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CONTESSA ENTELLINA (PA): AMPHORAE AND 'ROMANIZATION' IN INNER WESTERN SICILY

Introduction

This contribution aims at a typological and archaeometric study (thin section petrography) of a set of transport amphorae of the early Hellenistic to late Republican period, retrieved in a survey inland in western Sicily. The set consists of amphorae of the MGS III, IV, V and VI types, and of the later Graeco-italic[2] and Dressel 1 amphorae. We chose these amphora series because they constitute a quite homogeneous group, whose formal evolution may be followed from the 'a quarto di cerchio' amphorae to the Graeco-italic and Dressel 1.

The present work is the continuation of a research carried out on the amphorae assemblage from the Hellenistic building at Entella[3].

As a whole, these types represent a continuous evidence of food supply (almost certainly and exclusively wine[4]) from Sicilian and Italian centres. The results of such analyses allowed us to single out changes in the provenance of these containers, and to parallel such shifts with contemporary variations in settlement model in the territory here considered.

The territory of Contessa Entellina in the Hellenistic period

The district under discussion corresponds to the territory of the Comune of Contessa Entellina (PA) (136.4 km^2) (**fig. 1**), where the Laboratorio di Scienze dell'Antichità of the Scuola Normale Superiore carried out an intensive archaeological survey from 1998 to 2002.[5] The main centre of this district in Antiquity and the Middle Ages was the town of Entella, lying on an Upper Miocene gypsum plateau that looks over the valley of the Belice Sinistro river, in the north-west corner of the municipal territory. The town and necropolises of Entella have been explored since 1985 by the Scuola Normale Superiore in cooperation with the Soprintendenza BB.CC. AA., Palermo.[6] On the south, the ancient, still anonymous town on Monte Adranone (lying outside the boundaries of present survey [**fig. 1**]) probably controlled part of this territory in archaic to early Hellenistic times[7].

During the Contessa Entellina survey, 281 sites dating from Prehistory to the Middle Ages were located and investigated, together with 220 extra-site findings areas (MS)[8]. Among these locations, 121 sites and 15 extra-sites, dating as a whole from the 4th to the 1st centuries BC, yielded the amphorae fragments under discussion here. This selection of amphorae matches therefore almost all of the late classical/early Hellenistic, middle and late Republican sites; indeed, in 17 sites and 14 extra-sites the Hellenistic phase is documented only by amphorae fragments.

The aggregate map of settlements from late 4th to late 1st centuries BC (**fig. 1**) gives a flattened picture of the site distribution in the Hellenistic period[9]. Though the sites are distributed over the whole territory, we perceive a higher density to the south-west of Entella, to the east in the valley of Vallone Vaccarizzo, and above all in the southern part of the municipal territory.

The location and dimensions of the sites, together with the typology and quantity of ceramics found, point at a population characterized, along the whole period in discussion here, by small and medium size rural settlements occupying

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2 For convenience, we maintained the traditional definition of 'graeco-italic' amphorae, though we are well aware of the inappropriateness of the locution (lastly Panella 2010).

3 Corretti/Capelli 2003.

4 Bechtold 2008, 22.

5 General information on the survey may be found in AA. VV. 2006; in A. Facella et al., Contessa Entellina (PA), territorio comunale. In: D. Malfitana/M. Bonifay (eds.), La ceramica africana nella Sicilia romana (c.d.s.), and in Facella et al. in this volume.

6 General information on Entella in AA.VV., Da un'antica città di Sicilia. I decreti di Entella e Nakone. Catalogo della Mostra (Pisa 2001), with former literature (to which should be added the annual reports – 'Notizie degli Scavi' – in 'Annali della Scuola Normale Superiore' 2002, 2004, 2010, 2011, 2012).

7 G. Fiorentini, Monte Adranone (Roma 1995); former literature in Bibliografia Topografica della Colonizzazione Greca in Italia 10 (Pisa/Roma 1992) 257–265 s. v. Monte Adranone (C. A. Di Noto).

8 During the survey we distinguished between Topographic Units (UT = Unità Topografiche) (when archaeological evidence pointed at a permanent settlement) and Sporadic Finds (MS = Materiali Sporadici) when finds pertained most probably to extra-site activities. See AA.VV. 2006, 563; A. Arnese, Modelli di ritrovamento: la carta archeologica del Comune di Contessa Entellina. In: C. Ampolo (a cura di), Immagine e Immagini della Sicilia e delle altre isole del Mediterraneo antico. Atti delle Seste Giornate Internazionali di Studi sull'area elima e la Sicilia Occidentale nel contesto mediterraneo, Erice 12–16 Ottobre 2006 (Pisa 2009) 851–853.

9 For a general overview limited to the sites in the northern half of the territory, C. Michelini in: AA. VV. 2006, 570–574 fig. 353 (note that the colored labels are inverted: the caption of the green refers to the orange ones, and *vice versa*).

