

Late Roman coarse wares, cooking wares and amphorae

A survey of current research in Italy

In this paper I would like to present an overall view of the current tendencies in Italy with regard to the study of Late Roman coarse and cooking wares and amphorae.

I feel that it is necessary to make a preliminary observation: as is well known, the international economic crisis has had a strong impact on Italy and there have been considerable cuts in general scientific research. Moreover, in specific terms, the study of pottery is not advantageous for a career in Italy. It is very difficult for young ceramic specialists to enter universities and research centres, while rescue archaeology offers salaries for carrying out excavations and producing documentation, but only rarely for studying the findings and publishing the results. Despite all these difficulties, Italian archaeologists are continuing to conduct research, to take part in large numbers in the main events concerning ancient ceramics (e.g. RCRF and LRCW conferences) and to publish important studies, as I hope to show in this paper.

In analysing the ceramic panorama in Italy of the Late Roman period, it emerges from recent studies that many of the processes developed in different times and ways. Regional differentiation appears to be particularly marked in the 6th-7th century AD, and could be attributed to different geographical contexts: coastal/inland districts, river-connected or isolated areas, or geopolitical situations (Byzantine or Lombard Italy). Therefore, for the various regional areas we need statistically reliable and highly representative contexts for the main typologies, which are the production, redistribution and consumption sites. It is only through a comparative study, on a wider scale, of the representative regional and sub-regional datasets that it is possible to monitor the transition from late antiquity to the middle ages, a shift which cannot be grasped without combining time and space.

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Coarse and cooking wares

Concerning cooking wares, I will discuss the following topics that have been dealt with in recent studies in Italy:

- imported wares;
- the relationship between local wares and Mediterranean models;
- local/sub-regional/regional wares.

In the case of similar vessels, widespread in sub-regional/regional contexts, we should bear in mind the possibility of there being: a) a regional productive *koiné*, or b) the trading activities of a main centre which distributed its vessels on a small to medium scale.

We will consider the topic in terms of geographical sectors, that is the western Tyrrhenian and the eastern Adriatic areas. In the former sector, vessels widely distributed from Rome to Provence have been identified in the last few decades. They can be interpreted as evidence of:

- 1) independent local productions from various centres in a more or less vast area manufacturing functional forms arising from common cultural and dietary habits;
- 2) forms deriving from successful Mediterranean models.

Some examples of Point 1

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Pots with a distinct vertical rim "a fascia" (fig. 1.1-3)

These pots, belonging to the Luni II 32b group¹, are similar to the A6 type of the Franco-Vicini classification² and are very common in Tuscia from the 4th-7th century AD. They are present in inland districts of Fiesole, Chianti senese, San Ginesio³ and on the coasts at Vada Volaterrana (see fig. 1.1-3) and in the nearby villa of San Vincenzino⁴, at Roselle in the layers dating from the 5th to mid-6th century AD⁵ and at Cosa in the late 4th-5th century AD⁶. They have also been documented in Rome in the mid-5th century AD⁷ and appear to have been produced as late as the 6th-7th century AD, as confirmed by the Crypta Balbi findings⁸ and those at Porto⁹. Similar pots have been found at Albintimilium in Late Roman layers¹⁰ and in numerous sites in Provence dating from the 5th and 7th century AD¹¹, in particular in Marseilles¹², in the

1. FROVA 1977, p. 622.
2. FRANCOVICH, VALENTI 1997, p. 130.
3. CANTINI 2010, p. 359, tav. 4 (47).
4. CIRRONE 2012, fig. 7 (10-19).
5. VACCARO 2011, pl. 9 (1-5, 60).
6. DYSON 1976, fig. 65 (FC 15).
7. WHITEHOUSE *et al.* 1982, fig. 8 (109).
8. SAGUI, RICCI, ROMEI 1997, fig. 4 (5).
9. CIARROCCHI *et al.* 1998, fig. 9 (6).
10. OLCESI 1993, fig. 42 (104).
11. PELLETIER 1997, fig. 3 (A4, MA4).
12. BONIFAY, CARRE, RIGOIR 1998.

