

# REI CRETARIÆ ROMANÆ FAVORVM

## ACTA 42



CONGRESSVS VICESIMVS SEPTIMVS  
REI CRETARIÆ ROMANÆ FAVORVM  
SINGIDVNI HABITVS  
MMX

BONN

2012

ISSN 0484-3401

Published by the REI CRETARIÆ ROMANÆ FAVTORES, an international learned society

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*Printed and bound by:* BELTZ Bad Langensalza GmbH, D-99947 Bad Langensalza

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ISBN 978-3-7749-3797-0

*Distributor:* Dr. Rudolf Habelt GmbH, Am Buchenhang 1, D-53115 Bonn, verlag@habelt.de

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## VORWORT DER REDAKTION

Der 27. RCRF-Kongress fand vom 19. bis zum 26. September 2010 im Nationalmuseum in Belgrad statt.  
Thema des Kongresses war: „LATE ROMAN AND EARLY BYZANTINE POTTERY: the end or continuity of Roman production?“.

Von den anlässlich des Kongresses präsentierten Postern und Vorträgen wurden folgende nicht publiziert:

- M. BERGAMINI,  
P. COMODI & I. FAGA            Scoppieto: La produzione di vasi a pareti sottili
- D. BERNAL CASASOLA, M. LARA  
MEDINA & J. VARGAS GIRÓN    Roman clay fishing weights in Hispania. Recent research on typology and chronology
- A. BIERNACKI & E. KLENINA    Red slip ware from *Novae (Moesia Secunda)*: 4<sup>th</sup>–5<sup>th</sup> local production and imports
- M. CASALINI                        Circolazione ceramica a Roma tra l'età delle invasioni e la riconquista bizantina. Nuovi dati dai contesti delle pendici nord orientali del Palatino
- Sv. CONRAD                         Pottery of the second half of the 3<sup>rd</sup> century from *Romuliana*
- T. CVJETIČANIN                    Late Roman pottery in Diocese Dacia: overview, problems and phenomena
- M. DASZKIEWICZ & H. HAMEL    Roman pottery from Baalbek (Lebanon): provenance studies by laboratory analysis
- J. DAVIDOVIĆ                        Late Roman burnished pottery from Srem
- E. DOKSANALTI                     The late Roman pottery from “the Late Roman House” in Knidos and the Knidian late Roman pottery
- D. DOBREVA                         Late Roman amphorae on the Lower Danube: trade and continuity of the Roman production
- D. DOBREVA & G. FURLAN        Progetto Aquileia: *Fondi ex Cossar*. Commercio e consumo ad Aquileia. Analisi delle anfore tardoantiche alla luce di alcuni contesti
- KR. DOMZALSKI                     Late Roman light-coloured ware: tradition and innovation
- P. DYCZEK                          Remarks on the so called legionary pottery
- A. JANKOWIAK & F. TEICHNER    A household inventory of a *Mirobrigensis celticus*
- G. KABAKCHIEVA                  Spätromische Keramik in den Provinzen *Dacia Ripensis* und *Moesia Secunda*
- T. KOWAL & J. RECLAW            Scientific Investigations – Program EU – Central Europe: The Danube Limes project
- J. KRAJSEK                          Late Roman pottery from *Municipium Claudium Celeia*
- J. LEIDWANGER                     Economic crisis and non market exchange: fabric diversity in the Late Roman 1 cargo amphoras from the 7<sup>th</sup> century shipwreck at Yassiada (Turkey)
- T. LELEKOVIĆ                        Pottery from the necropoleis of *Mursa* (1<sup>st</sup>–4<sup>th</sup> centuries)
- B. LIESEN                            First century fine ware production at Xanten (Germany)
- R. PALMA                            La ceramica dipinta di Schedia (Egitto)
- D. PARASCHIV,  
G. NUTU & M. IACOB              La ceramique romaine d'*Argamum (Moesia Inferior)*
- S. PETKOVIĆ                         Late Roman pottery from tower 19 of the later fortification of *Romuliana*
- P. PUPPO                            Ceramiche comuni di VI–VII sec. d.C. nella Sicilia occidentale: produzioni regionali ed importazioni dall'Africa settentrionale
- D. RADICEVIĆ                        Early Byzantine pottery from Liška Čava, near Guča (Western Serbia)
- D. RATKOVIĆ                        The territory of Serbia in Roman times
- CHR. SCHAUER                      Pottery of the late Roman and early Byzantine periods in Olympia

