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# Pottery of the Middle and the New Kingdom from Lower and Upper Nubia

## Introduction

Until recently the study of pottery of the Middle and the New Kingdoms from Lower and Upper Nubia was dominated by an approach which compares it with the material from Egypt. This approach has resulted in considerable shortcomings concerning the dating and production of ceramics in these eras. Recent years have witnessed an increased understanding for the need of site specific and regional studies.<sup>1</sup> These revisions are still ongoing, and the following can only be an outline of the present state of research.

Similar to the study of pottery in Egypt, the period in question cannot be presented homogeneously – the evidence is, in fact, heterogeneous and some periods are better understood than others. In general, four broad categories of pottery from sites in Nubia can be distinguished, considering technology and raw material as defining elements (imported wares from the Oases and Levant; Marl clays from Egypt; Nile clays and Nubian handmade vessels). Further sub-categories according to shape, function and ware can be established on a site-specific level (see Figs. 2–5, 7–10). Whereas Egyptian Marl clay wares and imports from the Oases and the Levant differ considerably from the local pottery productions in Nubia and are therefore easily identifiable, the Nile silts are more difficult to assess. Imported Nile clay vessels are as well known<sup>2</sup> as locally produced vessels – the difference, however, is often not visible macroscopically, making current chemical and petrographic analyses all the more important.<sup>3</sup> The corpus in general is complemented by Nubian pottery, always associated with the other wares, but in most cases in rather small numbers.<sup>4</sup> In the following, the focus is on the main types of Nile and Marl clay vessels. Within a general overview, the rich potential of ceramics will be illustrated to understand the periods of the Middle and New Kingdoms in Nubia, stressing ongoing research and highlighting possible future studies.

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1 Cf. KNOBLAUCH 2007; 2011; BUDKA 2016b; 2017.

2 Cf. ARNOLD 1993, 76, figs. 90B–C and 78; SMITH 2003, 117; BUDKA 2016b; 2017.

3 Currently conducted for several New Kingdom sites, see below and note 94.

4 Cf. SMITH 2003, 116–124; 2012; ROSE 2012, 16. For the small amount of Nubian wares in New Kingdom tomb contexts in Lower Nubia, cf. WILLIAMS 1992, 23.

## Middle Kingdom Pottery

### Selected Sites and Contexts

Middle Kingdom pottery was found at both settlement and funerary sites (Fig. 1). The most prominent contexts are Egyptian fortresses (see KNOBLAUCH, this volume), associated Middle Kingdom tombs as well as Kerma graves.<sup>5</sup> All of these sites have essentially produced the same types of pottery, contrasting slightly in dating (BOURRIAU 1991, 130).<sup>6</sup> The complex phases of the use of the Nubian fortresses erected in the 12<sup>th</sup> Dynasty, possibly in use until the late 13<sup>th</sup> Dynasty and also during the Second Intermediate Period, were the subject of several studies (see SMITH 2012, 377 with references). Fine dating the ceramics to the 13<sup>th</sup> Dynasty or the Second Intermediate Period in Nubian contexts still carries certain challenges.

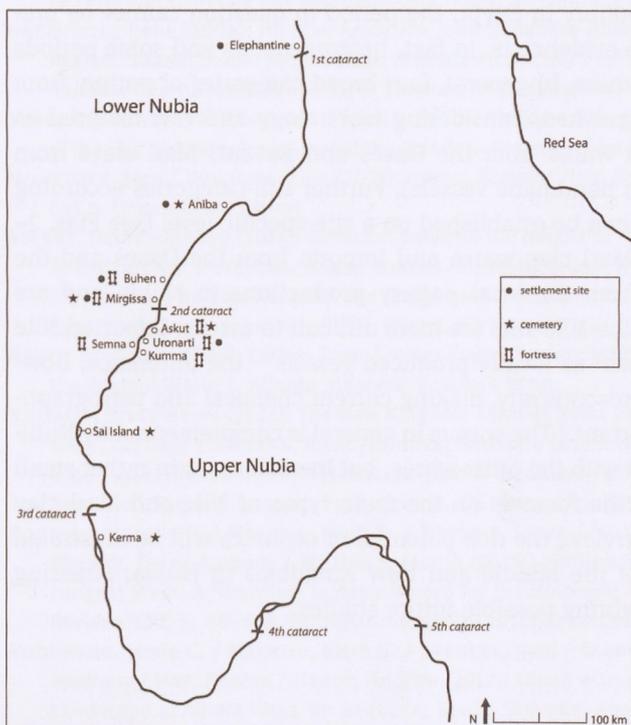


Fig. 1: Map with find contexts of Middle Kingdom pottery in Nubia.

5 For the difficulties to identify Egyptian pottery from Kerma contexts in publications, see BOURRIAU 2004, 3.

6 For the special case of Egyptian imports in Kerma, see BOURRIAU 2004, 11–12.

STUART TYSON SMITH's recent summary of Middle Kingdom pottery from the Nubian fortresses offers a concise history of research, outlines the state-of-the-art, and includes several sites with little or no published material like Faras, Ikkur, Kor, Quban, Serra and Shalfak (SMITH 2012, 378–379). The list of important sites for Middle Kingdom pottery may begin with Aniba (STEINDORFF 1937; SMITH 2012, 377). Excavations conducted by G. STEINDORFF in the settlement and especially the cemeteries yielded a considerable amount of Middle Kingdom ceramics. Because the tombs were reused during the New Kingdom, the exact character of the earlier material was not recognised until recently and still awaits complete publication.<sup>7</sup> Major excavations were undertaken by D. RANDALL-MACIVER and L. WOOLLEY in the fortress, settlement and cemeteries of Buhen (see SMITH 2012, 378 with references). As with Aniba, in publication the Middle Kingdom material is partly mixed with later ceramics from the New Kingdom (see SMITH 2012, 378).

Small-scale excavations by G. REISNER, published by DUNHAM (1967) are noteworthy at the fortress of Mirgissa. However, most ceramics from the Middle Kingdom came to light during the more substantial work by the French mission directed by J. VERCOUTTER (1970; 1975). The main fortress, settlement and associated cemeteries yielded material of mostly the (late) 12<sup>th</sup> Dynasty and 13<sup>th</sup> Dynasty (see SMITH 2012, 378).

Excavations directed by A. BADAWY focused on the fortress of Askut.<sup>8</sup> The publication of the entire ceramic assemblage is currently in preparation by S. T. SMITH, who has already published preliminary analyses.<sup>9</sup> The ceramics from Askut are of great importance for the study of Middle Kingdom material in Nubia and will be used to illustrate the most important types (Figs. 2–5). According to SMITH, the four ceramic phases at Askut cover the unbroken sequence from the late 12<sup>th</sup> Dynasty to the late 17<sup>th</sup>/early 18<sup>th</sup> Dynasty.<sup>10</sup> The Askut material finds parallels not only in Lower Egypt (as stressed by SMITH 2012) but corresponds well with Upper Egypt assemblages, especially from Elephantine (cf. RZEUSKA 2012).