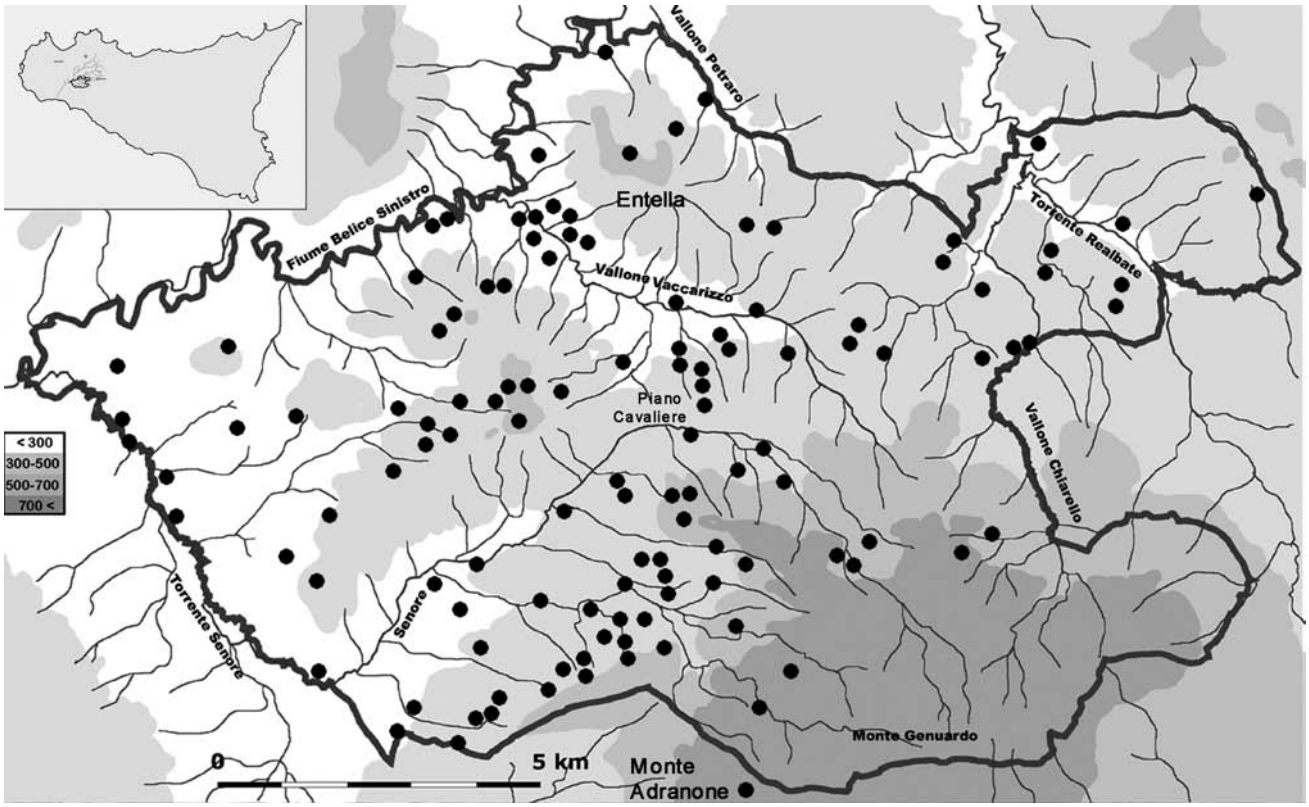

Fig. 1. Localization of the territory of Contessa Entellina in western Sicily (above left). General map of the Hellenistic sites and extra-sites.

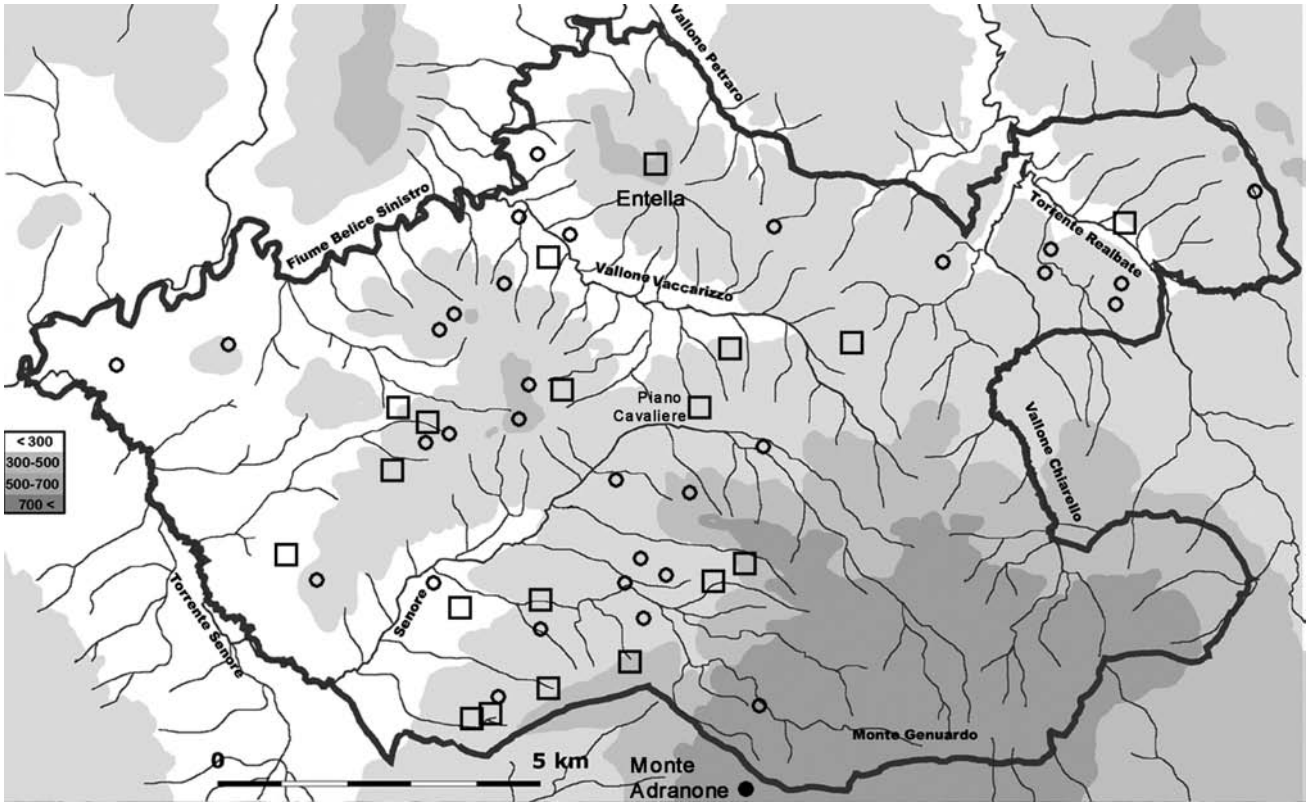

Fig. 2. Contessa Entellina survey. The Hellenistic phase. 4th century BC sites continuously occupied until the 1st century BC (empty squares) and 4th century BC sites abandoned before the middle of the 3rd century BC (empty circles) (on the basis of the amphorae evidence).

