

# POTTERY FROM DONGOLA: A STRATIGRAPHIC ASSEMBLAGE FROM UNIT B.I.41

Katarzyna Danys

Polish Centre of Mediterranean Archaeology, University of Warsaw

**Abstract:** The article discusses an assemblage of pottery recovered from unit B.I.41 in the palatial building B.I excavated on the citadel of Dongola in the 2011 and 2012 seasons. Exploration started with the fill of the room, followed by the fill of structures belonging to an earlier building below it. A well dated sequence of layers from the 6th through 7th centuries was identified. The pottery assemblage proved to be very abundant, composed of table vessels, cooking pots, storage and transport containers; the lattermost group included imported examples, mainly from Egypt. Most of the finds represented Dongolan ceramic production from the period in question.

**Keywords:** Dongola, pottery, amphorae, tableware, Early Makuria, Egypt, Soba, imports

Excavations in the palatial building B.I on the citadel of Dongola, the capital of the Kingdom of Makuria (for the most recent fieldwork reports, see Godlewski and Dzierzbicka 2015), were concentrated on the western part of the structure containing a complex of casemate units. A history of remodelling of these chambers was recorded, including renovation and structural changes. The rooms were later filled with earth and rubble, mixed with bulk pottery, which is the subject of this preliminary report, discussed in the context of the noted stratigraphy. Digging revealed, especially in unit B.I.41, walls from an earlier structure, Building X, which constituted the earliest occupation of the southwestern part of the citadel (Godlewski, Danys, and Osypińska 2015: 80–83).

The fill was explored in two stages: the northern part of the unit in the 2011 season and the southern part in the following campaign of fieldwork in 2012. Three main fill contexts were distinguished as regards the pottery finds:

- 1) layers preceding the construction of Building B.I (Building X),
- 2) level of the wall foundations of unit B.I.41,
- 3) fill inside unit B.I.41.

The pottery repertoire was dominated by tableware from local, Dongolan pottery workshops with a minimal share of imported wares from neighboring Egypt to the north and the Kingdom of Alwa to the south. The assemblage contained also amphorae produced both in Dongola and in Egypt.

The stratigraphical field division was dated by pottery finds, assigned to specific structural changes of Buildings B.I and B.X. Pottery from layers associated with the earliest structure, B.X, were dated to the mid 6th century AD. The next phase,

the construction of unit B.I.41 as part of the first remodeling of the palace, was placed in the end of 6th/beginning of the 7th century. The fill of the unit, connected with the second remodeling phase, was dated to the 7th century.

## TABLEWARE

The tableware group was dominated by red-slipped vessels, although white-slipped examples were recorded as well. Plain plates on ring bases and shallow bowls with rounded or flattened bottoms constituted the key shapes. Only a few were decorated: painted, engraved, impressed or stamped. The designation of vessel types follows the Dongola field naming system established by the author and soon to be published in a pottery handbook.

### PLATES

#### Typology

Type T1A of the plates, with a ledge rim [Fig. 1: *ADd.12.250*], is of particular interest. This shape is distinguished by large dimensions (rim diameters of about 36 cm), which made it suitable for serving dishes. Another distinctive feature is the decoration (on most of them) which consisted of a single or double arcade motif within an additional circumferential band, painted in white on a red-slipped surface. Plate *ADd.12.216* was an exception in this respect, being decorated with a double-cord pattern and two parallel, circumferential bands. *ADd.11.029* was exceptional as well, having an irregular pattern of arcades painted in black on a creamish-yellow ground; this, however, looks like a repainting of the original motif. The same was recorded on plate *ADd.10.069*, coming from the fill of nearby unit B.I.36.

Type T2A with a carinated body was white-slipped and plain. The only noted ornament was a double concentric groove on the floor of plate *ADd.11.062* [Fig. 1: *ADd.11.062*].

Plates of type T3A with a bead rim [Fig. 1: *ADd.11.127*] represented the smallest form of plate. Like type 1A, these vessels were red-slipped. They were also left undecorated, the sole exception being *ADd.12.285*, which had a row of rectangular stamps below the rim, and *ADd.11.160* which featured a roulette pattern on the body.

Plates of type T4A [Fig. 1: *ADd.12.269*] were all but one red-slipped. All had a wide circumferential groove on the inside wall, below the rim and, in two cases, a roulette band on the outside, in the lower part (*ADd.12.247*, *ADd.12.267*).

The most numerous group among the plates was type T5A [Fig. 1: *ADd.12.263*; *ADd.12.270*; *ADd.12.271*]. All the vessels were red-slipped and some bore traces of smoothing of the surface with a hard tool. Most of the vessels were plain, but the fill yielded also three plates decorated with one or three rows of roulette patterns of different shapes, placed on the outer surface of the lower part (*ADd.12.270*, *ADd.12.271*, *ADd.12.277*). This kind of decoration was not attested from other storage areas of Building B.I. It was common, however, in Egypt and in other

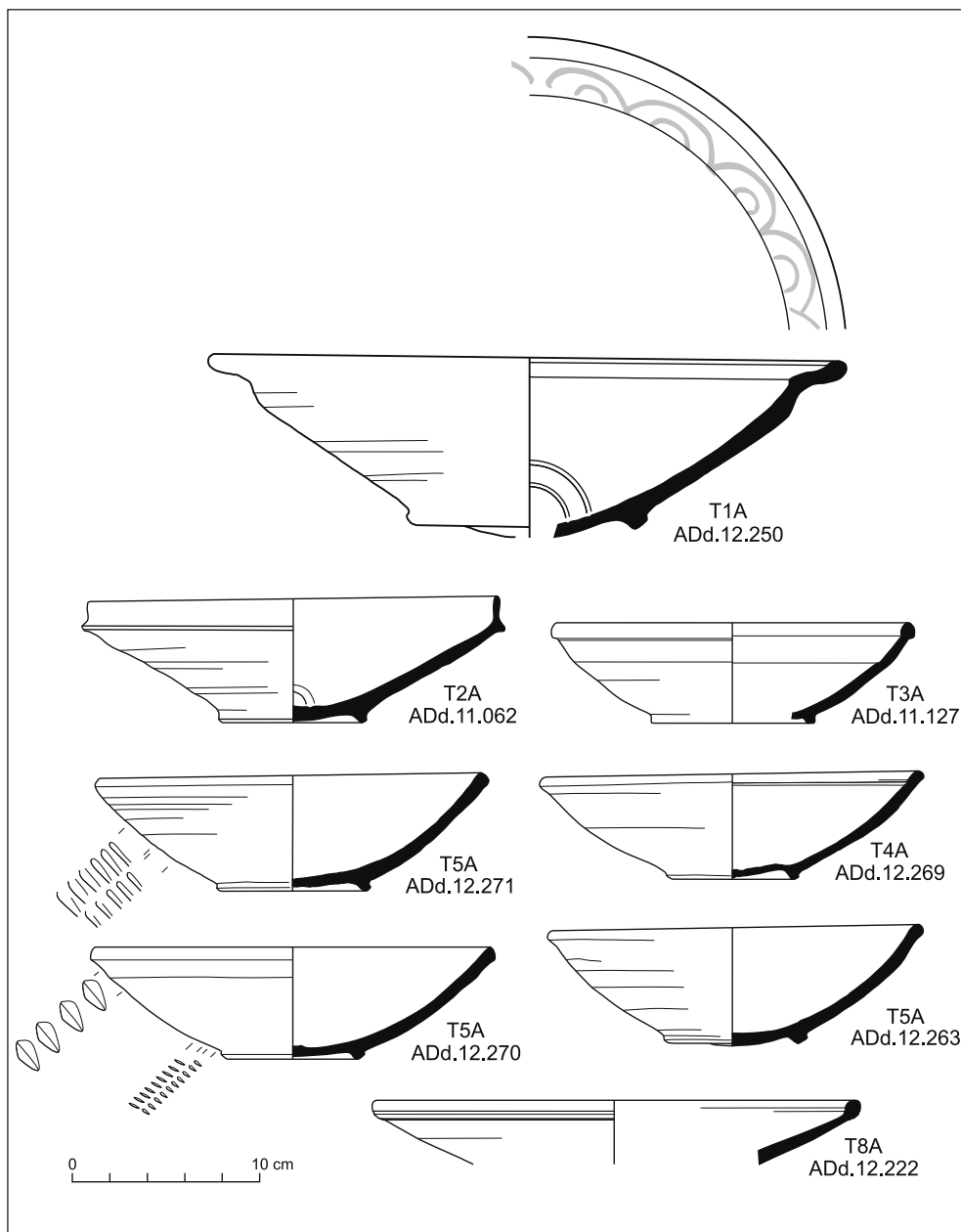


Fig. 1. Selection of plates from the three stratigraphic units

All drawings and digitizing by the author.

parts of the Mediterranean (Hayes 1972), and was considered a legacy of the Roman ceramic tradition, just like the borrowing of vessel shapes from neighboring Egypt (Pluskota 2001: 362).