Ceramics from the large fortresses of Semna-West (Semna) and Semna-East (Kumma), excavated by REISNER's Nubian expedition, were presented in a catalogue-style publication by DUNHAM (DUNHAM/JANSSEN 1960; see also SMITH 2012, 378–379). The southernmost substantial Egyptian site of the Middle Kingdom is Uronarti. Its fortress, the so-called campaign palace, some huts and associated tombs were unearthed by REISNER's Nubian expedition (DUNHAM 1967). In 2012, the Uronarti Regional Archaeological Project directed by C. KNOBLAUCH and L. BESTOCK resumed work at the site. First results illustrate its rich potential, also for ques-

7 Cf. WOLF 1937, 126 for short comments. The recent analysis on material hosted by the University of Leipzig was conducted by Anne Seiler and Jana Helmbold-Doyé (publication forthcoming).

8 SMITH 1995; 2012, 377 with further references; KNOBLAUCH 2007.

9 Cf. SMITH 1995; 2002; 2012, 377.

10 For problems related to this sequence, see KNOBLAUCH 2007, 225.

tions of Middle Kingdom pottery and chronological issues (KNOBLAUCH/BESTOCK 2015).

As mentioned above, Kerma cemeteries also yielded Middle Kingdom pottery. The two most important sites in this respect are Sai Island and Kerma.<sup>11</sup> Sai was the northern stronghold of the Kerma Kingdom in a prominent location just south of the Batn el-Hagar. Substantial Kerma burial grounds from the Ancient to the Classical Kerma Period yielded Egyptian pottery, especially Marl C storage vessels and Marl A jars (GRATIEN 1986, 398–402). Other than this, no clear Middle Kingdom contexts were identified on Sai. The site SAV2 was interpreted as a camp site of possibly Middle Kingdom date (see HESSE 1981; for the date, see VERCOUTTER 1986, 11–12), but more likely dates to the 18<sup>th</sup> Dynasty (BUDKA/DOYEN 2013, 170). In the capital of the Kerma Kingdom, a substantial number of Middle Kingdom Marl clay vessels were excavated in Kerma tombs (BOURRIAU 2004). Both Sai and Kerma illustrate that one has to be careful in dating tomb contexts by means of Egyptian imports, which may have been quite old by the time of their final use as burial gift (see BOURRIAU 2004).

## Fabrics: Nile and Marl Clays

As SMITH (2012, 380–394) has demonstrated for the material from Askut, the Vienna System (NORDSTRÖM/BOURRIAU 1993) works well for the classification of fabrics of Middle Kingdom pottery excavated in Nubia. The majority of the material from settlements and fortresses are Nile silts (c. 90–93%), which show regional and also chronological alterations (cf. SEILER 2012, 429–430). The variants Nile B1, B2 and C are most common; also attested are Nile D and Nile E. Nile B1 was specifically used for thin-walled bowls, dishes, stands and jars (SMITH 2012, 380–381). It appears only rarely after the Middle Kingdom. The medium fabric Nile B2 is well attested, but much less frequent than the finer version B1. Nile B1 and fine Nile B2 vessels were sometimes covered with a micaceous slip, representing the rare so-called ‘gilded ware’ produced in the Second Cataract forts (Figs. 3d, 4c–d).<sup>12</sup>

The most common fabric of the Middle Kingdom (also in Egypt) is Nile C, a coarse fabric dominated by straw (SMITH 2012, 381–385). Nile C was used for all different types of vessels, from small to large, but is specifically the material for large plates, bowls, stands and jars including beer bottles (Figs. 4f–g). Nile D, tempered with crushed limestone, is occasionally attested, especially for late Middle Kingdom to Second Intermediate Period contexts and for Egyptian Tell el-‘Yahudiya

<sup>11</sup> Another substantial Kerma cemetery with Egyptian imports is Ukma-West, see BOURRIAU 1991, 129; KNOBLAUCH 2011.

<sup>12</sup> See the concise study by KNOBLAUCH 2011. SMITH 2012, 389 classified the ‘gilded ware’ as separate Nile clay version (which is unlikely, see KNOBLAUCH 2011).

vessels (SMITH 2012, 387). Nile E is characterised by abundant sand particles and was very common in the Eastern Delta (well attested at Tell el-Daba). According to the published material, Nile E is rare in Middle Kingdom contexts in Nubia, but attested for cooking pots (SMITH 2012, 387–389).

Differentiating between locally produced and imported Nile silt has proved difficult (except for specific cases like the ‘gilded ware’), but scientific analyses may offer new insights as first Neutron Activation Analysis results from Askut suggest (BOURRIAU 2004, 9; see also KNOBLAUCH 2011, 173, note 53). In general, most scholars agree that local production in the Second Cataract fortresses has so far been underestimated.

Imported Egyptian Marl clays are well attested in the Middle Kingdom corpus. Within settlements, the percentage is around 4–6% of the material; in tombs the quantity can be slightly (or, in the case of tombs in Kerma, significantly) higher because of storage vessels produced in Marl clay (see BOURRIAU 2004). The two common Marl clay families belong to the Marl A Group (Fig. 10 top), which is Upper Egyptian (NORDSTRÖM/BOURRIAU 1993, 176–178), and to the Marl C Group (Fig. 10 bottom), a Lower Egyptian product (BADER 2001; cf. BOURRIAU 2004, 3). BOURRIAU (2004) has suggested that from the mid-12<sup>th</sup> Dynasty onwards, imports from the Northern part of Egypt were more common than the Upper Egyptian ones, possibly reflecting historical changes, represented by, for example, the new residence at Lisht. Also in Askut, the Marl A3 and A4 variants are outnumbered by Marl C vessels, especially *zirs* and jars (SMITH 2012, 392).

## Production and Technology

Except for the Nubian pottery, the Middle Kingdom corpus from Nubia is mostly wheel-made.<sup>13</sup> Some Egyptian types like Marl C *zirs* were handmade in sections with the coiling technique and the rim finished on the wheel. Bread-moulds were produced on conical forms.

Bread plates were finished on the ground, being partly handmade with the upper part finished on the wheel. Surface treatments and styles of decoration mostly correspond to the contemporary tradition in Egypt, with some local innovations like the ‘gilded ware’. From the late Middle Kingdom onwards, incised lines are frequently used for vessel decoration, straight lines as well as wavy lines. Carinated bowls of various sizes often show wavy lines, sometimes in combination with applied ridges and “pinched ‘piecrust’ rims” (SMITH 2012, 397).

Important evidence for potter’s workshops and kilns comes from the Second Cataract fortresses. Two kilns were documented at Mirgissa (HOLTHOER 1977, 16 with

<sup>13</sup> For a general summary of sources for pottery fabrication of the Middle Kingdom (pictorial, models, archaeological, literary material), see HOLTHOER 1977, 11–18.

references), three kilns and other structures of a potter's workshop at Serra East (RESHETNIKOVA/WILLIAMS 2016). Another workshop for the production of pottery was excavated at Nag Baba in the Ashkeit district (HOLTHOER 1977, 16 with references and plan (fig. 21); BOURRIAU ET AL. 2000, 139). Based on unfired sherds and sherds associated with the workshop and kilns, local Nile alluvium can be identified as raw material (cf. RESHETNIKOVA/WILLIAMS 2016, 489). RESHETNIKOVA and WILLIAMS (2016, 500–501) have convincingly argued that within the pottery production in Nubia, episodic work of the potters as itinerant craftsmen travelling from site to site played an important role. In addition, new evidence from Askut complements this picture: based on a ceramic potter's wheelhead, datable to the 13<sup>th</sup> Dynasty, SMITH (2014) demonstrated that the production and distribution of pottery during the Middle Kingdom in Nubia was probably quite complex, including industrial workshops at major sites like Askut as well as local productions for demands on a much smaller scale at other sites.

