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TRADE AND EXCHANGE ALONG THE ADRIATIC SEA IN EARLY IMPERIAL TIMES: THE CASE OF AFRICAN IMPORTS

During the 1st and 2nd centuries AD it is already possible to notice an interesting presence of African products in the northern Adriatic area. The development of this phenomenon assigns Africa a fundamental role in the Mediterranean market and lays the basis during the 4th century AD for real economic, social, and cultural globalisation of the ancient world. Taking into consideration these trade relationships, the role of Aquileia inside the Adriatic distribution system has been examined. The city occupied a strategic position as a natural terminal of the commercial routes coming from the south and as a redistribution knot towards the hinterland to the provinces beyond the Alps.

North African amphorae – African cooking ware – ARS ware – Adriatic distribution system – early Roman times

1. Introduction

The presence of African products in the northern Adriatic area is usually linked to the trade development of foodstuffs during the 3rd century AD when the market is invested with a large quantity of African products. The dominance of Tunisian imports over Italic and Eastern goods is registered mainly in the period between 4th and the first half of the 5th century AD. The start of this trend, however, is dated earlier, still in the 1st and 2nd centuries AD: a period of time in which it is already possible to notice an interesting presence of products exported from the region of *Africa Proconsularis*.

Recent excavations in the so-called *Domus* of *Titus Macer* in the former Cossar property of Aquileia, in one of the residential quarters of the ancient city, brought to light a large amount of African ceramics (**fig. 1**). A detailed analysis of the contextual data together with the materials excavated there made it possible to reconsider the distribution patterns of North African products along the Adriatic (see Bonetto, Mazzocchin and Dobрева 2021). This overview is to be considered only as a starting point for a more general study of the global development of African trade routes in the northern Adriatic region (further in Dobрева forthcoming).

2. African amphorae

Among the first imports that reached Aquileia, some amphorae of Punic tradition have to be considered. Early Imperial African amphora production reached Aquileia still in 1st century AD. The deposits from the so-called *Domus* of *Titus Macer* show two examples of Van der Werff 2 amphorae (recently discussed in Rizzo 2014: 263-264, Nacef 2015: 26-33 and

Bonifay 2016b) found in contexts of the period IIIa, dated to 25–75 AD (**fig. 3, 1-2**). The formal characteristic of the rim is similar to the late version of the form, typical for Flavian times. Recent analyses showed that Van der Werff 2 were produced in Tunisia, at Jerba, El Maklouba, *Leptiminus* and *Thapsus* (see further details in Capelli et al. 2017: 19-22). The distribution patterns of these amphorae are usually linked to the Tyrrhenian market, as documented by some fragments discovered at Ostia in contexts dated to the 1st century AD, at Rome, Pompei, *Herculaneum*, Scoppieto, and Malta (Panella 2001, fig. 19; Rizzo 2014: 264, 267-268). The form is quite uncommon for the Adriatic centres. It is attested at Aquileia, and, together with the above-mentioned examples from the *Titus Macer*'s House, Van der Werff 2 amphorae present in mid-1st century BC context of “Essiccatoio Nord” (Auriemma and Degrassi 2015: 472, fig. 9a) can also be cited; one example was found at Altino (Toniolo 1991: 37) and one more example is part of the cargo of the *Torre Santa Sabina* wreck, sunk nearby at Brindisi, Puglia (see **fig. 2**). The cargo of *Torre S. Sabina* shipwreck was mainly composed of Adriatic oil and wine amphorae (Greco-Italic, Lamboglia 2, ovoid amphorae Apani II, III, V, VII), some Aegean containers of Rodian, Koan, and Knidian origin, and of Tyrrhenian amphorae Dressel 1 and Dressel 2-4. Other amphora forms of Punic tradition are also reported along the Adriatic. Although not so frequently attested their presence is an important source for the reconstruction of distribution patterns in the Mediterranean. One Van der Werff 1 (=Maña C2) container was recovered in a context, dated between the middle of the 2nd century BC and the beginning of the 1st century AD of the River port at Aquileia (Carre 2007: 588). Additionally, in the *Čavlin* wreck near Murter in Dalmatia, one Dressel 18 was discovered while the main cargo was



Fig. 1. Map of Aquileia with the archaeological areas cited in the text: 1. Canale Anfora; 2. The *domus* of “delle Bestie Ferite”; 3. Area north of the fluvial harbour; 4. Area so-called “Essiccatoio Nord”; 5. *Forum*; 6. The so-called *domus* of *Titus Macer*; 7. National Archaeological Museum of Aquileia (drawings M. Trivini Bellini after Bertacchi 2003).



