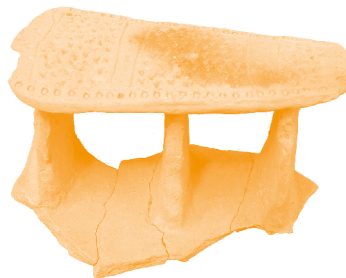


# The pottery from the site of Wakarida



**Abstract:** Excavations carried out between 2012 and 2013 at Wakarida in northeastern Tigray uncovered a huge quantity of pottery distributed across the different levels identified at the site. The different pottery assemblages collected from the site are presented in this contribution, proposing a periodization of the occupation of Wakarida city into two main units: Period I (subdivided into successive phases IA and IB) and Period II. Pottery comparisons and  $^{14}\text{C}$  dating provide the grounds for dating the two assemblages.

**Key words:** Ethiopia, Tigray, archaeology, pottery, Aksumite period

The site of Wakarida in northeastern Tigray has been surveyed and excavated since 2011 by the French Archaeological Mission under the supervision of Iwona Gajda and Fabienne Dugast (see Gajda, Charbonnier, and Peixoto 2020, in this volume). The main aim of this research is to define the developmental context of an urban center in this region during the Aksumite period, and to establish the potential factors determining this process, while estimating their impact. Listed among these factors are: local agriculture, intraregional and interregional trade, and political history.

A rich collection of potsherds was recovered from stratified contexts in two areas of the site excavated

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**Note**

This article deals with the first results of our research carried out in 2012 and 2013, and then in part in 2014. Subsequent investigations were carried out after this initial phase.

in 2012 and 2013. These potsherds were described and recorded, layer by layer, and compared to published collections. A local chronological sequence was developed based on this study, to be used as a framework for dating the different stages of development of the urban center

of Wakarida. Potsherds collected on the surface of other archaeological sites in the vicinity were then compared to the stratified material in order to provide a territorial framework for this development. The article presents the initial results of this study.

## 1. POTTERY GROUPS

### METHODOLOGY

Following collection, potsherds are washed and sorted according to the groups that were defined at the beginning of the 2012 campaign, based on a study of the surface collections. For each stratigraphical unit, potsherds are counted group by group, the quantity of each group being registered in a preliminary database used as a basis for rough statistical estimation. Secondly, significant potsherds that are fragments of rims or bases, decorated potsherds, or potsherds with any particular attribute that may provide information about the vessel shapes are described individually in a catalogue. When possible, complete vessels found in pieces during the excavation are restored. Thirdly, a selection of potsherds are photographed and drawn for publication.

Pottery groups are defined at a macroscopic level, using characteristics such as paste colour, inclusions or visible prints, and elements giving some indication of the techniques used in the shaping of vessels, their possible covering, surface finishing and decoration. Each pottery group includes a certain number of shapes, some being more standardized than others. However, some shapes appear in several groups.

Nine groups were distinguished in the material collected from the excavated layers, two more from surface collections, the rest of the sherds being simply labelled “other” and described, without receiving any further definition. A group is created when it seems to be well represented or when it can be linked to some well-known and particular class, amphorae, for example.

### DESCRIPTION OF POTTERY GROUPS

#### Groups 1 and 2

Two groups of fine red wares have been defined. Both have an orange colour, sometimes with a thin grey core. Group 1 presents a well levigated clay without any visible inclusions, Group 2 shows some occasional fine white inclusions, less than 0.5 mm. Both groups present walls of regular thickness, but without any surface traces of having been wheel-thrown. Vessels can have a thin red or caramel-buff slip, and are generally burnished or smoothed. Some have a red band painted on top of the rim. Vessels in fine red ware are generally small in size and include bowls, pots and carinated vases.

#### Groups 3 and 5

Common red wares also consist of two similar groups. Both are of orange col-

our, sometimes with a grey or black core. Group 3 contains sharp white inclusions, sometimes associated with grey grits, Group 5 also includes a high proportion of a very fine temper consisting of shining inclusions. Both groups also present some small rounded or oval porosities on the surface. Walls are regular without any traces of having been wheel-thrown and some potsherds show traces of coiling. Some vessels are slipped in red or brown, the surfaces often being burnished or smoothed. Common red wares include a wide variety of shapes: bowls, basins, jars, storage vessels, etc. Some large basins and storage vessels have incisions and impressions on the inside and/or on top of the rim.

#### **Group 4**

Fine black wares are of grey color, with a black slip, highly polished or burnished. Most potsherds show a well levigated clay without any visible inclusions. A few include occasional fine white grits. Shapes include small bowls and pots; some comparable to examples among the fine red wares.

In the present state of research, the relationship between fine black ware and fine and common red wares is still to be determined: it is not yet clear whether the difference in colour might be due only to firing conditions, both groups representing variants from a single manufacturer, or if they come from two different sources. In fact, a small group from this pottery, common or fine, is now being studied and might be distinguished in future. It includes common and fine wares of orange or brown color in their lower parts, becoming grey-black in the upper parts. Vases are generally globular bowls or pots also found in Groups 3 and 5, covered with a red or brown burnished

slip, becoming black in their upper parts. Such change in colour on a single vase is probably due to the position of the vessel in the furnace; the upper part being fired in reducing conditions while the lower one received more oxygen.

#### **Group 6**

Coarse grey ware is a handmade fabric, heavy and dense, with a large quantity of coarse, shiny grey grits. The walls are irregular in thickness, with many traces of finger pressure. Surfaces are never slipped, but are awkwardly smoothed and slightly soapy to the touch. Examples are mainly cooking vessels (bowls, pots, cauldrons), and some of them are partly blackened by fire. Some have incised decorations on the outside.

#### **Group 7**

Fine painted and incised ware is a fairly standardized fabric, of orange colour, well levigated, with regular walls. Vessels are generally covered with a caramel brown slip, more occasionally with a dark brown slip and finely polished. Black painted decorations underlined by fine incisions extend over the outside surface of the vase, including cross patterns and rounded arches within a framework of horizontal bands. Shapes include globular or semiglobular bowls and small pots with everted rims.

#### **Group 8**

Common incised ware is a group of red to brown colour, often with traces of burning on surface; it includes small vegetal imprints with which are associated white or grey, sometimes also dark brown grits of small to medium size. Walls are slightly irregular in thickness and vessels are of-

ten asymmetrical, suggesting that they are handmade. Surfaces are matt and unslipped, but present incised decoration patterns on the upper parts. Incision patterns include geometrical motifs that can be dense and finely executed, or coarser. Most geometrical patterns extend over all the upper part of the pots, but on a few examples they are limited to the rim and the middle or base of the neck. Shapes mainly include suspension vessels with a round base, and jars and small pots with small handles on the shoulders.

### Group 9

Fragments of ribbed amphorae appear on the surface and in area 2 of the excavation. They show a greenish to light orange wheel-made paste with fine vegetal prints sometimes associated with fine white grits. The outside surface is covered with a thick white layer and presents horizontal ribs. No shape has been found on the site, but the fabric is particular enough to link them to the amphorae.

## 2. DISTRIBUTION OF POTTERY GROUPS AND SITE PERIODISATION

Material collected from stratified layers from the two excavation areas was used to establish an initial periodisation of the site. In Area 2, three different phases were distinguished, while in Area 1 there were only two but with subphasing of the second one [Table 1].

### AREA 2

The earliest occupation phase (Level 1) in Area 2 was reached in probes excavated under the later Building A. It corresponded to an earlier Building B, neatly built on an apparently regular plan, partly obliterated by later activities on the site. Only a few fragments of floors survived, and in many cases only the wall foundations. This first occupation layer yielded 694 potsherds.

The second period (level 2) witnessed the construction of a new structure (Building A), which was excavated in its entirety. This building included nine rooms, aligned three by three. Floors were preserved in each room with pottery *in*

*situ*, covered by a thick layer of stones and earth from the collapsed architecture. Pottery directly from the floor layers (undisturbed occupation=Level 2A) counted 1195 sherds, whereas the lower part of the collapse (=Level 2B) yielded 1134 potsherds.

The upper part of the collapse consisting of stone debris was partly disturbed and showed traces of reoccupation attested by limited remains, such as a fireplace, postholes, a child's grave, a trench filled with small stones, remains of a floor of yellowish clay and a poorly constructed low stone wall. These remains form the third occupation phase (Level 3) and yielded 973 potsherds.

