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BROKEN POTTERY IN A FILLED ROOM: THE CASE OF SERVICE AREAS IN THE “CENTRAL BATHS” OF NORA (CA)

The central area of Nora (the “Area E”) is a very complex district because, in a chronological period of at least eight centuries, residential and public buildings (baths, theater) alternate, covering a period of time ranging from late Punic *facies* to Late Antiquity (fig. 1,1).

The materials are therefore extremely heterogeneous and fragmented (which is a characteristic of the residential areas), and secondly, especially in the later phases, there is a high percentage of residual ceramic (i. e. produced in earlier times to those of the layers investigated but coming in secondary arrangement, for example to fill), which is an element that contributes to complicate the dating of the stratigraphic sequence².

This paper aims to analyze the first data emerged during the last campaign of excavations conducted by the University of Milan.

In fact the 2011 campaign was partly dedicated to the excavation of the Te Room, located on the E–SE side of the Central Baths (fig. 1,2). This room, that probably was a service room for the Central Baths, has never been the subject of previous studies. In particular, the focus was on a layer (US 31331), characterized by a high concentration of mammal remains (cattle, pig, sheep/goat); this layer was rich in building materials and pottery. In fact, inside the layer it was found a stratification formed by successive discharges of building materials, but also quality materials (bone hairpins, mosaic tiles, fragment of blowing mold bottle, spiral blue glass stick, a not readable coin and numerous different marbles).

Pottery (still under study) is extremely abundant but is not wide in variety of wares and in type of use. Pottery consists mainly of tableware, although not without some examples of fine pottery and amphorae. As can be seen from **graphic 1**, the 845 fragments of pottery unearthed during excavation, have been attributed (on the base of the index of brokenness and on the reconstruction of the fragments fitting together)³ to 144 individuals, only 3% is ARS and 2% lamps. Among these two lamps stand out, which are almost reconstructable, with the stamp CIVNDRAC that is *Caius Iunius Draco*,

one of the most famous artisans in North Africa, attested from 120 to 200 AD⁴. The ARS, mostly A1 and A2 or A1/2, consists mainly of bowls and dishes, among which there is a bowl Hayes 6B, well attested in Nora (Roman Forum and Area C)⁵ and the main sites of Sardinia (S. Vero Milis, Olbia, Abbasanta, *Turris Libisonis*, Cornus)⁶ and a plate Hayes 26, documented in several areas of the old city (the Roman Forum, Area C, Area G, Roman necropolis)⁷. It stands out also a closed form, in three pieces not fitting together, of a globular spouted jug (*guttus*), in *sigillata* A1 (fig. 2,1); that is a form quite rare, partly similar to the Hayes 126, so far unattested in Nora.

All the fine pottery imported is dated to the mid-late 2nd century AD. It is therefore at an earlier stage to the large plant of the Central baths (3rd century AD) currently visible. It is interesting that the coarse ware consists mainly (about 39% of all Roman pottery found) of table ware, imitating the later forms of thin-walled ware (fig. 2,2)⁸.

We distinguish at least four types: a little piryform pot (type A), with everted rim, showed foot and two handles, medium height 12 cm, diameter medium rim 6.5 cm, wall thickness of 0.3–0.4 cm: the fabric is a fine grained matrix, beige-pinkish with calcareous inclusions micrometric and gray interior.

Type B is a little globular pot with everted rim, showed foot, ribbon handles, average height 10 cm, average diameter rim of 8.5 cm, wall thickness of 0.2–0.4 cm; the *fabric* has well purified clay, smooth surface, beige color. This type represents about 50% of finds; about 90% of cases has a bad cooking, with evident signs of cooking (“disks of stacking”).

Type C is represented by globular bowls with everted rim and it is decorated with wheel on the body (*kommaregen* pattern present on thin-walled wares and widespread enough in the excavations of Nora), average height 10 cm, average diameter rim 11 cm, wall thickness about 0.4 cm, and the *fabric* is similar to type B with the same tracks of bad cooking.

Type D consists of a low and wide cup with everted rim: the clay is beige with many calcareous inclusions of micrometric dimensions.

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² BEJOR 2007, 127–135; BEJOR 2008, 95–114. For the problem of the residual pottery see BASSOLI 2010, 109–133; PANERO 2010, 45–60; PANERO 2012, 91–104.

