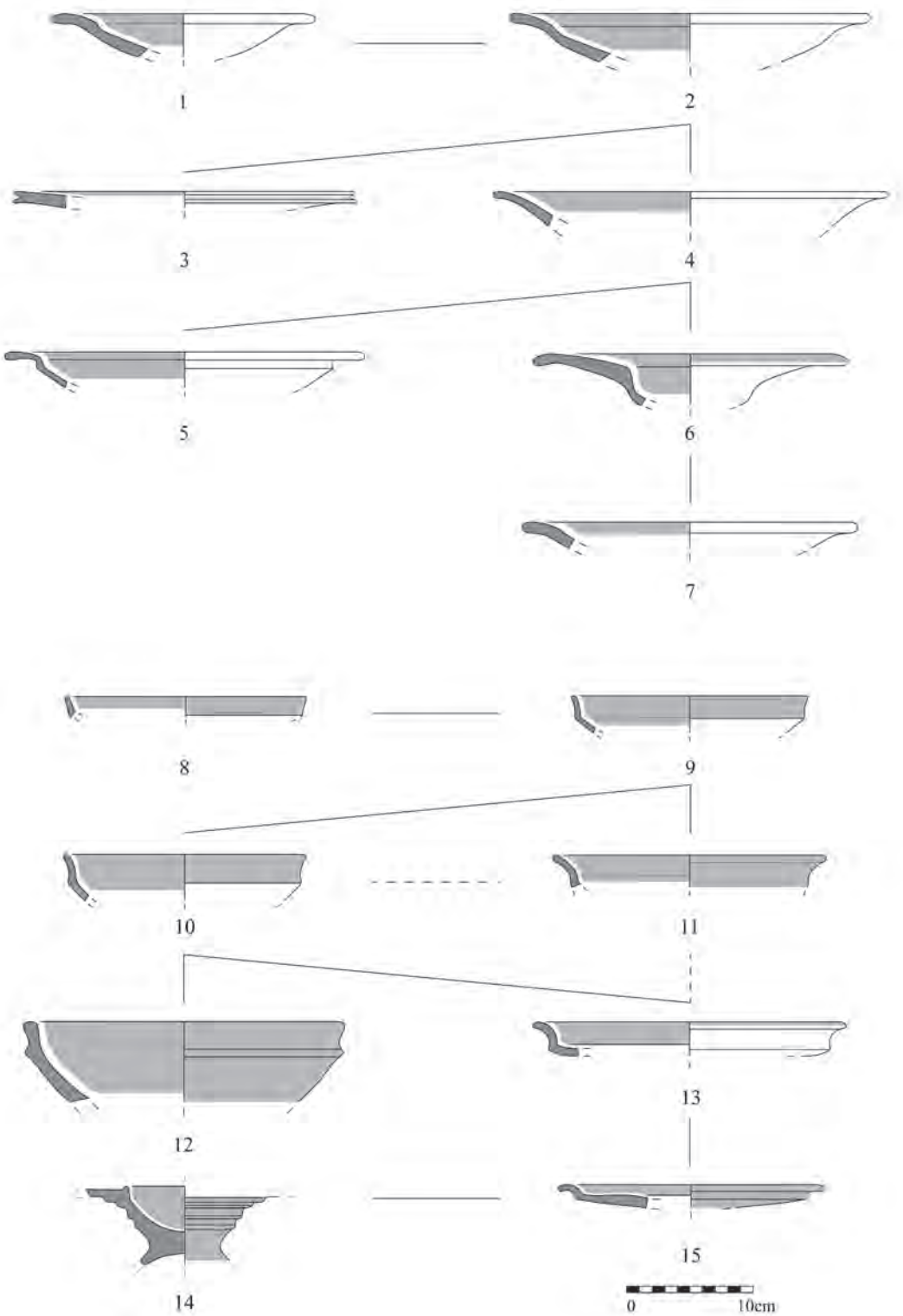

Fig. 10. Proposed evolution of red slip ware plates and carinated cups from Lisbon (after Sousa 2017, pp. 216-219, figs. 2-5, adapted).

significant portion of the RSWs from Abul A and from Alcácer do Sal's earlier phase have at some point been interpreted as imports hailing from the Bay of Cádiz on the basis of petrographic analyses.[150]

These data should however be taken with some reservations, and the high percentage of material suggested to have been imported should not be taken at face value, especially when no imported RSWs have been documented in other sites, such as the necropolis of OSM. In any case, and even if this assertion remains to be fully corroborated by new analyses, the fact remains that the most likely source of the prototypes which set the regional production of RSWs in motion is *Gadir* itself, a hypothesis which must however be tested in the future with new analytical approaches.

However, in the Lower Sado valley there are some evidences that these transregional models began to be slightly adapted and transformed at a relatively early time. Certain uncommon morphological details are in fact present since at least the late 7th century BCE, especially in the RSW plates.