The distribution of the different pottery groups inside Area 2 [see Table 1: Area 2], reveals a spectacular increase in coarse grey ware (Gr. 6) in Level 3. This group changes from less than 1% of the corpus in Levels 1, 2A and 2B to more than 40% in Level 3. As the coarse grey

ware is the only fabric contributing large potsherds and complete or semi-complete vessels in that occupation layer, it is to be wondered if the change visible in the results was perhaps even more important and the small-sized potsherds from other groups collected in this level were residual, the third occupation phase having been built upon the ruins of an earlier building.

There is also an evident strong continuity between levels 1, 2A and 2B. In the three assemblages, common red wares (Gr. 3 and 5) are predominant, forming between 60% and 75% of the corpus, followed by fine wares representing between 8% and 15% of the corpus. But slight changes are perceptible from one layer to another, including a gradual development of common incised ware, which grows from less than 2% of the corpus in Level 1 to 6.5% in Level 2A, and 14 in Level 2B. The amount in Level 2B is probably a factor of vessel types combined with the nature of the Level 2 subdivision. Common incised wares are mainly suspension vessels which might explain why they were better represented in level 2B (the lower part of the stony destruction layer) than in level 2A (objects collected on the

floor): some of these vessels may have been hanging on the walls. Fine red and black wares tend to decrease from Level 1 to Level 2, but as with the former, are rather better represented in the destruction layers than on the floors themselves.

### AREA 1

The stratigraphy in this area is still under study. Two main occupation phases have been distinguished, but may yet be subdivided even more in the course of further studies. The oldest occupation is represented in the northwestern part of the excavation, by a settlement area (Area G) revealed in trial trenches dug across later levels. It included at least two rooms, probably more. A large courtyard bordered it on the southwest; a drainage channel ran across it. East of it was a small area that separated the settlement from a building (Building F), of which only the foundation trench of a thick enclosure wall could be reached. The northwestern limits of this first settlement have yet to be delineated. 586 potsherds can be attributed to this first occupation.

Table 1. Distribution of pottery groups across levels in Areas 1 and 2; values express % of the total quantity of sherds per level

Layer	Gr. 1-2	Gr. 3	Gr. 5	Gr. 4	Gr. 7	Gr. 8	Gr. 6	Gr. 9	Others	Total
AREA 1										
L. 1	8.80	71.8	12.11	4.09	0.30	2.55	0	0	0.17	586
L. 2A	14.70	58.8	17.60	0.50	0.50	3.43	0	0	4.41	204
L. 2B	15.55	52.3	18.50	1.80	0.11	7.58	0.11	0.16	3.82	1779
L. 2-NW	17.60	64.7	4.50	0.70	0.30	7.80	0	0	3.75	958
AREA 2										
L. 1	12.7	65.7	11.5	2.5	0.10	1.6	0.6	0	5.0	694
L. 2A	6.8	75.1	5.1	0.9	0.33	6.5	0.1	0	6.5	1195
L. 2B	8.2	56.8	5.9	1.6	0.17	14.1	0.9	0	6.3	1134
L. 3	9.9	41.5	5.1	1.2	0	2.4	40.7	0	0.8	973

At a later time (Level 2), a large building (Building D) was erected to the east, over the remains of an earlier presumed structure. On the southwest and northwest it was bordered by an L-shaped street or alley that separated it from a dense settlement area (Area E), seven rooms of which were excavated. In the northwestern part, two cellar rooms were discovered, with jars buried inside them. The living areas were probably on a higher level, on wooden floors accessed by staircases. This part of the excavation was called Level 2-North-west and was not further subdivided.

Further to the southwest were other living spaces organized directly on the ground. A succession of two floors was observed in most of the spaces in this area, enabling a Level 2A and a Level 2B to be distinguished. Level 2B is marked by a large courtyard to the west being subdivided into two smaller spaces, and new floors of tamped earth appearing in most areas along with domestic installations (fireplaces and small bins delimited by stone slabs).

In total, Level 2 yielded 2942 potsherds including many complete or half complete shapes. 958 come from the northwestern part that remains without subdivision, 1983 were collected in the southwestern part, of which 204 were in level 2A and 1779 in level 2B.

The distribution of the pottery groups [see *Table 1: Area 1*] shows that the coarse grey ware observed in the latest occupation of Area 2 is practically absent from Area 1 (Gr. 6), suggesting that the two occupation layers might be contemporaneous with corresponding levels 1 and 2 in Area 2. Some gradual changes observed

in Area 2 are also perceptible in Area 1, such as the development of common incised ware from Level 1 to Level 2 (Gr. 8), and a decrease in fine black ware (Gr. 4) from the oldest to the most recent level. The evolution of other groups is less clear and might be related to vessel function and the purpose of the different spaces from which they were collected. Common wares with shining grits (Gr. 5) are particularly scarce in the northern part of the excavation, whereas they tend to grow in number from older to more recent levels in the southern part. Fine red wares (Gr. 1 and 2) tend to develop from older to more recent levels in all parts of the excavation in Area 1, whereas they showed a slightly dropping trend in Area 2.

Pottery group distribution in the two excavated areas leads to the distinguishing of two periods of site occupation provisionally designated as Period I and Period II [*Table 2*]. Period I includes Levels 1 and 2 in both areas and coincides apparently with the existence of the Wakarida town. During this period common red wares predominated, accompanied mainly by fine red ware; fine black and fine painted as well as incised wares were less frequent. It is currently possible to distinguish between an earlier stage (Period IA) where common incised ware is only occasional (less than 3% of the corpus) and a later stage (Period IB) where common incised ware shows a growing trend (6% to 8% of the corpus, up to 14% in the destruction layers over the floors of Level 2 in Area 2).

Period II is attested only in Area 2 and is characterized by the dominance of coarse grey ware. This period seems to correspond to a squatters' occupation in the ruins of this part of the city.

Table 2. Periodisation of Wakarida – first assessment

Period	Area 1	Area 2	Characteristics
I	Level 1 Building F/Settlement Area G	Level 1 Building B	Common wares + fine red wares, black fine ware, a few incised wares (Gr. 1, 2, 3, 4, 5, 7, 8)
	Level 2 Building D/Settlement Area E		Common incised wares (Gr. 8) – development
		Level 2 Building A	Amphorae (Gr. 9) for the first time in Area 2
II		Level 3 Squatter occupation	Coarse grey ware (Gr. 6) development

### 3. POTTERY ASSEMBLAGES AND COMPARANDA

Stylistic and morphological comparisons were carried out between the pottery vessels from Wakarida and published collections from other Ethiopian sites in order to place our pottery set within the Aksumite chronology. The main publications used for this purpose were those where pottery is illustrated extensively, as simple textual descriptions are not reliable enough to provide a clear idea of vessel shape.

#### PERIOD I

In both the excavated areas, the deepest levels have yielded a corpus where common and fine red wares are predominant and fine black, fine painted and incised wares more occasional. Common and fine wares share several shapes, but fine red wares and fine black wares mainly include small neckless pots, shallow bowls, small carinated vases and flasks, whereas common red wares show a wider set of vessels of different sizes, including bowls and cups, large shallow basins, storage vessels and utensils for various purposes.

Carinated goblets generally have a low carination and an upper part, which is

vertical or slightly inward-leaning, with one or two fine horizontal incisions below the rim [*Fig 1: Wk. 339, Wk. 572*]. They present traces of vertical burnishing. These small vases from Wakarida recall a small collection of plain goblets mentioned by Richard Wilding among the Red Aksumite Wares from the excavations supervised by Neville Chittick in Aksum (Wilding 1989: 241, Fig. 16-22, 23, 25), which often also show the same incisions below the rim. According to the author, these plain goblets appear early in the Red Aksumite pottery sequence, but remain in use for a time, up until the development of the Brown Aksumite Ware, considered to be of later date. A type of goblet with a slightly inward-leaning upper part and a horizontal incision under the rim that resembles Wakarida examples was also recorded by Jacke Phillips in late Aksumite levels from site D at Kidane Mehret, dated to between the mid-5th and the end of the 7th centuries AD (Phillips 2000: Fig. 272: b).

