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## More Fabrics of the 'Circuito del Estrecho' Area: Amphorae from the Region of Málaga/Almería from Southern-central Mediterranean Sites\*

### Introduction

The present research was inspired by the identification of an important find group among the approximately 280 Punic amphorae found in the necropolis of Himera in western Sicily.<sup>1</sup> This assemblage is composed of 30 transport containers which formally refer to types produced in the 'Circuito del Estrecho de Gibraltar' area.<sup>2</sup> The fabric study of the samples has led to the distinction of at least four fabrics,<sup>3</sup> each of which is represented by several items. According to the authoritative evaluation of selected macrophotos of three of these fabrics<sup>4</sup> conducted by Joan Ramon, all of these can clearly be attributed to workshops of the coastal area of the region of Málaga or Almería.<sup>5</sup>

In a second step, this southern Spanish sample set from Himera has been completed by single fragments from Carthage,<sup>6</sup> Pantelleria<sup>7</sup> and Segesta (Grotta Vanella dump),<sup>8</sup> which serve to add

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\* Special thanks are due to S. Gallagher, University of Warwick, for his critical input during the correction phase of the English manuscript (introduction, ch. 1-2).

<sup>1</sup> I am very indebted to S. Vassallo (Soprintendenza BB.CC.AA. di Palermo) for the permission to study and sample the whole assemblage of Punic amphorae yielded by the necropolis of Himera which will be published in Bechtold and Vassallo (in preparation). For the first identification of amphorae from the 'CdE area' at Himera, see Montana et al. 2006, 150, 152. The samples from Himera have been assigned the FACEM identification number 'M 179/1'.

<sup>2</sup> For this term, see Docter 2007, 646-7 with earlier references.

<sup>3</sup> For the description of fabrics CdE-A-3 to CdE-A-5, see below, Schmidt. Fabric CdE-A-2 has already been identified by V. Gassner, see Gassner 2011.

<sup>4</sup> CdE-A-2 (samples M 179/88 and M 179/89), CdE-A-3 (samples M 179/107 and M 179/108) and CdE-A-4 (sample M 179/106).

<sup>5</sup> I am very indebted to my colleague J. Ramon (University of Barcelona) for his kind email communication (10.9.2014): "Son claramente todas talleres de la costa central y oriental andaluza, de componente metamórfica (entra Málaga y Almería, más probablemente Málaga."

<sup>6</sup> I thank the directors of the excavations at the Bir Messaouda site at Carthage (2002-2005 campaigns) R.F. Docter (Gent University) and F. Chelbi (then Institut National du Patrimoine) for allowing me to consider within the framework of this paper two samples (with identification numbers 'M 92/1'). For the earlier identification at Carthage of Archaic amphorae from the 'CdE area', see Docter 2007, 646-50. For southern Spanish amphorae of the Middle Punic period, see Bechtold 2008, 83-5, 125-6; Docter and Bechtold 2011, 103-6.

<sup>7</sup> I am very indebted to M. Almonte (Direzione Generale delle Antichità a Roma), responsible for the Cossyra survey, Th. Schäfer (Universität Tübingen) and M. Osanna (then Scuola di Specializzazione di Matera), co-directors of the excavations on the acropolis of S. Teresa (2000-2011 campaigns), for the liberty to study selected

more information to the distribution pattern of this class in the central Mediterranean area. The here presented short contribution is intended to supplement a previous paper entitled 'Fabrics of Punic Amphorae from the Circulo del Estrecho (CdE)', published within the framework of the first edition of FACEM in 2011, which focused on the occurrence of southern Spanish amphorae at Velia.<sup>9</sup> As such, in the following, we will briefly discuss the dia-chronic occurrence of amphorae from the area of Málaga in selected consumption centres of the southern-central Mediterranean. On the other hand, because of the current lack of samples from the production region itself catalogued in the FACEM database, and since the samples presented herein all derive from central Mediterranean sites, no attempt will be made to identify the single fabrics of our CdE-group with specific amphorae series known from Andalucía.<sup>10</sup>

## 1. Archaeometric research on southern Spanish amphorae from Himera

G. Montana and team have undertaken an archaeometric analysis of four amphorae from Himera. Two samples<sup>11</sup> have been referred to 'impasto V', attributed to the area of Baetica, while two more items<sup>12</sup> form 'impasto II' of uncertain provenance (possibly north-western Africa).<sup>13</sup>

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materials yielded by their research. Furthermore, I owe my thanks to the authorities of the Soprintendenza BB.CC.AA. di Trapani for granting sampling permission. The amphorae samples from Pantelleria have been assigned the FACEM site identification number 'M 119/'.

