

Oxford Centre for Maritime Archaeology Monographs

Maritime Archaeology and Ancient Trade in the Mediterranean



Edited by Damian Robinson and Andrew Wilson

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4: Ceramic assemblages and ports

Candace Rice

Maritime cities also suffer a certain corruption and degeneration of morals; for they receive a mixture of strange languages and customs and import foreign ways as well as foreign merchandise, so that none of the ancestral institutions can possibly remain unchanged. Even their inhabitants do not cling to their dwelling places, but are constantly being tempted far from home by soaring hopes and dreams; and even when their bodies stay at home their thoughts nevertheless fare abroad and go wandering . . . Many things too that cause ruin to states as being incitements to luxury are supplied by the sea, entering either by capture or import; and even the more delightfulness of such a site brings in its train many an allurements to pleasure through either extravagance or indolence. But nevertheless, with all those disadvantages, they possess one great advantage—all the products of the world can be brought by water to the city in which you live, and all your people in turn can convey or send whatever their own fields produce to any country they like.

Cicero *De Republica* 2.7–9

Archaeological research reveals a Roman world that was highly interconnected. This connectivity shaped Roman daily life and, as the above quote from Cicero exemplifies, the Romans were well aware of this concept—even if it was not always viewed in a positive light. In terms of modern scholarship, however, the concept of connectivity is relatively new. The idea, and particularly the terminology, has been most influentially advanced by Horden and Purcell in their work *The Corrupting Sea*.¹ What Horden and Purcell term ‘dispersed hinterlands’—that is, networks which extend beyond immediate geographical boundaries—are a far cry from the work of scholars such as Finley who saw the ancient world as consisting of cities locked within a parasitical relationship with their immediate hinterland.²

Some recent work has even gone as far as to refer to the Roman world in terms of ‘globalisation’. For some scholars, globalisation provides an alternative to the controversial term ‘Romanisation’³ and for others, it is a concept that indiscriminately applies modern practice

to the ancient world.⁴ The fact that such terminology has been applied is a testament to the growing awareness that the Roman world was connected in a way that was unparalleled in its time. Many factors were involved in the creation and sustaining of the network in which the Roman Empire existed, but at the centre of this was what has been termed the ‘principal agent of connectivity’⁵—the Mediterranean Sea.

What, then, does this connectivity look like in the archaeological record? Simply noting that imported objects are present at a site is not sufficient evidence to argue for a connected, much less, a globalised world. In order justifiably to apply the principles of connectivity to the Roman world we must be able to demonstrate not only that various regions of the Empire were in contact with each other, but that these contacts were significant and sustained. There are several ways in which the archaeologist might attempt to illustrate such ideas, perhaps the most obvious of which is through the ceramic assemblages of various sites. As some of the most durable and well-studied artefacts of antiquity, ceramics have the potential to reveal significant information concerning the trading connections of the ancient world. This paper, therefore, looks at the amphorae and finewares from a variety of coastal sites around the Mediterranean in an attempt to gauge their relative connectedness with the wider Mediterranean and to assess the geographical limitations of such connections.

This type of research is not new. Indeed, a primary contribution to such studies was made by Fulford in his 1989 article, ‘To East and West’.⁶ Fulford compared the ceramic evidence for trade in the cities of Sabratha in Tripolitania and Berenice in Cyrenaica, arguing that each region traded preferentially with areas to its north as opposed to engaging in east-west trade across the Gulf of Sirte. The primary reasons for such a conclusion lie in the striking differences between the amphorae assemblages at the two sites. At Sabratha, the imported amphorae are consistently from western sources, whilst the imports at Berenice are predominantly of eastern origin.

In the twenty years since the publication of his article, a number of additional quantified ceramic studies have been carried out, though there has not yet been a detailed synthesis of them. It is therefore now useful to

1 Horden and Purcell 2000: particularly Chapter Five.

2 Weber *et al.* 1978: 1215; Finley 1985: 139; Whittaker 1995.

3 Mattingly 1997; Hingley 2005; Hitchner, R.B. 2007: ‘Globalization before Globalization: Rethinking the History of the Ro-

man World’, *Roman Discussion Forum*. Oxford University.

4 Morley 2007: 90–102 (Chapter Six: The limits of ancient globalization).

5 Horden and Purcell 2000: 133.

6 Fulford 1989.

re-examine the premise of an east-west trading divide and its potential for more widespread application. The primary assemblages examined will be both amphorae and finewares from Berenice, Carthage and Ostia with comparative material from Corinth and Sabratha as well.

Amphora assemblages

Berenice

At Berenice (Sidi Khrebish, Benghazi), quantified amphorae studies were carried out by Riley following the excavations of 1971–1976 by the Libyan Department of Antiquities and the Society for Libyan Studies.⁷ The amphorae from each stratigraphic level were counted and weighed. For the purposes of this paper, the amphorae have been grouped according to source (if known) and graphed to indicate relative proportions of imports to local wares over time and to elucidate the regions from which amphorae are imported. It should be noted that there is a certain amount of residuality in the discussed assemblages. With regard to finewares from Berenice, residual vessels have been removed from consideration. This is possible with the finewares because they are more narrowly dated, but is not possible with the amphorae. The reader should thus be aware of the possible bias of residual wares in the following discussion.

When the amphorae are analysed in this manner, a number of clear patterns emerge. Beginning with the Augustan period assemblage (Figure 4.1), 69 per cent of the amphorae are imports. Unfortunately the majority of these (54 per cent) are of unknown type.⁸ Italic amphorae are fairly common at 6 per cent (Campanian Dressel 2–4 and Dressel 1) and noticeable amounts of North African (Tunisian and Tripolitanian) and Aegean amphorae are

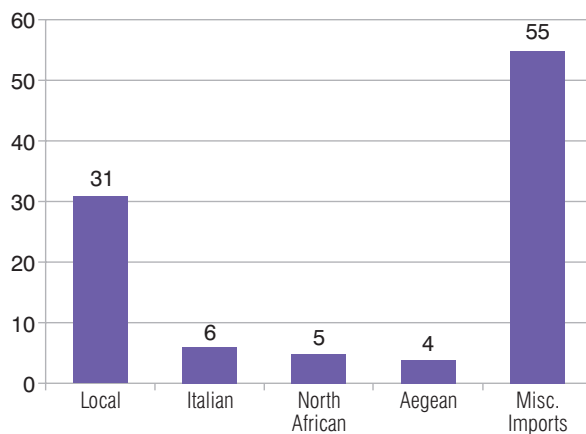


Figure 4.1. Sherd counts of amphorae from Berenice, Augustan Period.