Fig. 2. Sites cited in the text (drawings M. Trivini Bellini).

composed of Lamboglia 2 wine amphorae of Adriatic origin (Koncani Uhač 2007: 364, Sl. 4). Recently the genesis of the form was linked to Van der Werff 1 produced in *Zeugitania* (mainly in the region of *Carthago*), which during 1st century AD could develop in Dressel 18 (a full discussion in Rizzo 2014: 268-270). Lastly, one amphora of Punic tradition is also recorded in *Potentia* valley in the Marche Region but the contextual data is unknown (fig. 2). The information is reported in Monsieur and Verreyke 2007: 538, where a brief notice of Maña C amphora is made, unfortunately without any drawing or illustration.

The pattern observed for Tunisian exports to Aquileia in the 1st and 2nd centuries AD also could be linked to the import of some foodstuffs from Tripolitania. From early Imperial times until the beginning of 3rd century AD, the presence of Tripolitana II (see Bonifay and Capelli 2013, fig. 29 for the chronological evolution of the form) (fig. 3, 3) are reported in various areas of the city (fig. 1), linked to commercial buildings, for instance north from the River port (Rousse 2007: 613), in the storehouse of the harbour (Carre and Zaccaria 2004), and in “Canale Anfora” (Gaddi 2017: 387-388); to public and private structures: baths (Braidotti 2010/2011: 60) and houses (the *domus* of *Titus Macer*). In late 1st century AD the trade of African foodstuffs (in particular wine and fish sauces) is indicated by some finds of Leptiminius II (fig. 3, 4) recorded in the excavations of the River port (Rousse 2007: 609-610, fig. 5), in the west well of the *forum*, and in “Canale Anfora” (Auriemma, Degrassi and Quiri 2012, fig. 8a-b) and, moreover, with presence in contexts dated to the end of the 2nd century AD and the beginning of the 3rd century AD. This precise form

appears in the *Domus* of *Titus Macer* deposits in the period IIIc dated from 175 to 250 AD (Dobrev 2014: 84, fig. 12, 3), associated with Hammamet I amphora which has also been recognised in the layers of the *domus* so-called “delle Bestie Ferite” in the western part of Aquileia¹ (see fig. 1). Furthermore, one Leptiminius II amphora was also recovered from the Roman harbour at Cape Kremenjača in Zaton, which is thought to be the commercial port of the nearby *municipium* of *Aenona* situated on the Liburnian coast (Taras 2015: 262-263, fig. 10).

Alongside the evidence of *amphorae* of Punic tradition, some early Roman African types are also present. Its ancient African form (the so-called former “ancient Tripolitanian”) has been recently distinguished from Dressel 26 (Bonifay 2016b). The production of this type is most probably located in the region between *Carthago* and *Utica*, in *Zeugitania* and not in *Tripolitania*, as was previously surmised (Capelli and Contino 2013). Regarding some recent analysis the form appears around the mid-2nd century BC and is distributed until the beginning of the 1st century AD (*ca.* 15 AD) (see Bonifay 2016a: 511 and cited sources). At Aquileia the form is known only from the House of *Titus Macer* where unfortunately it is reported as residual finding in a mid-5th century context (fig. 4, 8). Moreover, two examples of the same type were part of the cargo of *Torre S. Sabina* wreck (see above). Other ancient Roman African types are known from the *Domus* of “delle Bestie ferite” where it is documented that a Leptiminius I amphora² originated from

¹ Pers. comm. from V. Mantovani.

² Unpublished, pers. comm. from V. Mantovani.

the Sahel region in Tunisia and especially, as evoked by the name of the type, at *Leptiminus* but also at *Sullectum* (Nacef 2015). This amphora is responsible for the fish sauce imports from Africa between the last quarter of 1st century AD and mid-3rd century AD. One example was also recovered in the so-called house of *Titus Macer* in a context of a modern chronology (fig. 4, 7).

During the 2nd century AD Tunisian oil supply was guaranteed by imports of Ostia LIX and Ostia XXIII (fig. 4, 9-12), considered as the precursors of the African classical types. These containers, which originated from the north-western part of Tunisia, were shipped along the Adriatic routes. At least three examples were part of the cargo of the *Grado* wreck, dated to mid-2nd century AD (Auriemma 1997: 134,



Fig. 3. North African amphorae of Punic tradition: 1. Van der Werff 2/Schöne –Mau XL; 2. Van der Werff 2/Schöne –Mau XL; 3. Tripolitana II; 4. Leptiminus II (drawings M. Trivini Bellini).

fig. 7), one has been found at *Concordia Sagittaria* (*Concordia Sagittaria* 1988: 148), arriving at Aquileia where some fragments from the excavations of the eastern part of the *forum* are collected (*Scavi ad Aquileia* 1994: 418, tav. 64, AA7). Other examples come from the *Domus* of *Titus Macer*, unfortunately in Late Roman and modern date deposits. Furthermore, specimens are known from Aquileia's *ager*,

as for instance at Joannis (Strazzulla Rusconi 1979: 74) and probably were redirected, by using the *via Iulia Augusta*, northwards to *Iulium Carnicum*, nowadays Zuglio (Donat 2001: 389) and Santa Maria di Scalunico (Cividini 1999: 37), which, as far as what has been published so far, is the most inland find spot in the region (fig. 2).