These details include the early introduction of carinated profiles, the preference for growingly oblique rims – which, however, can be traced in other assemblages too[151] – and in particular the development of concave rims instead of the more common and widespread convex ones. The development of such a characteristic shape as the Series II.A stemmed cup can be seen as yet another evidence of the growing regional innovation in the production of RSWs around this time.

On the other hand, it should be noted that some of these particular details can also be traced in the RSW assemblage from Quinta do Almaraz[152] (Fig. 11), suggesting the comparatively early rise of an eminently regional tradition which in time would become even more complex and diversified.

The growing isolation of the Tagus valley, whose relations with southern Iberia dwindled significantly in the second half of the 1st millennium BCE, certainly played a part in the development of a peculiarly regional repertoire marked by the creative reinvention and re-elaboration of Early Iron Age prototypes.[153] While the Late Iron Age assemblages from the Lower Sado are less well-known, and relations with Lower Andalusia seem to remain somewhat more intense,[154] local RSW repertoires seem to have followed similar paths, possibly due to the influence of the geographically close Lower Tagus region.

Meanwhile, these peculiar traits seem to remain largely absent from the Castro Marim assemblages (Fig. 12) which, due to the site's proximity to such important RSW production centres as Huelva[155] and the sites of the Bay of Cádiz,[156] remain more closely aligned with the evolution of RSWs in the old Phoenician colonial centres.

From the late 6th and 5th centuries BCE the local RSW repertoires show clear signs of a growing differentiation which becomes fully fledged during the Late Iron Age. During this period, the sites of the Lower Tagus develop a diversified RSW repertoire[157] (Figs. 10-11) including many shapes which are not represented elsewhere, such as the high-footed *paterae* (Fig. 10.14; Fig. 11.12).

The Late Iron Age RSW repertoire of the Lower Sado valley is not as well characterized, but the development of some peculiar shapes is well attested. This is the case of the conical plates of Type I.D.1, which

150 Mayet – Silva 2000, p. 35.

151 Freitas 2005a, fig. 35; Rufete Tomico 1988-1989, figs. 7-8.

152 Barros – Cardoso – Sabrosa 1993; Batalha – Barros 2018.

153 Arruda 1993; Sousa 2014.

154 Gomes 2018.

155 Rufete Tomico 1988-1989; 2004.

156 Ruiz Mata – Pérez Pérez 1995; Torres Ortiz *et al.* 2014.

157 Arruda 1993; Barros – Cardoso – Sabrosa 1993; Sousa 2014; 2017; Batalha – Barros 2018, figs. 5-7.

despite some similarities with Castro Marim's Type II.B.5 plates[158] (Fig. 12.7) show more complex profiles which suggest an independent evolution, with echoes in the Tagus estuary[159] (Fig. 11.7).

The most characteristic shape of the late RSWs of the Sado valley seems to be the plate with deep conical reservoir of Type I.D.3, which so far has only been identified in this region. These plates, showing many of the distinctive features of local RSWs (namely the very concave rims and the complex, shouldered profiles), remain one of the more characteristic products of the local evolution of these table wares.

Other late shapes, such as the more developed versions of Type II.B.2 carinated cups or Type II.C carinated *paterae* are also very characteristic. These shapes seem however to be part of a repertoire shared to some extent with the Lower Tagus sites, where they are also very well represented[160] (Fig. 10.10-13; Fig. 11.10-11, 13).

It should nonetheless be noted that local RSW productions do not seem to have been impervious to the adoption of new transregional models, as attested by the presence of Type I.D.2 fish plates.

Unfortunately, the final stages of the Late Iron Age are still very poorly known in the Lower Sado valley, and it is impossible to say if the local evolution of RSWs went on during the 4th and 3rd century BCE and, if so, what developments may have arisen during that time.

It is very likely, however, that the use and production of these table wares declined as a result of the popularity of Greek wares, which are abundantly documented in Alcácer do Sal in the first half of the 4th century BCE.[161]

After the break in the supply of Greek pottery around the middle of that century there may have been some attempts to overcome the shortage of fine tableware by locally copying the shapes of some Attic vessels[162] and possibly through the acquisition of Hellenistic "Kuass" wares.[163]

The taste for "Hellenistic" table wares in the final stages of the Late Iron Age seems to suggest that RSWs had fallen out of fashion, which would explain why little if any later examples of these productions have so far been identified. This situation, on the other hand, is very similar to the one documented in Lisbon, where RSWs also seem to disappear towards the late 4th century BCE,[164] suggesting this trend could be common to the whole Tagus/Sado area.

This brief overview clearly shows that, despite the limited available information, the Lower Sado valley RSWs can be said to be representative of the overall historical process of local communities between the mid-7th and the late 5th/early 4th century BCE.

Their analysis sheds significant light on the way in which the external *stimuli* introduced by the Phoenician presence were adopted and adapted, being used as the building blocks for essentially local productive traditions whose evolution shows the changing geometry of regional and transregional networks.