³ For the index of brokenness see ORTON ET AL. 1993.

⁴ JOLY 1974, 55–56.

⁵ BONETTO/FALEZZA/GHIOTTO 2009; GIANNATTASIO ET AL. 2003.

⁶ TRONCHETTI 1996; ZUCCA 1985, 93–104.

⁷ BONETTO/FALEZZA/GHIOTTO 2009; GIANNATTASIO ET AL. 2003; LA FRAGOLA 2000, 209–236.

⁸ FRANCESCHI 2009, 647–656; GAZZERO 2003, 106–112.

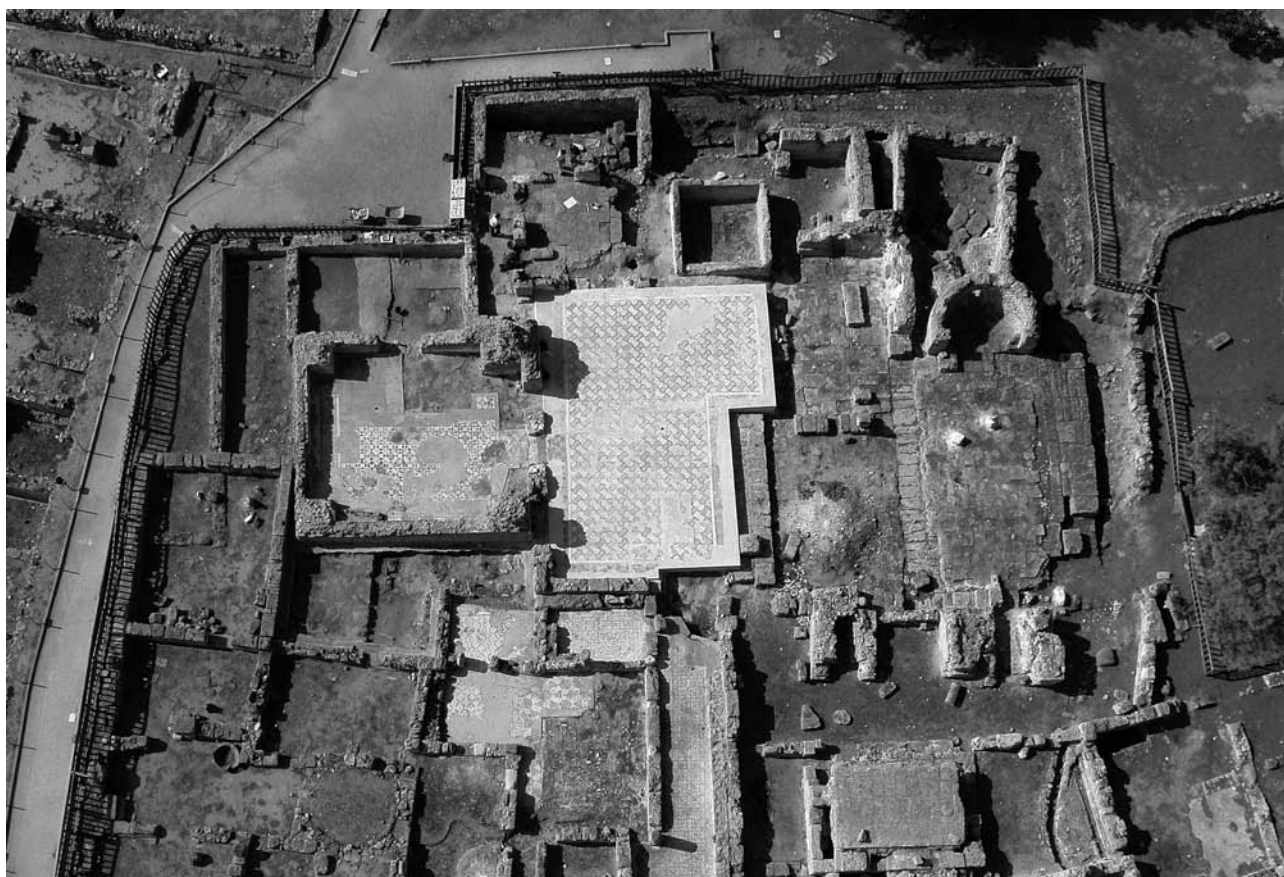
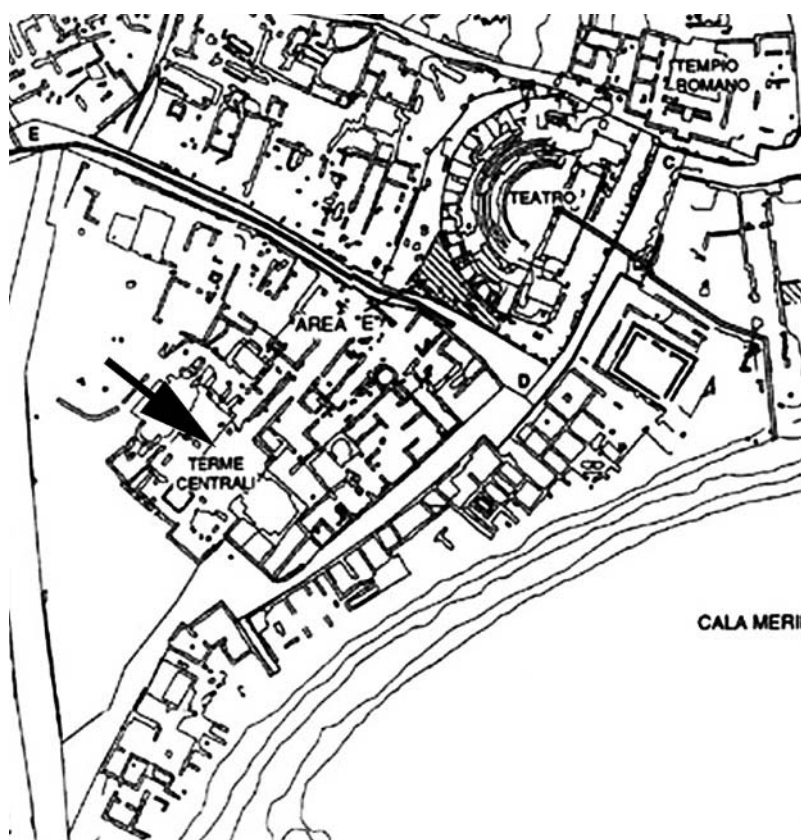


