



TOMB 26 ON SAI ISLAND

A NEW KINGDOM ELITE TOMB AND ITS
RELEVANCE FOR SAI AND BEYOND

JULIA BUDKA

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with contributions by Johannes Auenmüller, Cajetan Geiger,
Rennan Lemos, Andrea Stadlmayr and Marlies Wohlschlager

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Preface

Julia Budka

This book brings together all the archaeological information collected by the ERC AcrossBorders project in conjunction with the FWF Across ancient borders and cultures project on Sai Island in northern Sudan whilst excavating in an elite cemetery labelled SAC5. A new rock-cut tomb, Tomb 26, was discovered in this cemetery in 2015. It was fully excavated and can serve as a case study of modern field archaeology in the Middle Nile valley. The tomb provides us with the opportunity of addressing the New Kingdom burial customs in Nubia and offers important new insights into the population of Sai and their funerary and social practices. In 2017, work in Tomb 26 yielded intact interments of officials connected with the Egyptian administration of Nubia, buried together with family members and rich burial assemblages. These new finds enable us to trace individuals who lived and died on Sai during the 18th Dynasty (c. 1450-1350 BCE), and who were engaged in the Egyptian administration of a “colonial” town. Since the main research question of the AcrossBorders project was to achieve a better understanding of the people living on New Kingdom Sai, of their material culture, their funerary beliefs and social status including the health status, this discovery was of major importance.

This book presents the complete archaeological data, including chapters on the geology, the human remains, the scientific analyses and the compilation of the material discovered. This material from a cutting-edge research project which is published here for the first time as a complete set of data provides new facts and represents, therefore, an important contribution to the recently emerging field of Nubian archaeology, focusing on aspects of cultural encounters and social practices. Comparable material from other tombs on Sai and elsewhere in Nubia are discussed in order to stress the relevance of the new discovery.

The exhaustive assessment of all material from Tomb 26 resulted in a revised reconstruction of its building and burial phases. The rich funerary equipment associated with the burials in Tomb 26 enabled the dating and identification of family members of an overseer of goldsmiths, Khnummose, thus of Egyptian officials involved in goldsmith work and gold exploitation in Nubia. However, contrary to what was published in preliminary reports on the tomb, it transpired that Khnummose was not the oldest burial of the 18th Dynasty. The original tomb owner remains anonymous but is likely to have been a close relative of Khnummose, possibly his father or uncle. It can be inferred from the burial assemblage and the tomb architecture that Khnummose and his family members belonged to the Egyptian elite on Sai Island as far as their cultural identity is concerned. However, the strontium isotope values taken from several individuals from Tomb 26, including the original owner and Khnummose, lay within the determined autochthonous strontium range on Sai Island during the New Kingdom. Thus, all individuals were classified as presumed members of the local population on Sai and not as “colonialists” from Egypt.

The archaeological contextualisation of Tomb 26, in combination with the strontium isotope analysis and the anthropological study of the human remains, provides fresh information on the complex coexistence of various cultural groups on Sai with slightly different approaches to their cultural and social affinities during the New Kingdom. On the whole, Tomb 26 and its associated finds are of prime significance for understanding lived experiences on New Kingdom Sai and more broadly in New Kingdom Nubia.

Acknowledgments

Funds for fieldwork in SAC5 in all seasons were granted to Julia Budka by the European Research Council (ERC Starting Grant no. 313668) and the Austrian Science Fund (FWF START project Y615-G19). AcrossBorders was hosted by the Austrian Academy of Sciences from December 2012 to March 2015 and by the Ludwig Maximilians University Munich from April 2015 to April 2018.

AcrossBorders' fieldwork on Sai Island was conducted with the approval of the French concession holders: Didier Devauchelle (UMR 8164 HALMA-IPEL, University Charles-de-Gaulle Lille 3, until 2015) and Vincent Francigny (Section française de la direction des antiquités du Soudan, Khartoum, since 2015). Permission to work in the field was kindly granted by the National Corporation for Antiquities and Museums of Sudan (NCAM), and sincere thanks go in particular to Abdelrahman Ali Mohamed (then Director General) and El-Hassan Ahmed Mohamed (Director of Fieldwork). The NCAM inspector during the relevant 2015–2017 seasons was Huda Magzoub. Many thanks also go to the Sudanese staff of the dig house under the supervision of Sid Ahmed and Abdel Fatah. These thanks also include our gang of local workmen, supervised by Imad Shorbagi Mohamed Farah and by Hassan Dawd. Thanks go to all team members, and here especially to Martin Fera, Cajetan Geiger, Meg Gundlach, Daniela

Penzer, Lucia Sedlakova, Andrea Stadlmayr, Oliver Frank Stephan and Marlies Wohlschlager.

This volume would not appear in its present form without the collaborative efforts of a group of people, and here I would especially like to thank Cajetan Geiger, Patrizia Heindl, Andrea Stadlmayr and Marlies Wohlschlager for endless zoom meetings and vivid discussions on the phasing of the tomb and many other details. Veronica Hinterhuber prepared a complete list of finds (see Appendix), edited many of the photographs used in this book and helped with finalising the bibliography.

The original drawings of objects and pottery vessels were digitalised by the AcrossBorders assistants Oliver Frank Stephan and Daniela Penzer; in addition, Patrizia Heindl and Hassan Ramadan Aglan helped with illustrations after the official end of the project. Jessica Distefano was involved in the preparation of the final pottery plates. Anna Peters prepared the drawings illustrating the burial phases according to the 3D models and Patrizia Heindl finalised and adapted these. All maps and sections used here were designed by Cajetan Geiger (except for Fig. 3.1, for which thanks go to Ingrid Adenstedt). Some of the illustrations could be built on earlier versions created by Martin Fera. Most photos of objects are also by Cajetan Geiger, others were taken by Meg Gundlach.

I am grateful to Rennan Lemos for important input regarding burial assemblages in New Kingdom Nubia in general, in particular on amulets and their raw material, as well as for providing access to references in times of Covid-19. Philipp Stockhammer kindly shared his expertise on Mycenaean pottery and provided information about the possible origin of the decorated sherd SAC5 170/2016. John Baines provided useful help with some questions on terminology for which I am very thankful. Marlies Wohlschlager was in charge of the native proof reading of this volume and I appreciate the fact that she did not lose her patience.

Introduction

Julia Budka

1.1 Sai in the New Kingdom

As a large Nile island (12 × 5.5 km) in the area between the Second and Third Cataract (Upper Nubia), Sai provided good conditions for settlement and cultivation over millennia. It is located at the southern end of the Batn el-Haggar, which can be regarded as a position of strategic value (Vercoutter 1986; Geus 2004; Doyen 2009; Budka 2020). Sai's history of occupation extends from prehistory to Ottoman and modern times. The Egyptian New Kingdom (c. 1550-1070 BCE) was one of the heydays of the island and Sai represents one of the most important sites illustrating the settlement policy of Egypt in Upper Nubia during the 18th Dynasty (Fig. 1.1). The island functioned as a *'bridge head'* (Davies 2005, 51) into the realm of Kerma and its significant role originates from a strong Kerma presence on Sai prior to the 18th Dynasty (Arkell 1950, 33-34; Gratien 1986, *passim*; Vercoutter 1986, 12). The possibility of exploring both New Kingdom settlement areas and corresponding cemeteries adds to the importance of the site. While the New Kingdom town was the subject of various publications in the past years (see Budka 2020 with references), this volume will focus on the main cemetery of the period on the island (SAC5, see Minault-Gout and Thill 2012) and here, in particular, on a newly discovered burial place, Tomb 26.

The Egyptian name for Sai Island or, respectively, the region, is well-attested by epigraphic evidence as *Šꜣꜣ.t* (Minault-Gout and Thill 2012, 404; Budka 2020, 16 with references; Ullmann 2020, 56-58). Records of the Egyptian kings of the 18th Dynasty are also preserved in considerable quantity from the site, in particular for the rulers Ahmose Nebpehtyra, Amenhotep I and Thutmose III, but also for Thutmose I, Amenhotep II and Amenhotep III (see Gabolde 2012 with references). High officials of the Egyptian administration, including the viceroys, are also well-attested (see Gabolde 2012; Davies 2017a; Auenmüller 2020). Among the textual sources from Sai Island for King Ahmose, the founder of the 18th Dynasty, the most prominent object is a sandstone statue of the king (Khartoum SNM 3828 and 63/4/4, *cf.* Gabolde 2012, 118 with literature). This monument has been used as key evidence for the assumption that Ahmose founded the Egyptian town on the island (see the recent summaries with references: Budka and Doyen 2013; Budka 2017a; Budka 2020, 424-427). However, based on the iconography and style of the seated statue some scholars have argued for its posthumous dedication by Amenhotep I in honour of his father (Lindblad 1984, 21; Gabolde 2012). Due to these uncertainties, the founding of the town on Sai Island by Ahmose cannot be affirmed based on the epigraphic sources only. Important fresh data, especially in the shape of ceramics, were unearthed in several sectors of the New Kingdom town. These new records provide firm evidence of a very early 18th Dynasty presence at Sai (Budka 2017a, 18-21; 2017b). Nevertheless, the precise identification of the founder of Sai remains hypothetical; however, based on the ceramic evidence, King Ahmose seems indeed very likely (see most recently Budka 2020, 99).

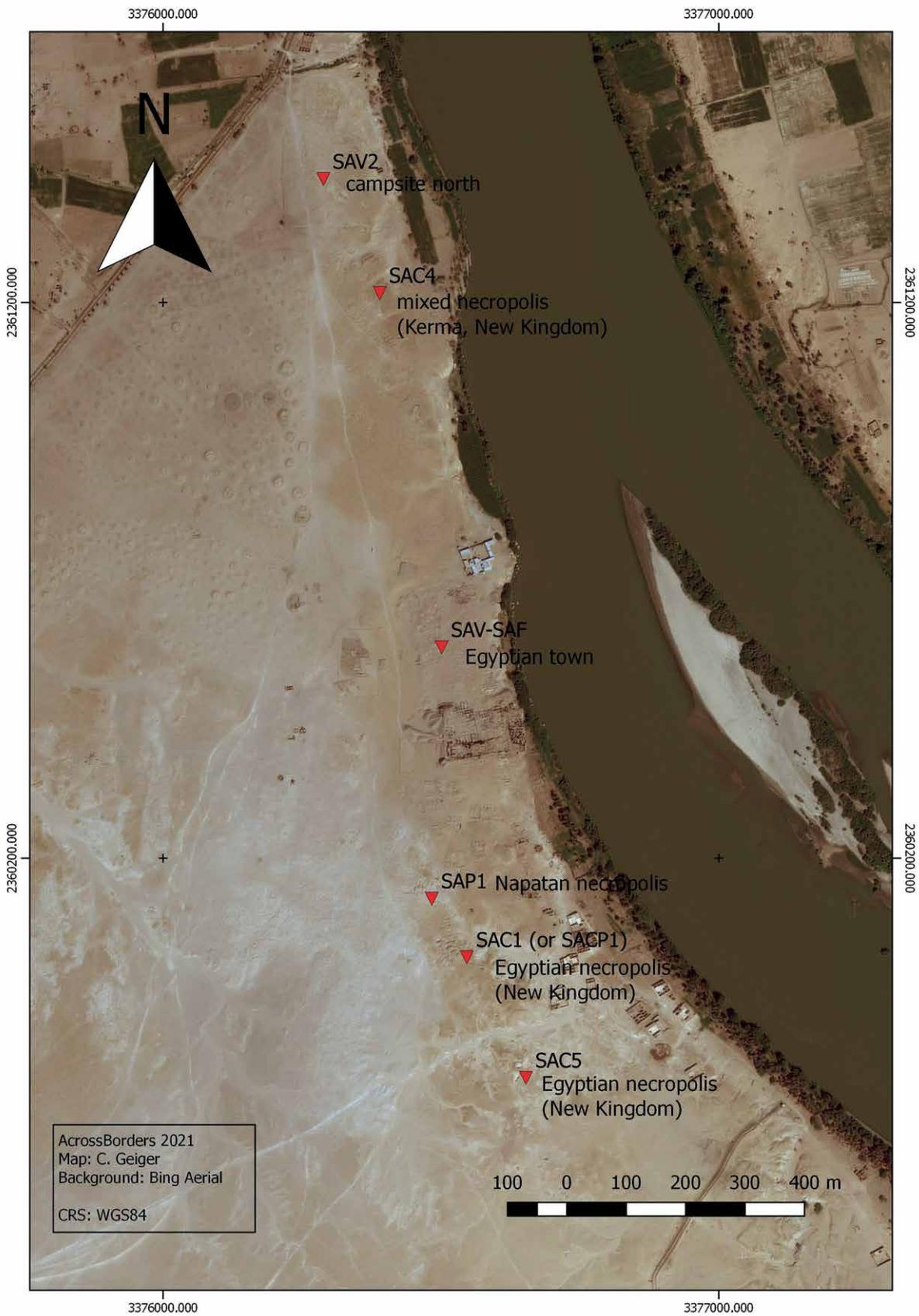


Figure 1.1: map of Sai with main sites of the New Kingdom (map: C. Geiger, ©AcrossBorders).

1.1.1 The New Kingdom town

The New Kingdom town (Fig. 1.1) is located on the eastern side of the island. This was probably the perfect place on the island from a strategic perspective, especially for controlling river traffic and to facilitate the landing and loading of ships (Budka 2020, 61-63). The town has the shape of a fortified settlement with an orthogonal layout, measuring 238m north-south and 118m east-west, with a total of 27,600m² (2.76ha). The main city gate was located on the western side, opening onto a main east-west axis leading to the stone temple, Temple A.

Like the other major Egyptian settlements in Upper Nubia, the town on Sai falls into the category of the so-called Nubian temple towns – fortified towns built in the New Kingdom with an enclosure wall and a sandstone temple (Kemp 1972, 651-656; Vieth 2018; Budka 2020, 65-68). Temples as key elements of these towns are attested from Thutmoside times onwards and seem to be connected with the character of the Abri-Delgo Reach as a rich gold ore region (see Klemm and Klemm 2013, 9 and passim; cf. also Budka 2020, 403-407).

The stone temple at Sai was labelled Temple A and foundation deposits allow to date it to Thutmose III (Thill 1997; Azim and Carlotti 2012, 39 and 45; Adenstedt 2016, 34). A complex evolution and several building phases of this temple are now well-established, thanks to the work of Michel Azim and Jean-François Carlotti (Azim and Carlotti 2012). Temple A is primarily dedicated to Amun-Ra, but also to the god '*Horus the Bull, Lord of Ta-Seti*'. The identity of this god has been discussed diversely. Florence Thill's identification of this deity as a manifestation of Thutmose III (Thill 2016) seems more likely than an interpretation as a local Horus deity (Budka 2020, 416). Temple A illustrates, therefore, as the main cultic building of the temple town of Sai, the close connection of the state cult on Sai to kingship.

1.1.1.1 Sectors of the New Kingdom town

The excavated areas of the town of Sai illustrate that the city comprises various sectors which contrast slightly regarding their layout and dating (Fig. 1.2). Two of these sectors were excavated by French missions (northern and southern part), two others by the AcrossBorders project (eastern and western). A common feature for the specific urban layout of Egyptian temple towns which is also present at Sai, and here, in particular in the southern sector, is the limited domestic space. Much of the room was instead occupied by storage facilities and magazines, obviously connected with the Egyptian administration of Kush (Budka 2017b).

The southern part of Sai city comprised the following features (Azim 1975; Adenstedt 2016): the so-called governor's residence (SAF2) with a large columned hall (15.3 × 16.2m) and mud-brick paving in the east; a central

domestic quarter H, including a cluster of five houses (H1-5); and a western quarter (SAF5), consisting of several rectangular storage rooms and circular silos (Azim 1975, 98, pl. 4; for new details see Adenstedt 2016). Parallels for such a layout can be found at other New Kingdom temple towns, especially at Buhen, Amara West and Sesebi (Kemp 1972, 651-653; Vieth 2018).

Another sector of the town, SAV1 North, was excavated between 2008-2012 by the Sai Island Archaeological Mission of Lille 3. Several building phases, from the early 18th Dynasty to Ramesside times and post-New Kingdom eras, were documented (Doyen 2009; 2014; Budka and Doyen 2013, 168-171). The earliest strata at SAV1 North (Levels 5 and 4), which would be essential for identifying the founder of the town, are only scarce architectural remains and some occupational deposits. The initial sequence of Egyptian occupation on Sai is therefore hard to reconstruct in this area and mostly relies on the ceramic evidence. Most important at SAV1 North was the discovery of remains of the enclosure wall to a length of 39.32 m, being 4.26 m thick, belonging to Level 3 of the area. No gate was discovered in this part of the town wall. Thanks to stratigraphic evidence and the pottery, this enclosure can be dated to the second half of the long reign of Thutmose III.

Interestingly, the architectural remains in sector SAV1 North adjacent to the town wall do not correspond to the general town planning visible in the southern sector. The structures are markedly different but find close parallels in the new excavation area SAV1 West. The building units at SAV1 North include typical Egyptian tripartite houses, considerably smaller than the houses in SAV1, but like houses in Middle Kingdom Nubian fortresses (e.g. at Uronarti and Buhen). Other building units at SAV1 North do not find close parallels within Egyptian orthogonal settlements, distinct in both size and ground plan from the houses in SAV1. Thus, SAV1 North nicely illustrates that, within the town of Sai, there are several different sectors that contrast regarding their layout.

SAV1 East is located to the north of Temple A and was excavated by the AcrossBorders project between 2013-2017 (Budka 2020, 70-122). The main structure in this part of the town is a terrace building, Building A, with a presumed administrative function. SAV1 East also yielded large magazines and cellars, making this sector comparable to the southern part of the town. The main phases of use at SAV1 East comprise the mid and late 18th Dynasty, corresponding to the periods of building activity at Temple A.

SAV1 West is located north of the main city gate and comprises the western enclosure wall (Budka 2020, 122-151). Remains of several mud-brick buildings were found toward the east of the town wall. According to the pottery, these date to the mid-18th Dynasty, staying in use

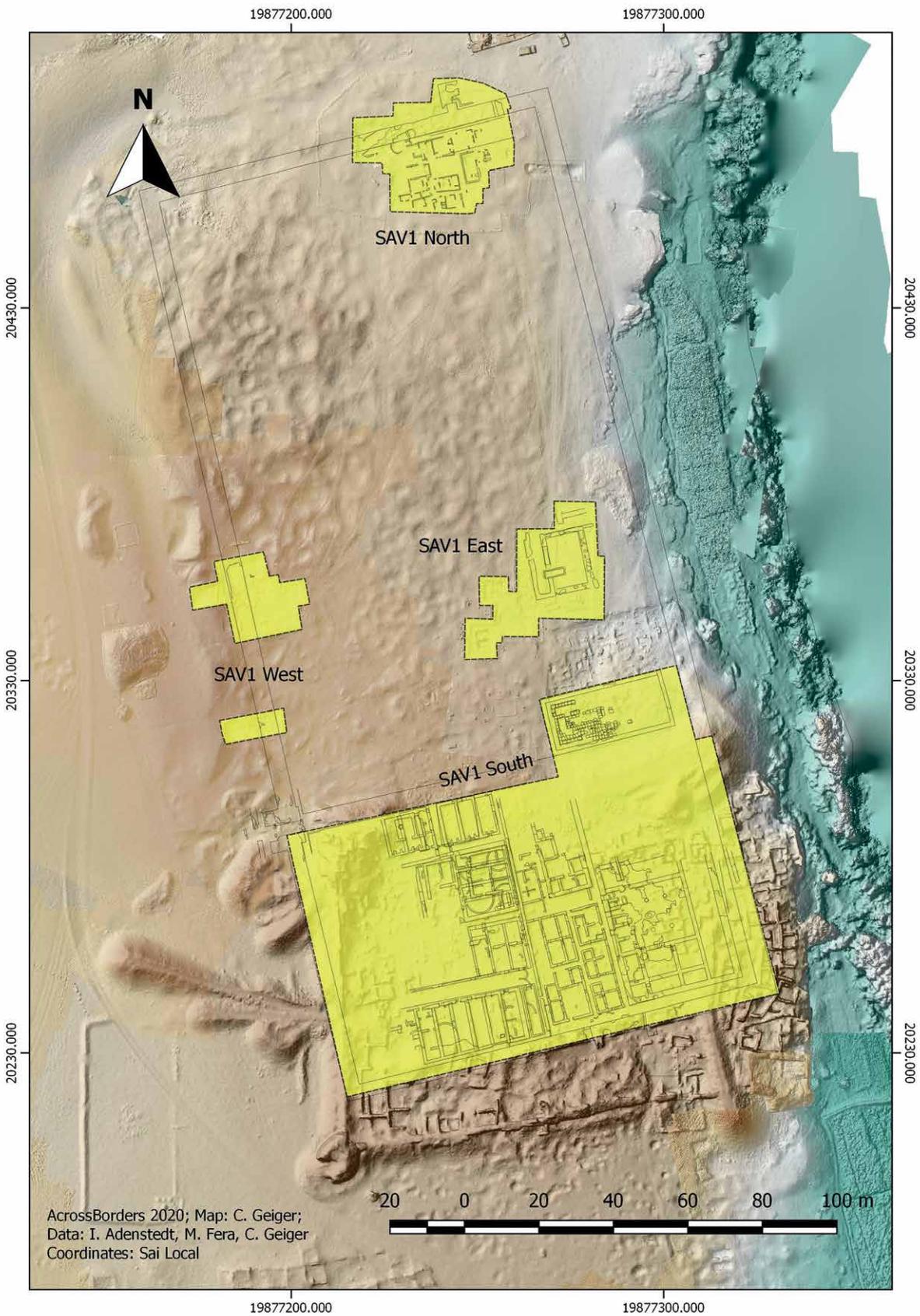


Figure 1.2: the sectors of Sai city (map: C. Geiger, ©AcrossBorders).

until the late 18th Dynasty and possibly also the early Ramesside period. In addition, a building phase prior to the town wall was confirmed at SAV1 West. Simple mud brick structures comparable to finds in SAV1 North are earlier than the town wall. Overall, the remains of 18th Dynasty structures along the enclosure wall in SAV1 West are very similar to findings in SAV1 North (Budka 2020, 152). Both areas within the Pharaonic town are markedly different from the southern part and SAV1 East because no large structures of a possible administrative function and no substantial magazines were found but rather simple domestic buildings of small dimensions with oven installations, grindstone emplacements, small sized cellars and storage bins.

Despite its character as a state-built foundation, sectors SAV1 North and SAV1 West exemplify short-term buildings and complicated processes within the town area of Sai which was part of a very dynamic world with remarkable changes during the New Kingdom (see Budka 2020, 424-427).

1.1.2 Other New Kingdom sites on Sai

Approximately 1km to the north of the New Kingdom town another domestic site, SAV2, was first tentatively identified by means of aerial photography and consequently investigated by fieldwork in 1969 and 1971 (Fig. 1.1). SAV2 was interpreted by Albert Hesse as a camp site of possibly Middle Kingdom or New Kingdom date, featuring a ditch and being of roughly rectangular shape (Hesse 1981; 1985; for the proposed Middle Kingdom date, see Vercoutter 1986, 11-12; cf. Minault-Gout and Thill 2012, 404 with note 5). This dating poses several problems (see Miellé 2012; see also Budka and Doyen 2013, 170). A mixture of the New Kingdom ceramics with pottery of Medieval date and nearby Christian remains hinder a clear assessment. Most recently, Hesse proposed the following: the dating of the original structure to the Middle Kingdom, the presence of a New Kingdom ditch and a 'later' pottery workshop as well as Christian occupation (Hesse 2015, 125, fig. 2). While Middle Kingdom seems quite unlikely given the other remains on the island and especially in its northern part, a New Kingdom camp seems, in general, very likely. Until today, the question of New Kingdom settlement activities outside the town enclosure of SAV1 has not yet been investigated in detail (see Budka 2020, 22). Based on evidence from other sites in Nubia, extramural settlements are to be expected at Sai (see Kemp 1972, 653-654; Spencer 2017). The question whether SAV2 is one of these remains unresolved for now and a substantiation would require additional fieldwork.

The two main cemeteries of the New Kingdom on Sai are located south of the town and were labelled as SAC5 and SAC1 (Vercoutter 1986, 14; Minault-Gout and Thill 2012, see Fig. 1.1). SAC1, a graveyard with about 20

chamber tombs (see Minault-Gout and Thill 2012, 404-406), seems to predate SAC5 and was possibly used by occupants (of Egyptian origin?) prior to the flourishing time under Thutmose III (publication in preparation by Brigitte Gratien). Another Egyptian cemetery, SAC4, interestingly with strong links to the Kerma culture (and with early tombs from the Old and Middle Kerma period, see Gratien 1985), is situated towards the north of the New Kingdom town (Gratien 1985; 2002; Minault-Gout and Thill 2012, 404). According to Gratien, this graveyard was used by Kerma people in contact with the newly arrived Egyptians living on the island (datable to the Classical Kerma and especially Recent Kerma periods, Gratien 1985; 2002; see also Williams 2018). One of the most remarkable finds from this cemetery was the skeleton of a horse which was dated to the early New Kingdom (Chaix and Gratien 2002). The largest New Kingdom cemetery is SAC5 which flourished in the mid- and late 18th Dynasty and will be discussed in the following.

1.2 The site SAC5

The pyramid cemetery SAC5 (Fig. 1.3), located around 800m south of the New Kingdom town, represents the most significant Egyptian cemetery on the island (Minault-Gout and Thill 2012, 3; Budka 2014a; 2015a; 2015b; 2017c). Its size, architecture and the qualitative nature of its material underline the importance of Sai as administrative centre during the mid-18th Dynasty in Upper Nubia (Minault-Gout and Thill 2012, 418; Budka 2016a; 2017c).

The necropolis is of Egyptian type (Minault-Gout and Thill 2012, 406), with a preferred extended position for burials, pyramid superstructures resembling the New Kingdom Theban model and typical Egyptian installations for funerary offering cult (Budka 2014a). The assumption that Egyptian administrative staff and their families (Minault-Gout and Thill 2012, 413-414, for titles attested at SAC5 from French excavations; see also Auenmüller 2020) were buried here is very likely and seems to be reflected in high quality objects such as heart scarabs and stone shabtis.

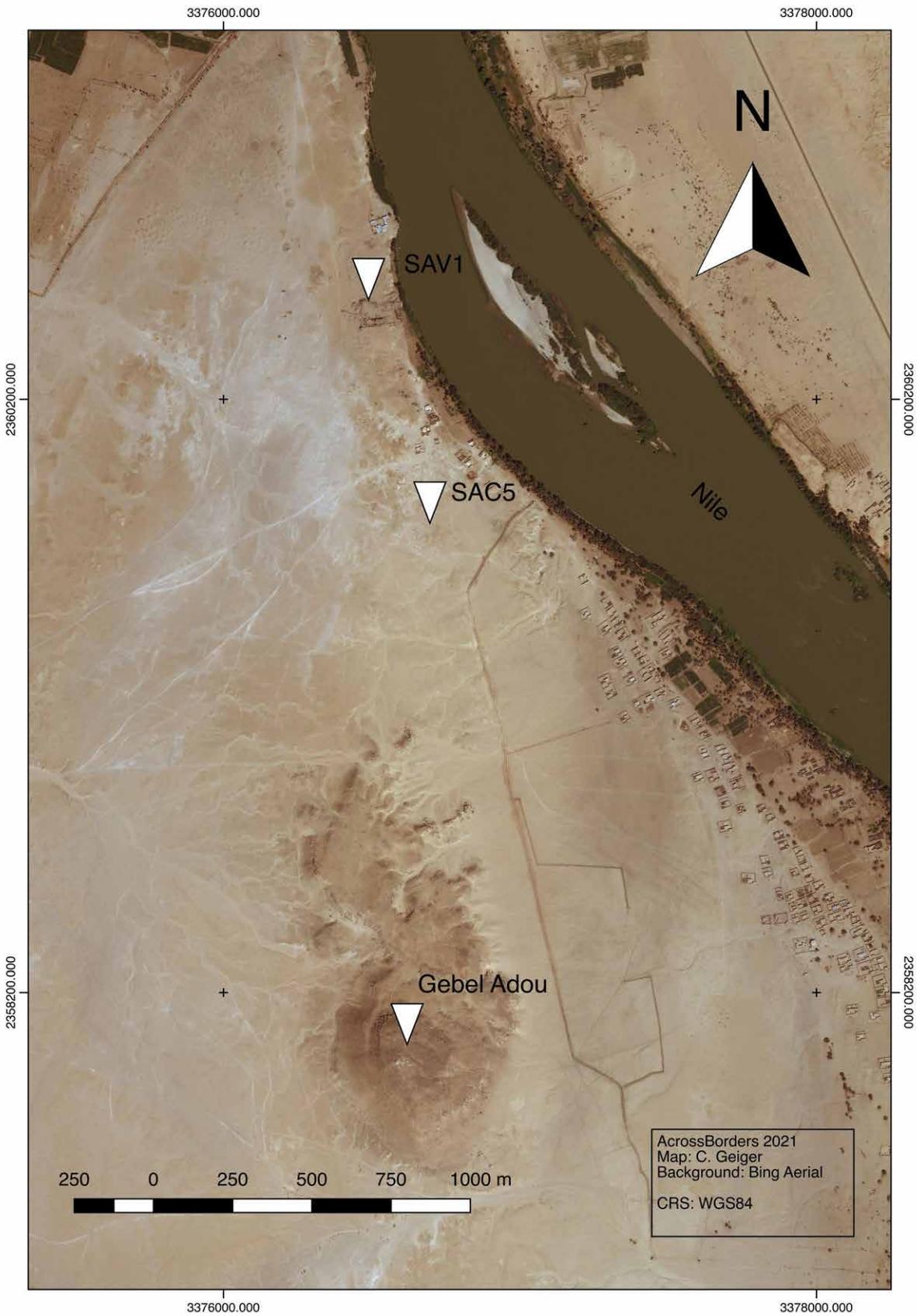


Figure 1.3: location of SAC5 in relation to the New Kingdom town on Sai Island (map: C. Geiger, ©AcrossBorders).

1.2.1 History of research of SAC5

During the 1972-73 season, the French mission discovered SAC5 based on various architectural remains on the surface and artefact scatters. The cemetery was excavated in several seasons until 2004 (for details see Minault-Gout and Thill 2012, 1-4) and subsequently published as a substantial monograph in two volumes by Anne Minault-Gout and Florence Thill (Minault-Gout and Thill 2012). The results from the French mission in SAC5 comprise data from 24 rock-cut shaft tombs with mudbrick chapels and mostly pyramidal superstructures, as well as an additional pyramid (“Tomb 23”) which was interpreted as a landmark (see Thill 2017). In the close surroundings of this monument, a small animal necropolis was unearthed (Thill 2017).

A magnetometer survey in parts of SAC5 was conducted by Nicolas Crabb and Sophie Hay, British School at Rome and the University of Southampton within the framework of the Sai Island Archaeological Mission in 2011 (Crabb and Hay 2011). This survey suggested the existence of still unexcavated monuments and tombs.¹

To achieve one of the main goals of the AcrossBorders project, a better understanding of the population on the island, fieldwork in SAC5 was carried out in three seasons, starting in 2015 and being completed in 2017. In conjunction with earlier work and publications (Thill 2007; Minault-Gout 2012; Minault-Gout and Thill 2012; Cressent and Raimon 2016), the new material from AcrossBorders’ excavations offers fresh data to assist in understanding the way of life in New Kingdom Sai. Besides information about the past occupants (see Wohlschlagger and Stadlmayr 2018; Retzmann *et al.* 2020; *cf.* Chapter 6), the questions of dating the phasing of the cemetery and its relation to the town were of key importance.

1.2.2 The dating of the site

Similar to other Egyptian sites in Nubia such as Aniba, Soleb and Amara West, Pharaonic style tombs had been built at SAC5 (Budka 2015b, 56-58). These tombs cover almost the entire New Kingdom and were still used into the pre-Napatan and Napatan periods (Thill 2007; Budka 2014a; 2015b; 2017c; see also Spencer 2002; Binder 2011; 2014; Spence 2019).

According to the published material from the French excavations, SAC5 cannot be associated with the foundation of the Egyptian settlement on Sai in the very early 18th Dynasty (reign of Ahmose or Amenhotep I, see above). A dating of some of the tombs to the Second Intermediate Period to early 18th Dynasty as proposed by Minault-Gout and Thill (2012, 407-411) seems very unlikely. This early

dating is primarily based on a slightly too early dating of the ceramics (see Budka 2014a). However, Minault-Gout and Thill rightly dated some of the scarabs found in tombs of SAC5 to the Second Intermediate Period (*e.g.* from Tombs 7 and 8, see Minault-Gout and Thill 2012, 408-409). It is well known, though, that scarabs can be used as heirlooms in various contexts (see, *e.g.*, Ben-Tor 2018, 87 with references; Brandl 2019), including tombs located in Nubia (see, *e.g.*, Säve-Söderbergh and Troy 1991, pls. 10-16; Budka 2014a with references). At SAC5, this was also observed in the newly discovered Tomb 26 (see Chapters 5 and 7). It is likely that it was also the case for these early scarabs from SAC5 discovered by the French mission – no pottery contemporaneous with the amulets was discovered, and the dating proposed by Minault-Gout and Thill can be regarded as too early. The scarabs only give a *terminus post quem/ante quem non* and dating of the individual tombs and contexts at SAC5 must be based on the ceramics (for these general caveats see Ben-Tor 2018, 88).

On the basis of the published material with special emphasis on the ceramic assemblages, I have argued that the Egyptian elite cemetery on Sai was not in use prior to Thutmose III and flourished until the late 18th Dynasty, reflecting the general heyday of the 18th Dynasty on the island (Budka 2014a; 2015a; 2015c; 2017b; 2017c; 2020, 426-427). SAC5 is, therefore, contemporaneous to the extensive building activities in the town, traceable in all town areas with a stone temple, an enclosure wall, magazines and cellars as well as the governor’s residence (Azim 1975; Budka and Doyen 2013; Adenstedt 2016; Budka 2017b; see also above).

Overall, the main phases of SAC5 are the following: mid- to late 18th Dynasty, Ramesside (19th and 20th Dynasties), pre-Napatan and Napatan. All these phases are also reflected in the use of Tomb 26 (see Chapter 8).

1 I would like to thank Didier Devauchelle and Florence Doyen for the permission to use these data as preparation of AcrossBorders’ fieldwork (see also Chapter 2).

AcrossBorders' excavations in SAC5

Julia Budka

2.1. Documentation methods

The AcrossBorders project applied a newly established documentation system to its fieldwork, both in the town and in the cemetery SAC5 (Fera and Budka 2016; Fera and Geiger 2018; Budka 2020, 69-70). This system is based on a geodetical survey by a total station and image-based 3D modelling via Structure from Motion (SfM). In the case of SAC5, the excavation of all areas (Areas 1, 2 and 3), including Tomb 26, were recorded in 3D.

Besides excavation, surface cleaning and corresponding documentation, aerial photography of the environment of both the New Kingdom town and the cemetery SAC5 was conducted between 2015-2017 for topographical landscape recording in form of high resolution orthophotographs and digital elevation models (DEM) by kite aerial photography (KAP). In this way, landscape building processes can be recognised and evaluated on a larger scale (see Fera and Geiger 2018).

2.1.1 Methods, techniques and workflow in the field

The basis of the applied documentation system is a GIS-based system for the documentation of stratigraphical excavations that has been developed at the University of Vienna since 2000 (Fera and Budka 2016; Fera and Geiger 2018). The stratigraphical unit (SU) is the basic entity of the conceptual model which must be defined and recorded during the excavation. By removing SUs in the reversed order of their deposition, the three-dimensional volume of the unit is recorded by documenting the uncovered surfaces and surveying their contours. As an additional information level, single SUs are grouped to connected objects so that further information for entire findings (*e.g.* fillings of chambers or shafts *etc.*) can be descriptively recorded. The geometry is captured in the documentation of the SU.

Besides the digital geodetic survey, paper forms were used by AcrossBorders for the descriptive documentation in the field. These were continuously digitised and connected with the geometric data in the GIS as attribute tables, for which the open source platform QGIS was employed (QGIS 2.18). For the geodetic survey, a digital total station (Leica TC1203) was used. The photographic record was done with a digital camera (Ricoh GR, 16.2 MP APS-C-Sensor, fixed focal length f2.8/18.3mm [= 28mm full frame], horizontal field of view 45.4°) mounted on a 4m long handheld pole. For the generation of 3D models of individual surfaces, the recorded images were processed with the commercial software package Agisoft Photoscan together with the geodetic survey points.

The data were processed directly after recording in the field and visualised in the GIS (mobile workstation with Intel Core i7, 16GB RAM). Therefore, the calculated models were exported as 2.5D surface models (GRID-raster, surface resolution 5mm) and a slope shade and/or hill shade model was calculated in the GIS application. Together with the

recorded survey data, daily actual maps could be created and used as basis for drawings of field sketches and context descriptions.

For the cleaning of surfaces in pyramid cemetery SAC5, here in particular in Areas 1, 2 and 3, the recording of the stratigraphical sequences was conducted in the same way as in the Egyptian town SAV1 (Fera and Geiger 2018; see also Budka 2020, 69-70). However, because much disturbance and debris were noticed, no stringent stratigraphic sequence was identified in any of the areas. Most surface levels are simply various layers of backfilling, including recent debris from the French excavations.

In Tomb 26, work in stratigraphical units was possible with certain limitations (see below). For the documentation of the underground findings in Tomb 26, adaptations to the system were made. Besides challenges for the geodetic survey in surveying narrow shafts and cavities, the photographic documentation was slightly modified. The camera system was equipped with a wide-angle ancillary lens (focal length 13.2mm [= 20mm full frame], horizontal field of view 60°) and an external flash. Because of the cramped conditions, the camera was held and released by hand. For the control points, markers were painted on the rocks and repeatedly re-surveyed during the excavation. For burial situations without rocky surfaces, coloured thumbtacks were used as control points. These were surveyed and then removed after recording.

Through the scalability of the system, high resolution virtual models of the underground tomb complex (*cf.* Figs. 3.2-4) as well as orthophotographs could be achieved (Fera and Geiger 2018). These were important for the evaluation of the data for taphonomical analyses of the occupation and repeated reuse of the tomb. The suitability of this system was already shown elsewhere (Dell'Unto 2014; Aspöck and Fera 2015).

The image-based documentation of AcrossBorders' excavation enabled the creation of a variety of 3D models, sections and very precise phase plans of the individual burials and construction phases, in addition to detailed orthophotos – the illustrations in this volume depict the results of our documentation.

2.1.2 Find documentation

Paper forms for lists of finds were filled in at the site and form the basis for the comprehensive list of all finds (available at <https://data.ub.uni-muenchen.de/217/>). The finds received consecutive numbers for each year, according to the stratigraphical units and progress of work. The list mentioned in the Appendix was sorted according to find contexts and type of material (bones, pottery, stone, charcoal *etc.*).

The description and entry of objects in the database, as well as the drawing and photographing of selected finds, was carried out in the magazine of the French

dig house on Sai, contemporaneous to AcrossBorders' excavations. One final study season was realised in the Sudan National Museum in Khartoum in the autumn of 2017. This season focused on final photos and drawings, as well as a detailed study of important objects such as the shabti of Khnummose. In addition, an ultimate assessment of the raw materials (*e.g.* specific type of stone *etc.*) of finds was carried out.

The objects from Tomb 26 are currently distributed between Sai and Khartoum. Bones and stone blocks were left at the site after the closing of the excavation; fragmented objects and pottery vessels were stored in the French dig house on Sai. Several objects were transported to Khartoum to be studied in 2017, but these were afterwards handed over to the Section française de la direction des antiquités du Soudan. A small selection of burial goods including some complete pottery vessels was chosen for registration in the Sudan National Museum. A list of these objects can be found in the Appendix which is arranged according to excavation find numbers; no registration numbers of the Museum are currently available.

2.1.2.1 Database of small finds

The descriptive find registration of objects was done in an already existing FileMaker-database, from which queries can be reconnected to the GIS (total of 433 objects). Responsible for most contents of the SAC5 database was Meg Gundlach; Veronica Hinterhuber was in control of final entries and additions. The description of objects presented in this volume is based on the entries in the FileMaker-database.

2.1.2.2 Ceramics

From surface contexts, the processing of ceramics was comparable to the protocol established for the New Kingdom town (see Budka 2020, 196-199). The sherds were gathered in large baskets or plastic bags, depending on the quantity and arranged conferring to their archaeological context (area, feature, stratigraphical unit). The contents of each basket/bag were then separated into the categories of diagnostic and undiagnostic sherds; rim and base sherds, handles and decorated/painted sherds were regarded as diagnostics. The first step was to separate the material according to periods: New Kingdom or post-New Kingdom material (pre-Napatan and Napatan or later). The wares (fabric plus surface treatment) and vessel shapes were then noted on recording sheets. The classification of vessel shapes and types followed the categories and abbreviations used for the town (see Budka 2020, 198, Tab. 15; see also Chapter 5.2.1.2.2). While the mixed surface material from Areas 1, 2 and 3 was processed in the field, all vessels and sherds from Tomb 26 were brought to the excavation house. All pieces were washed and then laid out to find matching pieces (in the case of fitting pieces, glued together using UHU hart).

2.1.3 Documentation and analysis of human remains

The human remains from AcrossBorders' excavation in SAC5 were anthropologically investigated contemporaneously with the fieldwork at the site from 2015 to 2017 by a team of physical anthropologists. The focus was on the material from Tomb 26, in particular during the seasons 2016 and 2017 with intact burials; other contexts only yielded very fragmentary and small-scaled bones. As a first step, human bones were identified and, when possible, biological age and sex were determined. Furthermore, Marlies Wohlschlagler and Andrea Stadlmayr documented pathologies and degenerative diseases. The minimum number of individuals within the chambers, as well as the total minimum number of burials in Tomb 26 was established (see Chapter 6). After this anthropological assessment, the human remains were reburied in Tomb 26 in 2017 at the end of the season.

Several scientific methods of analysis were applied, and respectively tested on the human remains from Tomb 26. In order to examine the kinship between the individuals buried in Tomb 26, 16 teeth from six individuals and five petrous bones from the same people were sent to the Max Planck Institute for the History of Man in Jena in 2018 for DNA extraction. Unfortunately, the results were negative – aDNA was not preserved in either the teeth or the petrous bones (see Budka 2019a).² The exact family relationships of the buried persons in Tomb 26 must therefore remain open and rely on the archaeological data and their interpretation only (see Chapter 7).

Furthermore, selected bones and teeth were sent to two different laboratories for radiocarbon dating (2016: Poznań Radiocarbon Laboratory; 2018: Beta Analytic). However, the collagen preservation in these samples was not suitable for this method. This was indicated by only trace amounts of nitrogen, showing that these samples did not contain collagen. Similar to the negative results for aDNA, the damage caused to the bones by repeated flooding as well as extreme temperature changes (according to season, difference day-night *etc.*) are probably responsible for the fragile state of the skeletons in Tomb 26. C14 dates were successfully provided by some bone samples from other New Kingdom sites in Sudan, *e.g.* at Soleb (see Schiff Giorgini 1971, 100-101 for charcoal, but also wood and skeleton/bone samples). From Tomb 26, some charcoal samples were suitable for C14 dating (see below).

A successfully applied scientific analysis of material from Tomb 26 was strontium isotope analysis (see Retzmann *et al.* 2020) which proved to be significant for general questions of mobility along the Nile and in particular for Sai (see below).

2.1.3.1 Strontium isotope analysis

In the last decade, the analysis of Strontium isotope ratios in human skeletal remains such as teeth and bones by thermal ionization mass spectrometry (TIMS) or multi-collector inductively coupled plasma mass spectrometry (MC ICP-MS) has been extensively used as an analytical method in archaeological research to reconstruct provenance, migration and mobility patterns of past humans and animals (see, *e.g.*, Bentley 2006; Slovak and Paytan 2012; Szostek *et al.* 2015; Sehrawat and Kaur 2017). The main attention focuses in this approach on the $n(^{87}\text{Sr})/n(^{86}\text{Sr})$ isotope amount ratio (commonly also noted as $^{87}\text{Sr}/^{86}\text{Sr}$ ratio) which can vary geographically based on the natural-abundance variation of ^{87}Sr as a product of the radioactive decay of ^{87}Rb (half-life of 4.88×10^{10} years). The bioavailable $n(^{87}\text{Sr})/n(^{86}\text{Sr})$ ratio is taken up by animals and humans in the course of the food chain without significant fractionation (Capo *et al.* 1998; Blum *et al.* 2000) and is stored in Ca-rich matrices such as bones and teeth (Bentley 2006, see also Retzmann *et al.* 2020).

In Sudan, Sr isotope ratio analysis to investigate human migration was carried out in an area from the Second to the Fourth Cataract, dating from the Bronze Age until Medieval times (Buzon *et al.* 2007; Buzon and Simonetti 2013; Binder 2019, 114 with references; Schrader *et al.* 2019). The first local Sr isotopic range in Sudan focusing on the Third Cataract region ($n(^{87}\text{Sr})/n(^{86}\text{Sr}) = 0.70732 - 0.70754$) was established by Buzon *et al.* (2007) to investigate possible Egyptian occupation of the New Kingdom town in Tombos (see also Buzon 2016).

In the case of Sai, nine human individuals from the New Kingdom buried in Tomb 26 in SAC5 were analysed for their Sr isotope ratio (Retzmann *et al.* 2020 with credits to the laboratory and people involved). These individuals included the overseer of goldworkers Khnummose and his presumed wife from the double burial in Feature 6 (see below, Chapter 6). The first molar was preferably used for analysis, depending on availability. In three cases the second molar and in another three cases the third molar was analysed (for details see Retzmann *et al.* 2020).

As the enamel and calculated biogenic dentine values of all investigated individuals from Tomb 26 lie within the determined autochthonous range on Sai Island during the New Kingdom (deriving from ancient animal and soil samples and combined with modern animal, soil and water samples), all tested persons were classified as members of the local population. Since one of the owners of the tomb, Khnummose, carries an Egyptian name and title and was buried in Egyptian style, these results are crucial for the reconstruction of the social and cultural fabric of the society of New Kingdom Sai and in particular of the users of SAC5 (see Chapter 10).

2 For this test and the sampling, I am grateful to Philipp Stockhammer, Johannes Krause, Stephanie Eisenmann and Marta Burri.

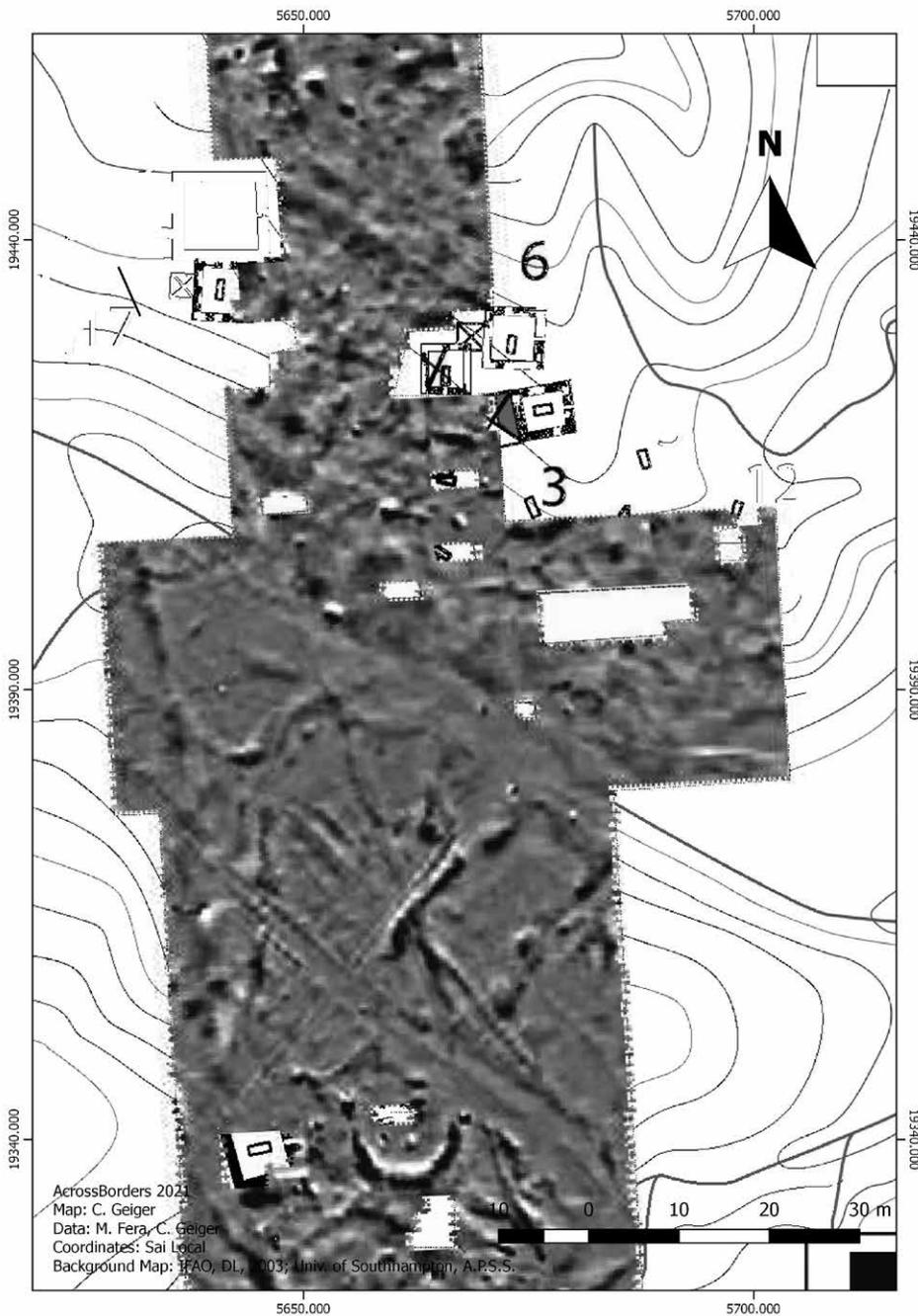


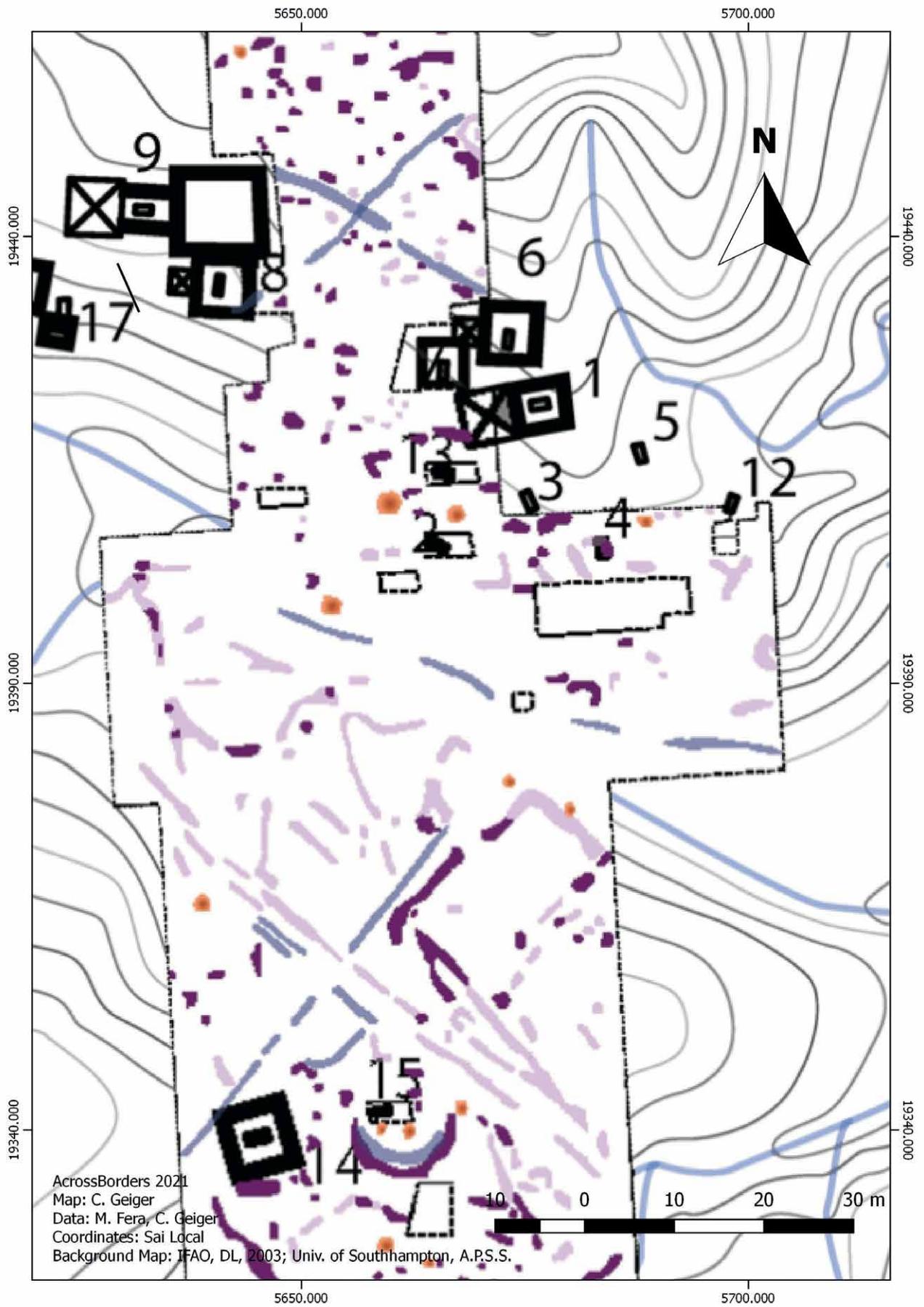
Figure 2.1: map of the geophysical survey of the southern part of SAC5 (illustration: C. Geiger, magnetometry by S. Hay and N. Crabb).

Figure 2.2 (right): interpretation of the geophysical survey of the southern part of SAC5 (illustration: C. Geiger, interpretation of magnetometry by S. Hay and N. Crabb).

2.2 Progress of fieldwork

In 2015, AcrossBorders resumed work in the large New Kingdom cemetery SAC5 (February 14 to March 11). Anomalies visible on the geophysical survey map from 2011 (by Sophie Hay and Nicolas Crabb, British School at Rome and the University of Southampton for the Sai Island Archaeological Mission) suggested that more tomb monuments were present in the necropolis than had been excavated (Crabb and Hay 2011), especially in the southern part (Figs. 2.1-2).

Based on the state of preservation at the surface, it was obvious that any possible superstructure was less well preserved than the previously studied monuments or had completely disappeared. Two areas were opened by AcrossBorders in 2015 (Areas 1 and 2), followed by Area 3 in 2016, aiming to clarify whether these zones are void of tombs or comprise still unexplored tombs (Fig. 2.3).