<sup>8</sup> I thank M. de Cesare (Università degli Studi di Palermo) and M. Quartararo (Pisa) for their generous permission to consider for the present research one sample from the Grotta Vanella dump. The whole assemblage of Grotta Vanella is currently being prepared for publication by M. de Cesare. For an overview of the Punic amphorae from Grotta Vanella, see Quartararo 2015. The samples from Segesta have been assigned the FACEM identification number 'M 165/'.

<sup>9</sup> Gassner 2011: two items of Ramon's T-11.2.1.3, attributed to fabrics CdE-A-1 and CdE-A-2.

<sup>10</sup> It has to be underlined, however, that currently only a very few workshops have been identified in this area. For a recent summary of the status of research, see Ramon 2006, 191.

<sup>11</sup> To 'impasto V' belong M 179/107 and M 179/108, both attributed to fabric CdE-A-3, see below, Schmidt.

<sup>12</sup> To 'impasto II' belong M 179/89 and M 179/109, both attributed to fabric CdE-A-2, see below, Schmidt.

<sup>13</sup> Thin-section petrography and chemical analyses by X-ray fluorescence spectrometry (XRF), see Montana et al. 2006, especially 150, 152: 'impasti' II and V.

## 2. Amphorae from the area of Málaga/Almería: new evidences from selected consumption sites of the southern-central Mediterranean

The earliest amphorae of the here studied sample set<sup>14</sup> are of Ramon's T-10.1.2.1. Most of them<sup>15</sup> belong to fabric CdE-A-3, which corresponds to the fabric mainly used for the bulk of the 7th century B.C.E. CdE amphorae found in the settlement stratigraphies at Carthage, and published by R.F. Docter.<sup>16</sup> Interestingly, based on archaeometric analyses, in Sardinia, at Sulcis and Monte Sirai, a small assemblage of Ramon's T-10.1.2.1 has also been referred to the province of Málaga.<sup>17</sup>

It is important to underline, however, that, according to the evidences from Pantelleria, at least two more fabrics have been identified among the sample set of the Ramon T-10.1.2.1 amphorae: one item refers to CdE-A-4,<sup>18</sup> while two more fragments are of the same, still unpublished, fabric.<sup>19</sup>

The majority of the amphorae (N 22) studied within the framework of this short contribution belong, however, to Ramon's 5th century B.C.E. SG-11.2.1.0 and eight items out of this group can be attributed more specifically to Ramon's T-11.2.1.3. The notable plurality of identified fabrics masterly confirms the 'proyección comercial externa' during the earlier Middle Punic period of the whole production area, localised on both shores of the Straits of Gibraltar.<sup>20</sup> The bulk of our samples have been attributed to fabric CdE-A-2,<sup>21</sup> whilst a minor number of items

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<sup>14</sup> The present research is based on the study of 40 samples referred to the production area of the Straits of Gibraltar: 33 items have been attributed to fabrics CdE-A-2 to CdE-A-5 (see below, Schmidt), whilst seven items belong probably to the same production area, but cannot be referred to the here-published fabrics.

<sup>15</sup> See below, fabric CdE-A-3: FACEM – <http://facem.at/m-179-108>, FACEM – <http://facem.at/m-119-127>. Furthermore the amphora W 7487 from the necropolis of Himera (unpublished) and sample M 92/34 from Carthage, published in Bechtold 2008, 84, cat. 16, pl. 1,3, fig. 19.

<sup>16</sup> I thank R.F. Docter for his kind confirmation based on comparison of samples by binocular microscopy (April 2015). Previously see Docter 2007, 646; Ramon 2006, 199-205.

<sup>17</sup> Botto et al. 2005, 94.

<sup>18</sup> See below, fabric CdE-A-4: FACEM – <http://facem.at/m-119-128>.

<sup>19</sup> M 119/129, M 119/130, published in Bechtold 2014, cat. 19-20.

<sup>20</sup> Ramon 1995, 233-7, 283-4.