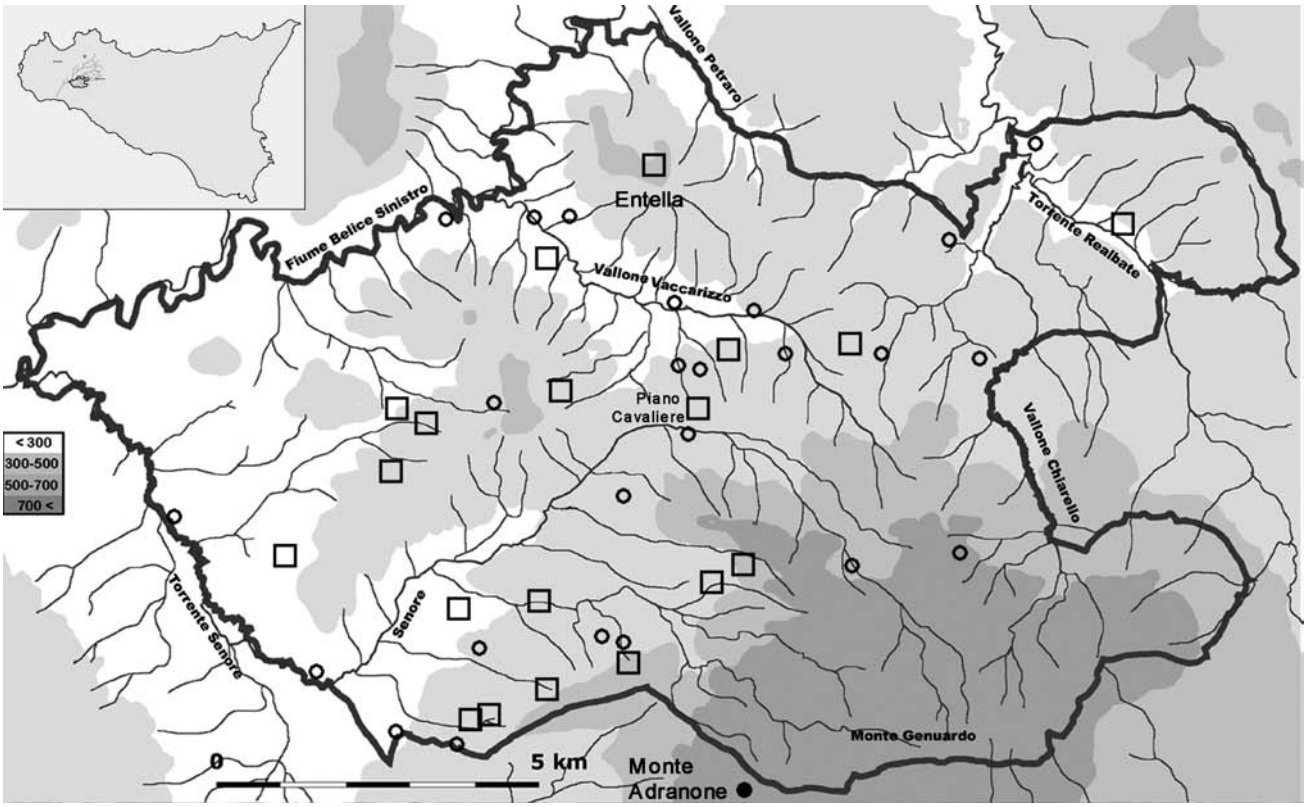

Fig. 3. Contessa Entellina survey. The Hellenistic phase. 4th century BC sites continuously occupied until the 1st century BC (empty squares) and new sites starting after the end of the 3rd–beginning of 2nd century BC (empty circles) (on the basis of the amphorae evidence).

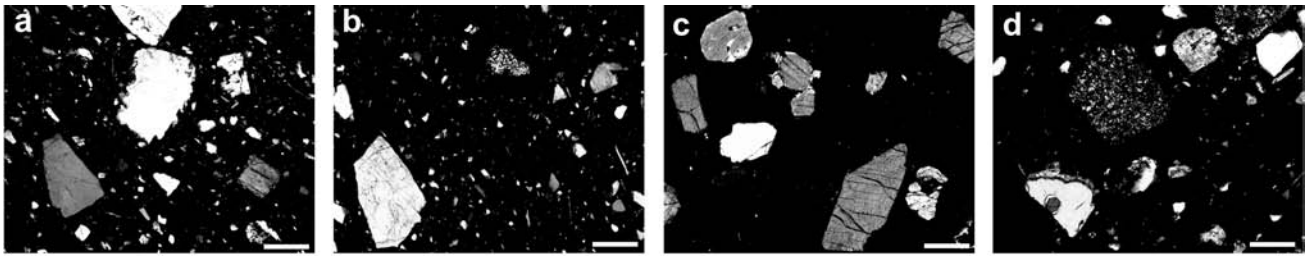

Fig. 4. Microphotographs at the polarizing microscope representative of the recognized paste reference groups (crossed nicol, scale bar = 0.2 mm): (**a**) MO1; (**b**) MO2; (**c**) MO3; (**d**) MO4.

the hillsides, lying along short- to long-distance roads, not far from water supplies. The position of these sites allows a wide visibility on the surrounding territory, though no settlement shows a clear preference for defensive character (with the obvious exception of Entella). Some empty areas correspond to lands unfit for settlement because of their geomorphological characteristics.