- G. SCHNEIDER & M. DASZKIEWICZ In-situ chemical analysis of pottery using a portable X-ray spectrometer
- A. STAROVIĆ & R. ARSIĆ Cherniakhovo-type ceramic vessels from NW Serbia and the question of inhabitants of the central Balkans in the late 4<sup>th</sup> century AD
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- P. VAMOS Some remarks about military pottery in *Aquincum*
- M. VUJOVIĆ & E. CVIJETIĆ *Mortaria* from Komini-*Municipium S.* (Montenegro)
- Y. WAKSMAN “Byzantine White Ware I”: from Late Roman to Early Byzantine Pottery in Istanbul/Constantinople
- I. ŽIŽEK Late Roman pottery in Roman graves in *Poetovio*

Bei der Korrektur und Durchsicht der Artikel stand mir das *editorial committee* zur Seite. Ganz besonders danke ich Philip Kenrick für die zuverlässige Unterstützung und Dieter Imhäuser (ars) für die gute und freundschaftliche Zusammenarbeit bei Satz und Layout.

Die Zitierweise wurde den Richtlinien der Römisch-Germanischen Kommission des Deutschen Archäologischen Instituts angeglichen (Ber. RGK 71, 1990, 973–998 und Ber. RGK 73, 1992, 478–540).

Susanne Biegert

Archer Martin

COMPOSITION BY FUNCTIONAL GROUPS OF CONTEXTS AT POMPEII<sup>1</sup>

In an attempt to see how geographic position with respect to trade routes influences the composition of ceramic assemblages, I compared the percentages for functional groupings (fine ware, lamps, common ware, cooking ware and amphorae) on four 5<sup>th</sup>-century sites along the Tiber for which I possessed quantified data: Ostia (Casone del Sale), Rome (S. Stefano Rotondo), Lugnano in Teverina (Poggio Gramignano) and Chianciano Terme (Mezzomiglio).<sup>2</sup> The first is, of course, the great port at the mouth of the river; the second the destination of great flows of goods from all around the Mediterranean; the third a site on the navigable stretch of the Tiber above Rome; the fourth a site on a non-navigable tributary of the Tiber. The most evident result of moving upstream was a decrease in the percentage of amphorae from some 2/3 or 3/4 at Ostia and Rome to 1/3 at Lugnano and less than 1/10 at Chianciano. What comparative material was available then suggested that one should expect levels similar to those at Ostia and Rome on Roman Mediterranean sites well integrated into maritime trade networks.<sup>3</sup> Later evidence also supported this – from a 3<sup>rd</sup>-century context at Rome, where amphorae made up 2/3 of the assemblage,<sup>4</sup> from a 5<sup>th</sup>-century context at Rome, where amphorae comprise 85.5%;<sup>5</sup> and from Marina el-Alamein, a coastal site in Egypt west of Alexandria dating from the 1<sup>st</sup> century BC to the end of the 3<sup>rd</sup> century AD, where amphorae stand at 75–80%.<sup>6</sup> Indeed,

I have used lower percentages as an argument that sites were at a certain remove from such commerce – Olympia, where amphorae in a context dated to c. AD 200 make up 38% of the assemblage by sherd count and some 8% in a 6<sup>th</sup>-century context;<sup>7</sup> Schedia in the Egyptian Delta from the 1<sup>st</sup> to the 4<sup>th</sup> centuries, with amphorae increasing from just over 34% to some 61%, as opposed to the same site in from the 6<sup>th</sup> century onward, with the amphorae over 75%.<sup>8</sup>