7 Riley 1979.

8 The miscellaneous category consists entirely of imports, containing primarily unidentified amphorae as well as

present as well. Locally made amphorae are significant at 31 per cent.

By the early to mid-first century AD (Figure 4.2), locally made amphorae constitute only 7 per cent of the deposit. The percentage of unidentified imported amphorae is extremely high at 71 per cent. Aegean amphorae surpass the number of Italian amphorae with Aegean amphorae comprising 12 per cent of the assemblage and Italian 9 per cent. The predominant Aegean import is the Crétoise 2, manufactured in Crete, which belonged to the same province as Berenice (Crete and Cyrene). In the mid- to late first century AD (Figure 4.3), Aegean amphorae continue as the most frequent type of known imported amphorae, comprising 10 per cent of the deposit. Miscellaneous imports are still by far the majority at 70 per cent. Spanish amphorae

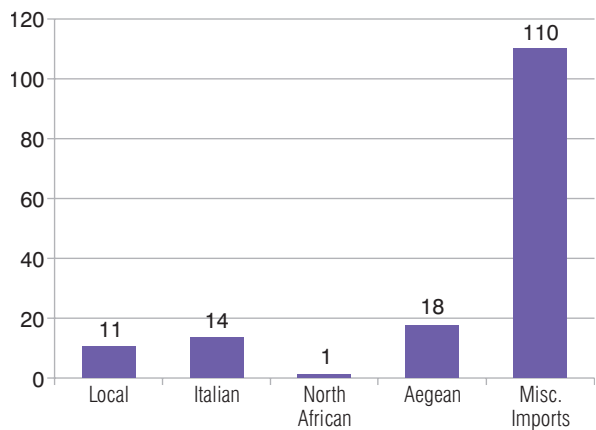


Figure 4.2. Sherd counts of amphorae from Berenice, early to mid-first century AD.

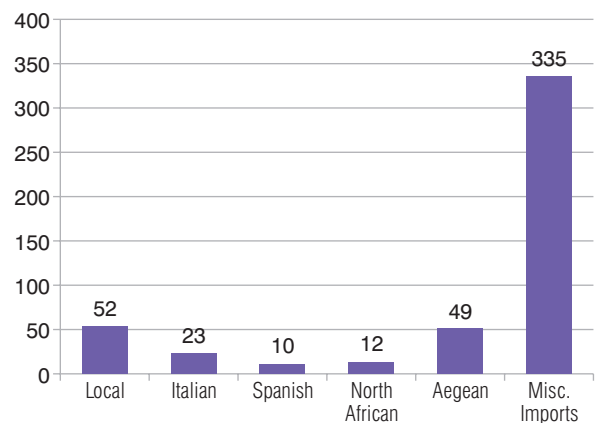


Figure 4.3. Sherd counts of amphorae from Berenice, mid- to late first century AD.

small numbers of identifiable amphorae which make up less than one percent of a given assemblage.

appear in noticeable quantities for the first time at 2 per cent. Italian amphorae account for 5 per cent of the assemblage and North African imports are at 2 per cent. The percentage of locally made amphorae is 11 per cent.

In the early to mid-second century AD (Figure 4.4), the percentage of Aegean amphorae increases to 24 per cent. The percentage of local amphorae rises slightly to 13 per cent. Spanish, Italian and North African imports are roughly similar at 2–3 per cent each. By the late second century AD (Figure 4.5), identifiable Italian amphorae are not present. Aegean amphorae are still the largest category of identifiable imports (21 per cent). The percentage of North African imports has increased to 6 per cent.

The early third century AD (Figure 4.6) sees the peak of Aegean imports at 41 per cent. The majority are Crétoise 1, followed by Kapitän II.⁹ North African imports comprise 8 per cent of the deposit. Locally-made

amphorae account for only 5 per cent of the assemblage. By the mid-third century AD (Figure 4.7), two import types clearly dominate: Aegean and North African. The percentage of Aegean amphorae has dropped to 26 per cent (predominately Kapitän II followed by Crétoise 1—the opposite of the early third century) and the percentage of North African amphorae has risen to 12 per cent. The amount of locally made amphorae is still low at 7 per cent.

Owing to the high proportion of unidentified imported amphorae from every period—reaching as much as 71 per cent of the first-century AD assemblage—it is not possible to draw straightforward conclusions regarding the trading connections of Berenice. Indeed, the unidentified amphorae probably conceal major connections, leaving us with only a partial picture of the trading patterns. Despite this, however, there are several general patterns that are distinguishable over time.

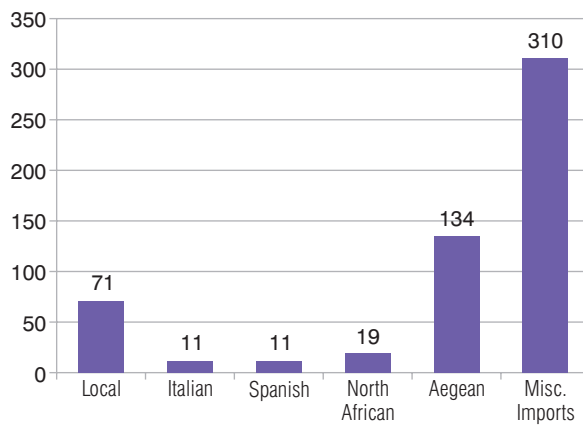


Figure 4.4. Amphorae from Berenice, early to mid-second century AD.

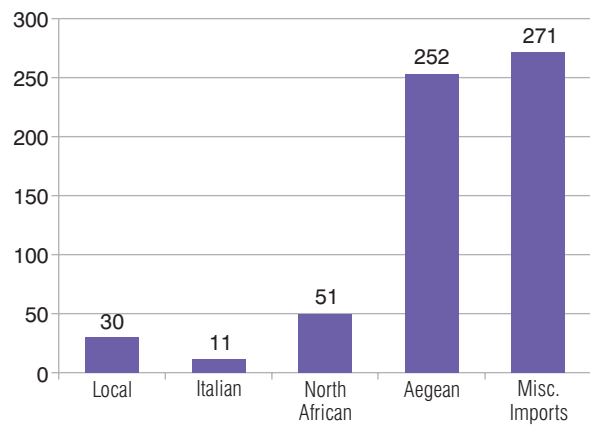


Figure 4.6. Amphorae from Berenice, early third century AD.