Shallow bowls having an outward-folded rim, horizontal, slightly concave or flat on top, with a small ring base are

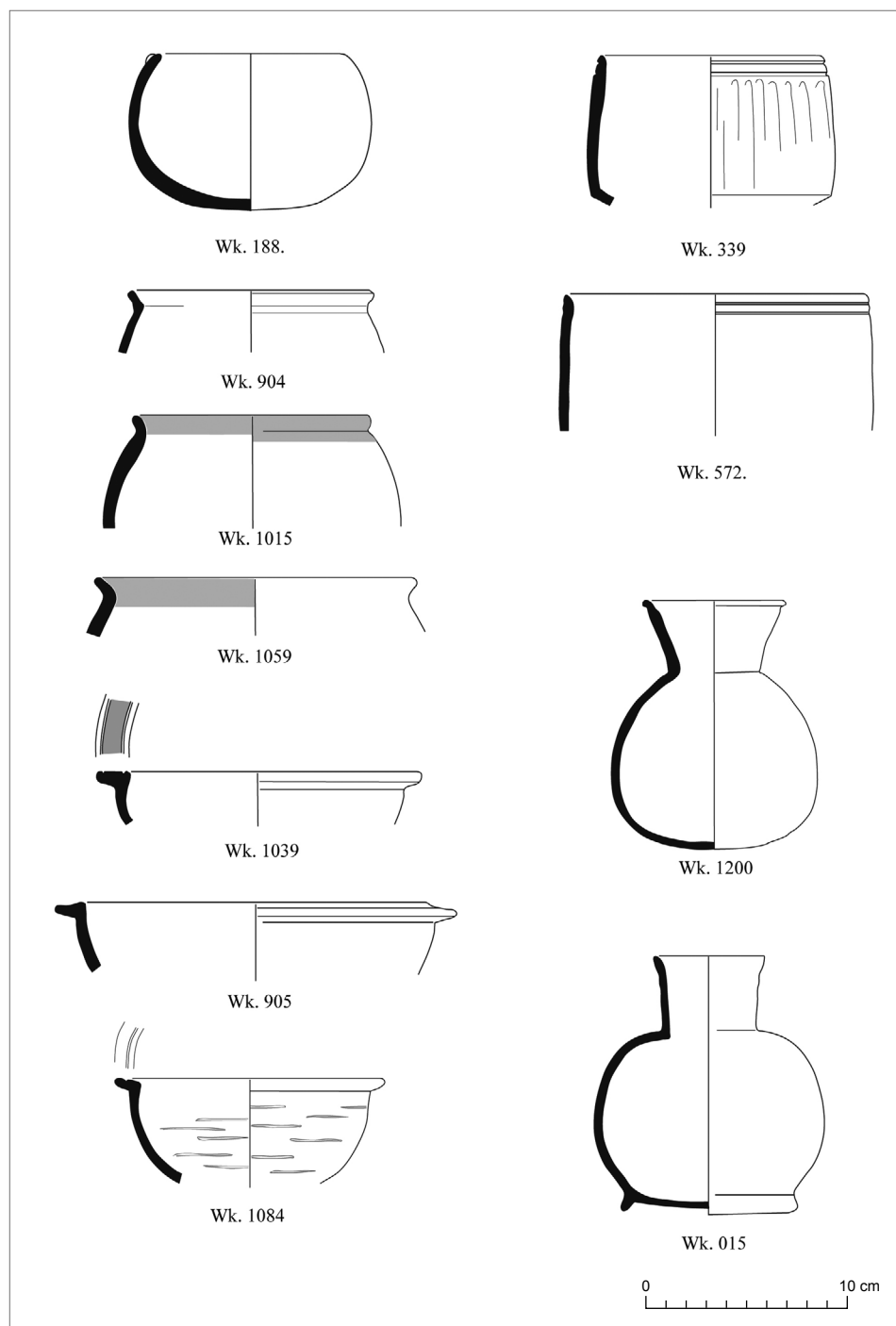


Fig. 1. Selection of fine red and fine black pottery from Wakarida, Period I (Drawing C. Verdellet, V. Bernard)

frequent among the fine red or black wares (Gr. 1, 2, 4) and also appear more occasionally among the common red

wares (Gr. 3). Some present traces of dark red paint and two parallel incisions on top of the rim [Fig. 1: Wk. 1039, WK. 905,

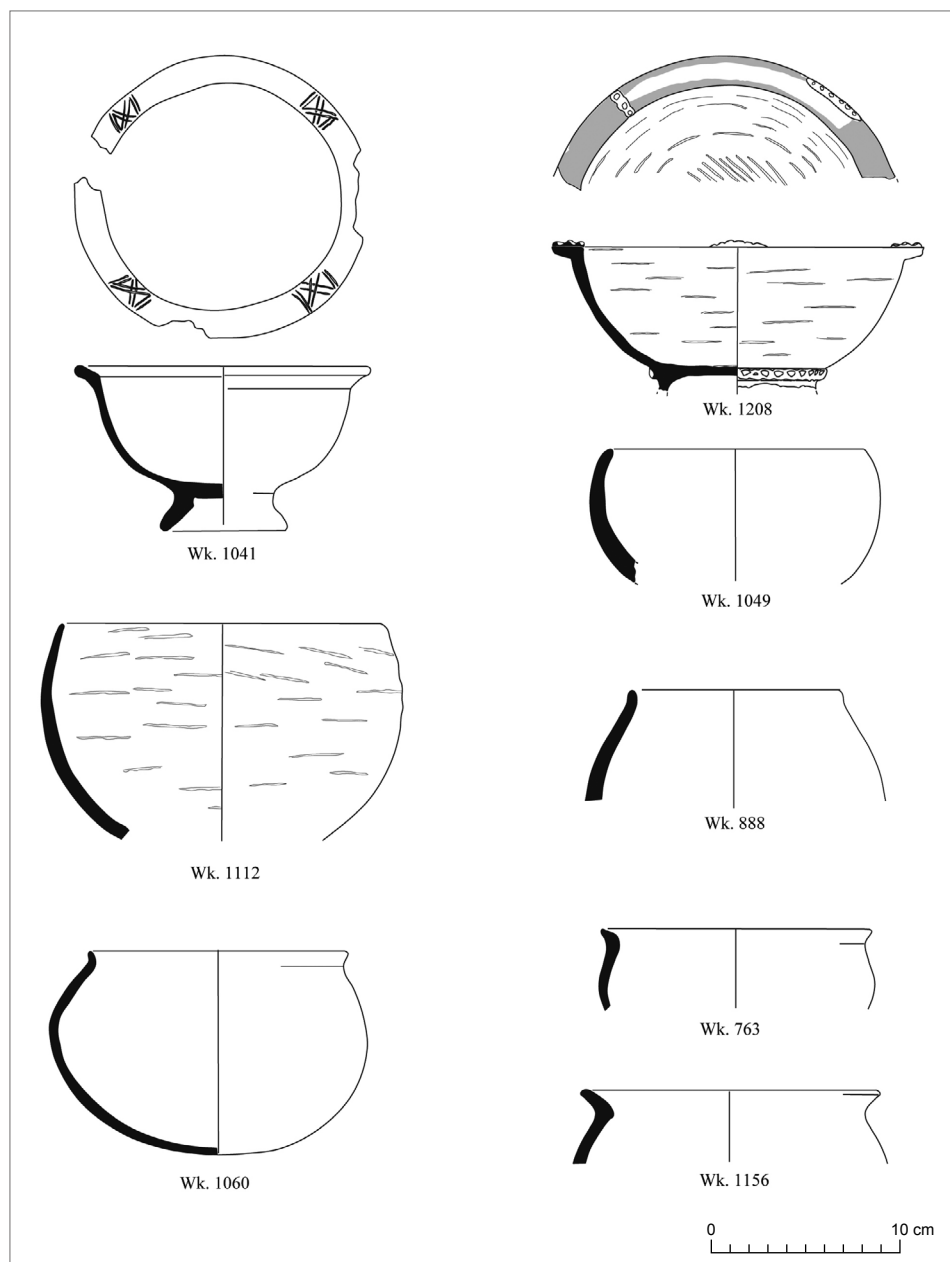


Fig. 2. Selection of bowls and cups in common and fine red wares from Wakarida, Period I (Drawing C. Verdelle, V. Bernard)

Wk. 1084]. Others have buttons or small lugs on top of the rim [Fig. 2: Wk. 1208]. Shallow bowls with an outwardly folded rim are mentioned by Wilding among the Brown Aksumite Wares collected in Chittick's excavations (Wilding 1989: Fig. 16-360, 361, 378, 379) and some of them (Wilding 1989: Fig. 16-360 and 16-379) notably show incisions on top similar to our examples. Such shallow bowls, sometimes with incisions or with buttons on top of the rim, also appear in the Late Aksumite levels on site D at Kidane Mehret (Phillips 2000: Fig. 272: d, e, f). A few examples from Level 2 in both areas have a cross pattern incised on top of the rim [Fig. 2: Wk. 1041]. This pattern is also attested in Aksum during the Late Axumite period (Wilding 1989: Fig. 394; Phillips 2000: Fig. 282).