As Pompeii is generally considered to be an active participant in the trade of its time, it was a surprise to find very low percentages of amphorae in evaluating the contexts uncovered by the Pompeii Forum Project in seven trenches dug below the AD 79 level of the city in 1997 and 2001 (**fig. 1**).<sup>9</sup> All together, the ancient layers in these trenches gave 4,128 sherds belonging to a maximum of 4,089 vessels (i.e. adjusting the sherd count to take into account joins).<sup>10</sup> Most of them, 3,395 sherds from a maximum of 3,359 vessels, come from Horizon 2, layers dated to no earlier than the late 1<sup>st</sup> century BC because of the presence of Italian sigillata or other wares whose production begins then. Transport vessels (amphorae, one-handed micaceous jars and Iberian kalathoi for the transportation of honey) came to 17.42% compared to 12.12% for fine wares, 0.39% for lamps, 46.83% for common wares (including thin-walled ware) and 23.25% for cooking wares. Horizon 1, made up of the layers that could be older than the end of the 1<sup>st</sup> century BC, is much smaller, with 732 fragments of a maximum of 729 vessels. Transport vessels in Horizon 1 are even less frequent, with 11.66%, while fine wares come to 12.76%, lamps 0%, common wares to 55.83% and cooking wares to 19.75%. The distinction between these two assemblages is not clear-cut because they both contain much residual material, thus smearing the picture. The increase in spite of this in the percentage of transport vessels

<sup>1</sup> This paper has benefited greatly from discussion with E. Jane Shepherd (Rome), to whom I am grateful.

<sup>2</sup> A. MARTIN, Considerazioni su un confronto tra gruppi funzionali in quattro contesti ceramici del V sec. d.C. In: E. C. De Sena/H. Dessales (eds.), *Metodi e approcci archeologici: l'industria e il commercio nell'Italia antica/Archaeological Methods and Approaches: Trade and Commerce in Ancient Italy*. BAR Internat. Ser. 1262 (Oxford 2004) 202–204; *id.*, Variation in Ceramic Assemblages as an Indicator of Openness to Trade. In: J. Pollini (ed.), *Terra Marique. Studies in Art History and Marine Archaeology in Honor of Anna Marguerite McCann on the Receipt of the Gold Medal of the Archaeological Institute of America* (Oxford 2005) 61–76.

<sup>3</sup> See, for example, E. R. GEBHARD/F. P. HEMANS/J. W. HAYES, University of Chicago Excavations at Isthmia 1989/III. *Hesperia* 67, 1998, 444.

<sup>4</sup> A. MARTIN, 4. Materials – Introduction. In: A. Martin et al., *A Third-Century Context from S. Stefano Rotondo* (Rome). *Mem. Am. Acad. Rome* 58, 2008, 232–233.

<sup>5</sup> L. SAGUI/C. M. COLETTI, Contesti tardoantichi dell'area a S-E della Crypta Balbi. In: L. Paroli/L. Vendittelli (a cura di), *Roma dall'antichità al medioevo II. Contesti tardoantichi e altomedievali* (Milano 2004) 243.

<sup>6</sup> GR. MAJCHEREK, Aegean and Asia Minor Amphorae from Marina el-Alamein. In: S. Marchand/A. Marangou (éds.), *Amphores d'Égypte*

de la basse époque à l'époque arabe. *Cahiers Céramique Égyptienne* 8 (Cairo 2007) 9–10.

<sup>7</sup> A. MARTIN, Amphorae at Olympia. *Acta RCRF* 36, 2000, 428–429.

<sup>8</sup> *id.*, Pottery from Schedia near Alexandria (Egypt). *Acta RCRF* 40, 2008, 266; *id.*, The pottery from a late-antique settlement at Schedia (Western Delta, Egypt). In: S. Menchelli/S. Santoro/M. Pasquinucci/G. Guiducci (eds.), *LRCW 3. Late Roman Coarse Wares, Cooking Wares and Amphorae in the Mediterranean: Archaeology and Archaeometry 3. Comparison between Western and Eastern Mediterranean*. BAR Internat. Ser. 2185 (Oxford 2010) 945–949.

<sup>9</sup> <http://pompeii.virginia.edu/>

<sup>10</sup> Raffaele Palma and I have nearly completed preparing the material for publication.