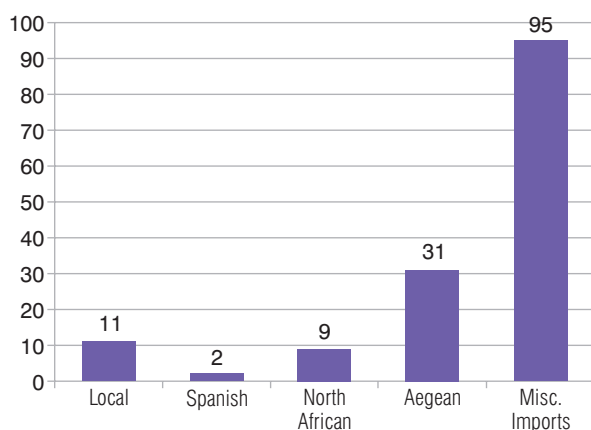


Figure 4.5. Amphorae from Berenice, late second century AD.

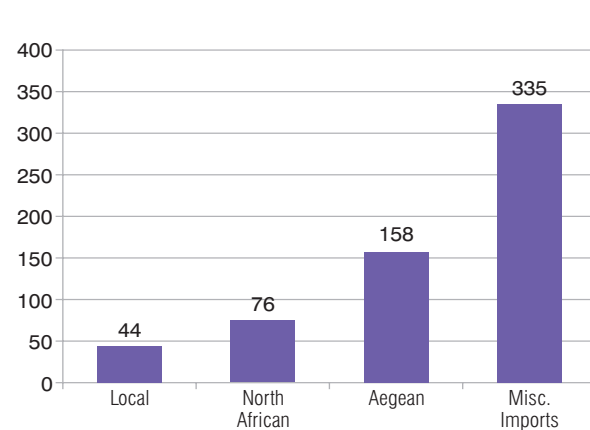


Figure 4.7. Amphorae from Berenice, mid-third century AD.

9 The production area of the Kapitän amphorae (I and II) is still unknown, though they are generally regarded as Aegean and have been classified as such for the purposes of

this paper. See Bezeczyk 2005 for a discussion of the evidence.

After the Augustan period, the number of locally-made amphorae decreases and remains relatively low for the remainder of the Imperial period. North African (Tripolitanian/Tunisian) amphorae increase gradually in number to a peak in the third century AD. Most prominently, eastern imports gain increasing importance, particularly from the second century onwards. A graph of the relative percentages of identifiable imports over time (Figure 4.8) shows a clear change with western imports dominating the Augustan period to a fairly even distribution for the first century AD, followed by the dominance of eastern imports beginning in the second century AD and continuing through the third century.

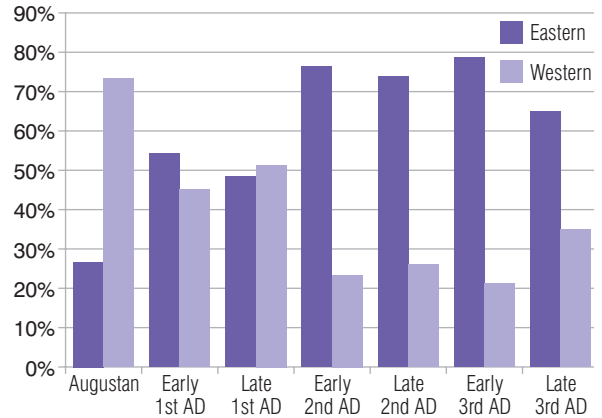


Figure 4.8. Graph of relative eastern/western imports, Berenice.

Ostia

The Ostian assemblages discussed here are from the Italian excavation of the Terme del Nuotatore, published in *Ostia I-IV*,¹⁰ with the primary amphorae results published in *Ostia III* by Carandini and Panella.

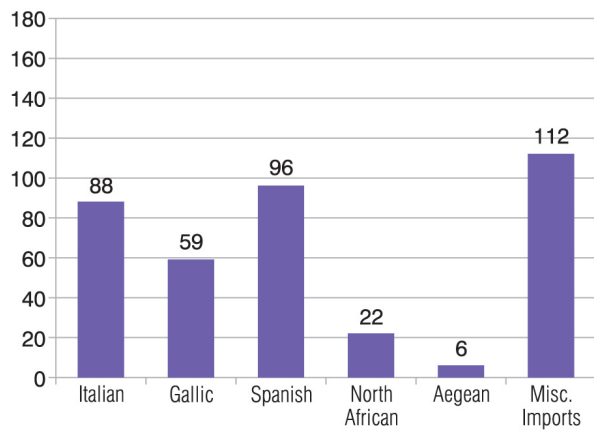


Figure 4.9. Amphorae from Ostia, Terme del Nuotatore, AD 80-90.

The earliest levels from the excavations at Ostia (VA and VB) are dated between AD 80-90 (Figure 4.9).¹¹ In this period there are two primary regional sources of amphorae: Spain (25 per cent) and Italy (23 per cent). Overall, Italian Dressel 2-4 wine amphorae comprise the largest single concentration of sherds. The predominant Spanish amphorae are the Dressel 20 oil amphorae and Dressel 2-5 wine amphorae.

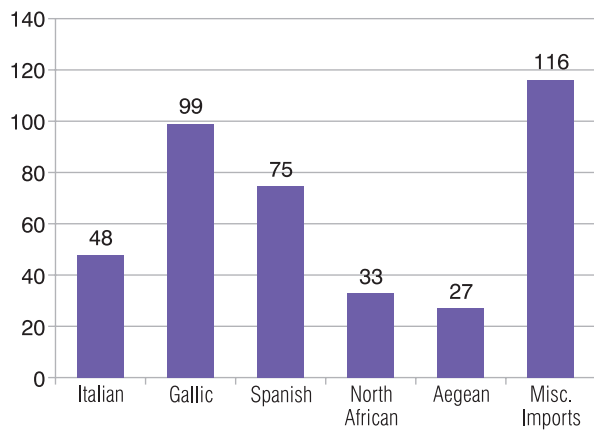


Figure 4.10. Amphorae from Ostia, Terme del Nuotatore, AD 90-155/160.

During the first half of the second century AD (Ostia level IV, AD 90-155/160), there are three primary regions visible in the imports (Figure 4.10): Gaul (25 per cent), Spain (19 per cent) and Italy (12 per cent). This period has the greatest variety of imports in the period spanned by the *Terme del Nuotatore* excavations. The amphorae from Gaul are predominantly Ostia L (the most numerous single amphora type in this period) and Gauloise 4. Dressel 20 are the most prominent Spanish amphorae, though there are still substantial numbers of Dressel 2-5. The Italian amphorae are almost entirely Dressel 2-4. Amphorae from the Aegean and North Africa also begin to appear in more substantial numbers during this period. Miscellaneous amphorae account for 29 per cent of all sherds.