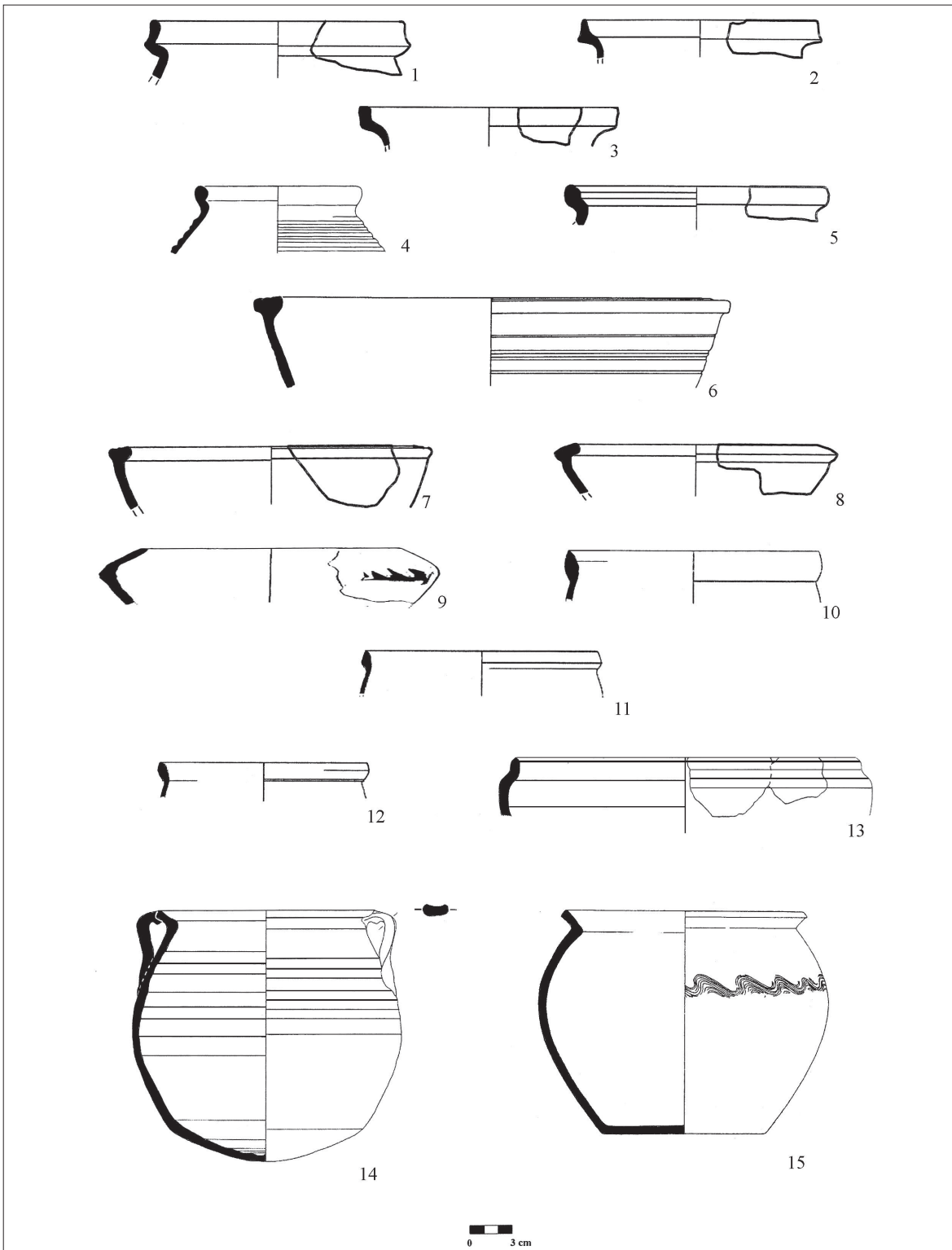


Figure 1: (1-3) S. Menchelli : vessels from Vada Volaterrana; (4) FULFORD, PEACOCK 1984, fig. 69, 19.2; (5) S. Menchelli : vessel from Vada Volaterrana; (6) FULFORD, PEACOCK 1984, fig. 66, 3.5; (7-8) S. Menchelli: vessels from Vada Volaterrana; (9) FROVA 1977 : Group 44c; (10-12) TONIOLO *et al.* 2014, fig. 3, 1-3; (13) FACELLA *et al.* 2014, fig. 6, 2; (14) TURCHIANO 2010, fig. 2, 2; (15) GELICHI 1998, fig. 1, 1

Saint-Blaise *oppidum*¹³ and in the Saint-Gervais 2 shipwreck at Fos-sur-Mer, dating from the early 7th century AD¹⁴.

Most probably the presence of the same forms in this area was due to the close economic and commercial ties between Rome and Provence, which had existed over a very long period and became even stronger in Late Roman times. It is not by chance that the *Itinerarium maritimum* dates from the early 6th century AD¹⁵. This is a portolan containing a list of the ports and landfalls from Rome to Arles and is considered evidence of the Ostrogoth annonarian concern, as Theodoric in 508 AD had annexed Provence with its capital Arelate to the Kingdom of Italy, a state of affairs that continued until 536 AD. Significant in this regard is the passage from Cassiodorus documenting the activities of the *Navicularii Campaniae, Lucaniae sive Tusciae* involved in trading foodstuffs in Gallia (*victualia ad Gallias*)¹⁶.

Some examples of Point 2

Pot with a rim cupped internally (fig. 1.4)

The form was produced in Africa from the late 4th to 5th century AD¹⁷ and was widespread in the western Mediterranean area¹⁸. It was manufactured on a large scale, above all in the 5th-6th century AD in northern Tuscia, both inland¹⁹ and on the coast at Vada Volaterrana (**fig. 1.5**) and its hinterland²⁰. It was also produced locally in southern Tuscia, at Portus Scabris²¹. Similar pots have been found at Albintimilium, in local fabrics, dating from the Late Roman to the Early Medieval period²², and in Marseilles in layers dating from the late 5th-early 6th century AD²³.

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Bowl having the upper surface of the rim scored with shallow grooves (fig. 1.6)

This type was produced in Tunisia (Carthago-Nabeul group) dating from 4th-5th century AD and perhaps the early 6th century²⁴; it has been found in local fabrics in numerous sites of inland²⁵ and coastal areas (*villa/mansio* di Massaciuccoli in the northern Ager Pisanus; Vada Volaterrana (**fig. 1.7-8**); villa di San Vincenzino²⁶) of Tuscia, in contexts of the 5th to mid-6th century AD. These bowls are present in the *oppidum* of Saint-Blaise, in layers dated 5th-7th century AD²⁷ and in Sardinia, among Late Roman vessels of uncertain origin²⁸.

