

BABETTE BECHTOLD

The Pottery Production of Punic Carthage*

The archaeological research conducted over the last thirty years has given clear evidence for the existence of a local pottery production at Carthage from its earliest occupation period onwards, that is to say from the second half of the eighth century B.C.E.¹ As an excellent example of the presence of high percentages of locally produced ceramics (handmade ware, plain ware, red slip- and bichrome ware and amphorae), already in deposits of the second half of the eighth century B.C.E., one might mention a stratified archaeological sequence yielded by the recent excavations of the Ghent University/Institut National du Patrimoine (INP) in trench 4 of Bir Messaouda.²

A pottery quarter has been identified at the southern fringes of the settlement, near the ancient coast line and below the Roman *cardo IX*,³ as part of the 'industrial belt' of Punic Carthage. Kilns active during the Late Punic period have been excavated at Carthage-Dermech and Carthage-Douimès.⁴

For archaeological reasons, therefore it is highly likely that the overwhelming majority of the pottery found in settlement deposits of Punic Carthage was produced by local workshops. This holds for almost all ceramic classes attested to within the large span of time from the second half of the 8th to the middle of the second century B.C.E.:

1. The table wares, that is to say the red slip-, bichrome and smoothed wares⁵ of the Early Punic and Early Punic/Middle Punic period (760–480 BC),⁶ the painted ware⁷ of the Middle Punic period (480–300 BC) and the black glaze ware⁸ of the Late Punic period (300–146 BC).
2. The plain- and cooking wares of the whole Punic period.⁹
3. The transport amphorae of the whole Punic period.¹⁰
4. The handmade pottery¹¹

¹ * I wish to thank my friend and colleague R.F. Docter (Ghent University) for his critical input in the correction phase.

Archaeological levels dating to the second half of the eighth to the early seventh centuries have been identified in several areas of the ancient settlement, for a recent overview see Docter 2007b, 43–9, contexts 1–79.

² Docter et al. 2008.

³ For the position of this area in relation to the rest of the settlement see Docter 2007b, 38, fig. 1, no. 2. Rakob 1989, 164–66, 190–2, fig. 5 A9.15.18.19. For the pottery dump related to the activities of one of the kilns of this ceramic quarter see Vegas 1990.

⁴ Vegas 1990, 34 with references. For a detailed discussion of the Dermech kilns see also Falsone 1981, 50–2.

⁵ For a detailed description of the macroscopic characteristics of the local fabrics and the morphological repertoire of the Carthaginian series see ultimately Briese and Peserico in: Niemeyer et al. 2007, 271–2, Peserico 2002; Peserico 2007 and Briese 2007 with earlier references.

⁶ For the revised period system developed from the deposits excavated on the Bir Messaouda, see now Bechtold 2010, 4–6.

⁷ For a recent discussion of the class and previous references see Bechtold 2007c, esp. 328–32. Ultimately see Bechtold 2010, 15–6, fig. 8; 29–30, fig. 17.

⁸ For a detailed description of the macroscopic characteristics of the presumably local fabrics and references to the excavation of the 'dépotoir' of La Rabta, near Carthage, consisting in misfired Black Glaze ware, see ultimately Bechtold 2007b, 561–66, 575–86. For a recent discussion of the morphological repertoire of the local Black Glaze series see Bechtold 2010, 39–41, fig. 22; 51 and Bechtold (forthcoming 3), § 4.

⁹ For a detailed description of the macroscopic characteristics of the local fabrics and the typological occurrence of this class see Bechtold 2007c with earlier references; Bechtold 2010, 17–9, figs. 9–10; 30–2, figs. 18–9; 40–3, figs. 23–5; 53–6, figs. 31–2.

¹⁰ For the Early Punic and Early Punic/Middle Punic period see Docter 1997 and Docter 2007a. For the Middle Punic period see Bechtold 2008, for the Late Punic period see Bechtold 2010, 45–7, fig. 27; 59–62, fig. 34, all with earlier references. For an overview of the amphorae production at Carthage see now Bechtold and Docter 2010.

¹¹ Mansel 2007 with earlier references.

Nevertheless, archaeometric analyses¹² suggesting a local origin¹³ are available only for some of these classes basically of the Early Punic period, and more specifically for the amphorae¹⁴ and the red slip- and bichrome wares¹⁵.

In particular, the detailed study of this latter class undertaken by A. Peserico has shown that based upon a macroscopic examination of the pottery, almost 90% of the 1,750 fragments selected for her research belong to a fabric labelled 'K', the remaining 10% is divided between the further five fabrics.¹⁶ Fabric 'K' is characterized by a reddish yellow or yellowish red clay (5YR 6/6–5/6), tempered with numerous rounded grains of quartz, less common white particles, clay inclusions (chamotte), varying in size, in addition to regularly sorted voids of round shape. This kind of fabric corresponds to what for the Hamburg excavations below the Decumanus Maximus has been defined as 'KTS', that is to say 'Karthago Ton Struktur'.¹⁷ The strong macroscopic similarity between the archaeometrically analysed Early Punic fabrics and the ones of the Middle and Late Punic series indicate however, a strong continuity of the Punic pottery tradition.