## Main Types

The most significant 'chronological markers' of the Middle Kingdom in Nubia are comparable with contemporaneous material from Egypt and comprise hemispherical cups, bowls, cooking pots, beer bottles, beakers and *zirs*. Functional pottery (Fig. 2) includes different variants of stands, cooking pots and ceramic connected with bread making (bread cones of type C after JACQUET-GORDON 1981, 17, fig. 4 [9 Kuban, 10, 11 Semna and 12 Mirgissa] and bread plates). In addition, so-called fish dishes are attested both in Marl clay (cf. BADER 2001, 81–83) and Nile variants (see SMITH 2012, 397).

The most common open forms in Nile silts are hemispherical cups, small beakers and carinated bowls (sometimes with incised decoration, applied ridges and pinched rims), large plates and dishes (Fig. 3). The hemispherical cup proportion index was used to date these characteristic vessels by comparison with Lower Egyptian material (SMITH 2012, 394, 398–401). This poses several problems, as highlighted by C. KNOBLAUCH. Due to the regional diversity of the 13<sup>th</sup> Dynasty, some of the material from Askut is more likely to date to the early to mid-17<sup>th</sup> Dynasty rather than the mid-13<sup>th</sup> Dynasty (see KNOBLAUCH 2007, 230–231 with references).

Tall beakers with flat bases, various types of bottles, jars and storage vessels dominate the corpus of closed Nile silt types. Some of the large storage vessels in Nile C correspond to Marl C vessels from Egypt (cf. KNOBLAUCH 2007, fig. 3). Jars with flaring mouth are representatives of the 'gilded ware' (Fig. 4c–d). Beer bottles (Fig. 4f–g) were used as chronological markers considering the Lower Egyptian classification (SMITH 2012, 401–402). But, as demonstrated by evidence from Thebes, the sequence of beer bottles in Egypt is based on the region, raising doubts about some of the dates attributed by SMITH to the vessels from the Second Cataract forts (see KNOBLAUCH 2007, 230).

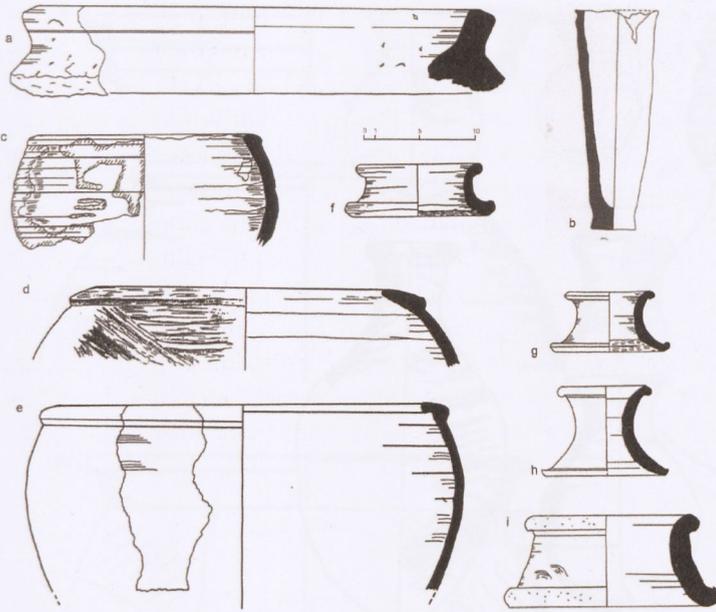


Fig. 2: Middle Kingdom functional pottery types (from Askut after SMITH 2012).

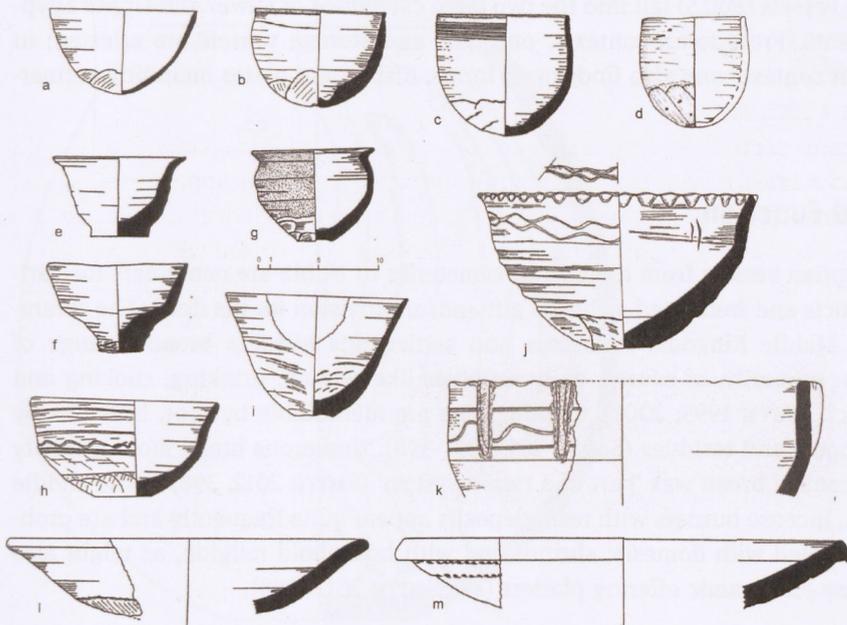
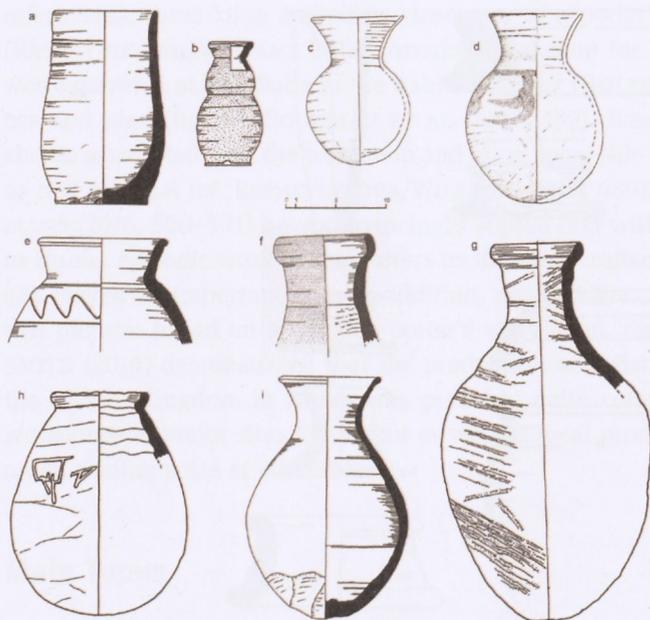


Fig. 3: Middle Kingdom Nile silt open forms (except d all from Askut after SMITH 2012; d from Mirgissa, after KNOBLAUCH 2011).



**Fig. 4:** Middle Kingdom Nile silt closed forms (c and d from Mirgissa after KNOBLAUCH 2011; all other from Askut after SMITH 2012).

Marl clay vessels (Fig. 5) fall into the two large categories of Lower and Upper Egyptian variants. From tomb contexts, only jars and storage vessels are attested; in settlement contexts one also finds open forms, dishes and plates including carinated bowls.