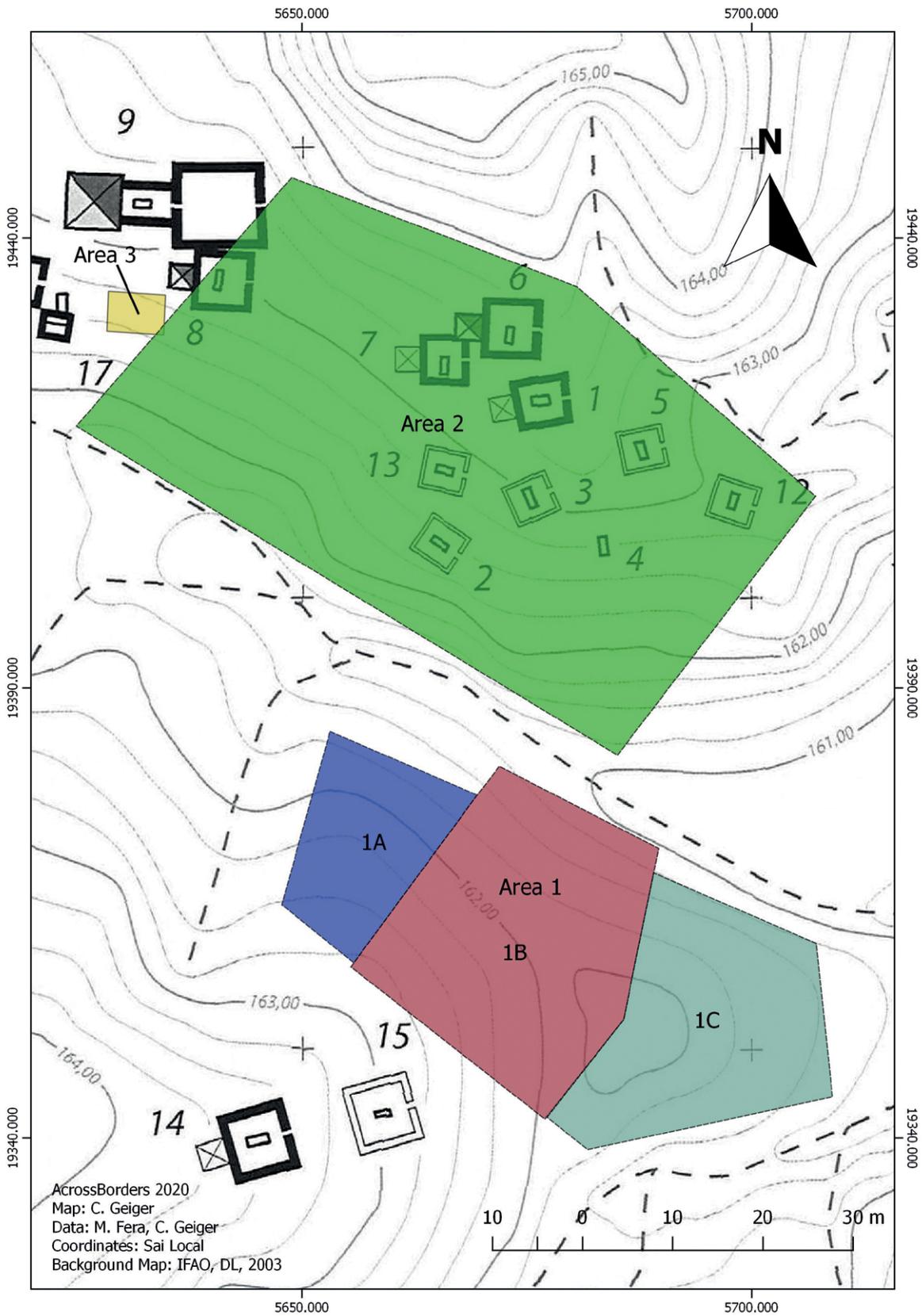


Figure 2.3: working areas of AcrossBorders in SAC5 with previously documented superstructures (illustration: C. Geiger, ©AcrossBorders).

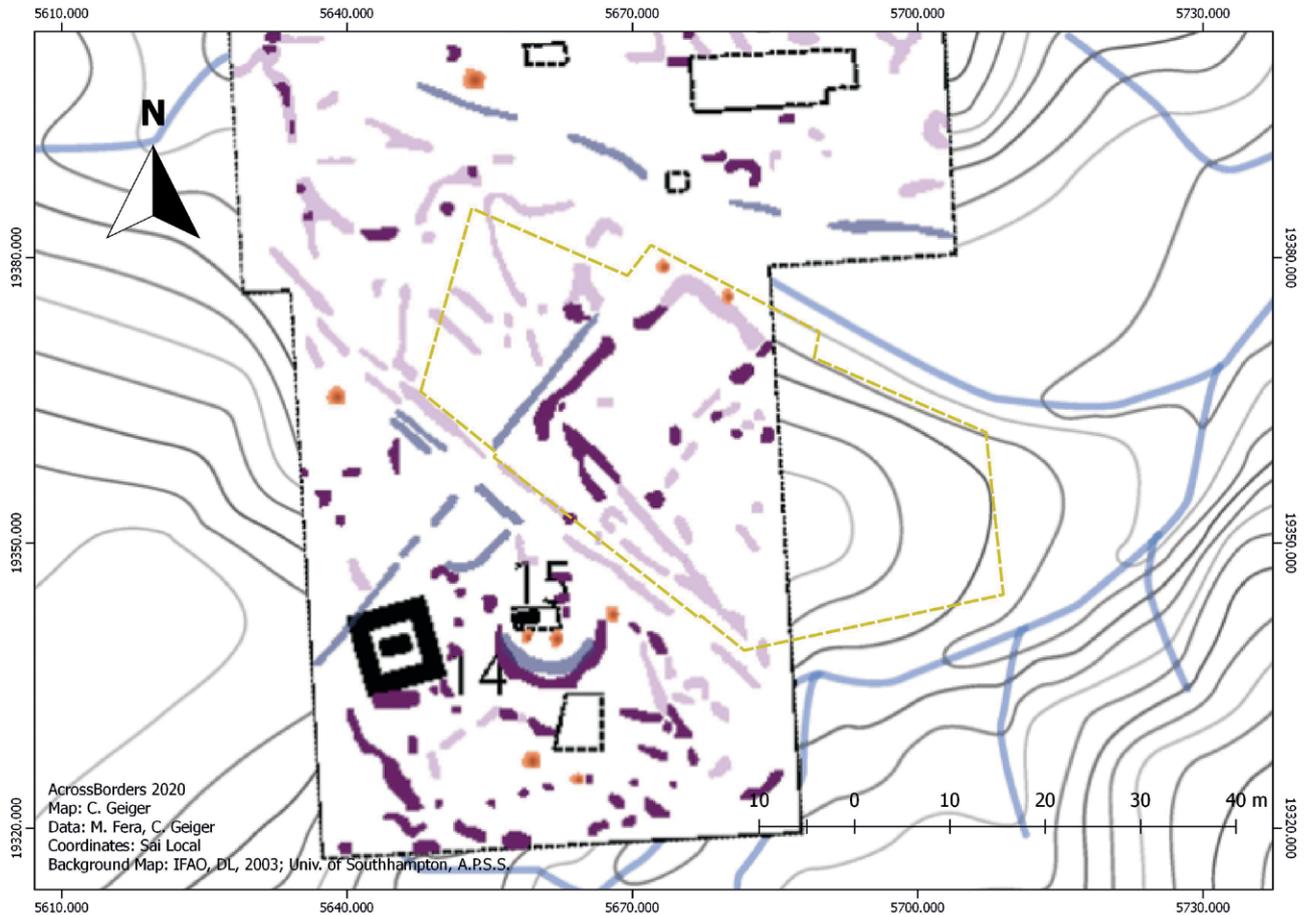


Figure 2.4: location of Area 1 above the interpretation of the geophysical survey (illustration: C. Geiger, ©AcrossBorders).

2.2.1 Area 1

Area 1 is located in the southernmost part of SAC5. During the French mission, only two tombs (Tombs 14 and 15) were found in this sector. The main aim in this new working area was to check anomalies visible on the geophysical survey map (Fig. 2.4). A complete surface cleaning of Area 1 was conducted, starting on 14 February 2015.

On 18 February 2015, we decided to divide Area 1 in three parts – labelled Areas 1A, 1B, 1C (Fig. 2.5). Because of the limited results below the surface (cleaning of the surface with brushes, SU 001), this division was aimed at checking the possible anomalies faster and with more precision. Cleaning started in Area 1B with SU 002, located along the possible linear anomaly leading towards northwest. However, it soon became clear that this level was indeed natural and represented a muddy surface layer which was in part much thicker in clefts and depressions of the soil rock. For the latter, the stratigraphical SUs SU 003 and 004 were defined, both of which are associated with finds (stone tools or ceramic sherds) in various clefts in Area 1B. SU 005 represents

a pebble area within Area 1B which was completely void of finds. SU 006 is located in Area 1A and equals SU 002, being the muddy surface layer. Excavation work in Area 1 ended on 25 February 2015, since natural rock appeared, and no structures were found.

During the cleaning in Area 1, several surface models were generated, illustrating the work progress according to the defined SUs. Fig. 2.6 shows the surface (bottom surface SU 001) on 17 February 2015, the state when the subdivision of Area 1 was decided. Only shallow surface material had been removed by brushing. Fig. 2.7 shows the state of work on 22 February 2015, when the natural rock had appeared in Areas 1A and 1B (bottom surface SUs 003 and 004).

To conclude, Area 1 did not yield any tombs, although little New Kingdom surface material was present (in the shape of pottery sherds from the 18th Dynasty). All of the features identified as anomalies in the magnetogram are actually natural features and in particular clefts in the rock respectively traces of modern car tracks. Thus, a sector void of burial monuments is now confirmed in the southern part of SAC5.

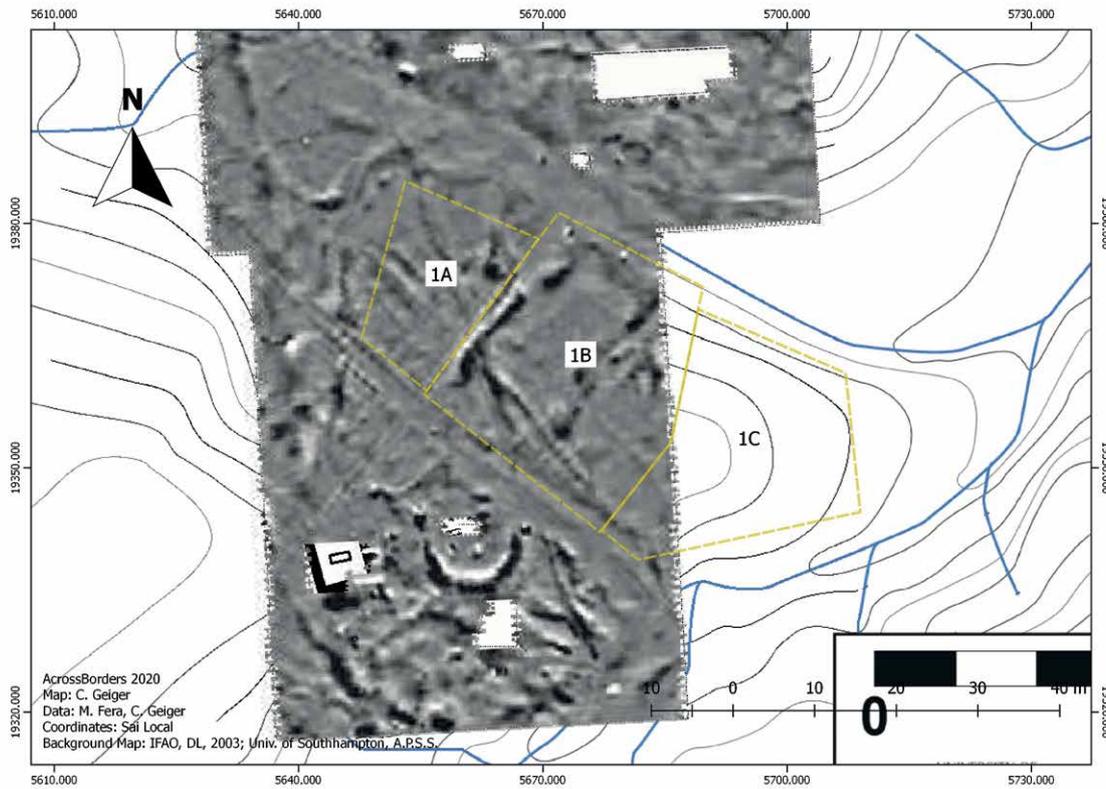


Figure 2.5: division of Area 1 above the map of the geophysical survey (illustration: C. Geiger, ©AcrossBorders).

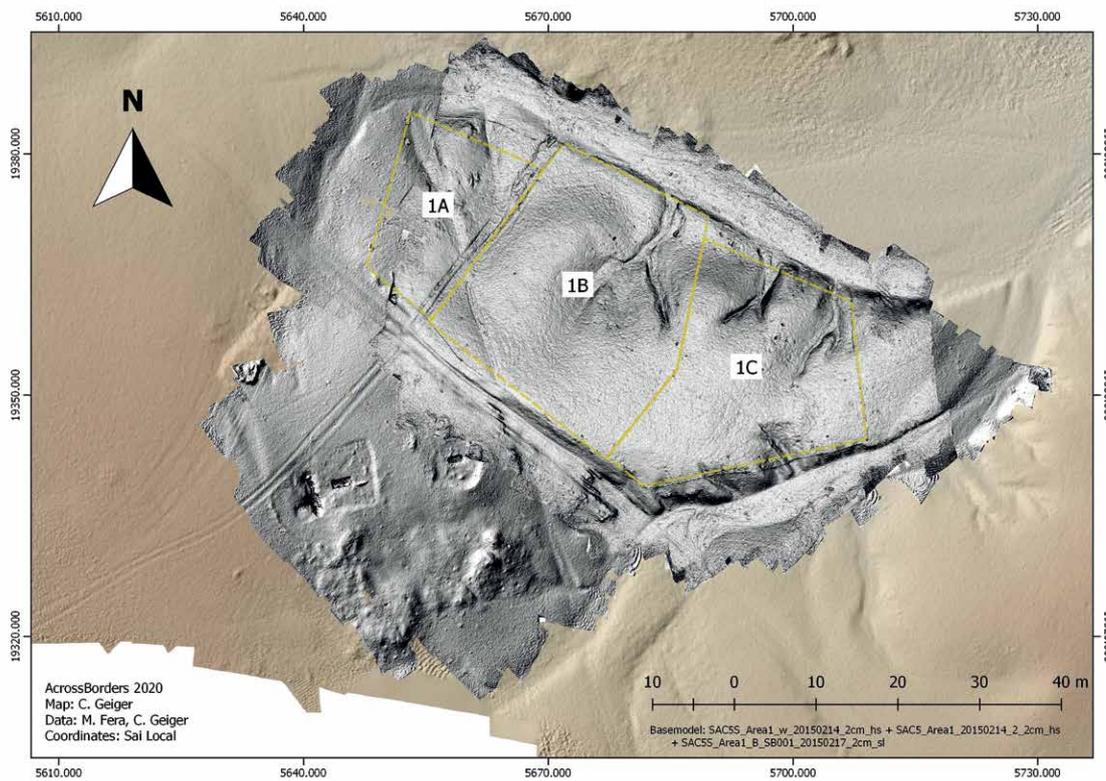


Figure 2.6: surface map of Area 1 on 17 February 2015 (illustration: C. Geiger, ©AcrossBorders).

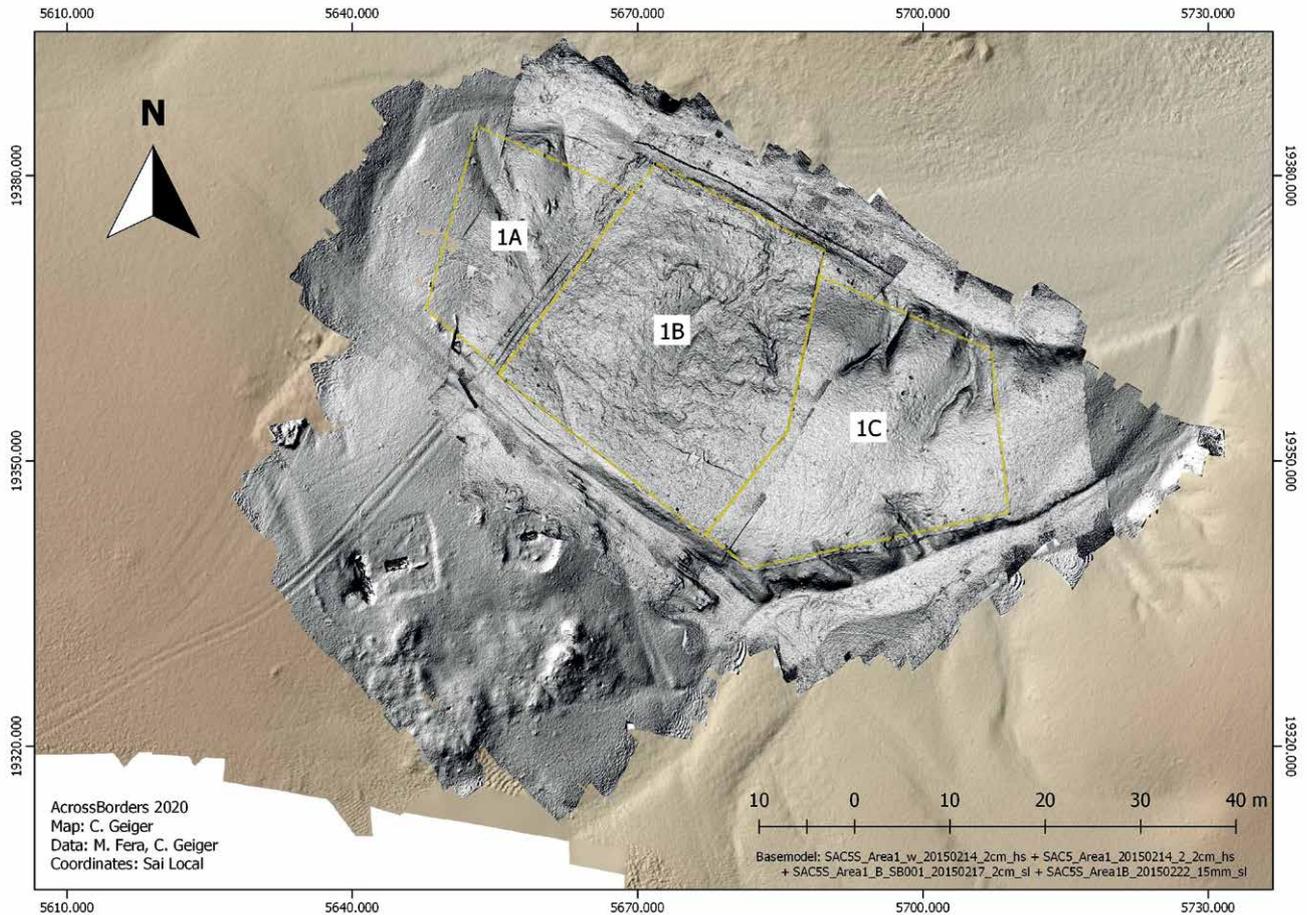


Figure 2.7: surface map of Area 1 on 22 February 2015 (illustration: C. Geiger, ©AcrossBorders).

A complete list of the few finds from Area 1 can be found elsewhere (see the Appendix). Only seven finds from Area 1 were registered and entered in the database, ranging from Palaeolithic to Modern times: one Palaeolithic flint/tool (SAC5 002); a Neolithic reused sherd (SAC5 003); one Ottoman pipe (SAC5 001); a modern “bobby” hair pin made of metal (SAC5 004), as well as three stone tools of unknown date, a pounder and two hand mills. Among the unregistered finds, several seeds of dates from SU 002 are noteworthy. Because of their find position in a surface layer and due to the absence of a tomb structure, these dates are likely to be modern relics, having been most probably consumed by either workmen during the excavations of the French mission or by occasional passers-by. Dates were also found in Area 2 (see below), here in SUs 022, 033, 035 and 036. It seems unlikely that these were of ancient origin, nevertheless it is worth mentioning that dates have been found as food offerings in Kerma tombs on Sai (Gratien 1985, 94 and 96)³ and in at least one New Kingdom tomb in Soleb (Schiff Giorgini 1971, 212, T 17 c37).

3 This was kindly remarked by Florence Thill in the field in 2015 during the excavation of Area 1.

2.2.2 Area 2

Area 2, located to the north of Area 1 and immediately adjacent to several 18th Dynasty monuments such as Tomb 8 (Fig. 2.8), was opened on 25 February 2015, and proved more fruitful in the search for new tombs. In this south-eastern part of cemetery SAC5, already 13 tombs were excavated by the French mission, including those with the richest burial equipment like Tomb 8 (see Minault-Gout and Thill 2012, 55-67).

According to the magnetometry, although traces of superstructures were missing it was likely that not all burial monuments had so far been found since enough space for shafts and substructures was available (Fig. 2.9).

Surface cleaning in Area 2 commenced with SU 020 which was the remains of the refilling of Tomb 8 and visible as a large heap of modern origin (see Fig. 2.10). SU 021 represented the first surface level in Area 2, being located within a trench dug by the French colleagues in 1973 (see the rectangular depression in Fig. 2.10). Obviously, mixed material had assembled here in the previous years, three baskets of mixed pottery and other finds were documented. Two layers were excavated below SU 021

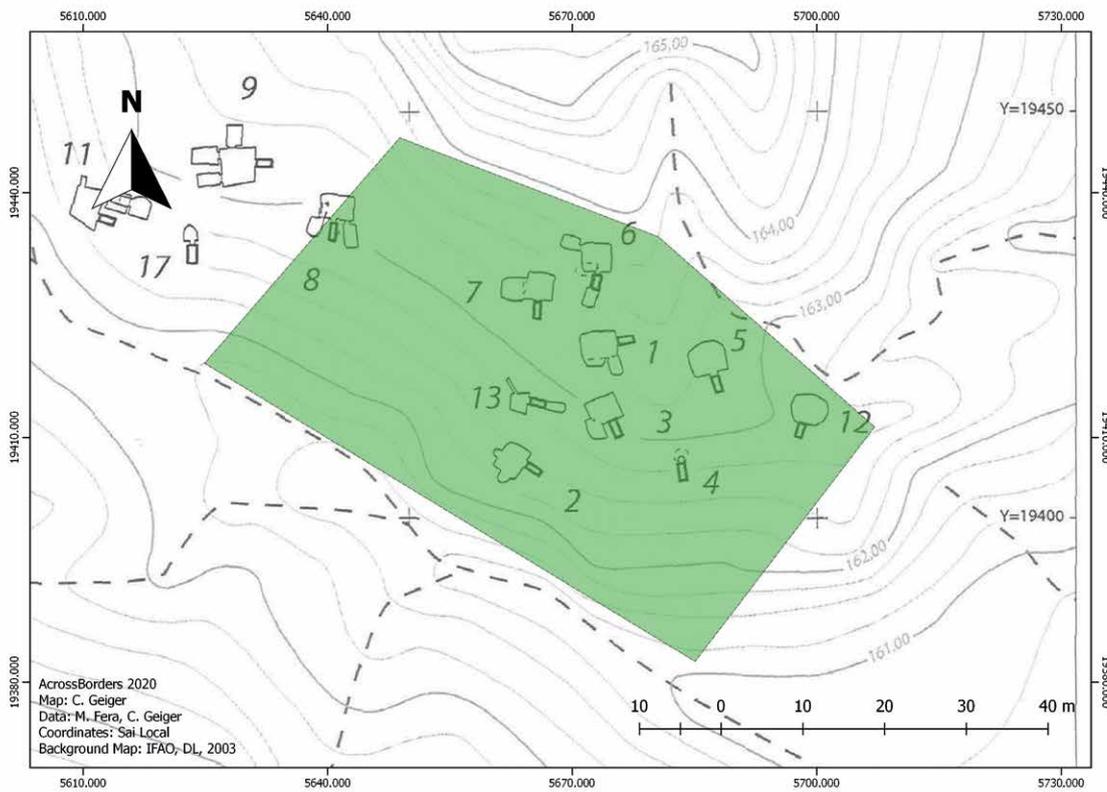


Figure 2.8: map with location of Area 2 (illustration: C. Geiger, ©AcrossBorders).

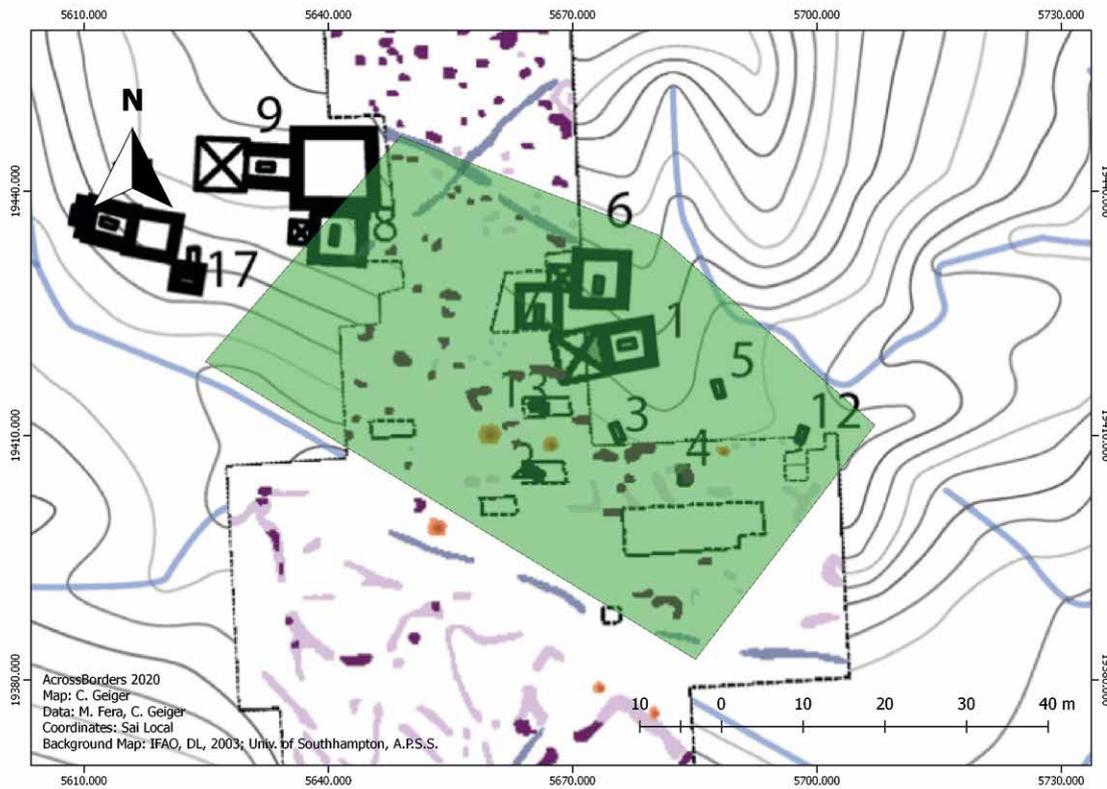


Figure 2.9: map of Area 2 above the interpretation of the geophysical survey (illustration: C. Geiger, ©AcrossBorders).

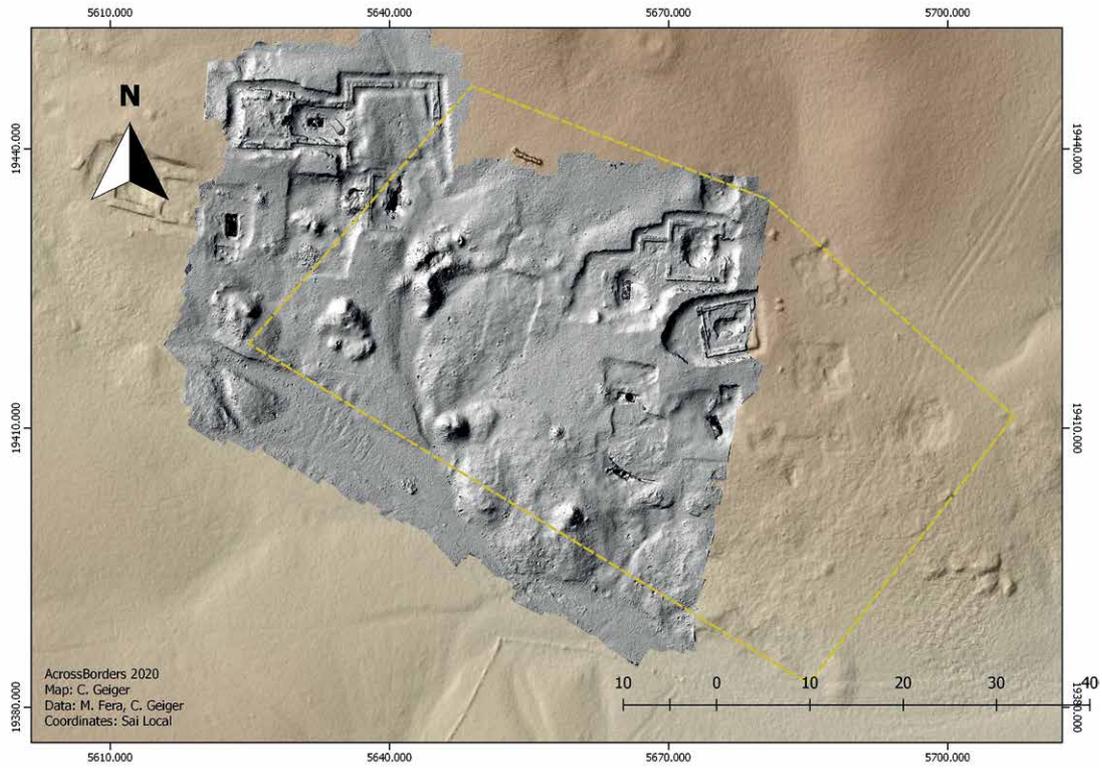


Figure 2.10: surface model of top surface of Area 2 in 2015 (illustration: C. Geiger, ©AcrossBorders).

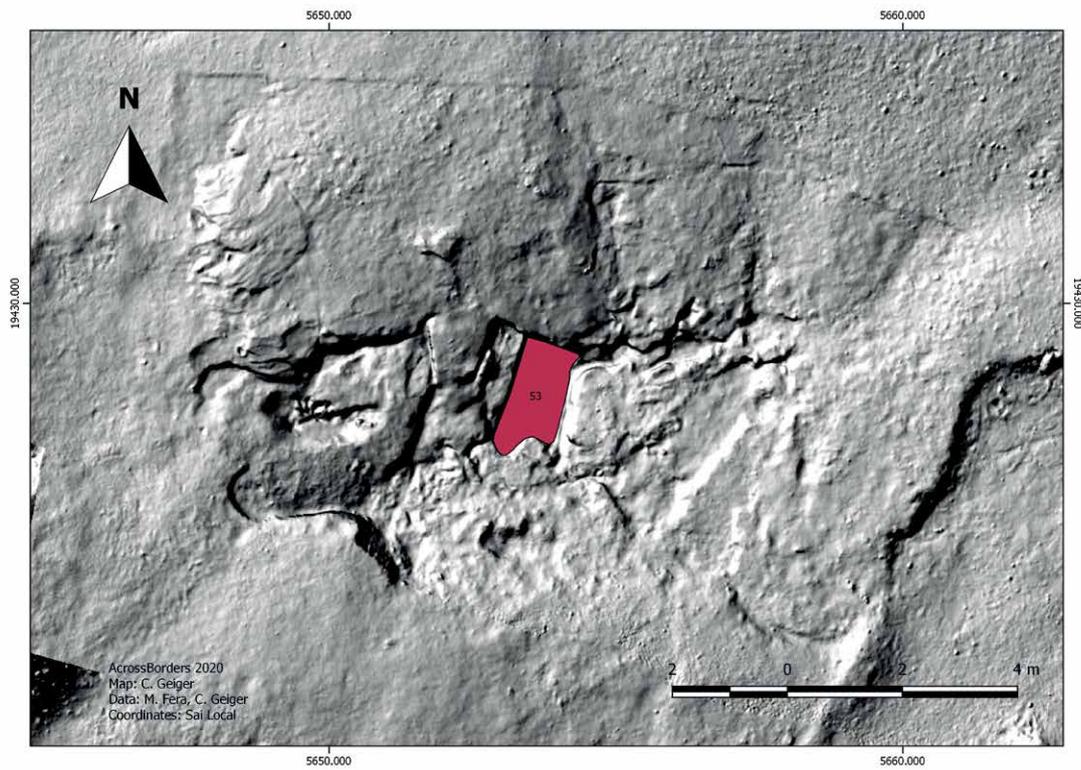


Figure 2.11: surface model with top surface of SU 053 in Area 2 in 2015, representing the shaft opening of a new tomb (illustration: C. Geiger, ©AcrossBorders).

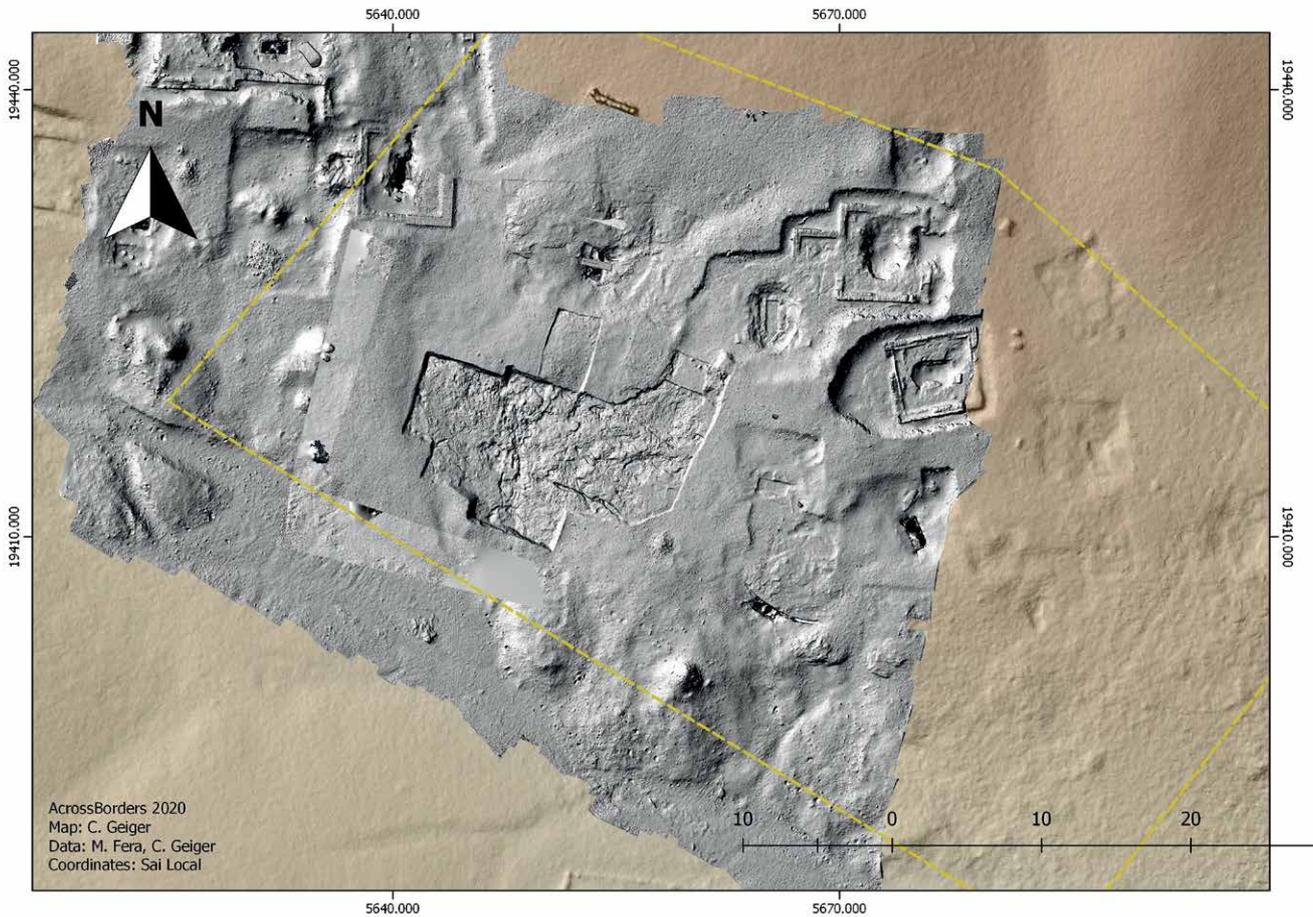


Figure 2.12: surface model of final status of work in Area 2 in 2016 (illustration: C. Geiger, ©AcrossBorders).

(SU 022 and SU 023), both of which were also interpreted as sandy backfilling of the French trench, mixed with some sherds and bones. No shaft or other monument was noted.

On 28 February 2015, work started in an area north of the French trench where several areas with eroded mudbricks were documented. The material was partly debris and mostly a sandy deposit above the bedrock or, respectively, a silty soil surface. The mudbricks could have come from the superstructures from surrounding tombs, or from a still unrecognised monument. Thus, cleaning of the various areas of the debris continued, with an artificial division into SUs (025-050) which represented mixed, disturbed surface levels. SUs 051 and 052 were both flood levels along the edge of a rocky outcrop, concealing a sandy layer which was labelled SU 053. This SU was the filling of the shaft opening of a new tomb, discovered on 3 March 2015.

This new structure, similar and in close proximity to the tombs excavated by the French mission (here Tombs 8 and 7), was labelled Tomb 26 (Budka 2015a, 47-50; 2017c; 2017d; 2018a; 2018b). This major find of the AcrossBorders project in SAC5 will be presented in detail in Chapters 3-8

and put into context in Chapters 9-12. The excavation of Tomb 26 lasted three seasons. In 2015, only the shaft and the entrance to a large chamber were cleared. In 2016, a modern disturbance and plundering of our backfilling of the shaft was noted and excavation in Feature 2, the large chamber, was carried out. 2017 resulted in the complete excavation of Tomb 26, including the discovery of intact burials and new chambers.

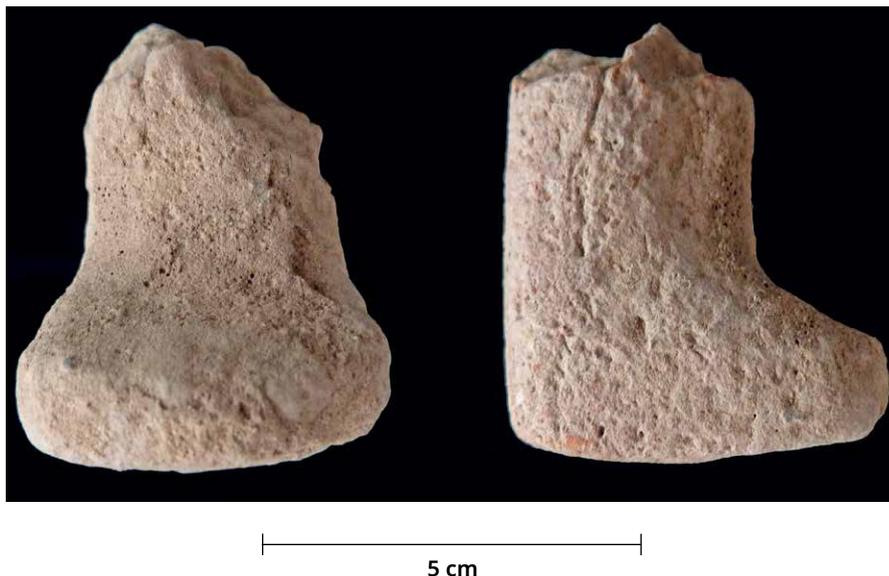
To contextualise Tomb 26 further, an extended surface cleaning of the surroundings of the monument, particularly towards the south and east of the French trench, was conducted in 2016. Although some surface finds were made, no other burials monuments were discovered, and the area marked on Fig. 2.12 can safely be regarded as void of tombs.

The surface material collected in Area 2 covers all periods attested for the use of SAC5 as a burial site: mid- to late 18th Dynasty, Ramesside, pre-Napatan and Napatan (see Thill 2007; Budka 2015a, 47). It must be noted that early 18th Dynasty material is missing. A detailed list of all finds can be found elsewhere (see the Appendix). The finds recovered also include some objects of Islamic date and

Figure 2.13: heart scarab
SAC5 268 from Area 2,
serpentinite (photo: C.
Geiger, ©AcrossBorders).



Figure 2.14: fired clay
shabti, foot part SAC5
312 (photo: M. Gundlach,
©AcrossBorders).



from sub-recent times – these are not associated with the use as a cemetery, but rather with plundering, excavation work and also accidental surface finds.

From the material outside Tomb 26, one heart scarab, found in SU 216 within the southern extension of the French trench, is especially remarkable (Fig. 2.13). **SAC5 268** is a well-preserved scarab made of serpentinite (46 × 32 × 20mm) with the characteristic inscription of the Book of the Dead, Chapter 30. The upper portion of the scarab is beetle shaped, divided into two segments (*thorax* and *elytra*). Rather than the head of the insect, a small forward-facing human head has been added. The head is probably male and wears a lappet wig which pushes the large ears forward. The eyes, nose and mouth are all present, but not particularly well

carved. The object finds parallels in SAC5 (see Minault-Gout and Thill 2012, pl. 104) and probably dates from the late 18th Dynasty (see also Chapter 7).

Another important find from Area 2 outside of Tomb 26 is **SAC5 312** from SU 231 (Fig. 2.14). This is the lower part of a ceramic/fired clay shabti, with only the lower legs and feet remaining (40 × 34 × 46mm). The base of the figure is flat (with a small depression) and without a plinth. Traces of red paint can be noted on the back surface. No inscription remains, though this may be due to the remaining portions.

This shabti was found together with a set of mixed pottery (SAC5 273/2016) from the 18th Dynasty, Ramesside and Napatan era. Similar clay shabtis are known from



Figure 2.15: rim sherd of glazed vessel SAC5 300 from Area 2, Islamic (photo: M. Gundlach, ©AcrossBorders).

other cemeteries in New Kingdom Nubia (*e.g.* Aniba, Steindorff 1937, 79-80, pls. 43.6-7) and from SAC5 (see Minault-Gout and Thill 2012, 175, 196, pls. 100). A dating to the Ramesside period is the most likely for SAC5 312; a mid-18th Dynasty date based on comparisons with the clay shabtis from Tomb 2 in SAC5 is also possible (Minault-Gout and Thill 2012, 407).

One of the latest finds, comparable to the Ottoman pipe from Area 1, is **SAC5 300**, a fragment of a glazed vessel, presumably of Islamic date (Fig. 2.15). SAC5 300 was found in SU 226, a sandy surface layer within the French trench with an assortment of pottery, bones and some beads. It is a very small rim sherd from a glazed ceramic vessel with a turquoise surface, most probably of a shallow dish with an angular rim (15 × 7mm, width 4mm). The edge of the rim has been painted black and the exposed core has been burnt along one side.

2.2.3 Area 3

Area 3 of AcrossBorders excavation in SAC5 was opened on 24 March 2016 to the west of Tomb 8 and to the east of Tomb 17 (Fig. 2.16). The surface was covered with modern debris, including plastic remains and metal. The main reason for the investigation of this area were remains of mudbrick in the eastern part. The surface was cleaned as SU 300, which was a sandy layer with mixed pottery and bones. The material in the western part of Area 3 had become very dense and wet, possibly due to the site having been used by the French mission in winter 2015 for reconstruction work on Tomb 8.

No *in situ* mudbrick remains were found; the fragments in the eastern part were all loose and may have come from surrounding structures associated with flood levels. The number of pottery sherds was low and only three faience ring beads (SAC5 282 and 290) were found in SU 300. In the western part, the natural ground was unearthened and yielded a number of irregular pits of unclear function. One very large double feature is almost oriented north-south in the manner of the Nile. These pits vary in dimensions, shape and depths and are possibly connected to the Pharaonic building activity at SAC5, maybe deriving from traces of scaffolding. Alternatively, an association with a prehistoric use of the site is conceivable. On Sai Island, Site

8-B-10C, dated to the late sixth and early fifth millennia BCE, an occupation area with several pits and post holes was found. Semi-subterranean huts with hearths and pits of Mesolithic date are also known from other sites such as Wadi El-Arab and El-Barga (see Garcea 2020, 60-61). Interestingly, in the courtyard of Tomb 11 very similar pits were observed directly within the mudbrick architecture of the structure (Fig. 2.17). This is difficult to explain with building activities and seems to point towards a pre-New Kingdom date of the pits which cannot be of a natural origin but are human made.

In the south-eastern corner of Area 3, a sandy pit revealed a dog skeleton which was most likely sub-recent in date (being buried in a sandy level, labelled as SU 301).

2.2.4 Summary

Overall, AcrossBorders' recent fieldwork in SAC5 confirmed that not all New Kingdom tombs have yet been located. The discovery of the new tomb, Tomb 26 in Area 2, identifies a cluster of similar structures in one part of the cemetery. However, the results in both Area 1 and 2 also indicate that there were definitely areas along the edge of the southern hill of the necropolis that remained empty of tombs throughout the time, including post-Pharaonic eras. Lastly, the surface cleaning in Area 3 as well as some surface finds from Area 1 (especially lithics but also ceramic) suggest a different use of the site in prehistoric times. This would need to be investigated on a larger scale. Future excavations in SAC5 will clearly contribute to a better understanding of a necropolis with a very rich and varied use-life and a distinct heyday during the 18th Dynasty.

2.3 Harris Matrix

The recording of AcrossBorders' excavation in accordance with stratigraphic units (SUs) resulted in the following distribution of SUs within the areas (Table 2.1). The numbering of the SUs was determined according to context/area and work progress – the lowest numbers are within Area 1 (SU 001-006), all SUs starting with 53 and in the 100s are located in Tomb 26; Area 2 is associated with SUs 020-052 and SUs 200*ff.* and Area 3 with SUs 300-301.

The only context of AcrossBorders excavations in SAC5 for which a Harris Matrix is relevant, is Tomb 26. As outlined above, Area 1 yielded no complex stratigraphy, merely surface cleaning of various sandy/muddy levels. The sequence of SUs 001, 002, 003 was already mentioned and SU 003 is located beside SUs 004 and 005 in Area 1B. SU 006 in Area 1A is directly below SU 001. No cleaning in Area 1C was carried out, except for the surface (SU 001). Area 2 was dominated by debris and surface levels and backfilling of cracks. No clear stratigraphy was preserved because of the high number of disturbances. In Area 3, only some superficial backfilling and surface debris was cleaned (SU 300 and SU 301).



Figure 2.16: map of location of Area 3 (illustration: C. Geiger, ©AcrossBorders).

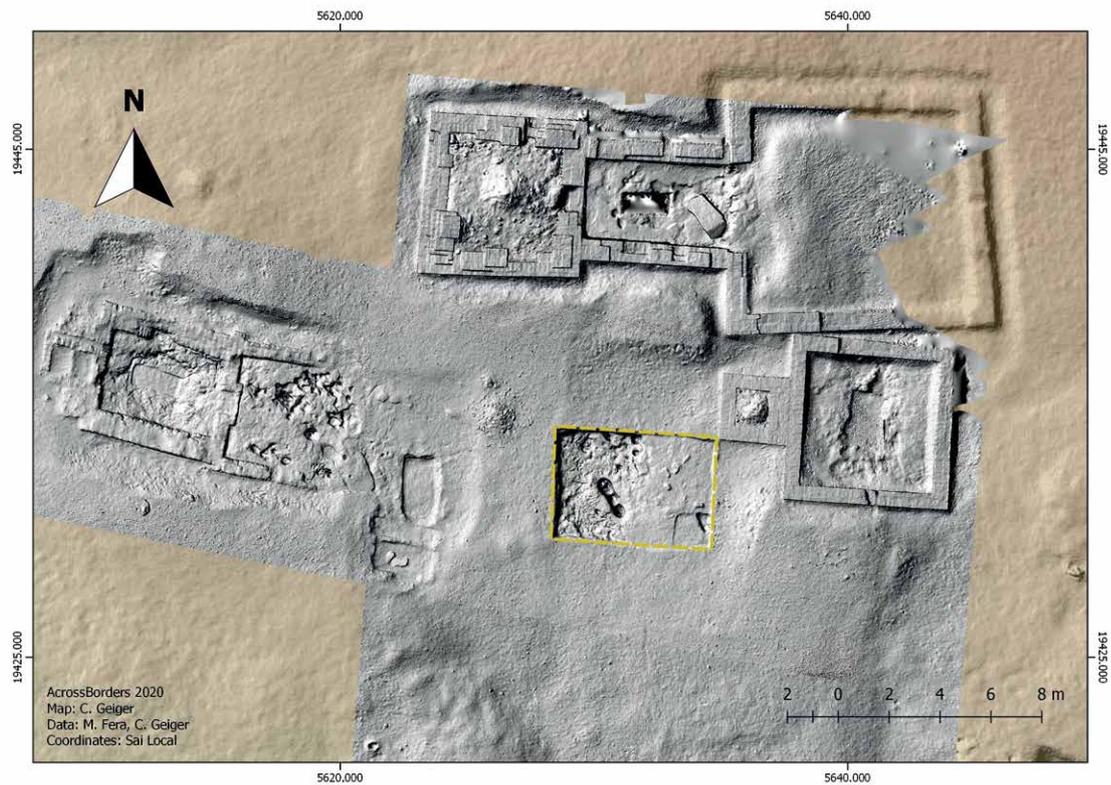


Figure 2.17: final status of cleaning in Area 3 and pits within the courtyard of Tomb 11 (illustration: C. Geiger, ©AcrossBorders).

SUs	Area	Year	Comment
001-006	1	2015	Surface
020-052	2	2015	Surface, debris, flood levels
053-071	2, Tomb 26	2015	Shaft (Feature 1)
072	2, Tomb 26	2015	Entrance (Feature 3)
073-075	2, Tomb 26	2015	Chamber (Feature 2), debris
100-102	2, Tomb 26	2016	Shaft and Feature 2, cleaning of modern plundering of refilling
103-142, 144-147	2, Tomb 26	2016	Chamber (Feature 2), flood levels
143	2, Tomb 26	2016	Trench (Feature 4), sandy filling of E part
150-151, 154-158	2, Tomb 26	2017	Trench (Feature 4), flood levels
159	2, Tomb 26	2017	Bottom of Trench and Chamber (Feature 6)
160-164	2, Tomb 26	2017	Chamber (Feature 6), flood levels
152-153	2, Tomb 26	2017	Chamber, NW corner (Feature 2)
170	2, Tomb 26	2017	Chamber (Feature 2), W wall, flood levels
175	2, Tomb 26	2017	Chamber (Feature 2), S wall, flood levels and Feature 7
190-191	2, Tomb 26	2017	Chamber (Feature 5), flood levels
192	2, Tomb 26	2017	Chamber (Feature 5), E wall, flood levels
200-236	Area 2	2016	Surface, debris, flood levels
300-301	Area 3	2016	Surface

Table 2.1: summary of SUs according to areas in SAC5, 2015-2017.

Figure 2.18: the Harris Matrix of the shaft of Tomb 26 (composed using the software Harris Matrix Composer).

2.3.1 Harris Matrix of levels in Tomb 26

Feature 1, the shaft of Tomb 26, was excavated in 2015. It yielded a sequence of flood levels and debris layers which can be illustrated as Harris Matrix (Fig. 2.18). Especially important were several layers with architectural stone fragments (see Chapter 3).

The entrance between the shaft and the first chamber, Feature 2, was labelled Feature 3. It was concealed by a filling layer labelled SU 072.

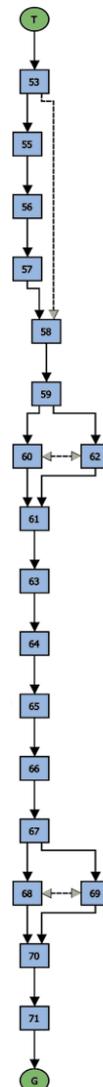
Excavation in Feature 2, the main chamber of Tomb 26, was carried out between 2015 and 2017. In 2015, the topmost debris in the entrance area was cleared. SU 073 was on top of SU 074; SU 075 was toward the north of SU 074. In 2016, SUs 100-102 were assigned to the cleaning of the modern plundering of Tomb 26 which occurred in 2015. The various flood levels and debris layers excavated in Feature 2 were documented as SUs 103-147. The subdivision of these SUs was mostly conducted for logistical reasons; a sequence of these working steps as Harris Matrix is therefore not adequate. A dating of the individual SUs was achieved by means of the ceramics (see Chapter 5). The SUs given in Table 2.2 are relevant for the human remains and their sequence (see Chapters 6 and 8).

In contrast to Feature 2, Features 4, 6 and 5 were found almost undisturbed, but completely re-filled with the remains of repeated flooding. The respective Harris Matrix per feature is therefore simple. The cleaning of Feature 4, a trench located in the north of Feature 2, yielded just a short sequence of flood levels (Table 2.3). The Harris Matrix within Feature 6 is also a simple arrangement of flood levels on top of the chamber floor (SU 160-164). During the excavation of Feature 5, a distinction of only two flood levels was made (SU 190 on top of SU 191), but the lowest flood level, SU 191, concealed a number of sub-phases (see below, Chapters 7 and 8).

2.4 C14 dates from Tomb 26

As an addition and potential correction of the archaeological dating of the remains in Tomb 26, five samples of charcoal were analysed by Beta Analytic in 2018 (see Budka 2018c). Four of these charcoal pieces were associated with skeletons/found close to bodies, one piece was found inside a ceramic vessel (in flowerpot SAC5 074/2017 within Feature 4). The information and results of these samples are summarised in Table 2.4.

Abbreviations for Egyptian kings used in Table 2.4: R. = Ramesses; Am. = Amenhotep; T. = Thutmose; Set. = Seti.



SU	Layer	Comment/location	Individual
103	Upper debris	In northeastern corner and along east wall; with much plaster from the walls	none
108	Mixed surface level/debris	Below SU 103; northeast corner	Ind. 11 and 12
110	Flood deposit	In northeastern corner, below SU 107 ≈ 108	Ind. 1, 2; upper bones of Ind. 3a
125	Flood deposit, sandy	Eastern and southern extension of SU 110	Ind. 4
126	Flood deposit, dense	Below SU 110	Ind. 4
128	Flood deposit, dense	Along west wall of F2	Ind. 4; Ind. 10
130	Flood deposit, loose	SW corner	Ind. 10
131	Flood deposit, dense	North of SU 130, west of SU 126	Ind. 3
136	Sandy filling/flood deposit	Northeast of SU 131	Ind. 5/6/7, Ind. 8a; Ind. 9a
137	Flood deposit, dense	Along N wall, below SU 134, above plaster and some rock debris	Ind. 13 and 14
135	Sandy filling/deposit	SW part, around Ind. 10	Ind. 10
138	Flood deposit, dense	SW part, along W wall	
139	Loose material	Around Ind. 10; partly chamber floor below	
142	Solid flood deposit, on top of chamber floor	Around Ind. 10; partly loose material <i>cf.</i> SU 139	

Table 2.2: Sequence of stratigraphical units in Feature 2 with relevant human remains.

