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The Fabrics of the Area of Carthage (CAR-REG)

Sampling Strategy for the Determination of the Fabrics of the Area of Carthage

The reference samples considered to be representative for the pottery production of Punic Carthage have been selected on the basis of the empiric experience of the present author who has worked on the ceramic finds yielded by several settlement excavations over a period of twenty years.¹ Due to the lack of archaeometric analysis available for the whole spectrum of ceramic classes identified for the local pottery issue,² at present we are unable to distinguish the series of the urban workshops from the presumably existing ones of other production centers located towards the Cap Bon or along the coastal line in the direction of Utica.³ For this reason we decided to label the identified fabrics as 'of the region of Carthage'. Further research is needed to clearly determine the metropolitan production.

The representative samples for the fabrics of the area of Punic Carthage were predominately (nearly 90%) selected from stratified deposits yielded by the Belgian-Tunisian soundings on the Bir Messaouda in the years 2002–2005.⁴ In addition to this major assemblage, 8 samples referring to published amphorae found in the nearby Hamburg excavations⁵ on the crossroads of Decumanus Maximus and Cardo X, and 1 sample found in the Amsterdam excavations on the Bir Messaouda in the years 2000–2000⁶ have been included. The bulk of the samples (approx. 61%) were found in archaeological levels dating to the Middle Punic period (480–300 BCE)⁷, while approx. 30% stem from Late Punic (300–146 BCE) deposits and single items refer to levels of the Early Punic period (760–530 BCE), Early Punic/Middle Punic period (530–480 BCE) or to contexts dating to the Roman or Modern period.

With reference to the dating of the sampled objects, nearly 60% have been attributed to the Middle Punic I, but most of all to the Middle Punic II period and approx. 30% refer to the earlier Early Punic or Early Punic/Middle Punic period. The Late Punic I-II (approx. 8%) periods are clearly under-represented among the present assemblage (fig. 1).

To sum up, it can be stated that the fabrics of the area of Carthage published on the **FACEM**-database are certainly representative for the local pottery issue from its earliest phase until the late 4th century BC, while the identity of the latest ceramic production appears to be less reproduced by the selected samples. The strong macroscopic similarity between the sampled Early Punic – Middle Punic fabrics and the ones of the Late Punic series indicate however, a strong continuity of the local Punic pottery tradition.

¹ See my contributions in Niemeyer et al. 2007, in addition to Bechtold (forthcoming 1) and Bechtold (forthcoming 2). The number of the selected samples is 75.

² See also the paper "The Pottery Production of Punic Carthage" by B. Bechtold **FACEM** (version, 06.06.2011).

³ For possible clay deposits see now Maraoui Telmini et al. (forthcoming), See also the paper "The Pottery Production of Punic Carthage" by B. Bechtold **FACEM** (version, 06.06.2011).

⁴ The 2002–2005 campaigns conducted by the University of Ghent in collaboration with the Institut National du Patrimoine were directed by R.F. Docter and F. Chelbi. For three preliminary reports see Docter et al. 2003; Docter et al. 2006 and Chelbi et al. 2006. The final report of these excavations is in preparation (Chelbi et al. in preparation). The present author has studied the primary deposits of the Middle and Late Punic period from trenches 1 and 2, in addition to selected contexts from trench 4 see Bechtold (forthcoming 2).

⁵ See Docter 2007, 622–23, cat. 5300; 628, cat. 5338; Bechtold 2007c, 669, cat. 5506, 5509; 671, cat. 5514–15, 5517; 673–74, cat. 5523.

⁶ The final report of these excavations will appear in Docter (forthcoming). The present author has studied the primary deposits dating from the Early/Middle Punic – Late Punic period (Bechtold forthcoming 1).

⁷ For the new chronological period system of Carthage see Bechtold 2010, 4–6.

Concerning the quantitative distribution of the different ceramic classes,⁸ best represented are plain wares (coarse wares) with 44%, transport amphorae (26.6%) and Punic painted wares (22.6%), while plain wares with smoothed surfaces, bichrome wares and red painted wares were selected only occasionally (fig. 2).

(B. B.)