## Use and Function

Most Egyptian vessels from tombs and cemeteries in Nubia are containers for various products and were used as burial gift and/or provision for the dead. The ceramics from Middle Kingdom fortresses and settlements attest a broader range of functions: primarily, of course, daily activities like serving, drinking, cooking and storage (cf. SMITH 1995; 2002). Cooking pots are identifiable by soot, beer jars by mud stoppers and residues (SMITH 2012, 397–398). Numerous bread moulds testify that the conical bread was ‘part of a ration system’ (SMITH 2012, 398) in the Middle Kingdom. Incense burners with resin deposits appear quite frequently and are probably associated with domestic shrines and with household religion, as might also be the case for ceramic offering platters (see SMITH 2012, 398).

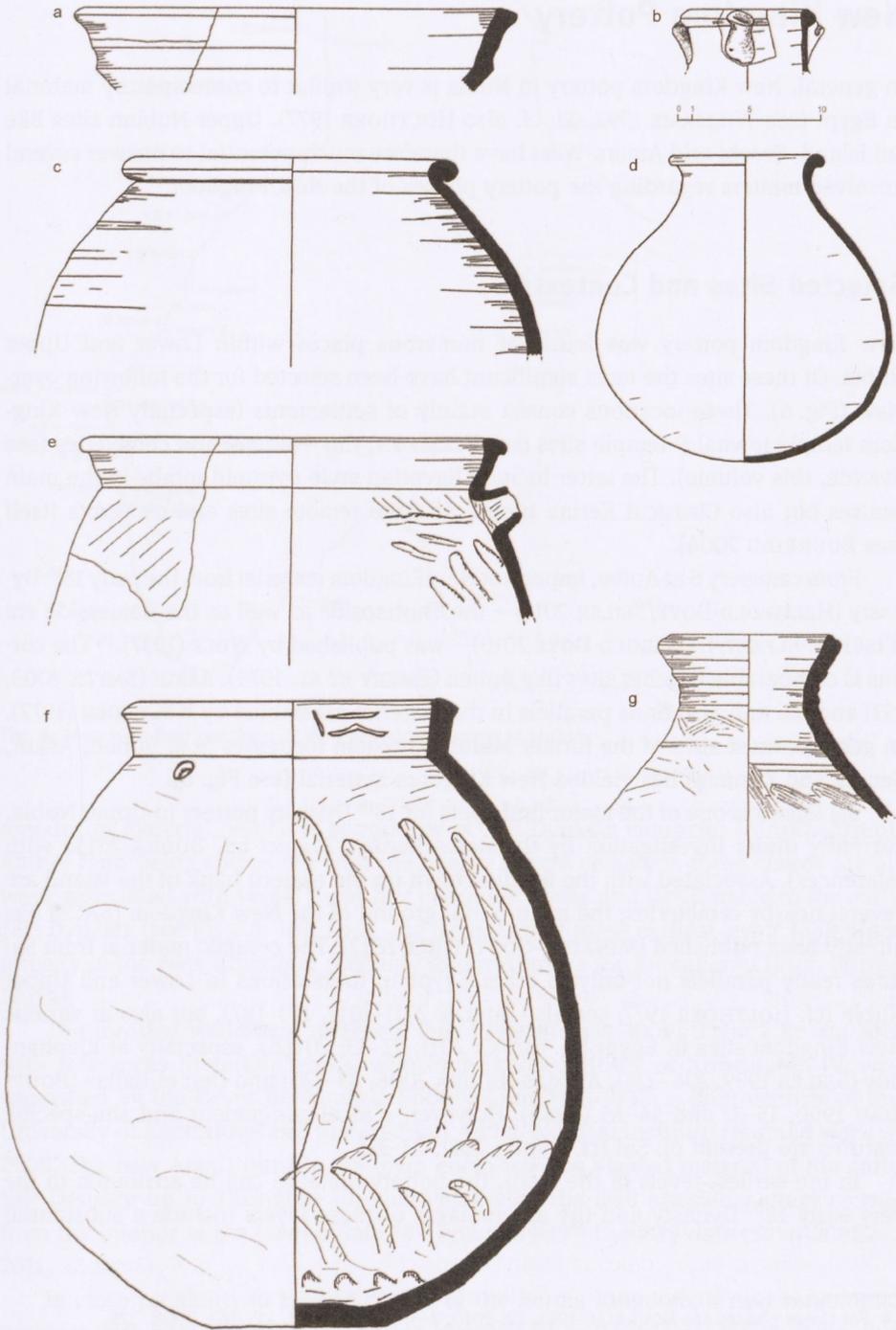


Fig. 5: Middle Kingdom marl clay pottery types (from Askut after SMITH 2012; a–d Marl A; e–g Marl C).

## New Kingdom Pottery

In general, New Kingdom pottery in Nubia is very similar to contemporary material in Egypt (see WILLIAMS 1992, 23; cf. also HOLTHER 1977). Upper Nubian sites like Sai Island, Sesebi and Amara-West have therefore much potential to answer several unsolved matters regarding the pottery phases of the New Kingdom.<sup>14</sup>

### Selected Sites and Contexts

New Kingdom pottery was found at numerous places within Lower and Upper Nubia. Of these sites the most significant have been selected for the following overview (Fig. 6). These locations consist mainly of settlements (especially New Kingdom temple towns),<sup>15</sup> temple sites (see ULLMANN, this volume) and cemeteries (see SPENCE, this volume). The latter include Egyptian style pyramid tombs in the main centres but also Classical Kerma tumuli at more remote sites and at Kerma itself (see BOURRIAU 2004).

From cemetery S at Aniba, important New Kingdom material from the early 18<sup>th</sup> Dynasty (HELMBOLD-DOYÉ/SEILER 2012) – the Thutmoside as well as the Ramesside era (FISCHER-ELFERT/HELMBOLD-DOYÉ 2016) – was published by WOLF (1937).<sup>16</sup> The corpus is comparable to other sites like Buhen (EMERY ET AL. 1979), Askut (SMITH 2003, 153) and Sai and also finds parallels in the material assembled by HOLTHER (1977). In general, most sites of the former Middle Kingdom fortresses (e.g. Buhen, Askut, Semna and Kumma) has yielded New Kingdom material (see Fig. 6).

Sai Island is one of the major find spots for 18<sup>th</sup> Dynasty pottery in Upper Nubia, currently under investigation by the *AcrossBorders Project* (cf. BUDKA 2015a with references). Associated with the fortified town on the eastern bank of the island are several nearby cemeteries; the main burial ground of the New Kingdom (SAC5) has already been published (MINAULT-GOUT/THILL 2012). The ceramic material from Sai finds ready parallels not only in other Egyptian foundations in Lower and Upper Nubia (cf. HOLTHER 1977; see also MIELLÉ 2011–2012, 173–187), but also at various New Kingdom sites in Egypt (cf. BUDKA 2011, 23–33; 2016b), especially at Elephantine (SEILER 1999, 204–224), Abydos (BUDKA 2006, 83–120) and Deir el-Ballas (BOURRIAU 1990, 15–22 and 54–65 (figs.)). However, a local component and site-specific features are present on Sai (cf. BUDKA 2011, 23–33).

In the earliest levels of the town, the pottery material can be attributed to the very early 18<sup>th</sup> Dynasty and the assemblages of these layers include a substantial

<sup>14</sup> For these phases see BOURRIAU 1981, 72; 2010, 2–3; ASTON 2003, 135–162; 2008, 375.

<sup>15</sup> See SPENCER, this volume. For New Kingdom pottery from Kerma settlements in the area of Gism el-Arba, see MIELLÉ 2016.

