FLAVIO FERLITO*

Amphorae Fabric of Entella

Introduction

About 70 samples, taken from amphorae found during archaeological investigations conducted at Entella and yielded by a survey project,[1] have been studied for the identification of the present fabric. Two samples have been submitted to petrographical analysis[2] and the results have been compared with the components of the raw materials of the same territory.[3] As a result, all these samples were compatible with the "Terravecchia Formation".[4]

Fabric Description

The amphorae fabric of Entella presents several 'sub-groups' with specific features, but all characterised by the same matrix. Infact and being the differences between the variants not distinctive enough, we decided to denominate just one fabric ENT-A-1. Indicatively, two different 'sub-groups' have been individuated: a first one with a major concentration of calcium carbonate, and a second, finer one with a higher presence of mica. However, we find a large number of samples which share features of both sub-fabrics and cannot be attributed confidentially to one of these most prominent selections. Specifically, among this 'mixed group' the proportion of calcium carbonate, mica and quartz varies significantly.

ENT-A-1

Ref. M 187/106 (M 187/50, M 187/51, M 187/57, M 187/83, M 187/96, M 187/116, M 187/118, M 187/119, M 187/121, M 187/122)

The colour of the matrix varies from brown to brownish-pinkish or brownish-reddish, with different tones (Munsell 2.5 YR 5/6, 6/6, 6/8; 5 YR 5/6, 6/6, 7/4; 7.5 YR 5/6). To the naked eye, the fabric can be very fine with no visible inclusions or fine with some visible particles, small-medium sized, or sporadically big-sized, of white, white-yellowish and/or greyish colour. In few cases, a notable proportion of whitish particles has been observed.
Voids are generally frequent, mostly in the form of vughies, channels and sporadically chambers and vesciculars. Their size varies from 0.03-04 to 0.87-1.00 mm, exceptionally around 1.39 mm.

* Institut für Klassische Archäologie, Universität Wien.

1 For previous research and an in-depth discussion of Entella's amphorae production and their circulation, see Corretti and Michelini 2020.

2 Thin-section petrography at the polarizing microscope has been conducted by G. Montana (DiSTem, University of Palermo) and L. Randazzo (DiBEST, Università della Calabria): M 187/106, see Michelini 2014, fig. 79, q. For first petrographic analysis undertaken in the late '90ties, see Corretti and Capelli 2003.

3 For previous archaeometric research in local Archaic matt-painted ware, see Montana et al. 2017 with earlier references.