Coarse Wares (CAR-REG-C-1 to CAR-REG-C-8)

The analysis of 55 samples of different coarse wares led to the distinction of eight fabrics. The overall characteristics of the observed fabrics are a fine-grained matrix with smooth break and channel shaped voids. In general the color of the matrix is light red, often shading to gray or completely gray. The temper is well sorted and contains typical rounded quartz particles (desert sand). We could distinguish two classes of fabrics by the absence respectively the presence of carbonatic inclusions or carbonate-pseudomorphoses. If these classes correspond to the two different groups of fabrics defined by the archaeometric analysis undertaken by Amadori and Fabbri cannot be decided as none of our samples corresponds to those that have been analyzed.⁹

FABRIC DESCRIPTION

The following fabrics show an absence of carbonatic particles and carbonate-pseudomorphoses:

CAR-REG-C-1 This fabric is characterized by a reddish yellow, fine-grained matrix which is riddled by well sorted rounded quartz temper of comparatively small size.

CAR-REG-C-2 This fabric shows a fine-grained, pink matrix with fine to mid-sized quartz temper and differs from CAR-REG-C-1 by large light gray (clay) inclusions.

The fabrics which are characterized by the presence of carbonatic inclusions show a greater variety:

CAR-REG-C-3 The fabric shows a light brown to light gray matrix and contains, in addition to common rounded quartz particles, white carbonatic inclusions as well as carbonate-pseudomorphoses.

CAR-REG-C-4 The fabric is very similar to CAR-REG-C-3: The fine-grained light gray matrix shows a high porosity and differs by characteristic orange yellow carbonate-pseudomorphoses, the quartz temper being less prominent.

CAR-REG-C-5 The pink fine grained matrix of this fabric is characterized by a high porosity and contains large yellowish white, carbonatic inclusions, the quartz particles being less prominent.

CAR-REG-C-6 The matrix is gray to light red and fine grained. Besides the common quartz particles it contains numerous carbonate-pseudomorphoses with a characteristic yellowish brown core.

⁸ For references for the ceramic classes of Carthage see above, notes 6–12.

⁹ Amadori and Fabbri 1998, 44–46, 'gruppi L1 and L2'.

CAR-REG-C-7 The coarser grained matrix is reddish brown with a gray core and shows a greater quantity of channel shaped voids. Its temper is characterized by prominent white carbonatic particles and carbonate-pseudomorphoses.

CAR-REG-C-8 The light red fabric contains a high degree of well sorted quartz temper as well as few white carbonatic particles and carbonate-pseudomorphoses (cf. CAR-REG-A-1).

(M. T.)

Transport Amphorae (CAR-REG-A-1 to CAR-REG-A-5)

The microscopic analysis of a relatively small number of 20 samples from Carthage led to the distinction of five fabrics. In general, these fabrics correspond to those of the coarse ware, but are more strongly tempered. They are characterized by a fine-grained matrix with a smooth break and with channel shaped voids. The color of the matrix is light red, often shading to gray or completely gray. The well sorted temper contains typical rounded quartz particles (desert sand). Varieties are attested in size and quantity of inclusions.

FABRIC DESCRIPTION

As in the coarse ware we can distinguish fabrics with and without visible carbonate-pseudomorphoses. In the case of amphorae only one fabric was made of raw materials that did not contain carbonate:

CAR-REG-A-1 This fabric shows a very fine matrix with regularly distributed quartz particles. Sporadically we find very large gray spots.

The following fabrics display different percentages of carbonate:

CAR-REG-A-2 The fabric is characterized by a very dense matrix and a relatively high degree of well sorted temper. Carbonate-pseudomorphoses are rather infrequent. This fabric has also been identified at Velia (M 10/60).

CAR-REG-A-3 The fabric is characterized by the darker color of the matrix. The particles of the temper are generally coarser than those of CAR-Reg-A2 and the clearly visible white carbonate- pseudomorphoses more frequent.