The second half of the second century AD (Ostia level III, AD 155/160-190) produced an extremely small number of sherds. Only 63 diagnostic form sherds (rims, bases and handles—RBH) were found from this period at Ostia, so any interpretation of this period is questionable (Figure 4.11). If the small number of sherds is representative, the largest change in the period seems to be the new dominance of Aegean amphorae. In this period, Aegean forms comprise 40 per cent of all sherds. The amphorae are primarily Kapitän I. The next most frequent amphorae are those from North Africa (16 per

cent), followed by Gaulish amphorae at 8 per cent. By this point, the Spanish and Italian amphorae are only scarcely visible.

10 Carandini and Panella 1969, 1970, 1973, 1977.

11 Ibid. 1973: 91.

This pattern is echoed fairly closely in the material of the early third century AD (Ostia levels II and I, AD 190–250) for which there is a much higher number of sherds (845 RBH) (Figure 4.12). Again, the two primary types of amphorae are those from the Aegean and North Africa. Aegean amphorae comprise 37 per cent of the deposit with the predominant amphorae being Kapitän I and Kapitän II. The North African amphorae (27 per cent) comprise two primary types, Africana II (82 out of 225 North African sherds) and Africana I (53 out of 225 sherds). Amphorae from Gaul make up a substantial part of the assemblage with 9 per cent of all sherds, primarily Gauloise 4. Miscellaneous sherds account for 21 per cent of the deposit and, again, the material from Italy and Spain is negligible.

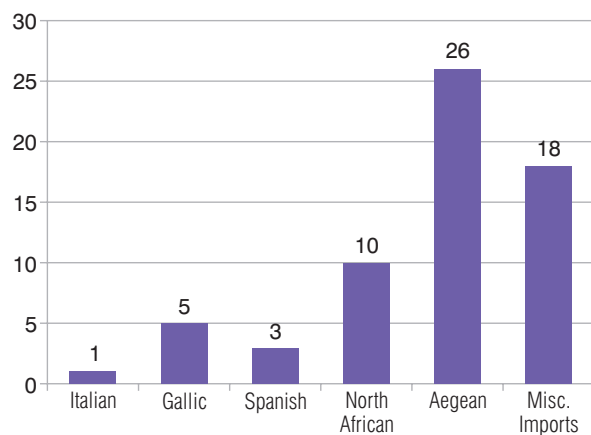


Figure 4.11. Amphorae from Ostia, Terme del Nuotatore, AD 155/60–190.

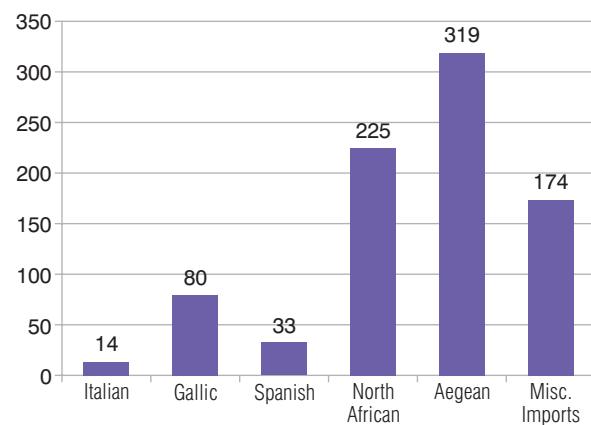


Figure 4.12. Amphorae from Ostia, Terme del Nuotatore, AD 190–250.

The material from Ostia allows for more detailed conclusions owing largely to the fact that there are far fewer unidentified amphorae; with the exception of 43 per cent unknown in the first century AD, the percentage of unidentified amphorae never reaches 30 per cent. At Ostia, the first century AD is dominated by western imports with fairly even proportions of Spanish and Italian amphorae. In the early second century AD, the western dominance remains: Gaulish amphorae are found in higher quantities than the Spanish and Italian, though these are still present in significant amounts. Indeed, the early second century sees the greatest diversity in the sources of amphorae and eastern amphorae do appear. The later second century AD produced only a small amount of sherds and therefore is only partially reliable as an indicator of trading connections, though it suggests that eastern sources were becoming increasingly important. Indeed, this is the pattern seen by the third century, when amphorae from Aegean sources are dominant, with North African amphorae a close second.¹³

Carthage

At Carthage, quantified ceramic studies were carried out as part of the British excavations of the Circular Harbour.¹³ The ceramics from each layer were counted and weighed and the results—including rims, bases, handles and body sherds (RBHS)—were weighed and counted. The number of ceramics retained is large and many of the assemblages contain highly residual material. In order to reduce the error caused by such residual material, some deposits have not been considered in this discussion. These deposits will be noted in their appropriate sections.

The first period of interest, the late first century BC, has the most variety of any of the relevant Carthaginian deposits (Figure 4.13). The material is vastly dominated by North African amphorae (81 per cent), both those of Punic tradition as well as Roman forms. The next most common identifiable category is that of Italian amphorae.

The second period (Figure 4.14), AD 1–125, shows a continuing dominance of North African amphorae (74 per cent).¹⁴ Spanish and Italian amphorae are imported in significant quantities, comprising 10 per cent and 7 per cent respectively. Compared with the other sites discussed there are relatively few unidentified sherds, forming only 9 per cent of the extant sherds.

In the final period to be considered at Carthage, AD 125–200, North African amphorae dominate solidly at 81 per cent of all sherds, whereas the remaining 19 per cent

12 More recent amphora evidence from the DAI-AAR excavations at Ostia complements and enhances the picture (Martin 2008).

13 Hurst *et al.* 1984.

14 As analysed here, this period consists of deposits 4.4, 4.7a,

4.7b, 4.7c, 4.7e, 4.8, 4.10, 4.12a, and 4.12b. Deposits 4.6, 4.14a, and 4.15c, dated to this period stratigraphically, have been removed from consideration due to the high degree of residual pottery.

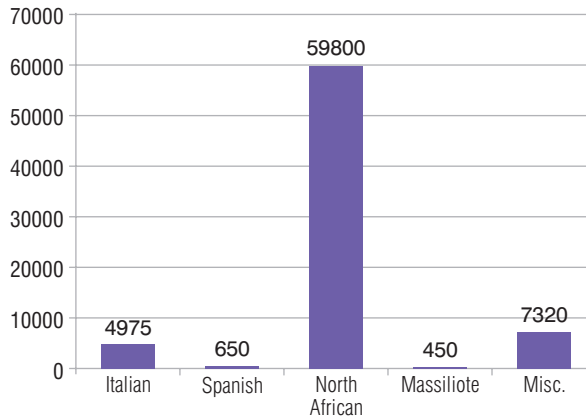


Figure 4.13. Amphorae from Carthage, Circular Harbour, late first century BC.