SU	Layer	Comment/location	Individuals
150	Mixed filling; debris	West part of Feature 4	Commingled bones
151	Alluvial sediment/flood level	West part of Feature 4	Commingled bones
154	Alluvial sediment/flood level; some pebbles in lower part	West part of Feature 4; some plaster collapse from Feature 2; fragmented pottery	Commingled bones
155	Sandy, gritty sediment	West part of Feature 4; some plaster collapse from Feature 2; fragmented pottery, debris	Commingled bones
156	Sandy, gritty sediment	West part of Feature 4; some plaster collapse from Feature 2; fragmented pottery, debris	Commingled bones; Ind. 51
157	Sandy alluvial sediment	West part of Feature 4; fragmented pottery and bones; joints between SU 157 and 158	Commingled bones; Ind. 51; 60; 75, 77, 87
158	Alluvial sediment/flood level	Complete extension of Feature 4; fragmented pottery and bones; joints between SU 157 and 158	Commingled bones; Ind. 124

Table 2.3: sequence of stratigraphical units of Feature 4.

Sample	Find no.	Material	Loc.	SU	Cal. date BCE 95.4% proba-bility	Cal. date BCE 68.2% proba-bility	Relative dating	Comment
17	SAC5 076/2017	charcoal	F4	157	1297-1112	1260-1190	R. I-R. IX	from pottery vessel
18	SAC5 083/2017	charcoal	F4	157	1415-1260	1393-1334	Am. II-R. II	
24	SAC5 298/2017	charcoal	F5	191	1451-1291	1432-1385	T. III-R. I.	from Individual 297
25	SAC5 399/2017	charcoal	F5	191	1505-1396	1459-1416	Am. I-Am. III	between legs of Individual 324
26	SAC5 189/2017	charcoal	F6	163	1437-1288	1425-1381	T. III-Set. I.	from Individual 160

Table 2.4: summary of C14 samples from Tomb 26.

According to the report by Beta Analytic, calibration was performed using 2013 calibration databases (INTCAL 2013). The calibrated dates with information regarding the probability are illustrated in the following graphs provided by Beta Analytic (Figs. 2.19-23).

In general, the calibrated radiocarbon dates for the charcoal samples are within the reconstructed time span which was based on the archaeological assessment. Two aspects

seem especially noteworthy: 1) radiocarbon dates support the surmise that the burials from Features 5 and 6 are roughly contemporaneous to each other; 2) burials from Feature 4 are slightly later in date and a re-filling of the structure probably occurred in Ramesside times (see Chapter 8).

Calibration of Radiocarbon Age to Calendar Years

(High Probability Density Range Method (HPD): INTCAL13)

(Variables: d13C = -26.3 o/oo)

Laboratory number **Beta-488458**

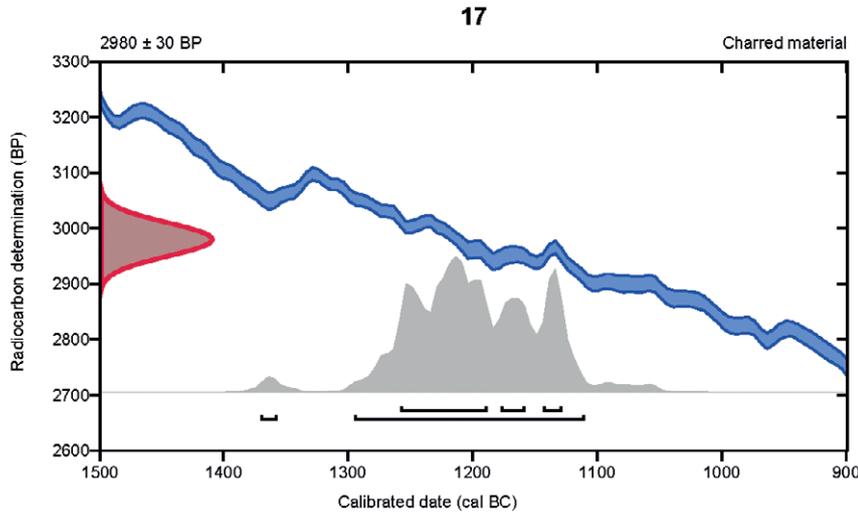
Conventional radiocarbon age **2980 ± 30 BP**

95.4% probability

(94.3%)	1297 - 1112 cal BC	(3246 - 3061 cal BP)
(1.1%)	1372 - 1359 cal BC	(3321 - 3308 cal BP)

68.2% probability

(46.6%)	1260 - 1190 cal BC	(3209 - 3139 cal BP)
(11.2%)	1179 - 1160 cal BC	(3128 - 3109 cal BP)
(10.4%)	1145 - 1130 cal BC	(3094 - 3079 cal BP)



Database used
INTCAL13

References

References to Probability Method

Bronk Ramsey, C. (2009). Bayesian analysis of radiocarbon dates. *Radiocarbon*, 51(1), 337-360.

References to Database INTCAL13

Reimer, et al., 2013, *Radiocarbon*55(4).

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Figure 2.19: calibrated C14 date of sample 17.

BetaCal 3.21

Calibration of Radiocarbon Age to Calendar Years

(High Probability Density Range Method (HPD): INTCAL13)

(Variables: $\delta^{13}C = -26.5$ o/oo)

Laboratory number **Beta-488459**

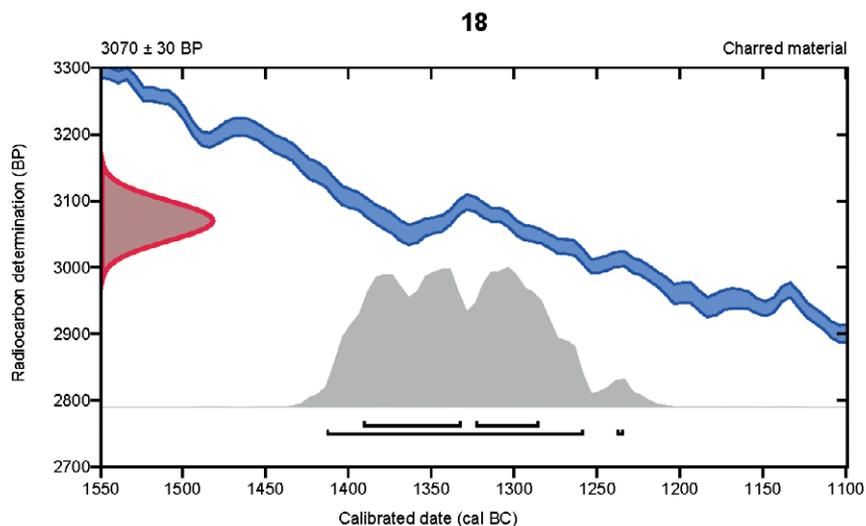
Conventional radiocarbon age **3070 ± 30 BP**

95.4% probability

(94.7%)	1415 - 1260 cal BC	(3364 - 3209 cal BP)
(0.7%)	1240 - 1236 cal BC	(3189 - 3185 cal BP)

68.2% probability

(41.2%)	1393 - 1334 cal BC	(3342 - 3283 cal BP)
(27%)	1325 - 1287 cal BC	(3274 - 3236 cal BP)



Database used
INTCAL13

References

References to Probability Method

Bronk Ramsey, C. (2009). Bayesian analysis of radiocarbon dates. *Radiocarbon*, 51(1), 337-360.

References to Database INTCAL13

Reimer, et al., 2013, *Radiocarbon*55(4).

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Figure 2.20: calibrated C14 date of sample 18.

BetaCal 3.21

Calibration of Radiocarbon Age to Calendar Years

(High Probability Density Range Method (HPD): INTCAL13)

(Variables: $\delta^{13}\text{C} = -26.2$ o/oo)

Laboratory number **Beta-488460**

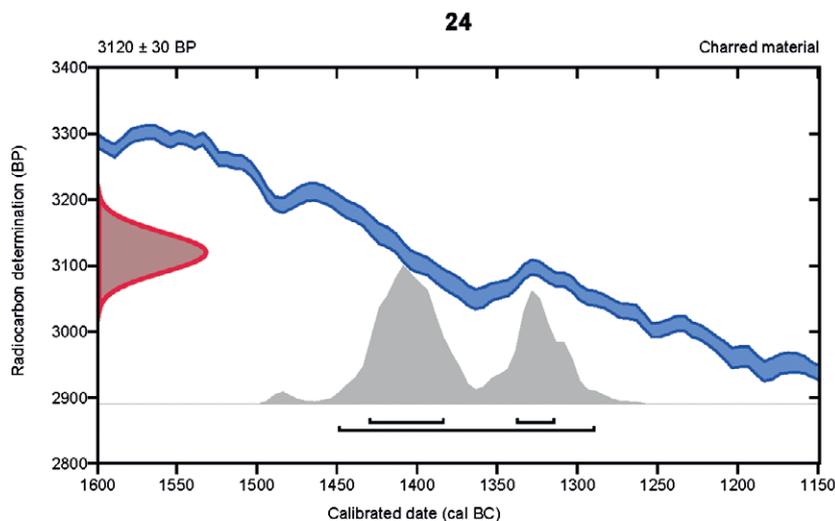
Conventional radiocarbon age **3120 ± 30 BP**

95.4% probability

(95.4%) 1451 - 1291 cal BC (3400 - 3240 cal BP)

68.2% probability

(47.5%) 1432 - 1385 cal BC (3381 - 3334 cal BP)
(20.7%) 1340 - 1316 cal BC (3289 - 3265 cal BP)



Database used
INTCAL13

References

References to Probability Method

Bronk Ramsey, C. (2009). Bayesian analysis of radiocarbon dates. *Radiocarbon*, 51(1), 337-360.

References to Database INTCAL13

Reimer, et al., 2013, *Radiocarbon*55(4).

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Figure 2.21: calibrated C14 date of sample 24.

BetaCal 3.21

Calibration of Radiocarbon Age to Calendar Years

(High Probability Density Range Method (HPD): INTCAL13)

(Variables: $\delta^{13}C = -26.8$ o/oo)

Laboratory number **Beta-488461**

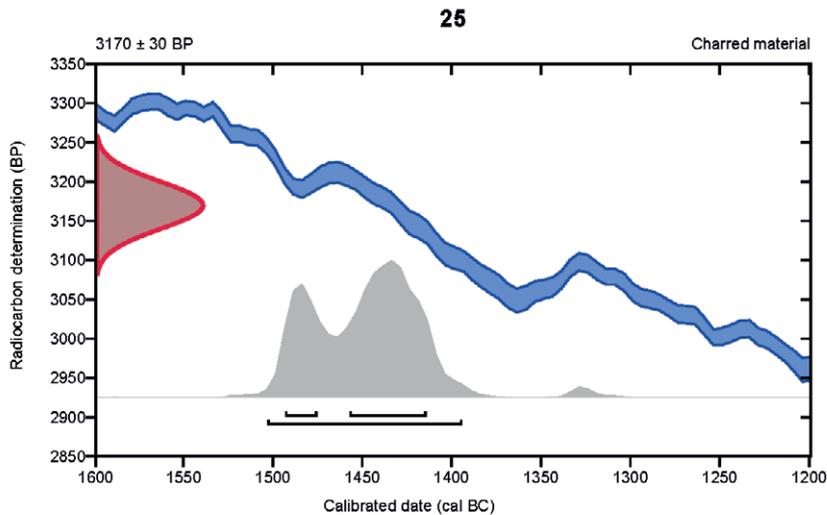
Conventional radiocarbon age **3170 ± 30 BP**

95.4% probability

(95.4%) 1505 - 1396 cal BC (3454 - 3345 cal BP)

68.2% probability

(49.3%) 1459 - 1416 cal BC (3408 - 3365 cal BP)
(18.9%) 1495 - 1477 cal BC (3444 - 3426 cal BP)



Database used
INTCAL13

References

References to Probability Method

Bronk Ramsey, C. (2009). Bayesian analysis of radiocarbon dates. *Radiocarbon*, 51(1), 337-360.

References to Database INTCAL13

Reimer, et.al., 2013, *Radiocarbon*55(4).

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Figure 2.22: calibrated C14 date of sample 25.

BetaCal 3.21

Calibration of Radiocarbon Age to Calendar Years

(High Probability Density Range Method (HPD): INTCAL13)

(Variables: d13C = -26.4 o/oo)

Laboratory number **Beta-488462**

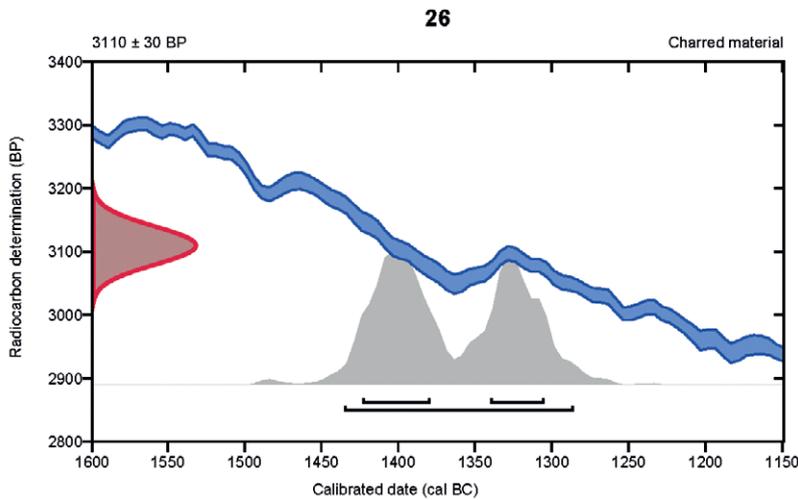
Conventional radiocarbon age **3110 ± 30 BP**

95.4% probability

(95.4%) 1437 - 1288 cal BC (3386 - 3237 cal BP)

68.2% probability

(39%) 1425 - 1381 cal BC (3374 - 3330 cal BP)
(29.2%) 1342 - 1307 cal BC (3291 - 3256 cal BP)



Database used
INTCAL13

References

References to Probability Method

Bronk Ramsey, C. (2009). Bayesian analysis of radiocarbon dates. Radiocarbon, 51(1), 337-360.

References to Database INTCAL13

Reimer, et al., 2013, Radiocarbon55(4).

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Figure 2.23: calibrated C14 date of sample 26.

2.5 Team members of the field seasons in SAC5

Funds for fieldwork in SAC5 from 2015 to 2017 were granted to Julia Budka by the European Research Council (ERC Starting Grant no. 313668) and the Austrian Science Fund (FWF START project Y615-G19). Thus, the list of team members working in SAC5 includes ERC as well as FWF collaborators. In all seasons, the inspector of NCAM was Huda Magzoub.

The 2015 mission in SAC5 was carried out from 14 February to 11 March 2015. Fieldwork with workmen was carried out under the supervision of Imad Shorbagi Mohamed Farah. The 2016 mission took place between 31 December 2015 and 12 March 2016. Fieldwork with workmen under the supervision of Hassan Dawd in SAC5 was conducted from 1 January to 4 January and from 13 February to 11 March. AcrossBorders welcomed Roa Abdelaziz as a trainee from NCAM (1 January 24 to January 2016).

The 2017 mission on Sai was carried out from 31 December 2016 to 10 March 2017. Fieldwork, partly supported by workmen under the supervision of Hassan Dawd, was conducted from 31 December to 3 March. A final study season to document finds from Tomb 26 took place between 30 September and 12 October 2017 in the National Museum of Sudan, Khartoum.

Julia Budka, Field director, Principal Investigator of ERC project AcrossBorders, Professor for Egyptian Archaeology, Ludwig-Maximilians-University Munich, Germany and FWF project, Austrian Academy of Sciences, Austria (2015-2017)

Vanessa Becker, Archaeologist, Ludwig-Maximilians-University Munich, Germany, FWF project field team (2016)

Martin Fera, Archaeologist, Austrian Academy of Sciences, Austria, ERC project member (2015-2016)

Cajetan Geiger, Archaeologist, Ludwig-Maximilians-University Munich, Germany, ERC project field team (2016-2017)

Kenneth Griffin, Egyptologist, Swansea University, Wales, United Kingdom, ERC project field team (2015), external expert (2016)

Meg Gundlach, Egyptologist, ERC project field team (2015), team member (2016-2017)

Patrizia Heindl, Egyptologist, Ludwig-Maximilians-University Munich, Germany (2017 study season)

Pierre Meyrat, Egyptologist, University of Geneva, Switzerland, ERC project field team (2015)

Daniela Penzer, Graduate student of Egyptology, Ludwig-Maximilians-University Munich, Germany, FWF project field team (2016), ERC team member (2017)

Lucia Sedlakova, Student of Ludwig-Maximilians-University Munich, Germany, volunteer for ERC project (2016), ERC team member (2017)

Anna Sonnberger, Physical Anthropologist, University of Vienna, Austria, FWF project field team (2015)

Andrea Stadlmayr, Physical Anthropologist, Natural History Museum Vienna, Austria, FWF project field team (2015-2017)

Oliver Frank Stephan, Egyptologist, Leipzig, Germany, FWF project field team (2015), ERC team member (2017)

Florence Thill, Egyptologist, University Charles-de-Gaulle Lille 3, France, external expert of ERC project (2015)

Marlies Wohlschlager, Physical Anthropologist, Austria, FWF project field team (2015-2017)

The architecture and building phases of Tomb 26

Julia Budka

3.1 General remarks

The Pharaonic style tombs of the New Kingdom in SAC5 documented by the French Mission on Sai are rock-cut shaft and chamber tombs with mudbrick chapels and mostly pyramidal superstructures. As such, they find close parallels at Soleb, Tombos and Aniba and also in Egypt, *e.g.* in the Theban necropolis (Minault-Gout and Thill 2012, *passim*; *cf.* also Spence 2019). For a small number of tombs in SAC5, the possibility of the absence of a superstructure was discussed – because of missing remains on site and taking into account parallels from Dra Abu el-Naga in Egypt (see Minault-Gout and Thill 2012, 7 with references).

The newly discovered Tomb 26 in Area 2 of AcrossBorders' excavation (see Chapter 2) falls into the category of a rock-cut tomb with superstructure. Its architecture will be described in the following, subdivided into the superstructure and subterranean part.

3.2 The superstructure

Only very few remains of mudbricks, documented as loose pieces scattered in the surroundings of Tomb 26, attest to a now lost superstructure which can tentatively be reconstructed as a courtyard/chapel and possibly a pyramid (Budka 2015b, 63, fig. 20). The reconstruction presented here in Fig. 3.1 is intended to show the final shape of Tomb 26, based on comparisons with contemporaneous tombs at SAC5 itself (Minault-Gout and Thill 2012, 9 and *passim*), as well as in Aniba (Steindorff 1937, pl. 45), Soleb (Schiff Giorgini 1971, 81, fig. 119) and Tombos (Smith 2003a, 138-143). A pyramidal superstructure seems very likely for Tomb 26 because a stone pyramidion was found in the shaft of Tomb 26. However, it must be stressed that this pyramidion of Hornakht (see Chapter 5.2.1.1) may derive either from an as yet undiscovered neighbouring tomb or from a building phase of Tomb 26 in Ramesside times (reign of Ramesses II). Remarkably, this find is the first attested pyramidion from Sai and thus from SAC5, comparable to discoveries in Soleb (Schiff Giorgini 1971, 82) and Aniba (Steindorff 1937, pl. 36).

The entrance to the rectangular chapel/enclosure of Tomb 26 was most likely located on the eastern side; the small mudbrick pyramid (if it existed in the early building phases) would have been on the western side. This hypothetical layout would then correspond to the one attested for the neighbouring tombs, Tombs 6 and 8 (Minault-Gout and Thill 2012, pl. 8) and proposed for Tombs 1 and 7 (see also Chapter 9). The opening to the shaft of Tomb 26 could have been either central within the courtyard (see Tombs 1 and 8) or slightly shifted towards the southern side of the enclosure (see Tombs 6 and 7).

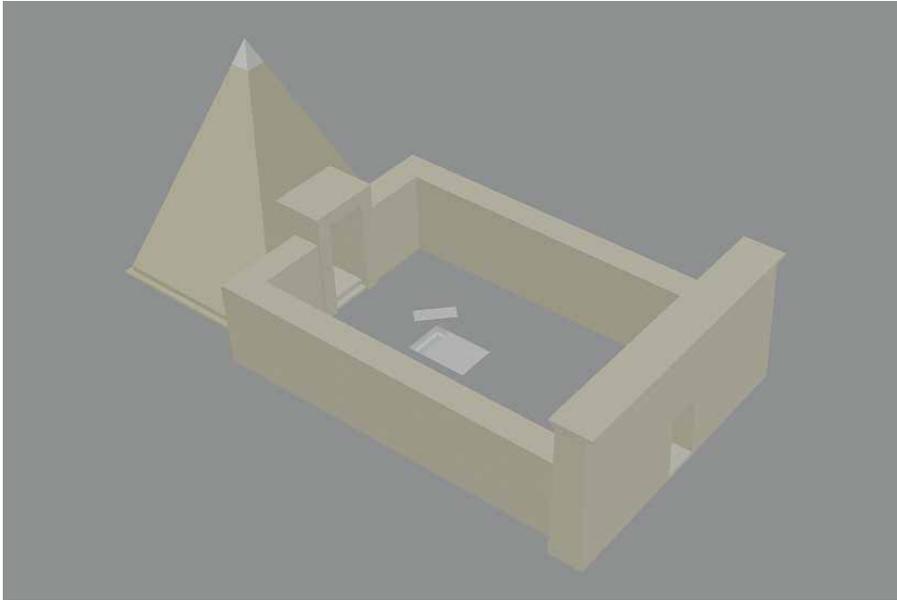


Figure 3.1:
reconstruction of the
superstructure of
Tomb 26 (illustration:
Ingrid Adenstedt,
©AcrossBorders).

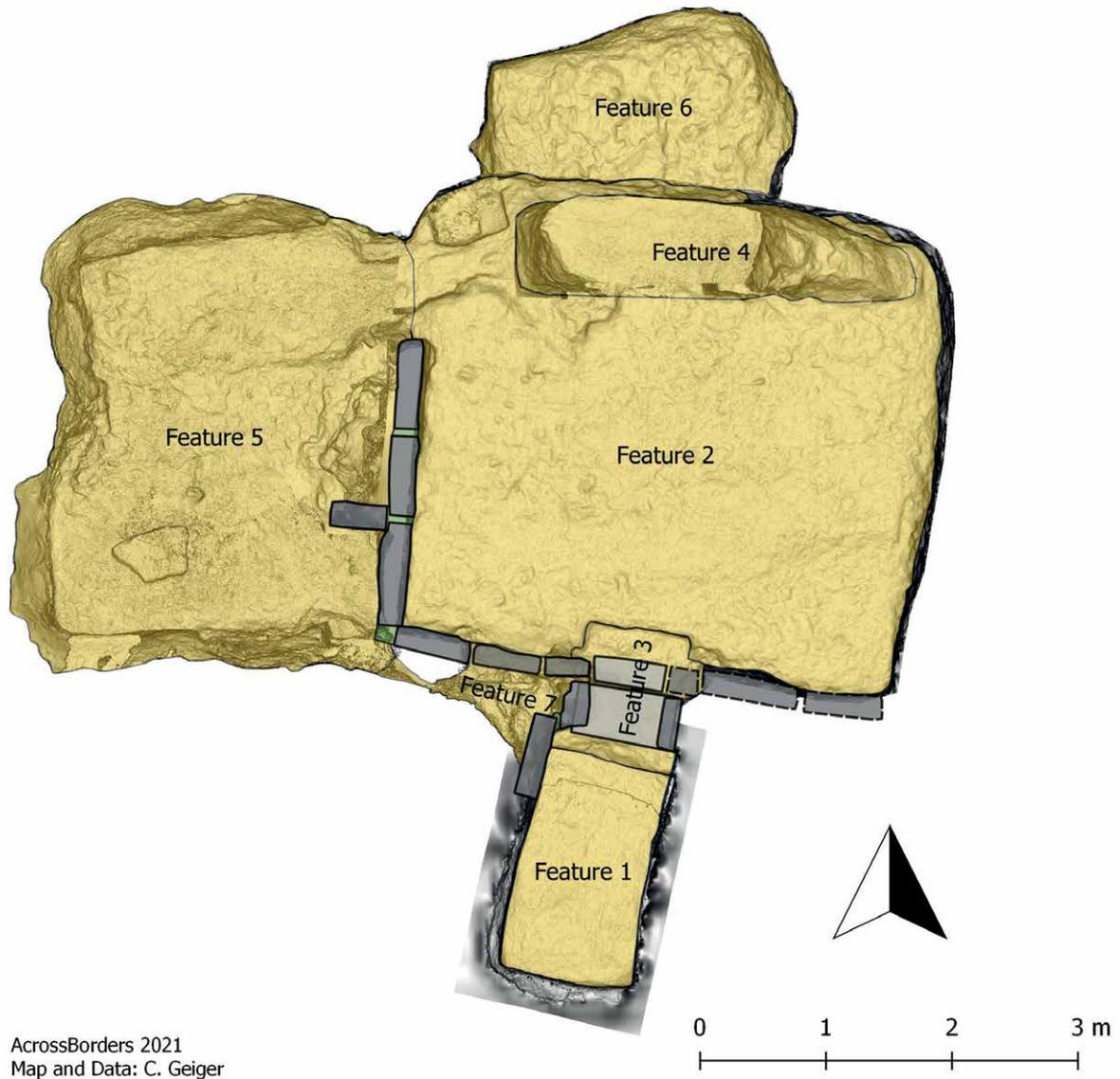
An unsolved problem relating to the lost superstructure of Tomb 26 is whether it showed an architectural development with diverse plans or just one layout. The latter is rather unlikely, given the marked evolution of the substructure (see below). I would like to suggest a two-phase development for the 18th Dynasty and a hypothetical modification in the Ramesside era. The initial stage of Tomb 26 could be described as Type 1 (an enclosure with a chapel, see Tomb 16 and the reconstructed superstructures of Tombs 2, 3, 5, 12 and 13 in the southeastern surroundings of Tomb 26) according to Minault-Gout and Thill (2012, 9-10, pl. 8). The second phase of the superstructure was probably an enlargement to Type 2 (enclosure, chapel and pyramid as attested for the Tombs 6 and 8 and proposed for Tombs 1 and 7). Type 3, a large superstructure with a chapel, court, pyramid and enclosure (see, e.g. Tombs 9, 11, 20 in SAC5) seems rather unlikely because of the mid-18th Dynasty date of Phase 2 of Tomb 26. Type 3 superstructures with brick pyramids were not constructed until the late 18th Dynasty and were especially common during the Ramesside period (Minault-Gout and Thill 2012, 12). Since the builder of Tomb 26 can be dated to the reign of Thutmose III, the existence of a pyramid in the earliest phase of Tomb 26 is somewhat problematic, making an architectural evolution as described here more likely. Within the diachronic development of SAC5, a simple enclosure (Type 1) or an enclosure with a chapel (Type 2 according to Minault-Gout and Thill 2012) were the most common types in the early/mid-18th Dynasty. Type 2 of the superstructures in SAC5 finds parallels in Aniba, where large tombs of the early New Kingdom did not have pyramids but rather mudbrick vaulted chambers (Spence 2019, 552, figs. 6a-b).

The question of the first appearance of pyramids as superstructures for tombs in Nubia has led to controversial discussions in the past years. In the case of SAC5, the dating by Minault-Gout and Thill (2012, 12) as being a late development starting in the mid/late 18th Dynasty is convincing. Likewise, the dating of such tombs with pyramidal superstructures not prior to the mid-18th Dynasty and most likely from the reign of Amenhotep III onwards, was proposed by several scholars for the larger region of Nubia (see most recently Näser 2017, 560). However, others, most prominently Bruce Williams (2018), have argued for an earlier date, which has as yet not been attested on Sai. It is therefore likely that there were differences between Lower and Upper Nubia. That the pyramid shape itself for non-royal tombs was “invented” in Thebes, Egypt, is the common opinion based on evidence from Dra Abu el-Naga (see Polz 2010, 350).

Overall, the lost superstructure of Tomb 26 is believed to have followed the local development on Sai showing a simple enclosure in its original 18th Dynasty design, possibly with an attached mudbrick pyramid at a later stage, and being modified into a larger pyramidal superstructure during the Ramesside use of the monument (see below, building phases).

3.3 The substructure

The general location of SAC5 can be ascribed to the sandstone layers present in this part of the island, allowing the excavation of deep tombs (*cf.* Chapter 1; see also the nearby New Kingdom sandstone quarries of which the southern limit is the northern edge of SAC5, Budka 2020, 43-44, pl. 17). Tomb 26 is one of the typical Egyptian tombs within SAC5 which show a substructure consisting of a shaft and chambers cut entirely into the rock. Overall, the



AcrossBorders 2021
Map and Data: C. Geiger

Figure 3.2: ground plan of the substructure of Tomb 26 (map: C. Geiger, ©AcrossBorders).

most typical layout of substructures of rock-cut Egyptian tombs in New Kingdom Nubia comprises two chambers opening either from the bottom of the shaft in different directions (see Spence 2019, 549) or as one large chamber with one subsidiary chamber attached to it (common at SAC5, see Minault-Gout and Thill 2012, pls. 25-26). The existence of single chamber tombs has also been attested, though Tomb 26 belongs to the rather rare group of burial monuments with multiple chambers. In SAC5, multiple chambers are well attested in the 18th Dynasty and the closest parallels can be found in neighbouring tombs – e.g. in Tomb 7 which shares several common features with Tomb 26 (Minault-Gout and Thill 2012, pls. 27a-b) or Tomb 8 with three chambers (Minault-Gout and Thill 2012,

pls. 28-29) and Tomb 9 with four chambers (Minault-Gout and Thill 2012, pls. 30-31).

The rock-cut substructure of Tomb 26 (Fig. 3.2) is accessed by a rectangular shaft (*approx.* 2.6 x 1.8m) with a depth of over 5.2m. This shaft (Feature 1) opens via an entrance (Feature 3) into a large burial chamber (Feature 2). On the west side of this chamber, a further chamber is added (Feature 5). On the northeastern side of Feature 2, a descent (Feature 4) leads into a lower burial chamber opening to the north (Feature 6) (see Fig. 3.3).

As will be outlined in the following, the ground plan described here is the result of several distinct building phases. The individual features are presented here in their chronological sequence.

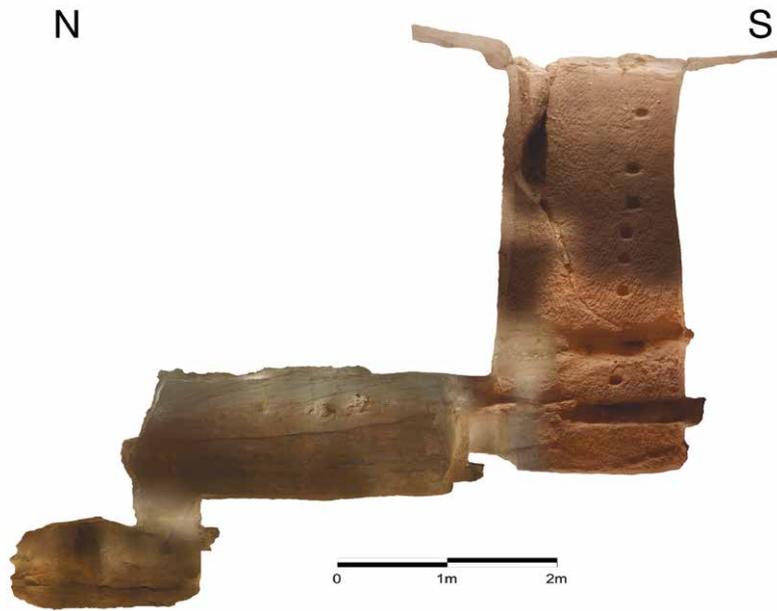


Figure 3.3: north-south section through Tomb 26 (illustration: C. Geiger, ©AcrossBorders).

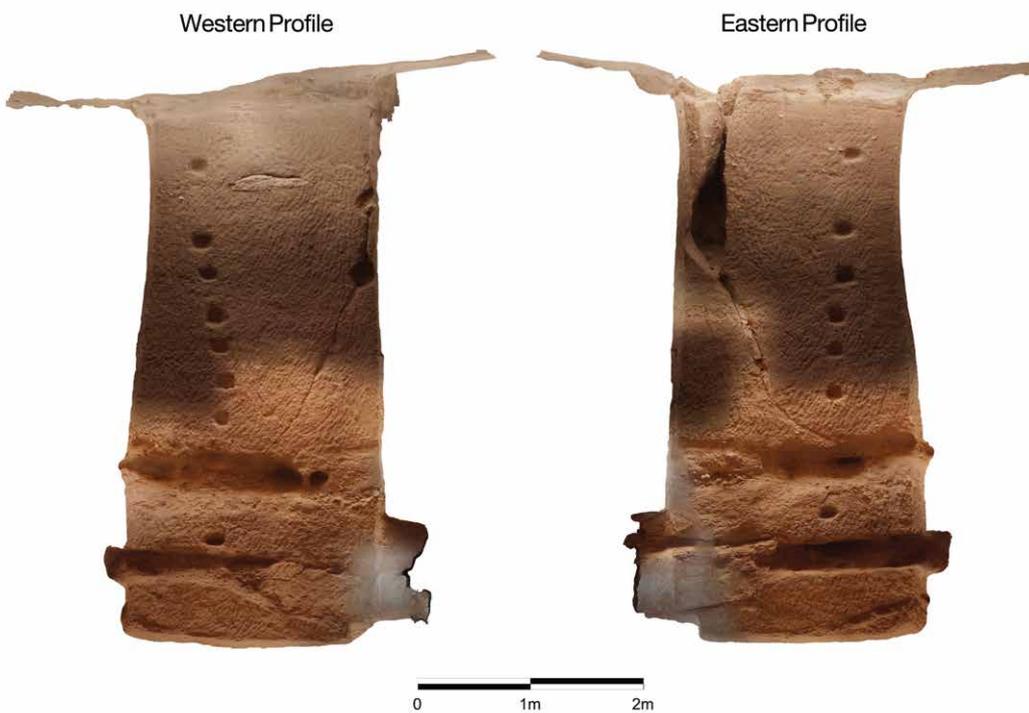


Figure 3.4: lateral sides of shaft of Tomb 26 showing the footholes (illustration: C. Geiger, ©AcrossBorders).

3.3.1 Feature 1

The rectangular shaft of Tomb 26 (approx. 2.6 × 1.8m) was labelled Feature 1. It is aligned north-south and 5.2m deep and thus comparable to neighbouring tombs of similar layout (e.g. Tomb 7, Minault-Gout and Thill 2012, pl. 27b with a shaft of 5.13m and pl. 29 for Tomb 8 with a shaft of 5.2m). A set of eight footholes was noted

on each of the lateral walls towards the south (eastern and western shaft face, Fig. 3.4) (Budka 2015a, 47). Such footholes are regularly found in New Kingdom tombs in SAC5 (see Minault-Gout and Thill 2012, passim for plans/sections of individual tombs, e.g. Tomb 7, pl. 27b which also has eight footholes).

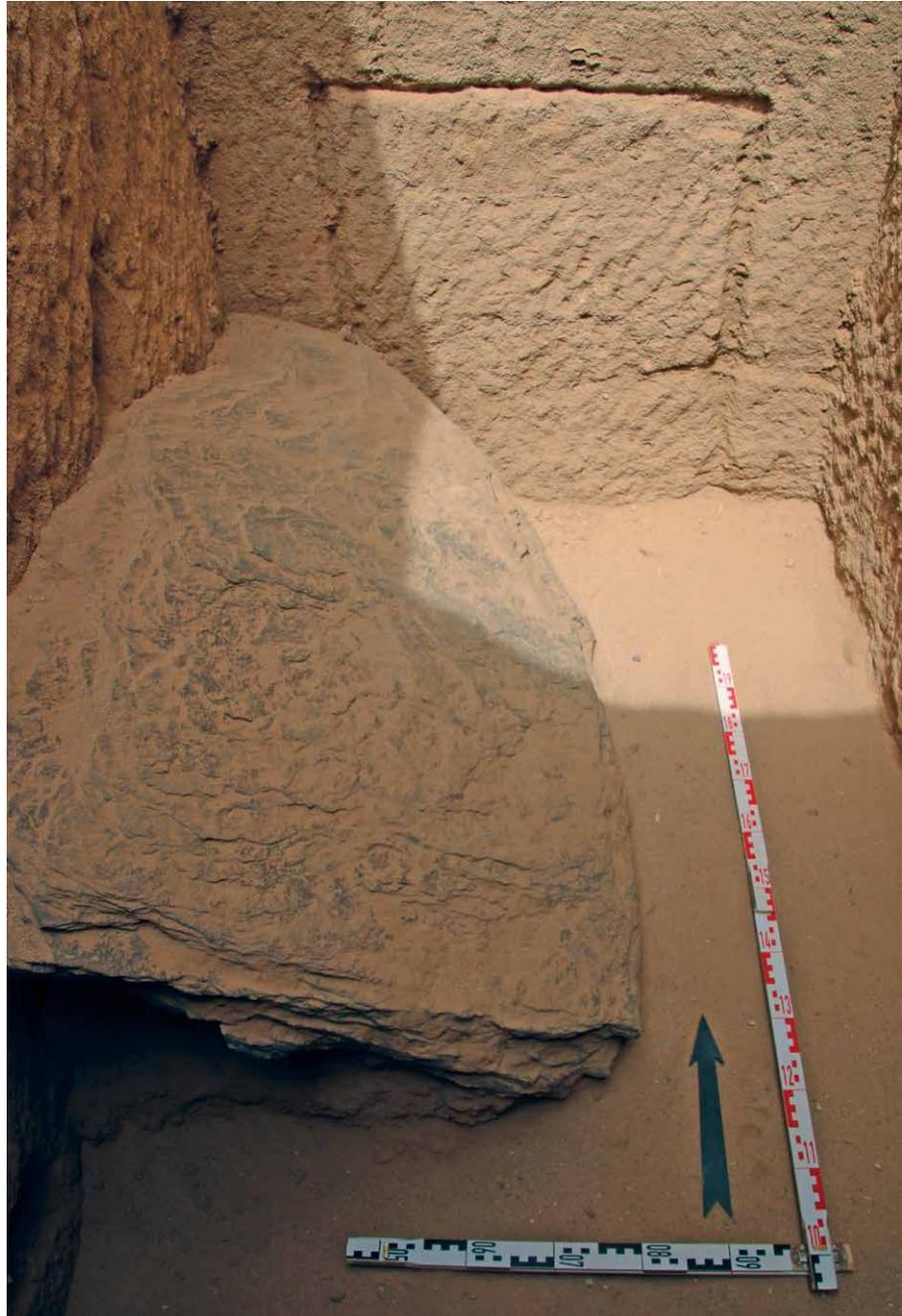


Figure 3.5: original roofing slab of shaft in its find position in Feature 1 of Tomb 26 (photo: J. Budka).

It was obvious that the upper part of the shaft had been refilled over a long period. It contained a good number of pottery sherds (ranging in date from the mid- to late 18th Dynasty, Late New Kingdom to Napatan times), small fragments of bones and several types of beads (see Chapter 5).

By removing the upper levels of windblown sand and faint traces of several flood levels, a layer with several stone fragments was reached at a depth of 2.5m, including an inscribed architectural block (SAC5 192/2015), together with many fragments of pottery vessels and a large quantity

of human bones. Clearly one of the original roofing slabs of the shaft, a large slab made of slate ($1.3 \times 0.76 \times 0.1$ m, Fig. 3.5) was set against the northwestern corner (Budka 2015a, 47, pl. 7). It is likely that it fell into the shaft during the last phase of plundering before Feature 1 was left open for some time. The ceramics from the debris layer (SUs 059–61) suggest as a date for this incident sometime after the early Napatan period (25th Dynasty). Comparable roofing slabs are well attested at SAC5 (see, e.g., Tomb 9, Minault-Gout and Thill 2012, pl. 14) and also at Soleb, where they were still regularly documented *in situ*



Figure 3.6: “dummy entrance” on northern side of Feature 1, depth of *approx.* 2.8m. (photo: J. Budka).

(e.g. Schiff Giorgini 1971, T4, 113, fig. 148; T8, 146, fig. 222, T9, 150, fig. 223, T10, 154, fig. 237, T15, 185, fig. 321, T20, 225, fig. 430, T21, 230, fig. 445).

Interestingly, on this level of Feature 1 intentional scratching on the northern narrow side was observed (see Budka 2015a, 47, pl. 7; Fig. 3.6). This rectangular scratching resembles an intended entrance/opening towards the north, the dimensions being 0.62m in width and 0.92m in height. The SUs covering the filling of this “dummy entrance” (SUs 59–61 and 63) are rich in stone

fragments (see Chapter 5), supporting the interpretation that this part of the shaft was left open for some time, in all probability because of a new burial phase/planning, allowing architectural pieces from the superstructure to fall in. Furthermore, the location of the “dummy entrance” is not coincidental. Its base line corresponds with the seventh foothole on the east and west sides of the shaft and is followed by a pronounced undercutting of the shaft on the east, south and west sides. This undercutting is due to a different layer of bedrock, the quality of which does

not allow as precise stone cutting as on the other levels of Feature 1 (a marl shell within the sandstone layers, see Chapter 4). It can be assumed that the “dummy entrance” was abandoned when the solidness of the rock was realised. Although it is possible that this was done during the first phase of excavating Feature 1 in the 18th Dynasty (see the matching measurements compared to the real entrance, Feature 3), the shallow height marked by the “dummy entrance” points to a later development (see Chapter 3.4.3). The final depth of the shaft of Tomb 26 closely corresponds to the measurements of the shafts in neighbouring tombs such as Tombs 7 and 8 and a shallower depth would be unusual.

Below the undercutting in Feature 1, the eight pairs of footholes on the eastern and western sides were discovered (see Fig. 3.3). At a height of 3.7m, a further layer of debris with inscribed stone blocks was documented, including the above-mentioned pyramidion of Hornakht (SU 070, see Chapter 5). The last filling layer of Feature 1 concealed the base of the shaft (5.2m) and the entrance into a chamber towards the north (Features 3 and 2).

A significant architectural feature of the bottom part of the shaft of Tomb 26 is that the lateral sides are partly lined with worked stones. Both the eastern and western side contain a large stone block which was plastered and perfectly aligned with the rock-cut shaft (see Chapter 4, Fig. 4.11). This kind of lining of the natural rock facade with stone blocks was also used in Feature 2 (see below). It is probable that the quality of the bedrock was the main reason for this measurement (see Chapter 4 for details of the geology of Tomb 26). On the western side of Feature 1, one nicely worked stone measuring 0.65m in length, 0.35m in height and *approx.* 0.15m in depth) was completely covered with plaster/mortar. It separates the shaft from a niche on the western side, Feature 7 (see Chapter 3.3.7).

Overall, the shaft of Tomb 26 finds several parallels in SAC5 and corresponds to the standard measurements attested in other tombs. This also includes the presence of footholes and of roofing blocks. The lining of the bottom part of the shaft with plastered and worked stones is, however, unusual and so far unique in SAC5. The described “dummy entrance” at a higher level than the real entrance, but directly above and with exactly the same measurements (Fig. 3.7), is also unparalleled (at least in published records).

3.3.2 Feature 2

A substantial rock-cut room is connected to the shaft by a doorway (Feature 3) and opens to the north (Feature 2). It is almost square in shape, measuring 3.96 × 3.89m, with a height of *approx.* 1.20m. The level of the floor is slightly lower than the base of Feature 1, the shaft. Feature 2 is hollowed out in a marl shell that follows the sandstone – making excavation an easy task, but also resulting in



Figure 3.7: view of the complete northern face of Feature 1 of Tomb 26 (illustration: C. Geiger, ©AcrossBorders).

very irregular side walls. Neither the ceiling nor the floor of the chamber is completely level, but rather they follow the geology of the rock (see Chapter 4). In 2015, the chamber was found partly filled with remains of flood levels, between 20 and 40cm in height throughout the chamber (Fig. 3.8). Heaps of looser debris and sand were documented in all four corners and especially along the north wall. In all corners, particularly the northwestern one, large fragments of the collapsed white plaster/mortar from the side walls were found.

Apart from this plastering of the walls, no decoration or drawings were observed in Feature 2.

All four sides of the chamber were originally plastered, with the southern and western walls created by worked stones lined up against the irregular rock. This difference in construction is evident in the southeastern corner where the plastered southern wall meets the irregular rock cut surface of the eastern façade of the chamber (Fig. 3.9).



Figure 3.8: appearance of Feature 2 of Tomb 26 at its discovery in 2015; view towards northwestern corner (photo: J. Budka).

These stone blocks on the southern and western walls were perfectly concealed as rock-cut lateral sides (Fig. 3.10) – only in areas with collapsed blocks such as those to the west side of the entrance (Fig. 3.11) and in the northwestern corner of Feature 2 was this elaborate building technique comparable to the treatment of the lower part of Feature 1, the shaft, noticeable (Budka 2016a; 2017c). These worked stones are linked to the first building phase of Tomb 26 and the cutting of Feature 5, the western chamber (see below).

Two samples from the white wall mortar of Feature 2 were analysed as thin sections by optical microscopy (sample nos. SM 13 and SM14, see Budka 2020, 271). Petrographic analysis evidenced that the quality of the mortar from Tomb 26 is comparable to

contemporaneous samples from the New Kingdom town site. The mortars are of good quality and were fabricated with non-hydraulic lime (Budka 2020, 273, pl. 128).

Overall, the layout of Feature 2 is similar to other main chambers in 18th Dynasty tombs in SAC5. Also, its measurements are typical for this elite cemetery. Tomb 7, which has a comparable layout, shows slightly smaller chambers (see Minault-Gout and Thill 2012, pls. 27a-b). In terms of technique, other tombs in SAC5 have been hollowed out similarly from softer layers within the local sandstone (see, *e.g.*, Tomb 3, Minault-Gout and Thill 2012, 30 as well as Tomb 7, Minault-Gout and Thill 2012, 48). Except for Tomb 7, none of the other tombs in SAC5 exhibits similarly built walls as lateral sides.



Figure 3.9: southeastern corner of Feature 2 of Tomb 26; note the thick plaster on the southern wall concealing set stones (photo: J. Budka).



Figure 3.10: stone lined western wall of Feature 2 (photo: J. Budka).

3.3.3 Feature 3

In general, entrances to subterranean chambers in rock-cut tombs such as Tomb 26 were blocked by brick or stone (*cf.* Spence 2019, 550; for a blocking in SAC5 between shaft and chamber see Tomb 7, Minault-Gout and Thill 2012, pl. 27b top). None of the blocking has survived between the shaft and Feature 2, but the doorway into the chamber was created by stone blocks. This built-in entrance into the rock-cut subterranean part was labelled Feature 3 (Fig. 3.12). The technique is the same as the lining with stone blocks in the lower part of the shaft and also in Feature 2. Feature 3 comprises a step leading up from the shaft, a threshold, door jambs and another step into Feature 2 and a lower very shallow threshold. The main threshold, the jambs and the step into Feature 2 are all set stones plastered

in white. Part of the right doorjamb is missing. The step within Feature 1, the architrave and the lower threshold within Feature 2 are cut out from the bedrock. The worked stone used as step into Feature 2 was plastered at its sides and put there at the same time as the lining blocks of Feature 2. At a later time, it was moved from its original position and still functioned as a step (Fig. 3.13).

Overall, the entrance of Tomb 26 between the shaft and the chamber (Fig. 3.14) is similar to other openings in SAC5 in layout, dimensions and location. However, the building technique with the worked and plastered stones is unusual. The complete southern side of Feature 2 including the entrance, Feature 3 as the opening to the shaft, was built with set stones and plastered.



Figure 3.11: collapsed stone from southern wall of Feature 2, west of the entrance (photo: J. Budka).



Figure 3.12: entrance into Feature 2, view from the shaft in 2015 (photo: J. Budka).



Figure 3.13: worked stone installed as step into Feature 2 (photo: J. Budka).



Figure 3.14: view of entrance from Feature 2 (photo: J. Budka).



Figure 3.15: view towards the original entrance of Feature 5a from the interior of the chamber (photo: J. Budka).

3.3.4 Feature 5

The western chamber, Feature 5, was accessed from Feature 2, the main chamber. Its shape and size (*approx.* 3.20 × 2.60m) as shown on the ground plan (Fig. 3.2) is the result of several building processes and the execution of two small annexes, labelled Features 5a and 5b, which were then joined as one chamber.

The original entrance to Feature 5a, the first southern annexe added to Feature 2 on its western side, lay in the southwestern corner of the main chamber. From the outside, it is completely concealed by one of the large worked stones forming the western wall of Feature 2 (see above). The original shape of the entrance is traceable by means of a vertical door jamb installed on the inner northern lateral side of the doorway (Fig. 3.15). This worked stone block (0.38 × 0.68 × 0.18m) was put at a right angle to the stone wall separating Feature 5a from Feature 2. Its southern and western faces are free, the northern face was set against the natural rock, emphasising the function of this block as the right door jamb. Its southern counterpart is only traceable by means of remains of plaster and a negative in the southern wall (see Fig. 3.15). The original entrance space between these two door jambs was filled with a deposit of ceramic vessels after the first burials and prior to closing the chamber (see below, Chapter 3.4.1 and Chapter 5 for the vessels).

Directly adjacent to the northern doorjamb, some remains of plaster were found close to the chamber floor, indicating that Feature 5a was originally plastered on its sides, possibly along with parts of the floor. The original southern annexe Feature 5a (Fig. 3.16) was of an almost rectangular shape measuring 1.25 × 2.60m. The ceiling was carefully flattened in an area of 2.50 × 1.30m with clear traces of masonry (see 3.4.1). Small annexes to main chambers such as Feature 5a are common in SAC5 and the example of Tomb 26 compares well to an annexe of Tomb 1 (see Chapter 9 for more details).

Sometime after the execution of Feature 5a, the cutting of a northern annexe from Feature 2 towards the west was started (see below, Chapter 3.4.3). In the northwestern corner of Feature 2 the entrance to this chamber, Feature 5b, was found as once having been concealed by a plastered stone wall as part of the western wall of Feature 2. The former blocking stone was found within Feature 2, placed in the northwestern corner, and had probably been moved from the wall sometime after the New Kingdom (Fig. 3.17, see Chapter 8).

The entrance to Feature 5b has similar dimensions to Feature 3 – a small threshold below the displaced stone block (negative: 0.61m in height and 0.80m in width) is 0.60m in width and the maximum height of the entrance

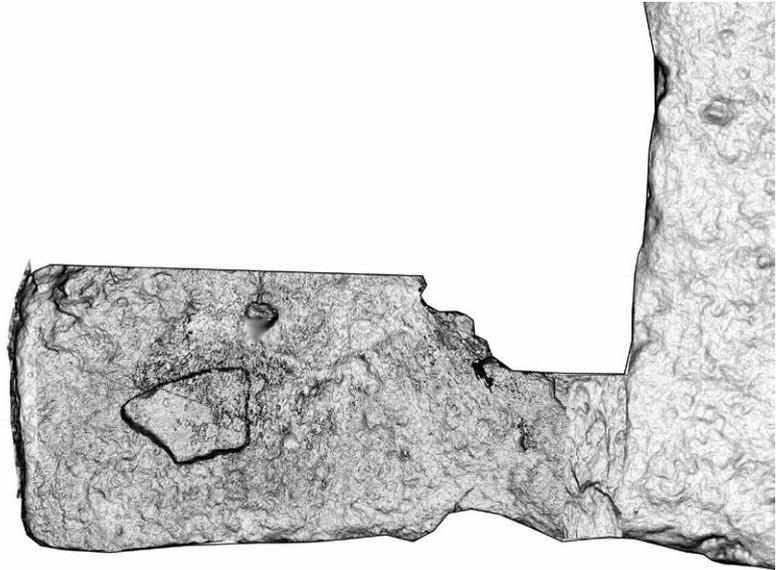


Figure 3.16: reconstructed original outline of Feature 5a (illustration: C. Geiger, ©AcrossBorders).



Figure 3.17: the northwestern corner of Feature 2 with the partly collapsed entrance into Feature 5b (photo: J. Budka).

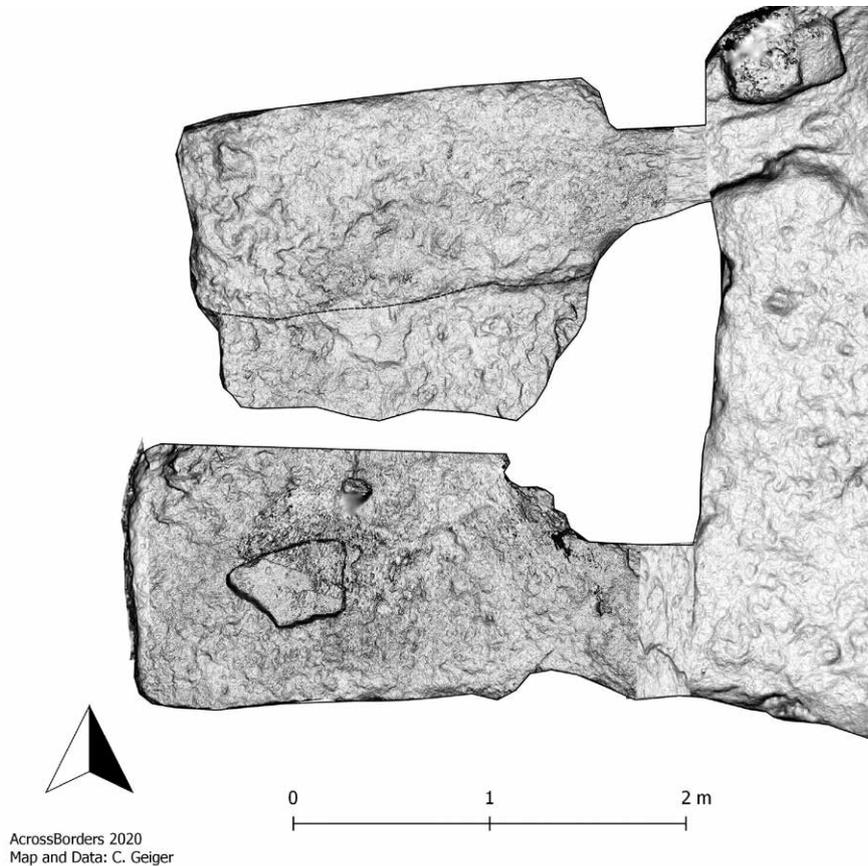


Figure 3.18: reconstructed original outline of Feature 5b (illustration: C. Geiger, ©AcrossBorders).

is 0.90m. The northern side of the entrance was cut from the natural rock; on the southern side, a worked stone is preserved. Above the set stone, an unworked fragment of a rock was used to fill the gap between the stone and the ceiling. All of this was once concealed by plaster/mortar. Unlike Feature 3 and the entrance to Feature 5a, this doorway into the new chamber Feature 5b did not have worked blocks functioning as doorjambs.

As is evident from both the floor level and the cutting traces on the ceiling, Feature 5b was probably originally designed as a narrow, rectangular chamber of roughly $0.9 \times 2.45\text{m}$. Its present shape and appearance suggest that during the cutting, the stone material towards the south was found as too fragile to create a vertical chamber wall. It was obviously decided to extend the annexe towards the south, measuring $1.30 \times 2.45\text{m}$ on the top and $1.68 \times 2.63\text{m}$ at floor level (Fig. 3.18).