<sup>16</sup> For an updated publication of the complete material, see HELMBOLD-DOYÉ/SEILER *forthcoming*.

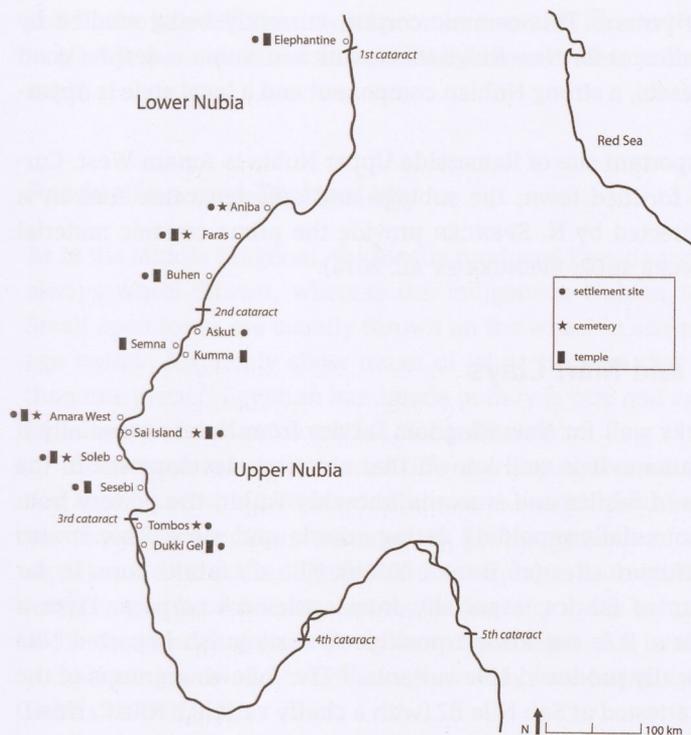


Fig. 6: Map with find contexts of New Kingdom pottery in Nubia.

amount of material, which is apparently of 17<sup>th</sup> Dynasty character (BUDKA 2016b). Rather than being connected with the nearby Kerma cemetery, these sherds are always associated with vessel types like carinated bowls and jars datable to the early 18<sup>th</sup> Dynasty (see Figs. 8, 10). Thus, the formation of these earliest levels took place already in the New Kingdom, probably under Ahmose (or Amenhotep I) (cf. BUDKA 2015a).

The fortified settlement of Sesebi (see SPENCE/ROSE 2009; SPENCE ET AL. 2011 with references to earlier work), with foundation deposits of Amenhotep IV, was excavated by the Egypt Exploration Society from 1936–1938; a joint venture of the University of Cambridge and the Austrian Archaeological Institute resumed work in 2008. The new Area 1 outside the town enclosure has yielded material of the early 18<sup>th</sup> Dynasty up to Thutmose III, complementing the well attested pottery corpus from the interior of the town of late 18<sup>th</sup> and early 19<sup>th</sup> Dynasty date (SPENCE ET AL. 2011, 37, fig. 5).

In close proximity to the old capital of the Kerma Kingdom, a new ceremonial precinct with palaces and temples was established at Dukki Gel (see BONNET, this volume). Much Egyptian and Nubian pottery from contexts datable to the early 18<sup>th</sup> Dynasty and the period of Hatshepsut and Thutmose III were unearthed by the

Swiss Mission in recent years.<sup>17</sup> This ceramic corpus, currently being studied by P. RUFFIEUX, is very significant for New Kingdom ceramics in Nubia – despite good parallels from Sai and Sesebi, a strong Nubian component and a local style is apparent (see RUFFIEUX 2016).

Finally, the most important site of Ramesside Upper Nubia is Amara-West. Current excavations in the fortified town, the suburbs and adjacent cemeteries by a British Museum team directed by N. SPENCER provide the prime ceramic material for this period (see SPENCER 2002; SPENCER ET AL. 2014).

## Fabrics: Nile Clays and Marl Clays

The Vienna System works well for New Kingdom fabrics from Nubia, especially if one includes local variations. It is well known that a certain development in the composition and nature of fabrics and wares is traceable within the pottery from New Kingdom Egypt, potentially providing dating criteria and more. This is also highly relevant for the Nubian sites (cf. BUDKA 2016b). Nile silt fabrics form by far the most common group of fabrics, especially from settlement corpora. From a macroscopic point of view, it is not always possible to distinguish imported Nile clays from Egypt and locally produced Nile variants.<sup>18</sup> The following groups of the Vienna System are well attested at Sai: Nile B2 (with a chaffy variant), Nile C, Nile D and Nile E. The latter was used for cooking pots (fig. 7, SAV1E P 179) – its fabric can be classified as Upper Egyptian equivalent (cf. BUDKA 2006, 84 for a local variation at Abydos) of the typical Nile E (see NORDSTRÖM/BOURRIAU 1993, 175), originating from the Nile delta. The bread moulds were made of a typical mixture of sandy mud, clay and organic temper, classified as ‘bread mould clay’ or Nile D4 (cf. BUDKA 2006, 84).

Marl clays are less common than Nile clays. The following have been identified in the material deriving from Sai: Marl A2, A4 (variant 1 and 2) and A3; Marl B; Marl C (variant 1 and 2); Marl D (variant 1 and 2) and Marl E. Within the material of the early 18<sup>th</sup> Dynasty Marl A2, A4 and Marl B were used most often. During the late 18<sup>th</sup> Dynasty and the 19<sup>th</sup> Dynasty, Marl D appears in considerable quantities. Both Marl C and Marl E are rare and restricted to vessels dating to the early 18<sup>th</sup> Dynasty. Marl C was mainly used for large *zir* vessels (cf. BADER 2001), Marl E for large thick-walled bread trays (so-called ‘Schaelbecken’; see BADER 2001, 81–83).

The first occurrence and origins of Marl D are still a matter for future research. The fabric is known from Egypt as early as the mid-18<sup>th</sup> Dynasty (as yet, the earliest evidence dates to the reign of Thutmose III; see BUDKA 2006, 84 with references),

<sup>17</sup> RUFFIEUX 2009; 2011; 2014.

<sup>18</sup> But for chemical and petrographic analyses, see CARRANO ET AL. 2008; 2009; SPATARO ET AL. 2015 and the unpublished results by the *AcrossBorders Project* for Sai Island (courtesy Julia Budka).

and by the late 18<sup>th</sup> Dynasty it becomes common, also in Nubia. An intriguing sherd in Marl D was unearthed at Dukki Gel from a context probably datable to Hatshepsut.<sup>19</sup>

## Production and Technology

As in the Middle Kingdom, the locally produced Egyptian-style Nile clays are almost always wheel-thrown, whereas the indigenous Nubian tradition is handmade.<sup>20</sup> Small open forms are usually thrown on the wheel in one piece, whereas large storage vessels frequently show traces of joints because they were produced in more than one piece.<sup>21</sup> Egyptian handmade pottery is rare and examples of it are restricted to bread plates and so-called ‘Schaelbecken’.

Sometimes locally produced Nile clay pottery vessels were modelled on Egyptian types, but with a ‘Nubian’ influence as far as the surface treatment, production technique or decoration is concerned. The appearance of such hybrid types is very significant, but not straightforward to explain. Such pots might be products of a temporary or local fashion, but could also refer to the cultural identity of their users or be the results of more complicated processes. All in all, they seem to attest a complex mixture of lifestyles in New Kingdom Nubia (see BUDKA 2017; cf. also GARNETT 2014, 62).