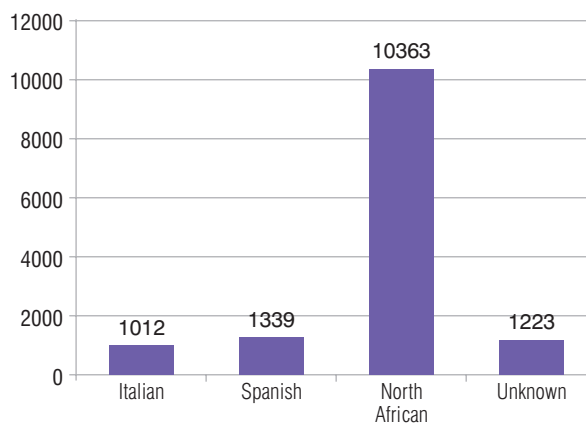


Figure 4.14. Amphorae from Carthage, Circular Harbour, AD 1–125.

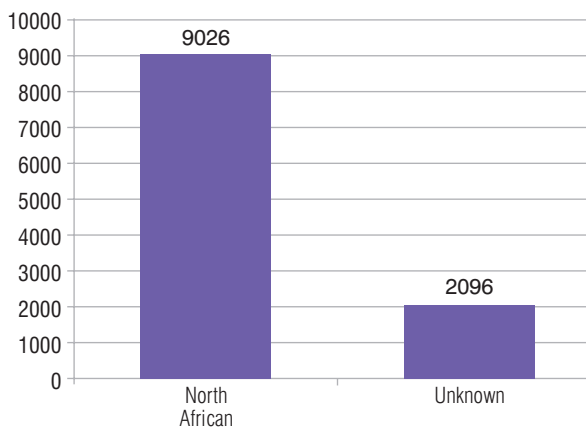


Figure 4.15. Amphorae from Carthage, Circular Harbour, AD 125–200.

consists of amphorae of unknown origin (Figure 4.15).¹⁵ However, it should be remembered that although these are African amphorae, it does not necessarily mean that they were produced near Carthage. The exact origins of the North African amphorae have not been determined and many of the amphorae could have been imported from production sites in Tunisia and Tripolitania up to several hundred kilometres away.

Carthage presents a very different picture from Ostia and Berenice in that North African amphorae always dominate the assemblages. The first century BC and the first century AD see moderate concentrations of Italian amphorae. The first and early second centuries AD exhibit the largest variety amongst amphorae sources, with a significant percentage of Spanish amphorae in addition to the Italian amphorae, but the overwhelming majority of amphorae are again North African. Of course, by the later second century there is no apparent competition for the North African amphorae and no other sources are present, though 19 per cent of the assemblage consists of unidentified amphorae.

Other Sites

Although the sites discussed above contain the most thoroughly published quantified material, it is also possible to draw some conclusions from excavations at Corinth and Sabratha. At Corinth, imported amphorae make up approximately 85 per cent of all amphorae.¹⁶ This percentage remains approximately the same over these periods, with slight decreases occurring only in the Antonine period and late fourth century AD.¹⁷ Interestingly, no single source region of amphorae dominates the assemblage, though there are fluctuations over time.¹⁸ This phenomenon is perhaps due to Corinth's role as an entrepôt connecting the Aegean and the Adriatic. During the Augustan period and early first century AD there are substantial numbers of Italian Dressel 6 amphorae and some Dressel 2–4. From the second century 'Micaceous Water Jars' (equivalent to Benghazi MR Amphora 3) are prominent, as are some Corinthian fabric amphorae. Dressel 6 amphorae continue and there are also a small number of Italian Forlimpopoli amphorae. Spanish amphorae, primarily Dressel 7–11, are also present.¹⁹ The third century sees the arrival of Kapitän II amphorae and a large majority of 'Micaceous Water Jars'.

At Sabratha, the number of amphora sherds available for study from the excavations by Kenyon and Ward-Perkins (1948–1951) is too low for any type of

15 This period consists here of deposits 4.16a, 4.16b, and 4.18. Deposits 4.13a, 4.14b, and 4.17 were removed for residual contents. By this period, the sources of imports are not as varied.

16 Slane 2003: 327.

17 Ibid.: 328.

18 Ibid.

19 Slane 2000: 300.

reliable quantitative analysis.²⁰ For the entirety of the site from 25 BC to AD 300, only 337 rims were available for analysis. Of these, 88 per cent were North African with 47 per cent being Tripolitanian and 41 per cent Tunisian varieties. Only 12 per cent were imported and only one sherd originated in the East.²¹

Discussion: Amphorae

In an attempt to distinguish wider Mediterranean trading patterns, it is useful to consider the amphora assemblages from these sites collectively. Among Berenice, Ostia and Carthage, Carthage initially seems to be the exception in its lack of diversified imports, but the North African material may conceal a range of imports from along the North African coast. The pattern at Carthage, dominated by many regionally produced amphorae, is closest to that seen at Sabratha—although as just mentioned, it is difficult to draw secure conclusions from Sabratha. Given that Africa Proconsularis produced significant quantities of major amphora-borne products (certainly oil and fish products, but also wine),²² it stands to reason that the majority of the amphorae at Carthage would be from this region, as the size of the province meant that there would still be a variety of imports. However, trade is not always about simply supplying what is needed, but about providing a choice of goods. This makes the lack of non-African amphorae seem surprising, given Carthage's role as a major trading centre.

Looking at western exports, at Berenice, Ostia, Corinth and even Carthage, there is a very clear presence of Italian amphorae during the early empire. Spanish amphorae also reach the cities discussed, including Corinth and Berenice, though in lesser quantity than the Italian amphorae. They account for a substantial portion of the limited imports at Carthage and a very small proportion of the amphorae at Berenice. Spanish amphorae also appear at Corinth, though in unknown proportions. On the other hand, Gaulish amphorae, which appear in significant quantities at Ostia in the early second century AD, do not appear in significant quantities at Carthage or the eastern sites. By the third century AD, North African amphorae form a substantial part of the western assemblages, but only a relatively small portion of the amphorae at Berenice (though how much of this is skewed by unidentified amphorae is impossible to know at this time) and they only appear in small numbers at Corinth.

Eastern amphorae are widely exported from the second century AD onwards. At Berenice they comprise

high percentages of the assemblages by the beginning of the second century AD and by the middle of the second century are found in large quantities at Ostia. Corinth, as might be expected, also sees large quantities of eastern amphorae. Eastern amphorae do not seem to appear at Carthage in the early to mid-Imperial period, though excavations at the Avenue Bourgiba did recover moderate numbers of eastern amphorae, eight per cent of total deposits of the fourth and fifth centuries AD.²³ It should also be remembered that while there are not at present quantified ceramic assemblages from the third century AD at Carthage, these could potentially change the picture as it is during the third century that the Kapitän amphorae are so prolifically distributed.