Globular bowls with a simple thinned rim are quite well represented in all levels [Fig. 1: Wk. 188; Fig. 2: Wk. 1049, Wk. 1112]. They find parallels in Aksum among the earliest assemblages of Brown Aksumite Ware mentioned by Wilding, who dates them to the 5th–6th centuries AD (Wilding 1989: 297, Fig. 16-399, 401). According to the chronological table of pottery shapes presented in 2014 by Kathryn A. Bard et al., these bowls could appear in the Biṣṭa Giyorgis excavations from the end of the 4th to the beginning of the 5th century and onwards, the shape being reported among those typical of the Aksumite 3 period (AD 360/400–550; Bard et al. 2014: Fig. 4, type N).

Globular bowls with an everted rim are also present among the common and fine wares in all layers at Wakarida [Fig. 2: Wk. 763, Wk. 1060]. In Aksum, some were reported from several stages of

the Red Aksumite sequence by Wilding (1989: Fig. 16-220) and a single example in Brown Aksumite Ware, with symbols engraved on the shoulder, is mentioned in the Ende Sem'on V Trench (Wilding 1989: Fig. 16-403).

Small pots with everted rims are frequent among the fine wares at Wakarida [Fig. 1: Wk. 904, 1015, 1059, Fig. 2: Wk. 188] and are sometimes painted on the rim top. They seem less well represented in the collections from Chittick's excavations at Aksum, but one example can be seen among the Brown Aksumite Wares illustrated by Wilding (1989: Fig. 16-355).

Two complete flasks with a globular body and a vertical or slightly outward-leaning neck were also collected in Wakarida: one in fine black ware from the surface [Fig. 1: Wk. 015], and the other, in fact black in the upper part and red at the bottom, in Area 1 [Fig. 1: Wk. 1200], collected from Level 2 in the northern part of the excavated area. They could be broadly compared to examples in Red Aksumite Ware from Chittick's excavations in Aksum, but they are smaller in size (Wilding 1989: Fig. 16-252, 253).

Several short-necked jars with a globular body and a short concave neck were found buried in the floor of two rooms interpreted as cellars in Level 2 of Area 1 [Fig. 3]. Infants were buried in three of these vessels and others contained beads but no bones. These jars have a globular to slightly teardrop-shaped body and a short, concave and often slightly outward-leaning neck with a round rim. Some have lugs or handles on the shoulder. Their shape strongly recalls examples of cauldrons in Red Aksumite Ware mentioned by

Wilding in the DA1 and GT Tombs, as well as in Structure XXIII in Ende Sem'on (Wilding 1989: Fig. 16-226, 16-227). A similar jar was collected in Matara, from room 32 of a large building excavated in Area B (Anfray and Annequin 1965: Fig. 7).

Common red ware in Wakarida, and more especially the examples with fine shiny inclusions (Gr. 5), also includes large, shallow basins with a round base and an everted rim, some with deep impressions and incisions on the inside [Fig. 4: Wk. 295, Wk. 007]. Similar vessels are recorded in

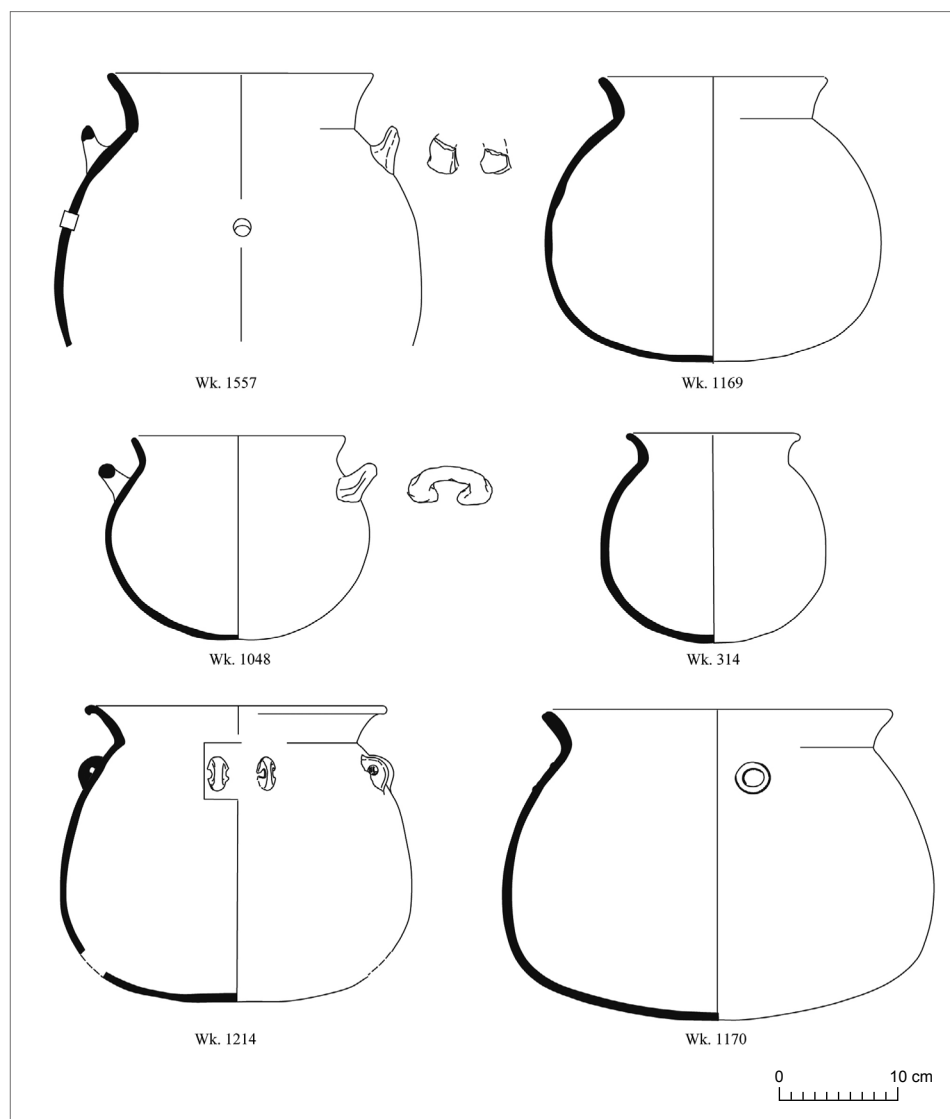


Fig. 3. Selection of common red wares from Wakarida, Period I: basins and large open vessels (Drawing C. Verdellet, V. Bernard)

Chittick's excavations in the Ende Sem'on area in Aksum (trenches ES and KAL; Wilding 1989: Fig. 16-232). They seem to be restricted to the "Late Red Aksumite sequence" (Wilding 1989: 268) and also appear in D. Phillipson's excavation on site D at Kidane Mehret (Phillips 2000: Fig. 272: g).

Incisions are mentioned on the inside of several large open vessels in Red Aksumite Ware from several contexts, some of which are very similar to the Wakarida ones (Wilding 1989: Fig. 16-185; Phillips 2000: Figs 273: i, 274: a). These incisions and impressions probably had a functional purpose.