During the New Kingdom, there is less clear evidence for kilns<sup>22</sup> and potter’s workshops than in Middle Kingdom Nubia, but important evidence for local pottery production comes from wasters and unfired sherds at various sites.<sup>23</sup>

## Main Types

An elaborate classification comprising a large amount of material, mostly from cemeteries and tomb contexts in Lower Nubia, was established by HOLTHOER (1977). His division into the main categories of non-containers, containers, unrestricted and restricted vessels allows a good overview of the most important types, but does not consider diachronic features and real associations reflected by the material (see the well-argued criticism by WILLIAMS 1992, 30).

<sup>19</sup> RUFFIEUX 2016, 516, fig. 11.5. For other Marl D shapes in Nubia, cf. MIELLÉ 2016, 430.

<sup>20</sup> For a general summary of sources for pottery fabrication of the New Kingdom (pictorial, archaeological, literary material), see HOLTHOER 1977, 18–21; cf. also WILLIAMS 1992, 24–29.

<sup>21</sup> For a concise summary of shaping techniques, see HOLTHOER 1977, 42–43.

<sup>22</sup> For a recent find of a pottery kiln at Amara-West: GARNETT 2014, 62; SPENCER ET AL. 2014, 19–20, 26.

<sup>23</sup> WILLIAMS 1992, 24 (Serra); SMITH 2003, 117 (Askut); EDWARDS 2012, 78, fig. 3.33 (Tombos); unpublished material from Sai (courtesy Julia Budka).

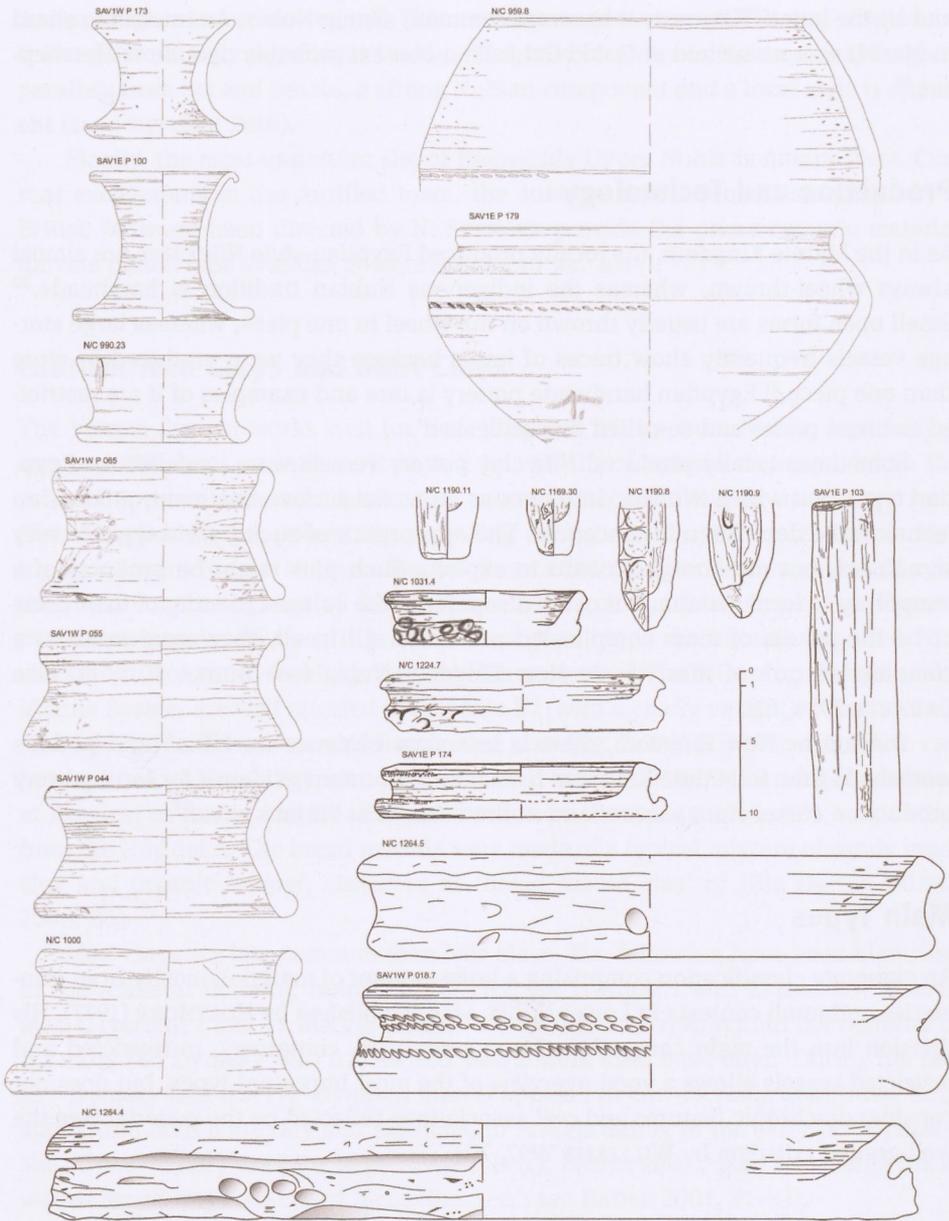


Fig. 7: New Kingdom functional pottery types from Sai (Courtesy of JULIA BUDKA).

The most common functional vessel types in 18<sup>th</sup> Dynasty Nubia are as follows (Fig. 7): Conical bread moulds, belonging to JACQUET's Type D (JACQUET-GORDON 1981, 18, fig. 5; see also ROSE 2007, HC 2, 288), are now more common in temple and ritual contexts, but are also attested in settlements (cf. BUDKA 2014; 2015a). Bread

plates of different sizes are frequent and usually made in Nile C. Pot stands are very numerous in settlement contexts (e.g. Buhen and Sai), vary from short to tall, and were made primarily in Nile clays (Nile B2 and Nile C), but are also attested in Marl clay (especially Marl B and Marl E).<sup>24</sup> Egyptian wheel-made cooking pots of the 18<sup>th</sup> Dynasty appear within the New Kingdom corpus as imported and locally produced variants. Especially remarkable are imported cooking pots in Sai (Fig. 7, SAV1E P179), with corresponding types appearing at Elephantine (see SEILER 1999, 223, Fig. 53). Another variant is reminiscent of Second Intermediate Period ceramic style and very close to Nubian cooking pots (Fig. 7, N/C 959.8) (see SEILER 1999, 221 with note 516).

Similar to cooking pots, the so-called ‘Schaelbecken’ illustrate that utilitarian shapes were both directly imported from Egypt and were also locally produced. At Sai, these large thick walled trays with an oval-shape and incised geometric pattern on the interior occur both in Egyptian Marl E and in local Nile clay variants – the shapes and decoration patterns are in both cases the same (see BUDKA/DOYEN 2013, 191). Other Egyptian functional types like spinning bowls (dishes with two handles attached to the interior of the base) (see ROSE 2007, 60–61, SD 6, 202–203) were primarily produced on site with local fabrics, attested in Sai, Sesebi and Buhen.<sup>25</sup> A pottery manufacture corresponding to local demand similar to, e.g., the workmen’s village at Amarna, is therefore likely (cf. ROSE 2007, 60).

