Lusitanian Amphorae in Tarraco (3rd-5th Century AD)

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We aim to assess the presence of Lusitanian amphorae in Tarraco during the late Roman period (3rd-5th centuries). The analysis is based on archaeological evidence and other documentary sources in order to characterize the general framework of the city's food consumption and supply. The sample - a selection of stratigraphic contexts, mainly dated to the 5th century - is uneven. A large dump dated to the end of the 3rd century allows a close approach to the consumption of this period. For the 4th century, the scarcity of appropriate closed stratigraphic contexts makes it difficult to define an accurate overall picture. This situation changes significantly in the 5th century, a period in which a major number of reliable archaeological deposits can be found. The amphorae and imported pottery in general show a steep increase in number and percentages compared to the earlier and later contexts. This growth could be related to an increased demand motivated by the strategic importance of Tarraco; the city appears in written sources as being the base of the imperial armies trying to reintegrate all of Hispania to the legitimate power in the West during most of the 5th century. In this period, a significant part of the amphorae comes from southern Hispania (Lusitania - Baetica), a high percentage, in striking contrast with the distribution patterns of amphorae documented in other regions, in which Lusitanian, and Hispanic amphorae in general, are very rare. From the end of this century onwards, a decline is detected in both amphorae and other imports, and there is no clear evidence to affirm the continuity of Lusitanian imports in a period dominated by eastern Mediterranean and North African amphorae.

KEYWORDS: LUSITANIA; AMPHORAE; LUSITANIAN AMPHORAE; LATE ROMAN; TARRACO; HISPANIA.

Introduction

We present a preliminary analysis of the presence of Lusitanian amphorae in Tarraco (Hispania Tarraconensis), within the general framework of supply and urban consumption, between the 3rd and 5th century, a period that extends from the moments before the profound changes experienced by the city at the end of the 3rd century until the Visigothic dominion of the Tarraconensis, about two centuries later (Remolà 2000; Remolà and Pérez 2013).

The barbarian incursions that devastated the region of Tarraco at the time of Gallienus (*c*. 260 AD) had a direct impact on the city and, especially, on its suburban areas and hinterland: a scenario of instability at all levels that must have lasted, with more or less intensity, until Maximianus' Hispanic military campaign (AD 297), with effects – ruins and abandonment – that were still visible in the city by the early 5th century.[1] Shortly afterwards, Diocletian's reforms (AD 284-305) represented the loss of more than half of its provincial territory and its integration into the *diocesis Hispaniarum*, with Emerita Augusta as the capital. Both occurrences had a negative impact on a city such as Tarraco, whose main strengths were its administrative function and port activity.

Archaeological evidence also indicates an abandonment of suburban areas and villas at the end of the 3rd-4th century (Adserias *et al.* 2000; Remolà 2000; Remolà 2008; Remolà and Sanchez 2010). In fact, the comment provided by Orosius proves that even more than a century after the barbarian incursions, Tarraco had not yet been able to restore the previous urban order.

The epigraphical evidence can be interpreted as a sign of the restoration of certain public spaces such as the *Basilica Iovia* – with the construction of a *porticus* (AD 286-293) (RIT 91) – or the *Montanae thermae* (RIT 155), promoted by Marcus Aurelius Vincentius, *praeses* in the 4th century (Alföldy 1975; Alföldy 1991). This evidence does not contradict the few textual references preserved, mainly concerning poetic comments and activities of the Christian community (Pérez 2012).

This situation changed radically at the beginning of the 5th century. The barbarian invasion (AD 409) and later settlement in Hispania, with the exception of Tarraconensis, as well as the presence of a usurper established in Tarraco (Maximus), motivated the response of Honorius. Initially, Constantius, Honorius' general, deposed the usurper (AD 411) and then hired Visigoths as a regular army to reintegrate all Hispania to the legitimate power in the West. After some successful campaigns, the Visigoths, instigated by Constantius, a real key figure of Honorius' policy, abandoned Hispanic territories (AD 418). Afterwards, the Roman army assumed the responsibility for ending the barbarian presence in Hispania, weakened and reduced due to the Visigothic military campaign (Remolà and Pérez 2013).

Around 420 AD, Tarraco appears in written sources – mainly Hydatius (*Chronica*) and Consentius' Epistle 11* – as being the military base for the imperial armies, a role that it maintained occasionally until the fall of the Western Roman Empire. Tarraco regained the leading and strategic role it had during the conquest of Hispania in the late republican period, a condition which, as we shall see, had repercussions at both urbanistic and consumption (external supply) levels.

[1] Orosius, *Historiarum adversus paganos*, 7, 22, 7-8.

This strategic function coincides in time with clear symptoms of transformation in the archaeological record of specific, relevant areas of the city. Such is the case of the upper part of the Roman city – an extensive public area monumentalized under the Flavian dynasty – and the port area, which was restructured and expanded after a long period of abandonment (Adserias *et al.* 2000; Remolà 2000; Remolà and Sanchez 2010). It is not only an urbanistic recovery; through the written and epigraphic sources, we are also aware of the presence of important imperial political personages leading the armies or supporting the diplomatic efforts to restore the legitimate power throughout Hispania (Remolà and Pérez 2013).