Due to the friable character of the soft stone in this geological layer, the northern wall of Feature 5a was consequently removed. This building step resulted in the fusion of Features 5b and 5a into one single western chamber, Feature 5. The two working phases are evident not only from the different floor levels and the cutting marks on the ceiling, but also from the irregular stone remains which were left standing in the central part of

Feature 5, especially on the eastern side, just north of the built entrance of the original chamber, Feature 5a.

In its final shape, Feature 5 is rectangular, oriented north-south and aligned next to Feature 2. The measurements of Feature 5 are roughly 3.15–3.20m north-south and 2.6m east-west with a height of 0.85–0.87m. The level of its floor is slightly higher than the one in Feature 2 and comparable in terms of regularity. Feature 5 is separated on its east side by a stone wall built of four rectangular blocks, representing the western wall of Feature 2 (see above). These blocks are *approx.* 0.82m in width and *approx.* 0.62m in height; their depth varies between 0.16–0.20m. They were plastered on both lateral sides.

The ceiling of Feature 5 shows some irregularities, corresponding to the two-step building phases (see below, Chapter 3.4.1). Similar to Feature 2, some plaster fragments were found in the corners of Feature 5, indicating that the low quality rock was once concealed, especially within the corners and on the side walls (see also the plastering of both sides of the lining blocks from the east wall).

Feature 5 was used as burial chamber during the 18th Dynasty (see Chapters 5 and 7) and yielded a number of burials (eleven adults plus one infant and one foetus; for details see below, Chapter 6), including the first owners of Tomb 26.

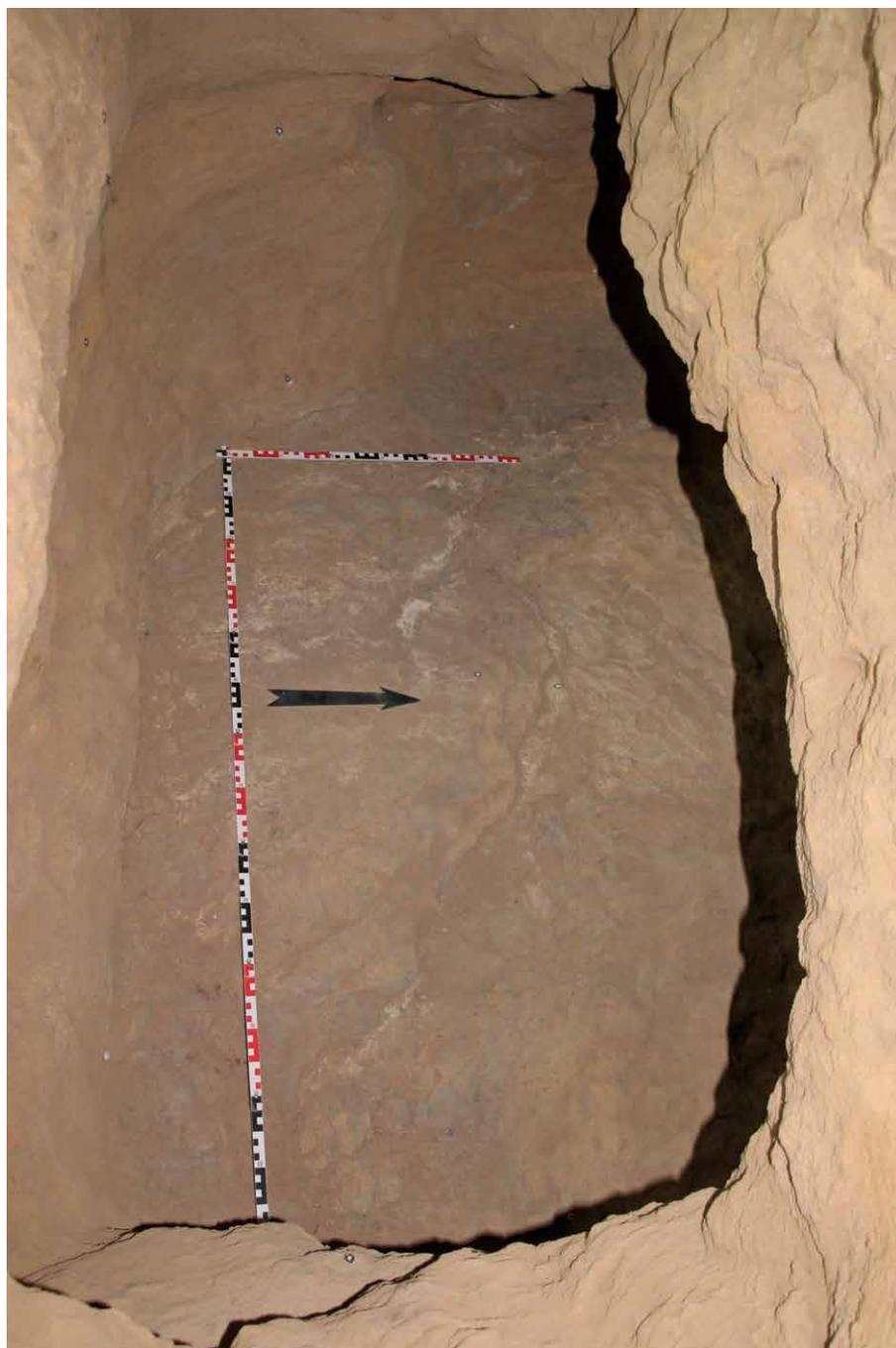


Figure 3.19: status of Feature 4 after excavation (photo: J. Budka).

The final layout of Feature 5 parallel to the main chamber, Feature 2, and only separated by a stone wall, is unusual for the subterranean layout of the tombs in SAC5. It finds only one parallel, and this is with Tomb 7 (Minault-Gout and Thill 2012, pls. 27a-b). The proportions of these two chambers are similar to the structure in Tomb 26 and the floor level of the western chamber is slightly higher. A stone wall separates the two burial chambers and the entrance is in the southern part, as with the original annexe Feature 5a in Tomb 26.

3.3.5 Feature 4

Along the north wall of Feature 2, a trench representing a descent into a lower burial chamber is located (Feature 4, 1.90 × 0.70 × 1.40m) which was cleaned in 2017 and yielded a number of burials (see Chapter 6). Interestingly, Feature 4 is not located on the central axis of Feature 2 in line with the entrance, but rather shifted towards the east (Fig. 3.2). This was interpreted as relevant for the building phases (see below, Chapter 3.4.1). In the western part, Feature 4 is



Figure 3.20: eastern part of Feature 6 (photo: J. Budka).

steep with almost vertical sidewalls; the eastern side is less pronounced and the descent slopes from the northwestern corner of Feature 2 (Fig. 3.19). Here, the depth of 1.20m is also considerably less than in the western part. It is obvious that Feature 4 was used as a descent from the eastern side.

Within the excavated tombs of SAC5, Feature 4 as a descent to the original burial chamber has no exact parallel. The only comparable layout can be found in Tomb 6: here, a descent from the main chamber leads into a lower room. However, unlike in Tomb 26, this assembly is situated in the southern part of the chamber, directly behind the entrance (Minault-Gout and Thill 2012, pl. 26).

3.3.6 Feature 6

At the bottom of Feature 4, a burial chamber (Feature 6) opens towards the north (see Figs. 3.2-3.3). It was found sealed with flood deposits and had obviously remained almost undisturbed since ancient times, contrasting with most other parts of Tomb 26. Feature 6 (2.13 × 1.35m), which is less than 1m in height (ranging between 0.93–0.95m, with some sections up to 1.05m), held two painted wooden coffins of which only traces survived in the flood sediments as well as rich burial equipment of Egyptian style (see Chapter 5). According to the inscribed finds and the human remains, the double burial in Feature 6 can be identified as the overseer of goldworkers Khnummose (main burial along the north wall) and an anonymous female, presumably his wife (second burial in the entrance area).

In its excavated status, Feature 6 has a slightly trapezoid shape with an irregular floor. There are two small niches in the northern and eastern walls (Fig. 3.20).

The location and layout of Feature 6 find no parallel in the other excavated tombs of SAC5. Within the subterranean part of Tomb 26, Feature 6 stands out because it is completely cut out of the rock and does not have stone-lined walls. This difference in building technique is significant regarding the building phases (see below, Chapter 3.4.1). Furthermore, as pointed out by Cajetan Geiger, the energy expenditure to cut the combined unit of Features 6 and 4 must have been considerable since the rock layer is more solid than the ones used to build Features 2 and 5 (see Chapter 4).

3.3.7 Feature 7

The southern wall of Feature 2 west of the entrance is constructed of three set stones (in a similar fashion to the western wall, see above). One of these stones was found upside down in Feature 2, leaving a negative of 0.70 × 0.62m in the wall. The other two worked stones were still in place (see Fig. 3.11), adjacent to the western wall and Feature 5 (the larger one measures 0.52 × 0.62m with a width of 0.16–0.20m).

The negative of the displaced stone was filled with flood sediments which were cleared at the end of excavations in order to additionally document a final status of this corner of Tomb 26. While cleaning the sediments, it became clear that a small niche opened into the rock. This niche was labelled Feature 7 and represents an empty space between the natural rock and the set stone of the western bottom part of Feature 1, the shaft of Tomb 26 (Fig. 3.21). Feature 7 enabled us to take measurements of the stone in the shaft and clearly illustrates the blending of rock surfaces in Tomb 26 with worked, nicely smoothed and plastered stone blocks.



Figure 3.21: frontal view of Feature 7 (illustration: C. Geiger, ©AcrossBorders).

It is interesting to note that the empty space documented next to the shaft continued along the backside of the worked stone shaping the southwestern corner of Feature 2. Feature 7 therefore continues into this direction and even includes a narrow opening in the extension of this stone into Feature 5, more precisely the lost doorjamb of the entrance of chamber Feature 5a (see Fig. 3.15). Based on the published plans and photos, no parallel for Feature 7 can be found in the other tombs of SAC5. This niche is related to the geology of Tomb 26 and the building of Feature 5a, as well as the southern wall of Feature 2 (see Chapter 4).

3.4 Building phases of Tomb 26

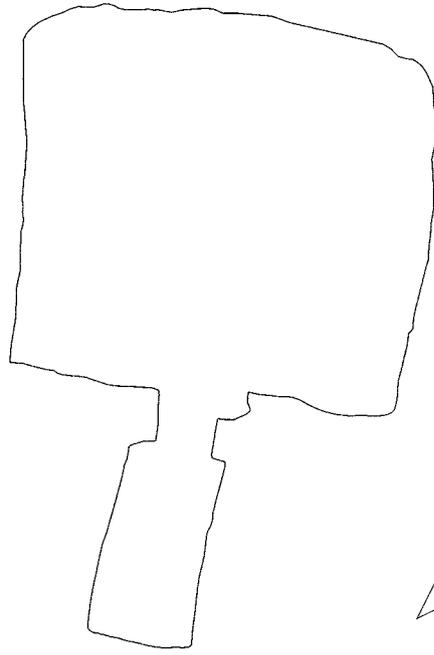
It needs to be stressed that the various building phases in Tomb 26 must be separated from the complex use-life of the tomb (see Chapter 8). The level of finds is not always illustrative for questions of building phases as has already been demonstrated by the work of the French mission (Minault-Gout and Thill 2012, *passim*).

The two main characteristics which were considered in reconstructing the building phases of the substructure of Tomb 26 are: 1) differences in floor and/or ceiling level and 2) differences in quality of workmanship/building

technique. In addition, parallels from other tombs in SAC5 were considered. Building phases of the lost superstructure of SAC5 must remain hypothetical and are solely based on architectural parallels from neighbouring tombs. However, as will be outlined in the following, the proposed phases in the superstructure correspond to the phases evident in the substructure.

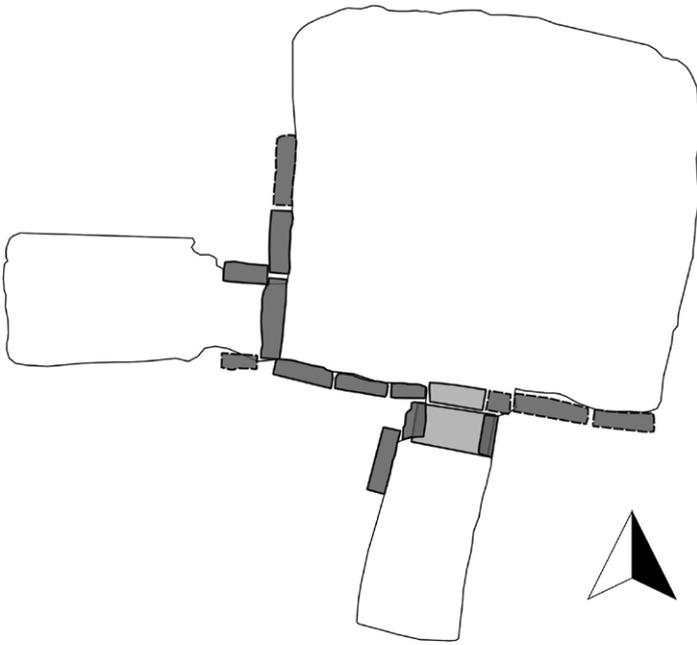
3.4.1 Building phases within the substructure

The first building phase of the substructure of Tomb 26 can be subdivided into three stages. Phase 1a comprises the execution of Features 1, 2, 3 and 5a. The logical sequence is, of course, Feature 1 as the shaft, Feature 3 as the entrance leading to Feature 2 and then Feature 5a, the southern annexe (Figs. 3.22-23). The raised floor of Feature 5a in direct comparison with Feature 2 also supports a slightly earlier execution of Feature 2 (Fig. 3.24). Both entrances, Feature 3 and the doorway of Feature 5a, use worked and set stones and are not simple rock-cut openings. This allows us to assume that the set and plastered stones which were used in Tomb 26 belong to the original building phase.



AcrossBorders 2021
Map and Data: C. Geiger

Figure 3.22: building phase 1a of the substructure with Features 1-3 (illustration: C. Geiger, ©AcrossBorders).



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Figure 3.23: building phase 1a of the substructure with the addition of Feature 5a (illustration: C. Geiger, ©AcrossBorders).

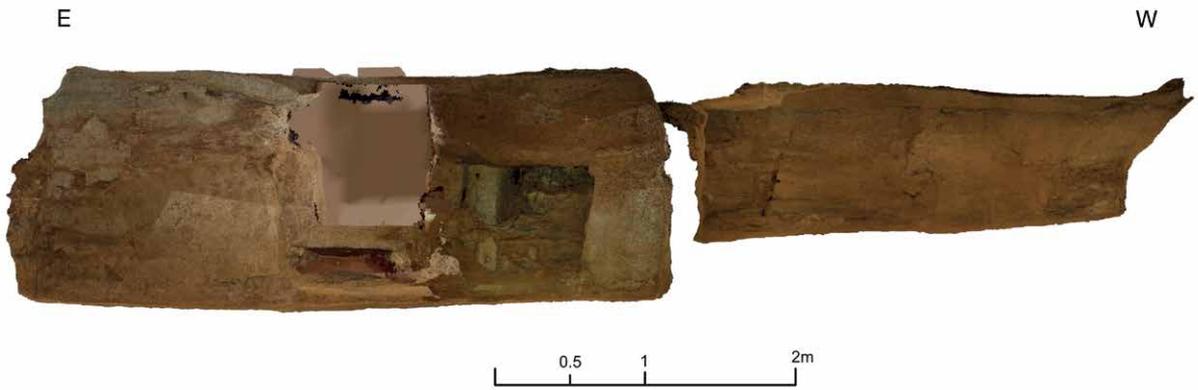


Figure 3.24: east-west section of Tomb 26 with the southern view (illustration: C. Geiger, ©AcrossBorders).

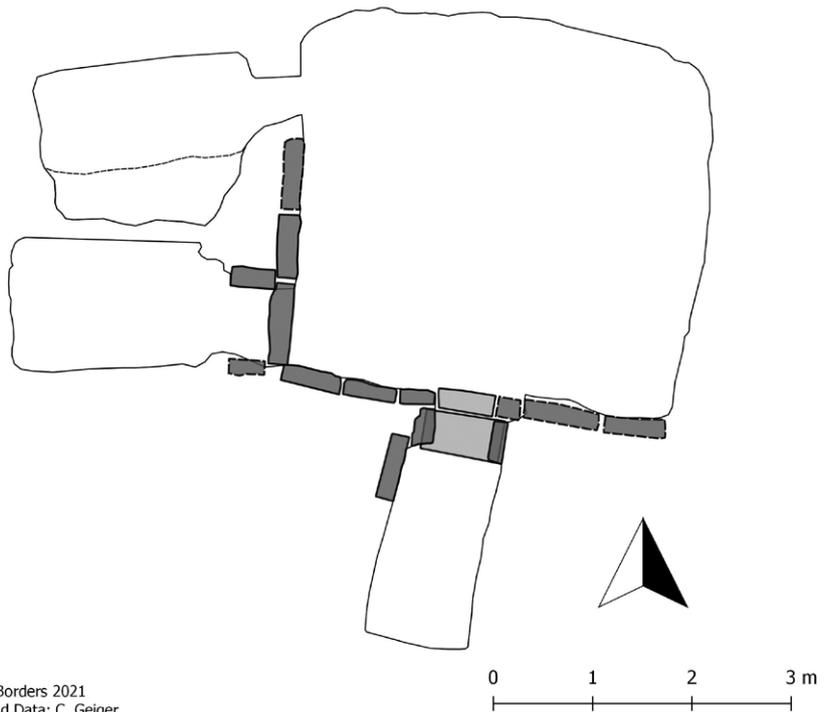


Figure 3.25: building phase 1b of the substructure prior to the merging of Features 5a and 5b (illustration: C. Geiger, ©AcrossBorders).

AcrossBorders 2021
Map and Data: C. Geiger

As a next step, the builders of Tomb 26 decided to cut a new annexe at the northern end of the western wall of Feature 2, Feature 5b. Building phase 1b comprises several stages – the original preparation of a narrow rectangular annexe in the northern part which was soon followed by a southern extension (Fig. 3.25) and then the merging of the two formerly separate chambers, Features 5a and 5b, into one large chamber.

The distinct working steps between building phase 1a and 1b in Feature 5 become especially evident by different floor levels and the cut marks on the ceiling (Fig. 3.26). The southern, earlier part is markedly different from the northern sector. The central part of the ceiling was probably never completely flattened and partly collapsed in antiquity (see Chapter 8). This is exactly the part of the chamber where the former northern wall of Feature 5a was removed.

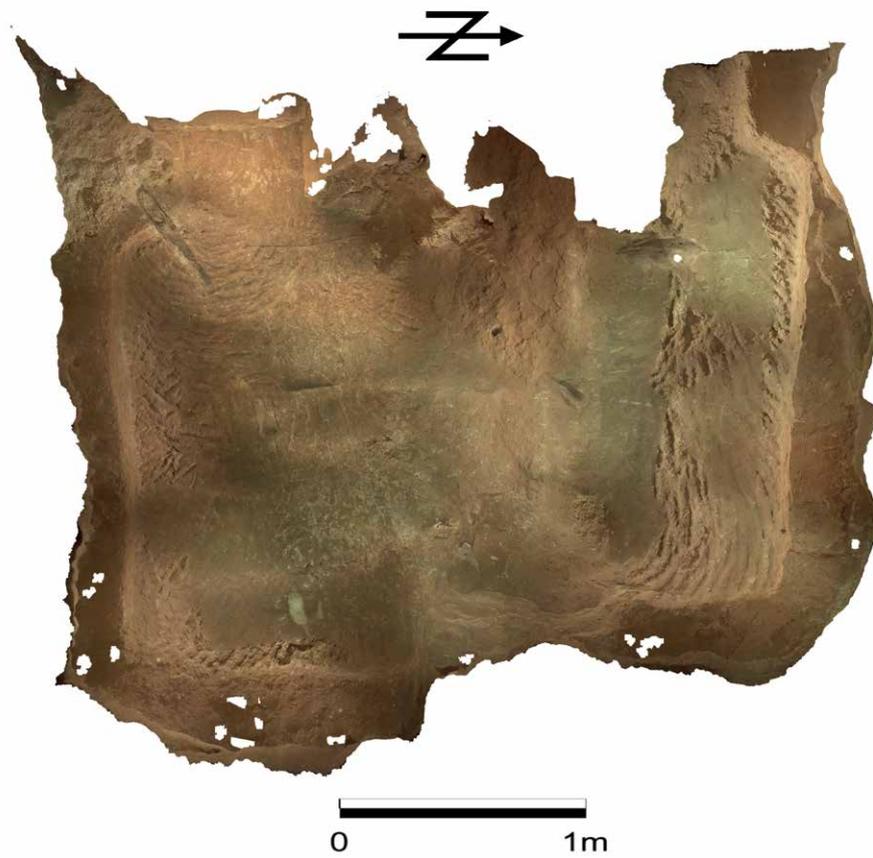


Figure 3.26: cut marks of building phases 1a and 1b as depicted on the ceiling of Feature 5 (illustration: C. Geiger, ©AcrossBorders).

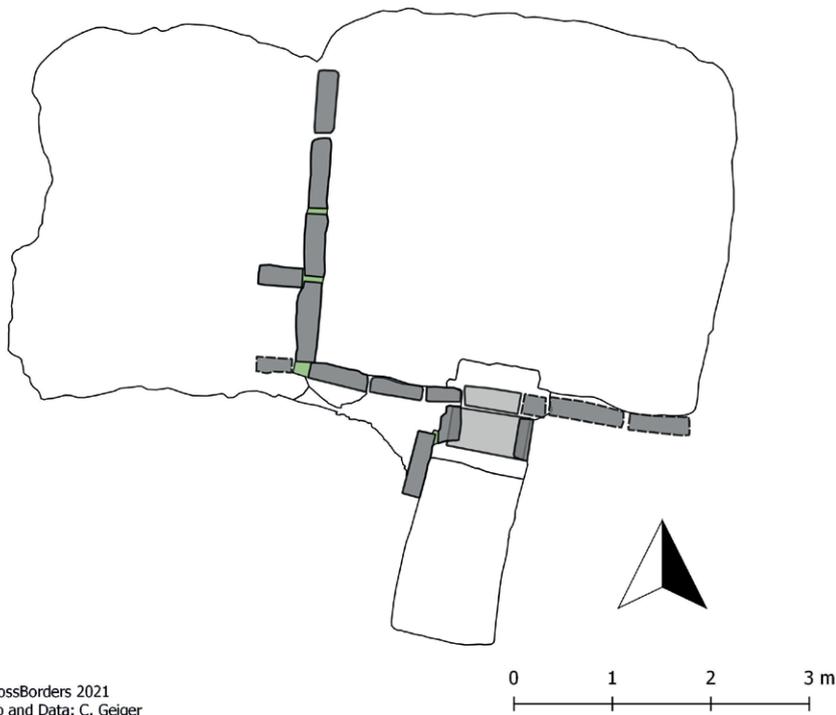


Figure 3.27: building phase 1c of the substructure showing the stone lining of Features 3, 5 and 7 (illustration: C. Geiger, ©AcrossBorders).

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Map and Data: C. Geiger

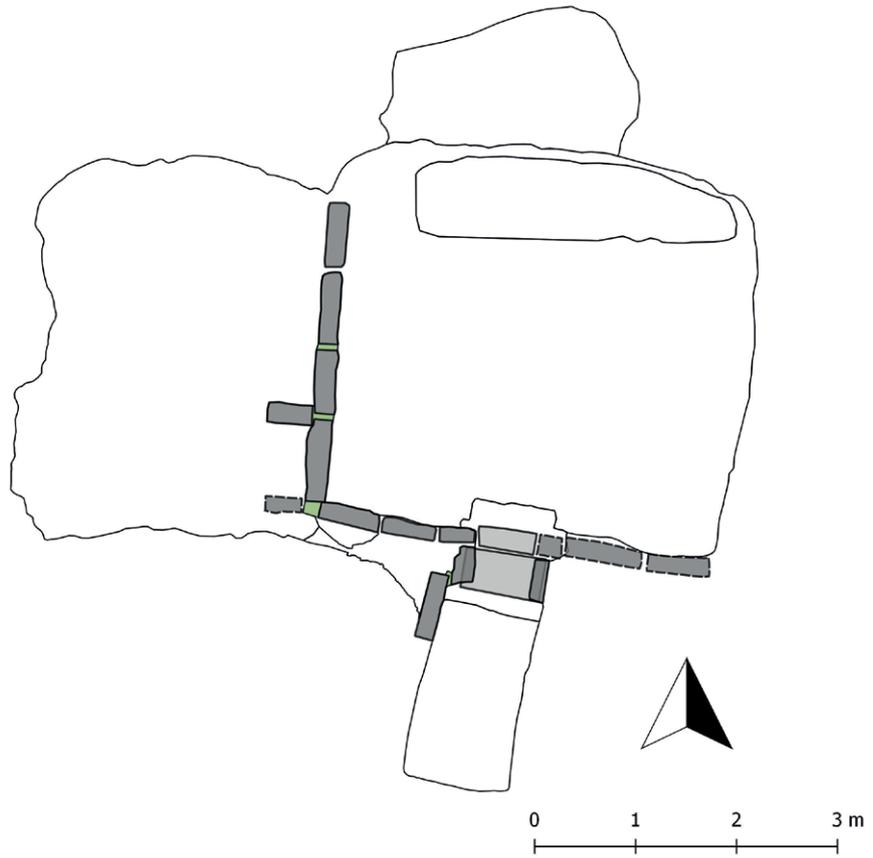


Figure 3.28: building phase 2 of the substructure with a new burial compartment in the north (illustration: C. Geiger, ©AcrossBorders).

Similar to the rough treatment of the central part of the ceiling, no efforts were undertaken to prepare the new, now merged chamber on all four sides and to carefully remove irregular pieces of bedrock, and it seems as if time was an issue. It is possible that already the next building phase was planned, leaving little time to finish the interior of Feature 5 (see Chapter 8).

The final working step of building phase 1 must have been the concealing of Features 5 and 7 with set stones as well as the lining of the shaft bottom (Fig. 3.27). The original, southern entrance of Feature 5a was now completely disguised. The northern entrance was possibly still left open, since more burials were deposited in Feature 5 (see Chapter 8). Overall, it remains unclear how much time elapsed during the cutting of Feature 5a and the blocking of its entrance and the exact temporal relation to Feature 5b. We have to assume that the stone lining and plastering of this phase was also connected with the plastering of all side walls of Feature 2. It is possible that the final shape of Feature 3 also belongs to Phase 1c (especially the plastering of the inner door jambs).

Phase 1c was probably finalised by blocking Feature 3 as the main entrance from the shaft into the chambers with bricks or stone blocks. The shaft was also sealed with roofing slabs at its opening. However, it is

possible that these last steps were only carried out as the final stage of Phase 2.

Phase 2 of the substructure of Tomb 26 resulted in a new design of Feature 2 (Fig. 3.28): in its northeastern corner, Feature 4 was executed, forming a unit with Feature 6 and representing a new burial compartment on a lower level (Fig. 3.29).

Feature 6 was probably never completely plastered like Features 2 and 5 were and this compartment did not use set stones to create walls or doorways being of different craftsmanship. Feature 6 may have been sealed by closing Feature 4. Only faint remains of plaster on the floor of Feature 4 were preserved; these could well derive from a lost blocking, probably of mudbricks since no stone remains were found.

The exact location of Feature 4 supports the phasing of this compartment as being later than Feature 5 (Fig. 3.27). Obviously, the northern entrance into this chamber (Phase 1b) was respected and taken into account in the layout of Feature 4. Phase 2 could have been concluded by replastering Feature 2.

Phase 3 refers to a reuse of Feature 2 as a burial chamber (see Chapter 8) with such minor building processes as the replastering of the walls. It remains uncertain whether the entrance stone of Feature 5 (northern entrance) collapsed at this time or later.



Figure 3.29: detail of the new burial compartment of building phase 2 (illustration: C. Geiger, ©AcrossBorders).

Phase 4 can be associated with a reuse of the shaft, Feature 1, and maybe the planning of a new entrance/an upper level for a new chamber which was never executed (“dummy entrance”).

Overall, the main building phases of the substructure of Tomb 26 are Phases 1 and 2 which are both datable to the 18th Dynasty. In later times, only minor construction work was carried out. The fine dating of the building phases will be discussed in Chapter 8 and will consider all the archaeological data.

3.4.2 Building phases within the superstructure

Since the superstructure of Tomb 26 is lost and only indicated by some loose mudbrick fragments, phasing of this part of the structure remains uncertain. As outlined above, a simple shape of the superstructure as an enclosure with an entrance in the east would correspond to attested parallels in SAC5, datable to the Thutmoside time, and is therefore suggested as Phase 1. Phase 2 is a slight modification of the superstructure parallel with the new burial compartment of this phase of the substructure and suggests the addition of a pyramid on the western side of the enclosure/chapel as attested for the neighbouring monuments Tombs 6 and 8.

Phase 3 of the substructure of Tomb 26 is likely to have had an equivalent in the new planning of the superstructure. The inscribed stone blocks, particularly parts of a doorway as well as a pyramidion recovered from Feature 1, all date to the Ramesside period and are likely to have been part of a Type 3 superstructure with court, chapel and pyramid. Several building phases and a redesign of the superstructures are also attested elsewhere for New Kingdom tombs in Nubia, for example in Soleb. Tomb 15 at Soleb displays complex phases of redesigning the superstructure (see Schiff Giorgini 1971, 186, fig. 322).

Considering post-New Kingdom evidence from other tombs in SAC5, it is unlikely that Phase 4 of the substructure resulted in any modifications of the superstructure. Since the blocks and the pyramidion of Hornakht ended up in the shaft of Tomb 26, we have to consider a destruction of the final shape of the superstructure sometime after the New Kingdom.

3.4.3 Summary of building phases of Tomb 26

Overall, several details relating to the building phases of Tomb 26 remain to be clarified (e.g., the dating of the “dummy entrance”), but the concise assessment of all architectural features as well as parallels from other

Table 3.1: synthesis of main building phases of Tomb 26.

Phase	Substructure	Superstructure	Dating
1a	F1, 2, 5a	Type 1 (enclosure)	Thutmoside
1b	F5b and then F5		
1c	stone lining of F3, 5, 7; blocking; plastering		
2	F4 and 6 replastering?	Type 2 (enclosure and pyramid)	mid-18th Dynasty (Am. II-Thut. IV)
3	replastering; blocking?	Type 3 (with courtyard and pyramid)	Ramesside (19th Dynasty)
4	“dummy entrance”?	collapse and destruction?	late Napatan?

tombs allows us to reconstruct at least two main phases associated with the 18th Dynasty, as well as one phase in the 19th Dynasty (Table 3.1).

The main evolution of the ground plan of the substructure of Tomb 26 is associated with Phases 1 and 2. Starting with a main chamber and one annexe (Phase 1a) then two annexes (Phase 1b), and one large western chamber concealed by worked stone blocks (Phase 1c), the layout was considerably altered in Phase 2 with a new burial compartment at a lower level (Feature 6).

Phase 3 is associated with the Ramesside period with only small changes in the subterranean part but proposed major modifications in the superstructure. The tradition of reusing older tombs in Ramesside times is not only traceable on Sai, but also at Amara West and in Tombos and can be considered as a regional feature of burial customs in Ramesside Upper Nubia. After the New Kingdom, the reuse of the structures seems to be limited to reburials without major architectural modifications or new building phases, as is also the case in Tomb 26.

The geology of Tomb 26

Cajetan Geiger

4.1 Introductory remarks

At the end of the last field season on Sai Island in 2017 a very short documentation of the geology of Tomb 26 was made. It does not represent a proper study planned in the original work packages. Nevertheless, the results maybe contribute to the understanding of the tomb in its environment.

My sincere thanks go to Prof. Dietrich Klemm, who helped me a lot in interpreting the thin sections with his expertise on Nubian Sandstones. Sadly, he passed away before these lines came to paper. Parts of the following can be attributed to him.

4.2 General geological setting

The general geological setting of the cemetery SAC5 and Tomb 26 within is rather simple. It lies in the uppermost layer of the *Nubian Sandstone Series* (*cf., eg.,* Worrall 1957, 6-7). Tomb 26 cuts about 4.80m deep into this relatively coarse, beige-whitish sandstone. The sandstone is composed of approx. 2mm grains and contains substantially larger clasts in a range from 1-10cm (Fig.4.1).

At a depth of *approx.* 3m the geology changes. The sandstone now appearing is more friable and seemingly secondarily altered. In some locations it splits into blocks and compact layers of 2-3cm. It is of purple-greyish colour and weathers locally to a yellowish colour. In many places this results in a banding of 10-15cm thick alternating colour layers. The stone is brittle and weathers heavily.

Tomb 26 is dug in this stratum. Feature 6 is completely chiselled in this altered material. Feature 5 is towards the ceiling and the ground cut out of stable sandstone, in between which the altered stratum of *approx.* 80cm thickness was completely removed (Figs. 4.2-5). Feature 2 intersects the more massive overlying sandstone series *approx.* 70cm below the ceiling.

The altered sandstone layer is roughly 310/4 oriented, so it falls gently northwards.

Three rock samples were taken and analysed as thin sections under a polarizing microscope. For the sample locations see Fig 4.6. The discussion follows below in Chapter 4.4.

Sample CG-G-01 comes from Feature 5, where a relic of the removed altered sandstone material had remained in place in front of the eastern wall of the chamber (see Fig. 4.5). The sample was taken out of this pile and represents the core part of the removed stratum (stratum IV, Fig. 4.8).

Sample CG-G-02 was taken west of the entrance to the main chamber (Feature 2) from Feature 7 (see Fig. 4.10).

Sample CG-G-03 originates east of the entrance to Feature 2 and was taken from the sandstone forming the ceiling of the chamber.

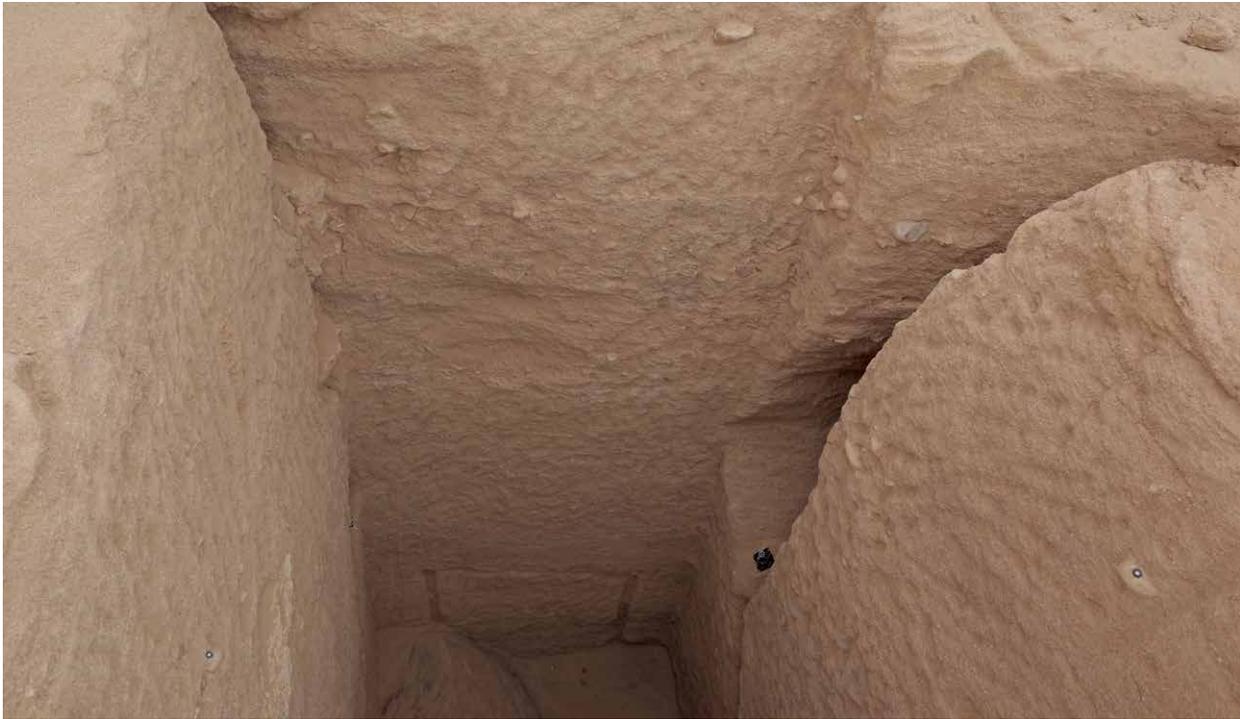


Figure 4.1: sandstone facies, representing stratum (I) (see profile Fig. 4.7). It predominantly forms the surface of Sai Island and reaches down into the shaft of Tomb 26 for *approx.* 3m before the altered strata appear (photo: C. Geiger).



Figure 4.2: altered sandstone with yellowish and purple bands at the northern profile of Feature 2 (stratum IV, see profile Fig. 4.7). The whitish material in the upper part of the image is the remains of a plaster which originally entirely covered the walls and ceiling of the tomb, so that the colourful alterations of the rock were not visible during the periods of usage (photo: C. Geiger).



Figure 4.3: View into empty chamber Feature 5 towards the southwest. Clearly visible is how Feature 5 is completely dug into the most brittle altered sandstone layer (stratum IV, see Fig. 4.7). The thickness of the layer is visible between the clay-rich sandstone on the floor (stratum V, see profile Fig. 4.7) and another more stable facies at the ceiling (stratum III, see Fig. 4.7.) (photo: J. Budka).

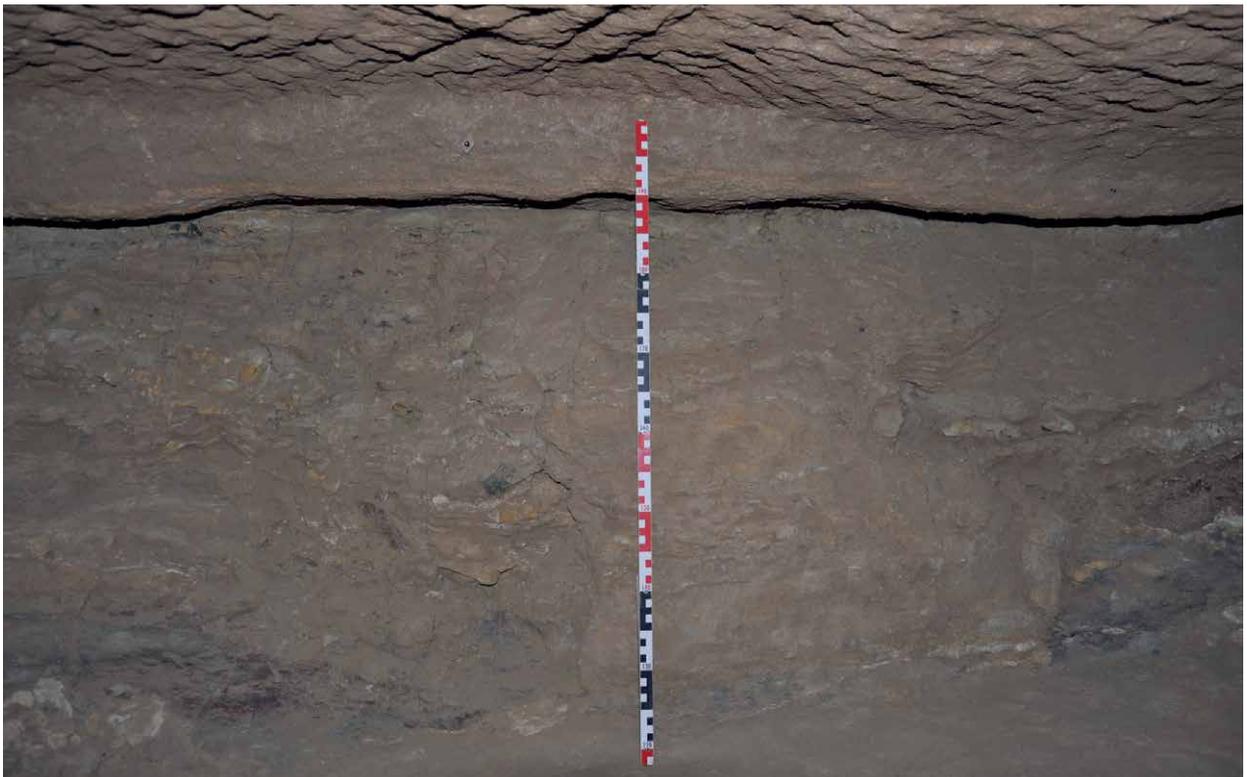


Figure 4.4: sharp border between more stable sandstone (stratum III, Fig. 4.7) above and extremely brittle material (stratum IV, Fig. 4.7.) in southern profile of Feature 5 (photo: C. Geiger).



Figure 4.5: remaining pile of the removed altered sandstone (stratum IV, see Fig. 4.7) in Feature 5. Sample CG-G-01 was taken here (photo: C. Geiger).

4.3 Description of the lithostratigraphic profiles

It is noteworthy that at a depth of *approx.* 3m in the shaft of Tomb 26 the geology changes in a clearly visible way. I would generally speak of one general band of altered rock within the setting of the most diverse Nubian Sandstone Series. However, this band can be subdivided into several strata, which will be explained in the following two profiles. For clarity the strata are referred to in the following by Roman numerals.

4.3.1 Weathering profile shaft (Profile 1, Fig. 4.7)

(I) In the uppermost part the shaft is dug for *approx.* 3m into relatively stable sandstone. It is of medium grain size with the single grains around 2mm, containing voids of about the same size. It is generally grain-supported. The single grains interconnect by a silicified matrix, containing in places clasts of several centimetres in size. This is the sandstone predominantly forming the surface of the island. It corresponds most likely to the quartzarenite, described in Budka 2020 (46, Sample 2). The rock is relatively resistant to weathering.

(II) Below stratum (I) – with its top edge *approx.* 1.60m above the level of the shaft – a 30cm thick band of conglomerate crops out, consisting of well-rounded pebbles and cobbles. They are embedded in a sandstone matrix and show predominantly sizes of 3-10cm. These clasts seem to be fluvial transported quartzites as they cover the surface of the island in large quantities. This layer has not much in common with the underlying strata but is strikingly different to the highly stable sandstone above and marks a clear border in the lithology. It is susceptible to weathering and partly shows a deep cut into the wall of the shaft.

(III) This stratum is an *approx.* 50cm thick sandstone layer which seems to be, in a macroscopic view, a bit finer in grain size compared to stratum (I). It is a fine-grained sandstone with a high clay content, which only contains a few larger quartz grains. It is relatively stable and resistant to weathering, similar to stratum (I). From this stratum sample CG-G-03 was taken (see 4.3 Sample 3).

(IV) Below that is a band of altered sandstone with a thickness of *approx.* 30cm. It is in places very fine grained with an almost argillaceous surface feel. In other places it has a significantly coarser structure with medium sized sand grains. The rock is extremely friable

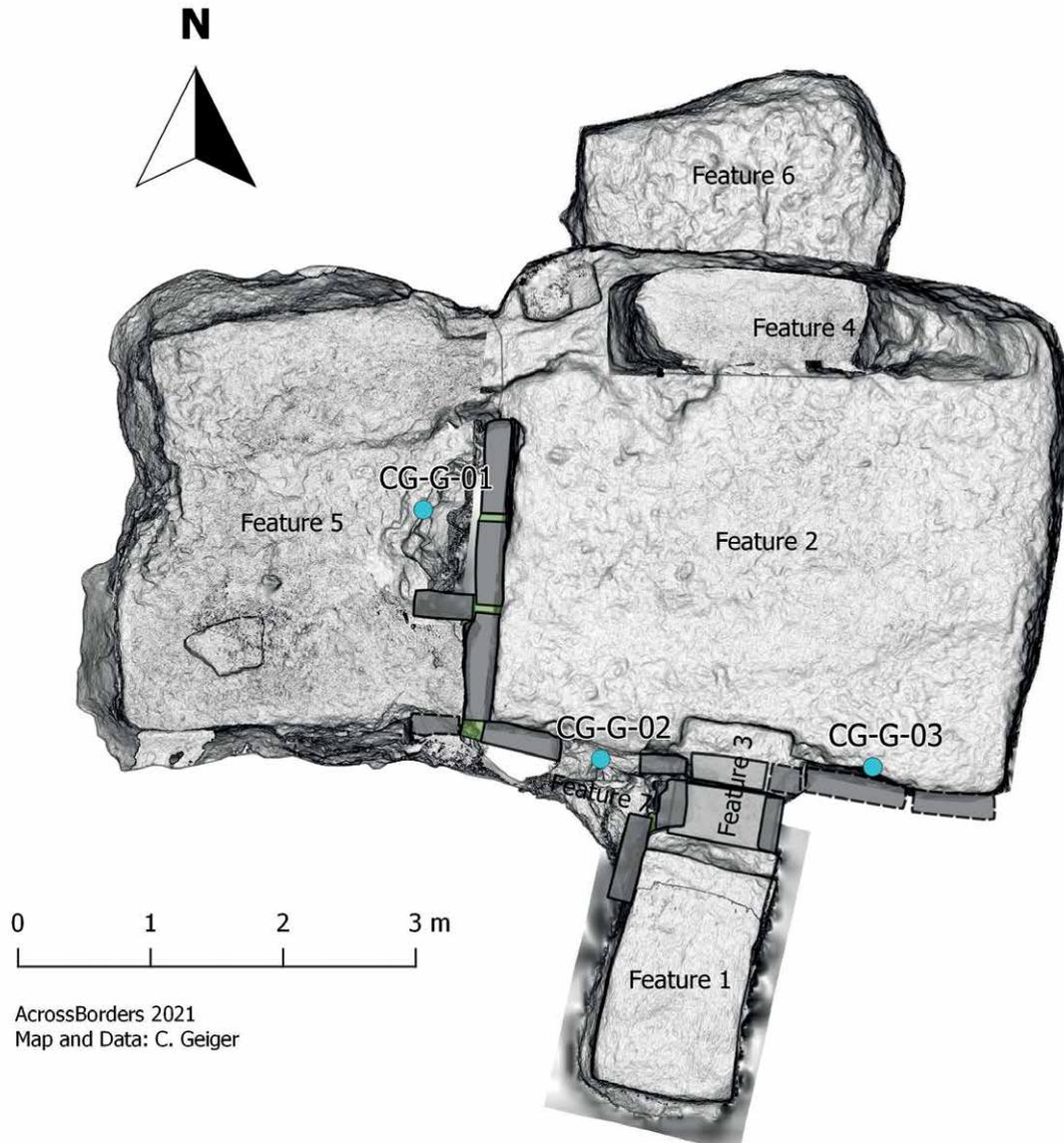


Figure 4.6: plan of Tomb 26 with geological sample locations (map: C. Geiger).

and brittle and weathers heavily at the outcropping surfaces. In places yellowish and purple discolouration appears. This should coincide with the coloured mudstones within the Nubian Series described by Worrall (1957, 7). From this layer sample CG-G-01 and CG-G-02 were taken (see 4.1 Sample 1 and 4.2 Sample 2).

(V) Below, down to the floor level of the shaft, an *approx.* 50cm thick sandstone stratum is located. In general, it is very similar to the stratum (III) and obviously only slightly less resistant to weathering. On the other hand, it contains lentil-shaped areas with altered material as it forms stratum (IV). It is similarly friable and shows yellowish-purple discolouration. This material also has a very high clay content. At these brittle spots heavy weathering can be observed.

WNW

ESE

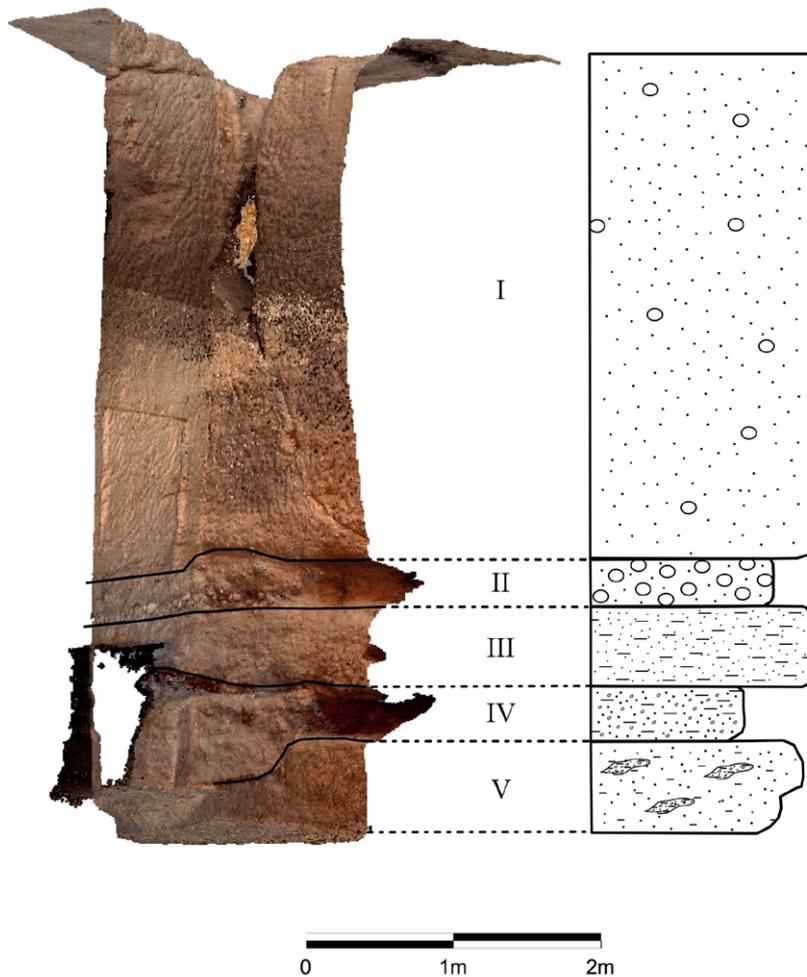


Figure 4.7: Profile 1. Weathering profile and orthophoto of the shaft of Tomb 26 (Feature 1). View to the northeastern corner of the shaft. Below left the entrance to the tomb. The strata shown here were numbered to simplify the understanding of the differently altered sandstone layers (drawing and orthophoto: C. Geiger).

4.3.2 Lithostratigraphical profile of Tomb 26 (Profile 2, Fig. 4.8)

Tomb 26 itself is dug in several of the strata described above. As it goes deeper down than the shaft, it gives us a further insight into the lithological setting. The uppermost part of Feature 2 (50-70cm) is cut into stratum (III). In the northern part of the chamber it also slightly intersects with stratum (II), visible due to many large clasts in the ceiling. For the lower half of the chamber stratum (IV) was completely removed. The colourful alterations of this layer are visible on all-natural rock profiles of this chamber. They show up as massive yellow-purple bands and partially red spots (see Fig. 4.2). The material is characterized by its inhomogeneity and is relatively unstable (*cf.* Chapter 4.4).

At the transition from the entrance of Feature 2 to the lower lying burial chamber, Feature 6, the more stable sandstone of stratum (V) is worked through. It shows a

varying thickness of 20 - 50cm. Feature 6 is again cut into a further altered layer, referred to as stratum (VI).

(VI) This stratum is more or less identical to stratum (IV). It is characterized by its fine grained, almost clayish composition, competing with a relatively coarse surface in some places. The rock is very friable and brittle and shows colourful alterations. It is of a thickness of 50cm - 100cm.

(VII) This lowest stratum consists of a very stable sandstone which forms the lowest part of the profiles and the floor level of Feature 6. It has fine grain sizes of about 2mm and voids of about the same size in a silicified matrix. It very much resembles stratum (I), although it does not show any signs of larger clasts at the exposed surfaces. I would also address it as a *quartzarenite*.

The most intriguing characteristic of this layer is the obviously missing clay component, which forms a significant part of all the strata (III) - (VI).

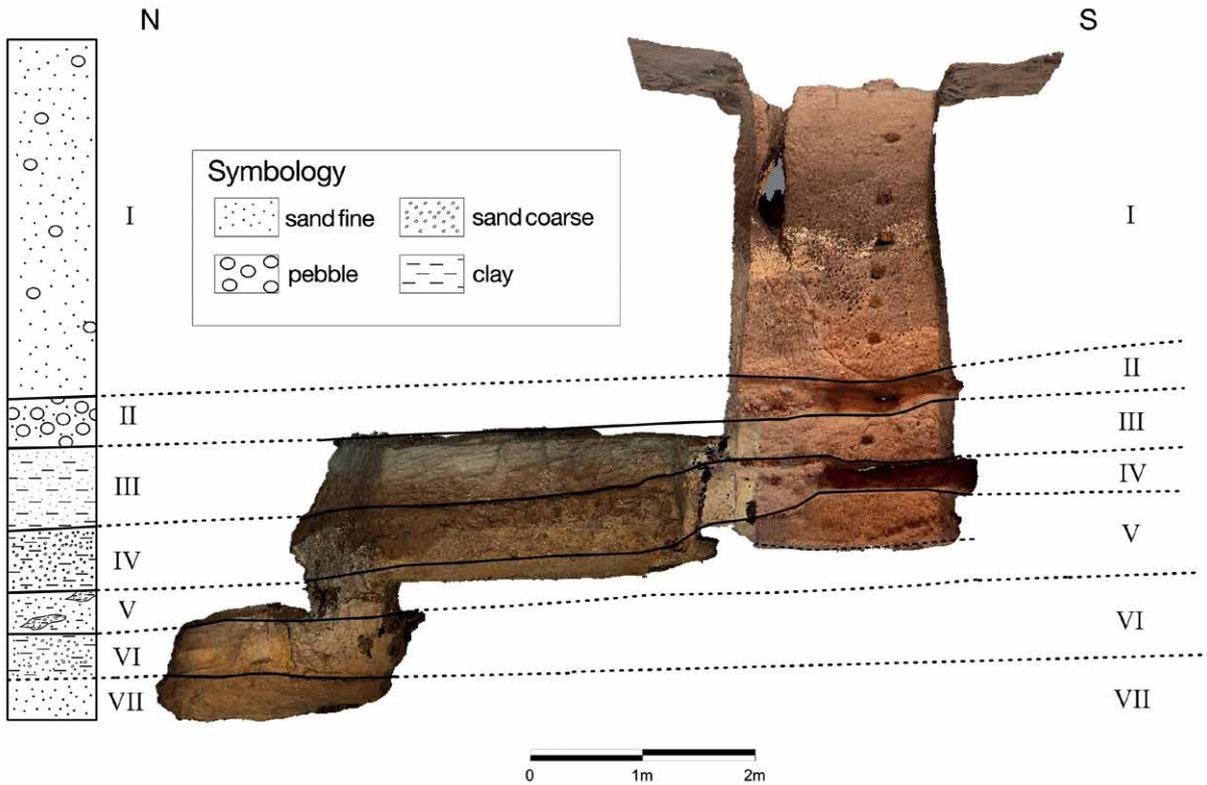


Figure 4.8: Profile 2. Lithostratigraphical profile, showing the position of Tomb 26 within the different lithological strata (drawing and image: C. Geiger).