Open forms of the 18<sup>th</sup> Dynasty in Nile silts (Fig. 8) are common in both domestic and funerary contexts. Simple dishes with flat bases or ring bases are very common, often with a red rim. Carinated dishes frequently show wavy incised or painted decoration.<sup>26</sup> Black rim ware and the Thutmoside red splash decoration (cf. ASTON 2006, 65–73) appears regularly on dishes (cf. Fig. 8). Chronological markers for the 18<sup>th</sup> Dynasty are the so-called flower pots, conical deep bowls with perforated bases (Fig. 8, SAV1E P 147 and 148) (HOLTHOER 1977, pl. 18; MINAULT-GOUT/THILL 2012, pl. 132).

The most characteristic types among the closed Nile clay forms (Fig. 9) of the 18<sup>th</sup> Dynasty are round-based beakers, two types of beer jars, large *zirs* and other jars as well as squat jars and pitchers (see also WILLIAMS 1992, 80, fig. 2). The latter are often decorated<sup>27</sup> and imitate Marl clay vessels. Large *zir* vessels of a chaffy Nile C variant (N/C 642, N/C 962, Fig. 9) are characteristic of the early to mid-18<sup>th</sup> Dynasty and find close parallels at Elephantine (BUDKA 2011, 26 with references). The corpus of various jars is better illustrated by finds from tombs because of the complete state

<sup>24</sup> For Buhen, see EMERY ET AL. 1979, pls. 70–71. For the small number of stands from funerary contexts, see WILLIAMS 1992, 88, figs. 10m-p; cf. also STEINDORFF 1937, pl. 68 (cemetery S, Aniba).

<sup>25</sup> Sai: unpublished material (courtesy Julia Budka); Sesebi: Pamela Rose, *pers. comm.*; Buhen: EMERY ET AL. 1979, pl. 68, nos. 143–144 and 148.

<sup>26</sup> See the parallels in Sesebi: SPENCE ET AL. 2011, 37, fig. 5.

<sup>27</sup> Sai Island town: unpublished material (courtesy Julia Budka); SAC5: MINAULT-GOUT/THILL 2012, pl. 141; see also KNOBLAUCH/LACOVARA 2012, 207.

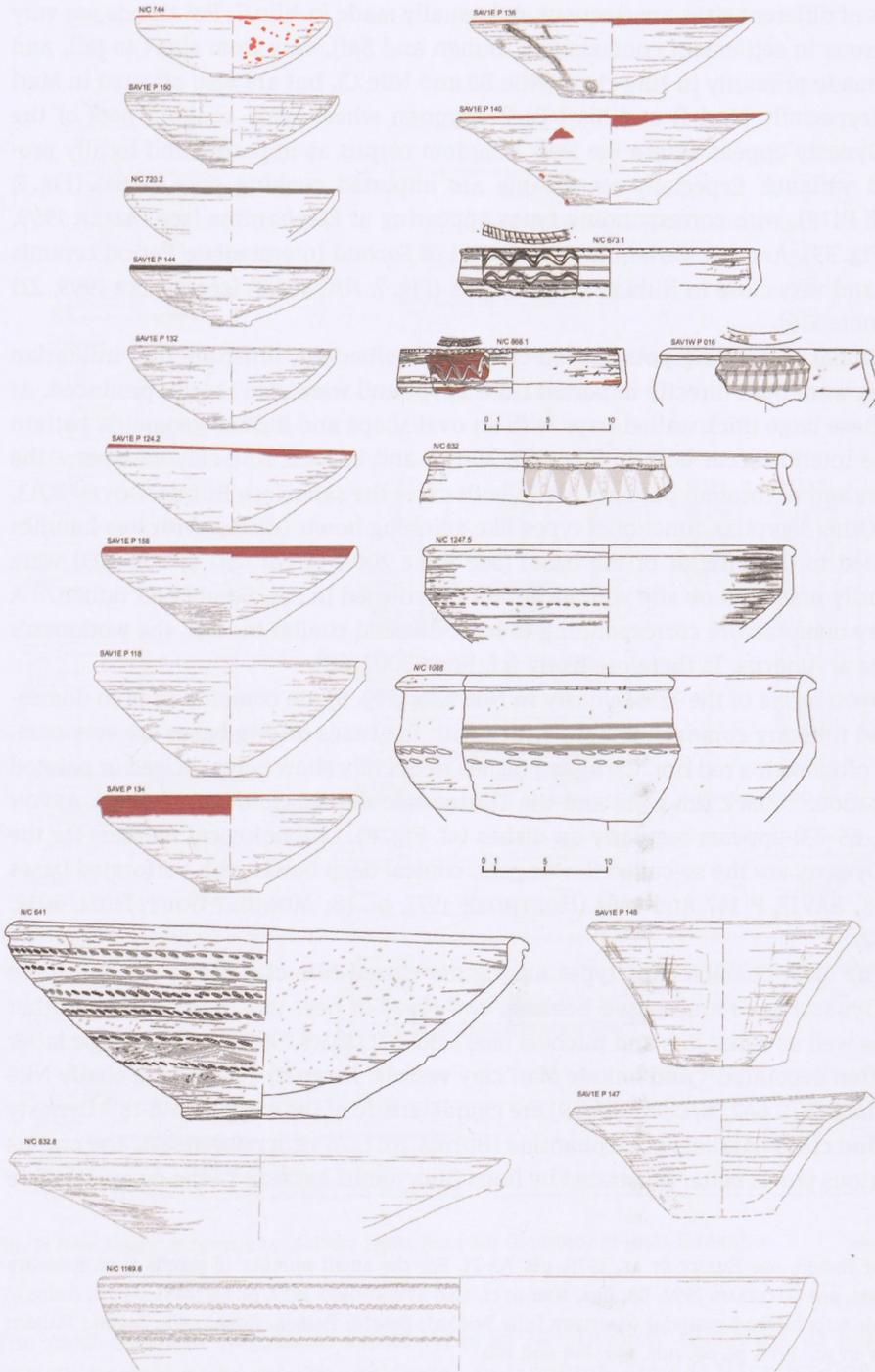
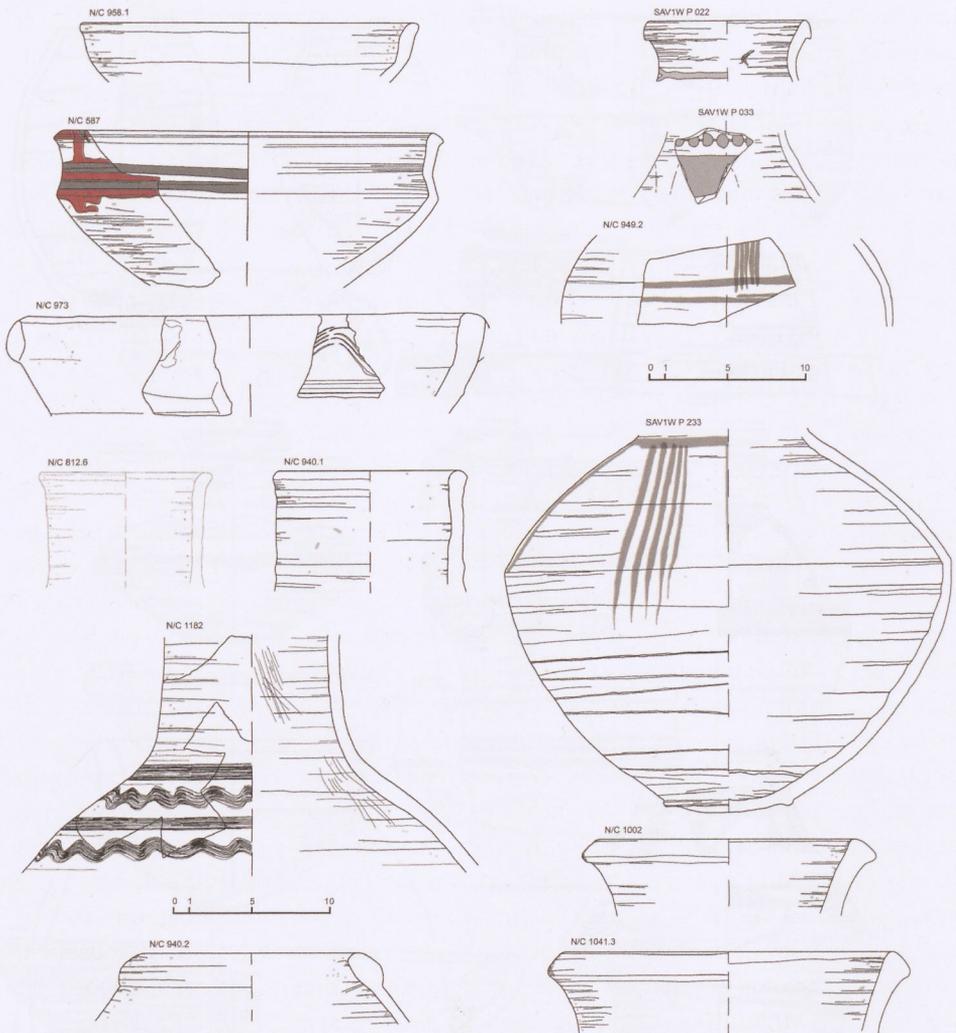