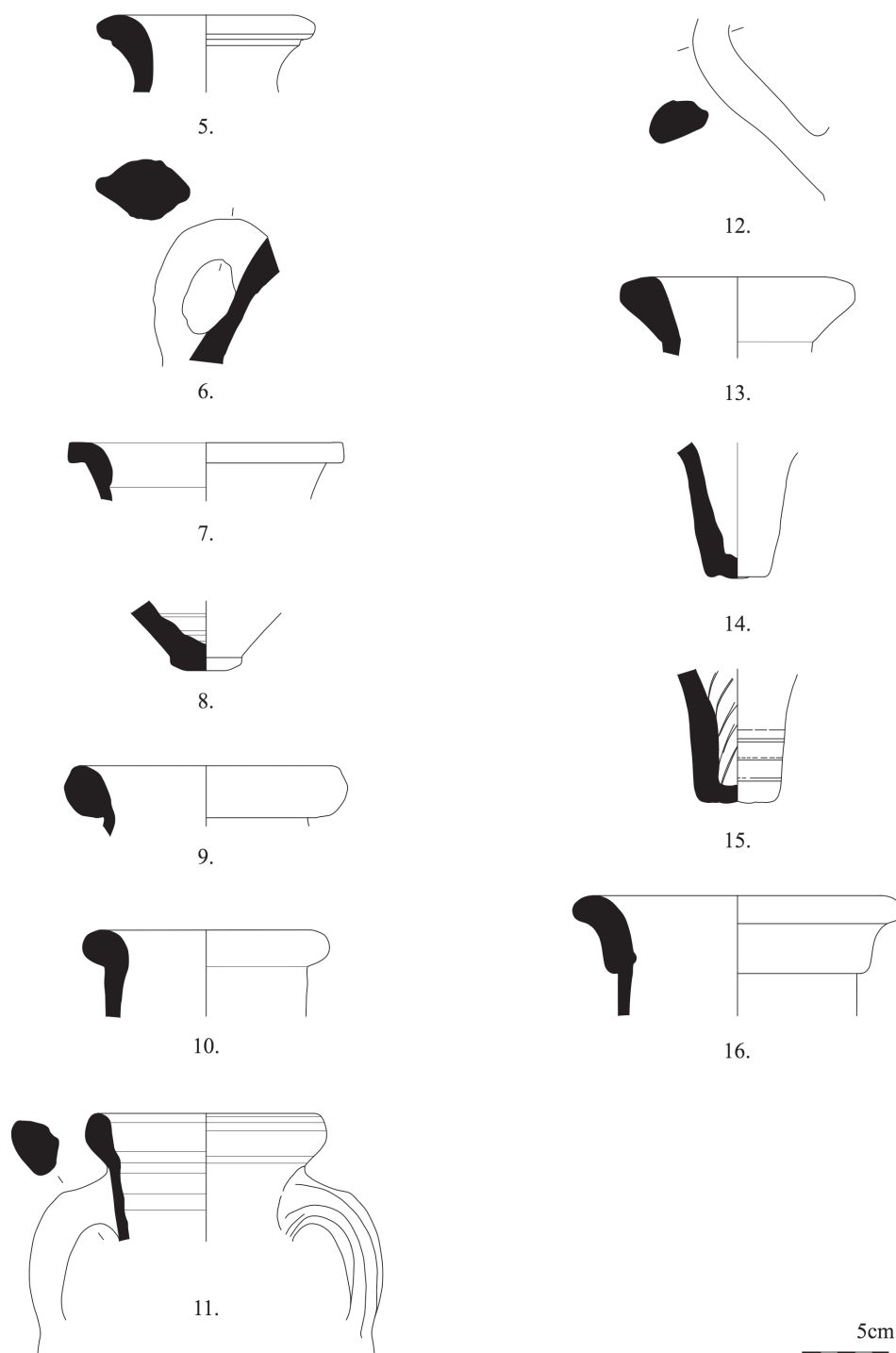


Fig. 4. North African amphorae: 5-6. Unidentified form of Punic tradition; 7. Leptiminius I; 8. Ancient African form; 9. Ostia XXIII; 10. Ostia LIX; 11. Ostia XXIII/LIX, late variant; 12. Ostia XXIII/LIX, late variant; 13. Pupput T 700.5 *similis* (Ostia VI, 368); 14-15. Uzita Pl. 52.10; 16. Sullectum 2/Uzita Pl. 52.10 (drawings M. Trivini Bellini).

In the same period *Titus Macer* and “delle Bestie Ferite” contexts register the presence of Puppit T700.5 *similis* and Uzita tav. 52, 10 (fig. 4, 13-15) which, up to now, are the only sites where these forms are documented. Their distribution along Adriatic coasts (at least for the amphora Uzita tav. 52, 10) has been also recognised at *Byllis*, Albania (Bonifay 2004: 103, fig. 52, 11). They are mainly connected with the import of *salsamenta* coming from the central Tunisian coast; the presence of the easily distinguishable typical *Sullectum* fabric (see especially fig. 4, 16), confirms trends observed in other part of Mediterranean. Aquileia finds do not offer possibilities to precisely date the type, because they are coming from early 5th century contexts; nevertheless, their presence proves some early trade connections between Tunisian Sahel and Adriatic.