Indeed, it is worth specifically considering the distribution pattern of the eastern Kapitän amphorae (I and II), as they appear to be one of the few amphorae that were widely distributed across both the eastern and western Mediterranean. As such, it is all the more unfortunate that their origin is not more specifically known. Their content is also unknown, but they are usually thought to have contained wine. Without knowledge of either their exact origin or content, it is difficult to understand why these amphorae had such a wide distribution. Bonifay has suggested on the basis of two wrecks, the Ognina and the Porticcio, that, at least occasionally, the Kapitän I and II amphorae were re-distributed out of North Africa.²⁴ Both the Ognina wreck (dated to the first half of the third century) and the Porticcio wreck (dated to the mid-third century) contained principal cargoes of North African amphorae and complementary cargoes of Kapitän amphorae.²⁵ While the absence of third-century assemblages at Carthage means that there were no Kapitän I and II amphorae documented in the reports discussed, Kapitän amphorae are well attested at Nabeul and El Djem.²⁶

There are, of course, clear regional patterns visible in the amphorae assemblages discussed. There are also, however, trends which occur across the Mediterranean. These do not appear to be governed by a strict east-west divide, but rather a tendency to import regional amphorae. The majority of amphorae at Carthage were produced within its province. At Berenice, the main amphorae that do not appear in the west are the Crétoise 1 and 2—again, part of the same province. These regional variations affect Ostia less than other cities, a fact which may be expected for the major centre for the supply of Rome. The one amphora type which does appear in significant quantities

20 Furthermore, only the sherds which could be brought to England from the excavations were studied. These sherds were not necessarily representative of the excavated sample as the selection criteria for those sherds brought back are unknown (Dore and Keay 1989: Preface).

21 Dore and Keay 1989: 68–9.

22 Bonifay 2007.

23 Hurst *et al.* 1984: 258.

24 Bonifay 2007: 257.

25 *Ibid.*

26 *Ibid.*

at Ostia, but not the other sites, is the Gauloise 4. This amphora is primarily distributed in the west²⁷ and can probably best be explained as an amphora designed for regional riverine export, as opposed to one being limited to the western Mediterranean. At this point, however, it is useful to turn to finewares to examine whether the same patterns exists as with the amphorae.

Finewares

Finewares are, unfortunately, not published in quantified studies to the same level of detail as the amphorae. As compared with the amphorae, the only site for which a truly quantified report of fineware exists is Carthage. At Berenice, quantified finewares were not reported within their stratigraphic context in the initial publication,²⁸ though they were broken down by period in a later article by Kenrick.²⁹

Berenice

Owing to the significant amount of residual pottery in the initial deposits, Kenrick did not quantify the finewares according to strict stratigraphical confines. Rather, he looked at the ceramics ‘through the type series listing all the sherds that are intrinsically datable’. As a result, the periods are very large, but basic trends are certainly discernible. It is these numbers that are considered here.

A total of 3,824 sherds from the period from 25 BC to AD 125 were examined (Figure 4.16). By far the majority of finewares (60 per cent) are Italian Terra Sigillata (ITS). A portion of these were initially categorized as ‘Tripolitanian’ sigillata (615 out of 2,338 sherds), but it is now clear that these are actually Italian. The next most common ware is

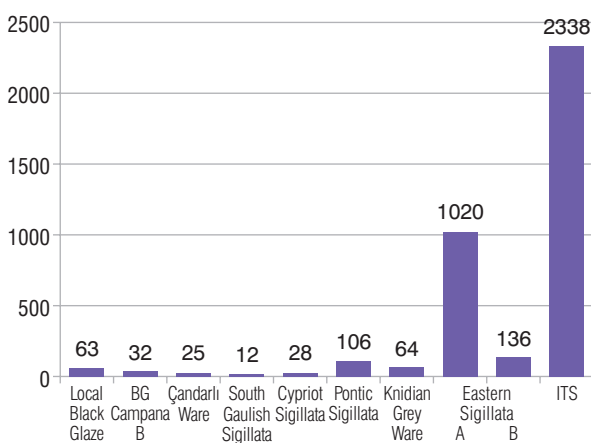


Figure 4.16. Finewares from Berenice 25 BC–AD 100.

Eastern Sigillata A (produced near Antioch) at 26 per cent. The remaining 14 per cent of fine wares are made up of a large variety of different wares including Eastern Sigillata B (from the Meander Valley) and Pontic Sigillata.

The second century AD sees a drastic change in the dominant finewares with African Red Slip (ARS) now comprising 55 per cent of all finewares (Figure 4.17). Eastern Sigillata B has replaced Eastern Sigillata A in importance, making up 14 per cent of the assemblage. ITS is still fairly significant at 13 per cent. Çandarlı wares account for 11 per cent of the finewares. The remaining 7 per cent of wares is made up of Pontic Sigillata, Eastern Sigillata A, Knidian Relief Ware and Cypriot Sigillata. The early third century AD shows a completely different view, with ARS dominating at 98 per cent (Figure 4.18). The remaining 2 per cent consists of Çandarlı wares and Corinthian Relief Bowls.

Over the course of the Imperial period, western sources supply the majority of finewares at Berenice. The first century is dominated by Italian imports, which are gradually replaced

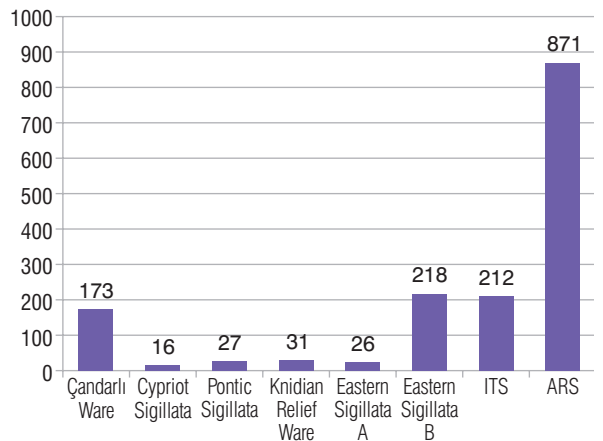


Figure 4.17. Finewares from Berenice, second century AD.

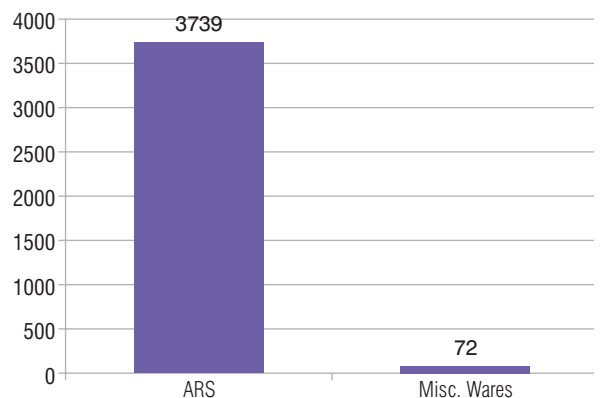


Figure 4.18. Finewares from Berenice, early third century AD.