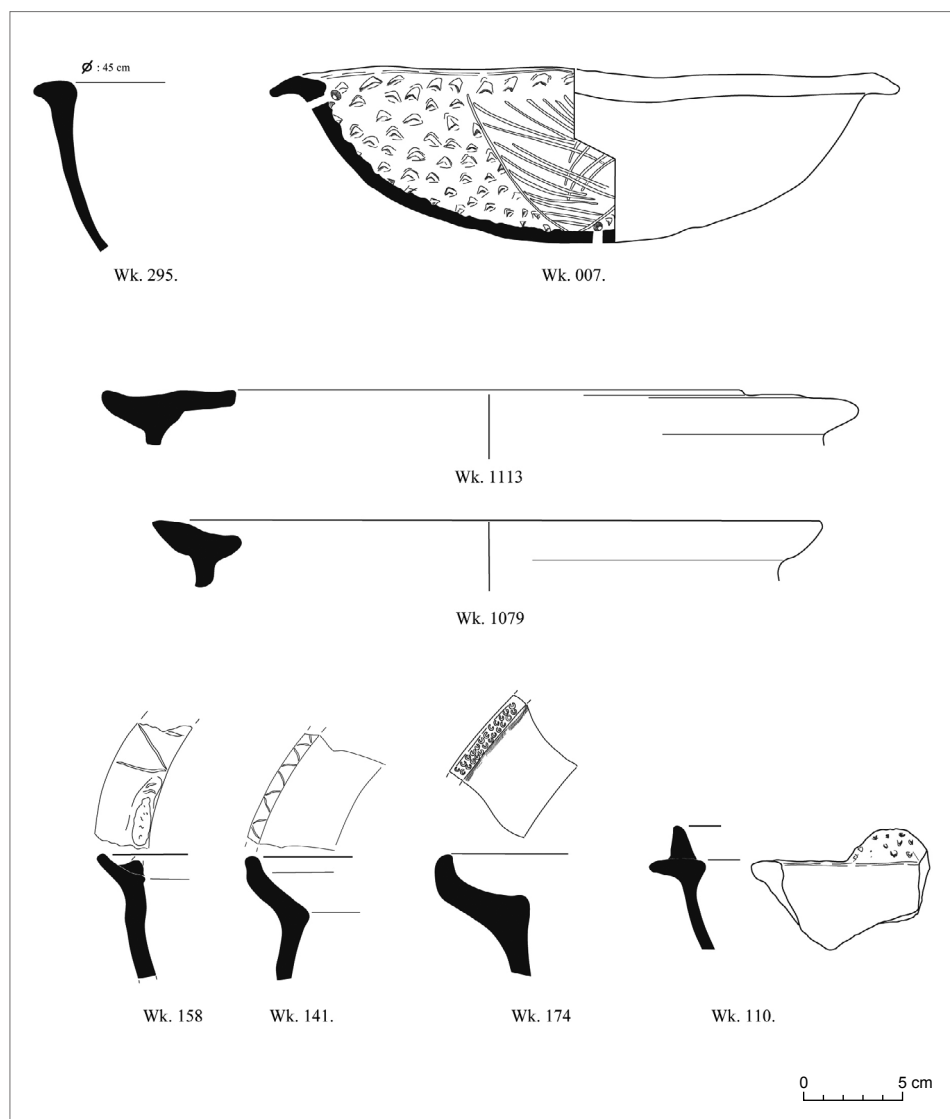


Fig. 4. Selection of common red wares from Wakarida, Period I: jars with short concave neck or cauldrons (Drawing C. Verdellet, V. Bernard)

Common red ware also includes large vessels with a T-shaped rim [Fig. 3: Wk. 113, Wk. 1079] that can be compared to examples present among the Red Aksumite Ware published by Wilding (1989: Fig. 16-208, 211). At Aksum, such vessels are often decorated with incisions on top of the rim. At Wakarida, incisions also appear on the top of rims but remain relatively scarce [Fig. 4: Wk. 158], whereas a slightly different type is better represented. This has an outwardly folded rim, not flat and horizontal but rather concave, oblique and prominent, where incisions are concentrated on the outside edge of the rim instead of extending all over the folded part [Fig. 4: Wk. 141, 174]. Others have incised lugs or decorations in

relief appliqué on top of the rim [Fig. 4: Wk. 174] and these can be compared to some Aksumite examples from the Brown Aksumite Ware collected in Chittick's excavations (Wilding 1989: Fig. 16-358, 359). Open vessels with an outwardly folded rim decorated with incisions or showing some decorated lugs on top are considered as characteristic of Aksumite Period 3 (from the 4th century until the beginning of the 6th century AD) by Bard et al. (2014: Fig. 4: type M).

An incised plaque mounted on three feet within a large open vessel was collected from Level 2 in Area 1 and several fragments of similar plaques were collected on the surface [Fig. 5]. These objects probably belonged to a footwashing



Fig. 5. Fragment of a three-footed plaque with incisions on top, probably belonging to a footwasher, collected in Area 1, Level 2B (Photo C. Verdelt)

basin, a type of vessel also encountered on several Aksumite sites from the beginning of the Aksumite period onwards (Wilding 1989: Fig. 16-197–207; Matara: Anfray 1963: Pl. XCI; Anfray and Annequin 1965: Pl. LVIII: 2900). Despite the name, the function of these vessels is not clear. According to Bard et al. 2014, they “practically disappear” at Biṭa Giyorgis during Aksumite Period 3, between about

AD 350/400 and AD 550/600, and their presence in Wakarida might be proof of a relative “archaism” of our assemblage compared with those usually dated from the Late Aksumite period.

Fine painted and incised ware from Wakarida [Fig. 6] strongly recalls a group of fine wares collected in the Ende Sem’ion trenches by Chittick’s expedition in Aksum. This was called “purple painted

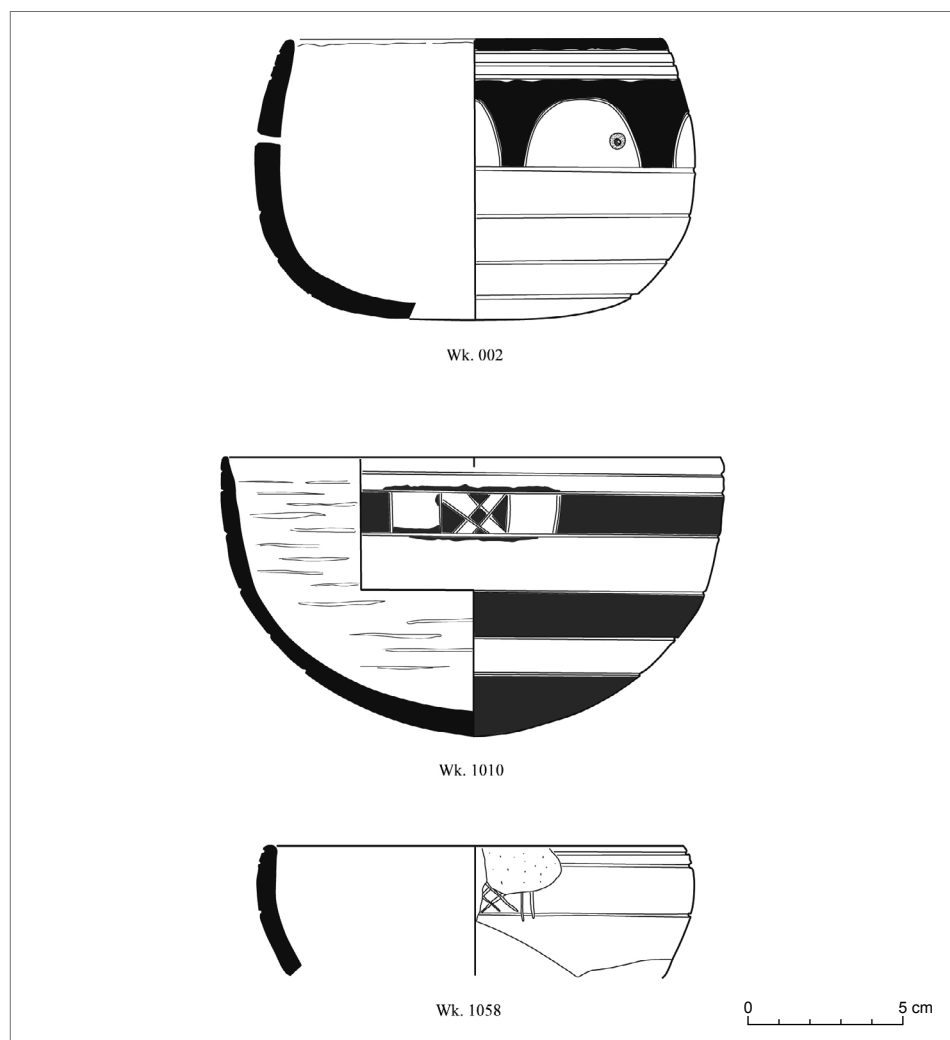


Fig. 6. Fine painted and incised ware (Drawing C. Verdellet, V. Bernard)

ware” by Wilding, and a bowl is exhibited in the National Museum at Addis Abeba. Bowls in “purple painted ware” are also attested in the Late Aksumite levels in

site K at Makele Aksum (Phillips 2000: Fig. 343:f). According to Wilding, the purple painted ware collected in the Aksum area was probably not produced there,