We have also recorded in domestic dumps an increase of imported commodities in quantity, quality and variety (TED'A 1989; Remolà 2000). Moreover, archaeological excavations in suburban necropoleis have yielded, for instance, a large group of decorated sarcophagi from Carthage and Rome (Rodà 2013) and other luxury goods that illustrate the requirements of an important aristocratic group (Remolà and Pérez 2013). Meanwhile, the massive importation of alimentary commodities (wine, olive oil, preserved food and presumably cereals) from distant regions suggests an increase, if only occasionally, in the number of consumers.

The role of Tarraco as a base of operations for the imperial armies during the middle decades of the 5th century must have had an impact on the city on urbanistic as well as supply and consumption levels. All management and logistics necessary to attend the needs of a military presence must have led, among other things, to an increase of activity in the port area that can be verified by means of an analysis of the dumps of this period, which, indirectly, document this flow of activity.

This particular context could be the answer, at least partly, to the significant rise in imported products and goods detected in the mid 5th century in the city, especially amphorae (foodstuffs) from North Africa, the eastern Mediterranean and the South of Hispania (Remolà 2000; Remolà 2013). Included in this last group are the Lusitanian amphorae which, although very few, are present in the consumption of the city in the mid 5th century, as they had been prior to that point.

From the end of the 5th century, Tarraco had to adjust to a new geopolitical reality, quite different from that documented during the last decades of Roman control. The incorporation of Tarraconensis into the Visigothic kingdom of Toulouse, the Ostrogothic regency and, finally, the moving of the Visigothic court from Barcelona to Toledo meant a gradual transfer of power to the inner parts of Hispania and a loss of prominence of the coastal cities such as Tarraco (Pérez 2012). Nevertheless, it still maintained its status as a metropolitan bishopric and kept a relevant port activity. With regard to Lusitanian and Baetican amphorae, the small number of fragments of pottery yielded by stratigraphical levels of the 6th century is very likely due to residuality, in a background dominated by North African imports and those of the eastern Mediterranean to a lesser extent.

3rd Century

For this period there are some outstanding contexts – especially a domestic dump excavated in Calle Castaños, which was formed in the mid 3rd century in the lower part of the city, near the Forum of the colony, the theatre and the public baths (Figure 1, no. 1) (Macias 2004; Trullén 2010). In one of the layers of this dump (UE 98), amphorae (192 individuals) comprise 4.1% of the estimated number of vessels (4612 individuals) (fine ware: 603; 13%; coarse ware: 3817; 82.7%). The amphorae have been attributed, mainly, to the western Mediterranean (65.6%, to which we could add the majority of the unprovenanced amphorae, 27.6%); 6.7% come from the eastern Mediterranean (see Figure 2). Within the western group, there is a high occurrence of Hispanic types (76; 60.3%), followed by North African (28; 22.2%), Italian (12; 9.5%) and Gallic amphorae (10; 7.9%). The 52 Hispanic individuals whose area of production has been determined are divided into Tarraconensian (38% of the Hispanic total) and southern Hispanic (62%), with the Baetican or Lusitanian origin of the twelve individuals assigned to Keay 16A[2] currently undetermined.

Another domestic dump (Calle Gasòmetre, 18) would also have been of significant interest. Unfortunately, it was a non-stratigraphic excavation, which considerably reduces its significance. It was formed during the first half/middle of the 3rd century above a pavement that gave access to the *cavea* of the Roman theatre (Figure 1, no. 2) (Trullén 2010). Amphorae (102 individuals) comprise 7.7% of the estimated number of vessels (1314 individuals) (fine ware: 189, 14.4%; coarse ware: 1023, 77.9 %), most of them from the Western Mediterranean (82.3%, to which we could add the majority of the unprovenanced amphorae, 14.7%); it has been possible to assign an eastern origin to only 2.9%. Within the western group there is a significant predominance of Hispanic amphorae (67; 79.7%), followed by North African (12; 14.2%), Italian (4; 4.7%) and Gaulish (1; 1.1%). Most of the Hispanic amphorae are from Lusitania (64% of the total of Hispanic amphorae) – including 41 individuals of Keay 16A (Figure 3, nos.1-2)[3] –, followed by Tarraconensian (20.3%) and Baetican amphorae (15.6%). The occurrence of the Lusitanian amphora Keay 16A, higher than the average detected in other contexts of similar date, must be attributed to the nature of the dump at its formation.

[2] We follow S. J. Keay's typology (1984), despite the already known inconveniences when it is applied to Lusitanian and Baetican amphorae. Lusitanian amphorae: Keay 16A = Lusitana 5; Keay 16B-C = Almagro 50 = Lusitana 6; Keay 19C = Almagro 51A-B (Lusitana) = Lusitana 7; Keay 21 = Almagro 51A-B (Lusitana) = Lusitana 7; Keay 22 = Almagro 50 = Lusitana 6; Keay 23 = Almagro 51C = Lusitana 4; Keay 68/91 = Almagro 51A-B (Lusitana) = Algarve 1; Keay 78 = Lusitana 8 = Sado 1. Baetican amphorae: Keay 13A = Dressel 23; Keay 13C-D = Dressel 23; Keay 19A-B = Almagro 51A-B (Baetican); Keay 23 = Almagro 51C (Baetican).