13. VALLAURI 1994, fig. 77 (138).
14. JÉZÉGOU 1998, p. 348 (20-21).
15. UGGERI 2004, p. 47.
16. Cassiodorus, *Variae*, 4, 5.
17. FULFORD, PEACOCK 1984, fig. 69 (19.2).
18. REYNOLDS 1995, p. 87-92.
19. FRANCOVICH, VALENTI 1997 (D3 type).
20. DONATI *et al.*, 2004, fig. 13 (6).
21. VACCARO 2011, p. 130.
22. OLCESE 1993, fig. 38 (64).
23. REYNAUD 1998, p. 259 (40= type Pelletier 1997, A2).
24. FULFORD, PEACOCK 1984, fig. 66 (3.5).
25. CANTINI 2010, tav 3 (5).
26. CIRRONE 2012, fig. 1 (5).
27. PELLETIER, VALLAURI 1994, form N, fig. 140, 148.
28. SANGIORGI 2005, fig. 9 (7).

As is well known, the imitative phenomenon most widespread in Tyrrhenian and Adriatic Italy was undoubtedly the Hayes 61 form: in this case the close link between the large scale importation of these bowls and their imitation in the local workshops is very evident. The success of this form, produced in cooking and table wares (some of which were red-coated) was most probably due to its versatility, as it could contain both solid or semi-liquid foods²⁹.

The vessels produced along the Tyrrhenian coasts, which derived from forms typical of Pantellerian ware, should be considered separately. For example, the CATHMA 7 type was manufactured in various areas of northern Tusciana³⁰ (**fig. 1.9**), in Sardinia³¹ and in Corsica, from Mariana³² and perhaps Castellu³³. Also, in this case we can talk of the absorption of foreign models: these vessels from Pantelleria reached the local Tyrrhenian markets as part of the trade flow from North Africa and were later imitated because they were particularly suitable for use at high temperature and for the new dietary habits. It is significant that the Pantellerian-derived vessels were traded over short and medium distances, as documented by the fact that gabbriic vessels produced in the coastal areas reached other parts of Tusciana and that Sardinian pots have been found in the harbour of Vada Volaterrana³⁴ and perhaps in Naples³⁵.

In any case, it should be stressed that in the northern Tyrrhenian district Pantellerian vessels were only about 1% of the total findings of cooking wares, and their local imitations were widespread but in small quantities. In fact, these bowls were particularly suitable for dry or semi-liquid food, especially sheep/goats boiled. On the other hand, according to the border marked by Paul Arthur³⁶, this area remained oriented towards pigs, as confirmed by the archaeological data of many contexts, for example that of Vada Volaterrana (**table 1**).

There was a different situation in the southern Tyrrhenian district, where Naples provides a lot of information from recent systematic excavations that add to previous research³⁷. From the early 4th century to the mid-5th AD, there was a prevalence of the North African types (Hayes 197 and, in smaller numbers, Hayes 181 and 23b casseroles), both massively imported³⁸ and widely imitated in the city workshops and throughout the region³⁹ (**fig. 1.10-12**). In the 6th-7th century AD layers, while the imports of Pantellerian ware constituted 1.4 % of the total, there was a high percentage of locally imitated casseroles⁴⁰. Moreover, it is worth emphasising the large quantity of Aegean pots starting from the second half of the 5th century, and their local imitations were produced as late as the early 7th century AD. In any case, it is certain that high-quality Campanian cooking wares were manufactured at least until this century.

29. FONTANA 2005.

30. FROVA 1977: Group 44c.

31. ROVINA 1998, fig. 3, 5 and 8; CAU ONTIVEROS 2007, fig. 6 (47, 74, 81, 49).

32. MENCHELLI *et al.* 2007, fig. 4 (44).

33. It is not clear whether the vessels were locally produced or imported: PENTIRICCI 1989, p. 69-72, fig. 70-71.

34. MENCHELLI *et al.* in this volume.

35. CARSANA, D'AMICO, DEL VECCHIO 2007, p. 427.

36. ARTHUR 2007.

37. For example see ARTHUR 1994.

38. CARSANA, DEL VECCHIO 2010, p. 462-463.

39. TONIOLO *et al.* 2014, p. 324-325.

40. CARSANA, D'AMICO, DEL VECCHIO 2007, p. 426.

Considering Sicilian cooking wares, according to the most recent studies it appears that just after the 3rd century, Pantellerian ware tended to replace that of North Africa and it is massively documented for the 4th-5th century, while during the 6th century there were also other productions, either spread over the Mediterranean area (e.g. Black Burnished Ware, Micaceous Ware), or manufactured in Sicily⁴¹. Despite the sub-regional differences, a tendency towards self-sufficiency and the development of local production can be seen throughout Sicily, for example the calcitic wares in the Agrigento territory⁴² and forms derived from the Black Burnished Ware at Segesta⁴³ (fig. 1.13). A new phenomenon in the late 7th-8th century was the production of local/regional wares consisting of hand or slow wheel-made pots and casseroles having a flat rim and lids fired in a fairly reducing atmosphere with a fabric rich in calcite inclusions. These vessels are considered a departure from the previous practice and could indicate the weakening of ties with the southern shores of the Mediterranean, obviously following the Arab conquest of Carthage⁴⁴. Sicily, however (at least its central and eastern portions), remained deeply rooted in Byzantine culinary customs until the 9th century.

A characteristic feature of the Adriatic cooking wares are the Aegean vessels, imported and locally imitated, as documented in Apulia by the San Giusto two-handled pots⁴⁵ (fig. 1.14) and in other regions, both in coastal and inland sites⁴⁶. In Salento, Illyrian cooking wares (San Foca pottery)⁴⁷ have also been documented, dating from the 3th-4th century AD, imported from Albania and perhaps from the island of Corfu, while western influences in Apulia are represented by a few locally produced vessels imitating African and Pantellerian forms⁴⁸. In conclusion, in this region we have evidence of Late Antique productions until the 7th century, and a gradual evolution during the 8th-9th century, in a southern Adriatic framework.⁴⁹

Moving northwards, the “Classe” ware, as defined by Sauro Gelichi⁵⁰, can be considered an element of the Adriatic *koiné*. Made up of pots and lids with combed decoration (fig. 1.15) and assumed to have been produced in the area of Ravenna because of the high number of finds there, it can be dated from the second half of the 6th century and was above all present between the 7th and 8th century. In any case, it is very common along the Adriatic coast from Istria to Apulia (including at Potentia, Senigallia, Cupra, Herdonia and Canusium) and the inland river valleys, for example near Mantua, and also in Rome⁵¹.