Two plates represented type T8A [Fig. 1: *ADd.12.222*], red-slipped on the surface and devoid of decoration.

### Stratigraphic analysis

Considering the frequency of particular types in the three stratigraphic units, one finds that T1A, T5A and T8A were found only in the fill of the room, while plates of type T2A were not recorded in layers preceding the construction of Building B.I. Plates of type T3A were common in all three stratigraphic units.

## BOWLS

### Typology

The bowl assemblage includes deep bowls of the M1D1 and M1D2 types [Fig. 2: *ADd.12.243*, *ADd.12.244*], represented by both red- and white-slipped vessels. All the recorded examples were decorated with circumferential grooves below the rim. Bowl *ADd.12.261* had ribbing on the entire upper surface and a row of crescent-shaped stamps below the rim. Thin-walled bowl *ADd.12.244* merits attention because of the white-slipped surface and red painted band on the rim, as well as the vertical stripes on the body.

Bowls of types M2A1 [Fig. 2: *ADd.11.124*] and M2A2 [Fig. 2: *ADd.12.302*] were for the most part plain and had pink "self" slip. The two decorated exceptions are *ADd.11.125* and *ADd.12.302*. The former had white circumferential stripes inside, the latter broad white bands with black borderlines, running on the upper and lower parts of

the vessel. Next come M2B1 bowls [Fig. 2: *ADd.12.224*], all of which were red-slipped with two or three circumferential grooves in the upper part. An M2B3 bowl (*ADd.12.257*) was remarkable in that it had a finely polished, white-slipped surface.

Type M4A was represented by just one vessel [Fig. 2: *ADd.12.280*] with red-slipped walls devoid of decoration.

Types M5A [Fig. 2: *ADd.12.234*], M5B [Fig. 2: *ADd.11.157*, *ADd.12.313*], M5C [Fig. 2: *ADd.12.279*] constituted the most numerous group. All the vessels were red-slipped. Decoration was sporadic: combination of broad white band and narrow black lines on the inside walls of *ADd.11.133* and *ADd.11.134*, and a frieze of white crossing festoons between circumferential lines on *ADd.11.032*. Bowl *ADd.12.245* featured a monogram painted in white on the floor.

Only two vessels represented type M6A [Fig. 2: *ADd.11.042*]. The rims were strongly incurved and the surfaces red-slipped.

Two bowls merit attention, being examples of the so-called Soba Ware, imported from the neighboring Kingdom of Alwa. The illustrated example [Fig. 2: *ADd.11.034*] was decorated on the inside with a circumferential groove below the rim. Both had low ring bases. At Soba East, bowls with such bases coincided with rounded bottoms of types 175–178 (Welsby and Daniels 1991: Fig. 112.175–178); however, *ADd.11.034* does not find an exact parallel among the vessels from this site.

### Stratigraphic analysis

With the exception of types M2B1 and M6A which were not present in the earliest accumulations, all other bowl

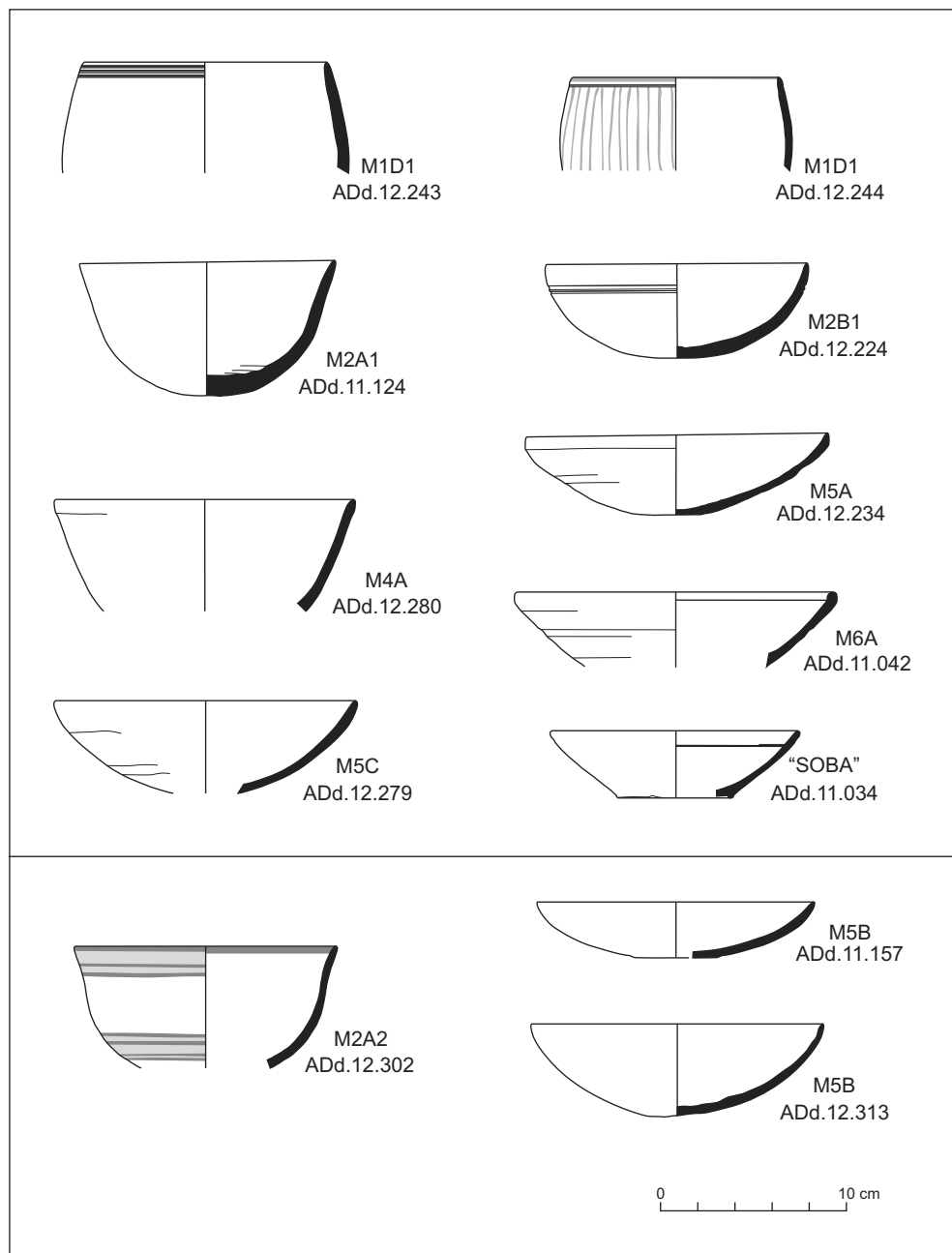


Fig. 2. Selection of bowls: top, from the fill of B.I.41 and the level of the wall foundation; bottom, from below the B.I.41 floor