Fig. 1. The central area of Nora (the “Area E”) and the Central Baths.

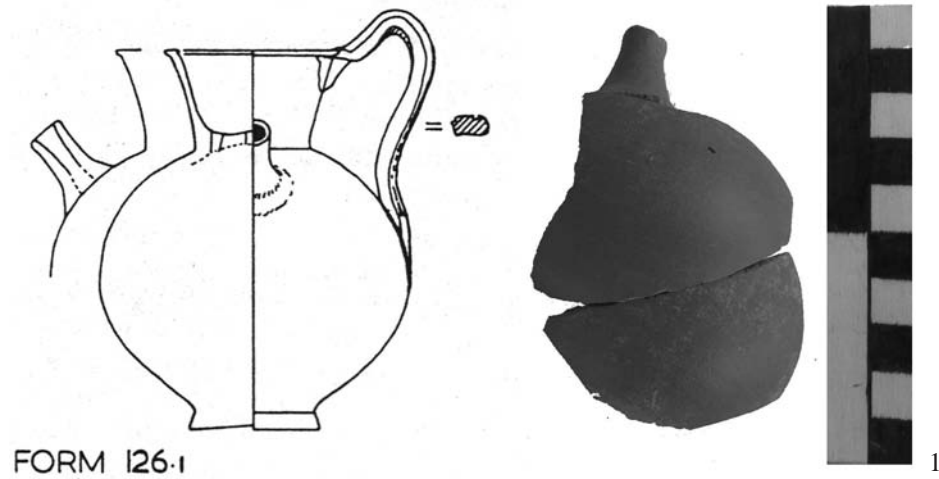


Fig. 2. 1 Globular spouted jug (*guttus*) in sigillata A1 and Hayes form 126 (from HAYES 1972); 2 table ware, imitating the later forms of thin-walled ware.



Fig. 3. Reconstructed vessels.