To date, workshops have not been identified. The Ravenna area must undoubtedly have been the main production centre or one of them⁵², but there is still the possibility, already raised

41. RIZZO *et al.* 2014b.
42. RIZZO *et al.* 2014b, p. 583; PARELLO *et al.* 2014, p. 345.
43. FACELLA, MINNITI, CAPELLI 2014, p. 540-541.
44. RIZZO *et al.* 2014b, p. 583-585.
45. TURCHIANO 2010, p. 665, fig. 2.
46. For example in Abruzzo: STAFFA 2015, p. 593-598.
47. DE MITRI 2010, p. 681-686.
48. TURCHIANO 2010, p. 658.
49. TURCHIANO 2010; VOLPE *et al.* 2010, p. 648.
50. GELICHI 1998.
51. SANTORO 2007, p. 367; TURCHIANO 2010, p. 659.
52. CIRELLI 2015b, p. 30.

by Sara Santoro⁵³, that these vessels were produced in many centres within the context of an Adriatic and Po valley manufacturing *koiné*, as would also seem to have been indicated by the recent studies of Marco Cavalazzi and Elisa Fabbri⁵⁴. In this instance, archaeometric analyses are really the decisive tool. In conclusion, the north Adriatic productions appear to have been very diversified, even in the main cities, ranging from the Ravenna fast-wheel productions in the 8th century⁵⁵ to the wares made by the coiling technique in Aquileia between the late 4th and the early 6th century⁵⁶.

Pottery finds in Alpine areas are even more complex and varied. From the papers in this volume⁵⁷ regarding the area from Vercelli/Biella to Aquileia, local pottery productions and short, medium and long-distance trade have been documented. It should be stressed that these districts were not isolated: Alpine soapstone vessels, which were redistributed along the Tyrrhenian and Adriatic coasts (including numerous sites in Apulia)⁵⁸, are evidence that Alpine regions were part of the Mediterranean trade network⁵⁹.

As regards coarse wares, the regional aspects seem less specific because the general imitative processes of African forms (both in the case of table wares and vessels for various purposes, in particular the flagged bowls) combined the typological characteristics of the productions of the whole peninsula, both of the Tyrrhenian and Adriatic regions. In particular, throughout Italy from the second half of the 2nd century AD until the middle ages, the production of table and storage vessels and mortars characterised by a red slip became very common.

These productions have been classified in different groups and variously named, stressing both technical aspects:

- *ceramica a vernice rossa tarda*: Late Red Slip Pottery;
- *ceramica ingobbiata*: Thin Slip Pottery;
- *comune dipinta*: Painted Coarse Ware.

And the territorial ones:

- *sigillata medioadriatica*;
- *ceramica a vernice rossa della valle del Tevere*: Central Tiber Valley Red Slip Ware;
- *ceramica dipinta dell'Italia meridionale*: South Italian Painted Pottery⁶⁰.

Because of the present lack of universally agreed standards, we do not know if these appellations really coincide with actual technical peculiarities: sometimes the same definition refers to different productions, e.g. the *sigillata medioadriatica* includes both sintered and non-sintered vessels. Conversely, in a few cases, the same items are named differently by different teams

53. SANTORO 2007, p. 367-369.

54. CAVALAZZI, FABBRI 2010, p. 623-624.

55. CIRELLI 2015a, p. 18.

56. DOBREVA, RICCATO, CAPELLI, in this volume.

57. DEODATO, VENTURA and BRAIDOTTI, QUIRI, in this volume.

58. VOLPE *et al.* 2010, p. 648.

59. See, in particular, QUIRI, in this volume.

60. MENCHELLI, PASQUINUCCI 2012.

working in the same regions. As already suggested by P. Arthur and Helen Patterson many years ago⁶¹, there should be a systematic reorganisation of these products including the relevant terminology, or, at least, careful morphological and technical-archaeometric analyses of the finds. A basic terminology could be the following:

- *Ceramica verniciata* = *Slipped Ware*. Sintered slip generally applied by total immersion.
- *Ceramica ingobbata* = *Thin and Matt Slipped Ware*. Slip applied both by total and partial immersion.
- *Ceramica con colature* = *Dripping Ware*. Thin slip drippings along the vessel surfaces, due to partial immersion and fast removal.
- *Ceramica dipinta* = *Painted Ware*. Vessels decorated with lines of thin slip applied with a brush. The lines form random or well-defined motifs.
- *Ceramica sovradipinta* = *Over-Painted Ware*. Colour-coated vessels over-painted with fine decorations applied with a brush.

In any case, our aim should be to define the trading range (local/sub-regional/regional or more extensive areas) of the workshops we are dealing with.