[3] One of them is a fragment stamped *in ansa* […]NIO[…] (IVNIORUM), also documented at Quinta do Marim (from the end of the 2nd century to mid-3rd AD) (Fabião 1997: 65; Lagóstena 2001: 408-409).

Figure 1. Archaeological plan of Tarraco indicating the main archaeological excavations mentioned in the text: 1. Castaños 1; 2. Gasòmetre 18; 3. Apodaca 7; 4. Gasòmetre 32; 5. lot 22B of PERI 2; 6. Pere Martell/Mallorca/Eivissa; 7. Vila-roma; 8. Antic Hospital de Santa Tecla; 9. Antiga Audiència; 10. Trinquet Vell 4; 11. Torre de l'Audiència. (from Macias *et al.* 2007).

The general picture does not appear to be substantially different from the one that was previously known (Trullén 2010). Towards the end of the 1st century and in the mid 2nd century, the percentages for amphorae are on average 5-15%, with a predominance of results lower than 10%. Among these, the majority are from the western Mediterranean and mainly Hispanic: Tarraconensian (within 30% to a little over 50%; to which we should add 10-20% of Ibizan amphorae), Baetican-Lusitanian (between 15 and 25%), Italian (on average 10%) and North African (on average 10%). The western Mediterranean amphorae generally fall to around 5% of the total.

Therefore, the few available data for the end of the 3rd century indicate, globally and with a certain continuity, proportions for amphorae on average of 10% and a clear predominance of the Hispanic ones (Figure 2). However, we noticed some changes such as the reduction in the occurrence of Tarraconensian amphorae (with a clear decrease in the late variant of Dressel 2-4 and PE-25) and the relevant increase in southern Hispanic Keay 16A that becomes predominant in contexts of the 3rd century. The occurrence of African I and II amphorae gradually increases, and other productive areas, such as southern Gallia and Italy, have a symbolic presence. Eastern Mediterranean amphorae continue to be scarce.

4th Century

This is a less known period mainly due to the scarcity of appropriate stratigraphic contexts for the analysis of consumption. Archaeological excavations in Apodaca 7

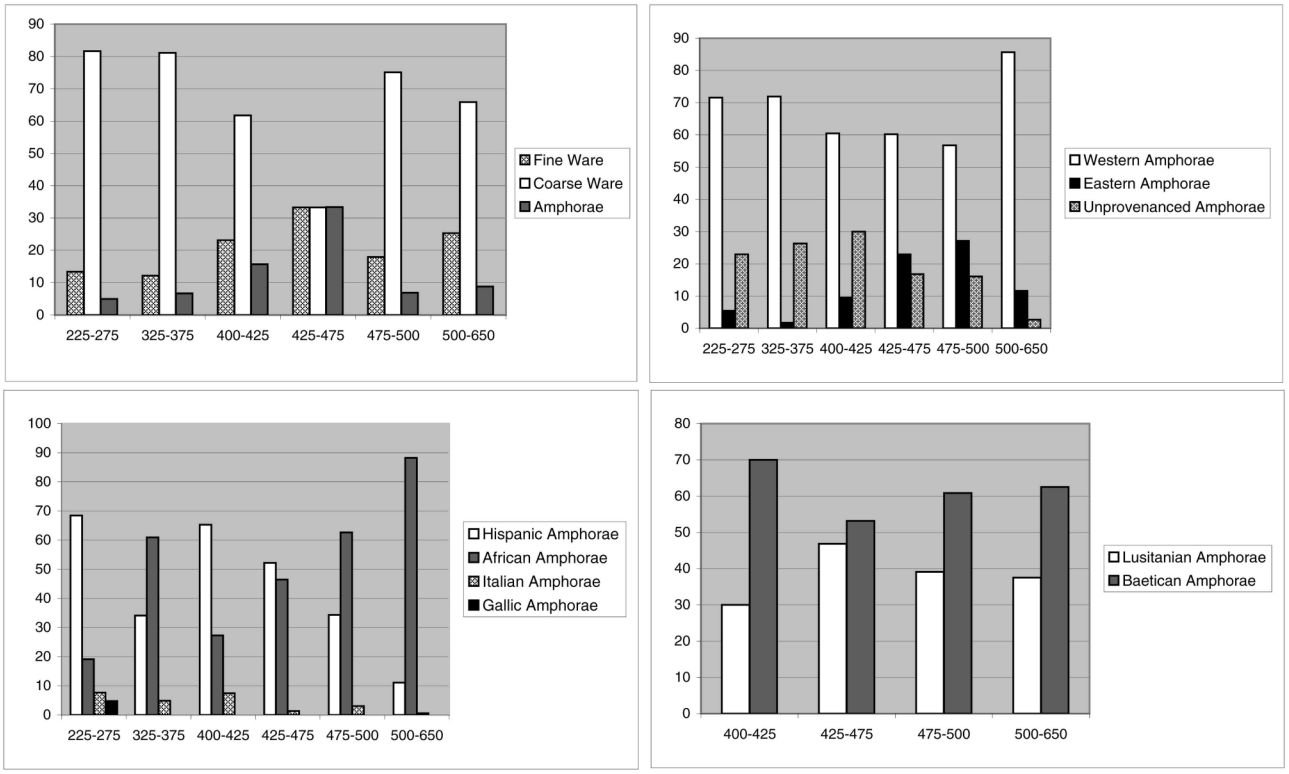

Figure 2. Diachronical quantitative analyses.