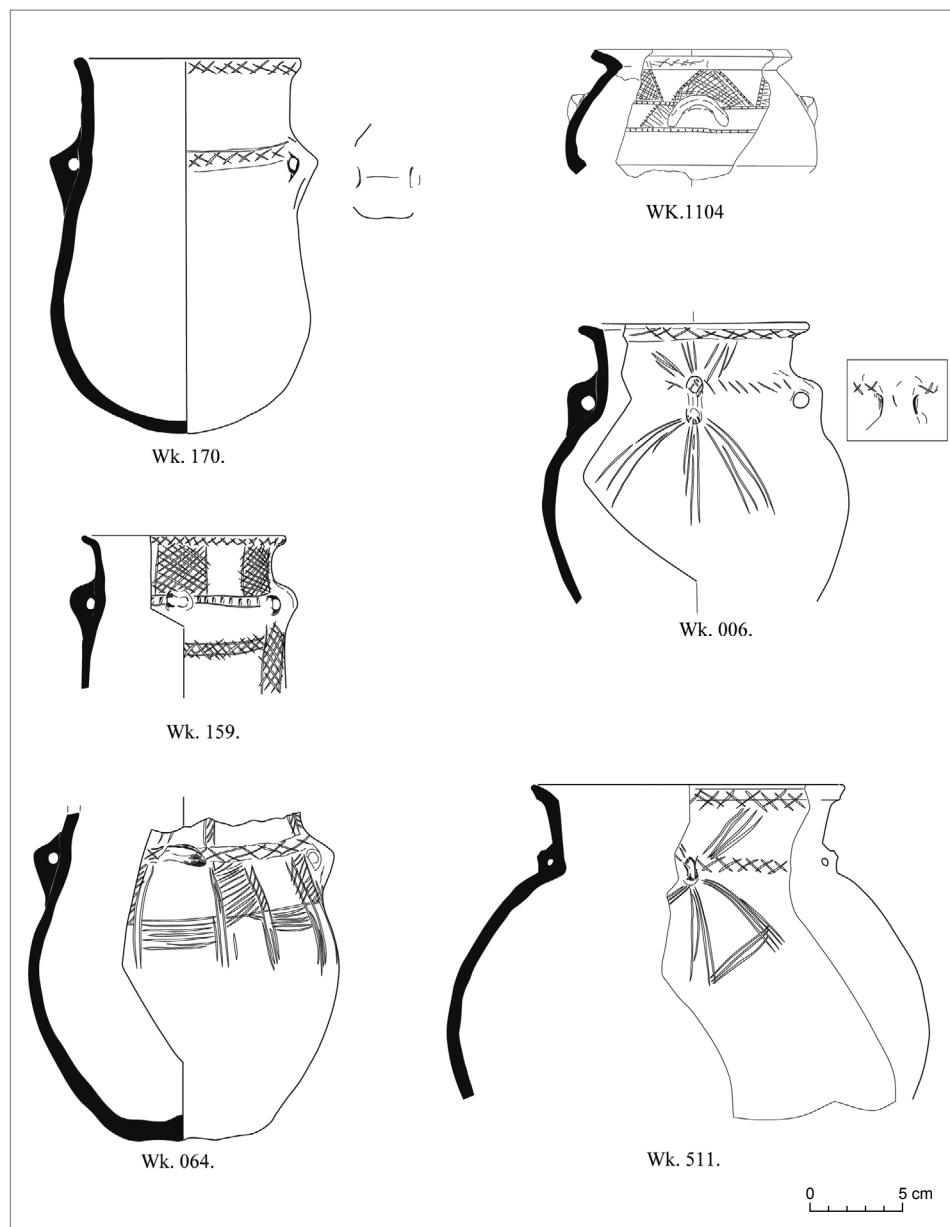


Fig. 7. Common incised ware from Wakarida, Period IB (Drawing C. Verdellel, V. Bernard)

but more likely came from Eastern Tigray and Eritrea where it seems more frequent on the surface. From a macroscopic point of view, the purple painted ware defined in Aksum and the fine painted and incised ware from Wakarida appear very similar in fabric, and the hypothesis of a common origin is worth considering. Petrographical and chemical analyses will be needed, however, to confirm it. The fine and incised ware from Wakarida also appears in the upper levels at Matara (Anfray 2012: Fig. 38).

Common incised ware appearing at Wakarida in the later stages of Period I [Fig. 7] finds fewer parallels among the pottery from Chittick's excavations in Aksum, although the Wakarida vessels broadly recall some incised suspension jars in Brown Aksumite Ware or even in Grey-Black Aksumite Ware illustrated by Wilding (1989: Fig. 16-407, 409, 436). One example from site D at Kidane Mehret could fit better with the Wakarida vessels (Phillips 2000: Fig. 276:c). Good parallels can also be found in Matara, coming from the floor of a large building excavated in Area B (Anfray and Annequin 1965: Pl. LIII: JE2841, JE2758).

The few excavated fragments of amphorae all come from Level 2 in Area 1 [Fig. 8]. Although we have no complete shape allowing us to precisely define the type of amphorae these fragments might represent, the shape of the ribs and the presence of a white covering on the outer surface permit the speculation that amphorae from Aqaba in western Arabia could be the best candidate. This amphora was in circulation in Ethiopia in the 6th–7th centuries AD. At least two pastes can be distinguished among the

amphorae fragments from Wakarida, one orange on color, with a fine black temper, the other more greenish and apparently vegetal-tempered. Several provenances can be suggested. Ribbed amphorae can be found on several other sites, from the east coast (Adulis: Paribeni 1907: Fig. 58) to the regions of Aksum (Phillips 2000: Figs 283: a, c, 343: a) and Matara (Anfray 1963: Fig. CI: 43–45; 2012: Figs 51, 52). In Eastern Tigray, a complete example was accidentally discovered at the site of Zala, not far away from Wukro, during our last season.

## PERIOD II

Most of the pottery groups reported in the Wakarida Period I levels also appear among the material collected in Level 3 of Area 2, without any perceptible change. As has already been said, it seems possible to imagine that the Period I pottery groups still present in Level 3 of Area 2 might be residual. Coarse grey ware characteristic of this period includes caul-



Fig. 8. Fragment of a ribbed amphora; Area 1, Level 2B (Photo C. Verdellet)

drons, pots, basins and plates [Fig. 9]. Cauldrons have a convex wall, with one or two handles on the upper part, and a rounded, sometimes slightly everted rim. They can be decorated with geometric incisions including chevrons and squares, some with a partly hatched cross design inside [Fig. 9: Wk. 067, Wk. 068, Wk. 082]. Pots have a globular body and

a rounded or slightly everted rim [Fig. 9: Wk. 077], shallow basins have a convex body with an incurved and rounded rim [Fig. 9: Wk. 074], plates have a strongly outward-leaning wall, and a slightly thickened rim [Fig. 9: Wk. 076]. One suspension vessel with a ring-base pierced with several holes has also been collected [Fig. 9: Wk. 081].