Hopefully, the continued study of the local material culture of these and other sites will allow for a more thorough understanding of the social, political and economic dynamics underlying those networks, while further stressing the rich and diversified nature of the Iron Age communities of the western Iberian Peninsula.

158 Freitas 2005a, pp. 31-34.

159 Barros – Cardoso – Sabrosa 1993, p. 177.

160 Barros – Cardoso – Sabrosa 1993, pp. 180-181; Sousa 2017, fig. 5; Batalha – Barros 2018, figs. 6-7.

161 Rouillard *et al.* 1988-1989; Gomes 2017.

162 Gomes 2018, fig. 8.

163 Gomes 2018, p. 129; cfr. Niveau de Villedary y Mariñas 2003; Sousa 2009.

164 Sousa 2017, p. 220.

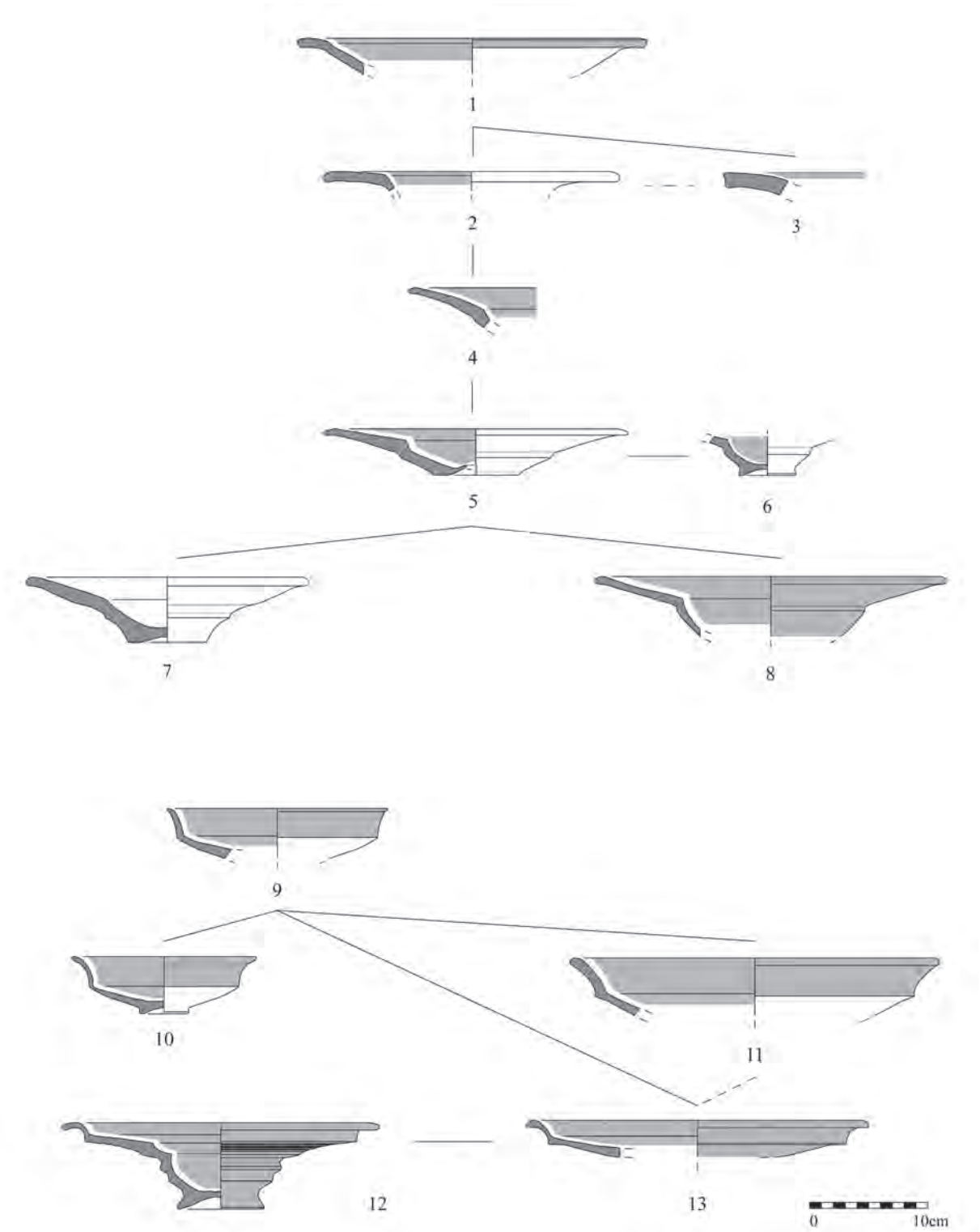

Fig. 11. Proposed evolution of red slip ware plates and carinated cups from Quinta do Almaraz (after Barros – Cardoso – Sabrosa 1993, pp. 177-181, Quadro 2, adapted).