and Gasòmetre 32 (Remolà 2000: 86-88; Trullén 2010), in the lower part of the city (Figure 1, nos. 3-4), have yielded some 4th century levels. Amphorae comprise 6-7% of the estimated number of vessels (476 and 378 individuals, respectively) (fine ware: 10.3-13.6%; coarse ware: 79.4-83.3%), percentages that are close to previous periods. Their origin is mainly from the western part of the Empire (between 80 and 90%), with a low eastern occurrence. Within the western part there is a clear dominance of the North African types (*c*. 65-75% of all western imports), followed by the Hispanic ones (*c*. 20-30%) – with a predominance of Baetican and Lusitanian Keay 16A and 23 – and a reduced presence of Italian amphorae. In the known late Roman necropolis, mainly dated to the 4th century, the most common south Hispanic type is Keay 23 (Figure 3, nos. 13-14), a fact that cannot be confirmed with data from more reliable contexts such as domestic dumps.

Even though we do not have appropriate stratigraphic contexts to analyse the urban consumption in this period, we can observe a similar quantitative distribution (see Figure 2) at a general level. Amphorae comprise 5 to 10% of the estimated number of vessels, but their composition, however, varies. There is an increase in North African amphorae, while Lusitanian and Baetican vessels have a similar percentage. For this period there are no documented amphorae produced in Tarraconensis.

5th Century

In contrast to the previous century, a significant number of domestic dumps were documented for the 5th century, allowing us to draw a more precise and detailed general picture of the supply and consumption in Tarraco, especially during the middle decades of this century. In this period, Tarraco received a huge quantity of imported food goods from North Africa, Baetica-Lusitania and the Eastern Mediterranean. The percentages of amphorae in the central decades of the 5th century reach much higher levels than those recorded in other historical periods of the city (Remolà 2000; Trullén 2010).

A dump formed in the first quarter of the 5th century in the port area of Tarraco (lot 22B of PERI-2) (Figure 1, no. 5) has yielded 150 amphorae, comprising 14.1% of the estimated number of vessels (1051 individuals) (fine ware: 268, 25.5%; coarse ware: 633, 60.2%), in their vast majority coming from the western Mediterranean area (56%, to which we could add most of the unprovenanced amphorae, 33.3%); 10.6% is of eastern Mediterranean origin[4]. Hispanic types dominate within the western area (56; 66.6%), followed very distantly by North African (19; 22.6%) and Italian ones (9; 10.7%). The Hispanic amphorae come from Baetica (35; 62.5% of the total Hispanic) and Lusitania (21; 37.5%). Types Keay 16B-C/22, 23, 19C and 68/91[5] (Figures 3 and 4) come from

[4] Preliminary data extracted from the inventories. There can be slight variations in those obtained in further, more accurate analysis of the context that is currently being undertaken by A. Lasheras (URV – ICAC).

[5] In previous publications (Remolà 1998; Remolà 2000: 196-200), we have assumed S. J. Keay's proposal (1984: 400-401) of a hypothetical production of types 68 and 91 in Tarraconensis. This was done despite observing the morphological similarity with fragments of Almagro type 51A-B from the Martinhal kilns and from Lagos (Algarve, southern Portugal) (Remolà 2000: note 308; Remolà and Piñol 1998: note 3).

Lusitania, while types Keay 19A-B (the most abundant, with 21 individuals), Keay 13A and 13C-D were produced in Baetica.

Another remarkable late 4th/early 5th century stratigraphic context, despite the smallness of the sample, comes from the levels of destruction of a building in the western *suburbium* (Figure 1, no. 6) (Remolà 2000: 92-94). Amphorae (50 individuals) comprise 18.1% of the estimated number of vessels (276 individuals) (fine ware: 39, 14.1%; coarse ware: 187, 67.7%) coming mainly from the western Mediterranean (74%, to which we could add most of the unprovenanced amphorae, 20%); 6% have an eastern Mediterranean origin. Within the western group, the Hispanic types predominate (23; 62.1%), followed, at some distance, by North African amphorae (14; 37.8%). The largest group of amphorae comes from Baetica (21; Keay 19A-B, 13A, 13C-D and Beltrán 68), while the Lusitanian region has a lower presence (3; Keay 16B-C/22, Keay 23 and 68/91) (Figures 3 and 4).

Clearly, this late 4th/early 5th century picture is quite similar to that obtained for earlier periods (Figure 2). Amphorae comprise between 14 and 18% of the estimated number of vessels, with a predominance of the western Mediterranean area: Baetica, Lusitania and North Africa to a lesser extent. Trends documented for previous times seem to remain. Nevertheless, the limited presence of North African amphorae is in sharp contrast with data obtained for the 4th century. We cannot detect the occurrence of local/regional amphorae, and eastern Mediterranean types show lower percentages compared to what occurs shortly afterwards.