Overall, the situation in the side chamber Feature 5 follows the one in Feature 2. The uppermost decimetres are cut into stratum (III) (see Fig. 4.4). For the main part of the chamber the altered rock of stratum (IV) was completely dug out (see Fig. 4.3). Stratum (V) forms the floor level of the chamber. The ceiling of the initial chambers 5a and 5b was clearly carved into stratum (III), which is still visible. Rough chisel-marks can be stated at the ceiling. The breakdown of the former natural wall in between these two features could simply be explained by the unstable character of the material forming stratum (IV) (cf. Chapter 3).

4.4 Discussion and description of Feature 7

One interesting feature which could give us some information on the building process of Tomb 26 is Feature 7 (see Chapter 3). Entering Tomb 26, directly left (west) beside the entrance, a sandstone slab came off the wall during excavation and revealed a concealed cavity (see Fig. 4.9). It shows a substantial pile of the brittle, altered sandstone of stratum (IV).

At some point during the building of the tomb, in this corner the rock must have broken out, destroying the northwestern edge of the basis of the shaft as well as

the southwestern wall of Feature 2 and the door frames of the entrance. Obviously too much work had already been done to simply try to cut the chamber elsewhere. This could explain the lavish efforts to hide this mishap. The broken out door frame was replaced by a rectangular sandstone pillar (see Fig. 4.9). Towards Feature 2, it was closed by two large stone slabs of *approx.* 50 × 60cm which probably had to support the ceiling.

The most elaborate construction however was made to make this broke out area invisible from the shaft. A sandstone block of roughly 35 × 30cm was set into the irregular hole in the wall of the shaft, narrowing towards the south. It is visible in its man-made rectangular form from the inside of the cavity (Fig. 4.10). Standing in the shaft one does not see at all that a part of the wall is artificial. The “outside” of the block was treated in a way that it looked like the natural sandstone forming the wall of the shaft (Fig. 4.11). On the opposite side of the entrance, a segment of the wall of Feature 1, similar in appearance to the roughly chiseled slab from Feature 7, could be an identical or similar installation. Unfortunately, this could not be confirmed.



Figure 4.9: View of a 3D-model of Feature 7, looking south in Feature 2. Behind a sandstone slab an unintentional breaking out of the altered sandstone material of stratum (IV) was hidden. On the left side the entrance from the shaft is visible with sandstone pillars replacing the destroyed door frames (image: C. Geiger).



Figure 4.10: detail photo of Feature 7. The sample CG-G-02 was taken from this material. Clearly visible the well-prepared sandstone block disguising the mishap towards the shaft (photo: C. Geiger).



Figure 4.11: the same sandstone block from Feature 7, seen from the shaft. The surface is treated in a manner that makes it look like the surrounding natural rock (photo: J. Budka).

4.5 Description of the thin sections

Only three rock samples were taken in Tomb 26, with the intention of settling the question of where the colourful alterations in the sandstone come from (for sample locations see Fig. 4.6 and the description of the geological profiles). At the time of the geological survey a three-layer-hypothesis was set up: the stable sandstone on top, a large altered layer out of which the tomb was cut, and again stable sandstone below. Sample CG-G-03 was thought to be a reference sample of the overlying sandstone. During post-processing of the data it turned out that this is not the case. The small-scale structure of the sandstone body is much more complex than it appeared during field work (*cf.* Fig. 4.8).

In the thin section it could be seen that sample CG-G-03 has a very high clay content, which was obviously not the case for the sandstone (I). A macroscopic sample confirmed this difference. Unfortunately, there is no thin section of this sample to show the direct comparison.

Thus, the three samples represent only the material of some of the geological layers, from which Tomb 26 was cut. The lack of direct comparison with the harder surrounding rock is unfortunate, but comparable data is available based on the sandstone survey carried out in 2016 on Sai Island (Budka 2020, 32-52). From my experience on the island,

Sample 2 of that record is the most likely to represent the most common features of the surface forming sandstone in the eastern part of the island.

In the following, the observations made on the thin sections of the samples from Tomb 26 are described.

4.5.1 Sample 1

Sample number: CG-G-01

Stratum: (IV)

Image: see Fig. 4.13

The grains of this rock have predominantly sharp edges and show a bimodal grain size distribution. One larger fraction contains, besides quartz, plagioclase and microcline. The latter shows strong crystal twinning. The other fraction consists mostly of smaller, sharp-edged quartz grains and muscovite. Larger quartz grains are partially rounded and show undulose extinction. In some places etch-traces can be seen; the edges of the grains are to some extent dissolved. The ratio of large vs. small quartz grains is about 40:60.

The quartz grains are embedded in a matrix composed of finely ground quartz, mica and clay minerals. Incipient recrystallization of biotite and muscovite can be stated which are finely dispersed between the bimodal grains. Some opaque phases are most likely hematite or limonite.



Figure 4.12: Macroscopic view on the thin sections of the geological samples from Tomb 26. No.1 represents sample CG-G-01, No.2 sample CG-G-02 and No.3 sample CG-G-03. Already at this scale it can be stated that samples 1 and 2, which were thought to originate from the same stratum, are different materials (both stratum IV). The much coarser structure of No. 1 is obvious. No. 3 was thought to represent the sandstone series which also appears at the surface, but it turned out to be part of the altered rock layers, too (stratum III), again with a completely different appearance in the section (photo: C. Geiger).

The undulose extinction feature of the quartzes and the etch-traces on some larger grains could be a sign of a general regime of pressure to which this formation was exposed for some time. This could, for example, appear in the framework of tectonics. This could be interpreted as a form of late diagenetic to early metamorphic state.

In principle this is a coarse sandstone with a share of crystalline basement material, which shows up in finely ground form as matrix.

4.5.2 Sample 2

Sample number: CG-G-02

Stratum: (IV)

Image: see Fig. 4.14

This sandstone shows a bimodal grain size distribution. It is composed of small, relatively coarse and sharp-edged quartz crystals, which are embedded in a fine-grained matrix. Only occasionally larger quartz grains of more than 2mm exist. The ratio of crystalline quartz to matrix is about 1:1. Besides the quartz crystals biotite exists in small amounts, which is partially degraded to chlorite. The matrix consists mainly of clay minerals which could not be further identified here. Some limonite grains could be identified.

It is remarkable that in some places the rock is mainly matrix-supported, whereas in others it consists almost entirely of coarser, sharp-edged quartz grains.

4.5.3 Sample 3

Sample number: CG-G-03

Stratum: (III)

Image: see Fig. 4.15

This sample represents a sandstone with a very high content of clay minerals. Essentially, it is of very fine grain size with only few quartz grains (~10%) larger than 2mm. The larger quartz grains have sharp edges and show undulose extinction. Only few feldspars are contained. The matrix is very fine grained and consists mainly of clay minerals. In some places the ratio of quartz to matrix is about 1:2.

Overall, the most intriguing observation made on the thin sections, is the complete inhomogeneity within macroscopic identical looking geological layers. My assumption in the field was that I had taken two samples from one formation, namely CG-G-01 and CG-G-02. As it turned out, these two samples were completely different, when seen through the microscope. Such a distinction could not be made macroscopically on the rock itself. An explanation would be the general inhomogeneity of the strata (IV) and (VI).

4.6 Conclusion

By the observations which were possible in Tomb 26 it looks as if there is a rather strong and stable rock which crops out at the surface and is not very pleasant to dig through. Some metres below, a band, of altered rock exists, in places more than 2m thick, which is much simpler to dig out. In my opinion, the builders of the cemetery could have been familiar with this geological formation so that they could have searched intentionally for this brittle and

Figure 4.13:
Microphotograph of thin
section of sample CG-G-01.
Magnification x30. Easily
visible the larger clasts
with sharper edges (photo:
C. Geiger).

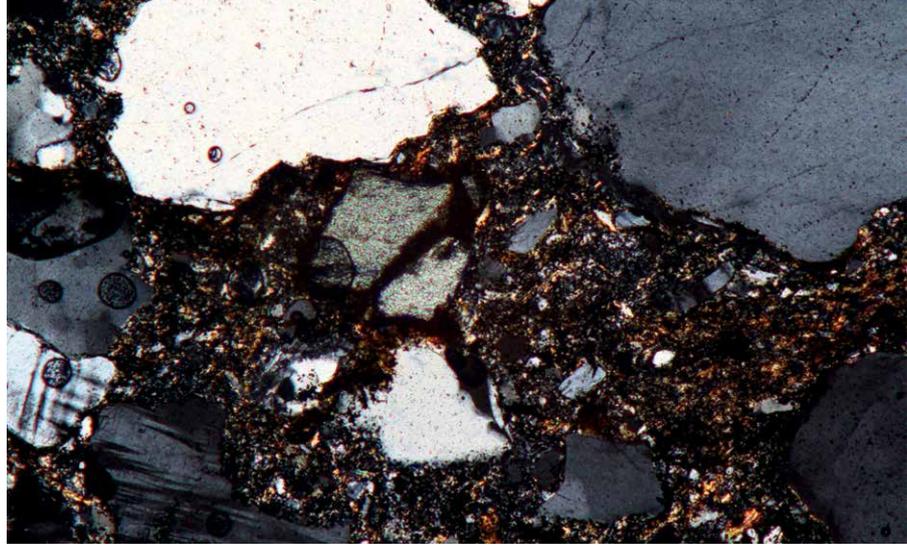
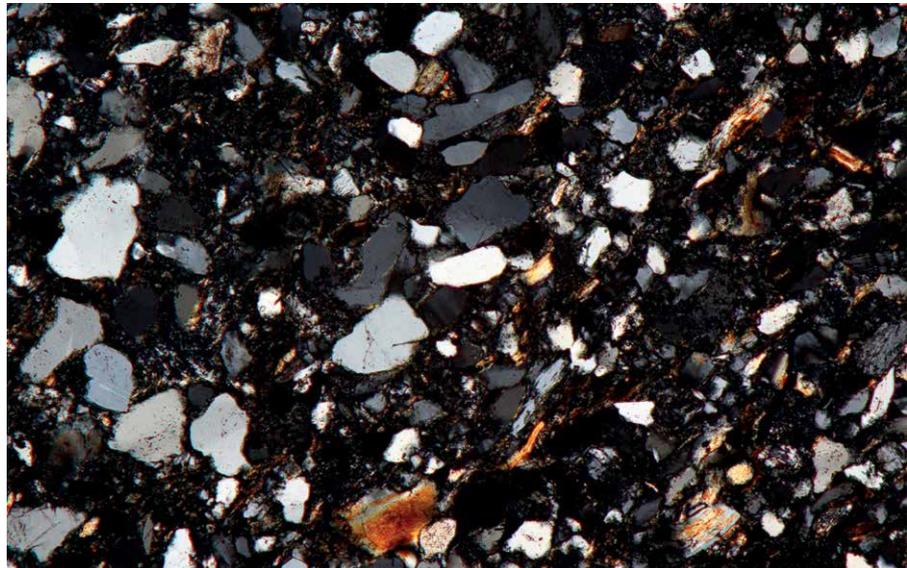


Figure 4.14:
Microphotograph of thin
section of sample CG-G-02.
Magnification x30 (photo:
C. Geiger).



easy to remove sandstone variation. All subterranean features of Tomb 26 – all three chambers – are located exactly within this zone.

A chiselled outline in the lower zone of stratum (I), directly above the entrance of Tomb 26, is an interesting feature (see Chapter 3, “dummy entrance”). It could be an initial prospecting trial for a chamber entrance, but then the builders decided to dig the shaft deeper as the rock was still too hard. Or it could simply date to a later period when the shaft was partially filled (see Chapter 8).

Whichever the case, the altered rock – found on purpose or not – had the big advantage of being easily removable, substantially accelerating the building time compared to that which would have been needed for the solid rock above. But the observations made in Feature 7 show that it had also one big disadvantage: it was quite

difficult to control this inhomogeneous and friable rock. Obviously, the wall simply broke down in some parts of the entrance area. This must have been the case for the entire entrance, most likely on both sides towards the shaft (following stratum IV) and parts of the southern wall towards Feature 5, as well as in between the initial chambers 5a and 5b. The material was too friable to withstand the pressure of the surrounding geology, as soon as large enough cavities were built.

To hide this mishap, large efforts were undertaken: the complete entrance situation was artificially set up by fitting sandstone blocks. The broken-out parts of the wall of the shaft were also closed by exact fitting stone blocks, working them in a way that they could not be identified as such. The southern wall of Feature 2 had to be completely covered with stone slabs, as the natural

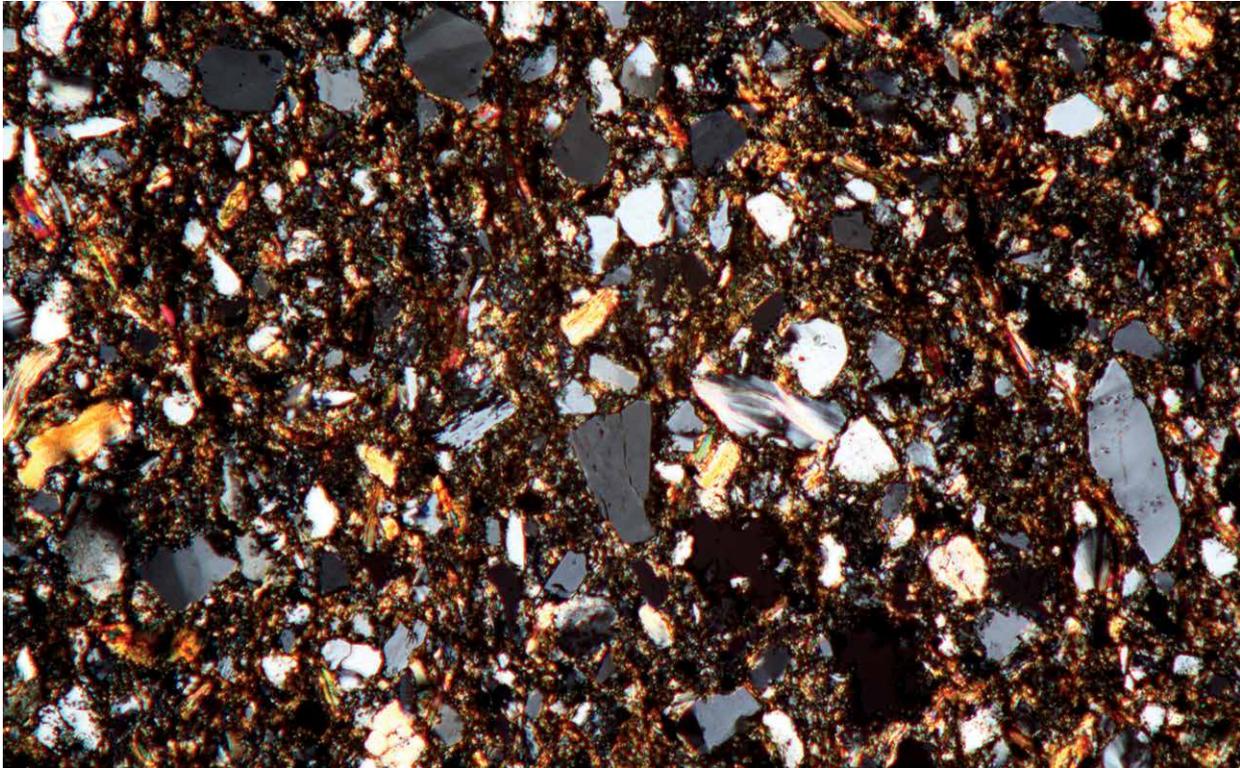


Figure 4.15: Microphotograph of thin section of sample CG-G-03. Magnification x30. Clearly visible the dominant matrix of clay minerals (photo: C. Geiger).

wall had fallen off. Between Features 2 and 5 stone slabs needed to be installed to support the ceiling. In addition, the entire walls of Feature 2 had to be sealed with plaster. This was particularly the case for the ceiling, where in the northeastern part of the chamber the intersected large

cobbles of stratum (II) threatened to collapse. Finally, Features 5a and 5b had to be merged to one single room.

The more stable layer of stratum (V) provides a secure shaft towards the lower chamber, Feature 6. With stratum (VII) an end of the altered layers seems to be reached.

The artefacts including the ceramics of Tomb 26

Julia Budka

5.1 General

A complete find list comprising all the material excavated by AcrossBorders in SAC5 from 2015-2017 can be found in the Appendix. The object FileMaker-database includes a total of 433 entries, of which 338 derive from Tomb 26 (Feature 1: 145 objects; Feature 2: 87 objects; Feature 3: 4 objects; Feature 4: 11 objects; Feature 5: 70 objects; Feature 6: 19 objects; Feature 7: 2 objects). The diverging quantities according to features are related to 1) number of burials, 2) state of plundering/shifting of finds towards the entrance. These two factors are also mirrored in the distribution of the pottery vessels, which were not entered in the object database but treated separately. All objects registered for the database received a consecutive SAC5 registration number (SAC5 001ff.); the ceramic vessels are referred to by means of their original find number which also includes the year of work, e.g. SAC5 001/2015. In the case of multiple vessels within a find number, the identification was supplemented by consecutive numbers e.g. SAC5 299-1/2015, 288-2/2015. In several cases, pottery vessels were joined from several SUs with various find numbers; here, the dominant find number was chosen as the identifier (e.g. SAC5 239/2015 for vessels with predominantly SU 066 as provenance).

In what follows, the complete set of material from Tomb 26 (small finds/objects as well as ceramics) will be presented according to features and SUs. The human remains will be dealt with separately in Chapter 6. The reconstruction of former tomb groups as well as the detailed assessment of inscribed objects can be found in Chapter 7.

In Egyptian funerary archaeology, it is common for material from tombs to be sorted according to “functional groups” and materials (see Smith 1992; Franzmeier 2017, 331). This method was also applied for cemetery SAC5 in the publication of the French mission (Minault-Gout and Thill 2012), making a division between *funerary furniture* (e.g. stelae and canopic jars, shabtis); *bodily adornments* (e.g. beads and amulets); *toilet objects* (e.g. mirrors, razors and kohl vessels); *ceramics*; *clay objects and figurines*; *non-ceramic vessels*; *tools in bronze and stone* and *objects in bone, ivory and wood*.

This classification is, of course, purely artificial and mostly the result of work division during excavation (with ceramics being treated by a different person etc.), mirroring also an Egyptocentric approach of categorization. All the finds were part of the funerary assemblage and functioned either as a burial gift, container or offering (see Budka 2014a). Here, fundamental aspects around ritualisation and constructed meaning must also be taken into account (see Bell 1992). For example, objects used in daily life may be used within a tomb with a completely new function (e.g. seals used as amulets, functional vessels as ritual ones etc.). Thus, the functional setting within the tomb, respectively the burials, is often hard to define.



Figure 5.1: pyramidion of Hornakht (photo: C. Geiger, ©AcrossBorders).

The categories used below are defined in order to allow an overview of all the material, avoiding implicit functional classifications but showing rather the complex structure of ancient Egyptian tomb groups.

Elite tombs like Tomb 26 generate two main categories of finds (Budka 2011a, 190-191 with references): A) tomb furnishing (*'Grabausstattung'* in German, everything related to the architecture and especially the superstructure of the tomb, in particular stone architectural pieces, wall decoration *etc.*); B) grave goods (all kinds of finds, burial goods including containers and offerings). For this publication, the following sub-categories for class B were used: coffins and funerary masks; bodily adornment; funerary objects or *funeralia* (see Franzmeier 2017, 331) such as shabtis; ceramic vessels; stone vessels and faience vessels (no glass vessels were found in Tomb 26); others and unidentified objects.

As was already specified by means of the architecture of Tomb 26, the people buried here belong, like the persons of the neighbouring tombs in SAC5, to the local elite of Sai which was compared to *'high middle class'* burials in Thebes (Smith 1992, 193-232) by Minault-Gout and Thill (2012, 67).⁴ Parallels for the grave goods used in these burials can therefore be found not only in Nubia, but also in Egypt.

⁴ Maybe the social differentiation of the users of SAC5 is better described with *'sub-elite'* (see Lemos 2017 for a division of *'elite'*, *'sub-elite'* and *'non-elite'*).

5.2 Finds from the individual features of Tomb 26

Since the superstructure of Tomb 26 is not preserved, all finds derive from the substructure of the burial monument. These are presented here in order of their discovery according to features and within the two main classes of tomb furnishing and tomb equipment.

5.2.1 Feature 1

The various fillings from the shaft of Tomb 26 produced finds ranging in date from the 18th Dynasty to the Napatan era (145 objects plus ceramic vessels and bones). Of special relevance was SU 070 which yielded several architectural pieces as well as stone and pottery vessels and represents the lower level of the filling of Feature 1.

5.2.1.1 Tomb furnishing – architectural pieces

Within Feature 1, 17 pieces of stone architecture made of sandstone were found. These blocks including one pyramidion most likely originate from the superstructure of Tomb 26, or from a neighbouring tomb.

Three sandstone objects can be associated by means of hieroglyphic decoration with the deputy of Kush (*jdⁿw n Kꜣꜥ*) Hornakht, who is attested from the reign of Ramesses II (Kitchen 1980, 117-118; Budka 2001, 210-212; Budka 2015a, 48; Auenmüller 2020). SAC5 215 (36 × 32 × 58cm) from SU 070 is a pyramidion inscribed with Hornakht's name and title, thus clear proof that he was buried somewhere in SAC5 (Budka 2015a, 48-50). It is the first pyramidion attested for SAC5. All faces were worked to a smooth



Figure 5.2: inscribed stone block SAC5 083 (photo: M. Gundlach, ©AcrossBorders).

finish, but only one side was decorated with Hornakht in a kneeling, adoring pose behind a column of hieroglyphs giving his name and title. By contrast, New Kingdom pyramidia attested in Egypt or elsewhere in Nubia (Aniba, Soleb) show decoration on all four faces (see Rammant-Peeters 1983; Malek 1990; Kampp-Seyfried 2004).

Apart from the pyramidion, two more objects attest to a superstructure of Hornakht in SAC5. SAC5 083 is a fragment of a sandstone lintel, while SAC5 122 describes three pieces of a door jamb. **SAC5 083** (17.5 × 4.4 × 23.5cm) from SU 059 (Fig. 5.2) was originally part of either an architrave of a chapel or a lintel from a doorway. One worked surface is preserved, which is flat and contains decoration. Two columns of hieroglyphs, oriented towards the right, are preserved while above them is a thick horizontal band (perhaps a *pt*-sign?). The first column is too damaged to be able to make out any signs clearly. The reading of the signs in the second column is not entirely clear, but fragments of the title *jdww n Kꜣš* can be made out and some signs associated with the name Hornakht. In terms of palaeography, SAC5 083 corresponds to the pyramidion.

Probably belonging to SAC5 083 are three fragments of sandstone as part of a door jamb, **SAC5 122** from SU 065. Two of the fragments match while the third has the same dimensions, they therefore must belong together (11.4 × 7.5 × 15.8cm; 11.9 × 7.2 × 30.5cm and 11.7 × 6.7 × 16.9cm). They are worked on three faces, which are flat and smooth.

SAC5 123 (15.8 × 5.8 × 9.7cm) is another piece of architecture which shows decoration. The block is

worked on two sides, both of which are flat and smooth. On the large side, there is the remains of sunk-relief decoration. This consists of a long, thin line, which is not completely straight and may represent the arm of a figure. Traces of blue paint suggest that it may be a deity. It remains unclear from which architectural context this relief block originates.

The remaining 13 stone blocks found in Feature 1 are all uninscribed pieces and difficult to classify (see Appendix). They seem to represent fragments of door jambs and lintels belonging to doorways. They could all derive from the same superstructure, thus most likely from the one of Hornakht, but could also represent a mixture of architectural blocks from various superstructures in SAC5.

5.2.1.2 Tomb equipment

Within the objects classified as tomb equipment, bodily adornment, ceramic vessels, stone vessels, unidentified objects and one wooden object were recorded in Feature 1. No remains of body containers like coffins or funerary masks were found in the shaft.



10 cm



3 cm

Figure 5.4: amulet SAC5 085 (photo: C. Geiger, ©AcrossBorders).

Figure 5.3: stone block with relief decoration SAC5 123 (photo: M. Gundlach, ©AcrossBorders).

5.2.1.2.1 Bodily adornment

Among the bodily adornment group found in Feature 1, one amulet and two scarab amulets are notable. **SAC5 085** from SU 064 (Fig. 5.4) represents a small faience amulet in the shape of a Hathoric head (12 × 5 × 19mm). A suspension loop is located above the head and the back of the object is flat and smooth. The colour of the faience is 2.5G 6/4 (Light Almond Green).

Hathor amulets are commonly attested both in Egypt and Nubia, from the New Kingdom to the Later Period/Napatan era (see Minault-Gout and Thill 2012, 269). Only a single piece was found in the other tombs of SAC5, notably in Tomb 24, most probably of Napatan date (Minault-Gout and Thill 2012, T24P2, 269, pl. 119). SAC5 085 is stylistically markedly different and possibly belongs to the New Kingdom and even the late 18th Dynasty, although its find position does not allow a more precise dating (see Chapter 7).

Similar dating issues occur for the steatite scarab **SAC5 120** from SU 068 (Fig. 5.5). The small piece (12 × 10 × 6mm) has a hole pierced longitudinally. In general, all scarab amulets found in Tomb 26 are pierced longitudinally and could be worn as a ring, necklace, or bracelet. For SAC5 120, the interpretation of its reverse side is not entirely clear. A large boat-like sign seems to be partially enclosing a group of hieroglyphs (*mn*-sign above an *n*-sign, above two small signs, most likely a sun-disc and stroke). Overall, this design seems to symbolize the deity Amun-Ra. A New Kingdom date is possible, but a Napatan seems likely (Budka 2015d).

The second scarab from Feature 1 is **SAC5 121** from SU 070 (Fig. 5.6). The piece is again made of steatite, with a hole pierced longitudinally (17 × 8 × 13mm). The reverse

of the scarab consists of three signs reading from right to left. The first sign is a seated *Mꜣꜣt*-figure, with a feather on her head. The second figure is a recumbent sphinx/lion, wearing the double crown, beard, and uraeus. Behind this is a winged cobra, with the wings flanking a *t*-sign.

In consideration of the manufacture and decoration, a Ramesside date seems most appropriate for this scarab (see Budka 2015a, 48, pl. 10) since parallels are known from the 19th Dynasty. A nice example was found in Amrit in Syria and is now in the British Museum (BM E48260, see Budka 2015d). The motif of a sphinx with uraeus is also regularly found on scarabs in New Kingdom Nubia, see, e.g., an example from Soleb (T17 c17, Schiff Giorgini 1971, 209, fig. 391).

A considerable quantity of beads was found in Feature 1. 73 object numbers were given to a total of 161 beads in various materials and forms (Table 5.1).

Faience beads are with a total of 81 pieces the most common class. This is in line with faience being the most common material of beads at New Kingdom cemeteries in Nubia (Säve-Söderbergh and Troy 1991, 83). In Tomb 26, they are attested in several shapes: tubular and as a variant with notches to imitate multiple ring beads; disc; ring and double ring beads. Stone beads are also common and comprise a total of 66 pieces. 38 of these are made of red jasper. Most belong to one set and are diamond-shaped/biconical (approx. 4 × 4 × 5mm). One spherical jasper bead is SAC5 035 and SAC5 069 has notches running vertically. Carnelian is the second most common stone type and here 25 beads are diamond-shaped and belong to one set. This preference for red jasper and carnelian in Tomb 26 is interesting since a preference for penannular, Nubian style



Figure 5.5: scarab SAC5 120 (photo: C. Geiger, ©AcrossBorders).



Figure 5.6: scarab SAC5 121 (photo: C. Geiger, ©AcrossBorders).

earrings in these two stones was identified by Lemos (2020) for the cemeteries at Sai and Soleb. Carnelian is very uncommon elsewhere, apart from Fadrus (see Säve-Söderbergh and Troy 1991) and Amara West (Binder 2014).

One bead is made of rock crystal and is again diamond-shaped (SAC5 026). Of two spherical beads, SAC5 044 and SAC5 045, the stone was undefined. Shell beads (which possibly also include beads made from bone) account for 14 pieces and appear as ring- and disc-shaped.

The bead assemblage from Feature 1 compares well to beads found in other SAC5 tombs (Minault-Gout and Thill 2012, 305-323, pls. 123-126). Their dating and presumable attribution to burials will be discussed in Chapters 7 and 8.

A unique specimen among all beads from Tomb 26 is the rock crystal bead **SAC5 026** (Fig. 5.7). With its find position in the filling of the shaft, this bead cannot be attributed to a specific burial in Tomb 26. This is particularly unfortunate since it belongs based on its material clearly to a Kerma tradition (see Markowitz and Doxey 2014, 99 for the *'fascination with quartz'* of

the Kerma people). A complete necklace with quartz crystal elements (beads and pendants) was found in the New Kingdom cemetery of Semna (Markowitz and Doxey 2014, 90, fig. 9).

5.2.1.2.2 Ceramic vessels

The filling material of the shaft yielded substantial amounts of fragments from ceramic vessels as well as complete vessels. The pottery represents a mixture ranging in date from the 18th Dynasty until Napatan times. Most common are dishes, bowls and lids, as well as storage vessels (Fig. 5.8). Most of these vessels are wheel-made and of Egyptian style; only a small number of handmade Nubian style vessels were found in Tomb 26 (6.5% of the material). One hand-made vessel (**SAC5 215/2015**, see Chapter 10, Fig. 10.1) remains unclear concerning its date and style-affiliation. Three Nubian bowls or cooking pots could be partly reconstructed from various levels of the shaft filling (Fig. 5.9). Comparable Nubian pottery was documented in small numbers from

Number of object	SU	Type of Object	Material	Description
SAC5 039	055	Bead	Stone (jasper)	Seven small red jasper beads, diamond shaped.
SAC5 040	055	Bead	Faience	Two small faience beads, tubular in shape but in the form of multiple, connected ring beads: a) 3 × 3x7mm – 3 rings; b) 3 × 3x5mm – 2 rings.
SAC5 041	055	Bead	Faience	Double ring bead.
SAC5 042	055	Bead	Faience	Nine complete faience disc beads and 2 fragments of others. Ranging in size between 4 × 4x2mm to 5 × 5x1mm.
SAC5 043	055	Bead	Faience	Three faience disc-shaped beads: a) 7 × 7x2mm – greenish-yellow; b) 8 × 8x3mm; c) 8 × 8x2mm.
SAC5 044	055	Bead	Stone	Small spherical bead, perhaps made of stone.
SAC5 045	055	Bead	Stone	Small spherical bead, made of black and white stone.
SAC5 046	055	Bead	Shell	Small ring bead made of shell.
SAC5 047	055	Bead	Shell	Two small disc beads made of shell.
SAC5 029	056	Bead	Faience	Small fragment of a faience disc bead.
SAC5 030	056	Bead	Stone (jasper)	Red jasper? bead, roughly diamond-shaped.
SAC5 032	056	Bead	Stone (jasper)	Small red jasper? bead, diamond-shaped.
SAC5 033	056	Bead	Faience	Small faience ring bead.
SAC5 034	057	Bead	Stone (jasper)	Four small red jasper? beads, diamond-shaped.
SAC5 035	057	Bead	Stone (jasper)	Small red jasper? bead, spherical in shape.
SAC5 036	057	Bead	Shell	Small shell bead, ring-shaped.
SAC5 037	057	Bead	Faience	Small disc shaped bead, perhaps made of faience.
SAC5 038	057	Bead	Faience	Small faience bead, tubular in shape but with an incised border at one end.
SAC5 026	058	Bead	Stone (rock crystal)	Small stone, perhaps rock crystal, carved as a semi-transparent bead. Roughly diamond-shaped.
SAC5 027	058	Bead	Faience	Small faience ring bead.
SAC5 028	058	Bead	Faience	Small faience ring bead.
SAC5 068	059	Bead	Stone (jasper)	Six small red jasper? beads, diamond-shaped.
SAC5 069	059	Bead	Stone (jasper)	Small red jasper? beads, diamond-shaped and with additional notches running vertically.
SAC5 070	059	Bead	Faience	Small faience bead, tube-shaped and with notches to imitate multiple ring beads.
SAC5 071	059	Bead	Faience	Ten small ring beads varying in size between 5 × 5x2mm to 2 × 2x1mm.
SAC5 072	059	Bead	Stone (jasper)	Small red jasper bead, diamond-shaped. Partially chipped.
SAC5 079	059	Bead	Shell	Small fragment of a shell bead.
SAC5 073	060	Bead	Faience	Small faience ring bead.
SAC5 074	060	Bead	Faience	Small faience bead, tube-shaped and with notches to imitate multiple ring beads.
SAC5 075	060	Bead	Faience	Three faience ring beads, ranging in size between 4 × 4x1mm to 3 × 3x1mm.
SAC5 076	060	Bead	Faience	Two fragments of a burnt faience bead with much of the glaze missing; a) 7 × 4x7mm; b) 4 × 2x1mm.
SAC5 077	060	Bead	Stone (jasper)	Five red jasper beads, diamond-shaped.
SAC5 078	061	Bead	Stone (jasper)	Two red jasper beads, diamond-shaped.
SAC5 097	062	Bead	Faience	Small faience ring bead.
SAC5 098	062	Bead	Stone (jasper)	Small spherical bead, perhaps made of red jasper.
SAC5 099	062	Bead	Stone (carnelian)	Small carnelian bead, diamond-shaped.
SAC5 090	063	Bead	Faience	Small fragment of a circular faience bead, broken roughly in half.
SAC5 091	063	Bead	Faience	Two faience ring beads, both complete: a) 3 × 3x2mm; b) 2 × 2x1mm.
SAC5 092	063	Bead	Shell	Small disc-shaped shell bead.
SAC5 093	063	Bead	Stone (jasper)	Six red jasper beads, diamond shaped, ranging in size between 4 × 4x5mm to 4 × 4x4mm.
SAC5 094	063	Bead	Stone (jasper)	One fairly large red jasper bead, diamond shaped.
SAC5 095	063	Bead	Faience	Two fragments of a spherical faience bead which is complete when joined (6 × 5x5mm and 5 × 5x2mm).

Table 5.1: beads from Feature 1 according to SUs.

Number of object	SU	Type of Object	Material	Description
SACS 096	063	Bead	Faience	Piece of a tube-shaped faience bead, largely intact.
SACS 087	064	Bead	Faience	Small fragment of a faience bead, largely broken.
SACS 102	064	Bead	Faience	Faience bead, tubular shaped and partially broken.
SACS 103	064	Bead	Faience	Two fragments of a round faience bead: a) 5 × 6x7mm; b) 3 × 3x3mm.
SACS 104	064	Bead	Faience	Two fragments of a round faience bead: a) 9 × 5x6mm; b) 7 × 4x3mm.
SACS 105	064	Bead	Stone	Small spherical stone bead.
SACS 106	064	Bead	Stone (carnelian)	Two small carnelian beads, diamond shaped.
SACS 107	064	Bead	Faience	Three small faience ring beads, ranging in size from 3 × 3x2mm to 4 × 4x1mm.
SACS 108	064	Bead	Shell	Five fragments of round shell beads, ranging in size from 3 × 1x1mm to 7 × 2x1mm.
SACS 088	065	Bead	Faience	Two small ring beads, both complete: a) 4 × 4x1mm; b) 3 × 3x2mm.
SACS 089	065	Bead	Stone (jasper)	Three red jasper beads, diamond-shaped.
SACS 100	066	Bead	Shell	Small circular shell bead.
SACS 101	066	Bead	Faience	Fragment of faience, originally part of a bead.
SACS 111	068	Bead	Faience	Small fragment of a faience bead.
SACS 112	068	Bead	Stone (carnelian)	Seven red carnelian beads, diamond-shaped.
SACS 113	068	Bead	Faience	Three fragments of faience ring beads, ranging in size from 4 × 2x1mm to 4 × 4x1mm.
SACS 114	068	Bead	Faience	Two intact circular faience beads.
SACS 109	069	Bead	Stone (carnelian)	Twelve red carnelian beads, diamond-shaped.
SACS 110	069	Bead	Faience	Two fragments of faience belonging to a spherical bead(s): a) 8 × 5x6mm; b) 6 × 7x4mm.
SACS 115	070	Bead	Faience	One complete faience ring bead and two fragments. Ranging in size between 4 × 4x1mm to 4 × 2x1mm.
SACS 116	070	Bead	Faience	Three fragments of a faience bead(s), ranging in size between 2 × 2x1mm to 6 × 4x3mm.
SACS 117	070	Bead	Stone (carnelian)	Small red carnelian bead, diamond-shaped.
SACS 118	070	Bead	Faience	Small faience bead, almost spherical. Corroded by salt.
SACS 127	070	Bead	Faience	Small faience disc bead.
SACS 128	070	Bead	Shell	Small shell ring bead.
SACS 129	070	Bead	Faience	Three fragments of a small faience ring bead, ranging in size between 3 × 2x1mm to 7 × 4x1mm.
SACS 131	070	Bead	Faience	Small faience disc bead.
SACS 124	071	Bead	Faience	Small faience ring bead.
SACS 125	071	Bead	Shell	Small shell ring bead.
SACS 126	071	Bead	Stone (carnelian)	Two red carnelian beads, diamond-shaped.
SACS 130	071	Bead	Faience	Small faience disc bead.

Table 5.1: continued.

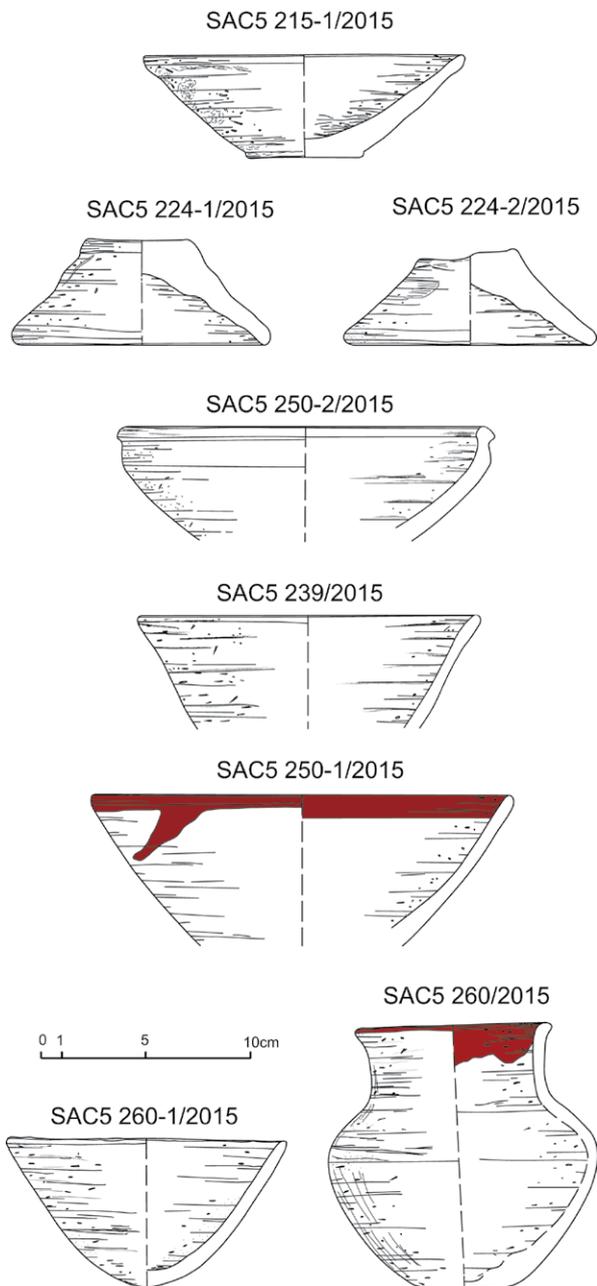


Figure 5.8: various vessels from the shaft filling (18th Dynasty to Napatan).

other New Kingdom tombs in SAC5 (Minault-Gout and Thill 2012, pl. 144 bottom).

The fragmented material from the shaft was processed as described in Chapter 2 and the results are summarised in Table 5.2.

The classification and abbreviation of the vessel shapes follows the system developed for the AcrossBorders project by the author based on the settlement material. An overview of the most important types used in the statistics



Figure 5.7: bead SAC5 026 (photo: M. Gundlach, ©AcrossBorders).

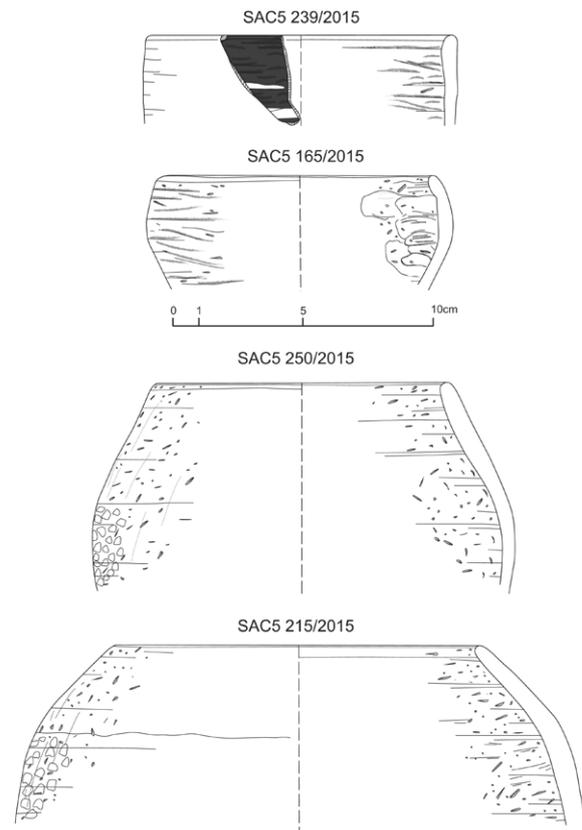


Figure 5.9: Nubian-style vessels from the shaft filling (probably 18th Dynasty).

in this Chapter can be found in Table 5.3. Table 5.4 offers the key for the used abbreviations of the most common surface treatments and fabrics, here classified as wares. That there is a greater variability within the New Kingdom wares than in the pre-Napatan and Napatan wares illustrates the main use of Tomb 26 during the 18th Dynasty and the Ramesside era.

Find nos. SAC5	155, 157, 165, 174, 180, 193, 201, 208, 215, 224, 232, 239, 245, 247, 250, 256, 260, 269, 277, 278, 284/2015	Feature	1	SUs	053, 054, 055, 056, 057, 059, 060, 063, 064, 065, 068, 070	
Dating		mid-late 18th Dynasty; Ramesside; pre-Napatan, Napatan				
Napatan ware	Shape	Complete	Rim sherds	Body sherds	Bases	Handle
B3RB	DP3 var.		2			
B3RB	BK		12	12		
B3RWRim	BK		16	7	1 U	
Marl A4UC	Ribbed jar		3			
Marl A4UC	Grooved rim, AO		3	12		4
Marl A4UC	Jug/small jar		3 + 2 shoulder	4	2 U	
Marl A4UC	Storage vessel		2			
Marl A2UC	AO 2		2			4
Marl A4UC	DP3		2			
Total Napatan: 93 (58 diagnostics, 35 body sherds)						
pre-Napatan ware	Shape	Complete	Rim sherds	Body sherds	Bases	Handle
B2WW	Jug with handle		1			
B2RWRim	Cup		50			
B2RWRim hand-made	BK		2			
B2UC hand-made	BJ?		1			
Total pre-Napatan: 54 (all diagnostics)						
Nubian ware	Shape	Complete	Rim sherds	Body sherds	Bases	Other
Nubian 2 UC	ST			3		
Nubian 2 basketry	CP		7	27		
Nubian 1 BT	BK Kerma		1			
Nubian 2 BT	Cup		1			
Total Nubian NK: 39 (9 diagnostics, 30 bodysherds)						
NK ware 18th Dyn.	Shape	Complete	Rim sherds	Body sherds	Bases	Handle
IV grey WW	AO			1		1
Marl D YB	Jug			2		
OA1 UC	AO			1		
B2WWBI	NJ		1 linear decorated			
B2RWMO	NJ		1 linear decorated			
B2RW	ST			55		
B2RW	NJ		1		2 U	
B2RW	BK 1		7		1	
B2RB	NJ		1	6	3 U	
B2chaffyWW	AO		4 + 1 shoulder	14		
B2UC	BJ 1		9	53	21	
B2UC	BJ 2		8	29	2	
B2UC	NJ		6		17 U	
C2UC	BJ, painter's pot			2		
B2UC	FP 1		1		3	
B2UC	BK 1.2				1	
B2UC	DP 1	2	8			

Table 5.2: statistics of the fragmented pottery found in Feature 1.

Find nos. SAC5	155, 157, 165, 174, 180, 193, 201, 208, 215, 224, 232, 239, 245, 247, 250, 256, 260, 269, 277, 278, 284/2015	Feature	1	SUs	053, 054, 055, 056, 057, 059, 060, 063, 064, 065, 068, 070	
B2UC	DP 2		3			
B2UC	DP 3		7			
B2UC	DP 6		8			
C2UC	DP 2		2			
B2RWallRPin	DP 3		3	3	1 ring base	
B2RWallRPin	DP 6		2			
B2RWallRPin	DP 9		1			
B2UCRB	DP			8		
C2UC	SU 2		2			
C2UC	SO				1 foot	
Total NK 18th Dyn.: 305 (131 diagnostics, 174 body sherds)						
NK ware Ramesside	Shape	Complete	Rim sherds	Body sherds	Bases	Handle
Marl A2UC	AO			22		7
Marl A2UC	MJ		2			5
Marl A2UCMO	PF		4 + 2 decorated sherds			2
IV grey RB	PF					1
IV grey MO	PF imported		1 + 1 shoulder			
Mix A YB	AO			3		
Mix B YB	AO		1	9	2	2
B2RW	AO		2	20		1
B2RW	ST, neckless		5			
B2UC	AO		2			9
B2UC	RS 1		1			
B2RWRim	DP 3		3			
B2RWRim	DP 6		4	2		
Total Ramesside: 113 (57 diagnostics, 56 body sherds)						
Total: 604 (309 diagnostics, 295 body sherds)						

The processing of a total of 604 sherds from Feature 1 shows the following distribution according to periods (Fig. 5.10): more than 50% are 18th Dynasty ceramics. The Ramesside material accounts to 18.6%. Very importantly, the Nubian New Kingdom wares show with 6.5% a significant percentage, higher than several contexts in the New Kingdom town (see Chapter 10). Similar to Aniba, not only cooking pots but also fine ware of Kerma Black topped style is present (*cf.* Helmbold-Doyé and Seiler 2012; 2019, 401-411). The ceramics from Feature 1 post-dating the New Kingdom are 24.3%, here 15.4 % Napatan material and 8.9% pre-Napatan wares.

Noteworthy is a fragment of an imported pilgrim flask which was decorated. A comparable piece was found in Tomb S10 at Aniba and dated to the second half of the 18th Dynasty (Helmbold-Doyé and Seiler 2019, 398, fig. VII.L.5). Another imported Levantine pilgrim flask is more likely to date to the Ramesside era – the fragment SAC5 215/2015 is comparable to fabric IV.07.12 in Qantir, well attested for pilgrim flasks at this site in the Nile delta (Aston 1998, 664), and has a reddish yellow slip (5YR7/6) without preserved painted decoration (Fig. 5.11).

The post-New Kingdom material mostly comprises red polished Napatan beakers, Marl clay amphorae and globular jars as well as a variety of dishes and cups. Such an

Table 5.2: continued.

Open forms
Dishes/Plates = DP
DP 1: Simple, direct rim DP 2: Simple, modelled rim DP 3: Simple, upturned rim (direct) DP 4: Simple, direct rim internally thickened DP 6: Simple, everted rim (direct) DP 9: Complex, outer lip
Flowerpot = FP
FP 0: hole in base, rim missing FP 1: direct rim/angular shaped, hole in base FP 2: modelled rim/rounded lip, hole in base FP 3: direct rim, everted, hole in base
Beakers (deep open forms) = BK
BK 1: Tall beaker with direct rim BK 1.1: rounded base BK 1.2: cut/trimmed base
Closed forms
Slender jars = Jar ordinary = JO
Necked jars = NJ
Beer jar = BJ
BJ 1: Hole-mouthed BJ 2: Short-necked slender jar, composite contour, direct rim
Storage jar = ST
Handeled vessels/amphorae = AO
Pilgrim flask = PF
Miniature vessels = MV
Others/Functional
Cooking pots = CP
Pot-stands = S stands
SU = Tubular
SU 1: Low ring stands SU 2: Medium ring stands SU 3: Tall stand of tubular form
SO = Tall stand with bowl/offering bowl and foot
Handmade
Bread mould = BM

Table 5.3: typology of main categories of pottery vessels from Tomb 26.

assemblages compares to finds in other tombs in SAC5 (see Minault-Gout and Thill 2012, pls. 146-148).

The SUs directly above the base of the shaft were highly interesting (SUs 070 and 71): several pottery vessels were found *in situ*, together with and below worked stones (architectural pieces, see above). Three almost complete, decorated Marl clay pilgrim flasks were assembled along the eastern wall of the shaft (Fig. 5.12). The total number of decorated pilgrim flasks must have been larger, since eight more fragments were found in Feature 1 (Table 5.2).

The fabric of these flasks is a Marl A4 variant. Marl clay pilgrim flasks are common in SAC5 (see Minault-Gout and Thill 2012, 354). Close parallels for the ones from Tomb 26 are T5 18 from the nearby Tomb 5, as well as

Napatan wares	Description
B3RB	Nile clay B3 red burnished
B3RWRim	Nile clay B3 with red rim
Marl A4UC	Marly clay A4 uncoated
pre-Napatan wares	
B2WW	Nile clay B2 whitewashed
B2RWRim	Nile clay B2 with red rim
B2UC hand-made	Nile clay B2 uncoated
Nubian wares	
Nubian 2 UC	Nubian 2 fabric uncoated
Nubian 2 basketry	Nubian 2 fabric with basketry impressions
Nubian 1 BT	Nubian 1 fabric black topped
Nubian 2 BT	Nubian 2 fabric black topped
New Kingdom wares, 18th Dynasty	
IV grey WW	Imported Syrian-Palestian amphora fabric, grey, whitewashed
Marl BUC	Marl clay B uncoated
Marl DYB	Marl clay D yellow burnished
OA1 UC	Oasis clay 1 uncoated
B2WWBI	Nile clay B2 whitewashed and bichrome painted
B2RWMO	Nile clay B2 redwashed and monochrome painted
B2RW	Nile clay B2 redwashed
B2RB	Nile clay B2 red burnished
B2chaffyWW	Nile clay B2, chaffy, local production, whitewashed
B2UC	Nile clay B2 uncoated
C2UC	Nile clay C2 uncoated
B2RWallRPin	Nile clay B2 redwashed in and out, burnished inside
B2UCRB	Nile clay B2 uncoated out, red burnished inside
B2RWRim	Nile clay B2 red rim on uncoated
D4UC	Nile D4 uncoated (bread mould clay)
New Kingdom wares, Ramesside	
Marl A2UC	Marl clay A2 uncoated
Marl A2UCMO	Marl clay A2 monochrome painted on uncoated
IV grey RB	Imported Levantine fabric, red slipped
IV grey MO	Imported Syrian-Palestian fabric, grey, monochrome painted
Mix A YB	Mix clay A yellow burnished
Mix B YB	Mix clay B yellow burnished
B2pinkslip	Nile B2 pink slip
B2RW	Nile clay B2 redwashed
B2UC	Nile clay B2 uncoated
B2RWRim	Nile clay B2 red rim on uncoated
B2UCRW	Nile clay B2 uncoated out, red washed inside

Table 5.4: abbreviations of main surface treatments and fabrics of pottery vessels from Tomb 26.

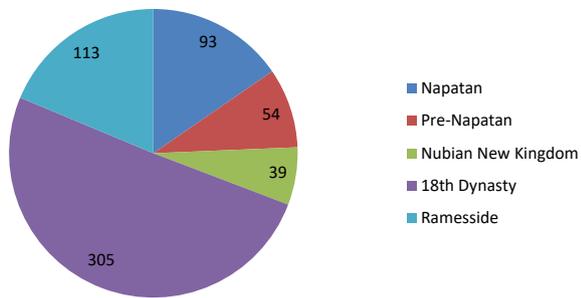


Figure 5.10: quantities of ceramics from Feature 1 according to periods.



10 cm

Figure 5.11: fragment of a Levantine pilgrim flask from Feature 1, SAC5 215/2015 (photo: C. Geiger).

T7 30 and T7 33 from the also nearby Tomb 7 (see Minault-Gout and Thill 2012 163, pl. 157). A Ramesside example similar to the ones from Tomb 26 was found in Hillat el-Arab (Vincentelli 2006, 147, fig. 2.91, no. 581). Another close parallel comes from Tomb 15 at Soleb (Schiff Giorgini 1971, 194-196, fig. 346, T15 p13). In general, Marl clay pilgrim flasks remained popular as burial gifts in Nubia until pre-Napatan times (Vincentelli 2006, *passim*; Binder 2014; Kilroe 2021). Based on the typological and stylistic criteria of the pilgrim flasks from the shaft of Tomb 26, they can be dated to the late New Kingdom (see Chapter 7).

The pilgrim flasks were found associated with other pottery vessels, especially large storage vessels and amphorae (Fig. 5.13). The fabric of these amphorae is Marl A2 and the vessels date to the Ramesside period, most likely the 20th Dynasty (Aston 2004, 198-199; see Budka 2017c, 114-115, fig. 8).

A remarkable ceramic vessel of which some fragments were found in the shaft is **SAC5 214**, a figurative vessel in the shape of a baboon. Since the fragments were found in the lowest shaft filling and in Feature 2, the vessel will be discussed below (Feature 2, Chapter 2.2.2).

Another noteworthy find associated with pottery is **SAC5 209**. This object is the filling of a so-called painter's pot – a compact plaster/mortar piece (9.7 × 4.4 × 7.1cm) which still shows the negative of the pot it was once filled into. Within a funerary context, such plaster or mortar remains could have a ritual connotation (see Budka 2010a, 374 with references). However, in view of the plastered walls from Feature 2 in Tomb 26 (see Chapter 3.3.2), a practical function and an interpretation as a remaining piece from the building/decoration equipment is more likely. Thus, this find does not belong to the grave goods, but is rather associated with the tomb furnishing respectively the building process of Tomb 26 ('*Baukeramik*', Budka 2010a, 374).

5.2.1.2.3 Stone vessels

One stone vessel and fragments of another one (**SAC5 210**, see below, Feature 2) were found in the shaft filling. **SAC5 212** is an alabaster vessel from SU 070 which is largely preserved with only a few fragments missing from the rim (Fig. 5.14). Several fragments have been glued on, including one from SU 072 (Feature 3). This is a jar with a tall neck, two horizontal ring handles and a rounded outer lip as a rim. The vessel is stained black from residue, most likely from bitumen (for evidence of bitumen used in Tomb 26 see Fulcher and Budka 2020 and below, Feature 5). This type is not attested from others tombs in SAC5 (see Minault-Gout and Thill, *passim*). It finds parallels at different sites in Egypt (Riqqeh, Gurob and Abydos), ranging in date from the late 18th Dynasty to the 19th Dynasty (Aston 1994, 152, types 178 and 179; see also Budka 2015a, 48).