From the end of the 2nd and the beginning of the 3rd century AD, the percentage of Tripolitanian oil became more relevant in the examined deposits. The presence of Tripolitana I and III at Aquileia (Cipriano and Carre 1987: 486-487; *Scavi ad Aquileia* 1991: 226-227; 1994: 413-415; Auriemma 1997; Rouse 2007: 613 and Dobрева forthcoming) and at Trieste is tiny linked to the Adriatic distribution system of African foodstuffs from the second half of the 2nd century AD onwards. Tripolitanian amphorae are part of the cargo of the Grado wreck, while their presence at Trieste from the excavations of Crosada (Zulini 2007: 162), piazza Barbacan (Maselli Scotti et al. 2003: 85), and Aquileia itself is the evidence that these centres can be considered as the terminal point of the northern Adriatic commercial system. Distribution patterns of the Tripolitanian oil amphorae report the involvement only of the coastal cities where some imports are registered and their absence (or rarity) inland where the olive oil supply is still provisioned from *Histria* or the Aegean region.

3. African cooking ware (ACW)

Other early imports from Africa also include some vessels of African cooking ware (ACW), supported mainly by the deposits of the *Titus Macer*'s House where an example of the casserole Hayes 194=Ostia II 303, produced “a patina cenerognola”, has been recognised. The form has Punic prototypes and is usually distributed during the Tiberian period until the mid-2nd century AD. In Aquileia it is known from a context dated between the last quarter of the 1st and the beginning of the 2nd century AD (fig. 5, 17). The early circulation of the form is confirmed by some finds from Pompei (*ante* 79 AD) and by others recovered in Ostia in deposits of 70/80 AD date (Napolitani 2014: 49) and by three examples coming from the military camp of *Burnum* in Liburnia (today Croatia) dated to the first half of the 1st century AD (Borzić 2014: 298, T. 2, KKZ-12).

During the 2nd century AD, ACW imports arrived mostly from north of Tunisia (the region of *Carthage*?), from the area affiliated to the production of African terra sigillata of A group. The casserole Ostia II 312 (fig. 5, 18) originated from this zone, which is considered as a prototype of Hayes 197. It usually dates between second half of the 1st and 2nd century AD and at Aquileia is found in a late-2nd century context in the *Titus Macer*'s *Domus*. The form is attested in Ostia

between the Flavian period and mid-2nd century AD (*Atlante* I: 219) but no other examples from Aquileia are known up to now. To the same period the pan Ostia II 306 (fig. 5, 19) can also be referred, which is characterised by a bifid-form rim, typical for the pans in Internal Red-Slip pottery, mainly produced in Campanian region between 2nd century BC and 2nd century AD. The earliest date of this pan is related to examples from the military camp of *Burnum* (today Croatia), dated to the first half of the 1st century AD (Borzić 2014: 298, T. 2, KKZ-2) and to Ostia finds from 70/80 AD date deposits (Napolitani 2014: 49, tav. VI, 57-58). At Aquileia the form was recognized among the materials of the House of *Titus Macer*, unfortunately coming from a post-Antique context (period Vb, 1200–1860) and in the excavations of the eastern part from the Roman *forum* (Pröttel 1996: 248, n. 87, Taf. 33). Other early African imports are composed by the plate/lid Hayes 196B=Ostia III 332. These vessels may have been used as the lids of forms Hayes 197 and Hayes 23 (Hayes 1972: 208-209). Examples occur in 2nd century levels at Ostia (Napolitani 2014: 51-53) and in mid-3rd century contexts at Nabeul (Bonifay 2004: 227). In the Adriatic the form is found at Trieste, in Piazza Barbacan excavations (Maselli Scotti et al. 2004: 106, tav. VII, 83), and in Crosada investigations (*Trieste antica* 2007: 91, Tav. 17, fig. 2). Other Hayes 196 (no variants recognised) occur at Aquileia, Sevegliano, Trieste, and in the Roman villa of Joannis, mainly in 2nd to 3rd century levels, although some late variants of the form are also known (*Trieste antica* 2007: 91 with other references; see also Pröttel 1996: 241, 247, 249, 252 and Zulini 2017a: 216). The example presented here (fig. 5, 20) is found in 4th and 5th century deposit of the IVb period of the House of *Titus Macer*, more probably to be considered as a residual find.