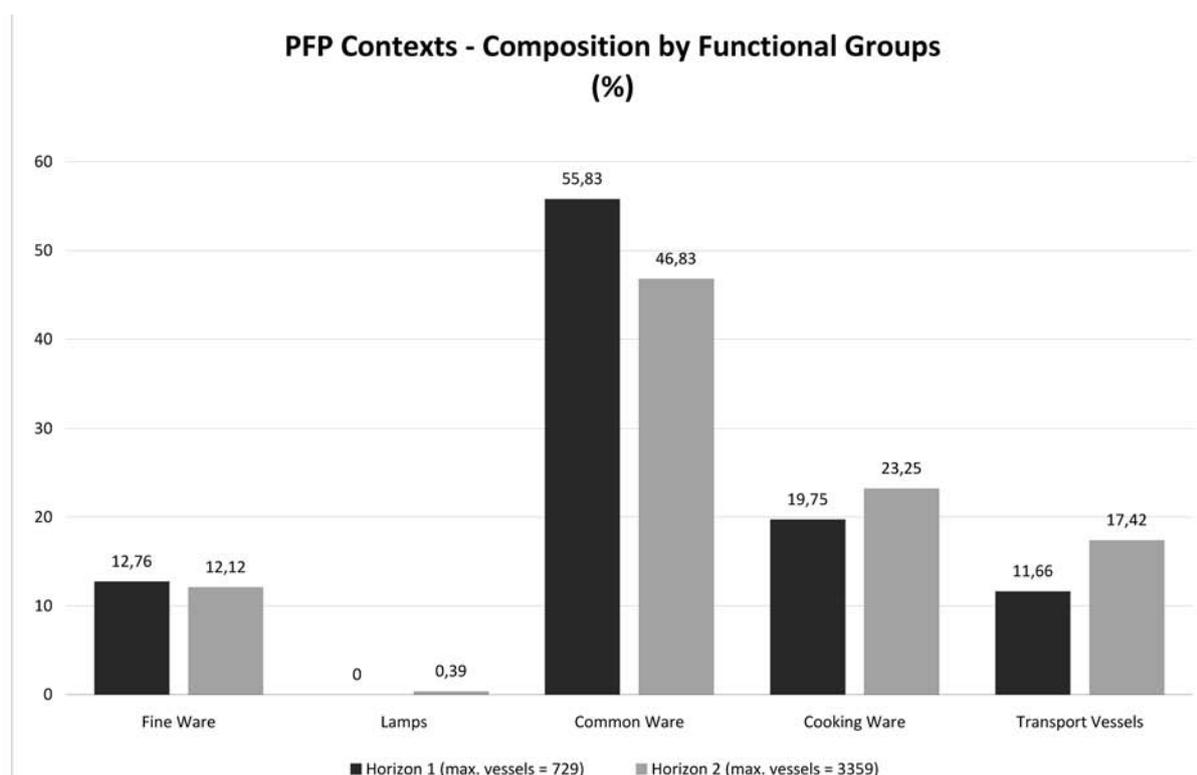


Fig. 1.

between Horizon 1 and Horizon 2 is therefore all the more likely to be significant.

Data from other contexts at Pompeii suggest that the percentages for the material from the Pompeii Forum Project should be considered normal (fig. 2). The material from the 2006 season of excavations below the AD 79 level at Porta Stabia comes to 16,357 sherds, where 4.69% belongs to fine ware, 0.92% to lamps, 63.59% to common wares, 17.91% to cooking wares and 12.87% to amphorae.<sup>11</sup> Various trenches in the Casa del Centenario, almost all of which contained Italian sigillata, gave a total of 9,999 sherds divided by functional groups into fine ware at 11.16%, lamps 2.92%, common ware 39.55%, cooking ware 29.76%, amphorae 16.59% and other 0.01%.<sup>12</sup> For the material from the trench for the electric installation in the area of the Forum we are given only percentages without the total number of sherds – fine ware at 21.37%, lamps 0.96%, common and cooking wares together 48.98%, amphorae 27.61% and other 1.09%.<sup>13</sup> In the late Augustan-early Claudian fill of a septic tank between

IX.12 and 13, which held some 1377 sherds, fine wares come to 2.91%, lamps 0%, common wares 34.56%, cooking wares 9.58%, amphorae 47.78% and other 4.87%.<sup>14</sup> Often the dates given for the contexts are too generic and/or the role of residual pieces too great for us to be able easily to capture developments within the pre-eruption layers. Nevertheless, the septic tank fill suggests that there may have been a sharp rise in the percentage of amphorae in the Augustan period or slightly thereafter.

With such low percentages of amphorae was Pompeii merely a minor participant in trade, contrary to what has always been assumed? Are figures even for sites that are undoubtedly well integrated into trade networks similar to Pompeii's, indicating that it was as active a participant in trade as any other city of its time?

Data from Ostia offer support for the second hypothesis – even an important port can have low percentages of amphorae in the late republican period and 1<sup>st</sup> century AD compared to later contexts (fig. 3). Excavations below the Schola of Trajan

<sup>11</sup> M. McCALLUM/E. MANFREDI, An Overview of the Finds from VIII.7.1–15: 2005–2006 Seasons. Riv. Stud. Pompeiani 18, 2007, 125–126.