CAR-REG-A-4 The fabric shows a pale brown matrix. This might be due to higher firing temperatures, the carbonate pseudomorphoses turning into a yellowish brown color. This fabric has also been identified at Velia (M6/80, classified here as fabric A 33¹⁰) M6/80 has been analysed by Roman Sauer (thin section, heavy mineral analysis). He attributes the sample to his group RVA013, attributed to North Africa.

CAR-REG-A-5 The fabric is rather fine-grained. Characteristic are the large carbonatic inclusions that are surrounded by a dark border.

Some of the fabrics defined at Velia do not correspond exactly to one of the fabrics defined at Carthage, but are so close to them that we have attributed them to the region of Carthage, although we have not proven their provenience archeometrically.

¹⁰ Gassner 2003, IIb.89.

CAR-REG-A-6 The light red fabric is characterized by an ill sorted distribution of various carbonate-pseudomorphoses of varying size.

Car-REG-A-7 The light red fabric is rather fine grained and characterized by a high degree of well sorted quartz temper as well as few white carbonatic particles and carbonate-pseudomorphoses. The fabric is very similar to the coarse ware fabric CAR-REG-C-8.

(V. G.)

References

- Amadori M.L., and B. Fabbri. 1998. "Indagini archeometriche su ceramica fenicia da mensa proveniente da Cartagine (VIII-VI sec. a.C.". In *Produzione e circolazione della ceramica fenicia e punica nel mediterraneo: il contributo delle analisi archeometriche*, edited by E. Acquaro, and B. Fabbri, 43–55. Bologna: University Press.
- Bechtold B. 2007c. "Die phönizisch-punische Gebrauchskeramik der archaischen bis spätpunischen Zeit". In *Karthago. Die Ergebnisse der Hamburger Grabung unter dem Decumanus Maximus*, edited by H. G. Niemeyer, R. F. Docter, K. Schmidt, and B. Bechtold, 327–431. Hamburger Forschungen zur Archäologie 2, Mainz: Philipp von Zabern.
- . 2010. *The Pottery Repertoire from Late 6th–Mid 2nd Century BC Carthage. Observations based on the Bir Messaouda Excavations*. Carthage Studies 4. Gent: Department of Archaeology and Ancient History of Europe, Ghent University.
- . Forthcoming 1, "§ 3.1.2, Selected Contexts of the (Late) Early Punic Period (EP) and the Transitional Early Punic/Middle Punic Period (EP/MP)"; "§ 3.1.3, Selected Contexts of the Second and Third Quarters of the 5th century BC (MP I)"; "§ 3.1.4, Selected Contexts Containing Material of the 4th Century BC (MP II.2); § 3.1.5, Selected Contexts Containing Exclusively Material of the First Half of the 2nd Century BC". In *Carthage. The excavations at the Bir Messaouda site 2* Vol. I, edited by R. F. Docter (forthcoming).
- . Forthcoming 2. "Selected Contexts Excavated in Trenches 1, 2 and 4 of Bir Massouda, Site 2 (Campaigns 2002–2005)". in: *Carthage Bir Messaouda. Excavations of the years 2002–2005*, edited by F. Chelbi, R.F. Docter, and B. Maraoui Telmini (in preparation).
- Bechtold B., and R.F. Docter. 2010. "Transport Amphorae from Punic Carthage: An Overview". In *Motya and the Phoenician Ceramic Repertoire Between the Levant and the West 9th – 6th Century BC*. Proceedings of the International Conference held in Rome, 26th February, 85–116. Quaderni di Archeologia Fenicio-Punica V. Rome: Università degli studi di Roma "la Sapienza".
- Chelbi F., B. Maraoui Telmini, and R.F. Docter. 2006. "Découverte d'une nécropole du huitième siècle av. J.-C. à Carthage Bir Massouda. Rapport préliminaire sur les fouilles de l'Institut National du Patrimoine (Tunis) et l'Université de Gand". *CEDAC Carthage Bulletin* 21, 2003: 13–25.
- Chelbi F., Docter R.F., and B. Maraoui Telmini (eds.), *Carthage Bir Messaouda. Excavations of the years 2002–2005*, Gent (in preparation).
- Docter R.F., 2007a, "Archaische Transportamphoren". In *Karthago. Die Ergebnisse der Hamburger Grabung unter dem Decumanus Maximus*, edited by H. G. Niemeyer, R. F. Docter, K. Schmidt, and B. Bechtold, 616–662. Hamburger Forschungen zur Archäologie 2, Mainz: Philipp von Zabern.
- . Forthcoming. *Carthage. The Excavations at the Bir Messaouda Site 2* Vol. I, Gent.
- Docter R.F., F. Chelbi, and B. Maraoui Telmini. 2003. Carthage Bir Massouda: Preliminary Report on the First Bilateral Excavations of Ghent University and the Institut National du Patrimoine (2002–2003). *BABesch* 78: 43–70.
- Docter R.F., F. Chelbi, B. Maraoui Telmini, B. Bechtold, H. Ben Romdhane, V. Declercq, T. De Schacht, E. Deweydt, A. De Wulf, L. Fersi, S. Frey-Kupper, S. Garsallah, I. Joosten, H. Koens, J. Mabrouk, T. Redissi, S. Roudesli Chebbi, K. Ryckbosch, K. Schmidt, B. Taverniers, J. Van Kerckhove, and L. Verdonck. 2006. Carthage Bir Massouda: Second Preliminary Report on the Bilateral Excavations of Ghent University and the Institut National du Patrimoine (2003–2004). *BABesch* 81: 37–89.
- Gassner V. 2003. *Materielle Kultur und kulturelle Identität in Elea in spätarchaisch-frühklassischer Zeit. Untersuchungen zur Gefäß- und Baukeramik aus der Unterstadt (Grabungen 1987–1994)*. Archäologische Forschungen 8 = Velia-Studien 2, Wien: Verlag Akademie der Wissenschaften.
- Maraoui Telmini B., S. Bouhleh, H. Abdelwahed, and F. Hosni. Forthcoming. Observations on Clay Characteristics of Local Punic Plain Ware from Carthage and Utica, in: Sagona C. (ed.), *Ceramics of the Phoenician-Punic world: a workshop* (Malta 2007), Leuven.
- Niemeyer H.G., R. F. Docter, K. Schmidt and B. Bechtold. eds. 2007. *Karthago. Die Ergebnisse der Hamburger Grabung unter dem Decumanus Maximus*, Hamburger Forschungen zur Archäologie 2, Mainz: Philipp von Zabern.