4 Montana et al. 2011, 67-73, 98-100, 125-27, 157.

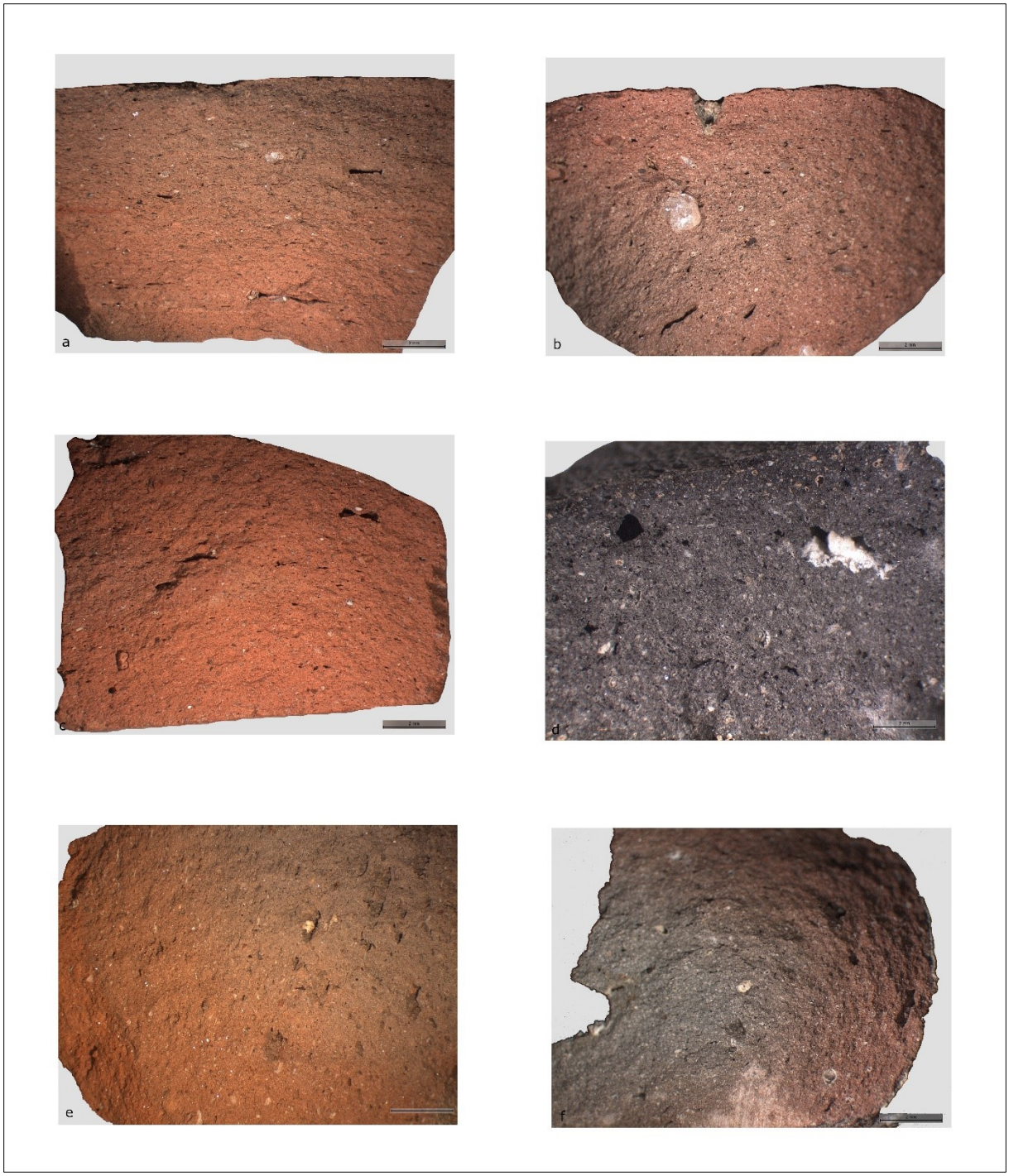

Fig. 1. Microphotos: **a.** M 187/50; **b.** M 187/51; **c.** M 187/57; **d.** M 187/83; **e.** M 187/96; **f.** M 187/106

The texture is mainly fine, with some granular exceptions, and the matrix is mostly carbonatic and/or micaceous. The distribution of the temper is chiefly poorly sorted or unsorted, with some cases of well-sorted silt or poorly-sorted sand in well-sorted silt (bimodal).

The temper is generally sized between 0.03-04/0.48-60 mm, in a few cases 1.19-1.59 mm. Quartz appears in different quantities. It can be frequent, infrequent or sporadic, but there are also samples where it doesn´t appear, like M 187/106 (fig. 1.f). Its colour can be greyish-whitish-transparent and its size varies from 0.04-08-12 to 0.48-67 mm, with singular cases of 1.19 mm, like M 187/51 (fig. 1.b). Also its shape is very diversified: very spherical/rounded-

subangular, spherical-subspherical/subrounded-angular and subspherical/well rounded-rounded-subrounded-subangular.