5.2.1.2.4 Unidentified objects

Two objects attest the use of metal, most likely of copper, in Tomb 26. Both are otherwise unidentifiable and very fragmented. **SAC5 031** from SU 055 is a small fragment of metal which is now green through oxidization (4 × 3 × 4mm). **SAC5 119** found in SU 070 is a flat fragment with no discernible shape and largely green through oxidisation (48 × 2 × 18mm). These two fragments of metal from Tomb 26 are most likely the remains of toilet objects or cosmetic utensils attested from other tombs in SAC5 in a better state of preservation (see Minault-Gout and Thill 2012, pls. 129 and 175).

SAC5 086 from SU 063 is another unidentified object. Made of stone, it remains with its spherical shape of unknown function (20 × 19 × 20mm).



Figure 5.12: find situation of the pilgrim flasks in Feature 1 (photo: J. Budka).

5.2.1.2.5 *Wooden object*

Wood is only badly preserved in Tomb 26. SAC5 080 from SU 059 is an example of worked wood (Fig. 5.15). Four fragments, ranging in size between $6 \times 10 \times 8$ mm to $7 \times 7 \times 4$ mm of worked wood, remain unclear as to their original shape and function. One fragment contains several small holes.

5.2.1.3 *Accidental finds/objects from debris*

As the only feature within Tomb 26, the shaft also comprises a large number of objects which are most likely not to be interpreted as part of the tomb equipment, but rather, were transported to the tomb by accident, by shifting of material or possibly used during plundering. Many tools (especially scrapers in ceramic and one stone pounder) were found in Feature 1. **SAC 084** from SU 063 is a stone tool made of siliceous shale ($13.7 \times 6.7 \times 8.1$ cm). Percussion marks located along the ridges of the stone illustrate that it was used as a pounder in its simple natural shape (Fig. 5.16).

This tool must remain unclear regarding its date – it finds close parallels in the New Kingdom town of Sai (see Budka 2020, 262), but similar pounders are attested until the Medieval period. Such stone tools are not confirmed as regular tomb equipment of New Kingdom burials (although hammerstones were found in Fadrus and Soleb, see Lemos 2020, 16) and its presence in Tomb 26 is most likely accidental or connected with a phase of plundering.

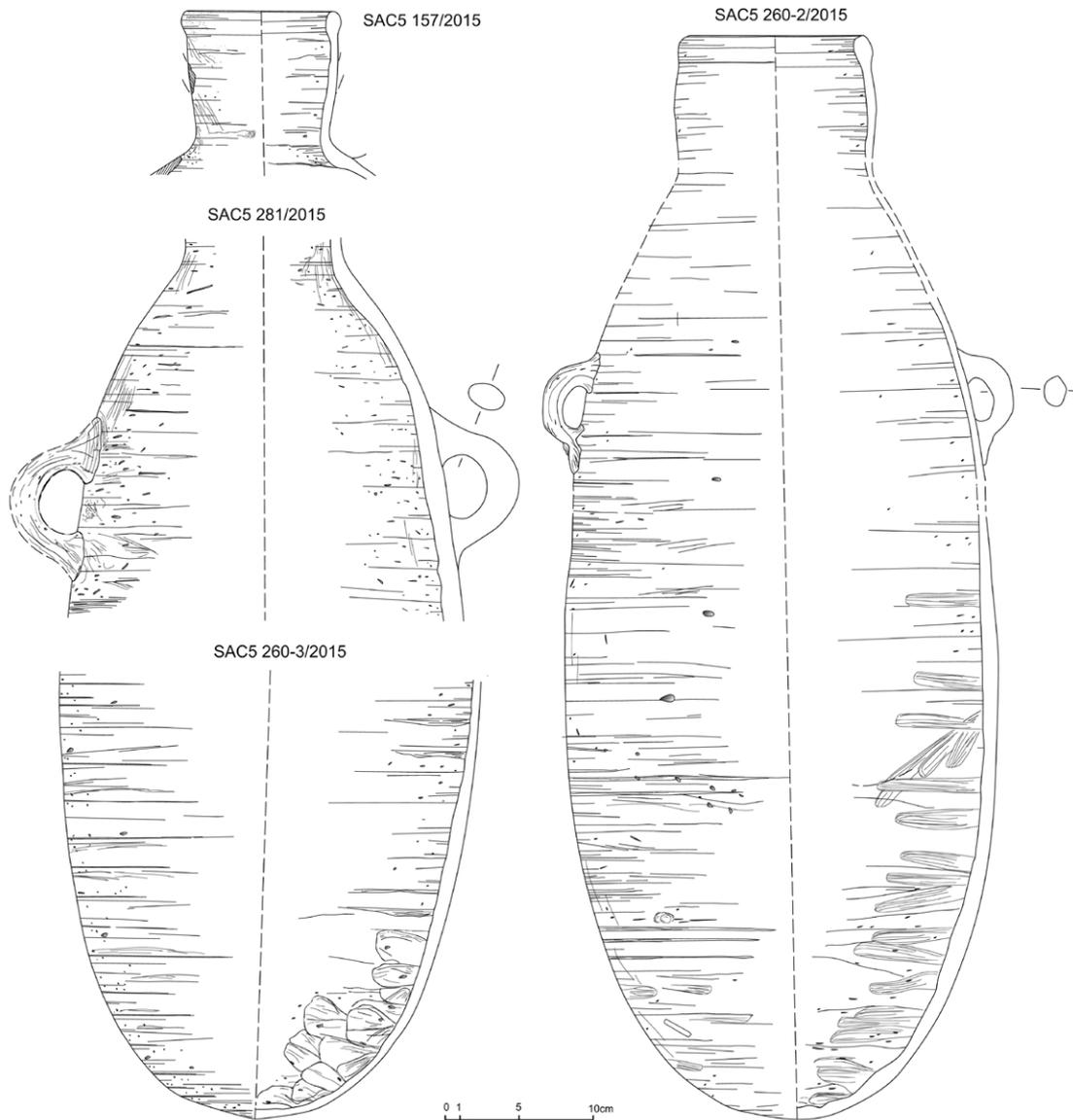


Figure 5.13: amphorae from Feature 1.

A total of 57 reused sherds representing scrapers were found in Tomb 26 and the majority derive from Feature 1 (Table 5.5).

All in all, 82 scrapers made of reused pottery sherds were found by AcrossBorders in SAC5. 25 pieces did not come from Tomb 26, 57 were found inside the tomb (mostly from Feature 1, some in Feature 2). Among these, the majority can be attributed to the New Kingdom based on the shape and material of the sherd (34 pieces, 12 from the 18th Dynasty, 22 more generally New Kingdom). 14 pieces are Napatan, one is Ramesside or pre-Napatan, four pre-Napatan or Napatan and an additional four scrapers remain unclear in date. This mixture in dating and a preference for sherds from

amphorae points towards an *ad hoc* production of these tools during the process of plundering Tomb 26, used as tools for digging. However, scrapers are well attested in the New Kingdom town of Sai (Budka 2020, 233-236) and a deliberate deposition of the tools in the tomb cannot be excluded although it remains unlikely. A function of the reused sherds as digging tools for plundering also finds a parallel in the near-by Meroitic cemetery on Sai (see de Voogt and Francigny 2012, 63, fig. 2).

5.2.2 Feature 2

Feature 2 was completely excavated in 2016 (Budka 2016a). Despite its obviously disturbed state of preservation and the multiple flooding, remains of a minimum of fourteen



10 cm

Figure 5.14: stone vessel SAC 212 (photo: C. Geiger, ©AcrossBorders).

individuals were documented from different levels (see Chapter 6 for details). No traces of tomb furnishing were found in this chamber (apart from the plaster fragments and the fallen stones from the walls, see Chapter 3). Except for a few scrapers which may be related to tomb plundering (see above and Table 5.5) as well as a small number of unclear objects (see below), all finds belong to the class of tomb equipment.

5.2.2.1 Bodily adornment

A total of 111 beads in faience, stone, shell and bone were found in Feature 2 (Table 5.6).

Similar to Feature 1, the most common material is faience with 85 pieces in different shapes (4 disc-shaped; 2 tubular; 61 ring-shaped; 9 spherical; 3 double ring-shaped; 1 diamond-shaped and 5 of unclear shape). 19 stone beads are attested (16 carnelian diamond-shaped; 1 red jasper diamond-shaped; 1 stone spherical; 1 stone tubular). Shell and bone beads are confirmed in small numbers (shell: 1 ring; 1 disc; bone: 2 ring; 1 ovoid, 1 tubular and 1 unclear).

Five scarabs/scaraboids were found in Feature 2. SAC5 207 from SU 073 is an unclear, fragile faience object which is most probably a ring bezel. It is only fragmentarily preserved but seems to present a scaraboid (13 × 7x6mm).



1 cm

Figure 5.15: wooden object SAC5 080 (photo: M. Gundlach, ©AcrossBorders).



10 cm

Figure 5.16: stone tool/pounder SAC 084 (photo: M. Gundlach, ©AcrossBorders).

Number of object	Find no. SAC5	Type of Object	SU	Date of Object
SAC5 049	040/2015	Scraper	021	18th Dynasty
SAC5 052	050/2015	Scraper	023	18th Dynasty
SAC5 053	050/2015	Scraper	023	18th Dynasty
SAC5 056	060/2015	Scraper	025	post-New Kingdom
SAC5 050	098/2015	Scraper	030	18th Dynasty
SAC5 057	082/2015	Scraper	032	18th Dynasty
SAC5 058	082/2015	Scraper	032	18th Dynasty
SAC5 059	082/2015	Scraper	032	18th Dynasty
SAC5 060	082/2015	Scraper	032	25th Dynasty
SAC5 061	082/2015	Scraper	032	Napatan
SAC5 062	089/2015	Scraper	035	18th Dynasty
SAC5 063	089/2015	Scraper	035	25th Dynasty
SAC5 064	089/2015	Scraper	035	25th Dynasty
SAC5 065	089/2015	Scraper	035	Ramesseid
SAC5 066	089/2015	Scraper	035	Ramesseid
SAC5 054	086/2015	Scraper	036	18th Dynasty
SAC5 055	097/2015	Scraper	037	18th Dynasty
SAC5 051	106/2015	Scraper	040	18th Dynasty
SAC5 143	123/2015	Scraper	046	Unclear
SAC5 142	127/2015	Scraper	047	Unclear
SAC5 179	238/2015	Scraper	051	New Kingdom
SAC5 180	238/2015	Scraper	051	Ramesseid/ pre-Napatan
SAC5 181	238/2015	Scraper	051	Ramesseid/ pre-Napatan
SAC5 144	153/2015	Scraper	054	Ramesseid/ pre-Napatan
SAC5 146	155/2015	Scraper	055	18th Dynasty
SAC5 145	157/2015	Scraper	059	Napatan
SAC5 158	193/2015	Scraper	060	18th Dynasty
SAC5 159	193/2015	Scraper	060	New Kingdom
SAC5 166	208/2015	Scraper	062	New Kingdom
SAC5 167	208/2015	Scraper	062	New Kingdom
SAC5 168	208/2015	Scraper	062	New Kingdom
SAC5 169	208/2015	Scraper	062	18th Dynasty
SAC5 147	215/2015	Scraper?	063	Unclear
SAC5 148	215/2015	Scraper	063	pre-Napatan/ Napatan
SAC5 149	215/2015	Scraper	063	Napatan
SAC5 150	215/2015	Scraper	063	pre-Napatan/ Napatan
SAC5 151	215/2015	Scraper	063	New Kingdom?
SAC5 152	215/2015	Scraper	063	Napatan

Table 5.5: list of all reused sherds (ceramic scrapers) found by AcrossBorders arranged according to SU.

Number of object	Find no. SAC5	Type of Object	SU	Date of Object
SAC5 153	215/2015	Scraper?	063	Unclear
SAC5 154	215/2015	Scraper	063	Napatan
SAC5 155	215/2015	Scraper	063	Napatan
SAC5 228	215/2015	Scraper	063	Napatan
SAC5 177	224/2015	Scraper	064	New Kingdom
SAC5 178	224/2015	Scraper	064	Napatan
SAC5 216	224/2015	Scraper	064	New Kingdom
SAC5 217	224/2015	Scraper	064	Napatan
SAC5 156	232/2015	Scraper	065	New Kingdom
SAC5 157	232/2015	Scraper	065	New Kingdom
SAC5 170	232/2015	Scraper	065	Napatan
SAC5 171	232/2015	Scraper	065	Napatan?
SAC5 172	239/2015	Scraper	066	Napatan
SAC5 173	239/2015	Scraper	066	New Kingdom
SAC5 174	239/2015	Scraper	066	Napatan
SAC5 175	239/2015	Scraper	066	New Kingdom
SAC5 176	239/2015	Scraper	066	New Kingdom
SAC5 230	247/2015	Scraper	067	New Kingdom
SAC5 160	250/2015	Scraper	068	New Kingdom
SAC5 161	250/2015	Scraper	068	18th Dynasty
SAC5 162	250/2015	Scraper	068	pre-Napatan/ Napatan
SAC5 163	250/2015	Scraper	068	pre-Napatan/ Napatan
SAC5 164	250/2015	Scraper	068	New Kingdom
SAC5 165	250/2015	Scraper	068	New Kingdom
SAC5 224	260/2015	Scraper	070	Napatan
SAC5 225	260/2015	Scraper	070	New Kingdom
SAC5 226	260/2015	Scraper	070	New Kingdom
SAC5 227	260/2015	Scraper	070	New Kingdom
SAC5 229	269/2015	Scraper	070	New Kingdom?
SAC5 231	286/2015	Scraper	071	Napatan
SAC5 222	295/2015	Scraper	072	18th Dynasty
SAC5 223	291/2015	Scraper	072	Unclear
SAC5 218	229/2015	Scraper	073	18th Dynasty
SAC5 219	229/2015	Scraper	073	18th Dynasty
SAC5 220	229/2015	Scraper	073	Unclear
SAC5 221	229/2015	Scraper	073	New Kingdom
SAC5 360	028/2016	Scraper	107	18th Dynasty
SAC5 365	179/2016	Scraper	114	18th Dynasty
SAC5 366	031/2017	Scraper	155	18th Dynasty
SAC5 357	044/2017	Scraper/lid	156	New Kingdom
SAC5 358	044/2017	Scraper	156	18th Dynasty
SAC5 359	044/2017	Scraper	156	18th Dynasty
SAC5 265	026/2016	Scraper	200	New Kingdom
SAC5 301	081/2016	Scraper	201	Unclear



Figure 5.17: faience ring bezel SAC5 207 (photo: C. Geiger, ©AcrossBorders).

One side (the base?) has a small chunk of material attached with a small depression inside – potentially part of the setting into the ring or necklace (Fig. 5.17).

SAC5 266 from SU 114 is a small complete faience scarab, with a hole pierced longitudinally (19 × 14 × 8mm). The material itself is quite degraded and fragile, of a light green colour and with no remaining glaze to protect the surface. The image on the reverse of the scarab is not entirely clear but is almost certainly pictorial rather than inscriptional (Fig. 5.18). The central figure is an abstractly formed winged scarab: the body is represented as a circle, the wings are asymmetrical, and there are only four legs. Below this is a *nb*-sign. A circular sun disc appears on either side. The interior of the body, wings, *nb* and discs all have incised linear decoration.

The execution and design of this scarab suggests a late New Kingdom or pre-Napatan dating. The winged scarab is generally well-attested on New Kingdom scarabs, but then differs in terms of details and stylistics (see, e.g., Art Institute Chicago, No. 1894.1690).⁵

SAC5 279 is a small serpentinite scarab (15 × 10 × 7mm), with a hole pierced longitudinally, unearthed in SU 118. The scarab is beautifully made and preserved, with well-



Figure 5.18: scarab SAC5 266 (photo: C. Geiger, ©AcrossBorders).

defined *clypeus* and *elyctra*. On the reverse, the goddesses Satet (left) and Anuket (right) are sitting facing each other, each with an ankh balanced on her knee (Fig. 5.19). On the far left is the *mrj*-sign and on the far right is ʕ, possibly reading *mrj* ʕ, “greatly beloved of Satet and Anuket”. Among the scarabs from other tombs of SAC5 giving the names of deities, neither Satet nor Anuket were attested (see Minault-Gout and Thill 2012, pl. 117).

SAC5 281 is a small complete faience scarab (21 × 15 × 9mm) from SU 125, with a hole pierced longitudinally. The scarab is well made, with decorated *clypeus* and head. On the reverse is a possible cryptographic writing of the name of Thutmose III, *Mn-hpr-Rʕ* (cf. Roulin 1999): a lion (*Rʕ*), the *mn*-sign, and a beetle (*hpr*) (Fig. 5.20). However, the lion itself looks very much like a hyena, with high set shoulders, a narrow rear end, and even bristly hair on the back. The beetle has only four legs. On either short side of the scarab, reed leaves stand in opposing directions, separated from the main text by thin vertical incised lines. A small chip is missing from the lower surface but is unlikely to affect the reading. The scarab appears to have been badly burnt at some stage, with black melted material (possibly bitumen) on all surfaces, obscuring the decoration on the scarab base. The surface is also worn, with little trace of the coloured glaze remaining, probably due to flood damage.

5 <https://www.artic.edu/artworks/134281/scarab-winged-scarab-beetle-with-hieroglyphs> (last accessed: January 15, 2021).

Number of object	SU	Type of Object	Material	Description
SAC5 192	073	Bead	Faience	Three small faience disc-shaped beads.
SAC5 193	073	Bead	Faience	Small fragment of a faience bead.
SAC5 194	073	Bead	Faience	Two fragments of faience ring bead(s): a) 10 × 6x6mm; b) 10 × 6x5mm.
SAC5 195	073	Bead	Faience	Small fragment of a faience spherical ring bead, largely broken.
SAC5 196	073	Bead	Stone (carnelian)	Small red carnelian bead, diamond-shaped.
SAC5 197	073	Bead	Faience	Five faience ring beads, ranging in size between 6 × 5x1mm to 6 × 6x3mm.
SAC5 198	073	Bead	Faience	Four fragments of faience ring beads, ranging in size between 8 × 6x4mm to 8 × 6x5mm.
SAC5 199	073	Bead	Faience	Two double ring beads: a) 5 × 3x1mm; b) 5 × 3x2mm.
SAC5 200	073	Bead	Shell	Small shell ring bead.
SAC5 201	073	Bead	Stone (carnelian)	Two small red carnelian beads, one intact and one broken: a) 4 × 4x4mm; b) 3 × 3x3mm.
SAC5 202	073	Bead	Faience	Small faience ring bead.
SAC5 203	073	Bead	Stone	Small spherical bead, perhaps made of stone.
SAC5 204	073	Bead	Faience	Seven faience ring beads, six intact and one broken, ranging in size between 4 × 2x1mm to 4 × 4x2mm.
SAC5 205	073	Bead	Stone	Two fragments of a bead, perhaps stone, ranging in size between 6 × 4x3mm to 6 × 4x4 mm.
SAC5 206	073	Bead	Faience	Tubular faience bead.
SAC5 215	073	Bead	Faience	Small spherical faience bead, largely eroded through water damage.
SAC5 187	074	Bead	Faience	Small spherical faience bead.
SAC5 188	074	Bead	Faience	Five faience ring beads, ranging in size between 4 × 4x1mm to 6 × 6x2mm.
SAC5 189	074	Bead	Faience	Small faience bead, which has the appearance of two small ring beads stuck together.
SAC5 190	074	Bead	Faience	Small fragment of a faience bead, largely broken.
SAC5 191	074	Bead	Faience	Three small fragments of a faience bead(s), ranging in size between 6 × 4x4mm to 6 × 6x3mm.
SAC5 182	075	Bead	Faience	Two fragments of a faience bead, broken and crumbly: a) 5 × 4x3mm; b) 7 × 6x4mm.
SAC5 183	075	Bead	Faience	Small faience disc-shaped bead.
SAC5 184	075	Bead	Faience	Two small faience ring beads: a) 5 × 5x1b) 6 × 6x1mm.
SAC5 185	075	Bead	Stone (carnelian)	Three small red carnelian beads, diamond-shaped.
SAC5 186	075	Bead	Faience	Small spherical faience bead, broken roughly in half.
SAC5 235	106	Bead	Bone	Small cream coloured ring bead, perhaps made from bone or ostrich egg, but the surface is very degraded.
SAC5 237	107	Bead	Faience	Rather large faience ring bead, burnt.
SAC5 238	107	Bead	Faience	Blue faience bead with a bevelled outer edge. Most of the original surface has worn off.
SAC5 239	107	Bead	Bone	One end of a bone bead, probably originally rather ovoid in shape.
SAC5 240	107	Bead	Faience	Eight faience ring beads, ranging from white to light blue; 4 × 4x1mm to 6 × 6x1mm.
SAC5 245	107	Bead	Faience	Blue faience ring bead, with heavily degraded surface
SAC5 247	107	Bead	Stone (jasper)	Red jasper? bead, roughly diamond-shaped.
SAC5 243	109	Bead	Faience	Faience with ring bead, with heavily degraded surface.
SAC5 252	109	Bead	Bone	Partial small bead. Possibly burnt bone? Largest remaining piece may have incised stripes on outer surface.
SAC5 244	110	Bead	Faience	White faience ring bead.
SAC5 248	110	Bead	Stone (carnelian)	Two small carnelian beads, roughly diamond/biconical shape.
SAC5 249	110	Bead	Stone (carnelian)	Small carnelian bead, roughly diamond shape.
SAC5 250	110	Bead	Bone	Small bone ring bead.
SAC5 251	110	Bead	Faience	Four small faience ring beads, two white and two light blue; 4 × 4x2mm to 5 × 5x3mm.
SAC5 267	110	Bead	Shell	Small disc bead, made from egg shell; from chest of Individual 2.
SAC5 277	110	Bead	Stone (carnelian)	Two small carnelian beads, roughly diamond shape.

Table 5.6: list of beads from Feature 2, according to SUs.

Number of object	SU	Type of Object	Material	Description
SAC5 325	110	Bead	Faience	Small green faience ring bead, with heavily degraded surface.
SAC5 271	118	Bead	Faience	Thick faience ring bead, originally blue.
SAC5 272	118	Bead	Stone (carnelian)	Small carnelian bead, roughly diamond shape.
SAC5 273	118	Bead	Faience	Two small faience ring beads; 5 × 5x1mm to 5 × 5x2mm.
SAC5 285	122	Bead	Faience	Three small faience ring beads, 4 × 4x1mm to 4 × 4x2mm.
SAC5 286	122	Bead	Faience	Four fragments of spherical faience beads, though none seem to match. Surface very worn and salt damaged. 5 × 6x3mm to 6 × 8x5mm.
SAC5 287	122	Bead	Faience	Two adjoining fragments of a spherical faience bead. Surface very worn and salt damaged. Similar to SAC5 286, but more yellow; 7 × 6x4mm to 7 × 7x4mm.
SAC5 288	123	Bead	Faience	Small white faience ring bead.
SAC5 289	125	Bead	Faience	Two small white faience ring beads, stuck together with mud (?).
SAC5 293	128	Bead	Bone	Small tube bead, made of bone or faience.
SAC5 308	136	Bead	Faience	Small green faience bead, roughly diamond shape. Possibly burnt?
SAC5 331	136	Bead	Stone (carnelian)	Three small carnelian beads, roughly diamond shape.
SAC5 332	136	Bead	Faience	Small blue faience tube bead, slightly tapered at the ends.
SAC5 333	136	Bead	Faience	Five blue/green faience ring beads, three with heavily degraded surface and one quite well preserved; 4 × 4x1mm to 6 × 6x1mm.
SAC5 334	147	Bead	Stone (carnelian)	Small carnelian bead, roughly diamond shape.

Table 5.6: continued.

SAC5 281 does not find an exact parallel in other tombs of SAC5. The motif of the lion on scarabs and seals is, however, common in the New Kingdom (see Newberry 1907, pl. 7).

SAC5 313 is a complete steatite scarab (16 × 12 × 7mm), with a hole pierced longitudinally (Fig. 5.21). It was found in SU 142, and here still in place alongside the left upper leg (where the left hand was positioned) of Individual 10 (see Chapters 6 and 7). The material itself is quite degraded. There is a large chip out of the *thorax* of the scarab and most of the head is missing, possibly from the drilling of a disproportionately large piercing. The legs of the beetle are well defined and delineated by deeply carved negative spaces. The image on the reverse is rather crudely carved, but clearly readable. The central element is the cartouche of *Mn-hpr-R^c* (Thutmose III). On either side are the epithets *mrj Jmn* (“Beloved of Amun”) and *ntr nfr nb t3.wy* (“The Good God, Lord of the Two Lands”). Notable is the use of a *t*-sign in place of the sun disc in the name of the king, maybe suggesting a local production of this scarab. This could also explain the disproportionately large piercing which resulted in removing the scarab’s head.

Scarabs with the prenomens of Thutmose III, Menkheperre, are well attested (see Jaeger 1982), including Egyptian tombs in Nubia, finding close parallels both in SAC5 (Minault-Gout and Thill 2012, 263-264) and, for example, in Soleb (Schiff Giorgini 1971, pl. 12). A date from the reign of Thutmose III is not always applicable – such scarabs cover a very long time span, with the reign of the king merely as “*terminus ante quem*



Figure 5.19: scarab SAC5 279 (photo: C. Geiger, ©AcrossBorders).



1 cm

Figure 5.20: scarab SAC5 281 (photo: C. Geiger, ©AcrossBorders).



1 cm

Figure 5.21: scarab SAC5 313 (photo: C. Geiger, ©AcrossBorders).

non” (see Budka 2014a; for post-18th Dynasty examples see Binder 2011; for scarabs from the 25th Dynasty see most recently Lohwasser 2013; 2014). The closest parallel from SAC5 derives from Tomb 16 (Minault-Gout and Thill 2012, pl. 117, T16P8) and supports a dating of SAC5 313 to the mid-18th Dynasty (Budka 2017c, 117, see Chapters 7 and 8).

5.2.2.2 Ceramic vessels

The ceramic corpus from Feature 2 includes many fragments and a small number of complete vessels. The pottery ranges in date from the 18th Dynasty to the pre-Napatan and Napatan era. Bowls, dishes, lids as well as jugs, jars and amphorae are present. Some matching pieces to vessels from Feature 1 were noted.

The mixing of the material was especially observed in the uppermost levels, here especially SUs 103, 105, 106 and 107 (Tables 5.7-10).

In this pottery assemblage, the find of a conical bread mould (Helen Jacquet’s Type D, see Jacquet-Gordon 1981, 18, fig. 5 and Rose 2007, HC 2, 288) is a bit surprising. A small number of slightly different bread moulds was published from SAC5 (Minault-Gout and

Thill 2012, 339, pl. 130). Such moulds for conical bread as the sherd from SAC5 016/2016 typically used for the cultic sphere and often depicted as offering in Egyptian tomb paintings appeared only in very small numbers within the domestic contexts of the New Kingdom town of Sai, with the exception of the areas associated with temple cult around Temple A (Budka 2020, 222). Bread moulds in tomb contexts in Nubia are well documented in the cemetery of Hillat el-Arab (see Vincentelli 2006, fig. 2.14, no. 103, fig. 2.33, no. 185, fig. 2.76, no. 479 and fig. 2.82, no. 539) and also at Amara West (Binder 2014, 600, III.69, proposing a post-New Kingdom data for these objects).

Another mixed context in Feature 2 is SU 140 (Table 5.11). SU 140 is a layer of flood levels in the northwestern corner of the chamber, directly above the stone next to Individual 1. Remains of this muddy remains continue on the west wall of Feature 2 in a maximum height of 0.90m from the chamber floor and into the entrance niche of Feature 5.

Complete or almost complete vessels were found in the lower filling layers of Feature 2. The lower part of a large storage vessel made in a coarse Nile clay was

Find no. SAC5	015/2016	Feature	2	SU	103	
Dating	mid-late 18th Dynasty; Ramesside; Napatan					
Napatan ware	Shape	Complete	Rim sherds	Body sherds	Bases	Handle
B3RB	BK			1		
B3UC	BK hand-made		1			
Marl A4UC	AO			5		
Total Napatan: 7 (1 diagnostic, 6 body sherds)						
NK ware 18th Dyn.	Shape	Complete	Rim sherds	Body sherds	Bases	Handle
B2RB	NJ			1		
B2UC	BJ			40		
B2UC	FP 1				1	
B2UC	BK 1		1	4		
B2UC	DP 1		1			
Total NK 18th Dyn.: 48 (3 diagnostics, 45 body sherds)						
NK ware Ramesside	Shape	Complete	Rim sherds	Body sherds	Bases	Handle
Marl A2UCMO	PF		1 decorated sherd			
B2RW	SNeckless		1			
Total Ramesside: 2 (2 diagnostics, 0 body sherds)						
Total: 57 (6 diagnostics, 51 body sherds)						

Table 5.7: statistics of pottery SAC5 015/2016, SU 103.

found directly behind the entrance. **SAC5 301/2015** is bag-shaped and broken at the shoulder (Fig. 5.22). The vessel shows a small intentional perforation in the lower part of the body, presumably a so-called killing hole (see below). Most probably, the vessel was deposited in Tomb 26 as a container with some commodities. It was found with a number of other ceramic vessels (SU 073), mostly datable to the Napatan era.

That large vessels were deposited as closed containers in Tomb 26 is also evident from the number of lids found. In Feature 2, a set of three lids (**SAC5 179/2016**) was found on the chamber floor just behind the entrance. Other lids were found in various levels of the filling of Feature 2 (Fig. 5.23).

An almost complete incense burner found in SU 110 of Feature 2 is noteworthy (Fig. 5.24). **SAC5 132/2016** finds close parallels in ritual contexts in Egypt, e.g. at Abydos (Budka 2010b, 44, figs. 24.4 and 24.6) and can be dated to the Late New Kingdom or pre-Napatan era. Within Tomb 26, it seems to belong to a group of ritual items rather than to tomb equipment illustrating the functional variety associated with ceramics found in tombs (see Budka 2011a, 189-192).

From the same SU as the incense burner, a large, almost intact amphora was found alongside the north wall of Feature 2, solidly stuck in several layers of dense flood deposits (Fig. 5.25). The amphora is situated above Feature 4 (see Chapter 3) and was

made of Nile clay and covered with a white slip. The vessel **SAC5 401/2016** finds good parallel in both Egypt and Nubia and is therefore significant for the relative dating of some interments in Tomb 26. In Egypt, this type of amphora is attested as Marl clay vessels from contexts dated to the reigns of Seti II through Ramesses III (Aston 2004, 192, fig. 8b). For Nubia, a comparable Nile silt amphora can be named from Tomb 15 at Soleb (Schiff Giorgini 1971, 194, fig. 344, T15 p12). Overall, the amphora from Feature 2 is probably contemporaneous to the incense burner from the same SU and originates from the 20th Dynasty, the Late Ramesside period (Budka 2017c, 117-118).

Other complete or almost complete pottery vessels from Feature 2 are associated with 18th Dynasty interments. This includes the only Cypriote import found in Tomb 26. A complete Base Ring II jug (**SAC5 305/2016**) with a strap handle and painted white linear decoration on a burnished, black slipped surface (Fig. 5.26) was found next to the skull of Individual 10 (see Chapter 7). It represents the first attestations of this ware from SAC5 (Budka 2017c, 116-117).

The Base Ring II jug is associated with two red washed, tall-necked bottles which were set against the southwestern corner of Feature 2 in close vicinity to Individual 10 (Fig. 5.27).

A dating into the second half of the 18th Dynasty, most likely the reigns of Amenhotep III or Akhenaten, can be proposed for these bottles according to

Find no. SAC5	019/2016	Feature	2	SU	105	
Dating	mid-late 18th Dynasty; Ramesside; Napatan					
Napatan ware	Shape	Complete	Rim sherds	Body sherds	Bases	Handle
B3RB	BK			1		
Marl A4UC	AO			4		
Total Napatan: 5 (0 diagnostic, 5 body sherds)						
NK ware 18th Dyn.	Shape	Complete	Rim sherds	Body sherds	Bases	Handle
Marl BUC	BK				1 flat base	
D4UC	BM		1			
B2RW	NJ			2		
B2UC	BJ			36		
C2UC	BJ			6		
B2UC	BK 1		1			
B2UC	DP 1		1			
Total NK 18th Dyn.: 48 (4 diagnostics, 44 body sherds)						
NK ware Ramesside	Shape	Complete	Rim sherds	Body sherds	Bases	Handle
Marl A2UC	AO			5		
Total Ramesside: 5 (0 diagnostics, 5 body sherds)						
Total: 58 (4 diagnostics, 54 body sherds)						

Table 5.8: statistics of pottery SAC5 019/2016, SU 105.

Find no. SAC5	021/2016	Feature	2	SU	106	
Dating	mid-late 18th Dynasty; Ramesside; Napatan					
Comment	1 small fragment to the baboon-shaped vessel SAC5 214					
Napatan ware	Shape	Complete	Rim sherds	Body sherds	Bases	Handle
B3 RWRim	BK		2	1		
Marl A4UC	AO			5		
Total Napatan: 8 (2 diagnostics, 6 body sherds)						
Nubian ware	Shape	Complete	Rim sherds	Body sherds	Bases	Other
Nubian 2 basketry	CP			1		
Total Nubian NK: 1 (1 body sherd)						
NK ware 18th Dyn.	Shape	Complete	Rim sherds	Body sherds	Bases	Handle
B2RW	NJ			4		
B2UC	BJ			41		
B2RWRim	DP 3		1			
B2RWallRBin	DP 3		1	1		
B2RWallRBin	DP 1		1			
Total NK 18th Dyn.: 49 (3 diagnostics, 46 body sherds)						
NK ware Ramesside	Shape	Complete	Rim sherds	Body sherds	Bases	Handle
Marl A2UC	AO			6	1 U	1
Marl A2UC	PF		1	3		
B2RWRim	DP 6		4			
B2UC	RS 1		1			
Total Ramesside: 17 (8 diagnostics, 9 body sherds)						
Total: 75 (13 diagnostics, 62 body sherds)						

Table 5.9: statistics of pottery SAC5 021/2016, SU 106.

Table 5.10: statistics of pottery SAC5 038/2016, SU 107.

Find no. SAC5	038/2016	Feature	2	SU	107	
Dating	mid-late 18th Dynasty; Ramesside; Napatan					
Napatan ware	Shape	Complete	Rim sherds	Body sherds	Bases	Handle
B3RB	BK			2		
Marl A4UC	AO			3		
Total Napatan: 5 (0 diagnostic, 5 body sherds)						
NK ware 18th Dyn.	Shape	Complete	Rim sherds	Body sherds	Bases	Handle
B2RW	NJ			10		
B2RW	FU		1			
B2UC	BJ			20		
B2UC	FP 1				2	
B2UCRP	DP			1		
B2RWRim	DP 3		1			
B2UC	DP 6		1			
Total NK 18th Dyn.: 36 (5 diagnostics, 31 body sherds)						
NK ware Ramesside	Shape	Complete	Rim sherds	Body sherds	Bases	Handle
Marl A2UC	AO			5		
B2RWRim	DP 6		1			
Total Ramesside: 6 (1 diagnostics, 5 body sherds)						
Total: 47 (6 diagnostics, 41 body sherds)						

Table 5.11: statistics of pottery SAC5 299/2016, SU 140.

Find no. SAC5	299/2016	Feature	2	SU	140	
Dating	mid-late 18th Dynasty; Ramesside; Napatan					
Comment	2 small fragments to the baboon-shaped vessel SAC5 214					
Napatan ware	Shape	Complete	Rim sherds	Body sherds	Bases	Handle
B3RB	BK		1	2		
B3RWrim	BK/cup		2			
Marl A4UC	AO			1		
Total Napatan: 6 (3 diagnostics, 3 body sherds)						
Nubian ware	Shape	Complete	Rim sherds	Body sherds	Bases	Other
Nubian 2 basketry	CP			2		
Total Nubian NK: 2 (0 diagnostics, 2 body sherds)						
NK ware 18th Dyn.	Shape	Complete	Rim sherds	Body sherds	Bases	Handle
B2RW	NJ			15		
B2UC	BJ		1 BJ 2	80		
B2UC	DP 1		2			
Total NK 18th Dyn.: 98 (3 diagnostics, 95 body sherds)						
NK ware Ramesside	Shape	Complete	Rim sherds	Body sherds	Bases	Handle
Marl A2UC	AO			1		
B2pinkslip	AO			1		
B2RWRim	DP 6		6		1 U	
Total Ramesside: 9 (7 diagnostics, 2 body sherds)						
Total: 115 (13 diagnostics, 102 body sherds)						

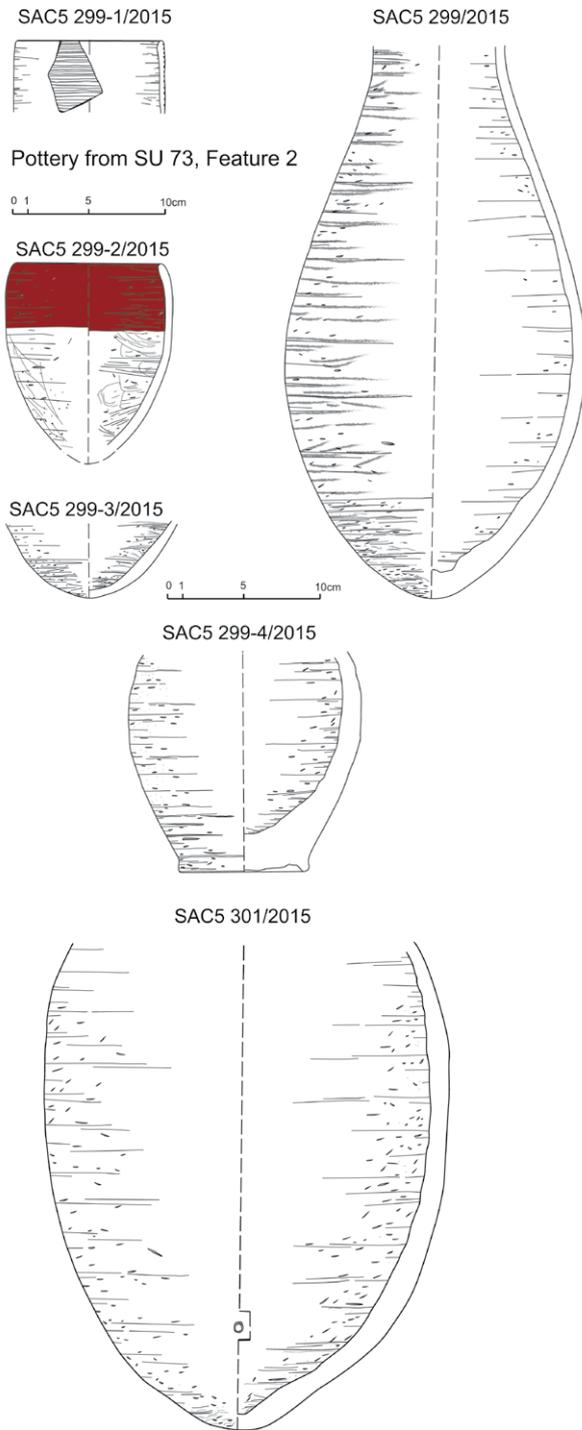


Figure 5.22: mixed ceramics from SU 073, the upper filling of Feature 2 behind the entrance.

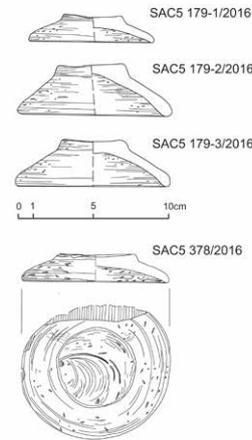


Figure 5.23: lids from Feature 2.

parallels from Amarna (Rose 2007, 90, type SG3, 230). Interestingly, both vessels show intentional perforation in the lower parts of the body. Together with the red colour of their surfaces, one might think of the Egyptian ritual ‘*Breaking of the Red Pots*’. However, evidence for breaking and “killing” vessels, both in Egypt and Sudan, is diverse and attested for other vessels in Tomb 26 (see above and *cf.* Chapters 7 and 9).

Interestingly, some pottery sherds were found below Individual 10 on the chamber floor (Tables 5.12-13). Because of their uniform dating to the mid-18th Dynasty, these few sherds seem to relate to the original phase of use of Tomb 26 and thus predate the burial.

Another vessel associated with a late 18th Dynasty burial in Feature 2 is the fragmentarily preserved vessel in the shape of a baboon (Fig. 5.28). SAC5 214 is only partly preserved and was able to be reconstructed from several fragments found in the shaft as well as in Feature 2 (SUs 071, 073 and 074 as well as SUs 106 and 140). The main fragment has one paw with five toes preserved, with part of the vessel/body above. A second fragment shows the back side with the tail and a third one possibly the snout. A fourth possibly associated fragment was identified as the animal’s head.

This monkey form vessel finds a close parallel at Soleb suggesting a late 18th Dynasty date (Schiff Giorgini 1971, 194-195, T15 p2, fig. 345).

More pottery fragments (Tables 5.14-16) were documented from alluvial layers which attested to a New Kingdom use of Feature 2 only (SUs 113, 118 and 120).

SU 119, another alluvial sediment associated with Ramesside burials in the northwestern part of Feature 2, yielded a remarkable decorated body sherd. SAC5 170/2016 is a fragment of a small closed Mycenaean vessel, probably a stirrup jar of the fine line group of Late Helladic IIIA2/B (see Chapter 8 for details). Similar Ramesside Mycenaean

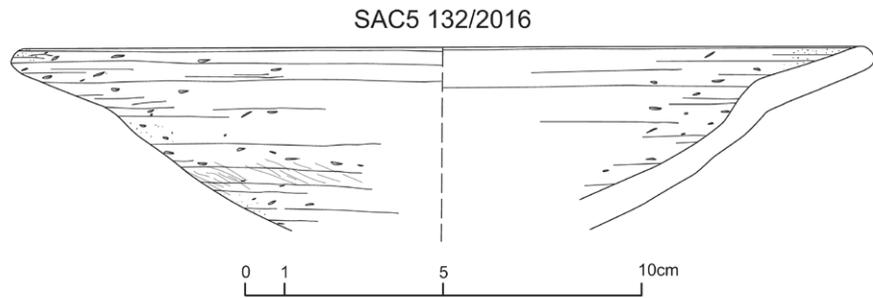


Figure 5.24: incense burner from Feature 2.



Figure 5.25: vessel SAC5 401/2016 in its find position in Feature 2 (photo: J. Budka).

pottery was found in Amara West (Spartaro *et al.* 2019), but interestingly not with burials but at the town site (see Chapter 10).

Because of the mixing of the ceramics throughout Feature 2 and 1, a reconstruction of the minimum total number of vessels was not undertaken for the fragmented assemblages. The corpus is, however, rich and comprises with a bread mould, a Mycenaean vessel, imported amphorae, beer jars and tubular pot stands pottery types which are not

represented in the complete vessels from Tomb 26. The small amount of Nubian cooking ware is also notable.

5.2.2.3 Stone vessel

Like the baboon vessel, the stone vessel **SAC5 210** was reconstructed out of several fragments found in the shaft and Feature 2 (SUs 068, 070, 073, 074). This vessel (44 × 39 × 95mm) is unique to SAC5 and belongs to the small group of figure vases in the shape of a bunch of grapes (Fig. 5.29). Such vessels

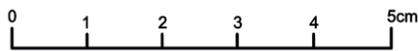


Figure 5.26: Base Ring II jug SAC5 305/2016 from Feature 2 (photo: C. Geiger).



Figure 5.27: vessels in the southwestern corner of Feature 2 (photo: J. Budka).

Find no. SAC5	375/2016	Feature	2	SU	145	
Dating	mid-18th Dynasty					
NK ware 18th Dyn.	Shape	Complete	Rim sherds	Body sherds	Bases	Handle
B2UC	BJ/FP 1			3	1	
B2UC	DP 1		2		1 flat base	
B2RWRim	DP 3	1			1	
Total NK 18th Dyn.: 9 (6 diagnostics, 3 body sherds)						

Table 5.12: statistics of pottery SAC5 375/2016 from below Individual 10.

are rare and associated with the late 18th Dynasty. While the best-preserved example now in Hildesheim (Schulz 1987a), was made in Egyptian blue, the material of SAC5 210 is stone and most probably obsidian. The individual grapes and also the inner part of the vessel are heavily sintered. Many of the grapes have become detached or broken as a result of the moist atmosphere in Tomb 26. A minimum of 38 loose beads

was documented. They once decorated the figure vessel creating a naturalistic impression of a grape bunch.

Since the provenance of obsidian can be well attributed by means of geochemical analysis (see, e.g., Lucarini *et al.* 2020), such a detailed study is planned for SAC5 210. The vessel is one of the most remarkable finds from Tomb 26 and raises several far-reaching questions (see Chapters 7 and 10).

Table 5.13: statistics of pottery SAC5 377/2016 from below Individual 10.

Find no. SAC5	377/2016	Feature	2	SU	145	
Dating	mid-18th Dynasty					
NK ware 18th Dyn.	Shape	Complete	Rim sherds	Body sherds	Bases	Handle
C2UC	FP 0				1	
Total NK 18th Dyn.: 1 (1 diagnostic, 0 body sherds)						

Table 5.14: statistics of pottery SAC5 137/2016 from SU 113.

Find no. SAC5	137/2016	Feature	2	SU	113	
Dating	mid-late 18th Dynasty; Ramesside					
NK ware 18th Dyn.	Shape	complete vessel/ profile	Rim sherds	Body sherds	Bases/ lower part	Handle
B2RW	NJ			4		
B2RW	BK 1		1			
B2UC	BJ			18		
C2UC	BJ			2		
B2RWRBin	DP			1		
Total NK 18th Dyn.: 26 (1 diagnostics, 25 body sherds)						
NK ware Ramesside	Shape	complete vessel/ profile	Rim sherds	Body sherds	Bases/ lower part	Handle
B2RWRim	DP 6		2			
Total Ramesside: 2 (2 diagnostics, 0 body sherds)						
Total: 28 (3 diagnostics, 25 body sherds)						

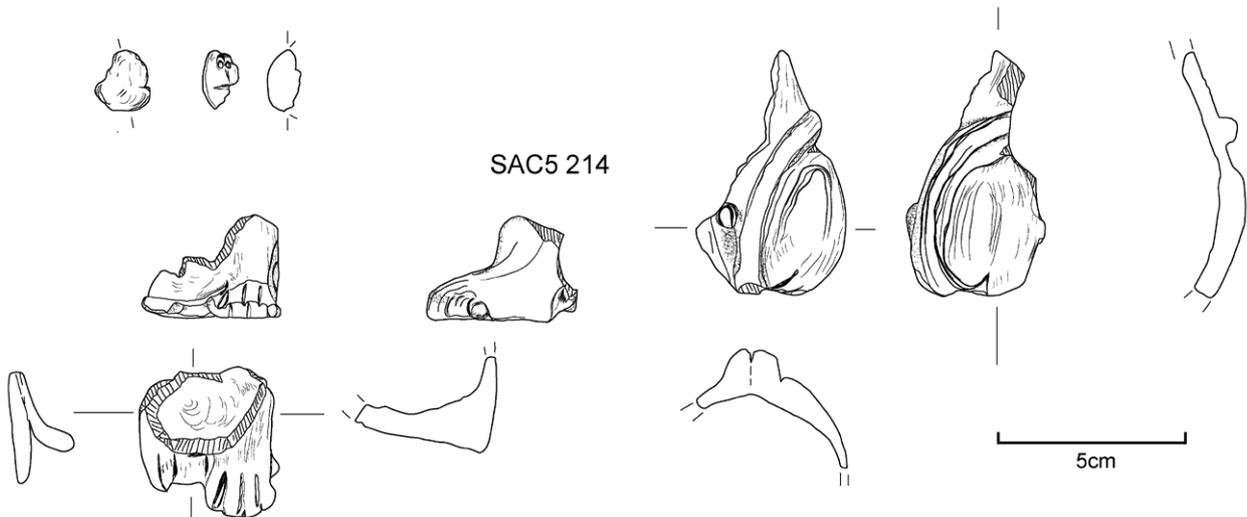


Figure 5.28: fragments of monkey form vessel SAC5 214.

A small bag-shaped alabaster vessel with a short neck and small opening (mouth diameter 33mm, 75% of the rim preserved) was recovered from SU 074 in the entrance area of Feature 2 (Fig. 5.30). The rim is heavily eroded and possibly once had a more pronounced shape (with a lip). **SAC5 211** (83 × 81 × 114mm) can be dated to the New Kingdom and most likely the 18th Dynasty based on several parallels (see Aston 1994, 154, fig. 16, no. 185). Except for the rim, it is similar in shape to the faience vessels found in Feature 6 (see below).

A tall alabaster pilgrim flask of small size, with an ovoid body, short neck and two rounded handles (Fig. 5.31) was found in SU 201 next to Individual 3 (see Chapter 6). The interior cavity of **SAC5 302** (mouth diameter 43 mm; 72 × 45 × 119mm) is a continuous drill hole from the mouth almost down to the bottom of the flask. The stone itself has suffered greatly from water damage

Find no. SAC5	163/2016	Feature	2	SU	118	
Dating	mid-late 18th Dynasty; Ramesside					
NK ware 18th Dyn.	Shape	complete vessel/profile	Rim sherds	Body sherds	Bases/lower part	Handle
IV grey WW	AO			1		
B2RW	NJ			2		
B2UC	BJ			28		
B2UC	BK 1		1			
B2UC	FP 2		2			
B2RWRim	DP 6		2			
Total NK 18th Dyn.: 36 (5 diagnostics, 31 body sherds)						
NK ware Ramesside	Shape	complete vessel/profile	Rim sherds	Body sherds	Bases/lower part	Handle
B2RWRim	DP 6		1			
Total Ramesside: 1 (1 diagnostics, 0 body sherds)						
Total: 37 (6 diagnostics, 31 body sherds)						

Table 5.15: statistics of pottery SAC5 163/2016 from SU 118.

Find no. SAC5	193/2016	Feature	2	SU	120	
Dating	mid-late 18th Dynasty; 19th Dynasty					
NK ware 18th Dyn.	Shape	complete vessel/profile	Rim sherds	Body sherds	Bases/lower part	Handle
B2RW	NJ			3		
B2UC	BJ			31		
B2UC	DP 1		2		2 flat base	
C2UC	BJ				1	
C2UC	SU 2		1			
Total NK 18th Dyn.: 40 (6 diagnostics, 34 body sherds)						
NK ware Ramesside	Shape	complete vessel/profile	Rim sherds	Body sherds	Bases/lower part	Handle
B2RWRim	DP 6		1			
B2UCRW	DP 6			1		
Total Ramesside: 2 (1 diagnostics, 1 body sherds)						
Total: 42 (7 diagnostics, 35 body sherds)						

Table 5.16: statistics of pottery SAC5 193/2016 from SU 120.

and the surface is heavily degraded. A hairline crack runs around the body at around 30mm up from the bottom, with another smaller one visible about 5mm up.

Stone pilgrim flasks are attested within elite burials in Nubia, *e.g.* Soleb (Schiff Giorgini 1971, 197, T 15 p25, fig. 351). The shape of SAC5 302 allows a dating not prior to the 19th Dynasty (see Aston 1994, 157, no. 195 with parallels from Egypt) which corresponds to its stratigraphic position in Feature 2 (see Chapter 7).

5.2.2.4 Others and unclear finds

A small group of objects from Feature 2 are partly unclear in terms of function and use. **SAC5 361** is a small tear-drop-shaped fragment of faience (16 × 5 × 9mm) and possibly derives from a faience vessel, although the original form remains uncertain.

SAC5 246 is a small agate flake, worked along one small edge into a microlithic (9 × 5 × 12mm, Fig. 5.32). Although agate was commonly used for tools in the New Kingdom town of Sai (Budka 2020, 255), the dating and whether SAC5 246 was deposited in Tomb 26 intentionally remains uncertain.

Two elite tombs from the cemetery of Soleb, Tomb 17 and Tomb 24, have, however, yielded a small amount of lithics, especially arrow heads (Schiff Giorgini 1971, 93-95, fig. 128).

The same holds true for **SAC5 241** which is an irregularly shaped pebble, used as a pounder on all corners (99 × 74 × 73mm). **SAC5 253** represents two small flakes of an unclear blue material (between 4-5mm in length, 2mm in height and less than 1mm thick). Since sticks of Egyptian blue were found in Feature 5 (see below), the same composition is possible for SAC5 253.

Lids for ceramic vessels are preserved in considerable numbers from Tomb 26 (see above), but **SAC5 236** is the only fragment of a stopper made of mud (23 × 19 × 19mm). This piece is unusual since it has a deep impression on the back surface, possibly from a peg and maybe related to its manufacturing process.

Similar to the small metal fragments from Feature 1, **SAC5 208** represents a small piece of copper with an unknown original function (12 × 8 × 4mm), most probably related to cosmetic tools.

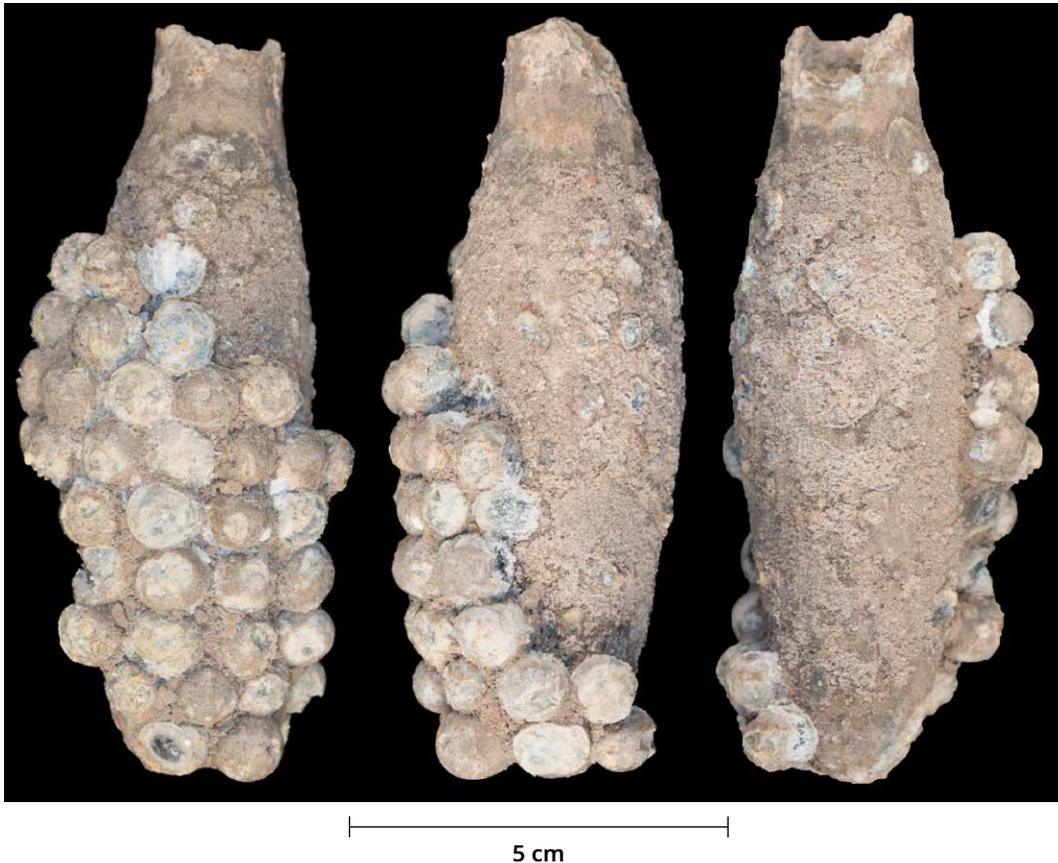


Figure 5.29: grape-shaped vessel SAC5 210 (photo: C. Geiger © AcrossBorders).