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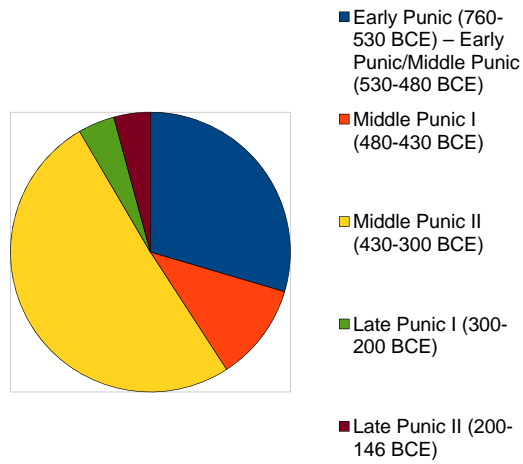


Fig. 1: The presumed chronology of the sampled items (N. 71) selected as representative for the determination of the fabrics of the area of Carthage.

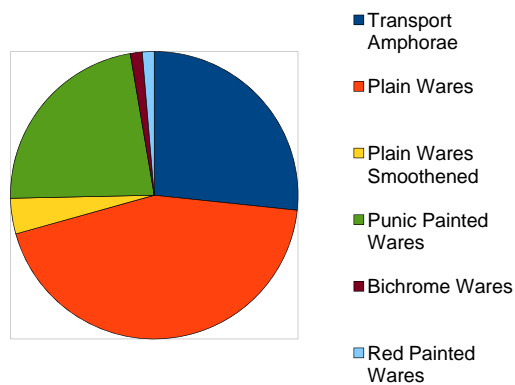


Fig. 2: The quantitative distribution of the ceramic classes (N. 75) sampled for the determination of the fabrics of the area of Carthage.