Additional data, in relation to these “first imports” of ACW to Aquileia, fall under the production of B group, vessels with the so-called burnished slip, manufactured in the centres of *Byzacena*. The findings refer to the *domus* of *Titus Macer* and of “delle Bestie Ferite”, where examples of the bowl Hayes 181, n. 1 (fig. 5, 21) occur. The form Hayes 181 (no variants recognised) has been identified in other areas at Aquileia (the eastern area of the Roman *forum* and in the *basilica*) and in the region of Friuli Venezia Giulia (Trieste and Sivigliano). Unfortunately no chronological data from the context is reported, see Pröttel 1996: 241, 249, 255. The bowl Hayes 181 was also recorded in the “Canale Anfora” excavations in 3rd and 4th centuries' deposits (Zulini 2017a: 219-220). This form is regularly found in 2nd century layers: known examples from the second half of the same century are at Ostia; meanwhile at *Puppit* the vessel was found in a tomb together with the lid Hayes 196=Ostia III 332 (Bonifay 2004: 213, note 163). No additional chronological observations can be offered from Aquileia findings, as the examples from the House of *Titus Macer* are attested in the period Vb dated to the period of 1200 and 1860. The same consideration can also be extended for the late version of the same bowl Hayes 181, n. 2=Ostia I 15, usually dated between the second half of the 2nd and 3rd century AD, recorded in a 3rd and 4th century level at Aquileia (Zulini 2017a: 219), and in a late Roman context (see *Trieste antica* 2007: 92-93 for other examples found at Aquileia and Trieste).

The framework of the ACW imports is further enriched by the findings of the shallow casserole Hayes 184A (**fig. 5, 22**) and its lid Hayes 185A (**fig. 5, 23**), both produced in *Byzacena*. The distribution of the shallow casseroles covers a period between 2nd and the beginning of 3rd century AD. In the *domus* of *Titus Macer* the form occurs in contexts dated in the 5th century AD, probably as a residual material. Meanwhile early examples of the lid Hayes 185A are still attested from the end of 1st and the beginning of the 2nd

century AD; even the findings from Aquileia occur in a late Roman and early Byzantine context with an approximate date between first quarter of the 5th and mid-6th century AD. However, lids Hayes 185 found in the military camp of *Burnum* in first half of 1st century AD context (see Borzić 2014: 298, T. 2, KKP-2) seem slightly to antedate the beginning of the production. The paucity of evidence and the lack of additional data made the confirmation of this hypothesis difficult.