The archaeometric analyses undertaken by Amadori and Fabbri (1998) on selected red slip samples of presumably local fabric have identified two different clays, L1 and L2, distinguished on the basis of the granulometry of the inclusions. The authors suggest to explain this result with a change of the raw material, which seems to have taken place during the second half of the seventh century B.C.E., since the samples defining the finer clay L2 generally seem to date to within the late eighth and the middle of the seventh centuries B.C.E., while group L1 is composed of items dating to c. 650 B.C.E. and onwards.¹⁸

Recent research undertaken by a Tunisian team focused on the macroscopic and archaeometric characterisation of a small assemblage of seven samples taken from local plain wares of the Middle and Late Punic period (4th-2nd century B.C.E.) from the excavations of the University of Gent/INP in the Bir Messaouda area, the Punic kiln of the Dermech area and the Salammbô sanctuary.¹⁹ On the basis of the examination of the fresh break by the use of a magnifying glass four macroscopic groups 1-4 have been distinguished. Maraoui Telmini's group 2²⁰ resembles strongly to fabric **FACEM** – <http://facem.at/car-reg-a-1>, while Maraoui Telmini's group 4²¹ matches almost certainly **FACEM** M – <http://facem.at/car-reg-a-4>.

Furthermore, the archaeometric analysis of sixteen samples of Middle-Late Punic plain ware items focused on the differences between the ceramic fabrics of Carthage (seven samples) and the Punic site of Utica (nine samples), situated some 40 km from Carthage on the northern coast of Tunisia.²²

¹² For a complete, very recent overview, see Maraoui Telmini et al. 2011, 16–20.

¹³ Archaeometric analyses of some Late Punic amphorae and Black Glaze Wares found on the island of Pantelleria suggest a Carthaginian origin, see Amadori et al. 2002 (for the amphorae) and Amadori et al. 2006 (for the Black Glaze Ware). For the results of the analyses of pottery samples from Middle and Late Punic deposits of Carthage see also note 19.

¹⁴ See G.H.J.M. Blessing in: Docter 1997, 191. For another assemblage of samples referring presumably to amphorae of Carthaginian fabric, see Botto et al. 2005, group E, 65, tab. 6, 73–75, 84, 90, 94, 102.

¹⁵ For the open forms only see more specifically Peserico 2002, 16–7. Amadori and Fabbri 1998. For petrographic analysis made on Phoenician fine and plain wares dating to the 7th-5th century B.C.E. from Carthage and its hinterland see Aznar 2005.

¹⁶ Peserico 2002, 11–6, for the fabric description of fabric 'K' see p. 12

¹⁷ Briese and Peserico in: Niemeyer et al. 2007, 269 with earlier references.

¹⁸ For a critical comment on the selection of the samples and the interpretation of the results see Botto 2001, 163–6.

¹⁹ Maraoui Telmini et al. 2011, 22–38.

²⁰ Maraoui Telmini et al. 2011, 26–27, fig. 11–13.

²¹ Maraoui Telmini et al. 2011, 27, fig. 15.

²² Maraoui Telmini, Bouhlel 2011.

Very recently, a Tunisian team guided by B. Maraoui Telmini²³ made also a first effort to localize some of the possible ancient sources of the raw materials used for the Carthaginian pottery production. Consequently, samples from three different, natural clay deposits were collected and submitted to analysis (XRF and XRD).

1. The area called 'Amilcar', situated on the slopes of the Sidi Bou Said hill
2. The area called 'Ghar Ettfal' near El Maalga;
3. The mountain called 'Jebel El Khaoui' at Gamarth.

As a first result, a chemical correlation between the analysed ceramic samples and the raw materials from Ghar Ettfa and Jebel El Khaoui can be stated.²⁴

In conclusion, one may say that until now the pottery production of Early Punic Carthage has been sufficiently covered by archaeometric analyses. For the Middle and Late Punic series however, such studies are still at an embryonic state of research. The exhaustive documentation within the FACEM database of nearly 80 samples dating from the Early Punic II period (seventh to the sixth centuries B.C.E.) till the Late Punic II period (second century B.C.E.), but mainly to the Middle Punic period (fifth to the fourth centuries B.C.E.) gives now clear evidence for the very homogeneous appearance of the Carthaginian series for nearly six centuries.

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²³ Maraoui Telmini *et al.* 2011, 20-22.

²⁴ Maraoui Telmini *et al.* 2011, 38.

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