<sup>12</sup> S. SANTORO/D. SCAGLIARINI ET AL., Progetto Insula del Centenario (IX 8). Riv. Stud. Pompeiani 16, 2005, 215–246.

<sup>13</sup> D. COTTICA/E. CURTI, Il progetto di recupero ed edizione degli scavi I. E. (Impianto Elettrico) 1980–1981 nel Foro di Pompei. In: P. G. Guzzo/M. P. Guidobaldi (a cura di), Nuove ricerche archeologiche nell'area vesuviana (scavi 2003–2006). Stud. Soprintendenza Arch. Pompei 25 (Roma 2008) 32 fig. 7b.

<sup>14</sup> R. BERG, Saggi stratigrafici nei vicoli a est e a ovest dell'Insula dei Casti Amanti (IX 12). Materiali e fasi. In: P. G. Guzzo/M. P. Guidobaldi (a cura di), Nuove ricerche archeologiche nell'area vesuviana (scavi 2003–2006). Stud. Soprintendenza Arch. Pompei 25 (Roma 2008) 366. The total and some sherd counts were calculated from the sherd counts and percentages of those classes for which both were given.

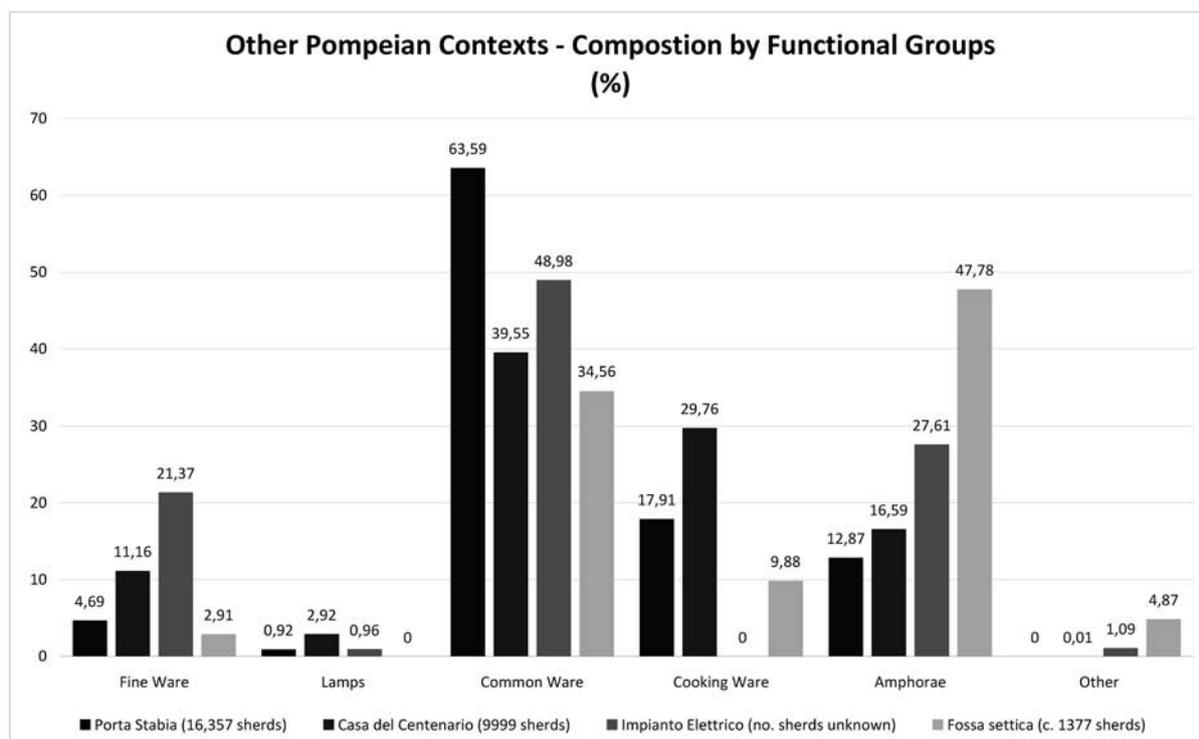


Fig. 2.