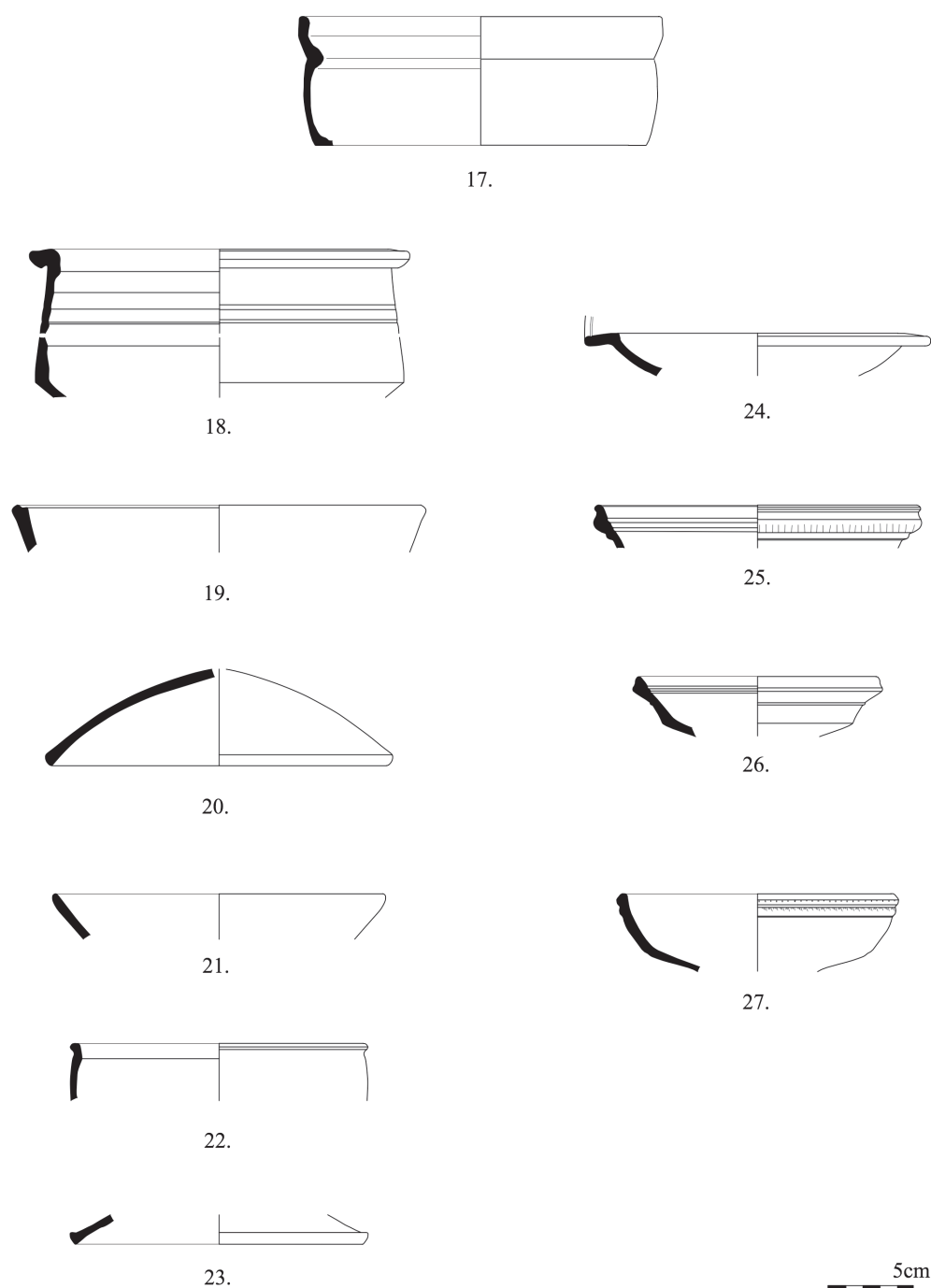


Fig. 5. African Cooking ware: 17. Hayes 194=Ostia II; 18. Ostia II, fig. 312; 19. Ostia II, fig. 306; 20. Hayes 196B; 21. Hayes 181, n.1; 22. Hayes 184A; 23. Hayes 185A. African Red Slip ware: 24. Hayes 6; 25. Hayes 8A; 26. Hayes 8B; 27. Hayes 9A (drawings M. Trivini Bellini).

4. African Red Slip Ware (ARSW)

Among the African products that reached Aquileia in the first two centuries AD the fine tableware covers a special position. The first imports of African Red Slip ware A (ARSW A) are documented by examples of the dish Hayes 3B-C, discovered in both the so-called “Canale Anfora” and in the south-western part of the Roman *forum* of Aquileia (Novak 1980: 98-99; Zulini 2015: 183 and Zulini 2017b: 118, fig. 3). The form is considered as an African imitation of the Dragendorff 36, traditionally manufactured in Gaulish terra sigillata (lastly Bonifay 2004: 155-156, fig. 84, type 2). These vessels are rarely attested in the Adriatic: instead of the Aquileia findings, other examples occur at *Suasa* and in the area around Modena (Zulini 2015: 184 with bibliography).

Another form that could be included in the early series of ARSW is the dish Hayes 6, documented by fragments of classical type with rouletted decoration and dated in the end of the 1st – early 2nd century AD. Specimens that could be placed in its variant B, characterised by plain floor, should be rather later than the decorated ones but not later than mid-2nd century AD (Hayes 1972: 29). Aquileia findings offer the possibility of confirming this chronological data because they come from levels dated from Flavian to 3rd century deposits (Zulini 2017b: 119, fig. 4). Others are instead residual findings collected in 4th to 5th century AD contexts of the House of *Titus Macer* (fig. 5, 24). The form is already known from other parts of Aquileia, from the excavations east and south-west of the Roman *forum*. In the area excavated east of the Roman *forum*, Hayes 6A occurs in a late Roman date context (*Scavi ad Aquileia I* 1991: 120-121). Also see Novak 1980: 118, 121 for the example found in the south-western area of the Roman *forum* where the fragment (variant not specified) is documented in a deposit dated between the first decades of the 3rd century and the first half of the 5th century AD.

Imports of the rather uncommon bowl Hayes 7B are attested at Aquileia, now kept in the depot of the National Archaeological Museum, unfortunately without any supplementary contextual data (Zulini 2015: 184). The bowl with a plain interior is usually related to the 2nd century pottery set (Hayes 1972: 31-33) and up to now only few examples from northern Italy are known: two fragments were found during the excavations of Piazza Marconi at Cremona (Palmieri 2018: 287). On the contrary this form seems to be distributed mainly along the western Mediterranean and the Atlantic coast (*Atlante I*: 26).

A common shape in the early ARSW repertoire is instead the carinated bowl Hayes 8, known with its early variant with rouletted decoration (Hayes 8A) and with its late development in plain version (Hayes 8B) (fig. 5, 25-26). Both variants in ARSW A₁ are products of the *ateliers* located in the area of *Carthage* (Mackensen and Schneider 2006: 173) and appear generally in 2nd century contexts; even the second variant seems to still be distributed in the 3rd century AD (as is the case for examples found in a tomb at *Pupput*, see Bonifay 2004: 156, fig. 84, 5). The samples cited here come from the so-called House of *Titus Macer* and are residual findings (fig. 5, 25-26): the bowl Hayes 8A occurs in a deposit dated to the late 5th and first half of

the 6th century AD, while Hayes 8B was found in upset stratigraphy. Other examples of the form are also known at Aquileia (in particular for Hayes 8A see Pröttel 1996: 252) and in the region, at Udine, where the fragments come from the south-eastern part of the city, found in a deposit dated from the 1st century BC to the Late Antiquity (Pröttel 1996: 243); at Trieste, from the “via Crosada” excavations in late Roman and modern layers (*Trieste antica* 2007: 39, 49-50) and from the investigations in “via Donota” (Pröttel 1996: 241), unfortunately without any information on the context of origin; and the Roman villa of Joannis (some Hayes 8A was cited in Strazulla Rusconi 1979: 1-120).