The analysis of two large domestic dumps formed in the mid 5th century in the upper part of the city (Vilaroma and the Antic Hospital de Santa Tecla) allows us to have a better understanding of imported foodstuffs, supply and consumption in the city (Remolà 2000). In the first one, Vilaroma (TED'A 1989; Remolà 2000: 46-50) (Figure 1, no. 7), amphorae (460 individuals) comprise 36.9% of the estimated number of vessels (1246) (fine ware: 340, 27.2%; coarse ware: 446, 35.7%) and come, mainly, from the western Mediterranean (60.8%, to which we could add most of the unprovenanced amphorae, 14.1%). Eastern Mediterranean amphorae comprise 25% of the total of estimated amphora individuals. Within the western area Hispanic types predominate (164; 58.5%), followed, quite distantly, by North African amphorae (116; 41.42%). The Hispanic amphorae come from Baetica[6] (92; 56%) and Lusitania[7] (72; 43.9%) (Figures 3 and 4).

In the domestic dump of the Antic Hospital de Santa Tecla (Remolà 2000: 35-42) (Figure 1, no. 8), amphorae (294 individuals) represent 29.1% of the estimated number of vessels (1009) (fine ware: 410, 40.6%; coarse ware: 305, 30.2%) and come mainly from the western Mediterranean (59.1%, to which we could add most of the unprovenanced amphorae, 21%); eastern Mediterranean amphorae comprise 19.7%. Within the western Mediterranean group North African types predominate (95; 54.5%), followed by the Hispanic (73; 41.9%) and Italian amphorae (6; 3.4%). As in the previous case, all the Hispanic amphorae come from Lusitania[8] (39; 53.4%) and Baetica[9] (34; 46.6%).

Analysed as a whole, some variations can be remarked in comparison to what was detected in previous periods (see Figure 2). The amphorae comprise on average between 29 and 37% of the estimated number of vessels, percentages significantly higher than earlier and later deposits. North Africa and southern Hispania share the western Mediterranean dominance, as in the past, while eastern Mediterranean amphorae range between 20 and 25%. Mid 5th century contexts show a steep increase in the numbers and percentages of eastern amphorae (Remolà and Uscatescu 1998; Remolà 2013). Typologically, we emphasize the presence of Lusitanian types Keay 16B-C/22 (Figure 3, nos. 3-12), 19C, 21 (Figure 4, nos. 1-14), 23 (Figure 3, nos. 15-16) and, in a lesser amount, Keay 78 (Figure 4, nos. 15-16), with a fabric similar to the Sado/Tagus group. Keay type 68/91, coming from the western Algarve is also widely documented (Figure 4, nos. 17-34).

For the end of the 5th century we can consider two domestic dumps located in the upper part of the city (Antiga Audiència and Trinquet Vell) (Remolà 2000). The first one was formed inside one of the towers of the square of the Forum of the *concilium Provinciae* and the second one above the Roman circus' arena. In the Antiga Audiència dump[10] (Figure 1, no. 9), amphorae (53) comprise 7.2% of the estimated number of vessels (734) (fine ware: 151, 20.5%; coarse ware: 530, 72.2%) and come, mainly, from the western Mediterranean (57.7%, to which we could add the majority of the unprovenanced amphorae, 13.24%); eastern Mediterranean amphorae comprise 32%. The western group is divided almost equally between North African types (15; 51.7%) and south Hispanic amphorae (13; 44.8%). Italian amphorae represent only 3.4%. Within the south Hispanic component amphorae of Baetican origin dominate (9; Keay 13A?, 13C-D and 19A-B) compared to the Lusitanian ones (4; Keay 23 and 21).

In the Trinquet Vell dump (Figure 1, no. 10), amphorae (65 samples) comprise 6.6% of the estimated number of vessels (974) (fine ware: 156, 16%; coarse ware: 753, 77.3%) mainly coming from the western Mediterranean (58.4%, to which we could add the majority of the unprovenanced

The close observation of samples proceeding from production centres and their macroscopic comparison with samples from Tarraco, as well as the appropriate comments and indications of our Portuguese colleagues Carlos Fabião and Rui de Almeida, who state that the origin of types 68 and 91 is the Algarve. For the question about these specific types see Fabião 2008, Bernardes *et al.* 2013 and particularly Fabião, Filipe and Brazuna 2010.

[6] Keay types 13C-D (34), Keay 19A-B (32) and Keay 13A (25)

[7] Keay 16B-C/22 (19), 19C (4), 21 (9), 23 (7), 78 (6) and 68/91 (26).

[8] Keay 16B-C/22 (6), 19C (1), 21 (13), 23 (5) and 68/91 (9).

[9] Keay 13A (12), 13C-D (13) and 19A-B (14).