Furthermore, it was possible to attribute more than 170 sherds to the North-African coarse ware, so called Roman Black Rim Ware. In Sardinia this particular kind of pottery is the usual cooking ware used for a very long time both in the big centers and in rural areas:⁹ all the forms known can be found here and even imitations produced locally.¹⁰ The Roman Black Rim Ware is easily recognizable because of the high level of standardization: the most characteristic features are the orange fabric, a slipped interior or exterior and the blackened surface or rims.¹¹ The level of homogeneity observed testifies the existence of a manufacturing tradition funded on the massive production of some forms of vessels that often lasts for many decades.¹²

The North-African production is the only Roman coarse ware that shows a wide diffusion around the western Mediterranean. Almost all the types of vessels known are produced in Northern Tunisia, in Carthage's area, except for pottery polished in stripes, whose manufacturing core is Central Tu-

nisia.¹³ The large volume of import is related to the commerce of another ware produced in North-Africa, the African Red Slip ware (ARS): the Roman Black Rim Ware seems to be exported together with the finer ARS, but was cheaper and could be used for more occasions. It starts to be exported to the western coasts of the Mediterranean from the beginning of the 1st century AD (Algeria, Spain, Italy and France). The end of the manufactures is traditionally related to the Vandalic occupation of the African regions (during the 5th century AD).¹⁴ The spreading of the Roman Black Rim Ware and the ARS is related to the big volume of trades involving the northern African regions, concerning in particular food products: wheat, oil, sauces and fish conserve.

More than 22 vessels were partially reconstructed and that contributed to the identification of at least 15 different forms. The most represented vessel is the cooking lid (**fig. 3,1**): types Ostia I, fig. 263 (**fig. 4,1**); Ostia IV, fig. 60; Ostia III, fig. 332; Ostia II, fig. 302; Ostia I, fig. 18; Ostia IV, fig. 59. The diameter swings between 18 and 40 cm and the fabric is usually pink-orange, rather coarser, with granular consistence: the rim presents the typical black surface due to the fact that, because of the stacking method used to put the pottery in the oven, it was the only part of the vessel left exposed to the effects of fumigation.¹⁵ Its double function and the fact that every lid could be used for more than one type of pot allows this form to be one of the most common, with a great range of export. The various types of cooking lid found in US 31331 show how the morphological evolution of this vessel's shape (from the 1st to the end of the 4th–beginning of the 5th century AD) leads to a progressive enlargement of the rim. The most ancient form attested, that has a rim undifferentiated from the wall, is type Ostia II, fig. 302: it is common from the end of 1st century BC–beginning 1st to the second half of the 2nd century AD.¹⁶ Even if there isn't a clear difference between rim and wall yet, the shape of the edge gets slightly bigger in type Ostia I, fig. 18: other records of this form can be found in Cornus¹⁷, Cagliari (Vico III Lanusei)¹⁸ and S. Eulalia.¹⁹ Another step in the changing of the shape can be seen in type Ostia IV, fig. 60: the form presents a blackened rim even more thick and has been attested in Carthage between 320–360 and 360–440 A.D. and in Ostia in context belonging to the end of the 4th–beginning of the 5th century AD.²⁰ In the rest of Sardinia this type of rim is very frequently found in Cagliari (S. Eulalia)²¹, in Gesturi's area (Tana),²² in Cornus²³ and in the eastern necropolis of Porto Torres.²⁴ The final transformation of the rim's shape is clear in types Ostia IV, fig. 59 and Ostia I, fig. 263. The rim looks very enlarged, blackened and rounded, with a definite distinction from the wall: these types' diffusion takes place

¹³ FALEZZA 2009, 681–682; HAYES 1972, 205–211; GANDOLFI 2005, 224.

¹⁴ Ibid. 224.

¹⁵ Ibid. 225.

¹⁶ FALEZZA 2009, 682; GAZZERRO 2003, 128–129.

¹⁷ GIUNTELLA 2000, 259.

¹⁸ MEZZANOTTE 2006, 188.

¹⁹ MARTORELLI/MUREDDU 2002, 293.

²⁰ Atlante I, 212.

²¹ MARTORELLI/MUREDDU 2002, 293.

²² LILLIU 1985, 244.

²³ GIUNTELLA 1985, 103.

²⁴ SATTA 1987, 91.

⁹ ZUCCA 1985, 99.

¹⁰ FALEZZA 2009, 681.