The bowl Hayes 9A also frequently occurs, which confirms a general increase of the ARS ware imports during the 2nd century AD. The form is very common along with the previous form Hayes 8, also typical of the 2nd century AD. At Aquileia the bowl Hayes 9A is known from the excavations of the *domus* of *Titus Macer* (fig. 5, 27), the “delle Bestie ferrite,” from the excavations at north of the warehouse of the ancient harbour, and from “Canale Anfora” (Carre and Zaccaria 2004: 589; Rousse 2007: 616, fig. 9; Ballancin 2014-15: 27 and Zulini 2017b: 120-121, fig. 7). The form also occurs in other sites of the region, at Grado (Malaguti et al. 2007: 66-67), Trieste (Maselli Scotti et al. 2003: 40, tav. III. 2; *Trieste antica* 2007: 39), “Punta dei Cocci” area (Auriemma et al. 2012: 161), and at *Emona* (Vidrih Perko 1992: 95, tav. 1, 3, fig. 1, 2).

Also relevant to the second and first half of the 3rd century imports is the flask Hayes 147, now conserved in the depot of the National Museum of Aquileia (Zulini 2015: 184, fig. 4). The form is very uncommon and occurs only in few other sites in northern Italy, at *Suasa* (Biondani 2014: 234-236, fig. 2, 11), Pollenzo near Cuneo (Hayes 1972: 185, n. 2), possibly Verona (Zulini 2015: 184, note 16), and more frequently in the western Mediterranean and along the Atlantic coast (*Atlante I*: 49).

The framework of the most ancient imports of ARSW is completed by the lid Hayes 22, discovered at Aquileia in “Canale Anfora” and the “Essicatoio nord” and also present in Trieste (Zulini 2015: 184, fig. 5; Zulini 2017b: 120, fig. 6; Maselli Scotti et al. 1993: 323 and *Trieste antica* 2007: 39-52). The form is quite uncommon and usually dated between the first half of the 2nd and the beginning of the 3rd century AD (*Atlante I*: 28).

5. Conclusion

The data discussed above allowed us to recognize the existence of close commercial links between the upper Adriatic coast and the regions of North Africa during the first two centuries of the Empire. A more accurate reconstruction of the origin and the size of this movement gives Aquileia the role far greater than an arrival and transit terminal - and therefore also a redistribution centre - of goods directed towards the northern Adriatic and the provinces beyond the Alps.

Considering the volume of North African products that reached Aquileia in early Imperial ages, we can note that the percentage is somewhat low if compared to the African

imports in the following centuries. From a basic classification on the 22.315 fragments of amphorae found during the excavations of the so-called House of *Titus Macer*, 2783 minimum number of vessels have been estimated as of Italic (Adriatic, Tyrrhenian, and Sicilian) and provincial (Aegean and Asia Minor, Pontic, Levantine, Egyptian, Gaulish, Iberian, and Lusitanian) production; a very large number refers also to amphorae originating from Tunisia and *Numidia*. In fact, 956 examples of the total amount of containers, equal to 34%, come from North Africa (Dobrevá forthcoming). Among these, however, only about 4% (40 specimens) refers to 1st and 2nd century AD date types. Regarding the ARSW, just 7% of the total number of vessels have been found in early Imperial deposits (see Trivini Bellini 2021). If we consider all African imports, it becomes clear that 4th to 6th century production makes up the majority of the African pottery discovered in the site. Compared to the other pottery classes from the early Imperial period the number of African ceramics that reached Aquileia in 1st and 2nd century AD is comparatively low. The percentage of ACW found in early Roman deposits of *Titus Macer*'s House is attested with 5% of the total number of cooking containers. The rest of the cooking pottery is mainly of local/regional origin (more than half of the vessels), a smaller portion of Tyrrhenian production, followed by the Internal Red Slip pottery, and finally with a small number of individuals registered as the Aegean products. In particular twelve specimens of 229 estimated cooking vessels dated between the second half of the 1st and 2nd century AD are of African origin. The rest of the cooking ware is represented by local/regional coarse ware, attested with 115 vessels: 51 are of Tyrrhenian origin; 24 are in Internal Red Slipware; 26 are Aegean cooking ware products (see details in Dobrevá, Riccato and Trivini Bellini 2018). It therefore seems that Aquileia during 1st and 2nd century AD generally prefers mainly Adriatic and Italic products. This trend seems to fit well with the other evidence from excavations and shipwrecks that indicate that Rome was the most important market for amphora-borne products from North Africa (Hobson 2015: 132). In fact, Paul Reynolds has remarked that during the 1st and 2nd century AD Tunisian amphorae were directed almost exclusively at the Rome market. Until the mid-3rd century and even later, Tunisian amphorae in fact did not reach Spain and Gaul in any quantities (Reynolds 2010: 16). Nevertheless, even of minor importance, trade connections between the Tunisian and Adriatic coasts developed early, probably also due to the demand for some particularly well-known goods. In this regard, it is interesting to note that most of the African amphorae are likely to have had wine or fish sauce content, confirming the integration of North African area in the Adriatic trading system and consequently establishing the distribution patterns of the amphorae of Punic tradition along the Adriatic coast. Actually, trade connections between both regions seem to be confirmed by the amphorae Van der Werff 2/Schöne-Mau XL found in *Titus Macer*'s House into deposits dated to second to third quarters of the 1st century AD. From the last quarter of the 1st century AD, the levels also confirm the presence of casseroles Hayes 194 = Ostia II 303 in ACW which seems to precede the import of fine pottery. ARSW appears