Amphorae

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Moving on to amphorae, it is necessary to point out that only a few Italian regions (Tuscia, Campania, Bruttium, Sicilia, various Adriatic areas) appear to have produced containers for trading foodstuffs - with a specific typology - even after the 3rd century, and these seem to have been only wine amphorae. This datum is at marked variance with both literary sources, which document an on-going production up to late antiquity for many regions (for example, Cassiodorus for Istria)⁶², and the results of the archaeological studies that have identified landscapes dotted with villas and city consumption centres characterised by urban normality as late as the 5th century⁶³. Therefore, we have to bear in mind that in order to satisfy the requirements of local/regional markets, wine and even more so olive oil, fish products and the other Italian foodstuffs were traded in non-ceramic containers (barrels, leather vessels) or in small two-handled vessels which could be also red-coated, like those found in Emilia⁶⁴ (fig. 2.16) and in Apulia⁶⁵ (fig. 2.17). Moreover, we can hypothesise the continuing production in the 4th-5th century of forms common in previous centuries, as in the case along the Tiber valley of the small flat-bottomed amphorae derived from the mid-Imperial Spello type⁶⁶: it is not by chance that the *vinum sabinum* was mentioned in the 4th century⁶⁷.

The range of Late Roman Italian amphorae, in terms of classified forms, is therefore restricted to the Empoli type, the Keay 52 groups and globular amphorae.

61. ARTHUR, PATTERSON 1994.

62. *Variae*, 12, 22, 4. About this topic see MENCHELLI forthcoming.

63. See in general CIRELLI, DIOSONO, PATTERSON 2015.

64. NEGRELLI 2015, fig. 3 (1).

65. CASSANO *et al.* 2010, p. 676.

66. PATTERSON 2015, p. 467.

67. *Expositio Tutius Mundi*, LV.

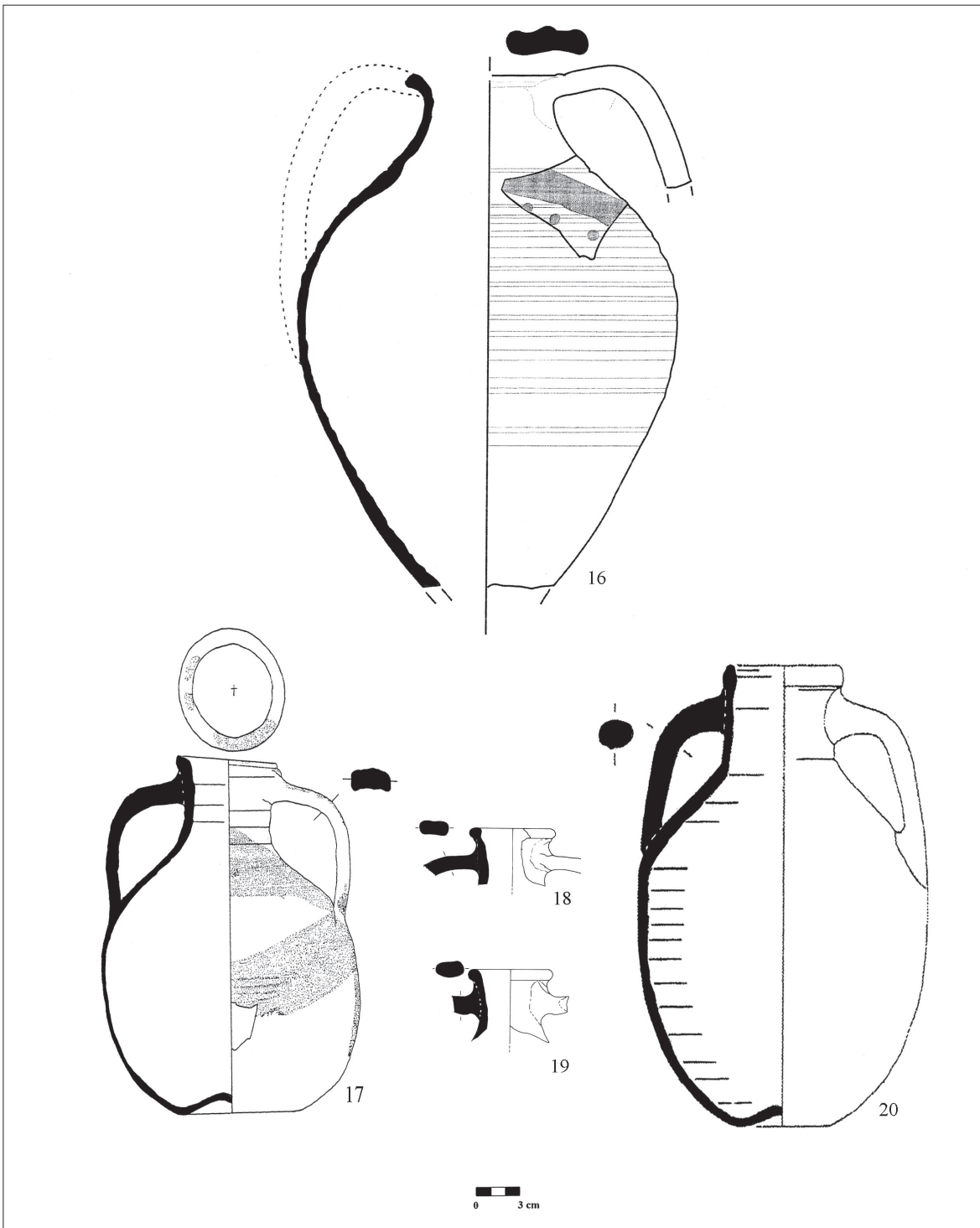


Figure 2: (16) NEGRELLI 2015, fig. 3, 1; (17) CASSANO *et al.* 2010, fig. 4; (18-19) S. Menchelli: amphorae from Vada Volaterrana; (20) CARSANA, D'AMICO 2010, fig. 5, 19