<sup>21</sup> See below, fabric CdE-A-2: FACEM – <http://facem.at/m-179-88>, FACEM – <http://facem.at/m-179-89>, FACEM – <http://facem.at/m-179-109>. Furthermore, from the necropolis of Himera, the amphorae W 185, W 278, W 1663, W 5302, W 6447, W 8343 (all unpublished).

refer to CdE-A-3,<sup>22</sup> CdE-A-4,<sup>23</sup> CdE-A-5<sup>24</sup> and to other, still unidentified, fabrics.<sup>25</sup>

Finally, recent excavations undertaken on the acropolis of Pantelleria have yielded one 4th century B.C.E. amphora of Ramon's T-8.1.1.2, found in a presumably early 4th century B.C.E. context. This is attributed to fabric CdE-A-2.<sup>26</sup>

### 3. Preliminary concluding remarks

Despite the limited number of analysed items from a very few sampling sites, the here presented fabric study allows, however, to formulate some preliminary remarks on the continuously increasing evidences for the distribution of southern Spanish Punic amphorae in the southern-central Mediterranean. The documentation of some 7th century B.C.E. amphorae of Ramon's T-10.1.2.1 from the area of Málaga at Cossyra and Himera<sup>27</sup> seem to confirm earlier hypotheses about Carthage's role not only as one of the most important consumers, but also as the major distribution centre for southern Spanish commodities (vine?).<sup>28</sup> On the other hand, one can state the widespread and constant documentation of ceramic finds, most of all transport amphorae, of Carthaginian fabric at many coastal sites of the Iberian peninsula from the middle of the 8th to the late 7th/early 6th century B.C.E.<sup>29</sup> which suggests a direct participation of Carthaginians themselves in the commercial activities between the Far West and the central Mediterranean area.

Economic relations change dramatically after the 'Iberian crises' of the second half of the 6th century B.C.E.<sup>30</sup> The commercial revivification of the whole area of the Straits of Gibraltar, linked to fish-processing activities on an industrial scale, is best documented by the extremely wide-

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<sup>22</sup> See below, fabric CdE-A-3: FACEM – <http://facem.at/m-179-107>. Furthermore, from the necropolis of Himera W 3736, W 5418, W 6469 (all still unpublished). From the Grotta Vanella dump at Segesta M 165/48, see Quartararo 2015.

<sup>23</sup> See below, fabric CdE-A-4: FACEM – <http://facem.at/m-179-106>. Furthermore, from the necropolis of Himera W 7245 (still unpublished).

<sup>24</sup> See below, fabric CdE-A-5: FACEM – <http://facem.at/m-179-105>. FACEM – <http://facem.at/m-92-32>.

<sup>25</sup> W 133, W 2765, W 7050 and W 7793 from the necropolis of Himera (still unpublished). From Pantelleria M 119/258 (PN 04 ACR RIC, UT 86.1-5, inv. 16149, from the Acropolis survey, unpublished).

<sup>26</sup> See below, fabric CdE-A-2: FACEM – <http://facem.at/m-119-105>.

<sup>27</sup> To this distribution pattern has to be added Motya with several documented items of unidentified fabric: Toti 2002, 278, type 5; Nigro 2007, 272-3, pl. LXXIX, MD.04.1111/21; Docter 1997, tab. 20.28.

<sup>28</sup> Ramon 2006, 205.

<sup>29</sup> Ramon 2010, 177-80, 190. Previously Ramon 2008, 245.

<sup>30</sup> For this phenomenon, see Ramon 2006, 199, 208; previously Docter 1997, 132; Ramon 1995, 281-2.

spread distribution of Ramon's SG-11.2.1.0. Outside the production area this class has been found in Sardinia, on Sicily, in the Tyrrhenian- and Ionian-Adriatica area and on the Greek mainland.<sup>31</sup> At 5th century B.C.E. Carthage southern Spanish amphorae are not unknown, but its occurrence is incomparably lower than in the Archaic period.<sup>32</sup> In parallel, on the Iberian peninsula we can state an interruption of the import of Carthaginian ceramics from the second half of the 6th to the last quarter of the 5th century B.C.E.<sup>33</sup>

The new amphorae data especially from Himera, lead us to the hypothesis to consider this Greek colony one of the trans-shipping centres of southern Spanish commodities towards the East.<sup>34</sup> At the same time, Himera was probably the principal distribution centre for the commercialisation of Spanish fishery products towards the western Sicilian hinterland,<sup>35</sup> but also towards the Tyrrhenian area.<sup>36</sup>

Finally, the here presented fabric studies give clear evidence for a renewed (or rather continuous?) industrial activity of the Archaic workshops related to the production of Ramon's T-10.1.2.1 in fabrics CdE-A-3 and CdE-A-4 during the Middle Punic period when the same fabrics are documented by several items of Ramon's T-11.2.1.3.