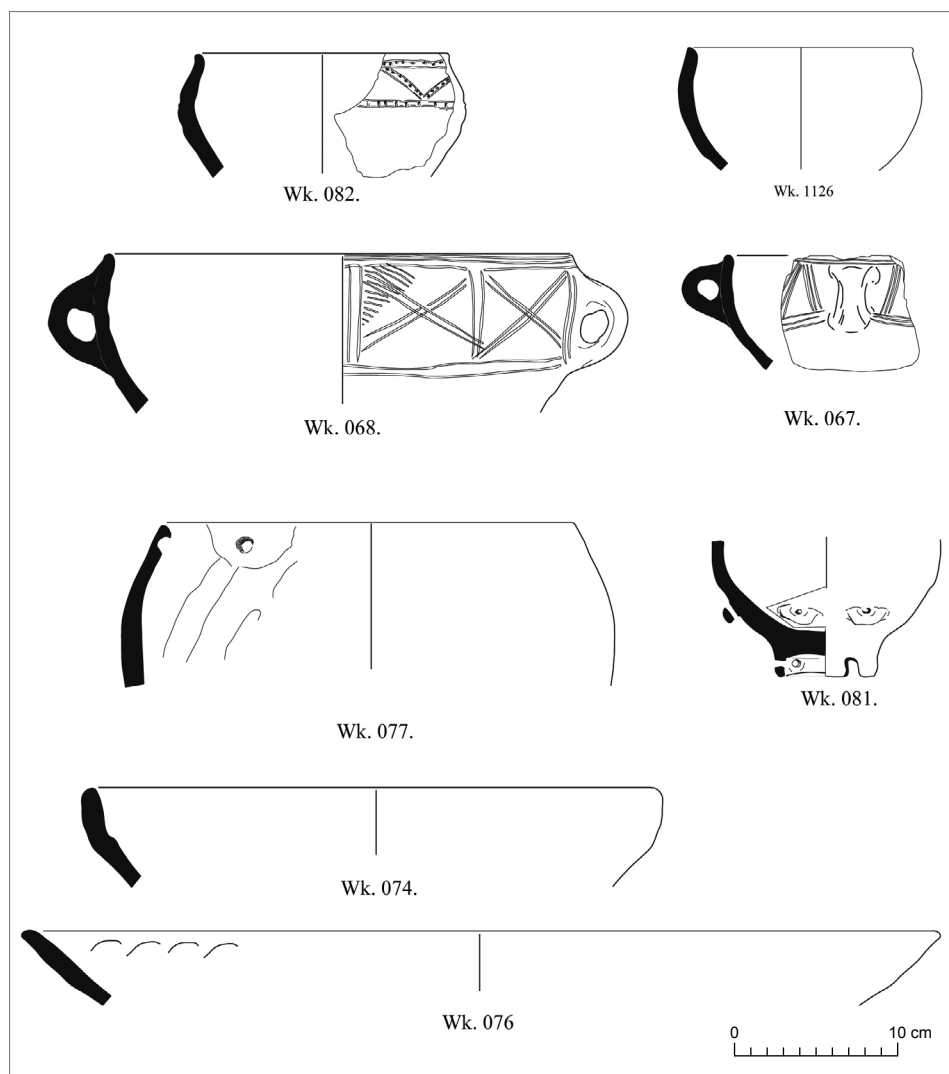


Fig. 9. Coarse grey ware from Wakarida Period II (Drawing C. Verdellet, V. Bernard)

Cauldrons with one handle and with geometric patterns comparable to the Wakarida examples appear among the grey-black ware from the upper layers and surface of Pironin's excavations alongside the giant stele in Aksum as described by Anfray (Anfray 1965: Pl. LXXXIV, Figs 2, 3), as well as a suspension vessel similar to the Wakarida examples (Anfray 1965: Pl. LXXXIV: 1). Anfray proposed to date these vessels to the 8th–10th centuries AD, after the fall of the Aksumite capital. Similar vessels might be present among the grey-black ware described by Wilding from the upper layers of Chittick's excavations in Aksum, although that last group seems more heterogeneous than the one observed in Wakarida, including some vessels of good quality (Wilding 1989: Fig. 16-427) and some coarse handmade examples (Wilding 1989: Fig. 16-438). These latter handmade vessels were described by the author as “undisciplined and technically inferior productions”, with such irregular walls that it was difficult to choose a profile for drawing. They were interpreted as a loss of technological skills after the city of Aksum had lost its place as the capital.

#### **DATING OF WAKARIDA PERIODS I AND II**

The parallels that can be drawn between the pottery shapes from Wakarida, Period I, and pottery assemblages collected elsewhere in the region of Aksum are broadly concentrated between the 4th–5th and the end of the 7th century AD.

Some of our shapes are reminiscent of those present in the “Red Aksumite Ware sequence” described by Wilding in 1989 as characteristic of the period between the 2nd and 5th centuries AD.

This is notably the case of large vessels with a T-shaped rim or with an outward-folded rim, sometimes with incisions and/or lugs decorated with incisions or impressions on top of the rim, carinated goblets, shallow bowls with a ledge rim, bottles with a globular body and vertical neck, globular jars with a short concave neck, footwashers and large basins with an everted rim.

The repartition of these types within the Red Aksumite Sequence is not always described in detail by Wilding. Some of these types seem to appear quite early in the sequence, notably footwashers and plain carinated goblets. Others are said to be present in several Red Aksumite contexts, such as cauldrons comparable to our globular jars with a short vertical neck. Nevertheless, these types (notably carinated goblets and cauldrons but also ledge rim bowls) are also presented as “continuing until the end of the Red Aksumite Sequence and well into the Brown Aksumite Sequence”. Thus, although they appear as possible early shapes, they could not be used in Wilding's publication to demonstrate an early dating between the 2nd and the 5th centuries AD.

Some of these shapes are also mentioned in the sequence briefly described by Bard et al. 2014, on the basis of excavations at Biëta Giyorgis. According to the authors, footwashers appear as early as Aksumite Period I (120/40 BC–AD 130/190), and continue until the beginning of Aksumite Period 3, during which they decrease notably, whereas large basins with an outwardly folded rim with incisions and/or lugs on top of the rim appear during Aksumite Period 3 dated between AD 360/400 and AD 550/610 (type M in Bard et al. 2014: Fig. 4), as well as globular

bowls with a simple rim (type N in Bard et al. 2014: Fig. 4). But large bowls and small cups with outwardly folded rims sometimes decorated with incisions, as well as plain carinated goblets, seem to continue well into the Late Aksumite period if we refer to the assemblage from site D in Kidane Mehret, in levels from the Late Aksumite period (AD 550–800). Other types, which are found in Wakarida in the earliest levels, are described as “restricted to the latest stages of the Red Aksumite Sequence” (basins with an everted rim: Wilding 1989: 268) and are also present on site D in Kidane Mehret.

At Wakarida we have observed the development of incised jars and pots with a globular body and a short or higher neck, generally bearing small handles at the base of the neck (Gr. 8). In Stuart C. Munro-Hay’s publication, these shapes are more restricted to the brown ware assemblages, and are not found among the red Aksumite ware (Wilding 1989: Fig. 16.433–437). They could be of a later date than the shapes previously mentioned. They are also present in David W. Phillipson’s excavations on site D at Kidane Mehret during the Late Aksumite period, dated between the end of the 5th and the end of the 7th century AD (Phillips 2000: Figs 275:d, f, 276:c, 277:b).

It is not fully clear whether or not the development of these vessels in Aksumite Periods 3 (AD 350–550) and 4 (AD 550–800) as defined by Bard et al. (2014). The shapes presented as typical of the Late Aksumite Period are somewhere between our common incised ware 5 and our coarse grey ware 6. The development of common incised ware at

Wakarida would be a tempting criterion for identifying a Wakarida period IA that would fit Aksumite Period 3 and a Wakarida period IB that would fit Aksumite Period 4. This possibility, however, has not been conclusively demonstrated yet, and as said before, we are faced, not with a sudden appearance but with progressive development, which is always more difficult to deal with.

Purple painted ware and amphorae are two other features shared by Wakarida and Aksum. Purple Painted Ware is clearly dated from the Late Aksumite period at Aksum, but there it represents an imported feature, the origin of which might be in Eastern Tigray, where Wakarida is located. It is not known yet whether the appearance of this ware at Aksum in the Late Aksumite period represents a new development or only a time of greater diffusion of this pottery to the west, and further investigations should be made before answering that question. Amphorae are restricted to Level 2 in Area 2, and have not yet been found in the oldest levels of the site. Also, they are not fully identified as yet which is why they cannot be used as strong chronological markers. Finally, the presence of Christian crosses incised or painted on pottery could also be of some chronological significance. At Wakarida, this design appears on several vases in fine or common ware (Gr. 1, 2, 3, 7) collected in Level 2 in Area 1 and in Level 2 in Area 2, but is totally absent from Level 1 in each of the areas.