Leaving aside the town of Entella, there is no clear evidence for villages, though traces of necropolises, or pottery kilns, or household manufactures were retrieved too, indicating therefore some complexity in particular settlements.[10]

While early Hellenistic sites are usually small (ca. 0.05 ha., based on the extent of the ceramic finds), late Republican sites are often large (1.5–3.5 ha.) and possibly more articulated inside (*i.e.* with several buildings with different functions)[11]. These sites are settled in more than one chronological phase and show a (sometimes impressive) growth in the Imperial and late-Antique periods.

The only case of a large (late Classical and) early-Hellenistic site is Piano Cavaliere, lying on a plateau in the middle of the territory (**fig. 1**). Toward the second half of the 4th century BC Piano Cavaliere undergoes a dramatic expansion (more than 10 ha.). This site is a 'unicum' both for its strategic location, on a saddle controlling the two main river valleys of the area, and for the amount and character of the ceramic finds. They consist in an impressive number of amphorae,

[10] C. MICHELINI in: AA. VV. 2006, 572.

[11] Cfr. BELVEDERE 2002, 392, with regard to the hinterland of Himera.

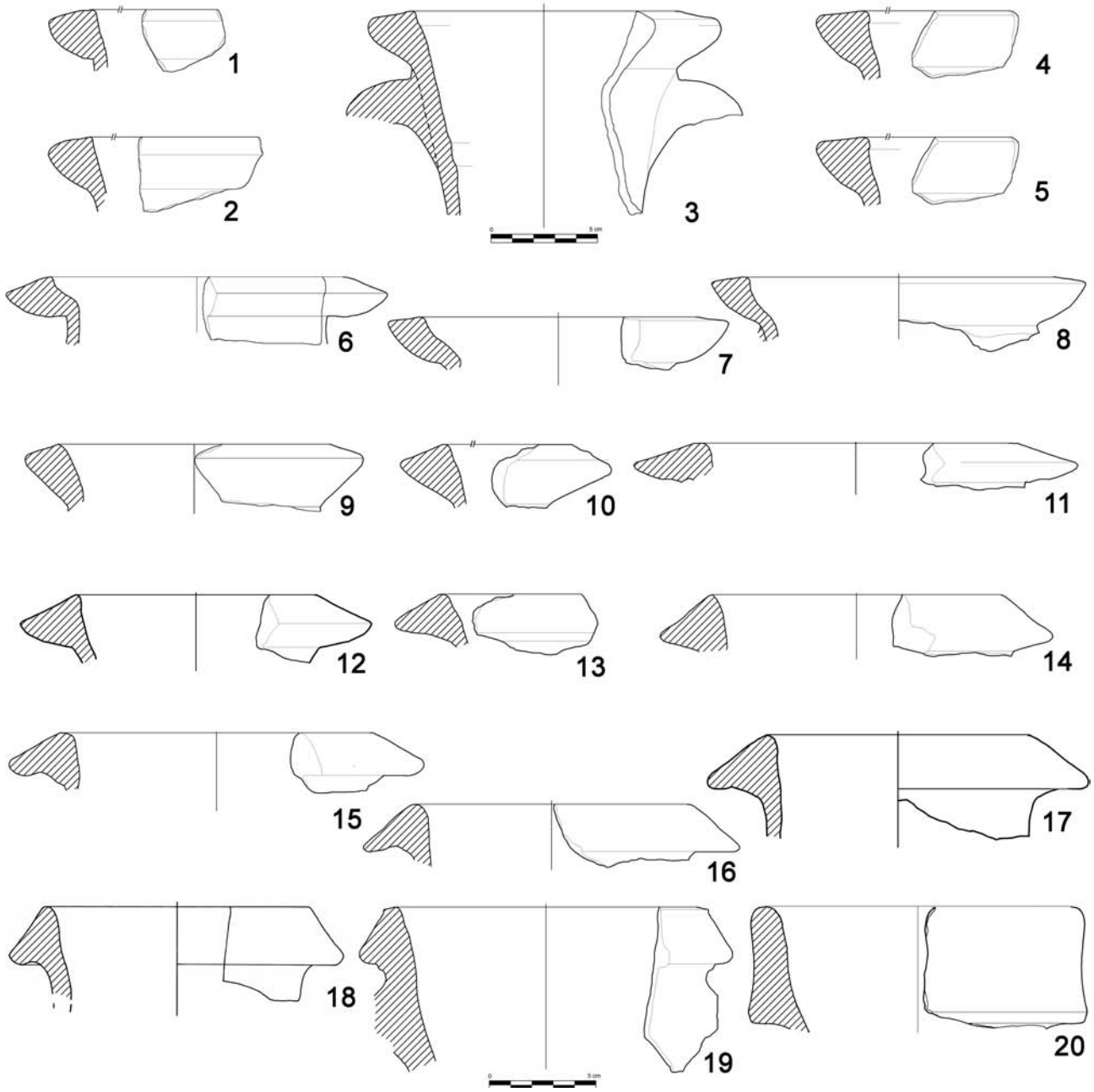

Fig. 5. Amphorae from the Contessa Entellina survey.

mainly of the MGS III, IV and 'a quarto di cerchio' type and, to a lesser extent, of Punic production.

The amphorae

We will not take into consideration the late Classical series, i.e. the MGS II, though some of them were manufactured in a fabric used for MGS III amphorae too.[12]

Within the whole range of late 4th to late 1st centuries BC amphorae from the survey, the *corpus* taken into consideration here (MGS III, IV, V, VI, 'a quarto di cerchio', Graeco-italic and Dressel 1 amphorae) is predominant. The aggregate *ratio* to all of the Punic amphorae is 2,5: 1. Also some 'Corinthian B' amphorae (easily identifiable by both shape and fabric, and already singled out at Entella[13]) were found in the survey, but they are not strictly relevant for the purpose of the present research: moreover, their presence is absolutely scarce (about 5 items) and is therefore not significant for statistic purposes.

The same is true for the very few Rhodian amphorae. The documentary basis for the present work consists in 255 fragments of rims, 52 toes, 262 handles and 100 walls. Though all these fragments were documented with regard to fabrics too, only the rim fragments were taken into consideration to build the percentages of the different amphora types.