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<sup>31</sup> Ramon 1995, 651, fig. 258. For an up-dated distribution pattern of this class in the central Mediterranean see Docter and Bechtold 2011, 104.

<sup>32</sup> Docter and Bechtold 2011, 104.

<sup>33</sup> Ramon 2010, 190.

<sup>34</sup> For the over-sea trade of the Middle Punic amphorae of the area of the Straits of Gibraltar see Zimmermann Munn 2003, 209-10, note 140. The author suggests, alternatively to the Archaic route along the shores of North Africa, a second one via the Balears and Sardinia.

<sup>35</sup> In addition to the new fragment from Segesta (see above, note 22), see Docter and Bechtold 2011, 104 with further references to be added to Ramon's distribution map of 1995.

<sup>36</sup> For the documentation at Velia of two items of Ramon's T-11.2.1.3, see Gassner 2011.

KARIN SCHMIDT

## Amphorae Fabrics of the region of Málaga or Almería

### Transport amphorae (CdE-A-2 to CdE-A-5)

#### FABRIC DESCRIPTION

#### **CdE-A-2 (M 6/85; M 179/88. 89. 109; M 119/105) Ref. M 6/85**

Fabrics CdE-A-1 and CdE-A-2 have already been described in a previous paper by V. Gassner.<sup>1</sup> Both fabrics are characterised by a dense sand temper with abundant quartz grains (0.04–0.8 mm), even if fabric CdE-A-2 shows a lower percentage of calcium carbonate. Some samples have larger quartz grains (up to 1.2 mm, e.g. M 119/105). The colour of the matrix is light red, light brown or very pale brown, often with a light brown or light red core.

#### **CdE-A-3 (M 179/107. 108; M 119/127) Ref. M 179/107**

Fabric CdE-A-3 differs from CdE-A-1 and CdE-A-2 (see above) in a fine to middle-fine and compact matrix, characterised by a low porosity of 2.5%–5% and a packing range from 12.5%–15%. Its sand temper (quartz grains max. 1.1 mm) shows a lower density with a predominance of small to large black to grey particles (0.04–1.1 mm). Red and/or reddish-brown particles are also frequent. Very small calcium carbonate fragments are very frequent, while larger fragments and pseudomorphoses appear to be quite rare (max. 1.0 mm). Foraminifera are present in various quantities. Furthermore, we find frequent, partly fractured, white shining grains (clear quartz ?), as well as some dark shining particles. The colour of the matrix is light red or pale brown and pale red, often with a light to dark grey core.

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<sup>1</sup> Gassner 2011.

**CdE-A-4 (M 119/128; M 179/106) Ref. M 119/128**

Fabric CdE-A-4 is close to CdE-A-3. It has a middle-fine and compact matrix with a discrete amount of sand temper. Large-sized black particles are frequent and predominant (up to 1.0 mm), while red particles are infrequent and quartz grains infrequent to frequent. The matrix is riddled with very small-sized calcium carbonate particles and, most of all, with pseudomorphoses (<0.04–0.16 mm, singularly up to 1.4 mm). Among these latter ones might be also very small foraminifera. The packing ranges about 15%, the porosity about 5%. The colour of the matrix is mainly light red and/or light brown or grey.

**CdE-A-5 (M 92/32; M 179/105) Ref. M 179/105**

CdE-A-5 differs from fabric CdE-A-4 in a lower quantity of large-sized, black particles, while the frequency of red/reddish-brown particles can be slightly higher. Generally, the numerous calcium carbonate particles and pseudomorphoses are a little bit larger (<0.04–0.4 mm, singularly up to 1.6 mm). Some foraminifera are also present. The packing seems to be slightly higher (about 20%). The colour of the matrix is light red, light brown, grey or light red/light brown and grey.

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