at Aquileia only from the last decades of the 1st century AD (Hayes 6) and in line with the regional framework, an increasing number is registered during the 2nd century AD. It is likely, furthermore, that in the 1st and 2nd century AD, grain was the primary commodity exported from *Africa Proconsularis* and *Numidia*. This is a major element in the equation that will not have left a trace in the archaeological record (Reynolds 2010: 18). According to recent studies, African fine ceramics travelled associated with the grain transported in large ships and thus was responsible for the distribution of the ARSW A. In the 2nd century AD, intensification of the imports of African products can be observed, with the ever-increasing role of amphora, but also of kitchen and fine ceramics. Towards the end of the same and especially with the beginning of the 3rd century AD, African oil trade increases significantly. This phenomenon is linked to the growth of the Tripolitanian amphorae and is part of general trends that developed from the Severan age in Aquileia market. Within this scenario the African imports indexes continue growing and reach their peak between the 4th and the first half of the 5th century AD, demonstrating the intensification of the exchange with Northern Africa (Dobrevá forthcoming).

Regarding the areas involved in this trade, a significant role has to be played by the Tunisian Sahel from where some amphorae and cooking wares have been exported. In particular centres such as *Leptiminus* and *Sullecthum* seem to be responsible mainly for the import of *salsamenta* and/or wine to Aquileia. Another important route is the connection with *Carthage* and the northern part of Tunisia, from where come both some amphorae and most of the cooking and fine pottery. One possible explanation of the existence of these close contacts relates to the importance of the zone in the trade of grain. Lastly, the route that linked the centres of Tripolitania starts to be active just from the end of the 2nd century AD onwards. It is represented mostly by the Tripolitanian oil export which is probably also the main commodity that was shipped along this route.

Although we have investigated the increasing role of African products inside the Adriatic trading system by highlighting some zones as especially dynamic, we are still far from creating a comprehensive model. Nevertheless, based on this data we cannot define these as preferential links or as results of direct exchange, but rather as an echo of a global phenomenon in which other parts of Mediterranean region are at the forefront. In the case of the Adriatic trading system a fundamental role has to be played by Sicily, the geographical position of which facilitates the development of the island as *entrepôt* in the trade between North Africa and Central Mediterranean. In fact, recent studies draw attention to some regional characteristics that could be connected to the specific role of a transshipment port. As for the case of the distribution of Tripolitanian amphorae mainly present along the southern and eastern coast of the island with abundance of finds in Malta and along the strait of Messina, from where they could be traded towards the Adriatic (Bonifay and Malfitana 2016: 407, 413, fig. 115). The same distribution system could also be used for the export of the Tunisian Sahel production that, as we have seen, was

largely attested at Aquileia. The importance of the eastern coast of Sicily is also recorded through the presence indexes of African pottery especially during Severan age when the growth of North African products is more relevant (Bonifay and Malfitana 2016: 411) and also through the rare presence of Sicilian amphorae that reach the upper Adriatic coast (see Dobрева forthcoming; Dobрева and Riccato forthcoming).

Taking into consideration trade relationships that would have been existed between two regions we need to also examine the role of Aquileia inside the Adriatic distribution system. The city occupied a strategic position as natural terminal of the commercial routes coming from the south and as a redistribution knot towards the hinterland to the provinces beyond the Alps. If the dominance of African products since the 3rd century AD onwards has already been testified, on the other hand, the aforementioned data clearly shows that the process that brought African foodstuffs to Aquileia is long and many-sided and that its origin can be recognised since the Late Flavian age. The data discussed above about the volume of these trade routes leaves the general interpretative framework unchanged; however, it does affect the knowledge of the commercial dynamics that developed between the regions of Adriatic and North Africa. Considering this it becomes clear

instead that the beginning of the trend can still be observed during the 1st century AD. Its development assigns to Africa a fundamental role in the Mediterranean market and lays the basis during the 4th century AD for real economic, social, and cultural globalization of the ancient world.

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