[12] Corretti/Capelli 2003, 293–296.

[13] Ibid. 289–291.

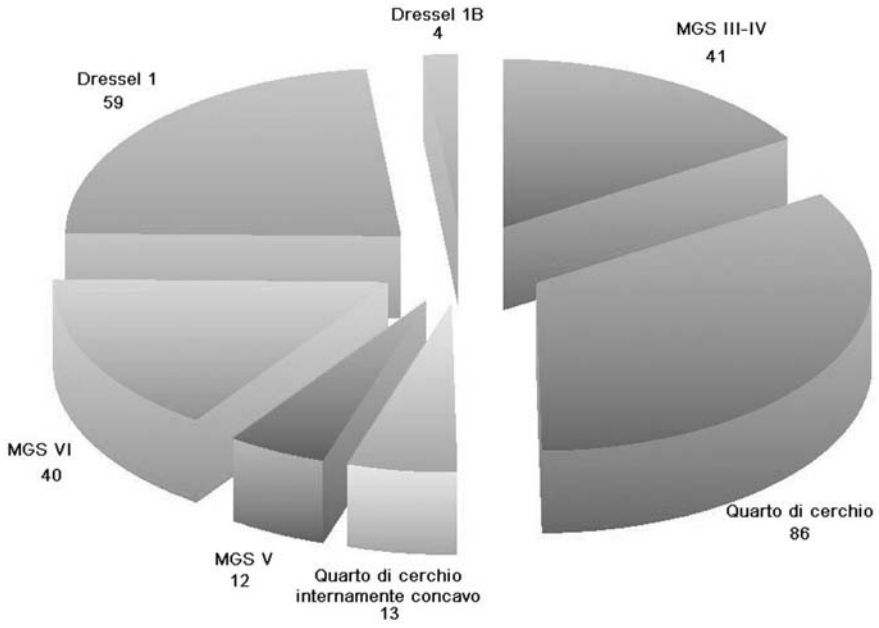

Fig. 6. Quantity of rim fragments of the MGS to Dressel 1 amphora types.

The typology

The typological identification and the consequent chronology of the amphorae fragments are hindered by their provenance from a survey collection: these ceramics are deprived of context and are usually fragmentary and worn out.

Moreover, it is generally agreed that, in the case of the Graeco-italic/Dressel 1 amphorae, the inclination of the lip is not in itself a reliable chronological indicator,[14] not to talk of the uncertainties that still trouble both the definition of Graeco-italic amphora types and their chronology.[15]

With regard to the earlier specimens, though the 'MGS' classification by Vandermersch[16] was not intended primarily as a formal typology, we adopted it because of its widespread use. Recent studies point to a difficulty in clear cut subdivision between MGS types: therefore, intermediate definitions are often used,[17] mainly between types V and VI. This is true with regard to the MGS III and MGS IV amphorae too: only complete items may be distinguished from each other, since the triangular, horizontal rim may be found on amphorae of both types.[18] Therefore, though in most cases we were able to distinguish between the two amphora types (**fig. 5,9–10** MGS III; **fig. 5,11** MGS IV), we preferred to consider "MGS III and IV" amphorae as a unique group when counting the percentages of the different containers.

On the basis of our evidence we had to increase this typology through two additional types: the "a quarto di cerchio" and "a quarto di cerchio internamente concavo" rim amphorae.

Rim fragments of the first group ('a quarto di cerchio' [**fig. 5,1–5**]) are thicker and more rounded on the external side than usual MGS III or MGS IV rims; moreover, their homogeneity in fabric suggests a unique provenance area (see below).[19] As for the chronology, the El Sec shipwreck is still reputed to yield a reliable reference for the middle of the 4th century.[20]

The second group was added to include several 'a quarto di cerchio' amphorae that show a very peculiar feature, *i.e.* a concavity on the interior of the rim[21] (**fig. 5,6–8**). This type is frequent in the neighbourhood of Contessa Entellina, and in western Sicily,[22] and differs from the amphorae of the above group in possessing a different, refined fabric.

Both these amphorae pertain to a 4th-early 3rd century BCE horizon.

Considering the whole number of rim fragments (255 items) (**fig. 6**), we notice that the older series (MGS III / IV, 'a quarto di cerchio' and 'a quarto di cerchio internamente concavo' [**fig. 5,1–11**]) are well attested (41, 86 and 13 respectively)[23], though their presence may be overrated, due to the high amount of rim fragments yielded by the single site of Piano Cavaliere (72 rim fragments). In fact, the number of MGS III and IV and 'a quarto di cerchio' amphora rims per site never rises over 5 items; indeed, the whole ceramic record from Late Classical and Early Hellenistic settlements in the territory of Contessa Entellina is usually poor.[24]

14 Panella 2010, 81 note 3. A more optimistic view, in consideration of the standardization of the amphorae profiles, in Asensio i Vilaró 2012, 35–36.

15 Panella 2010, 81–92. Barone et al. 2011, 3060–3061.

16 Vandermersch 1994; see also id. 2001, where the RMR abbreviation is introduced; see the observations by Panella 2010, 17 note 4; Barone at al. 2011, 3060.

17 Olcese 2010, 31; 37.

18 *E.g.* Olcese 2010, 315 nrr. I.A.7 e I.A.8; Rondinella 2012, 59–60.

19 Corretti/Capelli 2003, 298–300; Polizzi 2008, 318; Barone et al. 2011, 3060–3062; Rondinella 2012, 60 tab. 1,9.

20 Asensio i Vilaró 2012, 24 fig. 2b.

21 Mentioned among the MGS III/IV amphorae in Rondinella 2012, 60 tab. 2,11.

22 Corretti/Capelli 2003, 300–304; a possible production in Selinunte is suggested by a drawing in Olcese 2012, 530 nr. 143 tab. 4.XLV.19.

