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Fabrics of Coarse Ware from the Mid- and Late Republican site at *Norba* (modern Norma), southern Lazio, Italy

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Introduction

This paper focuses on the fabrics of coarse ware from the surroundings of ancient *Norba* (present-day Norma), located in the foothills of the Lepine Mountains in the Pontine region, southern Lazio. The study was conducted as part of the project 'Cooking Ware as Indicator for Regional Trade: A View from 4th-1st centuries BC Central Mediterranean'¹, and based on materials found during archaeological surveys by Tymon De Haas, and studied as part of his Doctoral research.²

Background

Roman colonisation in the Pontine region of southern Lazio began in the 6th century BC – *Norba* was founded as a Latin colony in 492 BC. It was mainly from the 4th century BC that towns and rural settlement expanded, and new infrastructure was built in the Pontine region. *Norba* developed into a considerably sized town during the 4th and 3rd centuries BC, while the construction of the *Via Appia* favoured the development of various roadside settlements, such as *Forum Appii*, in the Pontine plain.³ It is thought that the construction of the *Via Appia* contributed to the abandonment of *Norba* after the town was destroyed during the Civil War in 82 BC.⁴

Archaeological surveys have been carried out in the surroundings of *Norba*. They have permitted to map a dense pattern of Roman Republican sites along the foothills of the Lepini Mountains, and more dispersed farmsteads and villas in the uplands, north of *Norba*.⁵ The results further suggest that larger estates developed from the 3rd century BC onwards, which were involved in commercial activities related to agriculture.⁶ The surviving material culture (e.g., coarse ware) offers an opportunity to investigate the presence of a craft community in the area of *Norba* during the Roman Republican era, as well as the integration of the area into regional production and distribution networks during the period under consideration.

Coarse Ware Shapes and Fabrics

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² De Haas 2011.

³ De Haas 2017.

⁴ De Haas 2011.

⁵ *Idem*.

⁶ De Haas et al. 2011/2012.

A selection of coarse ware fragments (for a total of 32) found during the surveys was chosen for detailed compositional analysis. They comprise fragments of lids and two types of jars: the first corresponds to Olcese's olla type 2⁷ and is defined by a high collared rim. It occurs in southern Lazio between the 4th and 3rd centuries BC (Mid-Republican period), and its distribution is mainly confined to Tyrrhenian central Italy. The second type corresponds to Olcese's type 3a⁸ and displays an almond-shaped rim. This shape occurs in the region between the 2nd and 1st centuries BC (Late Republican period).

All 32 fragments of pots and lids were analysed using several compositional techniques, including thin section petrography, X-ray powder diffraction, and scanning electron microscopy, with the aim of reconstructing all the steps of the production technology.⁹ This contribution focuses on the macroscopic fabric descriptions of eight of these artefacts (M 294/). Four main compositions were identified, namely LAT-C-1, LAT-C-3, LAT-C-4, and LAT-C-5.

LAT-C-1

Samples: M 294/7, 12

Representative sample: M 273/2

The samples in LAT-C-1 display a yellowish red colour (Munsell Value HUE 5 YR 5/8). The fragments are hard, and their texture is granular or irregular.

The clayey matrix comprises small-sized quartz, mica (e.g., biotite), and rounded reddish brown inclusions (e.g., iron pellets). Coarse grains comprise between 20 and 25%. Their size varies from 0.2 to 0.5 mm, and they are moderately sorted. These large grains are predominantly angular and white or clear (e.g., feldspar), black and angular (e.g., pyroxene), and greyish (i.e., rock fragments including leucitite). Other coarse inclusions are dark-coloured (e.g., volcanic glass). Voids are channel-shaped, they measure between 0.2 and 0.5 mm. Overall, the porosity varies between 10 and 15%.

Coarse ware pottery bearing a similar composition to those in LAT-C-1 has also been identified on other sites in the region, including Ostia,¹⁰ and Rome.¹¹ It has been suggested that this fabric might have been produced in the region of the Alban Hills.¹²

LAT-C-3

M 294/5, 24

Representative sample: M 273/14

The samples in LAT-C-3 are defined by a yellowish red colour (Munsell Value HUE 5 YR 5/8) or dark grey colour (Munsell Value HUE 5 YR 4/1). The fragments have a granular texture and they are hard. The matrix displays numerous small-sized white inclusions (e.g., quartz), mica (e.g., biotite), as well as reddish pellets. The analysed fragments display between 20 and 30% coarse grains, which tend to be moderately sorted and range between 0.2 and 0.4 mm. Compositionally, they mainly comprise whitish to clear-coloured inclusions (e.g., feldspar), as well as some white grains (e.g., quartz). Rare black angular inclusions (e.g., pyroxene) are also

⁷ Olcese 2003.