27 Laubenheimer 2001.

28 Kenrick 1985.

29 Kenrick 1987.

in importance by ARS over the course of the second century. By the third century AD, ARS completely dominated the market. Eastern imports never appear in as significant quantities and gradually decrease over time after their peak in the first century AD. Interestingly, this is the opposite pattern to the one seen with the amphorae. Whereas the principal origin of amphorae becomes predominantly eastern in the second century AD, eastern finewares lose importance in this period only to disappear in the third century AD. Essentially, the early third century AD sees the zenith of imports of eastern amphorae and the nadir of eastern sigillata.

Carthage

The finewares from Carthage discussed here are from the same assemblages as the amphorae discussed above. During the late first century BC (Figure 4.19), the finewares at Carthage are dominated by black gloss ware, with 40 per cent of all finewares being black gloss wares of unknown origin and 25 per cent Italian Campana Black Glaze. The other dominant fineware of this period is Eastern Sigillata A, which comprises 30 per cent of all finewares of this period.

As with the amphorae, the deposits dated to AD 1–125 contain a large amount of residual material. Those deposits which clearly contain a large amount of residual material have been removed from this consideration, but it is not possible to remove all residual material (Figure 4.20). Black gloss wares still comprise 18 per cent of all finewares in the first-century AD deposits, despite the fact that they were no longer manufactured during this period. As may be expected, ITS dominates the finewares of this period, comprising 49 per cent of all wares. Thin-walled wares, most of which were imported from Italy, make up 14 per cent of the assemblage. ARS first

appears during this period, accounting for 10 per cent of the finewares considered, a figure that underplays its true importance during the period when it was produced, given that ARS production began c. AD 60, by which time black gloss ware production had ceased.

By the second century (AD 125–200) (Figure 4.21), ARS is the dominant fineware at 43 per cent. ITS still comprises a substantial portion of the finewares, though some of these may be residual by this time. Certainly residual are the 17 per cent of black gloss wares. Thin-walled wares only account for 5 per cent of the finewares during this period. The remainder of the finewares consists of some residual Punic wares and unidentified wares.

Overall, Carthage is also dominated by western finewares. Eastern Sigillata appears in substantial quantities in the Augustan period, but it is rapidly replaced by the western wares. During the first century AD imports were dominated by ITS until approximately the early second century AD, when it is replaced by ARS.

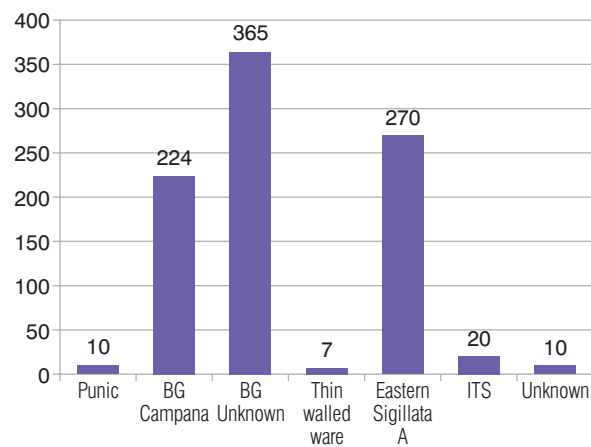


Figure 4.19. Finewares from Carthage, Circular Harbour, late first century BC.

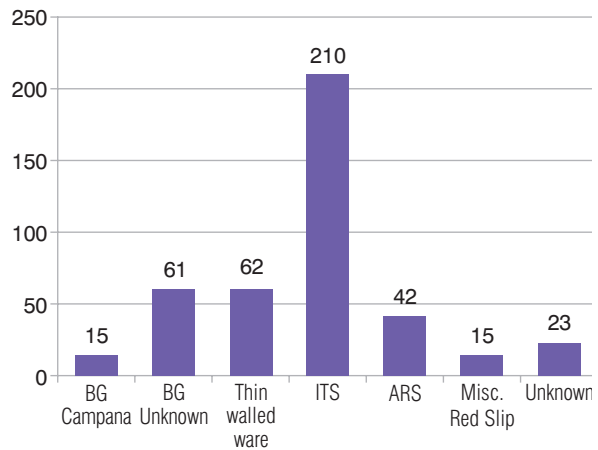


Figure 4.20. Finewares from Carthage, Circular Harbour, AD 1–125.

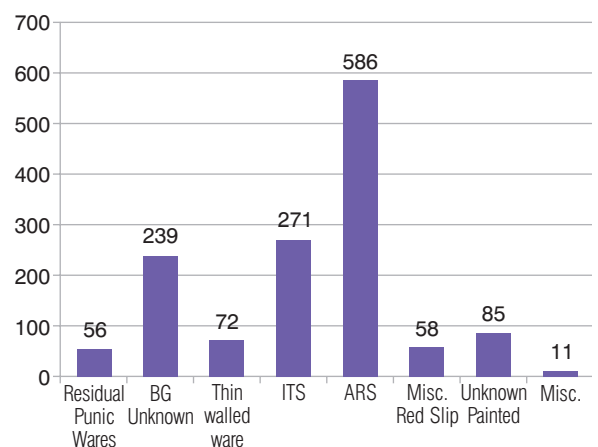


Figure 4.21. Finewares from Carthage, Circular Harbour, AD 125–200.

Other Sites

As with the amphorae, some detail can be given with regard to additional sites, though not as precisely as with Carthage and Berenice. At Corinth, Slane has done significant quantification of the finewares, predominantly on material from the excavations of 1981 to 1988 in the area east of the theatre.³⁰ Although the raw data from her quantification studies have not been published, the information concerning general trends is useful here. In contrast to the amphorae discussed from Carthage, only 30–35 per cent of all finewares at Corinth were imported between the Augustan and Severan periods.³¹ Imports were at their lowest during the Augustan period and generally increase in number over the Roman period.³²

During the Augustan period, as may be expected, the primary imported fineware was Italian sigillata.³³ During the late Flavian and early Hadrianic periods, Italian sigillata remains the primary import, though a significant number of Eastern sigillatas (Eastern Sigillata B, Çandarlı, Pontic Sigillata, etc.) appear as well. Furthermore, this period sees a small number of ARS vessels (Hayes forms 8 and 9).³⁴ The period c. AD 200–225/250, is characterized by a more restricted range of shapes and sources. There are two fineware types, Çandarlı and ARS, though ARS is the more common of the two.³⁵

Corinth is also largely characterized by western finewares. The exception to this is the second century AD when Eastern Sigillata B is the most common fineware. The first and third centuries AD, however, are dominated by ITS and ARS respectively.