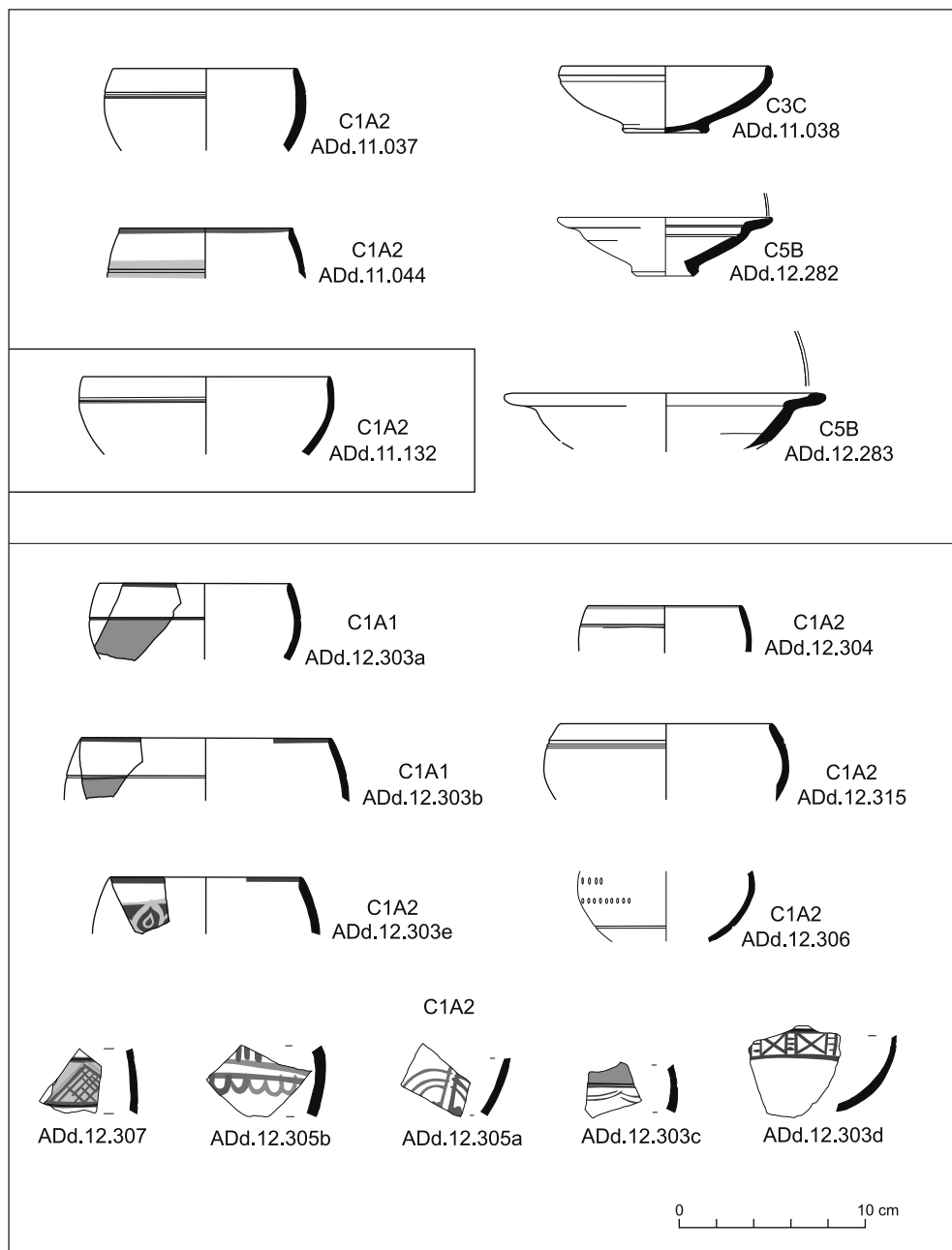


Fig. 3. Selection of cups: top, from the fill of unit B.I.41; center left, from the level of the wall foundation; bottom, from layers below the floor of the unit

types prevailed in all stratigraphic units. Form M5B was particularly common. With regard to types M5C and MID1, they were much more frequent in the layers of fill coming from inside the room.

### CUPS

A set of deep hemispherical cups of type C1A [Fig. 3: *ADD.11.037*, *ADD.11.044*, *ADD.12.132*, *ADD.12.303*, *ADD.12.304*, *ADD.12.305*, *ADD.12.306*, *ADD.12.315*] was found in the layers under B.I.41. They were composed of two sub-types. The first, C1A1, consisted of vessels with red slip on the upper surface and white or cream slip on the lower parts, decorated with a circumferential groove on the body and a black-painted band on the rim. Accompanying this were separate compositions painted in black on a lighter-colored background (so-called metope motifs). The second group, C1A2, encompassed red-slipped cups (although there were a few with buff, orange or cream surfaces), some with fragmentary black-painted decoration. Cup *ADD.12.306* was decorated with two rouletted bands and a circumferential groove on the body; it was manufactured in a southern Egyptian workshop and is close to Elephantine types

T625–T626 (Gempeler 1992: Fig. 73: 12–14).

The remaining cups were covered with a good-quality white slip: types C5B [Fig. 3: *ADD.12.282*, *ADD.12.283*], imitating the shape of a plate with ledged rim (type T1A). Form C3C [Fig. 3: *ADD.11.038*] was assigned to the “red product” category; it was decorated with a broad circumferential groove below the edge.

### Stratigraphic analysis

Frequency analyses indicated the presence of “metope” cups (C1A1) in layers preceding the construction of Building B.I. Forms C1A2 were noted in all three stratigraphic units, although fewer in frequency in the fill from inside the unit. Judging by the small size of the sherds from the latest layers, they may well have come from the bricks and mortar, and can be considered as being in secondary context. The other types of cups (C3C, C5B) were noted only in the fill inside the room.

### MISCELLANEOUS TABLEWARE

Miscellaneous tableware was represented by open-mouthed red-slipped vases [Fig. 5: *ADD.11.091*] and closed shapes with [Fig. 5: *ADD.11.115*] or without