The Empoli type was produced in various areas of northern Tuscia, both inland and on the coast, dating from the late 2nd century until the early 6th century⁶⁸. Obviously, it is the most commonly found amphora in the region (fig. 2.18-19). It has been suggested that in the 3th-4th century its production was triggered by annonarian needs⁶⁹: Tuscia would have guaranteed wines, which were not high quality and could be conveniently traded to Rome. In effect, it is documented that some *praefecti urbani* (*Vettius Agorius Praetextatus*, *Avianius Simmacus*, and his father-in-law, *Orfitus*) had large estates in Tuscia and were involved in the management of the *arca vinaria*, that is the imperial funds for supplying wine to the plebs in Rome⁷⁰. These 15-20 litre amphorae were widespread in the 4th-5th century contexts of Rome, but few in number. As has been pointed out by Archer Martin, it was only in the case of the Crypta Balbi, that the Empoli type exceeded 5% of the documented amphorae⁷¹.

Given the participation of the above-mentioned important figures, it is possible that the *vinum Tuscum*, moreover cited in the *Expositio Tutius Mundi* (LV), reached Rome in higher quantities in other ways, for example in wooden barrels, the *cupae*, whose large-scale use in the mid- and late imperial age is documented by numerous literary and iconographic sources⁷². They could also be transported from Tuscia by the Arnus/Clanis/Tiber river system⁷³: the fact that the Empoli type was much more numerous in Rome than in Ostia, and to date absent in Portus⁷⁴, supports the hypothesis of at least a partial trade of *Tuscum* wine by means of river transport.

Furthermore, it is possible that the *possessores* in Tuscia also utilized the *adaeratio* system, a practice which appears to have been sanctioned in the period between 344/346 and 365 AD: namely, the total amount of fiscal wine which they were obliged to provide could be replaced with an equivalent sum of money⁷⁵ and this usage obviously could have favoured the release of greater quantities of *vinum Tuscum* on the free market, not only in Rome, but also along the western Mediterranean coasts, where these amphorae appear to have been traded⁷⁶. The production of the Empoli type ceased in the early 6th century, most probably as a consequence of the Gothic-Byzantine War.

Recently, there have been many studies dealing with both the group of amphorae from Bruttium/Sicilia (Mid-Roman 1; Ostia I, 455/Ostia IV 166; Keay 52, Crypta Balbi 2, Termini Imerese type 151 and type 354) and the relevant workshops and trade routes⁷⁷. If, together with the other contemporary Sicilian types, the Mid-Roman 1b and 1a produced in the Catania region were markedly present in Leptis in the 3rd-4th century contexts, with percentages reaching 38%⁷⁸, the Keay 52 amphorae were even more successful. The latter, already consistently documented in Rome starting from the mid-4th century, became prevalent in the second half of the 5th century,

68. PASQUINUCCI, MENCHELLI 2013; CANTINI *et al.* 2014.

69. VERA 2005; VERA 2006.

70. CRACCO RUGGINI 1998.

71. MARTIN 2016, p. 579-589.

72. MARLIÈRE 2002.

73. About this topic see PASQUINUCCI, MENCHELLI 2003.

74. MARTIN 2016, p. 586.

75. CRACCO RUGGINI 1998, p. 360-363. PASQUINUCCI, MENCHELLI 2013.

76. See MENCHELLI *et al.* in this volume; for their presence also on the Adriatic coast, in Aquileia cf. VENTURA, BRAIDOTTI, in this volume.

77. FRANCO, CAPELLI 2014a; FRANCO, CAPELLI 2014b; CASALINI 2014; CUTERI, SALAMIDA 2010; RIZZO *et al.* 2014b, p. 213-224.

78. BONIFAY *et al.* 2013, in particular p. 132.



Figure 3: Keay 52 amphorae. Courtesy of Maria Luisa Stoppioni, Cattolica (RM)

almost at the same level as the African ones (17%), while in the early 6th century the number of southern Italian amphorae decreased in the urban contexts due to the augmented imports of eastern foodstuffs⁷⁹.

Apart from their widespread presence in western Mediterranean sites⁸⁰ (in the mid-5th century they constituted 10-16% of the total in Marseille⁸¹), these amphorae were already well known in 5th-7th century Adriatic contexts⁸². More recent research has provided a lot of new data about their presence: for example, in Ravenna and Classe they were approximately 4% of the analysed contexts and their presence has been linked with the many properties that the archbishop of Ravenna owned in southern Italy⁸³. In the 7th century the later variants reached 8%⁸⁴. Amphorae belonging to this group, above all the Keay 52, have also been documented in numerous sites along the Adriatic coast of Apulia⁸⁵, the Abruzzo-Marches sector⁸⁶, and in

79. CASALINI 2015, p. 543-545.

80. And also along the Rhine and in Britannia: see FRANCO, CAPELLI 2014a.

81. BONIFAY, PIERI 1995, p. 114-116.

82. AURIEMMA 1998; AURIEMMA, QUIRI 2007.

83. CIRELLI 2014, p. 544.

84. AUGENTI, CIRELLI 2010, p. 610.

85. VOLPE *et al.* 2010, p. 646.

86. STAFFA 2015, p. 599-600; GAMBERINI 2015, p. 247.

Aquileia⁸⁷. For example, there is the interesting case of 12 Keay 52 amphorae found in a well at Sala di Cesenatico⁸⁸ (**fig. 3**) where perhaps they were re-used as water jars. In these instances, careful fabric analyses should be conducted, as some of them could have been produced locally, like the Keay 52 manufactured in Val Pescara⁸⁹ and probably in central northern Apulia⁹⁰.