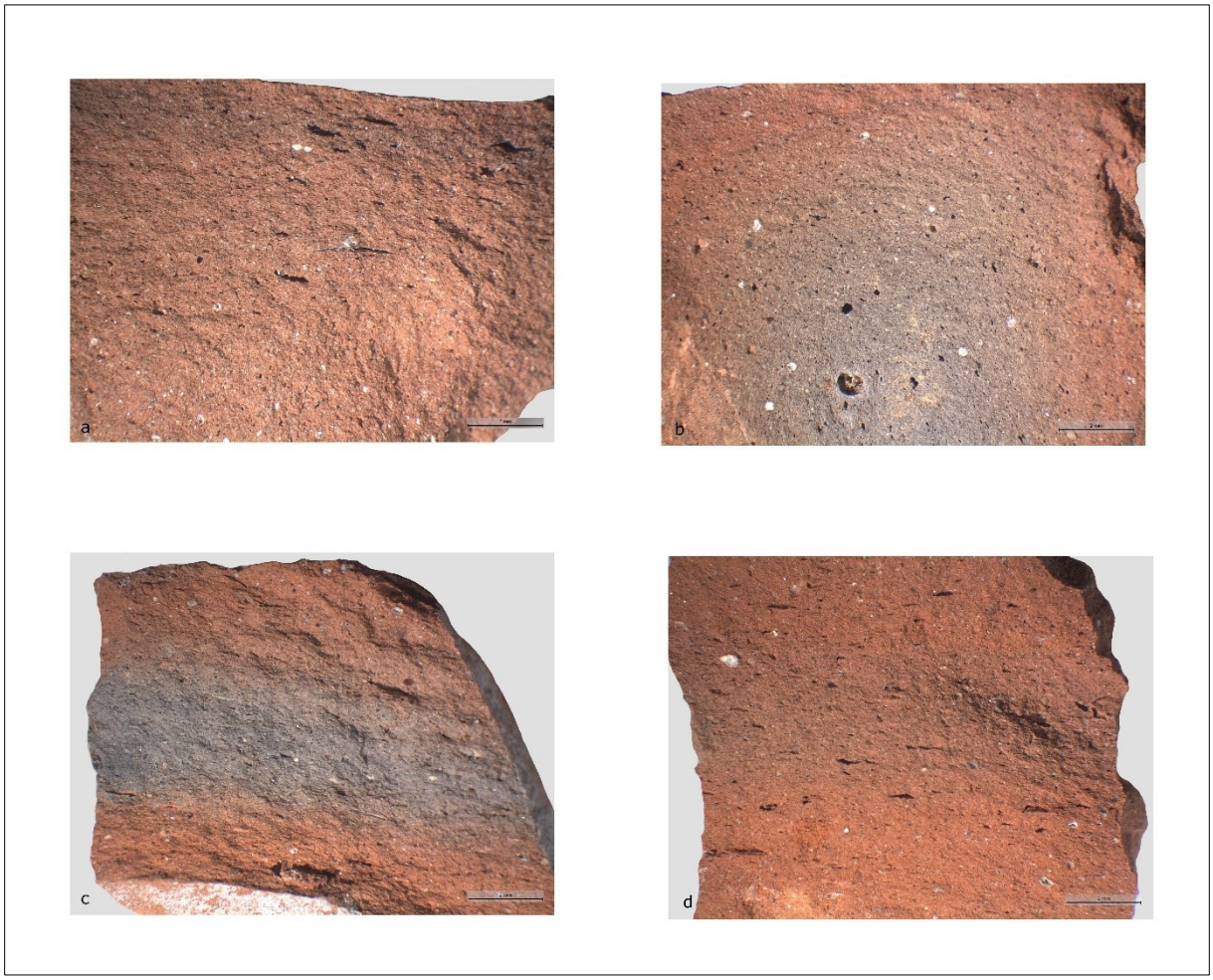

Fig. 2. Microphotos: **a.** M 187/116; **b.** M 187/118; **c.** M 187/119; **d.** M 187/122

As above-mentioned, the presence of the mica is variable: frequent, infrequent or sporadic. An example with a quite micaceous matrix is represented by M 187/96 (fig. 1.e). The shape can be very spherical-spherical-subelongate-elongate/very angular-angular and small sized (0.02/0.08-12 mm, with a singular case of 0.16 mm).

Calcium carbonate appears in two versions. The first one is represented by a very frequent, infrequent (M 187/122, fig. 2.d) or sporadic quantity of white or whitish-yellowish grains of spherical-subspherical/well rounded shape. Their size varies from 0.04 to 0.20-40 mm, with sporadic cases of 0.60-71 mm. The second version is represented by a very frequent, infrequent or rare (M 187/50, fig. 1.a) quantity of whitish-yellowish micritic clots,[5] of very spherical-spherical-subspherical/well rounded-rounded-subrounded, spherical/angular (rarely) or subelongate/rounded-subangular shape. Their size varies from 0.02-04 to 0.40-60 mm, with one singular case of 1.59 mm. Low quantities (sporadic or rare) of small sized (0.04/0.20 mm), spherical-subspherical/rounded-subrounded-subangular shaped reddish-brown iron oxide concretions can be observed in some samples. Others show a sporadic

[5] See Cau Ontiveros et al. 2002, 11-12: formations of secondary calcite, caused by high firing temperatures. This new term indicates the 'dissolved carbonate grains' used for the descriptions in FACEM.

presence of reddish or light red-orangish inclusions of very spherical-spherical-elongate/rounded-subrounded-subangular shape, sized between 0.04-08/0.20 mm. Finally, black or dark grey inclusions are rare, sized between 0.12/0.16-20 mm and of very spherical-subspherical/subrounded-subangular-angular shape.

References

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