[10] Considering together two stratigraphic deposits as part of the same dump (AUD/1A and AUD/1B) (Remolà 2000: 51-58).

amphorae, 18.4%), while 23% is imported from the eastern Mediterranean (Remolà 2000: 69-71). Within the western group the North African types predominate (27; 71%), followed, very distantly, by south Hispanic (14; 37.8%) and Italian amphorae (1; 2.6%). The south Hispanic group is divided equally between Lusitanian (5; Keay 16B-C/22, Keay 23 and 68/91) and Baetican types (5; Keay 13A, 13C-D and 19A-B).

Considered together, a number of differences can be noted with respect to the previous situation (see Figure 2). At a general level, the amphorae returned to values similar to those obtained before the mid 5th century, between 6-7%. Within the western Mediterranean group (54.7%) there is still no record of the late Tarraconensian amphorae, and those of Baetican and Lusitanian origin comprise 37.8 and 44.8%, with a scarce occurrence of Lusitanian amphorae (Keay 16B-C/22, 21, 23 and 68/91) (Figures 3 and 4). Eastern Mediterranean amphorae maintain similar percentages to those in the mid 5th century, between 23 and 32%.

6th Century

Inside one of the towers of the square of the Forum of the *concilium Provinciae* a dump was formed over a staircase between the end of the 5th century and the beginning of the 7th century (Figure 1, no. 11) (Remolà 2000: 58-60). The different layers of the dump were excavated together unstratigraphically. The study of the ARS established that most of the North African fine ware belonged to the 6th century, in spite of the presence of material belonging to previous and subsequent periods (Aquilué 1992).

Amphorae (189 samples) comprise 6.6% of the estimated number of vessels (2149) (fine ware: 544, 25.3%; coarse ware: 1416, 65.8%) and come, principally, from the western area (85.7%); 8.7% have an eastern Mediterranean origin. Within the western group North African types predominate (143; 88.2%), followed, very distantly, by southern Hispanic (18; 1.1%) and Italian amphorae (1; 2.6%). Of the Hispanic forms, the Baetican types predominate (10; Keay 13 and 19) compared to the Lusitanian amphorae (6; Keay 16B-C/22, 23 and 68/91); two individuals come from the island of Ebusus.

Despite being scarce, the data indicate a series of tendencies that can also be observed in other, minor contexts (Remolà 2000) (Figure 2). Globally, the amphorae present percentages similar to those detected in contexts dated to the end of the 5th century, around 6-7%. Most of the amphorae come from North Africa, while other areas, such as Lusitania or Baetica, drop remarkably. Recent data show that the arrival of Lusitanian amphorae (as well as Baetican) drops between the end of the 5th century and the beginning of the 6th century, when the external supplies come, mainly, from North Africa and, to a lesser extent, from the eastern Mediterranean (Syria and Palestine), both under Byzantine rule during much of the 6th century.

Conclusions

Despite the small size of the sample, the quantitative analyses of the closed stratigraphic deposits presented here enable us to draw up a preliminary picture of external supply and consumption in Tarraco between the 3rd and 6th centuries. Within this general framework, we focus on the evaluation of the occurrence of Lusitanian amphorae. Between the 1st century and the first half of the 3rd century, the high presence of amphorae produced locally/ regionally in the Tarraconensis suggests urban consumption based mainly on the province's own productive surplus (wine and olive oil). The occurrence of imported subsistence goods (amphorae) is very reduced and may have been caused by different factors, not exclusively commercial: the demand for specific commodities – for their composition, quality or prestige – not available in nearby areas; the cyclical occurrence of famine;[11] the supply of the military units settled in the city or occasional increases in demand could explain the long-distance transport of basic food supplies that, in many cases, would have similar qualities and prices to those of local or regional origin.

Available data for the mid 3rd century suggest a high occurrence of Lusitanian and, to a lesser extent, Tarraconensian and Baetican amphorae (see Figure 2). Local and regional amphorae (late Dressel 2-4) drop significantly compared to what is observed in the 2nd century (Trullén 2010). North African, Italian and Gaulish amphorae (mainly wine and oil) follow different dynamics: the presence of North African amphorae increases gradually (ARS and North African cooking ware also dominate in their respective categories) reaching its highest levels around the 4th century, while the other productive regions have a tendency to disappear from the Tarraconensian markets.

By the 4th century, the scarcity of archaeological documentation prevents an assessment of the effects that the circumstances of the city may have had upon the external supply during this period (see Figure 2). Despite the fact that the action of the Franks against Tarraco was occasional, the barbarian remained in the territory for twelve years according to Orosius.[12] This situation would have led to devastation in the productive areas and alterations in the usual circuits of supply of the city, coming, mainly, from a provincial background, although it is not possible to specify either for how long or to what extent.

In fact, there is no reliable evidence for the production at the end of the 3rd century of Tarraconensian amphorae, which were still predominant during the previous century (late Dressel 2-4). The Tarraconensian origin

[11] A funerary inscription refers to a member of the *curia* who was part of a *legatio* in charge of providing *frumentum* to the *plebs* in need of Tarraco: ---] / *sibi et suis, cuius be* / *neficio, in legationem* / *eundo at frumentum / comparandum plebs* / *adlevata est* (RIT 364) (Alföldy 1991: 73; Alföldy 1975).