In the Late Roman period, in various parts of Campania, globular amphorae were produced. Most probably containers of this form imitating the contemporary African *Castrum Perti* amphorae were made in Naples⁹¹ (**fig. 2.20**). There is greater evidence of amphorae dating from 7th-8th century, and even continuing beyond the 9th century, with production centres in the area of the Gulf of Miseno⁹². These amphorae, mainly for wine, were markedly present in the regional markets and in Rome⁹³, where the Church, for its own requirements, sent the agricultural surplus of its vast estates in Campania and in the other regions of southern Italy. These containers, even if in very small numbers, nevertheless appear to have been traded along the north Tyrrhenian routes. In fact, they have been found at Mariana in Corsica⁹⁴, in Pisa⁹⁵, Luni⁹⁶ and perhaps also in Languedoc⁹⁷.

Globular amphorae were also produced in the Adriatic area, for example, in Otranto in a 7th century context⁹⁸, and in Abruzzo at Castellana in the Pescara valley, dating between the late 6th and the early 7th century, a production which, according to the authors, came to an end with the Lombard conquest of the area⁹⁹. Italian globular amphorae clearly derived from the LR2 type have been documented in Marchigian contexts¹⁰⁰, and perhaps the 8th-century containers found in Classe also came from Italian workshops¹⁰¹.

As regards the trends of imports to Italy in the 4th-7th centuries, we can make use of significant data from the important studies recently conducted in Rome, Naples and Ravenna.

Rome

In Rome, between the 4th and 5th centuries, African products were very prevalent. The Rome-Carthage axis, formed following the redirection of Egyptian grain to Constantinople, is very evident in the archaeological data, both as regards amphorae (45% of the total) and ceramics (African red slip, coarse and cooking wares)¹⁰². An example of the complexity of African cooking wares and of their trade – apart from the ubiquitous Hayes 181, 23 and 197 forms – is the

87. VENTURA, BRAIDOTTI in this volume.

88. STOPPIONI 2011.

89. SIENA, TROIANO, VERROCCHIO 1998, fig. 23.

90. VOLPE *et al.* 2010, p. 646.

91. CARSANA, D'AMICO 2010, p. 72, fig. 5 (19).

92. CARSANA, D'AMICO 2010, p. 78.

93. In the *Crypta Balbi*: ROMEI 2001, p. 505; ROMEI 2004, p. 279-281.

94. MENCHELLI *et al.* 2007.

95. ALBERTI, COSTANTINI 2015, fig. 5, p. 15.

96. MENCHELLI, SANGRISO, GENOVESI 2016, fig. 12 (4).

97. San Peyre, Gard: CITTER *et al.* 1996.

98. ARTHUR, PATTERSON 1998.

99. SIENA, TROIANO, VERROCCHIO 1998.

100. GAMBERINI 2015, p. 247.

101. CIRELLI 2014, p. 544.

102. CASALINI 2015, p. 537.

Sidi Jdidi 4 casserole¹⁰³: a minor production obviously found in very small numbers but which, traded beyond Rome, was distributed along the north Tyrrhenian routes, at Vada Volaterrana¹⁰⁴ and along the Gallic and Spanish coasts¹⁰⁵.

Among the Italian imports, those from Sicily and Calabria began to arrive in significant numbers, progressively replacing Tuscan wine and, at the same time, eastern products started to reach Rome on an ever-increasing scale, while the last Iberian imports persisted until the end of the 5th century. It is worth noting that a catastrophic event, having a resounding echo in contemporary literary sources, such as the siege and sack of Rome by Alaric in 410 AD, does not seem to have had any evident consequences in the volume or balance of trade.

Starting from the mid-5th century, the situation changed markedly following the conquest of Africa by the Vandals, which led to Sicily's resumption of its role as Italy's granary. In this period there is evidence of Rome's progressive urban and demographic decline¹⁰⁶ and a decrease in African imports, which nevertheless remained very high with new types of large cylindrical amphorae. There was a boom in southern Italian imports (Keay 52, Crypta Balbi 2 and other forms) and an increase in the number of eastern products. African ceramics continued to be prevalent in the fine wares with red-slip pottery and lamps (Form X) and, even if the cooking ware was by then residual, flagged bowls and mortars continued to be present.

The 6th century witnessed an increase in eastern amphorae compared to the contraction of African imports, with the constant presence of southern Italian products. African table ware continued to dominate the Roman market but with an impoverishment of its morphological variety¹⁰⁷. It is certain that there was a general diminution of imports to Rome, due to both the cessation of tax revenues and the marked demographic crisis¹⁰⁸, but in the privileged consumption centres imports persisted even as late as the 7th century, as documented by the Crypta Balbi finds.

Naples

Many African amphorae (as high a figure as 62% of the total) also reached Naples between the late 4th and the early 5th century. As regards eastern imports, they appear to have been greater than in Rome. Starting from the second half of the 5th century there was a drastic decline in African imports accompanied by an increase in eastern and southern Italian productions, which reached respectively about 12% and 30% of the total in the 6th century up to the mid-7th century. African red slip continued to be present on the market at 6.5% and African amphorae made a strong recovery, reaching 48% of the total, while eastern and southern Italian amphorae respectively accounted for 27% and 12-13% of those found¹⁰⁹.