Fig. 4. Scoop from the layer preceding the construction of Building B.I

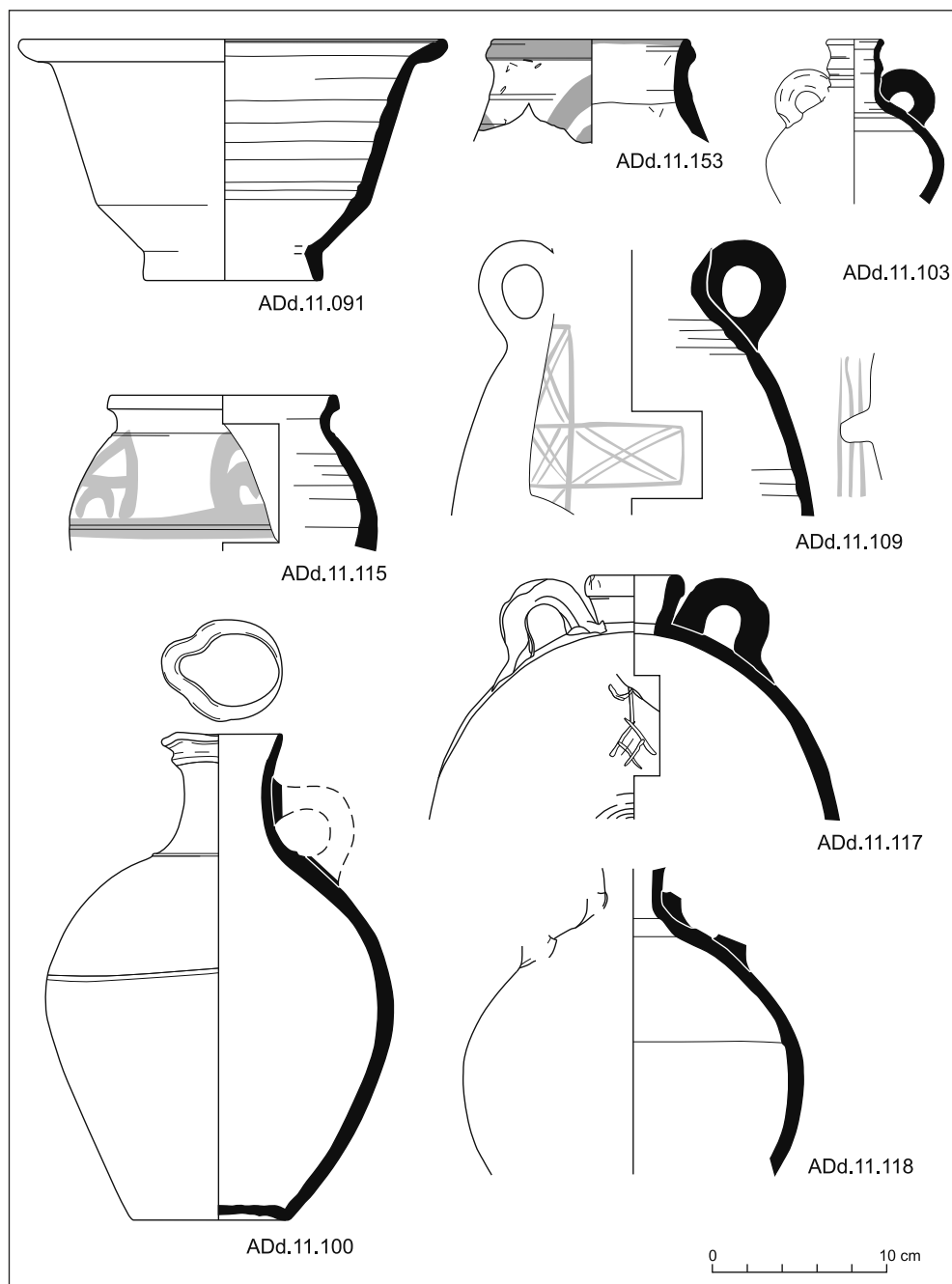


Fig. 5. Selection of miscellaneous tableware from different stratigraphic units



[*Fig. 5: ADd.11.153*] necks. The former had buff or cream surfaces, decorated in the upper part with red-painted compositions, while the latter were either red-slipped, occasionally grooved under the rim, or cream-slipped with red-painted ornamentation.

A large set of spouted jugs was discovered, with one specimen almost fully reconstructed [*Fig. 5: ADd.11.100*]. These vessels were red-slipped and glossy, although a pink slip was also recorded. Red-slipped flasks (former “pilgrim” bottles) were resinated on the inside

[*Fig. 5: ADd.11.117*]. Bottles were represented mainly by globular examples [*Fig. 5: ADd.11.118*] with pink “self” slip. A rather bag-shaped example [*Fig. 4: ADd.11.109*] bore a painted cross on the body. Last but not least, there was a small table amphora [*Fig. 5: ADd.11.103*] with grey surface.

Special forms in this assemblage included the lower part of an incense burner or beaker, and a miniature scoop with the surfaces covered with red slip of high quality, completely preserved but without the handle [*Fig. 4: ADd.12.301*].

## COOKING AND STORAGE WARES

The cooking wares found in B.I.41 included a small set of handmade vessels, mostly bowls, close to the *doka* type, but of varying sizes [*Fig. 6: ADd.11.068, ADd.11.095, ADd.11.105, ADd.12.287, ADd.12.288*]. Some of these pots featured mat impressions on the surface, others had engraved decoration in the form of crossing lines on the rim (ADd.11.105), additionally with four stamps on the handle (ADd.12.287) or a cross with hatched arms on the floor (ADd.11.068).

There was only one cooking pot [*Fig. 6: ADd.12.242*] with a mat impression on the surface and a double-notched lug.

Handmade storage vessels included globular bottles featuring flaring rims and narrow, cylindrical necks [*Fig. 7: ADd.11.093, ADd.11.094, ADd.11.096, ADd.12.241, ADd.12.255*]. Mat impres-

sions were recorded on body surfaces, the necks and rims were burnished and covered occasionally with white-painted decoration or engraved monograms and other signs. Storage vessels, both handmade [*Fig. 8: ADd.11.149*] and wheel-formed [*Fig. 8: ADd.12.248, ADd.12.254*], had decoration painted in black, red or white. One should note an almost complete vessel [*Fig. 8: ADd.12.317*] found in the southwestern corner of the structure underlying Building B.I. It was cream-colored with shoulder decoration composed of a combed band and a painted red-and-black motif.

Fragments of unfired clay vessels belonged to broad trays used as heaters, covered with a white wash [*Fig. 7: ADd.11.097*], sometimes decorated with red-painted motifs [*Fig. 7: ADd.12.319*].

## AMPHORAE

Amphorae were the most numerous pottery group beside tableware. The most often recorded containers were products

of local Dongolan workshops, most often type C in Krzysztof Pluskota’s typology [*Fig. 9: ADd.11.099, ADd.12.249*].