¹¹ GAZZERRO 2003, 132.

¹² GANDOLFI 2005, 227.

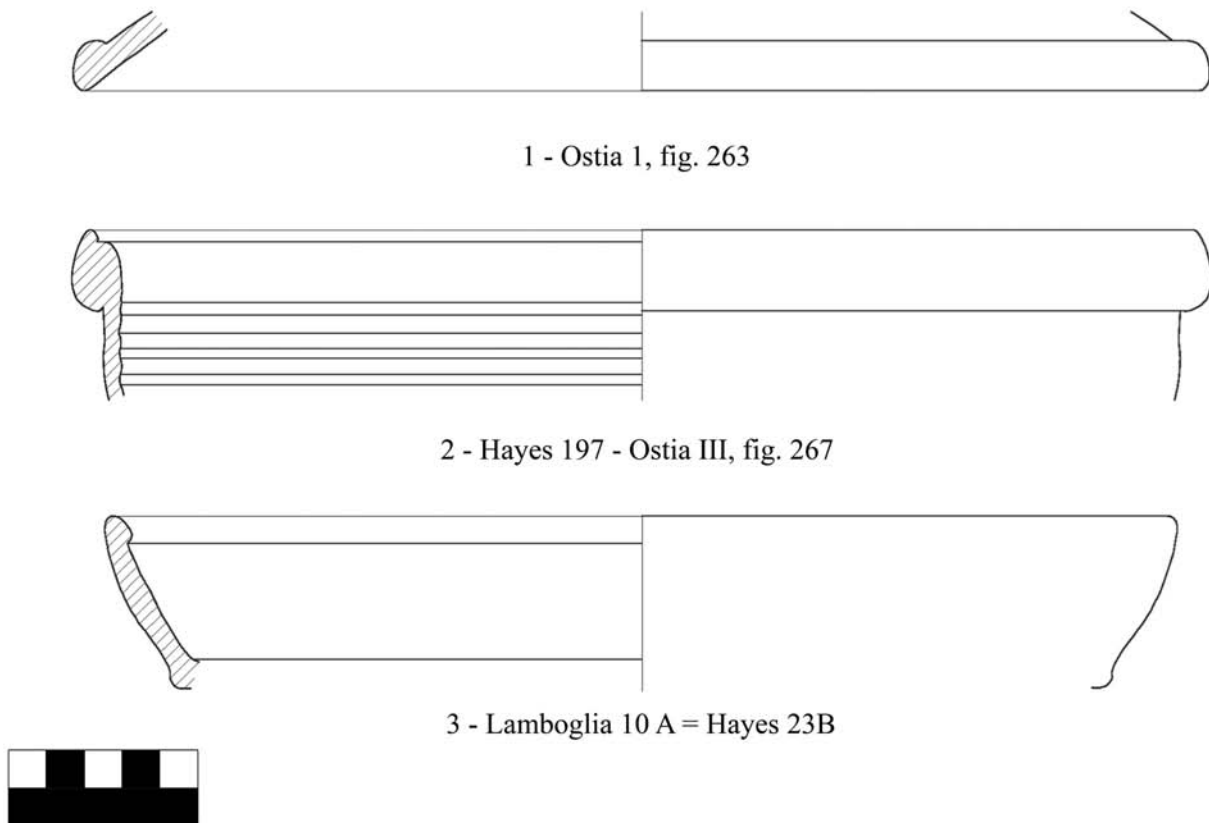


Fig. 4. Types of Vessels.

in the period between the first half of 3rd century AD and the IV both in Ostia and in Carthage (where the form appears before, in 320–360 AD.).²⁵

Next to the previous one, other forms well attested among this material are casseroles and bowls (figs. 3,2–3): types Hayes 197, Ostia III, fig. 267 (fig. 4,2), Atlante CVII, 11, Lamboglia 10A/Hayes 23B (fig. 4,3), Lamboglia 9A. Like the cooking lid, this form presents the characteristic orange fabric and the blackened external surface. Usually these casseroles have a rim with a small hollowing on inside to receive a lid, vertical wall ribbed inside and a convex striped bottom.²⁶ The various forms of casseroles identified testify the morphological development of the shape from the 1st century to the end of the 4th/beginning of the 5th century AD. At first the rim is outstretched with an edge to allow the positioning of a lid; then the rim's final element enlarges and gets closer to the wall of the vessel; at last rim and wall correspond, separated only by two grooves, one above and one below the rim²⁷.