23 An analogy in the case of Cossyra: Bechtold 2008, 73 (with former literature).

24 C. Michelini in: AA. VV. 2006, 571–572.

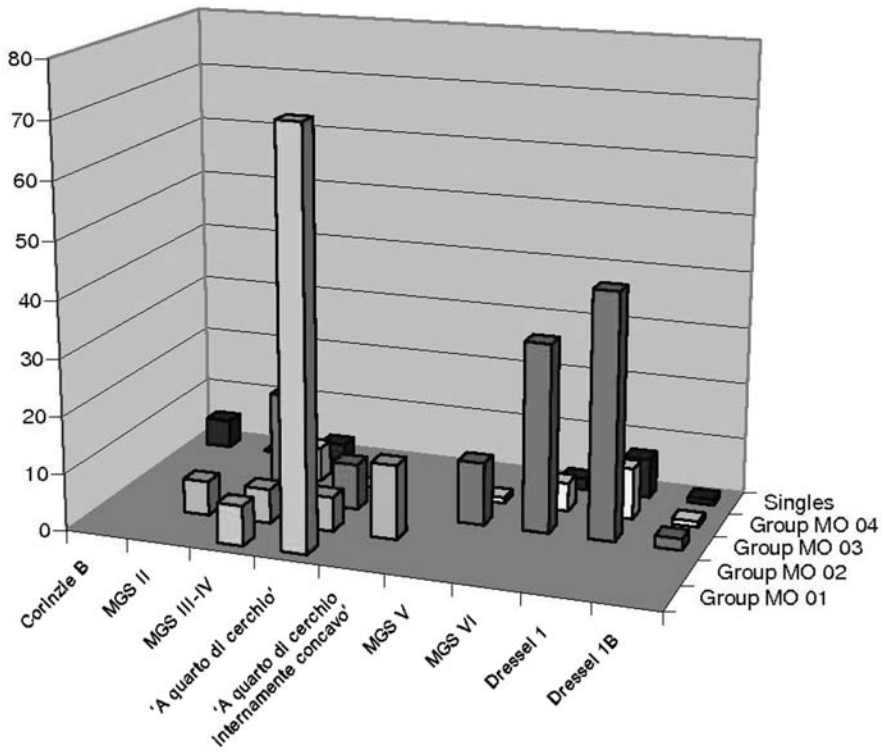

Fig. 7. Amphora types and petrographic groups.

Also the MGS VI (**fig. 5, 15–17**) and Dressel 1 (**fig. 5,18–19**) are well attested (respectively 40 and 63 items), while the low number of MGS V (12) may result from a difficulty in identifying this type only on the basis of the profile of the rim[25] (**fig. 5,12–14**). Only few rims may be surely referred to Dressel 1B amphorae (**fig. 5,20**).

The fabrics

During the classification we created a catalogue of fabric samples, by observing fresh breaks through a 10× magnifying glass.[26] The sampling increased along with the cataloguing of the ceramics. As we preferred to differentiate more, 38 fabrics were identified this way. These fabrics were then regrouped in 10 groups (called ACERR 01, 02 etc.) through direct observation.

The sampling made by archaeologists was then passed to geologists for thin-section examination under the polarizing microscope. This parallel study led to the recognition of only 4 main petrographic groups and 9 singles (called MO 01, 02 etc.). The correspondence of the petrographic groups with the ones proposed by archaeologists was total in two cases (group MO1 = ACERR 06; MO 02 = ACERR 01), while the groups MO 03 and MO 04 respectively included macrofabrics from different ACERR groups. So, fabrics that had been distinguished on the basis of the mere direct observation were classed as homogeneous through thin-section petrography (MO 03 = fabrics from ACERR 02, 03, 04; MO 04 = fabrics from ACERR 03, 04, 10). As we will see below, this disagreement is not prejudicial to the final results.

'Macrofabric' groups (ACERR), being more descriptive, will be maintained in the forthcoming publication of the survey, but only petrographic groups (MO 01 to 04) will be dealt with here.

Petrographic groups MO 01 to 04 include 80% of all of the amphorae fragments, while the remaining 20% is distributed into 9 single paste microfabrics. We chose to leave temporarily aside these single paste microfabrics, each accounting for approximately 2% of the total amount of amphorae, with limited statistical value.

With regard to the main 4 MO 01 to 04 groups, provenance hypotheses based on historical and morphological elements were compared to archaeometric data.[27]

Archaeometric data: analytical methods and results

Thin-section microscopy was carried out on all the ceramic samples, employing a Leica DC 200 polarizing microscope equipped with a digital camera. The relative abundance (modal mineralogy expressed as area %) of non-plastic inclusions was determined by conventional point-counting

[25] Bechtold 2008, 108.
[26] Same procedure in Bechtold 2008, 24.
[27] Good information on amphorae fabrics in Bechtold forthcoming, 81–158 tab. 20–25 (kindly provided by the Author).

procedures.[28] The most important characteristics, are illustrated schematically (**fig. 4a–d**) in terms of mineralogical composition, packing, sorting and grain size of the aplastic inclusions which led to the distinction of the paste groups/types differentiated in the sites of Entella.

Group MO 01 (fig. 4a)

PCRU 1 (Paste Composition Reference Unit), samples: AE 14, AE 15 AE 18, AE 19, AE 21.

This is characterized by a clearly bimodal distribution of aplastic grains (temper) up to 20-30% packing (area). It shows a clear prevalence towards a silicoclastic temper rather than a calcareous one, which, on the contrary, is not represented. Temper consists predominantly of very fine sand (0.06–0.125 mm), and medium-coarse sand (0.25–1.0 mm). Components include single mineral grains and lithic fragments deriving from acid crystalline rocks. Quartz is predominant followed by subordinate quantities of K-feldspar (often altered), fragments of granitoid and arenitic rocks, plagioclase and mica. Infrequent even if always detected are minerals originating from volcanic suites (clinopyroxene, plagioclase and sanidine).