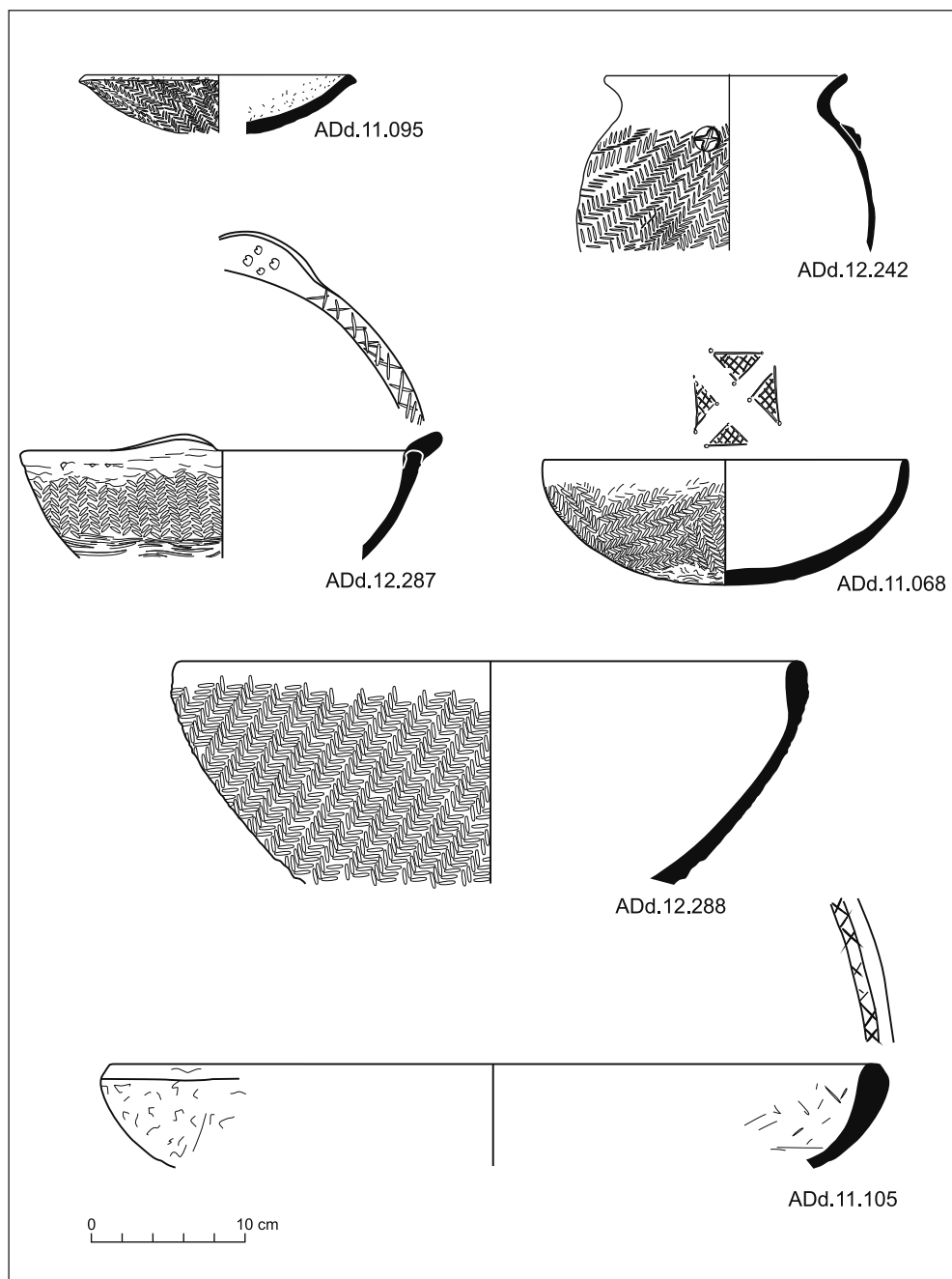


Fig. 6. Selection of vessels representing handmade cooking ware

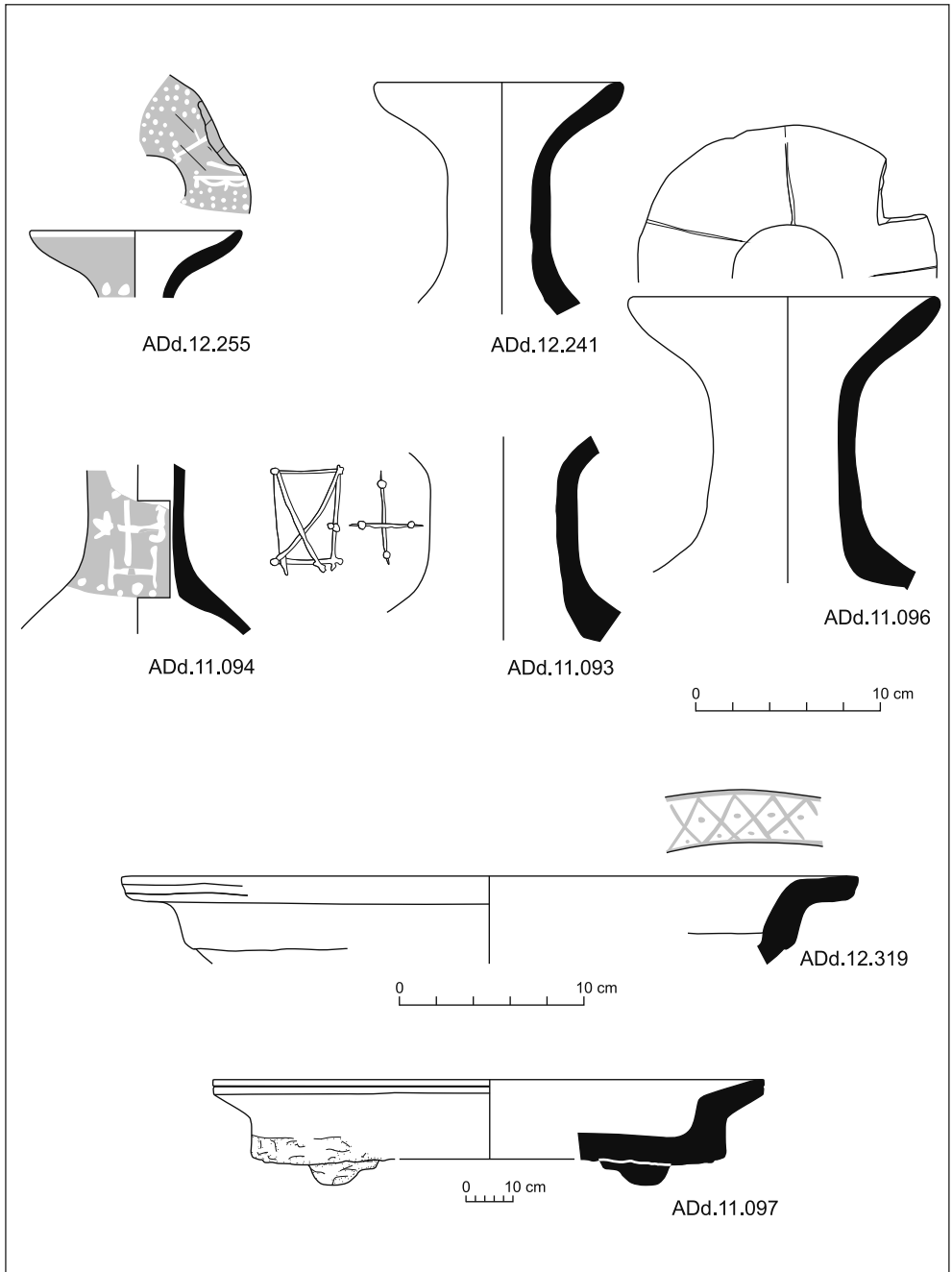


Fig. 7. Selection of: top, handmade bottles and, bottom, heaters/trays

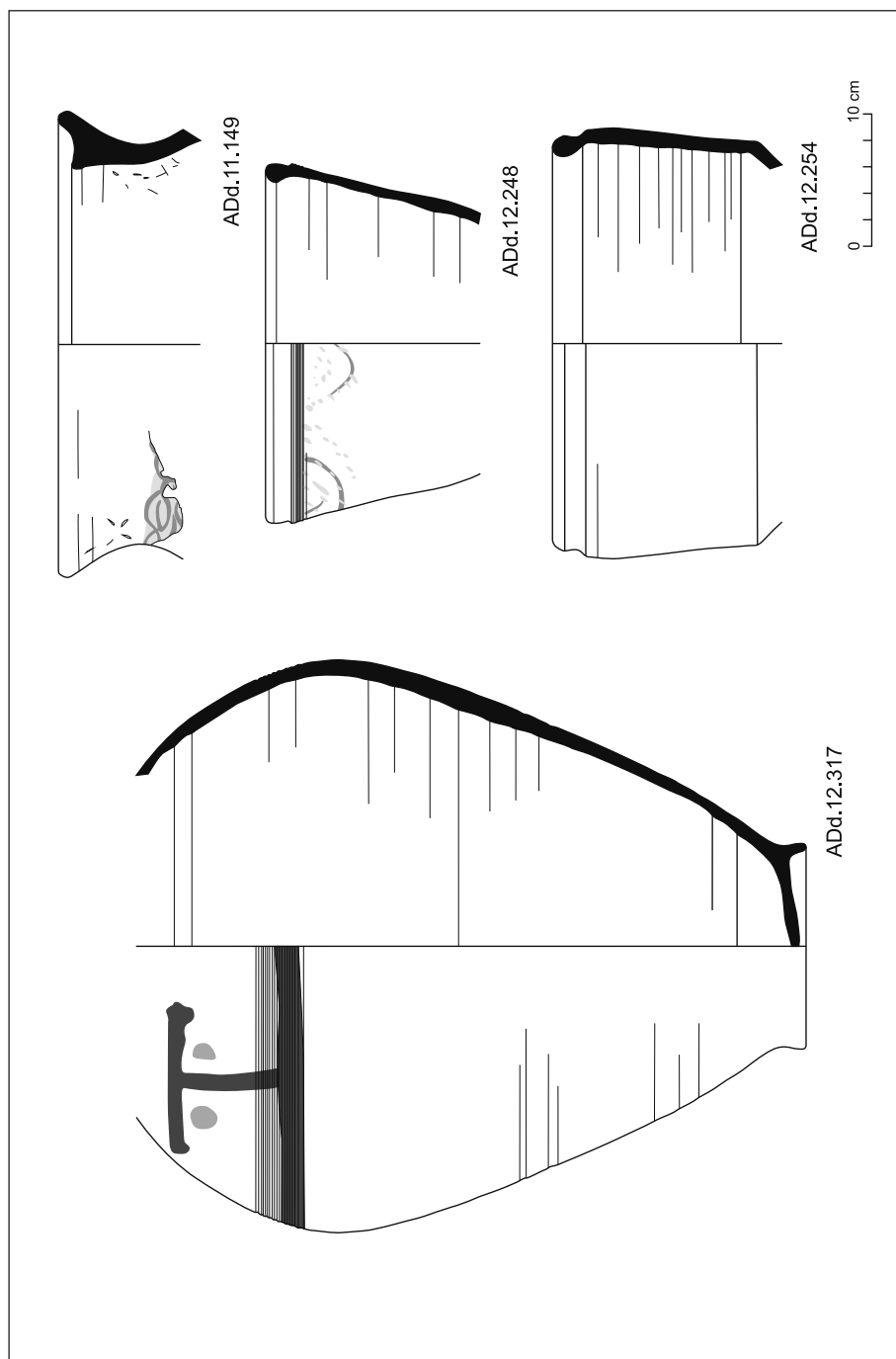


Fig. 8. Selection of storage vessels, both handmade and wheel-made: top, from the level of the wall foundation; center, from the fill inside B.I.41; bottom, from layers preceding the construction of B.I

It corresponds to material discovered in the earliest layers of the pottery kilns in Dongola, dated to AD 600–950 (Pluskota 2005: 229–230, Fig. 8). Some of them bore yellow-painted monograms on the shoulders, like ADd.12.249, or graffiti, as ADd.11.099 with the engraved name of MIXAEL, along with a partly preserved monogram. An analogous set of amphorae with inscriptions came from Dongola (Danys-Lasek 2012: Fig. 4; Danys 2015), and from Baganarti (Bagińska 2008b: Figs 3c–f, 4).