5.2.3 Feature 3

The entrance area between the shaft and the main chamber (Feature 2) did not yield many finds, only a few beads and bones from the filling layers (see Appendix). The list of objects (Table 5.17) also includes two reused sherds shaped into a scraper attesting to the plundered state of the entrance area of Tomb 26. Both scrapers were made from 18th Dynasty sherds, thus from original tomb equipment.

5.2.4 Feature 4

In 2017, a systematic, stratigraphic excavation was conducted of Feature 4, completely filled with Nile silt from flood levels (see Chapters 2 and 3). Remains of several individuals were documented (see Chapter 6) and only the burials in the lowest levels were found almost undisturbed, whereas the upper levels showed traces of plundering with disarticulated bodies. In connection with this plundering, several reused

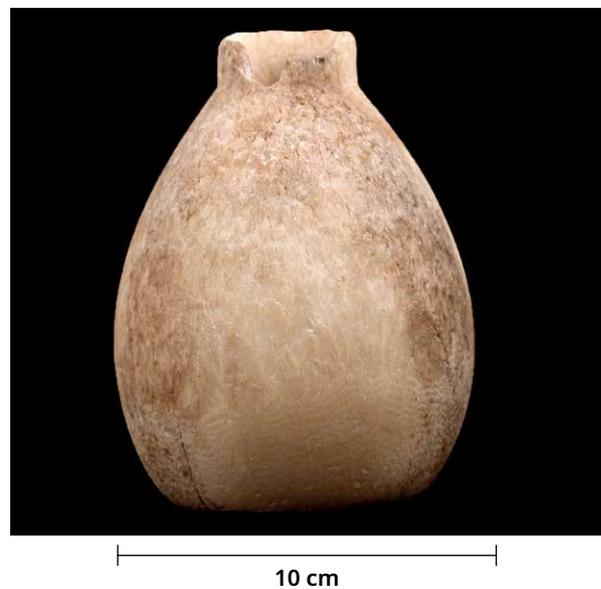


Figure 5.30: stone vessel SAC5 211 (photo: C. Geiger, ©AcrossBorders).



Figure 5.31: stone vessel SAC5 302 (photo: C. Geiger, ©AcrossBorders).

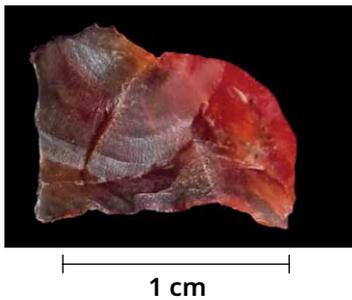


Figure 5.32: agate blade SAC5 246 from Feature 2 (photo: M. Gundlach, ©AcrossBorders).

Object no.	Find no.	Type of Object	SU	Material	Dating
SAC5 232	001/2016	Ring bead	100	Faience	New Kingdom?
SAC5 233	001/2016	Ring bead	100	Bone	New Kingdom?
SAC5 222	295/2015	Scraper	72	Nile clay	New Kingdom? Later?
SAC5 223	291/2015	Scraper	72	Nile clay	New Kingdom? Later?

Table 5.17: objects from Feature 3.

sherds/scrapers were found in Feature 4 (see below, 5.2.4.4). Except for traces of coffins and a small number of pottery vessels, almost no remains of burial equipment were found. A complete list of all material found, including animal remains, human bones and charcoal is referred to in the Appendix.

5.2.4.1 Coffin remains

Despite the fragmentary condition of the burials in Feature 4, faint traces of pigments in red, yellow, blue and white provide evidence for the first time in Tomb 26 that the individuals were once placed in painted wooden coffins, probably equipped with funerary masks (for such wooden coffins and funerary masks from SAC5 see Minault-Gout and Thill 2012, 166, pl. 88; for a similar colour palette such as the pigments from Feature 4 attested for coffins found in Nubia see Taylor 2017). One sample of blue pigment associated with Individual 87 was identified as Egyptian blue (Fulcher and Budka 2020). Several bags of white mortar/plaster were also found in Feature 4 – although these pieces could derive from the blocking of Feature 6 (see Chapter 3) or from the walls of Feature 2, it is also conceivable that they are partly related to wooden coffins decorated with painted plaster. Possibly also connected to the lost wooden coffins are two ivory inlays (SAC5 339 and 340) which are similar to faience inlays found in Tomb 21 of SAC5 (Minault-Gout and Thill 2012, pl. 127). However, coffined burials within Feature 4 remain hypothetical and the complex formation processes in this part of Tomb 26 will be specified in Chapter 8.

5.2.4.2 Bodily adornment

Only one fragmented faience ring bead was found in Feature 4 (SAC 336). This object probably postdates the 18th Dynasty since no beads were found in the lower chamber, Feature 6.

5.2.4.3 Ceramic vessels

The ceramics from Feature 4 form the largest group to be classified as grave goods. The pottery vessels attest to several burial phases. In the upper filling like SU 151, also some Ramesside material was present (Table 5.18).

A burnished Marl D jug with a long neck was found in the upper levels and is quite remarkable (SAC5 310/2016, Fig. 5.33). It can be dated to the late 18th Dynasty, finding parallels in Amarna and Thebes (Rose 2007, 269, ME 2.1; see also Bourriau 1982, 82, no. 61 with references). Furthermore, although the jug which can be labelled as wine pitcher was primarily found in Feature 4, additional small adjoining fragments derive from Feature 2 above Feature 4 (SU 137), attesting to a phase of plundering prior to the late New Kingdom (see Chapter 8).

Find no. SAC5	003/2017	Feature	2	SU	151	
Dating		mid-late 18th Dynasty; 19th Dynasty?				
NK ware 18th Dyn.	Shape	complete vessel/profile	Rim sherds	Body sherds	Bases/lower part	Handle
B2UC	BJ			3		
B2UC	RS		1			
B2RWRim	DP 1			1		
Total NK 18th Dyn.: 5 (1 diagnostics, 4 body sherds)						
NK ware Ramesside	Shape	complete vessel/profile	Rim sherds	Body sherds	Bases/lower part	Handle
B2RWRim	DP 1		1			
Total Ramesside: 1 (1 diagnostics, 0 body sherds)						
Total: 6 (2 diagnostics, 4 body sherds)						

Table 5.18: statistics of pottery SAC5 003/2017 from SU 151.

Among the pottery sherds from SU 155, two contemporaneous Nile clay vessels datable to the late 18th Dynasty are notable (Fig. 5.34). **SAC5 030/2017** is the lower part of a beer jar and **SAC5 032/2017** is an almost complete jar with a tall neck and ovoid body. This assemblage finds a close parallel in the tomb equipment of Tomb 17 (Minault-Gout and Thill 2012, pl. 74).

From a slightly deeper filling level, SU 157, derives the upper part of a so-called flowerpot (Fig. 5.35). **SAC 074/2017** has a direct, angular rim and this shape is associated with the mid-18th Dynasty (see Budka 2017b, 78 with references). Complete vessels of this type FP 1 were found in Feature 5 and 6 (see below).

The lowest level in Feature 4 was labelled SU 143 in the east part. Here, a complete vessel was found, standing with its base on the floor of Feature 4 (Budka 2017c, 118-119, fig. 13). **SAC5 372/2016** is a so-called *zir* in a coarse Nile clay variant, clearly datable to the mid-18th Dynasty (cf. Budka 2011b, 26-27). This dating is confirmed by the upper part of a flowerpot, **SAC5 373/2016**, which was found directly below the *zir*. Unlike SAC 074/2017, this flowerpot has a modelled rim and compares to the vessels from Feature 6. It is possible that both the *zir* and flowerpot (Fig. 5.35) were originally deposited in Feature 6 and not where they were found by us during excavation (see Chapter 7).

5.2.2.4 Others and unclear finds

Furthermore, one small fragment of a metal object was found in Feature 4. **SAC5 337** is made of heavily oxidized metal and its size of 5 × 2 × 1.5 mm does not permit a reconstruction of form or function.

Four reused pottery sherds from the 18th Dynasty were recorded in Feature 4, all of them shaped into scrapers (see above). One of them is especially remarkable. **SAC5 366** was made from a body sherd of a Canaanite amphora (Fig. 5.36). This choice of raw material for re-cutting

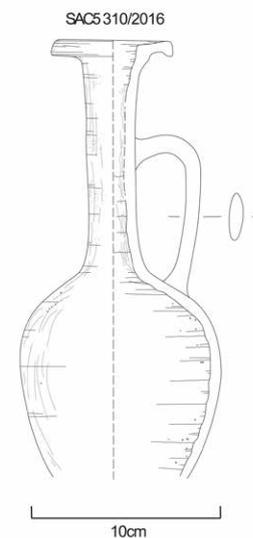


Figure 5.33: Marl D jug/wine pitcher SAC5 310/2016 from Feature 4.

pottery is also attested in the New Kingdom town of Sai (see Budka 2020, 235).

5.2.5 Feature 5

Feature 5 yielded nine adult and two infant burials. The tomb furnishing is traceable by means of plaster fragments and stone blocks used to build the eastern wall (see Chapter 3). The tomb equipment is rich and comprises several unusual elements (“blue sticks”) and very prestigious items such as a gold ring and an extraordinary necklace with crocodile pendants in various materials. All burials can be assigned to the 18th Dynasty, but some of the material, especially pottery, from the upmost filling layers are mixed in date, including pre-Napatan and Napatan pieces.

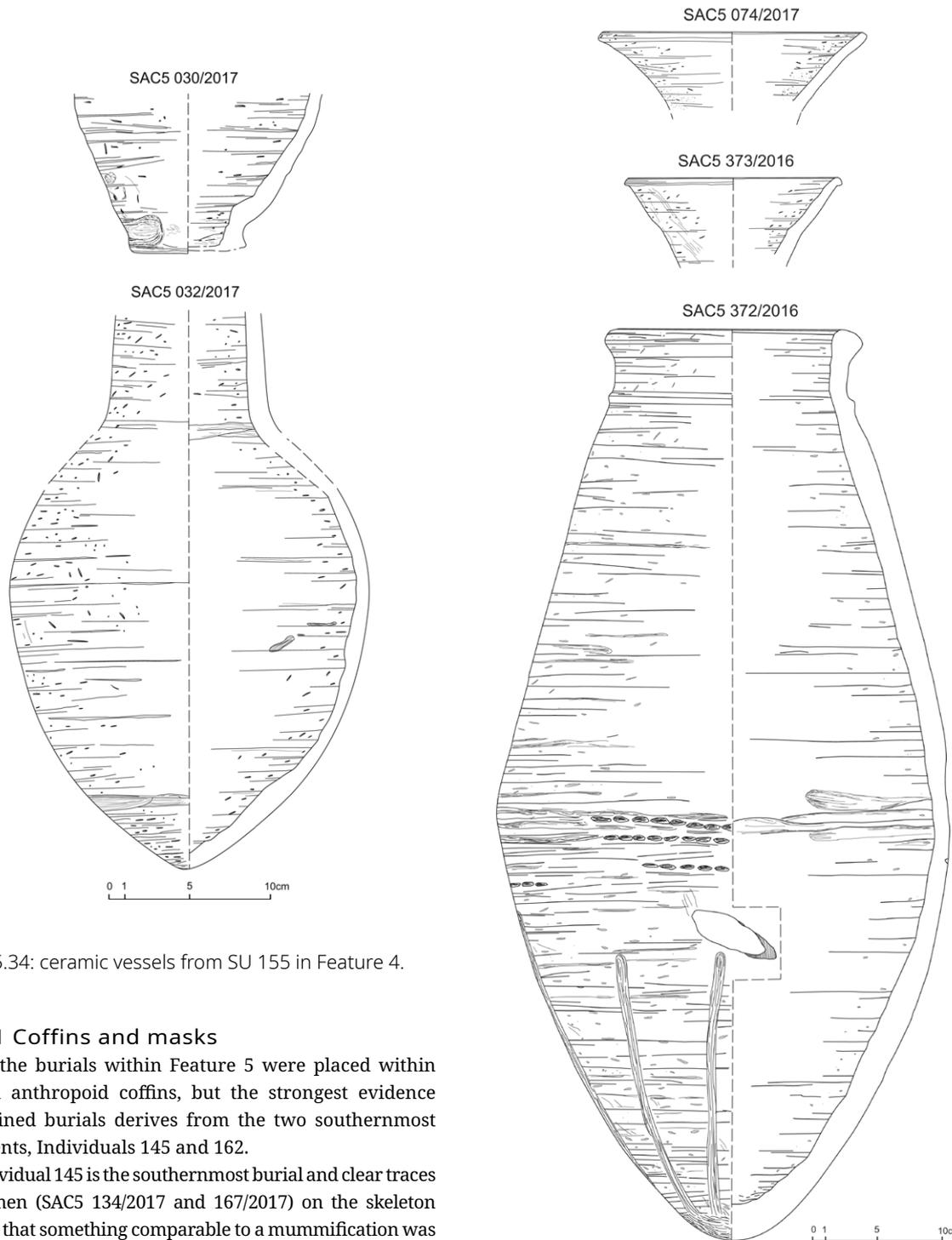


Figure 5.34: ceramic vessels from SU 155 in Feature 4.

5.2.5.1 Coffins and masks

Not all the burials within Feature 5 were placed within wooden anthropoid coffins, but the strongest evidence for coffined burials derives from the two southernmost interments, Individuals 145 and 162.

Individual 145 is the southernmost burial and clear traces of bitumen (SAC5 134/2017 and 167/2017) on the skeleton indicate that something comparable to a mummification was carried out (see Buzon 2008, 173 for similar observations at Tombos). The body was placed in a painted wooden coffin of which the following elements have survived: **SAC5 417**, 70 fragmented and badly deteriorated wooden remains and **SAC5 418**, one badly deteriorated fragment with a small spot of red pigment on one surface as well as eye inlays for the mask of the coffin. Since three eyes were found associated with Individual 145, it is clear that both the wooden coffin and the gilded wooden funerary mask had eye inlays (such inlays are well attested in SAC5, see Minault-Gout and Thill 2012, pl. 88 and also known from Soleb, there especially in

Figure 5.35: *zir* and flowerpots from Feature 4.

connection with wooden coffins, Schiff Giorgini 1971, 230, fig. 443, T20p4c2c3, 304, T 36c10a, fig. 600). To ascertain which one is which is difficult, and it was not possible to definitively match the pairs of eyes (SAC5 384 and SAC5 385 both have bronze surrounds, but SAC5 383 and SAC5 384 are much closer in size). It is most likely that **SAC5 384**, found west of the cranium of Individual 145, is associated with

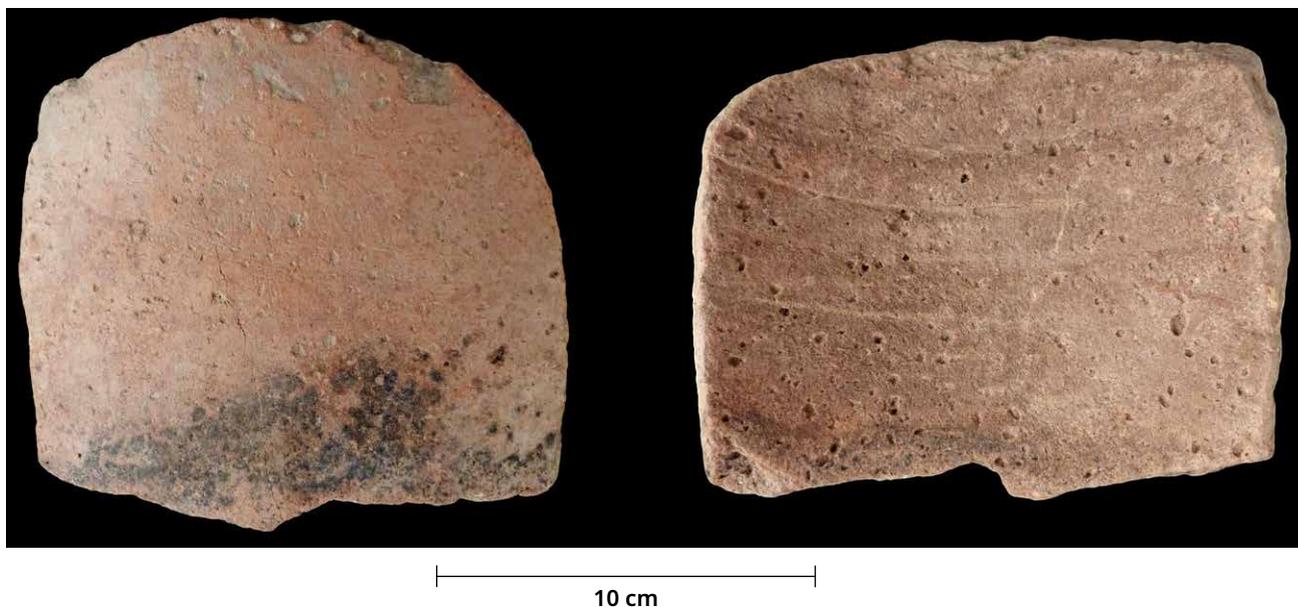


Figure 5.36: reused sherd SAC5 366 (photo: M. Gundlach, ©AcrossBorders).

the coffin. It is made of bronze, stone and plaster (Fig. 5.37), and two pieces of associated gold foil were found (belonging either to the coffin or the funerary mask).

The funerary mask of Individual 145 has survived in the form of **SAC5 408** found at the left shoulder of the individual and two more eye inlays as well as many gold foil fragments. SAC5 408 consists of eight badly deteriorated wooden remains, three of which are with embedded gold flakes (Fig. 5.38). A total of 159 gold flakes (see details in Appendix) was recorded associated with Individual 145 and either belonged to the coffin or to the funerary mask.

SAC5 385 was found east of the cranium and compares to the other eye inlays made of bronze, stone and plaster (Fig. 5.39). It was excavated with associated gold flakes (five small pieces) and associated funerary mask fragments (three badly deteriorated wooden fragments). The well-defined tear duct identifies this as the right eye. The bronze surround is well preserved but nearly all the material has fallen away from the reverse, leaving the stone pupil held in place by a thin layer of plaster and a thick layer of dirt. Plaster represents the whites of the eye. The pupil is made of dark stone that is circular and rather flat on the front, while more domed/spherical at the rear.

SAC5 383 was found below SAC5 385 (Fig. 5.40). Unlike the others, this eye inlay does not have a bronze surround and is in rather poor condition and fragile. Only one side of the white survives, making it difficult to determine whether it is the right or left eye. The stone pupil is still slotted into the curve of the white but is not attached.

The last object presumably connected with the mask of Individual 145 is **SAC5 370**. It is a triangular fragment

of white granular and fragile plaster (36 × 11 × 30mm). One broad surface is relatively flat, while the other rises from the corners to meet in the middle. With a depression at one side and a slight curve at the point, it resembles the white of an eye inlay, but would be very large (Fig. 5.41). Thus, it might rather belong to a miniature mask as attested from SAC5 (Minault-Gout and Thill 2012, 170, T16S2, pl. 89) and Soleb (Schiff Giorgini 1971, 167, T11c1).

The situation for Individual 162, deposited north of 145, is comparable. Traces of a wooden coffin (**SAC5 416**), a wooden funerary mask (**SAC5 400**), two pairs of eye inlays (**SAC5 363**, **SAC5 380**) and several hundreds of pieces of gold foil (see Appendix) have survived. The details of this assemblage will be discussed in Chapter 7. The same hold true for the central burial in Feature 3, Individual 300. Here, eye inlays (**SAC5 399**) and gold foil (**SAC5 422**) most probably attest a funerary mask. Interestingly, both Individual 162 and 300 had eye inlays without a stone pupil but rather with painted ones respectively made in plaster, thus of an inferior material (see Chapter 7).

For the burials in the northern part of Feature 5, traces of wooden coffins or boxes were also noted, e.g. in the northeast corner, most probably connected with the infant burial of Individual 299. Under the number **SAC5 432** a comparatively large fragment of coffin material, with remains of blue and yellow (orangey) pigment on one surface was recorded (Fig. 5.42). The blue pigment was identified as Egyptian blue (Fulcher and Budka 2020). The notched end of a bone inlay (24 × 4 × 2mm) visible below and comparable to SAC5 430 testifies that this coffin or box was executed with painting and inlays.



Figure 5.37: both sides of coffin eye inlay SAC5 384 and associated gold foil (photo: C. Geiger, ©AcrossBorders).



Figure 5.39: coffin eye inlay SAC5 385 (photo: C. Geiger, ©AcrossBorders).

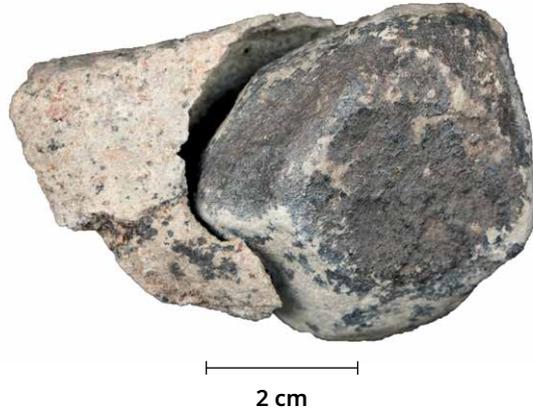


Figure 5.40: coffin eye inlay SAC5 383 (photo: C. Geiger, ©AcrossBorders).

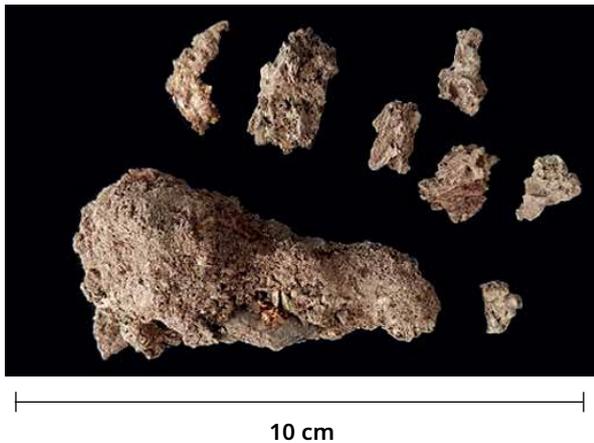


Figure 5.38: remains of the funerary mask SAC5 408 (photo: M. Gundlach, ©AcrossBorders).

SAC5 430 designates 77 small pieces/splinters of worked bone (Fig. 5.43). Though a variety of shapes are present, it is unclear what (if any) arrangement is intended. Most examples are triangular, with either a straight or notched short edge. For the pointed pieces without a notch, some are broken but many seem complete and simply have a straight edge. Rectangular and square/tiled examples were also collected. Some of the splinters show heavy tool marks along the edges. Several of the pointed pieces with a notched end also have a single deep incision across the broad surface. Small spots of red or blue pigment appear but are so tiny and infrequent that it is probably transfer from painted wood. Similar inlays in ivory were found at Soleb and interpreted as inlays for a wooden coffin (Schiff Giorgini 1971, 330, T45 p2, fig. 651).

SAC5 431 was found on the upper body of Individual 245 and probably originated from a funerary mask. 17 small pieces of unclear material, most likely bone, were once imbedded in degraded wooden material (Fig. 5.44). Though some are very similar to SAC5 430, more variety is seen in this group: some are so thick as to be cuboid, while others have one flat and one rounded surface ($3 \times 1 \times 4 \text{mm}$ to $15 \times 3 \times 4 \text{mm}$). A few appear to have cream coloured paint on the surface; there may also be traces of a black surface treatment.

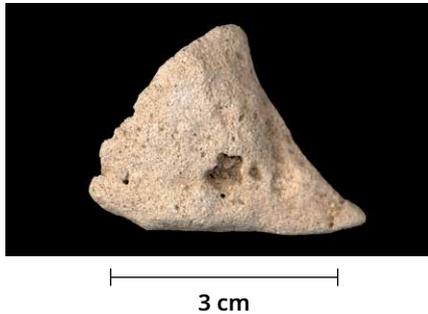


Figure 5.41: inlay SAC5 370 (photo: C. Geiger, ©AcrossBorders).

5.2.5.2 Bodily adornment

Rich bodily adornment was traceable in Feature 5, including beads (Table 5.19), amulets and scarabs in various materials, including gold and silver.

The beads from SU 140 and SU 190 derive from the upper flood levels and cannot be safely attributed to a specific burial. For the beads from SU 191, this is often possible. The variance in terms of shape and material is comparable to other contexts in Tomb 26 with faience beads as the most numerous ones. The most remarkable assemblage of beads is the one found in the necklace SAC 378.

SAC 378 is part of the bodily adornment of Individual 324, probably the earliest female burial in Feature 5b, the northern chamber (see Chapters 3 and 7). The composition of this necklace illustrates as the main theme apotropaic and regenerative symbols. Remarkable are not only the pendants in the shape of crocodiles but also the different materials and the variability of the beads. The necklace consists of various beads: 345 complete ring beads were documented, among them 180 in gold, 15 in carnelian (ring to ball-shaped), 83 in faience, 56 in bone and 11 in burnt faience or black stone (see Fig. 9.5). SAC 378 included more than a dozen crocodile amulets which were fabricated in carnelian and bone (Fig. 5.45). This necklace is not only the single attestation for crocodile amulets but also the only attested use of gold beads. Since Individual 324 was among the first interments in the northern part of Feature 5, it is tempting to assume a connection with the presumed use of Tomb 26 by a family of goldsmiths (see Chapters 9 and 12).

From the feet area of Individual 324, an amulet of a wedjat eye in carnelian (8 × 3x8mm) pierced through its length was found (**SAC5 382**). The eye is simplified to only the outline and both broad surfaces are sufficiently well worked to be the “front” when strung. While no internal detail has been added to the visible surfaces, additional detail has been added around the piercing at the inner side of the eye – a series of linear incisions form a small triangle and a horizontal dash across each point (Fig. 5.46).

Another individual adorned with an amulet in Feature 5 is Individual 300. With this male burial, three amulets were found (Fig. 5.47). **SAC5 379** is fragmented and shows a very

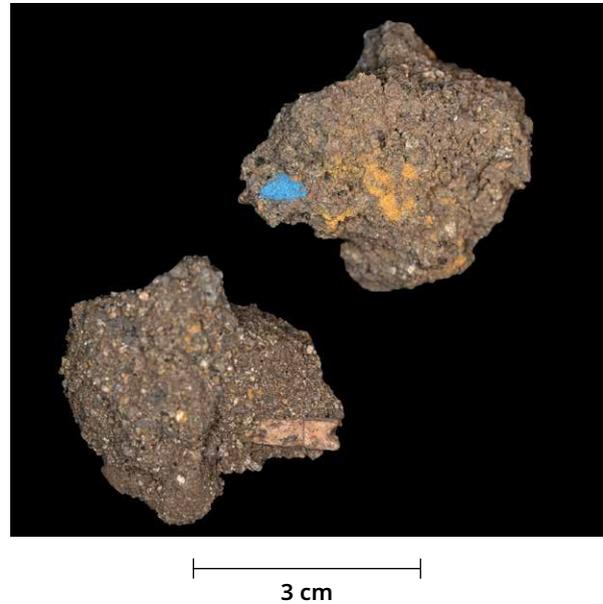


Figure 5.42: coffin fragment SAC5 432 (photo: C. Geiger, ©AcrossBorders).

fragile rounded object with a loop (8 × 5x6mm). It was probably made of ivory. **SAC5 376** is a complete amulet of a rearing cobra in faience (11 × 3x16mm). **SAC5 377** made of jasper (11 × 3x21mm) is a different type but also showing a rearing cobra.

The next group of bodily adornment objects attested in Feature 5 are scarabs of which six pieces were found. In addition, an exceptionally well-preserved finger ring out of gold and silver with a steatite scarab set in the bezel (**SAC5 388**) was discovered *in situ* with Individual 324 (Budka 2017c, 123-124, fig. 19). The ring (29 × 4x30mm) features a thick silver band, gold accents, and a scarab. The ring itself clearly dates to the 18th Dynasty, but the scarab seems to be an old piece, presumably from the Second Intermediate Period (see Wegner 2018, 243 that the mounting of scarabs as rings just starts with the 18th Dynasty). It is in a heavy gold setting, with an open frame to expose both the front and back surfaces (Fig. 5.48). Though the area surrounding the inscription is rather flat, the opposite side steps up to a small ledge to follow the shape of the beetle. Short extensions are incorporated at either end to hold the ends of the shank, which seem to abut small gilded domed caps. There are thin gold wire threads through the length of the scarab/setting, through the caps and finally out through a small hole drilled in the shank. The wire then coils tightly around either side of the shank (14 times below scarab, 17 above). The end of the wire goes through another pair of holes and seems to be tucked under the previous coil on the remaining side. The remaining (underside) of the shank is left exposed, undoubtedly both for comfort and because it was less visible.



Figure 5.43: coffin inlays SAC5 430 (photo: C. Geiger, ©AcrossBorders).

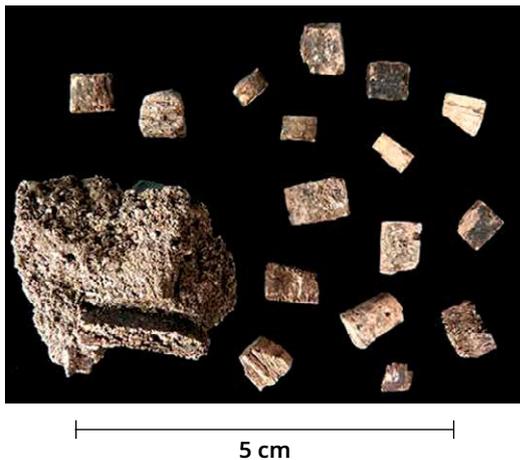


Figure 5.44: inlays SAC5 431, most probably of a funerary mask (photo: M. Gundlach, ©AcrossBorders).

The steatite scarab itself has an extremely simplified beetle ($16 \times 11 \times 5\text{mm}$), with only a short horizontal dash at either outer edge to separate the *thorax* and *elytra* (type D after Steindorff 1937, 99). Of the head area nothing is visible, though some detail may be covered by the edge of the setting. The reverse design appears to read *mꜣꜥt ꜥnkh nbw* (balance, life, gold), with the *nbw* sign rotated to fit the horizontal space. Interior stripes have been added to the feather and cross hatching to the basket of the *nbw*. Small *nb*-like half circles have been added to either end to fill the space and also have vertical/diagonal internal incisions.

Comparable finger rings are attested in small numbers from elite tombs in New Kingdom cemetery in Nubia. A similar ring with an old piece used as the scarab was found in Tomb 8 of SAC5 (Minault-Gout and Thill 2012, 252, 305, pl. 122); comparable pieces are also known from Soleb (Schiff Giorgini 1971, 305, fig. 601, T36c11) and Aniba (Steindorff 1937, 111, pl. 57, nos. 34 and 36).

Individual 324 in Feature 5 also had a separate steatite scarab, SAC5 387 ($14 \times 10 \times 7\text{mm}$). The body of the beetle is much simplified, with the plate excised

Number of object	SU	Type of Object	Material	Description
SAC5 315	140	Bead	Faience	Three rather large faience ring beads, burnt?; 7 × 12 × 11mm to 9 × 12 × 11mm.
SAC5 316	140	Bead	Shell	Four small disc beads, made of ostrich shell.
SAC5 317	140	Bead	Faience	Small faience bead, nearly spherical. The bead appears to be burnt, with further salt damage to the surface.
SAC5 318	140	Bead	Faience	Small faience bead, nearly spherical. The bead appears to be burnt.
SAC5 319	140	Bead	Faience	Fragment of a faience bead, probably originally oblong in shape. Broken widthwise, with extensive salt damage to the surface. Larger than SAC5 320.
SAC5 320	140	Bead	Faience	Four fragments of faience beads, originally oblong in shape. Two are broken widthwise and two lengthwise, with extensive salt damage to the surface. 7 × 7x5mm to 8 × 5x16mm.
SAC5 321	140	Bead	Faience	Two very small blue faience ring beads. Very fragile, water damage?
SAC5 322	140	Bead	Faience	Two small green faience ring beads, with very eroded surfaces.
SAC5 326	140	Bead	Faience	Rather large faience ring bead, burnt?
SAC5 327	140	Bead	Faience	Rather large faience ring bead, smaller than SAC5 326. Surface is heavily damaged (chipped and salt), burnt?
SAC5 328	140	Bead	Faience	Small blue faience bead, tube shaped and with notches to imitate multiple ring beads.
SAC5 329	140	Bead	Faience	Two small green faience ring beads, with heavily degraded surface.
SAC5 330	140	Bead	Stone (carnelian)	Small carnelian bead, roughly diamond shape.
SAC5 341	190	Bead	Faience	Fragment of a thick faience tube bead, tapered at both ends (one remains), same type as SAC5 344.
SAC5 342	190	Bead	Faience	Two complete faience ring beads. 6 × 6x1mm; 5 × 5x1mm.
SAC5 343	190	Bead	Faience	Three complete faience disc beads, with remains of light blue glaze. All have the same dimensions.
SAC5 344	190	Bead	Faience	Fragment of a thick faience tube bead tapered at both ends (one remains). Same type of bead as SAC5 341, but broken edges do not adjoin.
SAC5 345	190	Bead	Faience	Four faience ring beads: two complete and two fragments. All are heavily eroded, though one complete bead seems to have a remaining spot of light blue glaze; 5 × 5x2mm; 4 × 4x1 mm.
SAC5 378	191	Necklace	Stone (carnelian), bone, gold, faience	Necklace with ring and ball beads and various amulets (details see below).
SAC5 401	191	Bead	Faience	Two fragments of a tiny faience(?) ring bead, each representing about half the bead; <i>approx.</i> 1 × 2x1mm.
SAC5 405	191	Bead	Clay, unfired	Small fragment of a clay bead, with one flat and one rounded surface. The bead very much resembles the end of the oblong faience beads from Tomb 26.
SAC5 419	191	Bead	Stone (jasper)	Small red stone ring bead, possibly red jasper (very dense for carnelian). The bead is nearly spherical but is not quite spherical around the piercing. The piercing itself narrows considerably from one side to the other.
SAC5 420	191	Bead	Bone	Two complete small bone ring beads; 2 × 1x1mm; 1.5 × 1x1mm.

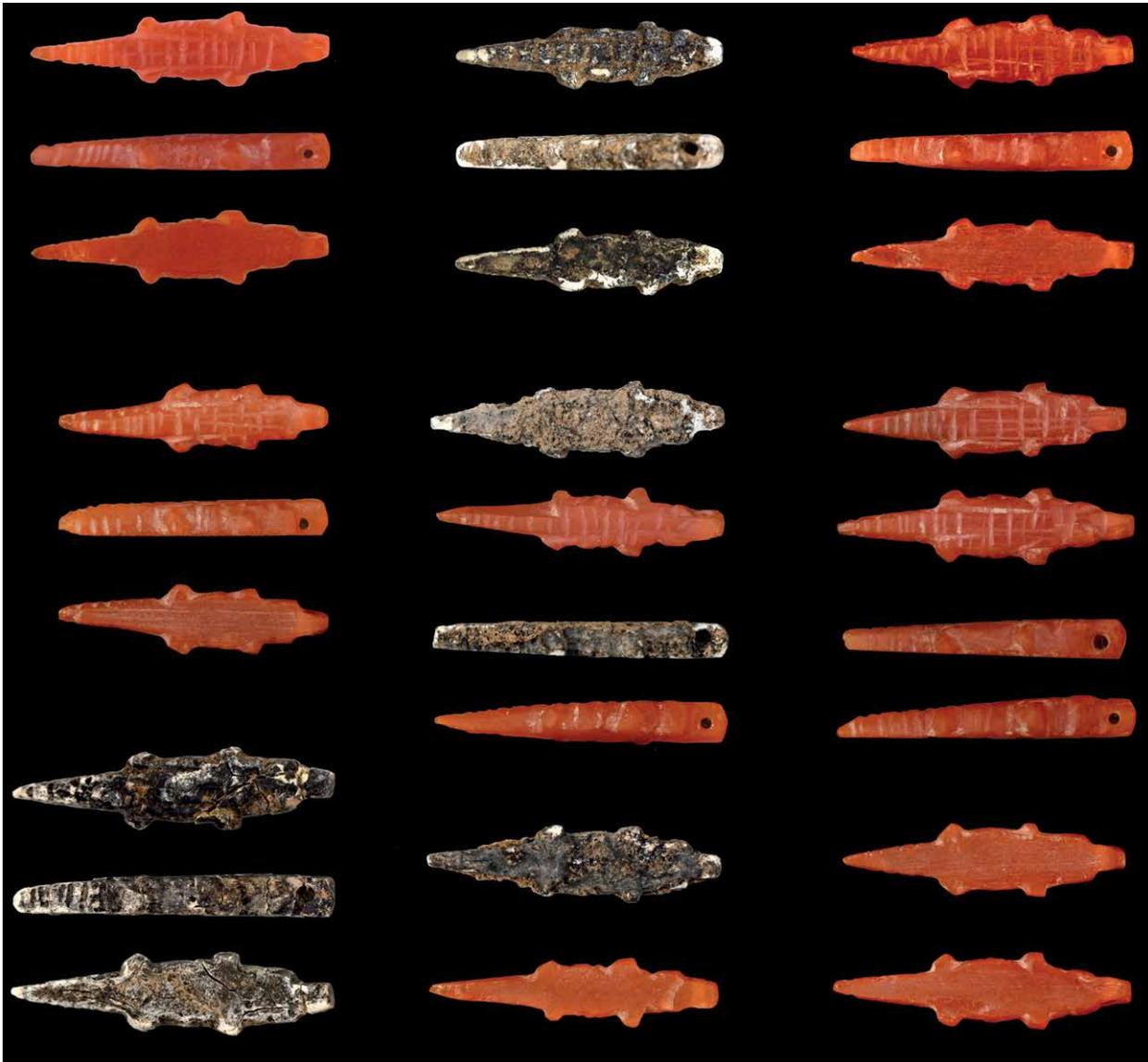
Table 5.19: list of beads from Feature 5.

completely and the *thorax/elytra* separated only by short horizontal dashes at the outer edge. The wings are not separated in any way. In the place of legs, two horizontal bands run around the short edge. Only a yellowish discoloration in the crevices remains of the original glaze. The reverse design depicts an elaborate *smꜣ tꜣ.wj*, which abuts and incorporates the perimeter line (Fig. 5.49). All four floral extensions are lotus blossoms. The elements of the upper half are connected by shallow parallel dashes, but it is uncertain if they would even appear when stamped. An arched line fills the space between the *smꜣ tꜣ.wj* and the perimeter at each end. This piece seems to date, like the scarab of the finger ring, to the Second Intermediate Period.

SAC5 364 is a complete steatite scarab (14 × 11 × 7mm) found with Individual 259. The body of the beetle is well defined, with the head, plate, *thorax* and *elytra* outlined. On either side, at the meeting point of the *thorax* and

elytra, a small triangle has been carved for decoration. All six legs are indicated in simple outline. The reverse design is pictorial (Fig. 5.50). The large central figure is a lion, which appears to be attacking the (somewhat abstract) crocodile curved in front of it. To the rear of the lion is a cobra/uraeus over two small horizontal dashes, possibly an abbreviation for *nb.t tꜣ.wj*.

SAC5 367, another complete steatite scarab (14 × 10 × 7mm), was found on the right side of Individual 300. The body of the beetle is well defined, with the head, plate, *thorax* and *elytra* outlined. On either side, at the meeting point of the *thorax* and *elytra*, a small triangle has been carved for decoration. All six legs have been carved with deep crevices between, though the back left leg is damaged. The reverse design is the name *Mn-hpr-Rꜥ* (Thutmose III), with a thin border but no cartouche (Fig. 5.51). Together, the *Rꜥ* and *mn* take up only about a third of the space. The *mn* is quite well



3 cm

Figure 5.45: crocodile amulets from SAC 378 (photos: C. Geiger, ©AcrossBorders).

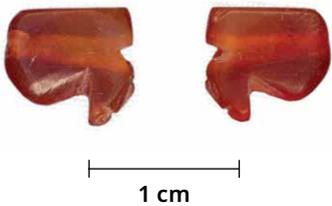


Figure 5.46: wedjat amulet SAC 382 (photo: C. Geiger, ©AcrossBorders).

carved, with eight game pieces and internal detail (one horizontal and five vertical cross hatches). The *hpr* is quite elaborate, with four legs and a pair of wings, each with a descending uraeus. Within the body, the head and *elytra* are delineated with incisions. The outstretched wings also have internal crosshatching.

Scarabs like this are very common in Egypt and Nubia (see above and Jaeger 1982) and this example finds a close parallel in Tomb 25 of SAC5 (Minault-Gout and Thill 2012, 264, pl. 117, T25P14) and among others in Soleb (Schiff Giorgini 1971, pl. XII, T17c7 and T19p9) and Aniba (Steindorff 1937, pl. 54.7 and 16).

SAC5 381, another complete scarab made of very soft and light steatite ($16 \times 11 \times 7$ mm), is associated with the southernmost burial in Feature 5, Individual 145. The body of the beetle is much simplified, with the head/plate made of abstract diagonal lines and the *thorax/elytra* separated only by short horizontal dashes at the outer edge. The wings are not separated in any way. In place of legs, two horizontal bands run around the short edge. A large chip is missing from the surface of the beetle, but rather than the exposed core, the surface is smooth and glossy. The reverse design depicts a recumbent antelope, with a palm frond filling the space to the front and above its back (Fig. 5.52). The gazelle itself is quite detailed, with the eye and rear haunch outlined. Several dashes are added to the body to represent fur, but the three straight lines across the neck may represent some other marking. Despite the high quality of the gazelle, the perimeter line is jagged and uneven.

Another complete steatite scarab from Feature 5 is **SAC5 386** ($15 \times 11 \times 7$ mm), found with Individual 162. The body of the beetle is well defined, with the head, plate, *thorax* and *elytra* outlined. Even the *clypeus* is well preserved, despite being directly over the piercing. On either side, at the meeting point of the *thorax* and *elytra*, a small triangle has been carved for decoration. All six legs have been carved with deep crevices between. The reverse design consists of a large *ḥt* and enclosed within an oval (Fig. 5.53). The space between this and the perimeter line is filled with thirteen discs, each with a dot in the centre.

SAC5 411 represents another type of scarab, not a seal or finger ring, but a heart scarab (Fig. 5.54) which was placed on the chest of Individual 145. However, this piece is unusual. The overall shape of the object made in white plaster/lime mortar is ovoid and it is pierced through the width. Such a piercing is highly uncommon; heart scarabs are either pierced vertically at their side or horizontally at the head part of the beetle.⁶ One surface is flat and smooth, while the other is slightly domed, narrowing towards the top. The pendant was clearly placed on the body in a similar way as a heart scarab, and in its original design it was probably inscribed. A painted writing of the typical Chapter 30 of the Book of the Dead which has completely disappeared because of the flood levels in Feature 5 seems likely. This was also suggested for a close parallel from Tomb 3 in SAC5, a faience heart scarab which in its present state is also uninscribed (Minault-Gout and Thill 2012, 216-217, pls. 102, 107).

The last object in the category of personal adornment is **SAC5 389**, a bracelet. This ivory bracelet was badly



Figure 5.47: amulets SAC5 379 (photo: M. Gundlach), 376 and 377 (photos: C. Geiger, ©AcrossBorders) from Individual 300.



Figure 5.48: finger ring SAC5 388 (photo: C. Geiger, ©AcrossBorders).

damaged and is broken into (at least) ten pieces ($58 \times 8 \times 5$ mm). The identification as a bracelet is based both on the size and arched shape of the fragments (Fig. 5.55) as well as their find location over the ulna of Individual 245 (see Chapter 6).

6 I am grateful to Rennan Lemos who pointed out this detail regarding the piercing of SAC5 411 to me.



Figure 5.49: scarab SAC5 387 (photo: C. Geiger, ©AcrossBorders).



Figure 5.50: scarab SAC5 364 (photo: C. Geiger, ©AcrossBorders).

5.2.5.3 Ceramic vessels

The pottery from Feature 5 includes in its uppermost flood level some pre-Napatan and Napatan pieces (Fig. 5.56). All vessels from the lower layer SU 191 are, however, datable to the mid-late 18th Dynasty, with the reign of Thutmose III as the earliest attested period.

The corpus includes some vessels specifically designed for the funerary sphere. Firstly, a set of miniature canopic jars (Fig. 5.57). **SAC5 394**, **SAC5 395**, **SAC5 396** and **SAC5 397** were found close to the cranium of Individual 145. These are model vessels made of Marl clay A2, seemingly used with a lid (SAC5 390–SAC5 393) to imitate a stone canopic jar (height: *approx.* 7.3cm). The small base of the vessels (*approx.* 32mm diameter) is slightly convex rather than flat and prevents the jar from standing upright. The body is globular and ends in a medium tall neck. The neck itself rises to a flat rim with rounded edges (mouth diameter *approx.* 41mm). This type of canopic jar is unique to SAC5, because the otherwise attested clay canopic jars differ in shape (being hole-mouth jars, see Minault-Gout and Thill 2012, pl. 150). The miniature vessel type rather belongs to the class of ointment jars which have been imported from Egypt to Nubia since the early 18th Dynasty. The examples from Feature 5 find close parallels in Aniba (Helmbold-Doyé and Seiler 2019, 346-347, 350, VI.2.2).

Towards the west and close to the head area of Individual 145, four clay lids for the set of canopic jars were found. **SAC5 390**, **SAC5 391**, **SAC5 392** and **SAC5 393** perfectly



1 cm

Figure 5.51: scarab SAC5 367 (photo: C. Geiger, ©AcrossBorders).



1 cm

Figure 5.52: scarab SAC5 381 (photo: C. Geiger, ©AcrossBorders).

fit on the tops of the miniature jars (Fig. 5.58). SAC5 393 was found with associated gold foil (11 pieces, see Fig. 9.6). Each lid has a human face which was set at a roughly 45-degree angle on the lid. The human heads only have vague features. A bag wig is largely identifiable as such because of comparative knowledge. Earlobes are in general recognisable. The nose is represented by a raised ridge, but the eyes and mouth are missing. Below the chin is a short extension that possibly resembles a beard (the best parallels for these lids from Tomb 14 are beardless, see Minault-Gout and Thill 2012, pl. 150). The rear of the moulded head is hollow, attached to the lid only at the edges. The concave lower surface suggests that it was not formed over the associated jars (SAC5 394–SAC5 397) which have flat rims and wide mouths. The lids are nearly circular. All surfaces are blacked, seemingly burnt rather than fired. There were faint traces of red paint on some parts of SAC5 391 (see Fig. 7.11).

Another specific set clearly of a funerary function is a pair of vessels with faces attached to the neck. This pair (SAC5 315/2017 and 352/2017) was found close to the west wall of Feature 5 respectively between the canopic jars. The vessels are small jugs with ovoid bodies and slightly flaring necks with modelled rims. A plastic human head with a neck was attached to each rim and neck (Fig. 5.59).

The interior of SAC5 352/2017 was filled with a black substance, identified by chemical analysis as bitumen (Fulcher and Budka 2020). The association of this jar containing



1 cm

Figure 5.53: scarab SAC5 386 (photo: C. Geiger, ©AcrossBorders).



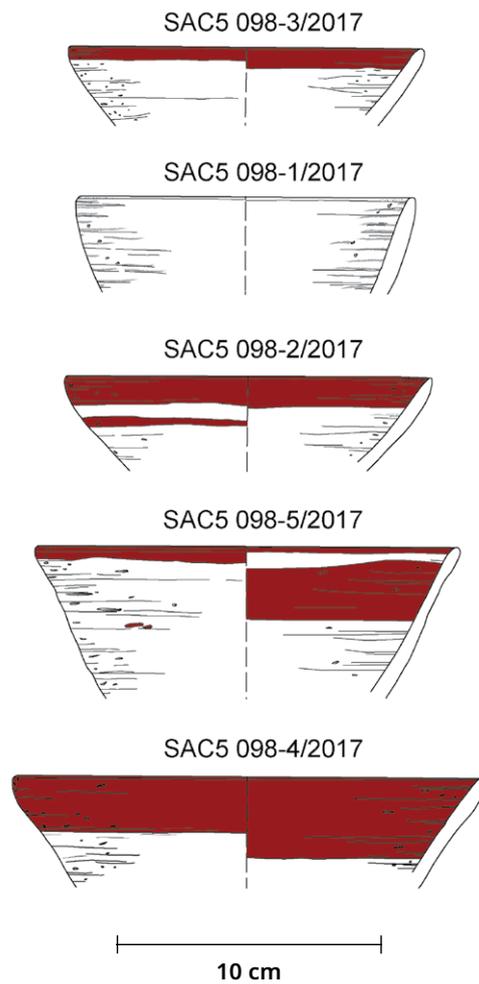
5 cm

Figure 5.54: heart scarab SAC5 411 (photo: C. Geiger, ©AcrossBorders).



10 cm

Figure 5.55: bracelet SAC5 389 (photo: C. Geiger, ©AcrossBorders).



10 cm

Figure 5.56: mixed ceramics from Feature 5.

Figure 5.57: set of four miniature vessels, used as canopic jars with fitting clay lids (photo: C. Geiger, ©AcrossBorders).



10 cm

bitumen with the canopic jars of Individual 145 is intriguing and will be discussed in detail in Chapter 7.

A small corpus of dishes, bowls and lids was recorded from Feature 5 (Fig. 5.60). All vessels are wheel-made and have been produced in Nile clay variants with various surface treatments. They do find parallels from the New Kingdom town of Sai and can be securely dated to the mid-18th Dynasty (see Budka 2017e, 124-126, figs. 20-22). A large white-slipped bowl (SAC5 388/2017) exhibits a monochrome painted style with linear bands which was common in New Kingdom Nubia, but is also found in Egypt (see, e.g., Franzmeier 2017, 1842, 1216/GKe/001). The same applies to a small lid with a spiral decoration in black on red wash (SAC5 258/2017).

Among the group of open vessels, flowerpots are the most numerous type in Feature 5 (Fig. 5.61). Several vessels have been found around burials in the northern part of the chamber and within a pottery cluster positioned in the south-eastern corner, at the feet of Individual 145, in the area of the original entrance of Feature 5a. This cluster comprises six flowerpots, piled with the mouths to the ground, as well as one large dish with a red rim and a small lid (see Budka 2017b, 79, pl. 9). The flowerpots comprise one example of FP 1 with an angular shaped rim; four examples of type FP 2 with a rounded lip and one example of an unusual type with an extended, direct rim, FP 3 (SAC5 268/2017).

A comparable assemblage of flowerpots is attested in the neighbouring Tomb 7, which also shows the architectural parallel of a wall separating the subterranean rooms. In the main burial chamber of this tomb, a cluster of vessels was found in the southeastern corner, including five flowerpots (Minault-Gout and Thill 2012, 49).

Two decorated handled jugs were found in Feature 5 (Fig. 5.62). SAC5 244/2017 is a small piriform jug or pitcher which relates to non-Egyptian forms and is well attested in

New Kingdom Nubia (e.g. at Soleb, see Schiff Giorgini 1971, pl. 15, no. 29). SAC5 342/2017 is a Marl clay monochrome painted jug attributable to the mid-18th Dynasty (see Williams 1992, 41, 86, fig. 80; cf. also Tomb 8 from SAC5, Minault-Gout and Thill 2012, pl. 138 bottom).

Only two closed vessels from Feature 5 fall into the category of jars (Fig. 5.63). SAC5 349/2017 is the complete tall necked ovoid jar with black linear decoration on red wash. It is similar to a jar from Tomb 14 of SAC5 (Minault-Gout and Thill 2012, pl. 135, T14 30). SAC5 343/2017 is a complete example of a miniature amphora made of Nile clay, well attested from other tombs in SAC5 (Minault-Gout and Thill 2012, pl. 136).

Finally, a pot stand was found in Feature 5 (Fig. 5.64). SAC5 346/2017 is a low tubular type well attested from the New Kingdom town of Sai. Larger variants of pot stands were also recorded from other tombs in SAC5 (Minault-Gout and Thill 2012, pl. 130), partly still associated with the round-based vessels they were supporting. This also seems to be the case for SAC5 346/2017 – it probably once held the amphora SAC5 343/2017 in place.

5.2.5.4 Stone vessel

One complete stone vessel (SAC5 398) was found within the cluster of vessels in the south-eastern corner of Feature 5 (Fig. 5.65). The gneiss vessel was broken into two parts through the width and the clean break allowed an easy reconstruction (15.1cm in height). The vessel has a small base (7.1cm diameter) that arches slightly into the centre. The body is much larger and bulbous. The neck is high and relatively straight, flaring only slightly into the thin rim (10.1-10.3cm rim diameter).

This type of stone vessel is very common, both in Egypt and Nubia (Aston 1994, 151, type 173). A number of the parallels were able to be dated to the reign of Thutmose III (see Chapter 8).

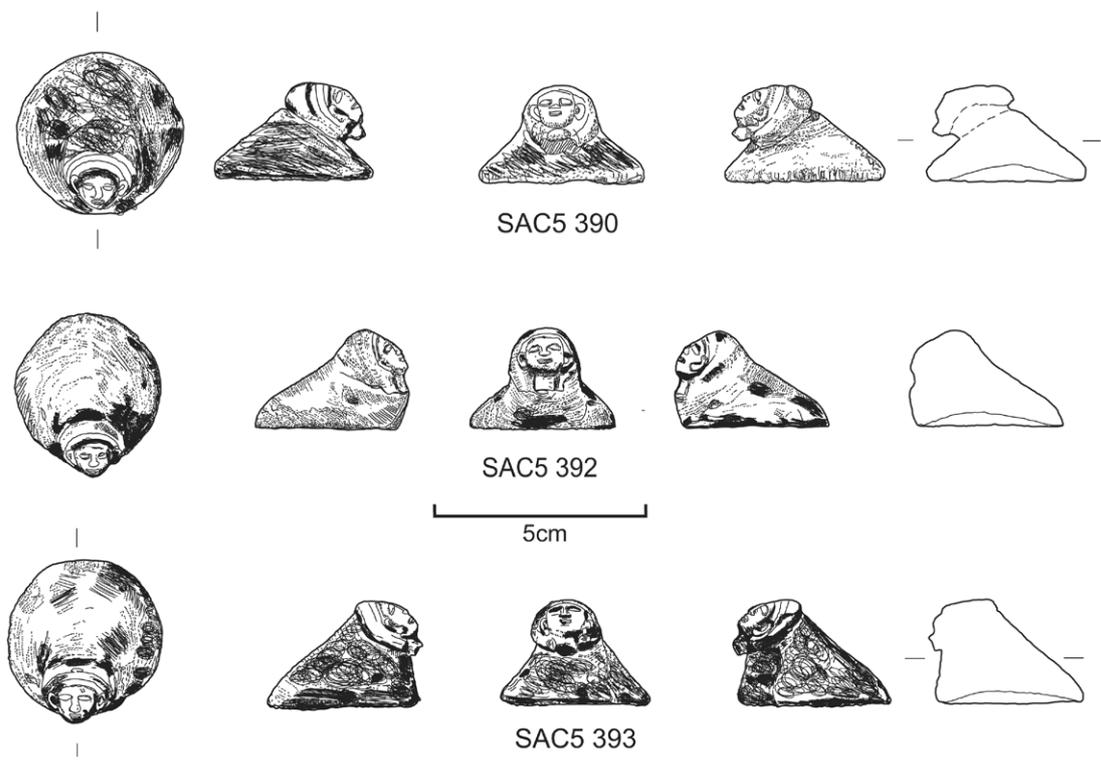


Figure 5.58: set of lids for the miniature canopic jars (SAC5 390, 392 and 393).