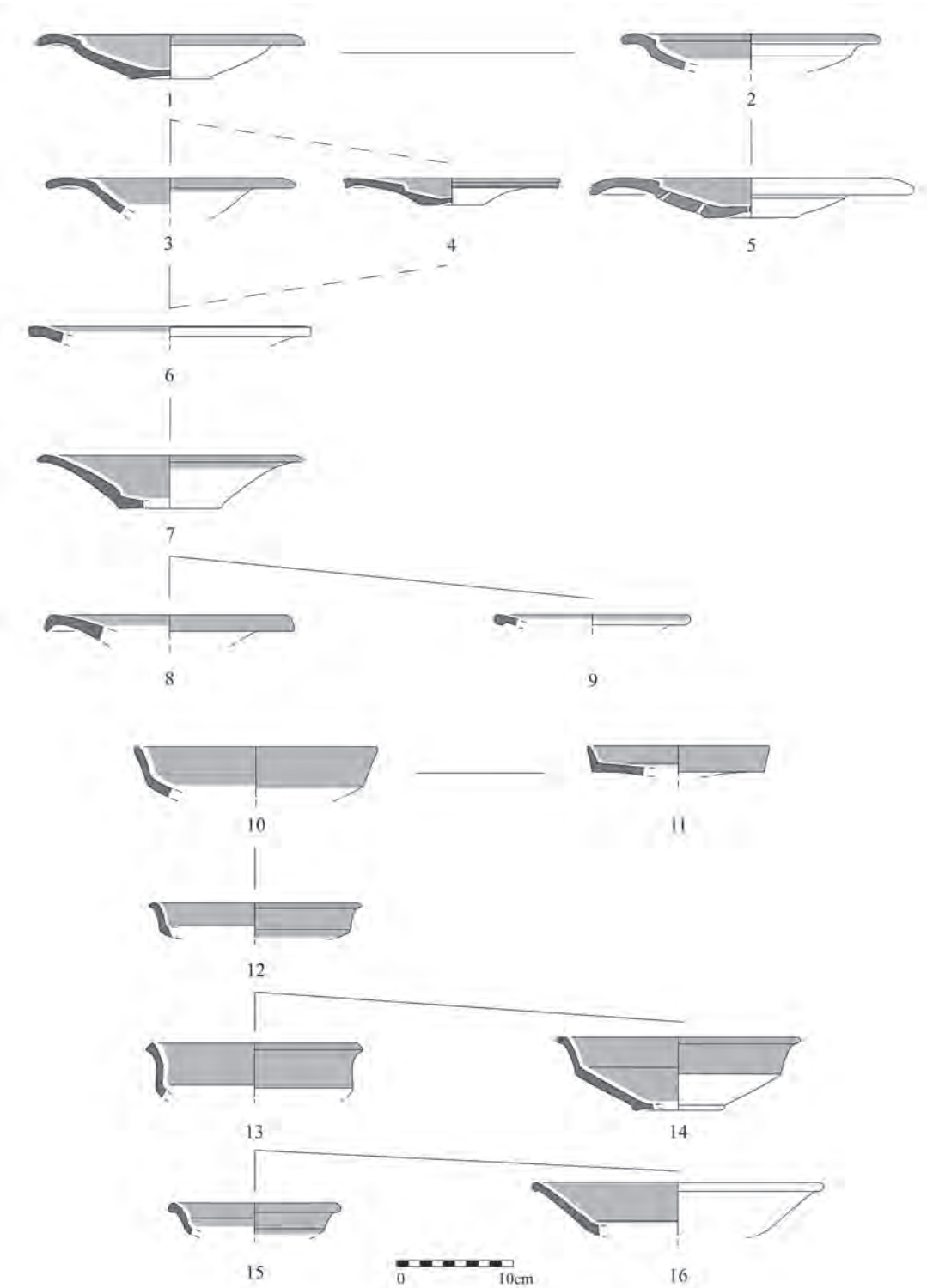

Fig. 12. Proposed evolution of red slip ware plates and carinated cups from Castro Marim (after Freitas 2005a, pp. 31, 35, figs. 11, 15, adapted).

References

Almagro-Gorbea – Mederos Martín – Torres Ortiz 2008 = M. Almagro-Gorbea – A. Mederos Martín – M. Torres Ortiz, *Cerámica de barniz rojo*, in M. Almagro-Gorbea (ed.), *La necrópolis de Medellín. II. Estudio de los hallazgos*, Madrid 2008, pp. 593-622.

Arruda 1993 = A.M. Arruda, *A ocupação da Idade do Ferro da Alcáçova de Santarém no contexto da expansão fenícia para a fachada atlântica peninsular*, in «Estudos Orientais» 4, 1993, pp. 193-214.

Arruda 1999-2000 = A.M. Arruda, *Los Fenicios en Portugal. Fenicios y mundo indígena en el centro y sur de Portugal (siglos VIII-VI a.C.)*, Barcelona 1999-2000 («CuadAMed», 5-6).