Fabrics of this group were used almost exclusively for the 'a quarto di cerchio' amphorae.[29] On the occasion of the former study of the amphorae from the 'Hellenistic building' at Entella, mineropetrographical observation on thin section by C. Capelli led to a suggested provenance for this fabric from the North-East Sicily and Calabria area. A similar fabric is described with regard to 'a quarto di cerchio' amphorae from North-East Sicily.[30] This would lead us to the 'Mamertine' wine.

Indeed, the fabrics of this group can match more than one geological district. A possible provenance from Southern Campania *(Paestum, Velia*) cannot be excluded[31], and would fit with what we know of the vitality of wine production and export from this area before the exploitation of the Neapolitan district[32].

Group MO 02 (fig. 4b)

PCRU 2, samples: AE 1, AE 37 AE 38

Calcareous components are not significantly represented. This group can be distinguished by the quite homogeneous distribution of temper grains with a packing estimated around 15% (area). Temper consists of coarse silt (0.04–0.06 mm), very fine sand (0.06–0.125 mm), fine sand (0.125–0.25 mm) and minor quantities of medium sand (0.25–0.5 mm). The latter with grains rarely greater than 0.3 mm. Temper is predominantly represented by sub-angular or angular mono- and polycrystalline quartz (size < 0.2 mm), followed by K-feldspar, plagioclase and sporadic lithic fragments composed of high grade metamorphic rocks showing association of quartz, microcline or orthoclase feldspar, myrmekite and sillimanite. Quartzarenite fragments are also sporadic components. Quite common minute mica flakes which are homogeneously distributed in the groundmass. Rarely detected garnets and opaque minerals.

This highly refined fabric characterizes the MGS II[33], some MGS III/IV, and the 'a quarto di cerchio internamente concavo' amphorae. It is important to observe that three of these MGS III amphorae come from a site in the neighbourhood of Entella, where there is evidence for a pottery kiln of the early Hellenistic age[34] (though these MGS III amphorae rims are not misfired potsherds, actually). Table amphorae with double relief rim were surely produced at and around Entella in a fine fabric very similar to this one.

A regional provenance therefore may be supposed for amphorae made in this paste[35].

Group MO 03 (fig. 4c)

PCRU 3 samples: AE 2, AE 3, AE 4, AE 7, AE 8, AE 9, AE 11, AE 16, AE 20, AE 23, AE 24, AE 25, AE 27, AE 34

This paste is characterized by a serialized temper distribution with a bimodal tendency and packing ranging within 15–30% (area). Very fine sand (0.06–0.125 mm) and medium sand (0.25–0.5 mm) are the prevailing grain size classes. Concerning composition the peculiarity of this paste is the contemporaneous presence of bioclasts, "micritic clots"[36] together with volcanic minerals and rock fragments following the typical association of the high-K series (HKS) volcanic rocks (Central Italy Plio-Quaternary magmatism). Not present are minerals and rock fragments that can be ascribed to terrigenous sedimentary formations. Temper is thus composed by (in order of decreasing abundance) K-feldspar (sanidine, often showing Carlsbad twinning), clinopyroxene, biotite, plagioclase, feldspatoids, alkaline amphibole, olivine, opaque oxides. Lava fragments are mainly represented by trachytic rocks and more or less extensively vesiculated glass scoriae. It must be underlined that the relative proportion of calcareous bioclasts (or "micritic clots") and volcanic temper is quite variable all over the observed samples.

This group of fabrics is almost unanimously attributed to the island of Ischia and the Gulf of Naples.[37] It shows some internal differences according to the frequency and dimensions of some of its components.

Some of the MGS III/IV, many of the MGS V, VI, Graeco-italic and Dressel 1 were manufactured in these fabrics.[38]

Group MO 04 (fig. 4 d)

PCRU 4 samples: AE 6, AE 10, AE 26, AE 29, AE31, AE 32, AE 36

The paste shows a serialized temper distribution with a bimodal tendency and packing ranging within 20–30% (area).

28 Van der Plas/Tobi 1965.
29 The fabric described by Rondinella 2012, 60 is similar to paste MO01.
30 Barone et al. 2011.
31 Bechtold 2007, 52.
32 Id. forthcoming114–117.
33 Rondinella 2012, 59.
34 C. Michelini in: AA. VV. 2006, 572; Corretti/Capelli 2003, 316.
35 Bechtold 2007, 58; id. forthcoming 117–119.
36 M. A. Cau Ontiveros/P. M.Day/G. Montana, Secondary calcite in archaeological ceramics: evaluation of alteration and contamination processes by thin section study. In: V. Kilikoglou/A. Hein/Y. Maniatis (eds.), Proceedings of the 5th European Meeting on Ancient Ceramics, Athens, 18–20 October 1999. Modern trends in scientific studies on ancient ceramics. BAR Internat. Ser. 1011 (Oxford 2002) 9–18.
37 Olcese 2010.
38 Bechtold 2007, 52; id. 2008, 108: "during the first half of the 3rd century…amphorae from Campania start to be documented … in … western Sicilian contexts".

The prevailing grain temper size falls within the classes of very fine sand (0.06–0.125 mm) and medium sand (0.25–0.5 mm). Rare grains with size greater than 0.5 mm. In regard to composition, this paste is characterized by abundant siliceous sedimentary detritic materials, while volcanic components (both minerals and lithic fragments) are not significantly represented. The latter temper constituents are composed of clinopyroxene and sanidine. Siliceous sedimentary detritic components are quartz (mono- and polycrystalline), orthoclase feldspar, plagioclase, quartzarenite fragments, granitoid rocks. Calcareous component is sporadic and mainly represented by "micritic clots".

The possible provenance of this group is the coast of Campania and Latium. Of course, given the deepening characterization of the Tyrrhenian fabrics, more detailed studies will allow a precise identification of the single workshops. Anyway, in the present study a general attribution is enough to perceive large-scale changes.