At Ostia, fully-quantified reports were not produced for the finewares as for the amphorae. With regard to the Terme del Nuotatore excavations, quantified results were given for the dominant finewares: ITS, South Gaulish Sigillata, and ARS. While this is not ideal, it is interesting to consider the changing proportions of these major wares over time. In the last quarter of the first century AD, ITS comprised 83 per cent of the finewares recorded. South Gaulish Sigillata accounts for 16 per cent, with the remaining 1 per cent being ARS.

ITS still dominates during the first half of the second century AD, accounting for 75 per cent of those finewares under consideration. South Gaulish Sigillata remains at 16 per cent and ARS wares now comprise 9 per cent of the reported assemblage. By the latter half of the second century AD, ARS has become the dominant fineware, accounting for 80 per cent of recorded wares. ITS still accounts for 16 per cent of finewares, whereas South

Gaulish Sigillata has dropped to only 4 per cent. By the third century AD, ARS accounts for 99 per cent of the finewares.

More detailed recent work on the finewares by Martin considers the wider variety of finewares which appear at Ostia from not only the Terme del Nuotatore, but from more recent excavations as well.³⁶ His work reveals much the same picture as the results discussed above. What is addressed in more detail is the presence of Eastern Sigillatas. Eastern Sigillata A, B and C all appear at Ostia, though never in significantly large quantities. Of these, Eastern Sigillata B is the most common, primarily during the second century AD. The other primary difference apparent in Martin's study is that by the early second century AD, ARS has already replaced South Gaulish Sigillata as the second most common fineware. As his calculations consider an additional section of the Terme del Nuotatore in addition to that included in the publication by Carandini and Panella, his results are probably more representative.

Essentially, the picture at Ostia is the same as that seen elsewhere. ITS is the most prevalent fineware of the first century AD and early second century. From the middle of the second century AD, ARS floods the market. The only point at which eastern finewares make a significant appearance is during the second century AD, when Eastern Sigillata B is at its peak.

Discussion: Finewares

The overall fineware trends are considerably more straightforward than those of the amphorae. Indeed, the evidence discussed above reveals almost complete saturation of western wares, first with regard to ITS and then ARS, in both the western and eastern port cities studied. The only eastern ware which manages to permeate to any significant degree is Eastern Sigillata B and this is best seen during the second century AD at Corinth. The idea of a strict divide between eastern and western trade is simply unsupported given the fineware evidence.

If we consider the evidence from the amphorae and the fine wares together we are faced with a different set of patterns. As discussed above, the amphora evidence does not support a straightforward east-west trading divide, though there is considerably more regional variation than is seen with the finewares. This is probably a result of the different mechanisms involved in the transportation of amphorae and finewares. Whereas amphorae were transported as the primary cargo of a ship, finewares seem to have most frequently been complementary cargoes, an occurrence which is clearly illustrated in the

30 Slane 2000: 299.

31 Slane 2003: 330.

32 *Ibid.*

33 Slane 2000: 299.

34 Slane 2003: 300.

35 Slane 2000: 308.

36 Martin 2006.

wreck of the Madrague de Giens.³⁷ It has been suggested that ARS travelled from North Africa along with grain ships and was redistributed outwards from Portus as return cargoes on ships that had brought other goods to Rome.³⁸ ARS does not seem to have travelled with African amphorae, as they do not appear together on shipwrecks of the Imperial period.

Conclusion

The amphora and fineware evidence suggests a Mediterranean which is highly connected. There is clearly some variation between regions, but this is to be expected; it is only practical that cities should depend on their neighbouring regions for the supply of particular goods. However, there are always products which are present in significant quantities all over the Mediterranean. Amphorae manufactured in Italy, Africa and the eastern empire are exported across the entire Mediterranean. Western finewares also permeate east and west. The idea of an east/west trading divide is an oversimplification of trading mechanisms which are still not fully understood.

It is, however, quite clear that finewares and amphorae were being traded with a different economic logic. Why do fine wares permeate empire-wide, while amphorae are typically more regionally restricted? It is most puzzling that there are only two known wrecks with ARS, Dramont E and Port-Miou.³⁹ Is it that ARS travelled with luxury goods or grain, as has been suggested by Bonifay and others? Cargoes of textiles, spices, and grain would not have survived and although the finewares themselves would survive, they are less likely to be found as they are neither as bulky, nor as easily recognizable as amphorae.⁴⁰ Perhaps the

somewhat more limited distribution of amphora-borne products is related to the fact that these were often staple goods and could be obtained without reaching too far outside one's region (as discussed previously with regard to Carthage). However, this does not apply to all products traded in amphorae and it is known that certain wines and fish sauces were traded because of their high quality and distinctive flavour.⁴¹ Furthermore, one must allow for the possibility that obtaining a product produced in bulk could be cheaper than a product produced on a smaller scale, even factoring in transport costs.

While it is difficult to explain fully the different movements of amphorae and finewares in the Roman period, it is apparent that an explanation on the basis of an east-west divide is unsatisfactory and that the actuality of the situation was rather more complex. Two factors are apparent from this study, however, and bear emphasis. Firstly, the fact that amphorae and finewares were traded by means of separate and distinct strategies stresses the high level of organisation present in maritime trade in the Roman period. Secondly, to return to the opening of this paper, the evidence presented above leaves little doubt as to the connected nature of the Roman Mediterranean. The variety of amphorae found at the sites discussed illustrates the range of goods such as wines, oils and fish sauces available for purchase and consumption within many Roman cities. The evidence of the finewares, particularly the ITS and ARS, illustrates that the Roman world was connected to such an extent that a low-cost mass-produced product penetrated the markets of the entire Empire. Furthermore, this connectedness was not a short-lived phenomenon; by looking at such distributions chronologically, it is clear that trade was consistent and sustained over the course of several centuries.

37 The Madrague de Giens ship (60–50 BC) was carrying a cargo of some 6–7,000 Dressel 1B amphorae upon which were packed crates of Campanian finewares (Tchernia 1978).

38 Bonifay 2003; Fentress *et al.* 2004: 157–8.

39 Bonifay 2003: 121.

40 See Parker 1986 on the probable over-representation of amphorae wrecks.

41 For example, Strabo discusses the widespread fame of Caecuban wine (*Geographica* 5.3.6). Pliny the Elder includes a section on the best and most widely-regarded *garum* in his *Naturalis Historia* 31.43).

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