The casserole Hayes 197 (= Ostia III, fig. 267) has more or less vertical walls, rounded bottom and a heavy convex rimoulding with a small hollowing on inside to receive a lid. Underside it bears a series of small grooves or ridges; similar treatment has the inside of wall, often with a 'stepped' appearance and the exterior of rim and wall frequently is blackened²⁸. This form was current in the Mediterranean sea from the first

half of the 2nd to the end of the 4th/beginning of the 5th century AD: Sardinian contexts could narrow the chronology mostly at the 3rd century AD with the following development of a local production located, for example, in Sinis area or around Oristano.²⁹ Type Atlante CVII,11 shows an outstretched rim, blackened, outward-facing: in Carthage this form is found in contexts that could be dated between the 360 and the second half of the 6th century AD.³⁰ The casserole Lamboglia 10A (= Hayes 23B) has a more or less conspicuous rim on the inside, a convex bottom decorated with concentric stripes; a little step undelines the point of conjunction between wall and bottom. The contexts of finding in Sardinia, Ostia and northern Tyrrhenian sea, lead to a chronology between the first half of the 2nd and the end of 4th/beginning of the 5th century AD.³¹ This type is very common in Sardinia: Villacidro³², Cagliari (Vico III Lanusei)³³, Olbia (Su Cuguttu)³⁴, Turris Libisonis³⁵ and in southern necropolis at San Gavino³⁶. The bowl Lamboglia 9A has curved wall and flat bottom, with the external surface blackened and the inside often covered in gloss. The chronological period of this vessel is set between the end of the 2nd – beginning of the 5th century AD.³⁷

²⁹ FALEZZA 2009, 687.

³⁰ Ibid. 687–688.

³¹ GAZZERRO 2003, 130.

³² TILLOCA 2004, 1260.

³³ MEZZANOTTE 2006, 189.

³⁴ SATTÀ 1996, 414.

³⁵ VILLEDIEU 1984, 131.

³⁶ SATTÀ 1987, 370.

³⁷ FALEZZA 2009, 689.

²⁵ FALEZZA 2009, 685.

²⁶ HAYES 1972, 209.

²⁷ FALEZZA 2009, 686.

²⁸ HAYES 1972, 209.

Unfortunately, regarding the morphological and chronological combination of the different types among themselves, it is difficult to raise any hypothesis because in Nora the majority of the sherds are residual,³⁸ so it's not possible to gather reliable informations: the only combination is the one between casseroles type Hayes 197 and type Hayes 23b, with almost the same chronology and often found in the same contexts³⁹.

These types of vessels are found almost everywhere in Sardinia: in Nora, numerous examples of North-African coarse ware come from the *forum* area and the so-called Area C (in the western part of the city).

In Nora this class appears at the end of the 1st century AD, but it starts to be very common in the first half of the 2nd century AD and reaches the maximum diffusion in the 3rd century AD. Between the end of the 3rd century and the beginning of the 4th there's a flexion in the import, that rises again in the last decades of the 4th century AD and declines beyond repair in the 5th century. (F. Z.)

In US 31331 twenty fragments of "fiammata" ware have been found; among them there are two rims, two bases, one handle and twelve decorated walls. It is a significant amount for a single stratigraphic unit, considering the fact that this ware seldom occurs in such a high concentration in Nora.⁴⁰

"Fiammata" ware is a local production which has been restricted to the western-southern Sardinia, area where it is mainly spread.⁴¹ Tronchetti, who first studied the formal and typological characteristics of such ware, with extreme certainty indicates *Sulci* as the main center of production and also proposes the possibility of an unitary and common factory for the specimens that he analysed, coming from Sant'Antioco, Domusdemaria and Nora.⁴²

This ware is easily recognizable by the characteristic painted decoration, from which its name derives. In fact it consists of wide horizontal stripes of short curved brush-strokes, the so-called "flames", and also of straight and wavy stripes, that can vary from brown to reddish in color, more or less intense or diluted. The outer surface – and in open forms also the inner surface, which presents similar decorative motifs – on which the painting is stretched is usually covered with a pale slip, white or pink, similar in color to the fabric. The fabric, in fact, is purified and hard, very pale, almost white, with shades that vary from ocher to deep pinkish.