⁸ *Idem.*

⁹ Borgers et al. 2023.

¹⁰ Capelli 2016.

¹¹ Borgers and Fischetti 2023; Fischetti and Borgers 2026 in FACEM (release 9: 03/2026).

¹² Borgers et al. 2023.

present. Voids have the shape of vughs. They measure between 0.1 and 0.4 mm and the porosity varies between 10 and 15%.

Pots in types 2 and 3 occur in LAT-C-3. They bear compositional similarities to the 'Roman and Tiber Valley' fabric,¹³ which occurs on several sites both within Rome,¹⁴ as well as in its hinterland.¹⁵

LAT-C-4

Samples: M 294/14, 15

Representative sample: M 294/15

The samples in LAT-C-4 are defined by different colours, such as light reddish brown (Munsell value HUE 5 YR 6/4) or reddish yellow (Munsell value HUE 5 YR 6/6). The fragments are hard, and their texture is granular. Coarse inclusions comprise between 20 and 30% of the fragments, they are moderately to well sorted. Overall, their size varies between 0.2 and 0.4 mm, and their shape tends to be sub-rounded to rounded. Their composition varies, as suggested by the different colours: predominant are rounded white (e.g., quartz) and whitish to clear subrounded to subangular inclusions (e.g., feldspar). Common are angular black grains (e.g., pyroxene), and mica laths (e.g., biotite) are also present. The voids are vugh-shaped, tendentially measure between 0.1 and 0.3 mm, and comprise between 10 and 15% of the fragment.

Only type 2 jars occur in the LAT-C-4 fabric. This fabric shares broad similarities with the composition of the coarse ware pottery that was produced at *Satricum* (modern-day Borgo Faiti).¹⁶ This fabric has also been identified in the coastal area of the Pontine region.¹⁷

LAT-C-5

Samples: M 294/1, 4

Representative sample: M 294/4

Both LAT-C-5 samples are defined by a yellowish red colour (Munsell value HUE 5 YR 4/6 or 5/8). The texture of the fragments is granular, and they are hard. The clay matrix displays numerous dark-coloured fragments, sub-angular and of various size (up to 0.8 mm) (e.g., volcanic glass). In comparison with other coarse ware fabrics from Lazio (e.g., LAT-C-1 to LAT-C-4, and LAT-C-6 to LAT-C-8), this fabric is fine, with only 10 to 15% coarse inclusions. Most of these are white to colourless (e.g., feldspar), while some are angular and black (e.g., pyroxene). Their size ranges between 0.2 and 0.5 mm. Most voids occur as vughs, their size varying between 0.2 and 0.5 mm. The porosity of the samples ranges between 15 and 20%.

Only type 3a jars occur in this composition. To the authors' knowledge, this composition has not been identified elsewhere. It has been compared with the geology of the study area and combined with raw materials prospection, permitting to suggest that this fabric might have been produced at or near *Norba*.¹⁸

¹³ Olcese 2003.

¹⁴ Thierrin-Michael 2003; Borgers and Fischetti 2023; Fischetti and Borgers 2026 in FACEM (release 9: 03/2026).

¹⁵ Borgers et al. 2017, 2023.

¹⁶ Attema et al. 2003.

¹⁷ Borgers et al. 2024; Verhagen 2024.

¹⁸ Borgers et al. 2023.

Conclusion

The results show that the area around *Norba* was integrated into regional trade networks that extended not only across the Pontine region (and particularly in the coastal area), but also across the adjacent Alban Hills and the Tiber valley, north of Rome. Roads and rivers formed the logical connections.

The results further indicate that, while most coarse ware pottery seems to have been imported, there is also evidence of local production in or near *Norba* during the Late Republican era. This aligns with other evidence for black gloss pottery production in the area at that time.¹⁹

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¹⁹ Tol and De Haas 2013.