[12] *Historiarum adversus paganos*, 7, 41, 2.

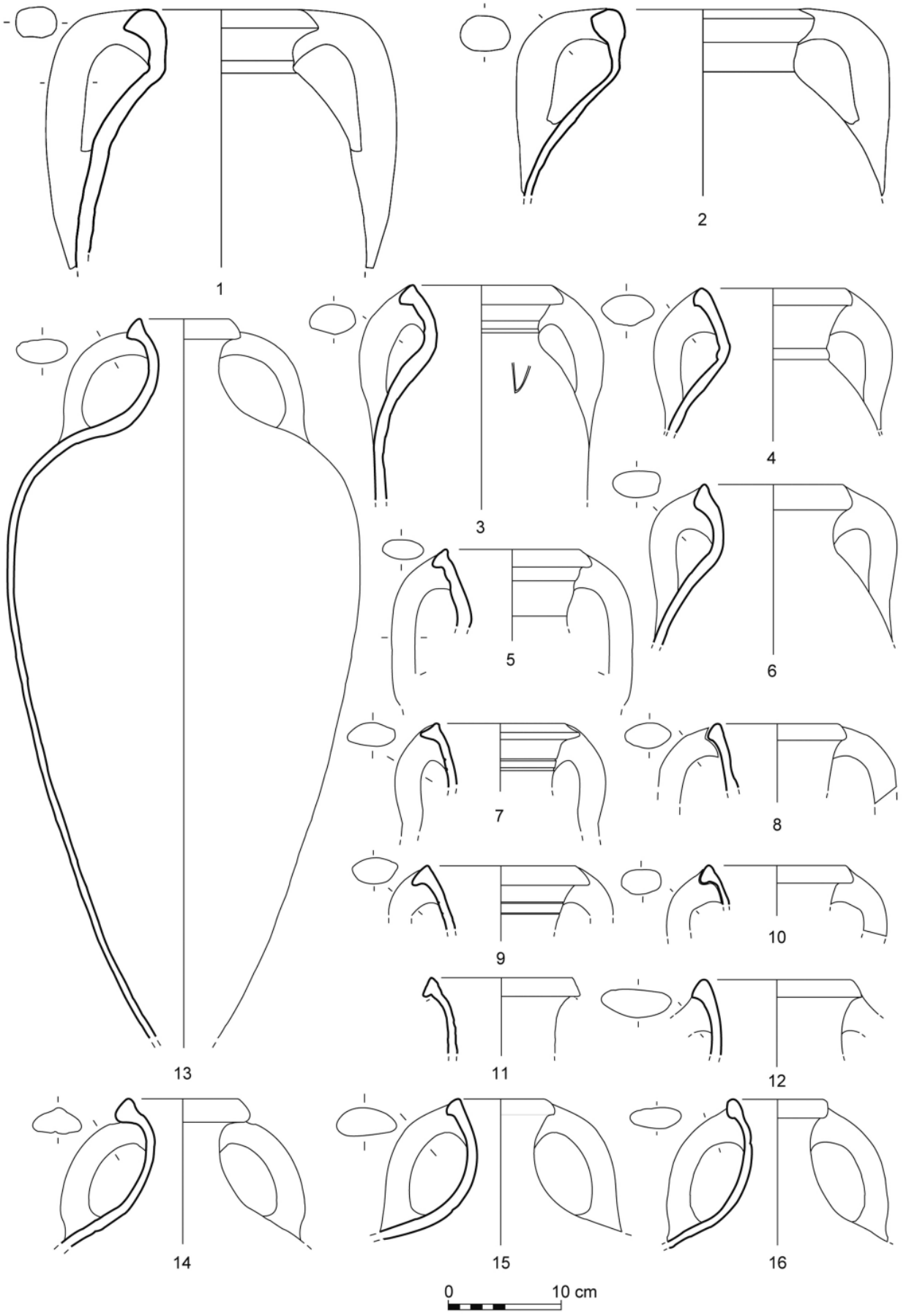

Figure 3. Lusitanian amphorae in Tarraconensian contexts: 1–2. Keay 16A (3rd century); 3–12. Keay 16B–C/22 (mid 5th century); 13–14: Keay 23 (4th century): 15–16: Keay 23 (mid 5th century).