Two <sup>14</sup>C dates were obtained at Wakarida. Ly 16202 from Level 2 in Area 1 is between AD 385 and AD 587 after calibration (Age BP -1625±30), which is con-

	"Traditional"		Phillipson 2000		Bard et al. 2014	
	After Fattovich et al. 2000: 69					
P r e - A k s u m i t e	7000–1000 BC	Late Prehistoric				
	800/700–400/300 BC	Ethio-Sabaeen phase	8th–5th centuries BC	Pre-Aksumite I–III		
					360–120/40 BC	Proto-Aksumite
	300/200 BC–AD 100	Intermediate phase	4th century BC–1st century AD	Proto-Aksumite	120/40 BC–AD 130/190	Aksumite 1 =Early Aksumite
			1st–3rd centuries AD	Early Aksumite I–II	AD 130/190–360/400	Aksumite 2 =Classic Aksumite
A k s u m i t e	AD 100–350/400	Early Aksumite				
	AD 350/400–600	Middle Aksumite	mid to late 4th century AD	Classical Aksumite I–II	AD 360/400–550/610	Aksumite 3 =Middle Aksumite
	AD 600–800/900	Late Aksumite	late 5th–late 7th centuries AD	Late Aksumite I–III	AD 550/610–800/850	Aksumite 4 =Late Aksumite
	from AD 800/900 onward	Post-Aksumite	from 8th century AD onward	Post-Aksumite	from AD 800/850 onward	Post-Aksumite

Fig. 10. Chronologies used at Aksum

sistent with Aksumite Period 3 as defined by Bard et al. (2014), and would overlap with the beginning of the Late Aksumite period defined by Phillipson (2000) [Fig. 10]. Ly 16201 from charcoal collected in a fireplace in Level 2 in Area 2 is between AD 245 and AD 389 after calibration (Age BP  $-1725 \pm 25$ ), which is even older (but could be due to the use of an “old” piece of wood for fuel).

Finally, two coins were found on the surface at the site. One is anonymous and has been dated by comparison to the end of the 4th century AD, the second is of King Ioel and is dated from the first half of the 6th century AD.

In the present stage of research, we propose to place Period I at Wakarida between about AD 400 and AD 800, admitting that the date of the beginning of Wakarida's occupation remains somewhat vague. Further data are necessary to see whether the occupation of the site started before the beginning of the Late Aksumite period (around AD 550 according to Bard et al. 2014, a little before AD 600 according to Phillipson 2000), or not, the oldest levels of Period I showing a few signs of possible “archaism” that have to be better documented: absence of cross patterns, absence of amphorae, relative scarcity of common incised ware,  $^{14}\text{C}$  dating relatively ancient in both areas.

Coarse grey ware characterising Period II at Wakarida is more closely related to pottery sets collected in Aksum in layers dated from the post-Aksumite period. Few details of the latter have been published, and if the beginning of this period is generally placed somewhere during the 8th century AD at the earli-

est, nothing is known about the further evolution of this pottery between the end of the 8th century AD and the present day that could help us to define a *terminus post quem* for the diffusion of this particular assemblage. A post-Aksumite periodisation has still to be constructed.

Finally, it is worth mentioning that a certain share of the vessels characterising the common incised ware from Period I (Gr. 8) and the coarse grey ware from Period II (Gr. 6) also recall to a certain extent some pottery shapes still in use today and sold, for example, at the Thursday Market in Wukro. It is possible to find at the present-day market some pots with a globular body, with incised decoration patterns that resemble some of the pots from Group 8, except that they have much larger handles, as well as pots and large plates recalling typical shapes from Group 6. The present-day pottery is mainly grey-black ware, sometimes still showing some red on the lower parts, handmade, with round bottoms moulded on other vessels, and upper parts incised or pebble-burnished. It is of course possible to distinguish between ancient and modern wares as textures are rather different, but it is clear that pottery traditions related to the shaping and decoration of the vessels have persisted over a long timespan. The potters in the region are being studied in order to build up a reference collection of present-day products, available for use during surveys, and to get more information about the technical and functional aspects of traditional pottery-making that could be used later as comparative data for the study of archaeological collections.

## CONCLUSION

Pottery assemblages collected from the different layers excavated at the site of Wakarida have helped to establish the first—still very limited—local chronology which we were able to link to the latest part of the chronology attested on the site of Aksum. Although we are dealing mainly with cultural styles, and although, as yet, we have observed only a few cases of possible identical groups of paste on both sites, our comparisons reflect the development of a certain cultural unity throughout northeastern Ethiopia during that period.

Evidence of interregional trading is relatively scarce: a few fragments of amphorae in Area 1, a *millefiori* glass bead in Area 2, a Sassanian agate seal collected during the last campaign. It would suggest that the urban growth of Wakarida was not tied in closely with developments

in interregional trading, but might have been the result of an endogenic process, still to be defined. The part played by intraregional trade in this process, when better understood, will certainly provide interesting paths towards a better definition of the steps in Wakarida's evolution.

Our view of the formation and evolution of the urban center within the Late Aksumite period is still rather confusing as we need to define more clearly the possible subphasing of Period I. In this conceptual framework of progressive evolution, the goal is to confirm the chronological significance of certain observations made in the two areas, and to take into account possible functional aspects which may have influenced the composition of the material. Such an exercise requires extended excavations.

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## References

- Anfray, F. (1963). La première campagne de fouilles à Matara près de Sénafé (novembre 1959–janvier 1960). *Annales d'Éthiopie*, 5, 87–166
- Anfray, F. (1965). Note sur quelques poteries axoumites. *Annales d'Éthiopie*, 6, 217–220
- Anfray, F. (2012). Matara: enquête archéologique sur une cité antique d'Érythrée. *P@lethnologie*, 4, 11–48
- Anfray, F. and Annequin, G. (1965). Maṭarā. Deuxième, troisième et quatrième campagnes de fouilles. *Annales d'Éthiopie*, 6(1), 49–86
- Bard, K.A., Fattovich, R., Manzo, A., and Perlingieri, C. (2014). The chronology of Aksum (Tigrai, Ethiopia): A view from Bieta Giyorgis. *Azania: Archaeological Research in Africa*, 49(3), 285–316
- Fattovich, R., Bard, K.A., Petrassi, L., and Pisano, V. (2000). *The Aksum archaeological area: A preliminary assessment*. Naples: Istituto universitario orientale, Centro interdipartimentale di servizi per l'archeologia
- Gajda, I., Charbonnier, J., and Peixoto, X. (2020). The Aksumite site of Wakarida, in the region of Tigrai, Ethiopia: First results of archaeological investigations. In I. Zych, M. Gawlikowski, and J. Oller Guzmán (eds), *Red Sea trade in resources and other studies. Proceedings of the Red Sea VIII conference in Warsaw, 4–9 July 2017* (=PAM, 29/1) (pp. 381–406). Warsaw–London: University of Warsaw Press; Archaeopress
- Paribeni, R. (1907). Ricerche nel luogo dell'antica Adulis (colonia Eritrea). *Monumenti antichi*, 18, 437–572
- Phillips, J. (2000). Pottery and other clay objects. In D.W. Phillipson (ed.), *Archaeology at Aksum, Ethiopia, 1993–7* (=British Institute in Eastern Africa Memoir 17) (pp. 205–212). London: British Institute in Eastern Africa
- Phillipson, D.W. (ed.). (2000). *Archaeology at Aksum, Ethiopia, 1993–7* (=British Institute in Eastern Africa Memoir 17). London: British Institute in Eastern Africa
- Wilding, R.F. (1989). The pottery. In S.C. Munro-Hay, *Excavations at Aksum: An account of research at the ancient Ethiopian capital directed in 1972–4 by the late Dr. Neville Chittick* (=British Institute in Eastern Africa Memoir 10) (pp. 235–316). London: British Institute in Eastern Africa