Arruda 2011 = A.M. Arruda, *Indígenas, fenicios y tartésicos en el occidente peninsular: mucha gente, poca tierra*, in M. Álvarez Martí-Aguilar (ed.), *Fenicios en Tartesos: nuevas perspectivas*, Oxford 2011, pp. 151-160.

Aubet *et al.* 1999 = M.E. Aubet – P. Carmona – E. Curià – A. Delgado – A. Fernández Cantos – M. Párraga, *Cerro del Villar. I: El asentamiento fenicio en la desembocadura del río Guadalhorce y su interacción con el hinterland*, Seville 1999.

Barros – Cardoso – Sabrosa 1993 = L. de Barros – J.L. Cardoso – A. Sabrosa, *Fenícios na Margem Sul do Tejo. Economia e integração cultural do povoado do Almaraz, Almada*, in «Estudos Orientais» 4, 1993, pp. 143-192.

Batalha – Barros 2018 = L. Batalha – L. de Barros, *Alguns elementos novos sobre Almaraz*, in «Cira-Arqueologia» 6, 2018, pp. 50-69.

Beirão – Gomes 1983 = C. de M. Beirão – M.V. Gomes, *A necrópole da Idade do Ferro do Galeado (Vila Nova de Milfontes)*, in «APort» ser. 4, 1, 1983, pp. 207-266.

Bikai 1978 = P.M. Bikai, *The Pottery from Tyre*, Warminster 1978.

Calado *et al*. 2013 = M. Calado – J. Pimenta – L. Fernandes – V. Filipe, *Conjuntos cerâmicos da Idade do Ferro do Teatro Romano de Lisboa: a cerâmica de engobe vermelho*, in J.M. Arnaud – A. Martins – C. Neves (edd.), *Arqueologia em Portugal: 150 anos*, Lisbon 2013, pp. 641-649.

Correia 1972a = V. Correia, *Uma conferência sobre a Necrópole de Alcácer do Sal*, in V. Correia, *Obras. IV. Estudos Arqueológicos*, Coimbra 1972 (1925), pp. 151-168.

Correia 1972b = V. Correia, *Escavações realizadas na Necrópole Pré-Romana de Alcácer do Sal em 1926 e 1927*, in V. Correia, *Obras. IV. Estudos Arqueológicos*, Coimbra 1972 (1928), pp. 169-179.

Cuadrado 1969 = E. Cuadrado, *Origen y desarrollo de la cerámica de barniz rojo en el mundo tartéssico*, in *Tartessos y sus problemas*. *Actas del V Symposium Internacional de Prehistoria Peninsular* (Jerez de la Frontera, September 1963), Barcelona 1969, pp. 257-290.

Fernández Flores – Rodríguez Azogue 2007 = A. Fernández Flores – A. Rodríguez Azogue, *Tartessos desvelado. La colonización Fenicia del Suroeste peninsular y el origen y ocaso de Tartessos*, Córdoba 2007.

Fernández Jurado 1985 = J. Fernández Jurado, *Die Phönizier in Huelva*, in «MM» 26, 1985, pp. 49-60.

Freitas 2005a = V.T. de Freitas, *As cerâmicas de engobe vermelho do Castelo de Castro Marim. Produção, consumo e comércio na Idade do Ferro Orientalizante Peninsular*. MA Thesis Presented to the University of Lisbon. Unpublished.

Freitas 2005b = V.T. de Freitas, *Observações preliminares sobre a cerâmica de engobe vermelho do Castelo de Castro Marim*, in S. Celestino Pérez – J. Jiménez Ávila (edd.), *El Período Orientalizante. Actas del III Simposio Internacional de Arqueología de Mérida – Protohistoria del Mediterráneo Occidental* (Mérida, May 2003), Madrid 2005, pp. 911-918.

Giardino 2013 = S. Giardino, *Tipologia e cronologia dei piatti fenici nella Penisola iberica*, in «Sardinia, Corsica et Baleares Antiquae» 11, 2013, pp. 77-90.

Giardino 2017 = S. Giardino, *La ceramica fenicia da mensa. Un indicatore culturale e cronologico delle relazioni tra la madrepatria e la Penisola Iberica nei secoli IX-VI a.C.*, Roma 2017.

Gomes 2008 = E. Gomes, *Os ex-votos proto-históricos do Castelo de Alcácer do Sal*, MA Thesis Presented to the University of Lisbon. Unpublished.

Gomes 2016 = F.B. Gomes, *Contactos culturais e discursos identitários na I Idade do Ferro do Sul de Portugal (séculos VIII-V a.n.e.): leituras a partir do registo funerário*. PhD Thesis Presented to the University of Lisbon. Unpublished.

Gomes 2017 = F.B. Gomes, *Un conjunto de cerámicas áticas inéditas de la necrópolis de Olival do Senhor dos Mártires (Alcácer do Sal, Portugal)*, in «Onoba» 5, 2017, pp. 45-58.