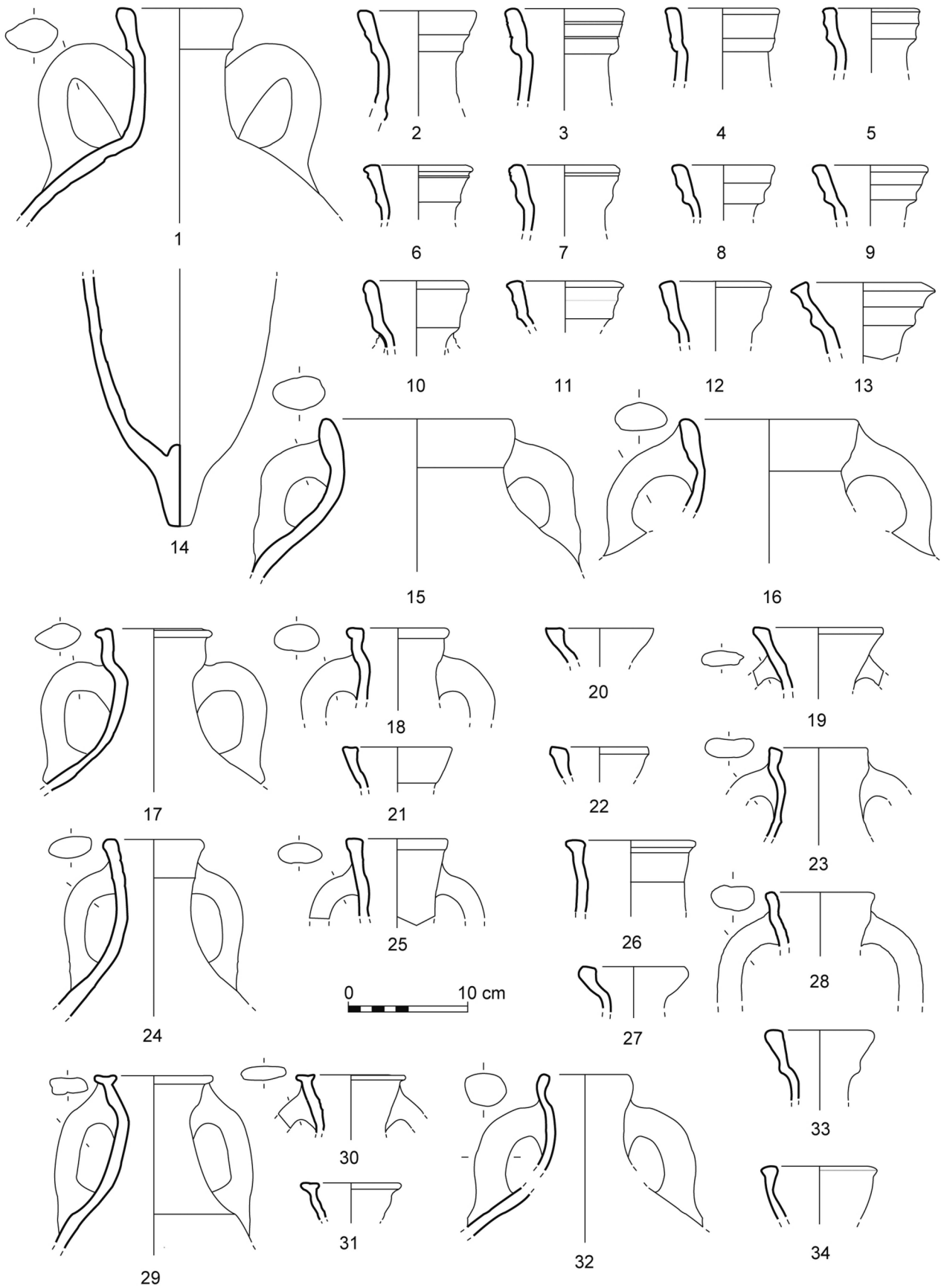

Figure 4. Lusitanian amphorae in Tarraconensian contexts: 1–14: Keay 21 (mid 5th century); 15–16: Keay 78 (mid 5th century); 17–34: Keay 68/91 (4th–mid 5th century).

of particular types of the 4th and 5th century (Keay 68 and 91) – suggested as a hypothesis by S. J. Keay (1984) and supported by us in prior publications (Remolà and Piñol 1998; Remolà 2000) – should be reconsidered in the light of the results obtained in production centres of the Portuguese Algarve, an area that corresponds to ancient southern Lusitania. Moreover, elaborating on the previously stated lack of reliable archaeological contexts of the end of the 6th century, we can also detect a higher presence of North African containers, more abundant in relation to Baetican and Lusitanian amphorae. The sparse presence of the Tarraconensian 'late Dressel 2-4' type in contexts subsequent to the 3rd century is quite likely due to residuality.

From the beginning of the 5th century there are clear symptoms of urban recovery, which can be perceived in a general historical context; Tarraco recovers a certain political significance in becoming, even if temporarily, the base of the imperial armies in Hispania (Remolà and Pérez 2013). This could be identified in the quantity and quality of products imported in the archaeological deposits, especially in the mid 5th century. In this period we can highlight the significant increase of amphorae compared to the rest of the ceramic categories, with a similar number of North African, Baetican-Lusitanian and eastern Mediterranean amphorae (see Figure 2), an increase in the external supply that could be related, at least in part, to a significant rise in demand for food products.

With the fall of the Western Roman Empire and the Visigothic control of the Tarraconensis, its capital loses importance, favouring the rise of Barcino and later Toletum. On the basis of the contexts analysed, the recovery of the usual percentages for amphorae compared to fine ware and coarse ware can be observed. There is a clear dominance of African amphorae, while the Baetican and Lusitanian contributions are significantly reduced. Furthermore, if we consider at least a part to be residual, these would reflect the very end of the presence of Lusitanian containers, which could be situated preliminarily toward the end of the 5th century and the beginning of the 6th.

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