Typology, chronology and fabrics

Putting together typological and archaeometrical data (**fig. 7**) we notice that pastes of groups MO 01 and MO 02 are used only in the early amphorae series (some MGS III/IV, 'a quarto di cerchio' and 'a quarto di cerchio internamente concavo' amphorae) and disappear in later amphorae types. Independently of the location of the amphorae workshops which used these pastes[39], it is clear that their products do not reach the Entella territory after the transition to the MGS V and VI series, that is to say, the middle? of the 3rd century BCE[40].

We may also observe that the amphorae from the Gulf of Naples, easily identifiable through the volcanic inclusions in their fabric, are present in a small percentage in the territory of Entella at the beginning of the 3rd century BC.[41] They become more and more frequent in the following decades, and towards the end of 3rd–beginning of 2nd century BC they replenish in an almost exclusive way the local demand for wine.[42]

Typology, fabrics and settlement

The distribution of the different amphorae types in the territory points at a clear discontinuity[43] between the sites yielding MGS III/IV, 'a quarto di cerchio' and 'a quarto di cerchio internamente concavo' amphorae (**fig. 2**), and the sites where later amphorae (MGS V, V/VI, VI, later Graeco-italic and Dressel 1) were retrieved (**fig. 3**). So, amphorae chronology marks a major change in the territory of Entella around the middle of the 3rd century BC.[44]

But this is not the only change that we perceive through these containers. In fact, we observe a parallel and decisive shift also in the fabrics of the transport amphorae, pointing at an increasing share of Campanian (mainly Neapolitan) wine traders[45] against a dramatic fall of regional productions.

Several of the sites where earlier amphorae series were recorded, disappear in the first decades of the 3rd century BC.[46] These vanishing settlements are located mainly in the Carrubba Vecchia hills to the south-west of Entella, and in the Cozzo Mole area, to the east (**fig. 2**). These sites are small and usually occupy the upper hillsides; in most cases, their frequentation begins in the archaic period (6th–5th centuries BC). Indeed, two thirds of the early Hellenistic sites in the northern half of the territory (discussed in 2006) were active also in the archaic/classical age[47].

Later amphorae series, instead, mark a flourishing of new settlements from the late 3rd–early 2nd century BC onward[48]. These new settlements show a clear preference for the plains, near the watercourses and long distance roads, expanding also in formerly unsettled areas (**fig. 3**). All these characteristics indicate in our opinion a different settlement model and a new approach to the territory.

Conclusions

The informative potential of the transport amphorae cannot be overestimated, though the conjunct archaeological and archaeometrical study of these containers surely yields primary information on commercial networks and food supply. So, the data discussed above will need a deep re-examination on the basis of a parallel study of other ceramic classes from the same sites. Primary information will come from the black-glazed pottery (mainly 'Campana A'): the work is in progress, but a major change in the ceramic supplies is already perceivable, as had been suggested for the main centre (Entella) in the Hellenistic period[49].

Anyway, it emerges clearly that a parallel change occurs in settlement pattern, on one side, and amphorae provenance and distribution on the other. The time of this evolution corresponds to the increasing Roman presence in Sicily and to the development of wine export from the Gulf of Naples, again under Roman influence.[50]

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39 A useful catalogue of ceramic workshops (including transport amphorae) is now provided by Olcese 2012, mainly on the basis of literature. For Sicily, a production of MGS III or IV amphorae is suggested at Naxos (467, nr. S072), Manfria (409, S120), Selinunte (529-530, S143); archaeometrical evidence for amphorae production in North-East Sicily in Barone et al. 2011.

40 Bechtold 2007, 61.

41 A parallel in Cossyra: Bechtold forthcoming 122.

42 As attested in Late Punic I Carthage: Bechtold 2007, 53. For Segesta, Entella, Lilybaeum and Lipari see ibid. 62. A parallel in late 3rd–early 2nd century Iberia: Asensio I Vilaró 2012, 27; 31.

43 C. Michelini in: AA. VV. 2006, 573–574.

44 A similar remark concerns the amphorae assemblage at Pizzo di Ciminna (Rondinella 2012, 70).

45 As documented *e.g.* at Lipari: Bechtold 2007, 63.

46 A similar phaenomenon occurs in the territory of Resuttano: Burgio 2002, 155.

47 #. Gargini in: AA. VV. 2006, 568; C. Michelini in: AA. VV. 2006, 573.

48 Cfr. the territory of Resuttano in the Hellenistic period: Burgio 2002, 155–156; vd. also Belvedere 2002, 391 for the hinterland of Himera.

49 C. Michelini, Entella fra III sec. a.C. e I sec. d.C. Note preliminari. In: Atti delle Quarte Giornate Internazionali di Studi sull'Area Elima, Erice 2000 (Pisa 2003) 933–972.

50 Olcese 2010, with earlier literature; Vandermersch 2001, 174; 191.

Finding an appropriate label (Romanisation?) for this change is not so relevant for the present research.

We just aimed at illustrating archaeological evidence from a large inland district in western Sicily between the early Hellenistic and the late Republican periods, showing the evolving settlement pattern and the growing dependence on external supplies in an area more and more devoted to grain production after the Punic wars.[51]

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[51] This idea is well developed in Bechtold 2007, 63; 65 (with reference to the whole of Sicily). By contrast, a different trend can be seen *e. g.* at Carthage, where amphorae assemblages show a percentage increase of local containers vs. imported amphorae in the late Punic II period (200–146 BC) (R. Docter/B. Bechtold, Transport Amphorae from Punic Carthage: an Overview. In: L. Nigro (ed.), Motya and the Phoenician ceramic repertoire between the Levant and the West 9th–6th century BC. Proceedings of the Internationale Conference held in Rome, 26th February 2010. Quad. Arch. Fenicio-Punica 5 (Roma 2010) 85–116; 98–99; Bechtold 2007, 54).

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