Gomes 2018 = F.B. Gomes, *The Necropolis of Olival do Senhor dos Mártires (Alcácer do Sal, Portugal) during the Late Iron Age: New Social, Political and Cultural Insights*, in «Zephyrus» 81, 2018, pp. 117-139.

Gomes – Arruda 2013 = F.B. Gomes – A.M. Arruda, *A cerâmica pintada da II Idade do Ferro do Castelo de Castro Marim*, in «Onoba» 1, 2013, pp. 19-54.
González de Canales – Llompart – Serrano 2004 = F. González de Canales – J. Llompart – L. Serrano, *El emporio fenicio precolonial de Huelva (ca. 900-770 a.C.)*, Madrid 2004.
González Prats 2014 = A. González Prats (ed.), *La Fonteta. Excavaciones de 1996-2002 en la colonia fenicia de la actual desembocadura del río Segura (Guardamar del Segura, Alicante)*, Alicante 2014.
Guirguis 2010 = M. Guirguis, *Il repertorio ceramico fenicio della Sardegna: differenziazioni regionali e specificità evolutive*, in Nigro 2010, pp. 173-210.
Jodin 1966 = A. Jodin, *Mogador, comptoir phénicien du Maroc atlantique*, Rabat 1966.
López Malax-Echeverría 1973 = A. López Malax-Echeverría, *Una comunicación sobre la cerámica de "barniz rojo"*, in *Crónica del XII Congreso Nacional de Arqueología* (Jaén, October 1971), Zaragoza 1973, pp. 389-394.
Maass-Lindemann 1982 = G. Maass-Lindemann, *Toscanos. Die westphönizische Niederlassung an der Mündung des Río Vélez*, Berlin 1982.
Maass-Lindemann 1986 = G. Maass-Lindemann, *Vasos fenicios de los siglos VIII-VI en España. Su procedencia y posición dentro del mundo fenicio occidental*, in G. Olmo – M.E. Aubet (edd.), *Los fenicios en la Península Ibérica*, 1, Sabadell 1986, pp. 227-239.
Maass-Lindemann 1990 = G. Maass-Lindemann, *Orientalische Importe von Morro de Mezquitilla*, in «MM» 31, 1990, pp. 169-177.
Maass-Lindemann 1997 = G. Maass-Lindemann, *La primera fase de la colonización fenicia en España según los hallazgos del Morro de Mezquitilla*, in M.E. Aubet (ed.), *Los fenicios en Málaga*, Málaga 1997, pp. 63-86.
Maass-Lindemann 2008 = G. Maass-Lindemann, *Morro de Mezquitilla. Die Entwicklung der Fundkeramik vom 8. zum 7. Jh v. Chr.*, in «MM» 49, 2008, pp. 188-208.
Maass-Lindemann 2009 = G. Maass-Lindemann, *Phoenicians between East and West*, in *Interconnections in the Eastern Mediterranean. Lebanon in the Bronze and Iron Ages. Proceedings of the International Symposium* (Beirut, 2008), Beirut 2009 («BAAL, Hors-Sér.», 6), pp. 479-488.
Maass-Lindemann 2017 = G. Maass-Lindemann, *Die phönizische Keramik des 8. Jhs. v.Chr., der Gründungsphase*, in H. Schubart – G. Maass-Lindemann, *Morro de Mezquitilla. Die phönizisch-punische Niederlassung an der Algarrobo-Mündung*, Wiesbaden 2017, pp. 263-343.
MacPhee – Trendall 1987 = I. MacPhee – A.D. Trendall, *Greek Red-figured Fish-plates*, Basel 1987.
Maia 2000 = M. Maia, *Tavira fenícia. O território para Ocidente do Guadiana, nos inícios do I milénio a.C.*, in A. González Prats (ed.), *Fenicios y territorio. Actas del II Seminario Internacional sobre Temas Fenícios* (Guardamar del Segura, 9-11 April 1999), Alicante 2000, pp. 121-150.
Maia 2003 = M. Maia, *Fenícios em Tavira*, in *Tavira: Território e Poder. Catálogo da exposição* (Lisbon 2003), Lisbon 2003, pp. 57-72.
Mancebo Dávalos 1991-1992 = J. Mancebo Dávalos, *La cerámica de barniz o engobe rojo de Montemolín (Sevilla)*, in «Zephyrus» 44-45, 1991-1992, pp. 269-299.
Mancebo Dávalos 1996 = J. Mancebo Dávalos, *La cerámica de barniz o engobe rojo de la Cuenca Baja del Guadalquivir*, in «Tabona» 9, 1996, pp. 353-378.
Mataloto 2010-2011 = R. Mataloto, *Os Senhores da Terra: necrópoles e comunidades rurais do território alto alentejano nos séculos VI-V a.C.*, in «AHist» 60-61, 2010-2011, pp. 77-100.
Mayet – Silva 2000 = F. Mayet – C.T. da Silva, *L'établissement phénicien d'Abul. Portugal*, Paris 2000.
Negueruela 1980 = I. Negueruela, *Sobre la cerámica de engobe rojo en España*, in «Habis» 10-11, 1980, pp. 335-359.
Niemeyer – Schubart 1969 = H.G. Niemeyer – H. Schubart, *Toscanos. Die Altpunishce Faktorei an der Mündung des Río de Vélez*, Berlin 1969.
Nigro 2010 = L. Nigro (ed.), *Motya and the Phoenician Ceramic Repertoire between the Levant and the West. 9th-6th century BC*, Rome 2010.
Niveau de Villedary y Mariñas 2003 = A.M. Niveau de Villedary y Mariñas, *Las cerámicas gaditanas barnizadas de "tipo Kuass". Tipología, producción y distribución*, Madrid 2003.
Núñez Calvo 2010 = F. Núñez Calvo, *Referencias secuenciales del repertorio cerámico fenicio metropolitano de la Edad del Hierro Tardío*, in Nigro 2010, pp. 49-84.