As Naples was the main Byzantine city in southern Italy¹¹⁰, it obviously attracted the privileged trade organised by Byzantium and the Church, and also increased the local production of

103. CASALINI 2015, p. 537.

104. MENCHELLI *et al.* in this volume.

105. BONIFAY 2004, p. 239. For finds in Libya cf. BONIFAY *et al.* 2013, fig. 17 (61).

106. See also PAVOLINI 2015, p. 683-684.

107. CASALINI 2015.

108. VERA 2010, p. 14; BONIFAY, TRÉGLIA 2010, p. 1037.

109. CARSANA, DEL VECCHIO 2010, p. 466, chart 3.

110. For the remarkable presence of eastern pottery along the Calabrian coasts, see CUTERI, SALAMIDA 2010.

cooking, coarse and table wares, red-coated or not, for the markets of the city and the region¹¹¹, where, as stated above, globular amphorae were also produced.

Ravenna

Moving to Ravenna, recent excavations have confirmed its role as a consumption and redistribution centre with massive imports of Mediterranean goods, mostly eastern. Between the late 5th and 6th century, oriental products reached 80%, while African amphorae were 18%, and southern Italian were 2%. Palestinian wine amphorae LR4 were principally imported and it is significant that the Phocaeen red slip was more numerous than the African¹¹². There is evidence of continuing imports also in the 7th and 8th century, with the new types of eastern globular amphorae, perhaps also reproduced locally, as we have seen above.

Obviously Rome, Naples and Ravenna were the most important centres in Italy for the strategic decisions of the Byzantine Empire and for supply requirements of the Church of Rome, which until the 7th century ensured that goods continued to circulate in accordance with the Late Roman economic system, within the sound interconnections established among the Mediterranean regions starting from the 4th century¹¹³. In any case, as has been shown by many recently published studies¹¹⁴, the data documented in these three cities correspond with the distribution of goods along the Tyrrhenian and Adriatic coasts. In fact, Rome, Naples and Ravenna, with their harbour systems, were also redistribution centres and therefore the same goods consumed there could also be widespread, as documented by archaeological finds, in areas of minor strategic importance for Byzantium and the Church. Even more so than in the main cities, in these “peripheral” areas trade depended upon free market dynamics and not state intervention¹¹⁵.

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Concluding remarks

If we want to try to find the dividing line between the Late Roman and Medieval periods, this can be identified as starting from the second half of the 7th century, and is marked by the cessation of African productions, red slip pottery and amphorae¹¹⁶. Another element, which seems certain, is that the areas which remained under Byzantine rule maintained, for a longer period, Late Roman productions, for example the globular amphorae and the red-coated table wares.

As regards the Lombard-Byzantine split, judging by the archaeological finds, in some regions the political frontiers appear to have been totally permeable and open to Mediterranean trade, as documented by 7th-8th century Byzantine goods found in the Arno¹¹⁷ and Po valleys¹¹⁸. On the

111. CARSANA, DEL VECCHIO 2010, p. 466, chart 3; CARSANA, D'AMICO 2010, p. 72-74.

112. CIRELLI 2014, p. 544.

113. For this topic, see HORDEN, PURCELL 2000; MCCORMICK 2001; REYNOLDS 2010.

114. Many papers in CIRELLI, DIOSONO, PATTERSON 2015.

115. VERA 2010, p. 12-1.

116. PANELLA 1993.

117. For Byzantine objects found in Lombard necropolis in Pisa: ALBERTI, PARIBENI 2011.

118. NEGRELLI 2015, p. 148.

contrary, in other regions¹¹⁹, e.g. the Sabina, ceramics finds seem to reflect the Lombard/Roman Byzantine political division¹²⁰. In any case, in our opinion, rather than political barriers, the physical (transport difficulties for inland areas not connected by rivers) and economic ones (the undoubted 6th-7th century crisis) determined the inland sectors' progressive isolation from the trade routes, and the transition from a market to a subsistence economy, where, for the largest part of the population, wooden utensils and vessels often replaced ceramic products. This transition between antiquity and the middle ages in Italy, as throughout the Mediterranean, cannot in my view be identified except in a regional perspective. In certain areas it was precocious, slow and gradual, for example in the northern Tyrrhenian regions after the conquest of Liguria by the Lombard King Rotari (643 AD)¹²¹. For Naples and Campania, instead, this epoch-making change took place in the last years of the 7th century following the Arab conquest of Carthage which brought to an end the local market economy based on the production of surplus goods to be traded within the African trade flows¹²². For other regions we can think in terms of later crucial events, for example when Comacchio replaced Classe¹²³, or when the Arabs conquered Sicily¹²⁴.

In any case, it does not seem that there was a total rupture: weak movements of goods continued between these new regional economic systems as late as the 7th-8th century, as stated above. These complex mechanisms, including both decisive interruptions and weak continuity¹²⁵, should be studied carefully in their regional contexts. There is still a lot of work to be done regarding the economic dynamics between the Late Roman and the Early Medieval periods.

	oxen	sheep	pigs	gallinaceans
2nd-3rd cent.	2	2	5	
4th-5th cent.	8	19	48	21
6th cent.	6	14	32	2
7th cent.	4	9	10	

Table 1: Vada Volaterrana (*Horrea*), the archaeozoological data (by Claudio Sorrentino)

119. DELOGOU 2015, p. 698

120. PATTERSON 2015, p. 474. For ceramics and ethnicity, see: MOLINARI 2015, p. 686-688, with abundant bibliography.

121. PASQUINUCCI *et al.* 2005.

122. CARSANA, D'AMICO 2010, p. 75.

123. NEGRELLI 2015 and cited bibliography.

124. Regarding the island's strategic importance under Byzantine rule, see PETRALIA 2015, p. 20-21.

125. For the continuity/resumption of trade dynamics in the 8th century, see the observations, essentially not at variance, of Peregrine Horden and Nicholas Purcell (2010, p. 160-172) and of Michael Mc Cormick (2001, p. 539-540) and the considerations of Giuseppe Petralia (2015).

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