If the decorative motifs appear repetitive and standardized, the same can be said for what concerns the forms.

There are two closed forms attested, the jug and the amphora, both tending to be large and morphologically identical, only differing in the number of handles. The basin is the only documented open form, which can also reach large sizes, up to 40 cm in diameter.

It is assumed that "fiammata" ware was most likely used as tableware, on the base of significant elements such as the high level of morphological standardization, the evidence of numerous fragments in living environments and the presence of a manifest decoration.⁴³

The fragments found in US 31331 are different in size, mostly too small and in a bad condition to be ascribed with certainty to a specific form. It is anyway possible to appreciate their characteristic decorative motifs, just like an illustrative set of samples (figs. 5,1–6): straight stripes, wavy stripes and, above all, the typical "flames". It's also interesting to point out the variety in color intensity – there are fragments with pale and diluted patterns and others where the brush-stroke is more vigorous.

From the autoptical analysis two main fabrics are to be recognized, both rather purified with rare and small brown inclusions – both very pale, the one yellowish and the other light pinkish.

Among all the considered fragments, the most significant in regard of size is a basin of nearly 40 cm in diameter, whose rim and profile are still preserved in a large portion.

The rim is everted and folded down and below there is further decoration consisting of a corrugated plastic strip, which is also characteristic for this ware⁴⁴. The outer surface of the tank (fig. 5,4), covered by pinkish slip, presents a decoration with wide angular waves, below which runs a horizontal stripe of the same light brown color. The inner surface (fig. 5,5), also decorated, presents a horizontal stripe with the so-called "flames" at the top, while below there is another wavy stripe.

This large fragment is likely to be relevant to another sherd belonging to a ringed base, since both present similarities concerning fabric, the color of the surface and the type decoration (fig. 5,6).

The "fiammata" ware takes on particular importance as chronological marker. Since its production is rather limited in time. According to Tronchetti, in fact, this ware is to be restricted to the 3rd century AD, on the basis of findings in closed contexts which can be dated with certainty.⁴⁵

This proposal of dating is confirmed by the observation of the fabrics of amphora fragments found in the same US. Among them is recognizable, for example, a brick red fabric tending to dark grey in the upper part of the section, with abundant white and grey, small and tiny inclusions, attested in amphoras of African production dated back to the third century.⁴⁶ (C. M.)

The local pottery (imitation of Thin-Walled and Fiammata Wares, characteristic of southern Sardinia) is a significant chronological indicator, since its production is attributable to

³⁸ PANERO 2011, 136–148.

³⁹ GAZZERRO 2003, 128–130.

⁴⁰ In this regard it's interesting to examine data published concerning the other excavation areas in Nora: Area C, excavated by University of Genova, and Forum Area, by University of Padova. The first one has 43 fragments of "fiammata" ware divided in six UUSS, of which only one presents a concentration of 30 specimens. The second one has evidences even more reduced: 27 fragments distributed in eleven UUSS. PICCARDI 2003, 206; TRONCHETTI 2009, 694.

⁴¹ Tronchetti observes that the diffusion of this ware interests almost exclusively the coastal area of *Sulci*, Domusdemaria, Nora and Cagliari. He points out that in the hinterland of Cagliari "fiammata ware" is no longer attested and that in northern Sardinia the evidences are extremely sporadic. TRONCHETTI 2009, 695.

⁴² TRONCHETTI 1996; ID. 2009.

⁴³ TRONCHETTI 2009, 695.

⁴⁴ By comparison: PICCARDI 2003 Tav. 57,1–4; TRONCHETTI 2009 figg. 1; 2.

⁴⁵ Ibid. 694–695.

⁴⁶ BONIFAY 2004.