Núñez Calvo 2013 = F. Núñez Calvo, *De Tiro a Almuñécar. Conexiones metropolitanas de un contexto colonial fenicio*, in «MM» 54, 2013, pp. 27-88.

Núñez Calvo 2017 = F. Núñez Calvo, *Phoenician Colonial Plates and their Sequential and Chronological Connections with the Motherland*, in «RStFen» 45, 2017, pp. 7-35.

Núñez Calvo 2018 = F. Núñez Calvo, *Una lectura tipológico-secuencial de los materiales cerámicos orientales más antiguos hallados en Huelva*, in M. Botto (ed.), *De Huelva a Malaka. Los fenicios en Andalucía a la luz de los descubrimientos más recientes*, Roma 2018 («Collezione di Studi Fenici», 48), pp. 107-182.

Paixão 1983 = A.C. Paixão, *Uma nova sepultura com escaravelho da necrópole proto-histórica do Senhor dos Mártires, Alcácer do Sal*, in «APort» ser. 4, 1, 1983, pp. 273-286.

Paixão 2001 = A.C. Paixão, *Alcácer do Sal proto-histórica no contexto mediterrânico*, in *Os Púnicos no Extremo Ocidente*, Lisbon 2001, pp. 149-172.

Paixão 2014 = A.C. Paixão, *A necrópole do Olival do Senhor dos Mártires (Alcácer do Sal). Novos elementos para o seu estudo*, in «Estudos Arqueológicos de Oeiras» 21, 2014, pp. 429-460.

Pellicer 2007 = M. Pellicer, *La Necrópolis Laurita (Almuñécar, Granada) en el contexto de la colonización fenicia,* Barcelona 2007.

Peserico 1996 = A. Peserico, *Le brocche "a fungo" fenicie nel Mediterraneo. Tipologia e cronologia*, Roma 1996.

Peserico 2002 = A. Peserico, *Die offenen Formen der Red Slip Ware aus Karthago: Untersuchungen zur phönizischen Keramik im westlichen Mittelmeerraum*, Münster 2002.

Ramon Torres 2010 = J. Ramon Torres, *La cerámica fenicia del Mediterráneo Extremo-Occidental y del Atlántico (s. VIII-1r 1/3 del VI AC): problemas y perspectivas actuales*, in Nigro 2010, pp. 211-253.

Rouillard – Gailledrat – Sala Sellés 2007 = P. Rouillard – E. Gailledrat – F. Sala Sellés, *L'établissement protohistorique de La Fonteta (fin VIIIe-fin VIe siècle av. J.C.)*, Madrid 2007.

Rouillard *et al*. 1988-1989 = P. Rouillard – A.C. Paixão – M.-C. Villanueva-Puig – J.-L. Durand, *Les vases grecques d'Alcácer do Sal*, in «APort» ser. 4, 6-7, 1988-1989, pp. 43-108.

Rufete Tomico 1988-1989 = P. Rufete Tomico, *Las cerámicas con engobe rojo de Huelva*, in «HuelvaA» 10-11, 1988-1989, pp. 11-40.

Rufete Tomico 2004 = P. Rufete Tomico, *El final de Tartessos y el período turdetano en Huelva*, Huelva 2004.

Ruiz Mata 1986 = D. Ruiz Mata, *Aportaciones al análisis de los inicios de la presencia fenicia en Andalucía Occidental según las excavaciones del Cabezo de San Pedro (Huelva), San Bartolomé (Almonte, Huelva), Castillo de Doña Blanca (Puerto de Santa María, Cádiz) y El Carambolo (Camas, Sevilla)*, in O. Arteaga (ed.), *Homenaje a Luis Siret (1934-1984)*, Seville 1986, pp. 537-556.

Ruiz Mata 2002 = D. Ruiz Mata, *The Ancient Phoenicians of the 8th and 7th centuries B.C. in the Bay of Cádiz: State of the Research*, in M.R. Bierling – S. Gitin (edd.), *The Phoenicians in Spain*, Winona Lake 2002, pp. 155-198.