at Ostia uncovered three successive contexts.<sup>15</sup> In the first, US 467, datable to the first two decades of the 1<sup>st</sup> century BC, 5198 fragments came to light, with 17.83% in fine ware, 73.45% in common ware (evidently including cooking ware), 7% in amphorae and 1.71% in other. In the second, US 404, dated to 20–10 BC, 1609 sherds were found, divided among 21.38% in fine ware, 43.69% in common wares, 31.08% in amphorae and 3.85% in other. In the third, US 285, dating to AD 1–20, with 13,050 fragments, 22.05% belongs to fine ware, 34.77% to common wares, 39.41% to amphorae and 3.97% to other. It is worth mentioning also the Period 1 assemblage of the Domus dei Pesci (1036 sherds), which dates to the first half of the 1<sup>st</sup> century AD, although with many residual pieces from the 2<sup>nd</sup> and 1<sup>st</sup> centuries BC – there the fine wares come to 12.07%, lamps to 2.8%, common wares (including thin-walled wares) to 37.45%, cooking wares to 16.99%, transport vessels (including a fragment of an Iberian honey pot) to 30.69%.<sup>16</sup> By contrast, the following Period 2

on the same site, with a more compact assemblage datable to the last two decades of the 1<sup>st</sup> century AD (6451 sherds), presents fine ware at 4.84%, lamps at 2.65%, common wares at 28.71%, cooking wares at 15.05%, amphorae at 48.75%.<sup>17</sup> Thus, we see at Ostia a sharp rise in the percentage of amphorae from the early 1<sup>st</sup> century BC to the Augustan period and beyond in the 1<sup>st</sup> century AD.

For Rome too there is evidence of a similar development.<sup>18</sup> The percentages of amphorae rise from nearly nil to 5–6% in contexts datable between the 4<sup>th</sup> and 1<sup>st</sup> centuries BC but pass to 30% or more in the Augustan period.

It appears likely that we have a consistent trend for Tyrrhenian central Italy, even on sites that must be among the best integrated into commercial circuits – low percentages of amphorae in contexts of the republican period with consequently higher ones for the other functional groups, a marked increase in the percentages of amphorae and decreases in the other functional groups in the Augustan period, a further increase in the percentages of amphorae and decreases in the other functional groups during the 1<sup>st</sup> century AD (without,

<sup>15</sup> S. AUBRY/C. BROQUET, La datation des phases de construction et de destruction de la Domus aux Bucranes: céramiques et monnaies. In: B. Perrier (ed.), *Villas, maisons, sanctuaires et tombeaux tarso-republicains: découvertes et relectures récentes. Actes du colloque international de Saint-Romain-en-Gal en l'honneur d'Anna Gallina Zevi*, Vienne - Saint-Romain-en-Gal, 8–10 février 2007 (Roma 2007) 33–45.

<sup>16</sup> R. GEREMIA NUCCI, 3.2. Periodo 1. In: F. Zevi et al., *Ostia – Sondaggio stratigrafico in uno degli ambienti della domus dei Pesci (1995 e 1996)*. *Notizie Scavi Ant. Accad. Ministero Beni Culturali e Attività Culturali (Ser. 9)* 15–16, 2004–2005, 56–69.

<sup>17</sup> R. GEREMIA NUCCI, 3.3. Periodo 2. In: F. Zevi et al., *Ostia – Sondaggio stratigrafico in uno degli ambienti della domus dei Pesci (1995 e 1996)*. *Notizie Scavi Ant. Accad. Ministero Beni Culturali e Attività Culturali (Ser. 9)* 15–16, 2004–2005, 69–109.

<sup>18</sup> R. VOLPE, *Vino, Vigneti ed anfore in Roma repubblicana*. In: V. Jolivet/C. Pavolini/M. A. Tomei/R. Volpe (a cura di), *Suburbium II. Il suburbio di Roma dalla fine dell'età monarchica alla nascita del sistema delle ville (V–II secolo a.C.)*. *Collect. Ecole Française Rome* 419, 2009, 378–381.