Fig. 8: New Kingdom Nile silt open forms from Sai (Courtesy of JULIA BUDKA).



Fig. 9: New Kingdom Nile silt closed forms from Sai (Courtesy of JULIA BUDKA).



**Fig. 10:** New Kingdom marl clay pottery types from Sai (Courtesy of JULIA BUDKA).

of preservation (MINAULT-GOUT/THILL 2012; see also WILLIAMS 1992, 81–84). During the late 18<sup>th</sup> Dynasty and the Ramesside Period funnel necked jars are very common (cf. WILLIAMS 1992, 84, figs. 6f–h).

A large group of bichrome-decorated necked jars that contain linear and floral as well as figurative designs is of special interest. Good examples of mid-18<sup>th</sup> Dynasty date are known from Sai (Fig. 9) and Dukki Gel (RUFFIEUX 2009, 124–126, figs. 3–5; 2016, 512–513, figs. 7–8), but also from Askut, Buhen and Aniba (see BUDKA 2015b with references). The origin of these specific vessels is still an open question – on the basis of parallels, the area of Elephantine has seemed likely (BUDKA 2015b), but

new finds from Dukki Gel may suggest a local workshop in Upper Nubia.<sup>28</sup> Another category of painted closed forms is blue-painted pottery, something only rarely attested in Nubia (Fig. 9).<sup>29</sup>

The corpus of Marl clay vessels corresponds to finds from Egypt in the 18<sup>th</sup> Dynasty (Fig. 10). Simple dishes with inverted rim are attested, but more common are carinated dishes and bowls, sometimes with incised or painted decoration. Large Marl B bottles were sometimes decorated with comb incisions (Fig. 10, N/C 1182). Among the characteristic markers of Thutmoside pottery are decorated squat jars of various sizes and proportions.<sup>30</sup> Large two-handeled storage vessels (amphorae) from Egypt are in the 18<sup>th</sup> Dynasty mostly Marl D vessels, which are used well into the Ramesside Period.<sup>31</sup>

## Use and Function

In general, ceramics can be used as indicators for site-specific preparation, storage and serving of food. Especially in settlement contexts, the functional aspects of ceramics are broad and cover various activities (see above, Middle Kingdom). Utilitarian forms like stands, cooking pots, bread plates and bread moulds as well as spinning bowls are characteristic of New Kingdom settlements. Especially within the class of cooking pots, the general co-existence of Egyptian (wheel-made) and Nubian (handmade) pottery traditions is evident as it was the case in the Middle Kingdom. Residue analysis conducted on Nubian and Egyptian cooking pots from Askut has shown that a distinction was made regarding which pot was used to prepare specific food (SMITH 2003, 113–124). It is also likely that the choice of an Egyptian or Nubian cooking pot was dependent upon the cooking pot's user and his or her identity (cf. SMITH 2003, 119). As in the Middle Kingdom, New Kingdom sites in Nubia provide evidence for the use of ceramics within the framework of household religion. Pot stands and footed bowls with a gypsum-coating and resin deposits as well as female figurative vessels can be cited in this respect (cf. BUDKA 2016a).

## Summary and Outlook

Despite a general similarity with contemporary pottery in Egypt, for both the Middle and the New Kingdoms local pottery workshops and traditions are traceable in Nu-

<sup>28</sup> Phillipe Ruffieux, *pers. comm.*, May 2016.

<sup>29</sup> E.g. at Aniba, Sai, Tombos, Dukki Gel and Amara-West, cf. SPENCER 2002, pl. 4; BUDKA 2011, 30. See also HOLTHOER 1977, pl. 33, FU1.

<sup>30</sup> STEINDORFF 1937, pl. 82; HOLTHOER 1977, pl. 30–32; WILLIAMS 1992, 85, fig. 7.

<sup>31</sup> Cf. SPENCER ET AL. 2014, 79; MINAULT-GOUT/THILL 2012, pl. 137. See also FISCHER-ELFERT/HELMBOLD-DOYÉ 2016.

bia. Regional style was mostly expressed by surface treatment and decoration. Case studies like Marl clay vessels with incised decoration and cooking pots illustrate that Nubian decoration patterns and shapes directly influenced the Egyptian pottery tradition.<sup>32</sup> At present, it is still difficult to assess the possible impact of Nubian potters, whereas Egyptian potters were certainly present at the colonial sites.<sup>33</sup>

Recent work has illustrated that parallels between Upper Egypt and Nubia are greater than those between the northern part of Egypt and Nubia. Concise and detailed studies about regional differences between Lower and Upper Nubia – in both the Middle and the New Kingdom – still need to be undertaken and should be of prime priority. Chemical and petrographic analyses will help to further distinguish within the Nile silts between real imports from Egypt and locally produced wheel-made vessels.<sup>34</sup> Current research is consequently engaged in establishing site specific corpora of fabrics and types, which are then embedded into regional and also supra-regional contexts (see BUDKA 2016b). Much progress has been made in close dating for both periods – for example for the 13<sup>th</sup> Dynasty (cf. KNOBLAUCH 2007) and the early 18<sup>th</sup> Dynasty (cf. BUDKA 2011). A better understanding of ceramic industries, trade, contact and household inventories can be expected as a result of the ongoing work at Egyptian sites in Northern Sudan, which will be significant for the general study of Middle and New Kingdom pottery.

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32 Cf. Rzeuska 2010; 2012. See also ARNOLD 1993, 90; MIELLÉ 2014.

33 WILLIAMS 1992, 24, note 3; RESHETNIKOVA/WILLIAMS 2016. Cf. also GARNETT 2014, 62.

34 Cf. note 18 for ongoing analyses on material from Tombos, Amara-West and Sai Island.

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