Ruiz Mata – Pérez Pérez 1995 = D. Ruiz Mata – C. Pérez Pérez, *El Poblado Fenicio del Castillo de Doña Blanca (El Puerto de Santa María, Cádiz)*, Puerto de Santa María 1995.

Ruiz Mata – Pérez Pérez – Gómez Fernández 2014 = D. Ruiz Mata – C. Pérez Pérez – V. Gómez Fernández, *Una nueva zona fenicia de época arcaica en Cádiz: el solar de la "calle Ancha, n°29"*, in M. Botto (ed.), *Los Fenicios en la Bahía de Cádiz*, Pisa-Roma 2014 («Collezione di Studi Fenici», 46), pp. 83-122.

Schubart 1976 = H. Schubart, *Westphönizische Teller*, in «RStFen» 4, 1976, pp. 179-196.

Schubart 2002-2003 = H. Schubart, *Platos fenicios de occidente*, in «Lucentum» 21-22, 2002-2003, pp. 45-61.

Schubart – Maass-Lindemann 1979 = H. Schubart – G. Maass-Lindemann, *Morro de Mezquitilla, informe preliminar sobre la campaña de excavaciones, 1976*, in «NotA Hisp» 6, 1979, pp. 175-218.

Schubart – Niemeyer 1976 = H. Schubart – H.G. Niemeyer, *Trayamar. Los hipogeos fenicios y el asentamiento en la desembocadura del río Algarrobo*, Madrid 1976.

Silva 2005 = C.T. da Silva, *A presença fenícia e o processo de Orientalização nos Estuários do Tejo e do Sado*, in S. Celestino Pérez – J. Jiménez Ávila (edd.), *El Período Orientalizante. Actas del III Simposio Internacional de Arqueología de Mérida – Protohistoria del Mediterráneo Occidental* (Mérida, May 2003), Madrid 2005, pp. 749-766.

Silva 2018 = C.T. da Silva, *Ocupação da Idade do Ferro*, in C.T. da Silva (ed.), *Caetobriga. O sítio arqueológico da Casa dos Mosaicos*, Setúbal 2018, pp. 65-79.

Silva *et al*. 1980-1981 = C.T. da Silva – J. Soares – C. de M. Beirão – L.F. Dias – A. Coelho-Soares, *Escavações arqueológicas no Castelo de Alcácer do Sal (campanha de 1979)*, in «SetubalA», 6-7, 1980-1981, pp. 149-218.

Silva *et al*. 2014 = C.T. da Silva – J. Soares – A. Coelho-Soares – S. Duarte – R. Godinho, *Preexistencias de Setúbal. 2ª campanha de escavações arqueológicas na Rua Francisco Augusto Flamengo, nºs 10-12. Da Idade do Ferro ao Período Medieval*, in «Musa» 4, 2014, pp. 161-214.

Soares – Silva 1986 = J. Soares – C.T. da Silva, *Ocupação pré-romana de Setúbal: escavações arqueológicas na Travessa dos Apóstolos,* in *Actas do I Encontro Nacional de Arqueologia Urbana* (Setúbal, 24-26 May 1985), Lisboa 1986, pp. 87-101.

Sousa 2009 = E. de Sousa, *A cerâmica de tipo Kuass no Algarve: os casos de Castro Marim e de Faro*, Lisboa 2009.

Sousa 2014 = E. de Sousa, *A Ocupação Pré-Romana da Foz do Estuário do Tejo,* Lisboa 2014.

Sousa 2016 = E. de Sousa, *A Idade do Ferro em Lisboa: Uma primeira aproximação a um faseamento cronológico e à evolução da cultura material*, in «CuPAUAM» 42, 2016, pp. 167-185.

Sousa 2017 = E. de Sousa, *A cerâmica de engobe vermelho de Lisboa*, in A. Caessa – C. Nozes – I. Cameira – R.B. da Silva (edd.), *I Encontro de Arqueologia de Lisboa: uma cidade em escavação* (Lisboa, 26-28 Novembro 2015), Lisboa 2017, pp. 211-221.

Sousa – Arruda 2010 = E. de Sousa – A.M. Arruda, *A gaditanização do Algarve*, in «Mainaké» 32, 2010, pp. 951-974.

Torres Ortiz *et al*. 2014 = M. Torres Ortiz – E. López Rosendo – J.M. Gener Basallote – M.Á. Navarro García – J.-M. Pajuelo Sáez, *El material cerámico de los contextos fenicios del "Teatro Cómico" de Cádiz: un análisis preliminar*, in M. Botto (ed.), *Los Fenicios en la Bahía de Cádiz*, Roma 2014 («Collezione di Studi Fenici», 46), pp. 51-82.

Vegas 1999 = M. Vegas, *Phoniko-punische Keramik aus Cartago*, in F. Rakob (ed.), *Karthago III. Die deutschen Ausgrabungen in Karthago*, Darmstadt 1999, pp. 93-219.