A large group among the imported amphorae were Egyptian LR5/6 containers [Fig. 10: ADd.12.309], made of desert fabric in the Mareotis region. Surfaces were creamish in color, inside walls were resinated, and combed bands appeared on the shoulders with ribbing on the body. Containers of this type are common on Egyptian sites, e.g., Kellia (Egloff 1977: Pl. 6.4; Ballet and Picon 1987: 33–34) and Alexandria (Majcherek 2004: Fig. 7:5), as well as in Lower Nubia, placed in the same group with so-called Ballas ware (Adams

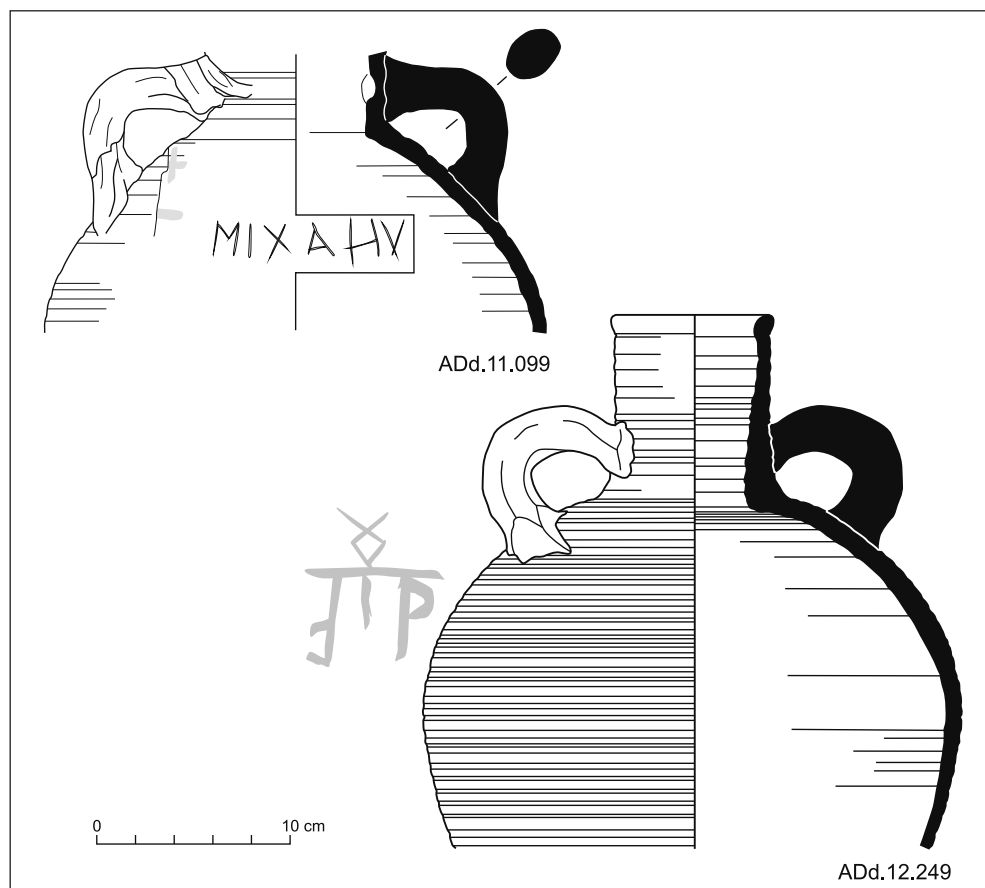


Fig. 9. Selection of local amphorae

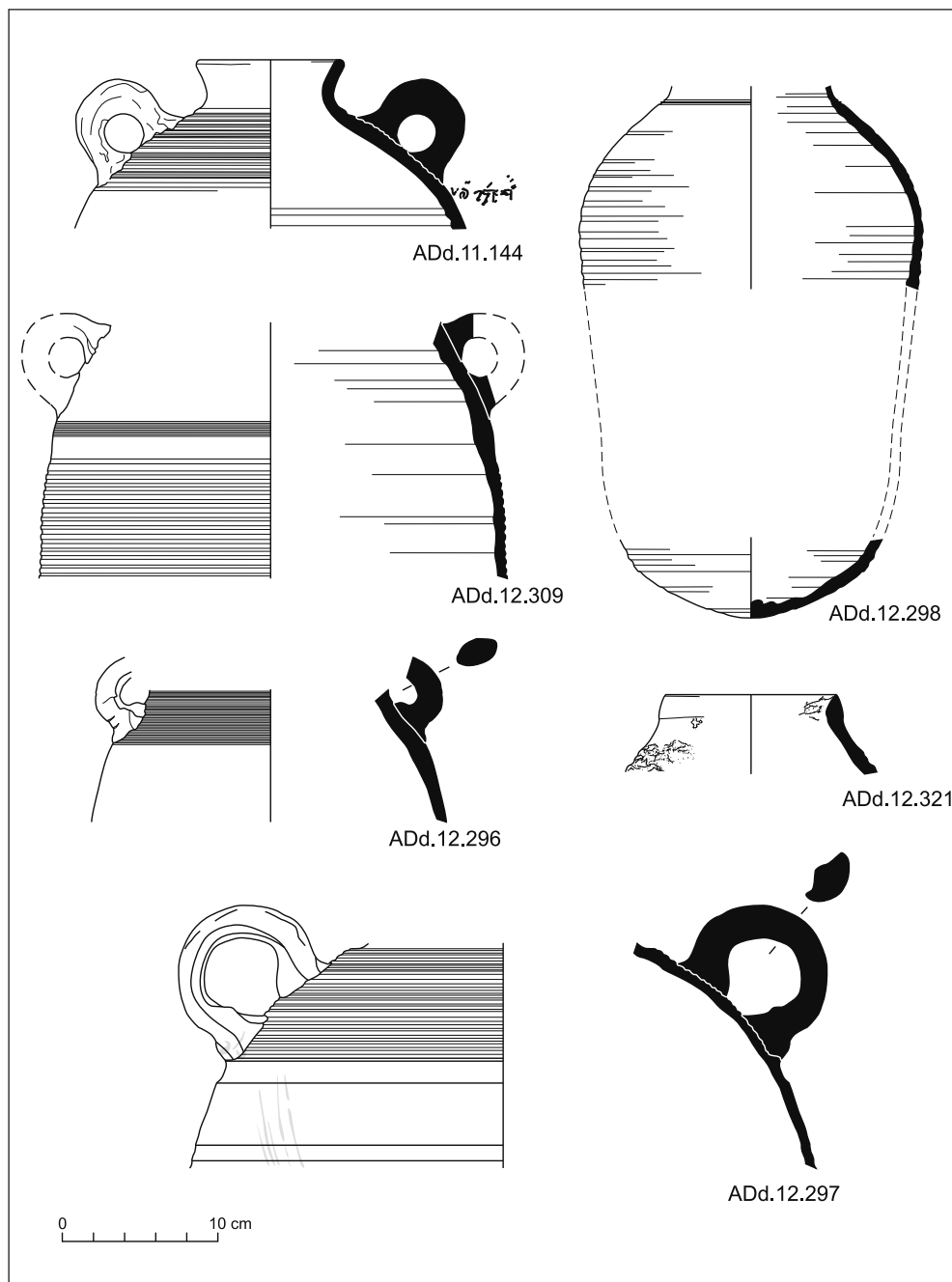
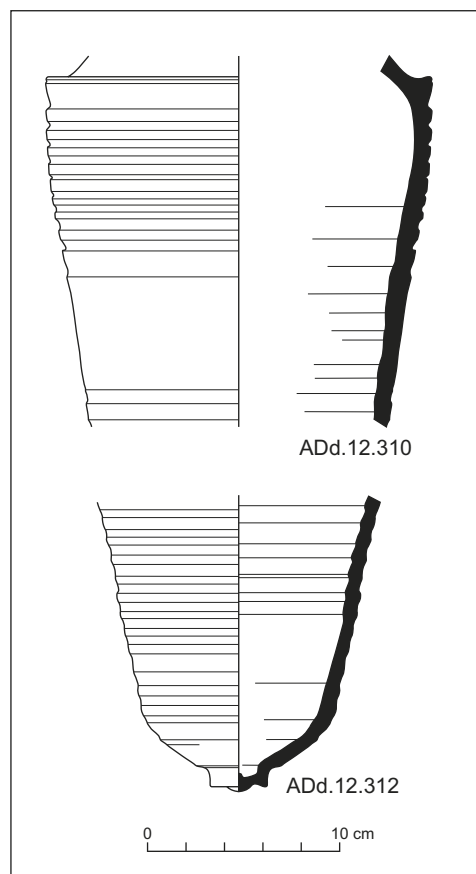