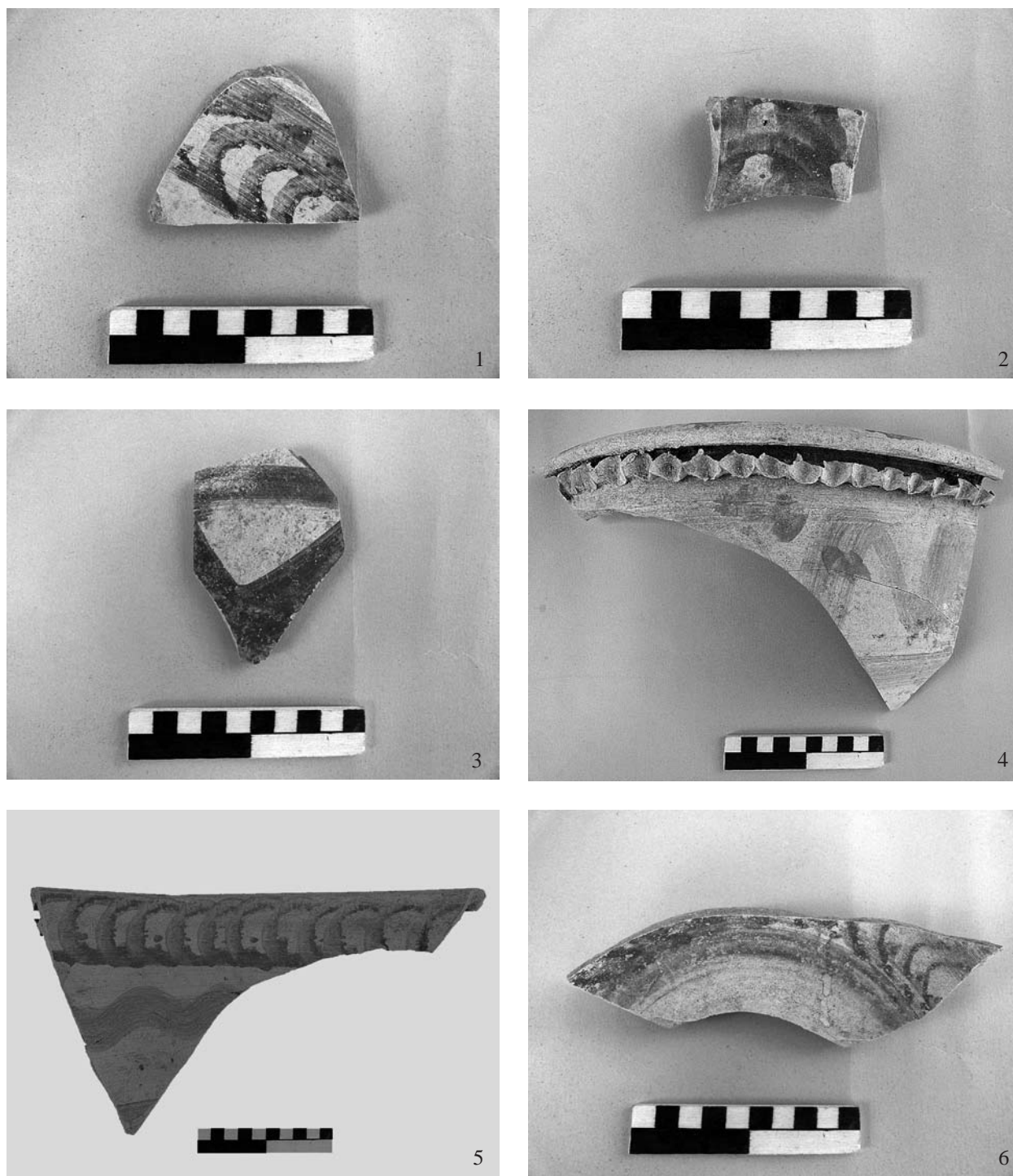


Fig. 5. 1–2 Fragments of “Fiammata ware” decorated with the typical “flames”; 3 fragment of “Fiammata ware” decorated with straight stripe and wavy stripe; 4 fragment of the outer side of a basin decorated with wavy stripe and straight stripe; 5 fragment of the inner side of a basin decorated with wavy stripe and the typical “flames”; 6 fragment of a ringed base of a basin decorated with the typical “flames”.

the 3rd century AD (or better to the end of the 2nd century AD). This proposed dating is confirmed by the observation of the few, but however well retreadable, finds, imported from African area (amphorae, lamps, ARS, Roman Black Rim Ware).

It is therefore in the presence of a major phase of arrangement of the area, through smoothing and leveling that,

as evidenced by the pottery founds, was passing from a eminently private function to a public intended use.

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