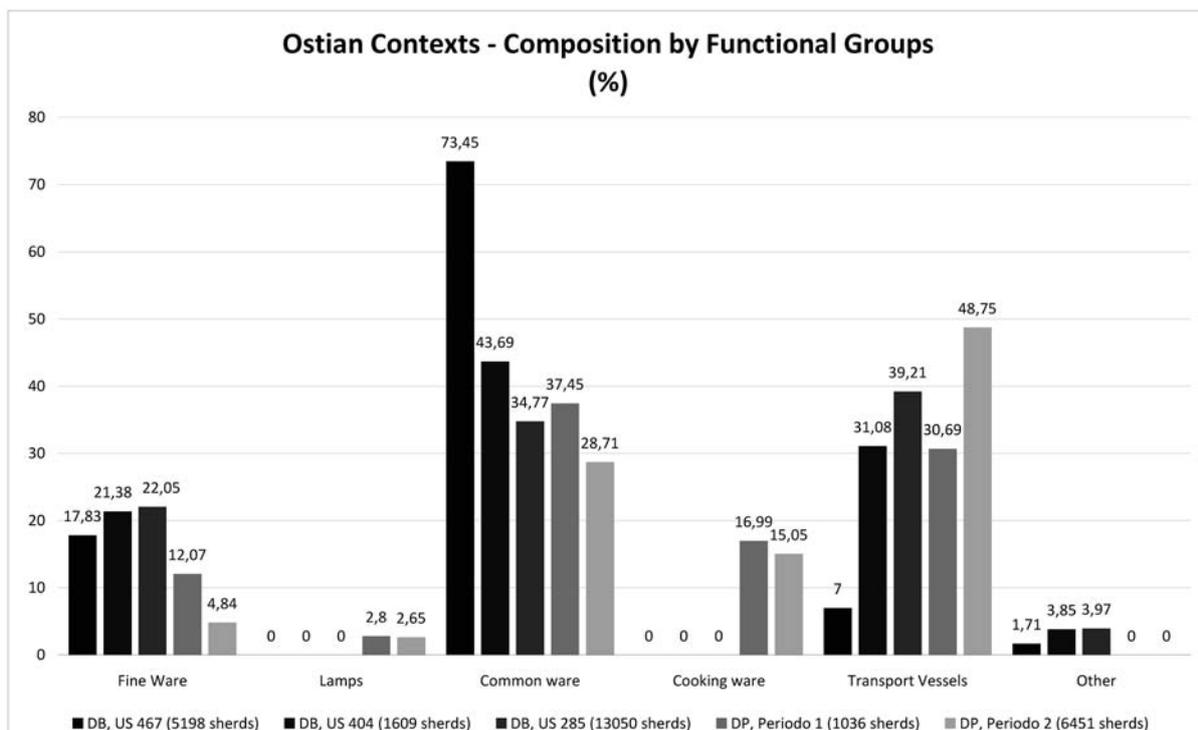


Fig. 3.

however, reaching the percentages found by the 3<sup>rd</sup> century). Thus, the same percentage of amphorae on sites in Tyrrhenian central Italy could indicate a low level of participation in trade during the later imperial period but a substantial one for the republican period or the 1<sup>st</sup> century AD.

In the discussion of the Roman material, it is suggested that the suburbium of Rome covered its need for wine in the republican period (without recourse to amphorae for transportation) and that the increase in the city’s population and the preference for using the suburbium for market gardens or luxurious dwellings gave rise after that to the importation of wine from the provinces (in amphorae). That is a satisfactory explanation from the point of view of the evidence for wine production in the surroundings of Rome. On a larger scale, I believe we have here an indication of the integration of Tyrrhenian central Italy into a Mediterranean maritime trade network that was growing as the various regions specialized (so that among other things it became preferable to import

wine to Rome rather than to produce it locally). Other parts of the Mediterranean can undoubtedly show the same phenomenon, perhaps with somewhat different dates.<sup>19</sup>

In my original studies I concluded that the evidence was good that the composition of assemblages by functional groups was indicative of a site’s openness to trade. I maintain that the present study confirms this. In those same earlier studies, I emphasized, however, the need for the examination of further cases in order to have a broader basis for comparison. That is also borne out here more dramatically than I expected.

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<sup>19</sup> C. PANELLA, Discussion. In: V. Jolivet/C. Pavolini/M. A. Tomei/R. Volpe (a cura di), *Suburbium II. Il suburbio di Roma dalla fine dell’età monarchica alla nascita del sistema delle ville (V–II secolo a.C.)*. Collect. Ecole Française Rome 419, 2009, 389, indicates that some sites in the western Mediterranean saw increases in amphorae during the late republic, although she gives no percentages.