Fig. 10. Selection of imported amphorae

1986: 574, Fig. 316.21). A numerous assemblage was identified in neighboring unit B.I.37 (Danys-Lasek 2012: Fig. 8). Examples of other bag-shaped containers, but made of Nile silt were also recorded [Fig. 10: *ADd.11.144*]. Their inner surfaces were resinated and black-ink inscriptions were noted on the shoulders of a few examples (see Danys and Łajtar 2016). Such containers are known from Egypt, among others from Kellia (Egloff 1977: 118) and Elephantine (Gempeler 1992: 200), as well from Nubia, e.g., finds from Dongola (Godlewski 2002: Fig. 5; Danys-Lasek 2012: Fig. 8).



Middle Egyptian LR 7 containers also formed a sizeable group [Fig. 10: *ADd.12.310*]. Diagnostic sherds included shoulders with a triangular collar or sharp carination, paralleled by finds from Deir el-Naqlun (Godlewski 1990: Figs 20, 21, 24; Górecki 1993: Fig. II.4) and Kellia (Egloff 1977: Pl. 58.5,8). Amphorae of this type were recorded also on Elephantine (type K742, 6th/7th century, and type K743, Gempeler 1992: Fig. 126.5,6). Some complete vessels came from the deposit in the church at Meinarti (Adams 2001: Pl. 8f:1,2).

Products of the south Egyptian workshops were represented by “Aswan” amphorae [Fig. 10: *ADd.12.312*], and forms identified as types K715–K717 on Elephantine, occurring there from the 6th through the 7th/8th century AD (Gempeler 1992: 191–192, Figs 122, 123). The biggest set of them was discovered in a deposit under unit B.I.37, which preceded the construction of Building I (Danys-Lasek 2012: Fig. 8). The other deposit of intact vessels comes from the church in Meinarti (Adams 2001: Pl. 7f).

Bag-shaped amphorae LR 5 from Palestine were also found [Fig. 10: *ADd.12.296*]. They were made of fabric termed Palestinian Orange Fabric (POF), tempered heavily with fine limestone particles (Peacock and Williams 1986: 191, 192). The outer surfaces were cream-colored, and no traces of resination were noted on the inside walls. These containers were produced in Palestine from the 5th to the 6th century (Peacock and Williams 1986: 191). The other type of vessel from this region was the Keisan amphora [Fig. 10: *ADd.12.297*] with characteristic light-colored stripes painted on the body. The orange fabric, sometimes with

grey core, was tempered with limestone particles. The outer surfaces were devoid of resination. These containers were produced in pottery workshops from the 5th to the 8th century, discovered at Tell Keisan (Landgraf 1980: 80).

Finds of LR 1<sup>1</sup> amphora [Fig. 10: *ADd.12.298*] represented two types of fabrics: sandy, yellowish-buff, tempered mainly with black particles, and fine, orange-buff, almost devoid of inclusions, beside white grains. Light cream external walls were well-smoothed and bore

characteristic ribbing, while internally they demonstrated no traces of resination. Dongolan examples resembled fabrics recognized on several sites in Cyprus and northern Cilicia (Williams 2005: 618).

Vessels representing LR 4 amphorae from Gaza [Fig. 10: *ADd.12.321*] were covered with a layer of wet clay just below the rim, while the inside walls were resinated. Parallel examples of amphorae came from Alexandria (type 4 in Grzegorz Majcherek's typology, identified in 6th century contexts, although also present in early 7th century assemblages,

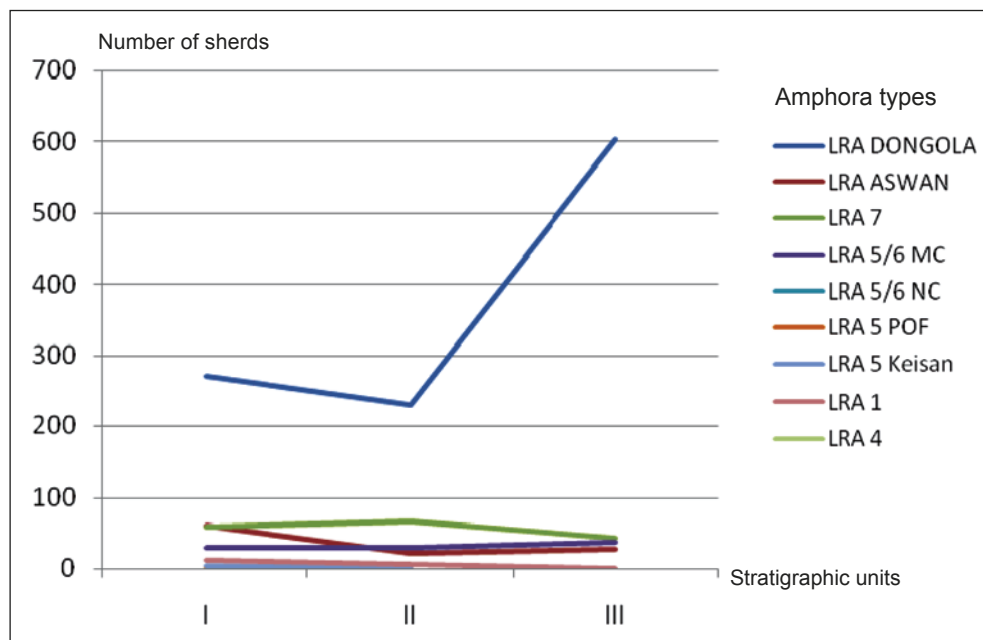


Fig. 11. Frequency of amphora types by stratigraphic units

Key: I – layers preceding the construction of Building B.I, under unit B.I.41; II – fill connected with the wall foundations of unit B.I.41; III – fill inside unit B.I.41

<sup>1</sup> In his preliminary examination of these amphorae discovered in Nubia, W.Y. Adams pointed to the Cairo/Saqqara area or outside of Egypt as the place of origin (Adams 1986: 580). They were described as “Saqqara Buff Amphora Ware” with the main period of distribution dated to AD 400–650 (Adams 1986: 580, Fig. 319). Later studies, including archaeometric analyses of thin-sections, revealed fabrics connected to workshop sites, all located in the Eastern Mediterranean (Williams 2005: 618).



Majcherek 1995: 169, Pl. 7.2) as well as Old Cairo (Gascoigne 2007: 165, Fig. 8) among the sites in the Nile Valley.

### Statistical analysis

A statistical analysis was conducted on all the amphorae fragments (rims, handles, bases, body sherds), sorted to the main groups (only representative specimens of each vessel type were kept and registered). The frequency study was determined by the three main stratigraphic units, which are strictly connected to architectural phases. The first one preceded the construction of Building B.I and is associated with the remains of an earlier structure (Building B.X), the second one was connected with the founding of B.I, and the last one refers to layers accumulated inside unit B.I.41 during its functioning.

Changes in amphora frequency [Fig. 11] showed a major increase in the number of containers produced in Dongola in the 7th century. This indicates a booming local pottery industry, reflecting presumably, growing local wine production satisfying a consumer demand for wine, as

well as efforts to lessen the dependence on foreign markets. There was a simultaneous decrease in the quantity of imported containers (most probably for wine, but oil or other products should also be taken into consideration). The set of imports most probably reflects the availability of goods on the purchase market, which would have been Aswan presumably as a “port of trade” for Nubia. The variety of imported containers, connected most likely with the different kinds of wine, points to a well-organized exchange and an elite clientele with developed tastes residing in the capital.<sup>2</sup>

The decreasing share of imported amphorae in the 7th century could be interpreted as a result of the geopolitical situation of the time: the Persian occupation (AD 619–629) followed by the Arab invasion (AD 642). In the light of the finds from unit B.I.41 and the neighboring rooms, the *baqt* treaty with the Kingdom of Makuria (AD 652) appears to be a continuation of the exchange with Byzantine Egypt, marginalized by the political events of the first half of the 7th century.

## CONCLUSIONS

The ceramic material from the fill in unit B.I.41 is a fairly homogeneous assemblage associated with the 7th century, as indicated by finds of plates of types T1A and T5A, bowls of type M5B and locally produced amphorae, recognized already in neighboring unit B.I.37 (Danys-Lasek 2012: Fig. 1) as well as in Banganarti (Bagińska 2008b: Fig. 1e). The pottery from the foundation

levels of the unit, as well as from layers preceding its construction (connected with earlier structures), demonstrates a different (diverse) repertoire of certain shapes. Developments can be traced in the shape of some vessel types, which is significant from a chronological point of view. The assemblage of “metope” cups from layers preceding the construction of Building B.I is of exceptional importance

<sup>2</sup> Single specimens can be interpreted also as gifts from visitors to the Makurian court. Dr. Pamela Rose (ÖAI, Cairo) kindly shared this idea and discussed it with the author.

in this respect, considering their total or almost total absence from the assemblages from nearby rooms (some minute sherds in the deposits could have originated from either the mortar or bricks from the walls of Building B.I). Parallels come from layers below Building B.X and the cathedral (Old Church or ECC), as well as from the earliest parts of the citadel

walls (Godlewski 1991: Fig. 5), which have been dated to the mid 6th century (Pluskota 1990: Fig. 5), similarly as the finds from the vicinity of the monastic church on Kom H (Bagińska 2008a: Fig. 1a,b). The vessel repertoire linked to the wall foundations of unit B.I.41 indicates, in turn, a date at the end of the 6th and in the beginning of the 7th century.

Katarzyna Danys

Polish Centre of Mediterranean Archaeology, University of Warsaw  
00-497 Warsaw, Poland, ul. Nowy Świat 4  
elfik777@o2.pl

## REFERENCES

- Adams, W.Y. (1986). *Ceramic industries of medieval Nubia* [=Memoirs of the UNESCO Archaeological Survey of Sudanese Nubia 1]. Lexington, KY: University Press of Kentucky
- Adams, W.Y. (2001). *Meinarti II. The early and classic Christian phases* [=BAR IS 966]. Oxford: Archaeopress
- Bagińska, D. (2008a). Christian pottery from Old Dongola (Kom H). *PAM*, 18, 361–375
- Bagińska, D. (2008b). Pottery from Baganarti. Season 2006. *PAM*, 18, 410–425
- Ballet, P. and Picon, M. (1987). Recherches préliminaires sur les origines de la céramique des Kellia (Égypte): importations et productions égyptiennes. *CCE*, 1, 17–48
- Danys, K. (2015). Amphorae from Building SWN.B.I in Dongola. In W. Godlewski and D. Dzierzbicka (eds), *Dongola 2012–2014. Fieldwork, conservation and site management* [=PCMA Excavation Series 3] (pp. 117–151). Warsaw: PCMA
- Danys, K. and Łajtar, A. (2016). Egyptian amphorae LR 5/6 with Greek *dipinti* found in Dongola. In A. Łajtar, A. Obluski, and I. Zych (eds), *Aegyptus et Nubia christiana. The Włodzimierz Godlewski jubilee volume on the occasion of his 70th birthday* (pp. 347–358). Warsaw: PCMA
- Danys-Lasek, K. (2012). Dongola 2009: Pottery from Building I (Kom A). *PAM*, 21, 315–329
- Egloff, M. (1977). *Kellia, la poterie copte: quatre siècles d'artisanat et d'échanges en Basse-Égypte I–II* [=Recherches suisses d'archéologie copte 3]. Geneva: Georg
- Gascoigne, A.L. (2007). Amphorae from Old Cairo: A preliminary note. In S. Marchand and A. Marangou (eds), *Amphores d'Égypte de la Basse Époque à l'époque arabe I* [=CCE 8/1] (pp. 161–174). Cairo: Institut français d'archéologie orientale
- Gempeler, R.D. (1992). *Elephantine X. Die Keramik römischer bis früh-arabischer Zeit* [=AV 43]. Mainz am Rhein: Philipp von Zabern
- Godlewski, W. (1990). Coptic pottery from Deir el-Naqlun (Fayum). In W. Godlewski (ed.), *Coptic and Nubian pottery: International workshop, Nieborów August 29–31, 1988, I* [=National Museum in Warsaw Occasional Paper 1] (pp. 49–62). Warsaw: National Museum in Warsaw

- Godlewski, W. (1991). The fortifications of Old Dongola. Report on the 1990 season. *ANM*, 5, 103–128
- Godlewski, W. (2002). Old Dongola. Kom A, 2001. *PAM*, 13, 203–216
- Godlewski, W. with contributions by K. Danys and M. Osypińska. (2015). Palatial Building SWN.B.I and earlier relics of Buildings SWN.B.IV and SWN.B.X. In W. Godlewski and D. Dzierzbicka (eds), *Dongola 2012–2014. Fieldwork, conservation and site management [=PCMA Excavation Series 3]* (pp. 65–84). Warsaw: PCMA
- Godlewski, W. and Dzierzbicka, D. (eds). (2015). *Dongola 2012–2014. Fieldwork, conservation and site management [=PCMA Excavation Series 3]*. Warsaw: PCMA
- Górecki, T. (1993). Deir el-Naqlun 1992: The pottery. *PAM*, 4, 53–64
- Hayes, J.W. (1972). *Late Roman pottery*. London: British School at Rome
- Landgraf, J.E. (1980). Keisan's Byzantine pottery. In J. Briend and J.-B. Humbert (eds), *Tell Keisan (1971–1976): une cité phénicienne en Galilée [=OBO Series Archaeologica 1]* (pp. 51–99). Fribourg: Editions universitaires
- Majcherek, G. (1995). Gazan amphorae: Typology reconsidered. In H. Meyza and J. Młynarczyk (eds), *Hellenistic and Roman pottery in the Eastern Mediterranean: Advances in scientific studies. Acts of the II Nieborów Pottery Workshop, Nieborów, 18–20 December 1993* (pp. 163–178). Warsaw: Research Center for Mediterranean Archaeology, Polish Academy of Sciences
- Majcherek, G. (2004). Alexandria's long-distance trade in Late Antiquity — the amphora evidence. In J. Eiring and J. Lund (eds), *Transport amphorae and trade in the Eastern Mediterranean: Acts of the international colloquium at the Danish Institute at Athens, September 26–29, 2002* (pp. 229–238). Aarhus: Aarhus University Press
- Peacock, D.P.S. and Williams, D.F. (1986). *Amphorae and the Roman economy: An introductory guide*. London: Longman
- Pluskota, K. (1990). Early Christian pottery from Old Dongola. In W. Godlewski (ed.), *Coptic studies: Acts of the Third International Congress of Coptic Studies, Warsaw, 20–25 August, 1984* (pp. 315–333). Warsaw: PWN
- Pluskota, K. (2001). The kiln sites of Old Dongola. In S. Jakobielski and P.O. Scholz (eds), *Dongola-Studien: 35 Jahre polnischer Forschungen im Zentrum des makuritischen Reiches [=Bibliotheca Nubica et Aethiopica 7]* (pp. 357–366). Warsaw: ZAŚ PAN
- Pluskota, K. (2005). Amphorae from Old Dongola. Evolution of local products (exploration of kiln R1 F). *GAMAR*, 3, 227–232
- Welsby, D.A. and Daniels, C. (1991). *Soba: Archaeological research at a medieval capital on the Blue Nile [=British Institute in Eastern Africa Memoir 12]*. London: British Institute in Eastern Africa
- Williams, D.F. (2005). An integrated archaeometric approach to ceramic fabric recognition: A study case on late Roman amphora 1 from the eastern Mediterranean. In J.M. Gurt i Esparraguera, J. Buxeda i Garrigós, and M.A. Cau Ontiveros (eds), *LRCW 1. Late Roman coarse wares, cooking wares and amphorae in the Mediterranean: archaeology and archaeometry [=BAR IS 1340]* (pp. 613–624). Oxford: Archaeopress