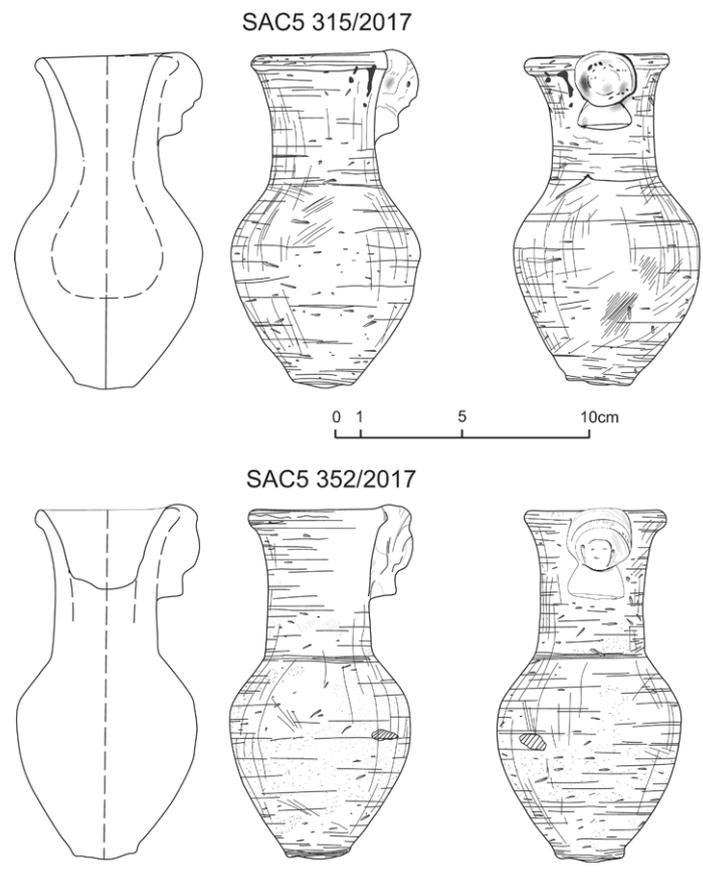


Figure 5.59: pair of vessels with attached human heads.

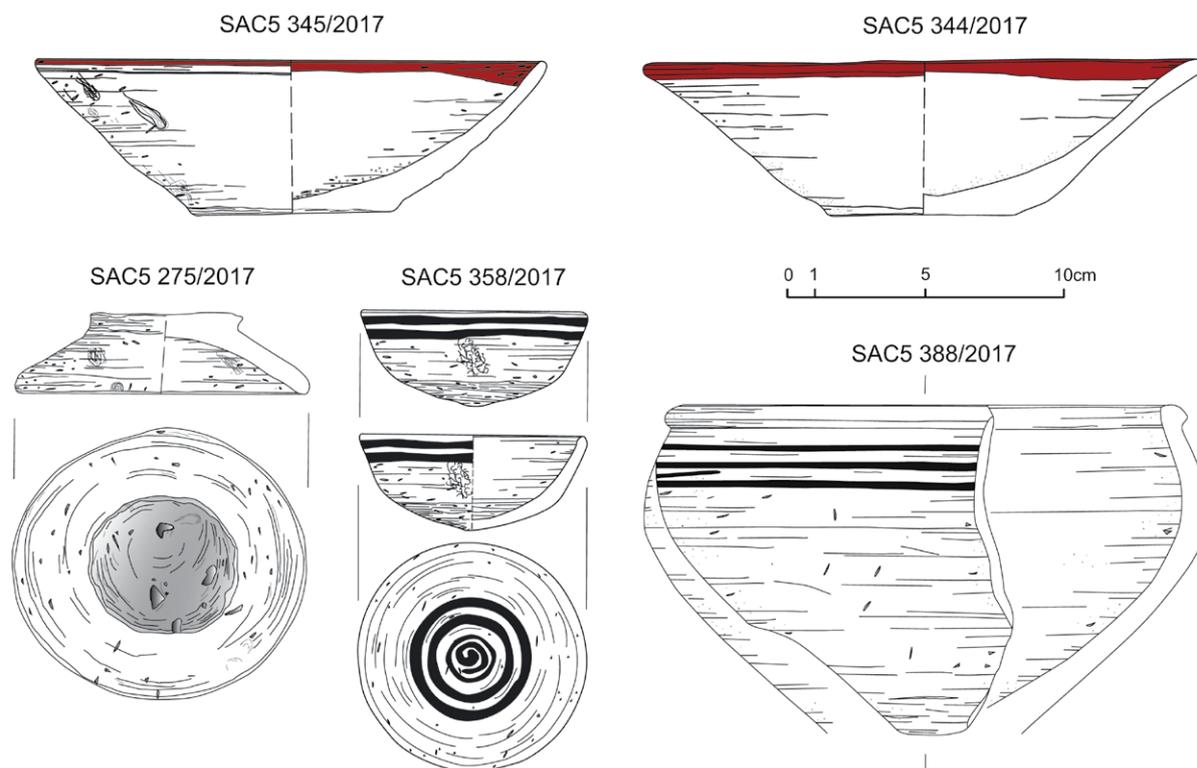


Figure 5.60: ceramic dishes, bowl and lids from Feature 5.

5.2.5.4 Others and unclear finds

A small number of objects recovered from Feature 5 remain unclear as to their use and function. **SAC5 402** are small fragments of an ivory object. Three tiny fragments are very similar in appearance to amulet **SAC5 379**, but with no identifiable parts. The original form of **SAC5 402** remains unknown (1 × 1mm to 3 × 1mm).

The most unusual finds from Feature 5 are a group of so-called blue sticks (**SAC5 371**, **SAC5 414** and **SAC5 415**, Fig. 5.66). These objects vary in size and shape and are made from a very fragile and soft blue material, partly decorated with red. The material was initially unclear, and a sample was therefore analysed using infrared

spectroscopy and microscopy with polarized light (PLM) in London (Fulcher and Budka 2020). The material analysis identified the blue sticks as Egyptian blue. The most likely explanation for the elongated objects is therefore that they are pigment sticks (see comparable objects in disc-shape now in Hildesheim, Schulz 1987b) or fixing material for coffin inlays (see Chapter 7). The evidence of blue sticks in Tomb 26, which consist of Egyptian blue, shows that enough quantities of synthetically produced materials were available on Sai for painting funerary furnishings in Nubia in a comparable way to that in Egypt.

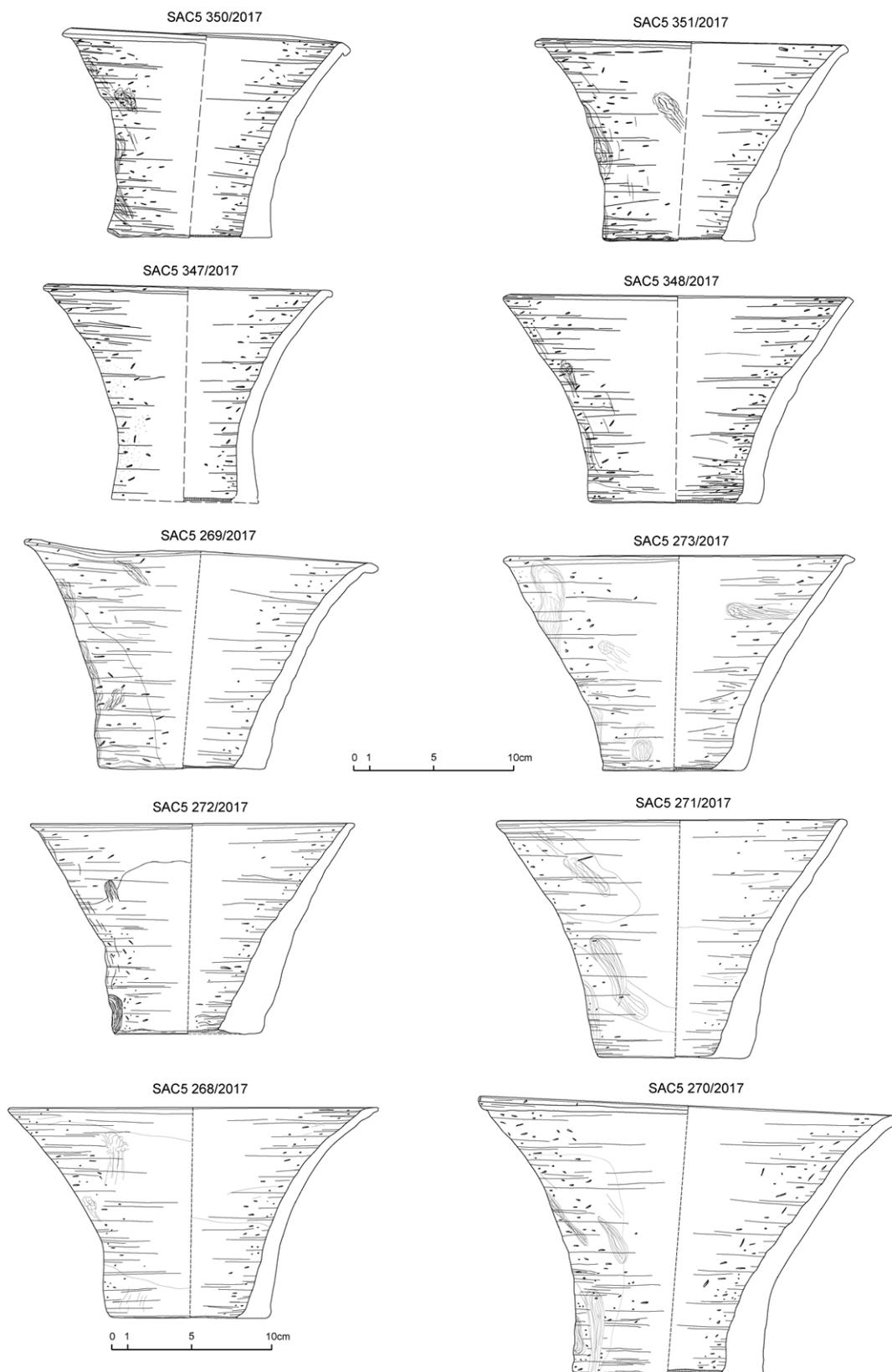


Figure 5.61: flowerpots from Feature 5.

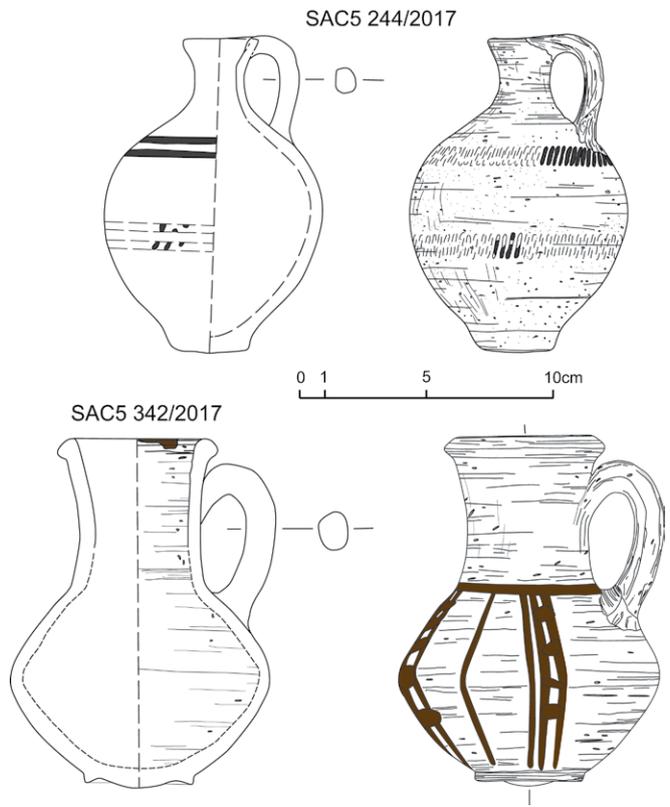


Figure 5.62: painted jugs from Feature 5.

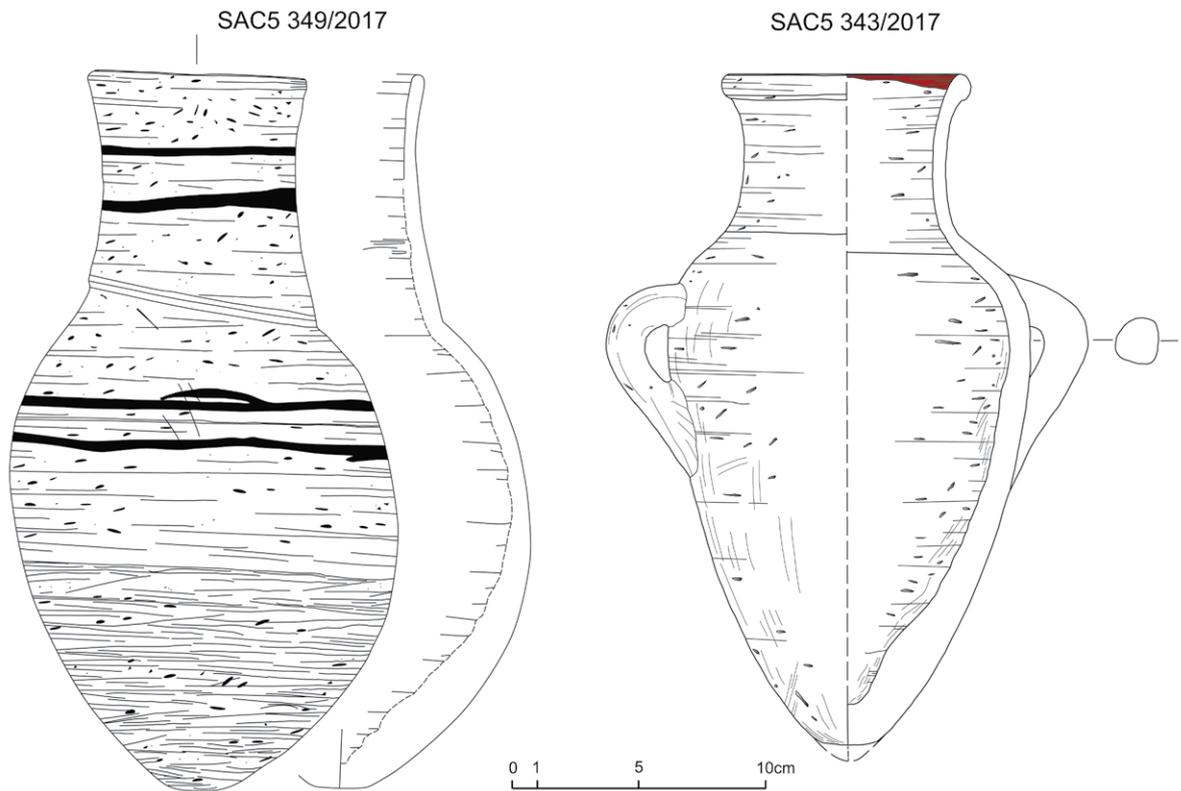


Figure 5.63: painted jar and amphora from Feature 5.

SAC5 346/2017

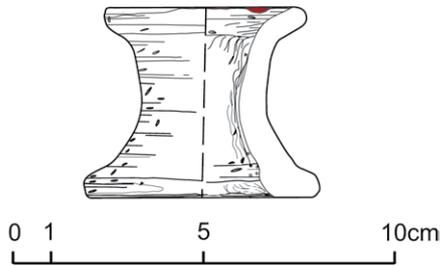


Figure 5.64: pot stand from Feature 5.

SAC5 398

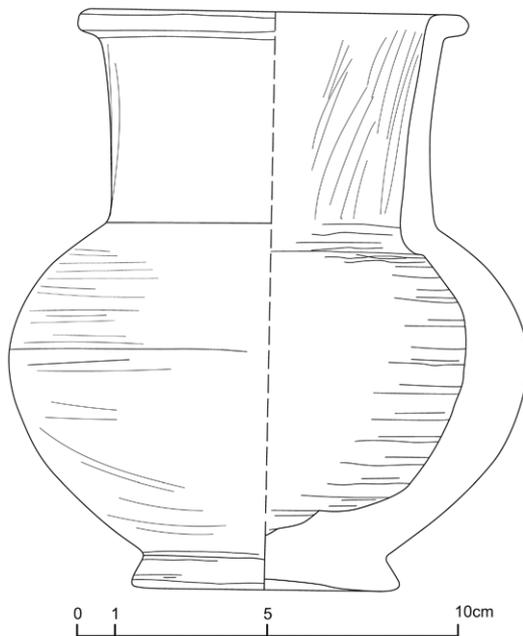


Figure 5.65: stone vessel from Feature 5.

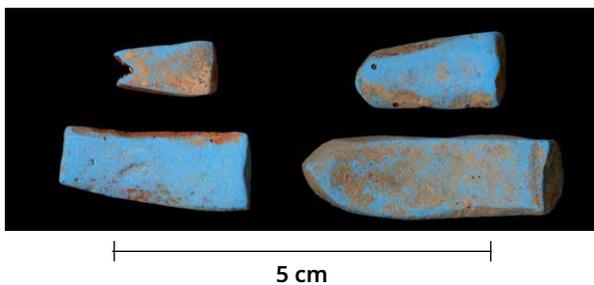


Figure 5.66: examples of so-called blue sticks from Feature 5, SAC5 371 (photo: C. Geiger).

5.2.6 Feature 6

Feature 6 was found sealed and filled with flood deposits and has obviously remained undisturbed since ancient times. Feature 6 held the remains of two wooden anthropoid coffins (only traces survived in the flood sediments), as well as rich burial equipment of Egyptian style.

5.2.6.1 Coffins and masks

Both burials in Feature 6 were placed in painted wooden coffins of anthropoid shape, most probably with a white ground colour. Several fragments of decayed wood and painted plaster with traces of blue, yellow and red pigments (Fig. 5.67) were classified as remains of the coffin of Khnummose (Individual 159, see Appendix for details).

SAC5 356 is the pair of inlaid eyes from the coffin (SAC5 218/2017). The lack of bronze surrounds has made them very unstable and each eye was collected in pieces. The whites of the eyes are virtually identical on this set, and the sides have been attributed based on find location. Both eyes have roughly circular black stone pupils (one edge is rather flat and has been oriented towards the bottom) surrounded by white paste (Fig. 5.68).

Of the left eye, only the pupil and one of the whites have been preserved. A thin circle of plaster belonging to the space behind the pupil has also been preserved ($24 \times 12 \times 6\text{mm}$). A third piece of plaster, roughly the size ($21 \times 8 \times 15\text{mm}$) and shape of the eyes, was also recovered but its connection is unclear; it seems far too thick to be the reverse surface and seems to have remains of blue paint. Similar to Feature 5, the additional existence of a miniature mask for Khnummose is conceivable (see above).

Of the two coffin eyes, the right is the better preserved and both whites have been recovered ($35 \times 13 \times 7\text{mm}$). The stone pupil is twice as thick as its counterpart but has the same surface area and would have been easily adjusted with additional plaster—remains of plaster are still stuck to the back of this pupil. One of the whites is also much thinner than the other (seemingly the inside?), though it is unclear if this is a significant design feature. It also appears to curve up slightly at the end.

SAC5 346 is the pair of inlaid eyes from the funerary mask of Khnummose (Fig. 5.69). This set is much better preserved than the other, with the intact bronze outlines. The well-defined tear ducts make the eyes easy to distinguish. Both eyes have a pupil of dark stone that is circular and rather flat on the front, while more domed/spherical at the rear. The whites of the eyes are made of a fragile paste, which is now cracked and powdery.

The left eye is the slightly larger of the two ($63 \times 21 \times 26\text{mm}$). Of the whites, one side is smooth, and one side is cracked. A small chip is missing from the outer edge of the pupil.



Figure 5.67: pigments from the head area attesting to the now lost wooden coffin of Khnummose (photo: J. Budka).

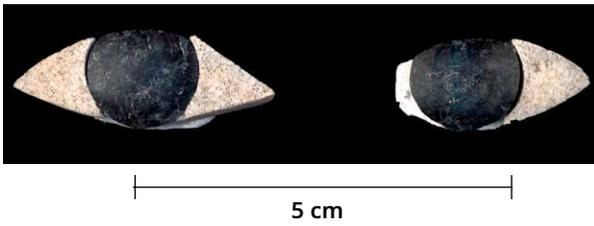


Figure 5.68: pair of eye inlays SAC5 356 from Feature 6 (photo: C. Geiger, ©AcrossBorders).

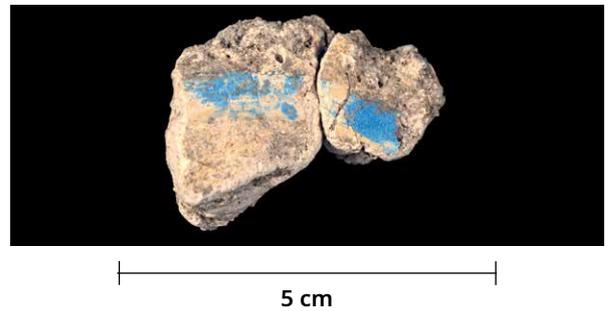


Figure 5.70: right eyebrow of the painted plaster mask of Khnummose, SAC5 356 (photo: C. Geiger, ©AcrossBorders).

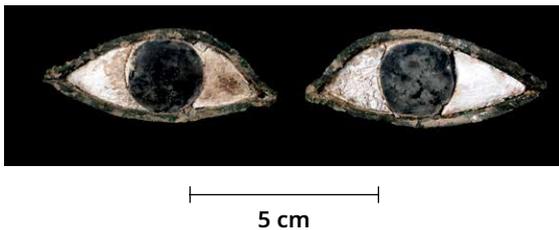


Figure 5.69: pair of eye inlays SAC5 346 from Feature 6 (photo: C. Geiger, ©AcrossBorders).

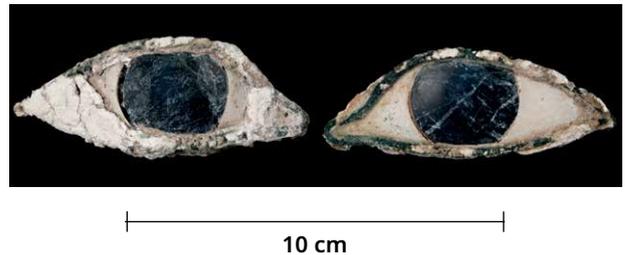


Figure 5.71: pair of eye inlays SAC5 362 from Feature 6 (photo: C. Geiger, ©AcrossBorders).

The right eye is slightly better preserved (62 × 20 × 25mm). Like the left eye, there is a small chip/edge to the outer side of the pupil. The back surface is better preserved but fragile. At the point of the tear duct there is a gap straight through, though this may have been an original difference in the shape of the metal and paste.

As mentioned above, there are some traces of painted plaster which seem to be associated with a miniature mask of Khnummose. Another object seems to attest to a painted plaster mask, but it was most probably almost life-size. The piece seems to show the right painted eyebrow; it was also recovered with the right eye inlay. Painted in blue on the plaster, it is in extremely poor condition. Though three fragments of the plaster have been recovered, only two retain paint. Together, these two pieces are about 43mm long, but it is unclear if the whole eyebrow is represented (Fig. 5.70).

Another object associated with the funerary mask of Khnummose is **SAC5 421**, a fragment of painted plaster (22 × 7 × 18mm) found west of the right eye. Blue paint remains on one surface, while the other is encrusted with the organic remains of the mask. Several flakes of gold foil were found in the area of the skeleton of Khnummose, most likely associated with the heart scarab **SAC5 349** (see below) and not deriving from a gilding of the mask or of the coffin (see Appendix).

Overall, the existence of two pair of bronze inlay eye pairs, for coffin and wooden funerary mask, as well as the painted plaster remains support the interpretation that Khnummose was equipped with a set of wooden coffin and mask and an additional plaster (miniature) mask (see Chapter 7).

The poor state of preservation of the painted wooden coffin of the female (Individual 160) buried in Feature 6 compares to the one of Khnummose. Traces of blue and red on white plaster were identified as remains of the coffin (**SAC5 219/2017**). One white sample of **SAC5 219/2017** was an almost pure calcite. This much higher level of calcite than for example in plaster samples suggests that the mineral was being added deliberately in funerary contexts (Fulcher and Budka 2020), high lightening the specialised production of the coffins found in Tomb 26. As **SAC5 136/2017** something which looked like a painted eye in blue and red on white was documented, most probably the decoration of the lateral side of the coffin case (see Chapter 9, Fig. 9.8).

That the wooden coffin **SAC5 219/2017** once had inlays is suggested by remains registered as **SAC 409** and found on top of the coffin, especially in the shoulder area. These are fragments of an unclear substance, most probably of ivory. The original form is very unclear, and the small pieces were collected together with fragments of plaster. The size varies from 1 × 1 × 1mm to 5 × 3 × 4mm and 12 × 3 × 9mm.

Only one pair of eye inlays was discovered with Individual 160, presumably from the funerary mask rather than the coffin. **SAC5 362** are much smaller than



Figure 5.72: scarab **SAC5 351** (photo: C. Geiger, ©AcrossBorders).

those of Khnummose (**SAC5 346**), but otherwise very similar. The well-defined tear ducts helped to distinguish between the right and left eye. Both eyes (Fig. 5.71) have a pupil of dark stone that is circular and rather flat on the front, while more domed/spherical at the rear. The whites of the eyes are rather well preserved. Unlike the eyes of Khnummose, there are large patches of plaster on the front surfaces of these.

Of the two eyes, the left appears to be the better preserved (37 × 13 × 15mm), having less plaster on the outer surface. The white of the right eye (37 × 12 × 15mm) is almost entirely covered with plaster and just enough shows to confirm its presence. Plaster also covers the lower edge of the pupil. Little remained of the funerary mask itself, with only small fragments recovered. On these pieces red, blue, and white painted sections were noted.



Figure 5.73: heart scarab SAC5 349 (photo: C. Geiger, ©AcrossBorders).

5.2.6.2 Bodily adornment

Interestingly, no beads were found in Feature 6. The only type of amulet present was a scarab.

SAC5 351 is a complete steatite scarab (18 × 13 × 8mm) which was found at the head of Khnummose. The body of the beetle is simplified, with no distinction of the *thorax* or *elytra*. Though the head (and possibly the plate?) do seem to be outlined, damage around or caused by the perforation has largely obliterated them. All six legs are indicated in simple outline. The reverse design is elaborate (Fig. 5.72), with twelve individual signs forced into the tiny scale within the ovoid border line. Apart from a loaf shape filling the uppermost edge and a larger *nfr* in the centre, the design is mirrored to either side. Most of the space is dominated by a pair of wedjat eyes over a pair of uraeus wearing the Red Crown. Between them is the single *nfr*, flanked on either side by an *nh* over a small *nfr*. Two larger *nh*-signs fill the space below the uraei.

Another item found with the body of Khnummose is a heart scarab, thus an object with a clear funerary function. **SAC5 349** (Fig. 5.73) is a complete serpentinite heart scarab (84 × 61 × 21mm). Both the beetle and the inscribed surface are well preserved. Though the beetle has all major parts delineated (*clypeus*, head, plate, *thorax* and *elytra*), the effect is rather abstract. Rather than depicting the legs, the beetle sits raised on a short platform-like plinth. The ovoid shape is widest near the head and tapers through the wings. The outer meeting points of the *thorax* and *elytra* are each decorated with three diagonal lines. At the bottom point of the two vertical lines dividing the wings, each is decorated with a further two arched incisions. Three circles are incised



Figure 5.74: heart scarab SAC5 349 *in situ* with gold foil remains (photo: J. Budka).

just below the head, the smaller two possibly intended as eyes. Around the edges of the beetle, many scratches from production are visible on the smooth surfaces but do not detract from the overall quality.

The inscribed surface is also ovoid, widest at the start of the text. The text itself is enclosed by an incised border (for details see Chapter 7). The inscription is divided into nine rows with a small gap above and below. In the upper gap, a further line of text has been added in a different hand (even more crudely than in the main text) and appears to be dedicate to the wife of Khnummose: *nb.t pr*



Figure 5.75: shabti SAC5 350 (photo: C. Geiger, ©AcrossBorders).

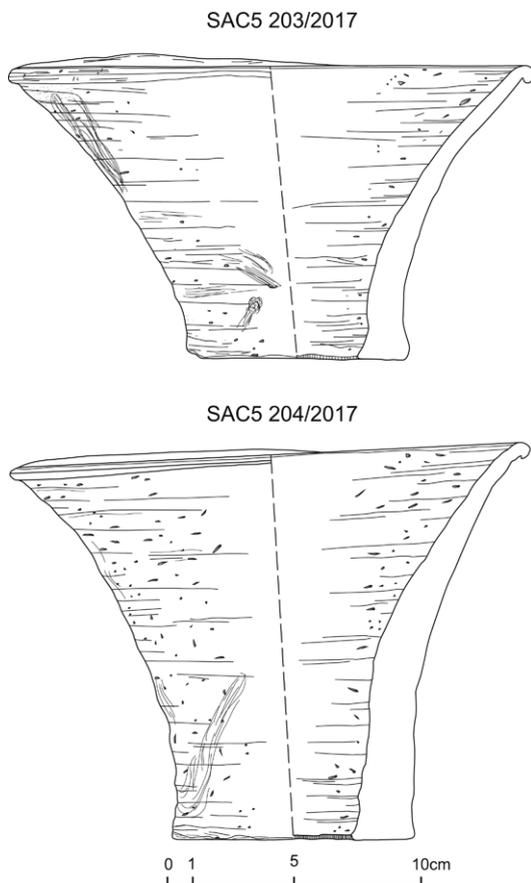


Figure 5.76: flowerpots associated with the burial of Khnummose.

Hnn=f (cf. Auenmüller 2020, 372). The addition of the *Dd=f* at the point is odd but may mimic the similar placement on parallel shabtis (see Schneider 1977, fig. 5). At either end of the third row, holes are pierced through the border line, lining up perfectly with the upper edge of the plinth on the opposing side. Gold foil was still stuck to the edges of the scarab (see Fig. 5.74). These pieces were only held in place by dirt. The largest fragment has a large hole pierced through it, almost certainly lining up with one of the piercings on the scarab.

Stone heart scarabs are elite burial gifts in New Kingdom Nubia (see Spence 2019; Lemos 2020; see also Chapter 9). Good parallels for SAC5 351 were found in other tombs in SAC5 (Minault-Gout and Thill 2012, pl. 111) and in Soleb (Schiff Giorgini 1971, 120, T4 c17, figs. 170-171). Because of the gold foil remains of SAC 351, it is likely that the heart scarab of Khnummose was also mounted in a gold bezel and originally hung from a gold chain. Such an elaborate design of heart scarabs is known from elite burials in Egypt, e.g. for the mother of the famous Senenmut (time of Hatshepsut/Thutmose III, see Roehrig 2002, 38, fig. 52-b; Patch 2005) or the wives of Thutmose III (Andrews 1994, 58).

5.2.6.3 Shabti

The most remarkable funerary object accompanying Khnummose's burial in Feature 6 is a serpentinite shabti. SAC5 350 (see Chapter 7 for a detailed description; Chapter 11 for parallels, provenance and questions of dating) was found south of the head part of the coffin, between the small faience vessels. Its mummiform

figure is typical of the 18th Dynasty, with no anatomical features apart from the head and outline of the feet (Fig. 5.75). The tripartite wig is defined at the front and back and leaves the ears exposed. The face is very well carved, with detailed eyebrows and cosmetic lines. There is no beard or broad collar, nor any other adornment or implement. The base of the feet is flat and smooth but slants towards the toes; the figure (5 × 4.2 × 19.2cm) does not stand upright on its own.

The shabti spell (Chapter IV of the Book of the Dead) is written in five horizontal rows, reading from right to left (see Chapter 7). At the back, the start and finish of each line is defined only by a small gap one quadrat in size. Above the first line, a partial register has been added between the lappets of each shoulder. The right shoulder has been left blank, though it contains *Dd=f* on the parallel examples. The left shoulder has the expected epithet *SHD*.

The name and title of the goldworker Khnummose are given in the first line. The name ends nearly two quadrats before the end of the first line, with the spell resuming in the second line. Name and title were clearly inscribed by a different hand to the remaining text (Budka 2017b, 77). A chip covers the conclusion of line four with only a faint *r* visible at the upper edge. This damage was present during production, as the preceding hieroglyphs *k r*, usually grouped in a quadrat with the first *r*, begin the fifth line. The lower halves of the legs are left blank, as with similar examples (see Chapter 7).

5.2.6.4 Ceramic vessels

A set of open vessels and some miniature jars were found in Feature 6. Two flowerpots of type FP 2 and one fragment of a dish were associated with the burial of Khnummose (Fig. 5.76).

One complete beaker, two flowerpots and one dish were found accompanying the female burial in Feature 6 (Fig. 5.77), finding close parallels both in SAC5 and in the New Kingdom town of Sai. The dish held two faience vessels and four miniature jars. These miniature jugs are common burial gifts in Soleb, in particular in Tomb 15, dated by Schiff Giorgini to the reign of Amenhotep III (Schiff Giorgini 1971, 194, fig. 344, T 15 p9 and p14 and 196, fig. 348, T15 p20). The form is also attested in other tombs in SAC5 (Minault-Gout and Thill 2012, pl. 139).

5.2.6.5 Faience vessels

A set of four faience vessels was found in the head area of Khnummose: **SAC5 352**, **SAC5 353**, **SAC5 354**, **SAC5 355** (Fig. 5.78). SAC 352 has the name and title of Khnummose (overseer of goldworkers) painted in a horizontal row, enclosed by a rectangular box. The vessel itself is in reasonably good condition, despite the wear to the surface. The vessel has a flat bottom and bulbous body (base diameter 6.8cm, max. diameter 8.2cm, height 10cm).

The short neck flares into a wide flat rim (mouth diameter 5.2cm). The interior follows the shape of the body and the vessel was certainly capable of use. It resembles ointment jars from the mid-18th Dynasty.

SAC5 353 shows Khnummose's name and title (goldworker) painted in a vertical column. Though it is very similar in shape to SAC5 352 (height 9.2cm; max. diameter 8.3cm), the neck is noticeably shorter, with a smaller rim/mouth (mouth diameter 4.5-4.6cm). The surface is generally in better condition than SAC5 352, though there are several patches of exposed core.

SAC5 354 is the only one of the four vessels with no trace of remaining inscription though it otherwise closely resembles SAC5 355. The vessel itself has a bulbous body (height 6.5cm; max. diameter 5.1cm) and sits on a small defined flat base (diameter 3.2cm). The neck is only slightly narrower than the upper body and flares into a flattened rim (mouth diameter 3.8cm). Unlike SAC5 352 and 353, the interior hollow is a straight core that goes nearly to the bottom but does not expand with the body. A tiny handle arches between the neck and shoulder. Like the other vessels from the set, the surface is in very poor condition.

SAC5 355 closely resembles SAC5 354, but there are remains of a docket in a vertical column. The vessel itself has a bulbous body, a flat base and flaring flattened rim (height 6.1-6.3cm; max. diameter 5.2cm; mouth diameter 4.0cm; base diameter 3.3cm). The tiny handle that arches between the neck and shoulder was pinched very thin when attached. Of the set of vessels, this surface is perhaps in the worst condition and almost all surfaces have powdery exposed core. The inscription appears on the surface opposite the handle and is as poorly preserved as the rest of the surface, showing only traces of the name of the owner.

Similar faience vessels are known from other tombs in SAC5 (Minault-Gout and Thill 2012, pl. 170). Also, the Tomb 11 at Soleb was equipped with comparative objects, there dating to the mid-late 18th Dynasty (Schiff Giorgini 1971, 166, figs. 268 and 270).

Miniature faience vessels (Fig. 5.79) were placed in the pottery dish next to the female burial in Feature 6 and are closely similar to the two smaller jars from the burial of Khnummose. **SAC5 348** has a round body with a flat base, tall neck, and flared rim (height 8.8cm; maximum diameter 6.3cm; mouth diameter 5.5cm). The vessel is made in a very irregular fashion. The interior hollow is a straight core that goes nearly to the bottom but does not expand with the body. There are no traces of decoration or inscription remaining.

SAC5 347 is of the same type (see also vessels from Tomb 1 in SAC5, Minault-Gout and Thill 2012, pl. 170) with slightly different proportions (height 9.1cm; maximum diameter 6.6cm; mouth diameter 5.4cm). There are again no traces of decoration or inscription remaining.

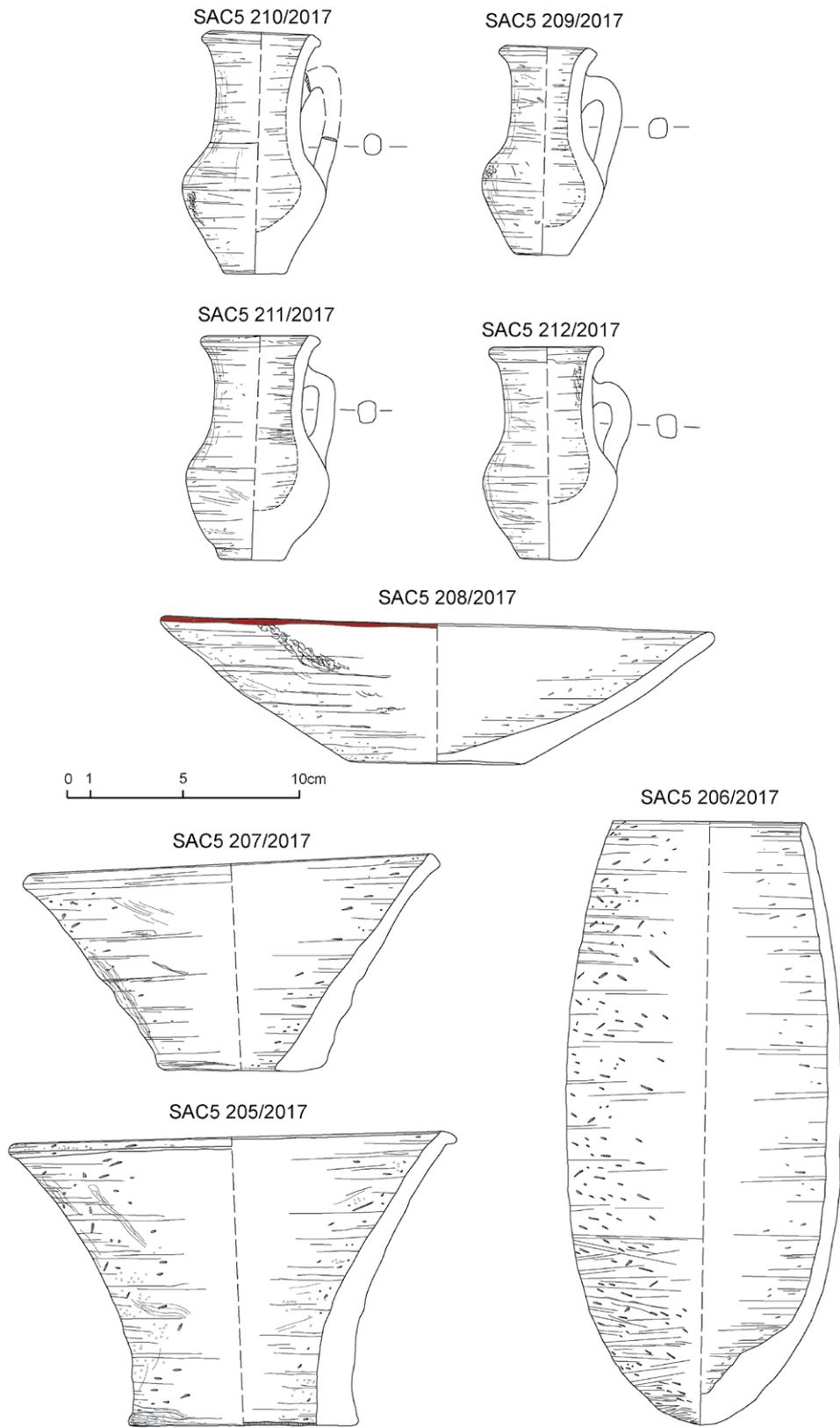


Figure 5.77: pottery vessels associated with the female burial in Feature 6.

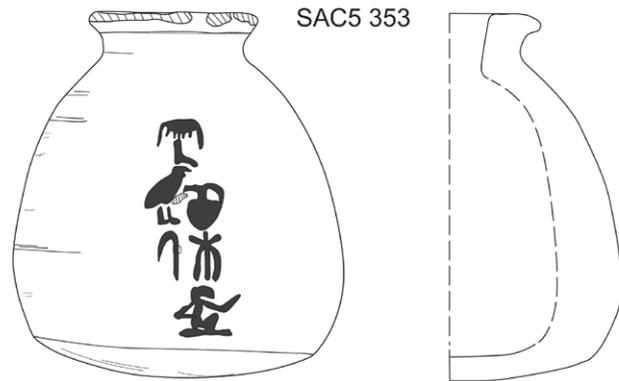
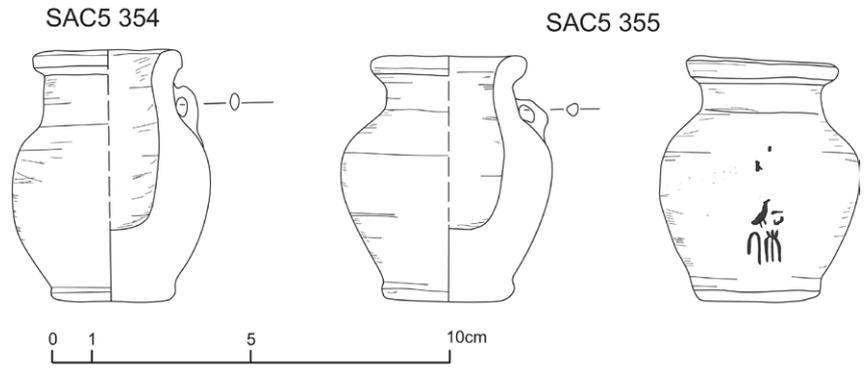


Figure 5.78: set of faience vessels from the burial of Khnummose.

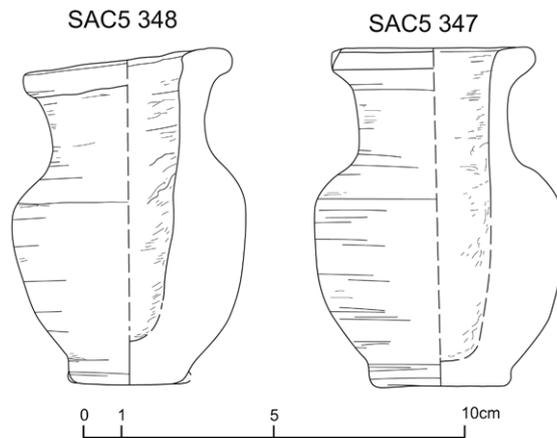


Figure 5.79: faience vessels associated with the female burial in Feature 6.

5.2.7 Feature 7

Within the niche labelled Feature 7 (see Chapter 4), only some plaster, bones and pottery sherds as well as two beads were found. All of them are loose finds within the muddy flood level (SU 175) and therefore not of relevance for tomb equipment within Feature 7. The two beads are one faience ring bead (SAC5 403, 5 × 5x2mm) and a fragmented oblong bead in faience (SAC5 404, 10 × 5x7mm).

5.3 Summary

The rich finds from Tomb 26 cover material from the mid- to late 18th Dynasty, the Ramesside period to the pre-Napatan and Napatan eras, related both to burial practices but also to processes of plundering (*e.g.* the tools for digging in the shape of scrapers). Burial gifts are especially well preserved in Features 5 and 6 and allow reconstructing the original tomb groups (see Chapter 7). The presence of an obsidian vessel in Tomb 26 is particularly remarkable, as is the use of Egyptian blue pigment sticks as part of

the burial assemblage. Evidence for bitumen in Feature 5 raises far-reaching questions regarding the treatment of the bodies in New Kingdom Nubia.

The material of Tomb 26 finds close parallels both in other tombs of Sai, but also in other Egyptian style cemeteries in Nubia, especially Soleb. A detailed assessment of the individual tomb groups and their parallels as well as dating can be found in Chapter 7. Despite certain similarities of the individual burials, it became clear that there are variances in the composition and that certain differences, most likely relevant for displaying social status, can be noted. The quality of manufacture may differ, various materials were employed for the same objects (see *e.g.* beads which are attested in gold, carnelian, jasper, faience, clay and unidentified stone or also the different eye inlays of coffins/masks which are attested with a painted pupil as well as one of stone) and certain differences regarding the quantities of objects (*e.g.* pottery vessels) are observable.

Anthropological report of human remains recovered from Tomb 26

Marlies Wohlschlager & Andrea Stadlmayr

6.1 Introduction

Tomb 26 held the remains of at least 36 individuals which were carefully excavated between 2015 and 2017 and anthropologically analysed directly on Sai Island (Figure 6.1). Two more or less contemporaneously buried persons, Individuals 145 and 162 in Feature 5a were identified as the original burials, soon followed by a 35-50 year old male named Khnummose, ‘*overseer of goldworkers*’, and a 45-60 year old female, his presumed wife in Feature 6. Khnummose held the highest possible position as a professional goldworker and was buried with his own shabti, a restricted foreign object, which implies that he belonged to a more “elite”, wealthy group of individuals (see Chapter 11). The study of human remains allows us to learn more about the life of the deceased, including diet, health and interaction with the environment. The pathological alterations found in the individuals of Tomb 26 allow a glimpse into the lifestyle and general state of health of the people on Sai Island in the New Kingdom.

6.2 Material and methods

Archaeologists and physical anthropologists excavated the skeletal remains in Tomb 26 according to bioarchaeological standards. Bone preservation and mineralization is generally poor due to numerous flooding events of the tomb in the past. The individual state of preservation strongly depends on the location within the tomb (Fig. 6.1). Generally, the individuals located near walls are the best preserved: Individual 1 (Ind. 1) in Feature 2, Individual 145 (Ind. 145) in Feature 5 and fortunately also Khnummose (Ind. 159) in Feature 6, who is almost complete with only small areas of postmortem erosion on the bone surfaces. Remains that were found towards the middle of the chambers appeared extremely fragile and deteriorated to a certain degree.

With future analyses such as stable isotope analysis in mind, we intentionally refrained from washing the preserved bones and did not use any adhesive substances to rejoin fragments. Removable soil was carefully brushed off in order to keep the original bone surface intact. The remains were identified (and separated from animal bones in the case of Feature 1, the shaft) and surface preservation, as well as pigments and organic residues were investigated macroscopically and then recorded. Age and sex were determined where possible, and measurements were taken of the existing long bones. Pathologies and degenerative diseases were examined macroscopically and/or with a magnifying glass and the detected calcifications were put aside for more precise investigation at the Natural History Museum in Vienna. For commingled remains, the name of bone was recorded, including its siding and region/segment if possible, together with any kind of additional



Figure 6.1: human remains in Tomb 26, represented in three levels (Level 1 = F2 and F5, Level 2 = F4 and Level 3 = F6) (illustration: P. Heindl, ©AcrossBorders).

information where available. Finally, the minimum number of individuals (MNI) was established.

Sex was recorded as follows:

0. not observable
1. female
2. female?
3. indeterminate
4. male?
5. male

In the demographic analysis, possible males/possible females (males?/females?) were treated as males and females respectively.

Age at death and sex were estimated following the standard methods summarised in Armelagos *et al.* (1972), Ferembach *et al.* (1980), Knussmann (1988), Buikstra and Ubelaker (1994), Bruzek (2002), Scheuer and Black (2000) and (2004) and Schaefer *et al.* (2009). Age was determined as precisely as possible and the arithmetic mean of the lowest and the highest possible age was established. In the demographic analysis, the maximum age was set at 80 yrs. In addition, individuals were categorised into age classes, which are listed in the data base as follows:

- Infant I 0-7 yrs.
Infant II 7-14 yrs.
Juvenile 14-20 yrs.
Adult 20-40 yrs.
Mature 40-60 yrs.
Senile 60-80 yrs.

In order to gain more information on the individuals' stature, we estimated the following postcranial measurements by Martin (1957, see Knussmann 1988), as well as the maximum radial head diameter, either *in situ* in the case of highly fragile bones, or after they had been excavated, when available:

- maximum length: humerus (H1), radius (R1), ulna (U1), femur (F1), fibula (Fib1)
- medial length: tibia (T1b)
- longitudinal diameter of the head: humerus (H10)
- transverse head diameter: humerus (H9), femur (F18)

Body height was estimated according to Raxter *et al.* 2008. For individuals without assigned sex both the estimated male and female height was provided.

Tooth status was recorded as:

1. tooth present in alveole
2. isolated tooth present
3. ante-mortem tooth loss
4. postmortal tooth loss
5. tooth not occluding (but showing abrasion)
6. tooth development incomplete (e.g. permanent tooth in crypt)

7. congenital absence of tooth
8. possible congenital absence of tooth
9. complete loss of crown due to surface wear
10. tooth missing, evaluation impossible

Abrasion for molars was recorded according to Miles (1963) and enamel hypoplasia, calculus and periodontal changes were recorded according to Schultz (1988). Periapical abscesses and intravital chipping were either rated as 0 (healthy) or 1 (present).

Caries location was recorded as follows:

0. no caries
1. fissure caries
2. caries on mesial approximal surface
3. caries on distal approximal surface
4. mesial cervical caries
5. distal cervical caries
6. buccal cervical caries
7. lingual cervical caries
8. caries on occlusal surface
9. combinations

Caries size was coded as follows:

1. surface caries
2. pin-sized
3. peppercorn-sized
4. half of the crown destroyed
5. crown fully destroyed
6. open pulpa

Unspecific stress markers (porotic hyperostosis, *cribra orbitalia* and periosteal reactions) and the different levels of joint degeneration were recorded according to the Data Collection Codebook (Steckel *et al.* 2011).

Inflammatory reactions (stomatitis, sinusitis, otitis, pleuritis and osteomyelitis), endocranial changes (intensified digital impressions, inflammatory or haemorrhagic processes, lesions and perisinusitis) and specific disease patterns (scurvy, rickets, tuberculosis, bone tumour) were recorded as:

0. skeletal region missing/evaluation impossible
1. no pathology
2. pathology present
3. possible pathology

Schmorl's nodes, disc prolapse, vertebral joint eburnation and vertebral osteoarthritis were recorded as:

0. skeletal region missing/evaluation impossible
1. no pathology
2. pathology on at least one vertebra/vertebral joint
3. possible pathology

6.3 Catalogue of human remains within Tomb 26

6.3.1 Individual burials in Feature 2

Individual: 1

Find numbers: SAC5 143/2016, SAC5 319/2016, SAC5 355/2016, SAC5 366/2016, SAC5 394/2016

Stratigraphic unit: 110

Year of excavation: 2016

Posture and orientation of skeleton: supine, east-west

Age at death: 18-25 yrs.

Age group: juvenile-adult

Sex: female

Body height: 152.7cm

Surface preservation: existing surfaces show signs of erosion

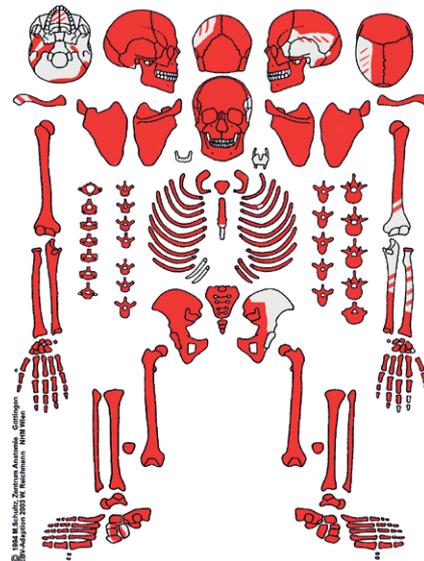
Dental / Oral status: no signs of pathology on the teeth 12-18, 31-38 and 41-48 *in situ*; abrasion of tooth 16 (2+), 17 (2), 36 (3+), 37 (2+), 38 (2), 46 (3+) and 48 (2); teeth disintegrated during excavation;

Pathologies and variations: no visible pathologies on existing bone fragments; the fifth lumbar vertebra is fused to the sacrum;

Staining: -

Artefacts: -

Notes: -



Individual: 2

Find numbers: SAC5 082/2016, SAC5 184/2016, SAC5 238/2016, SAC5 244/2016

Stratigraphic unit: 110, 130

Year of excavation: 2016

Posture and orientation of skeleton: prone, east-west

Age at death: >35 yrs.

Age group: adult-senile

Sex: indeterminate

Body height: f: 155.3cm; m: 161.6cm

Surface preservation: existing surfaces show signs of erosion

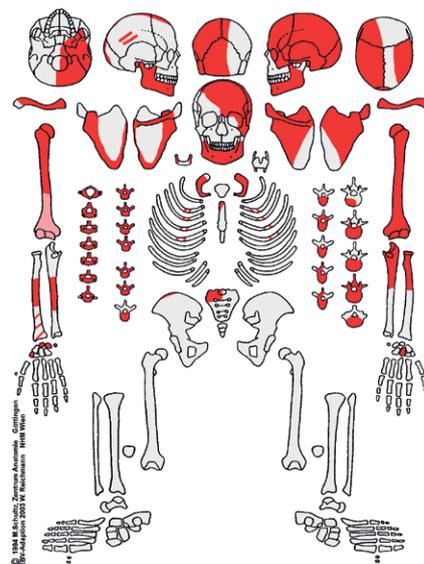
Dental / Oral status: lower frontal teeth severely abraded, slight signs (grade 1) of linear enamel hypoplasia on the first upper incisor (i1?), periapical abscesses recorded for teeth 33, 41 and 42; ante-mortem loss of mandibular premolars and molars, postmortal loss of teeth 31-33.

Pathologies and variations: slight porotic hyperostosis on the external lamina along the lambda sutures (left and right), as well as above the occipital protuberance (size: 1.5 × 1.5cm); slight osteophyte formation (grade 2) on the body of at least one cervical and one lumbar vertebra, slight marginal lipping (grade 2) is also present in thoracic and lumbar articular surfaces; the left and right elbow joint and the right proximal wrist appear free of degenerative signs (total grade 1); the left and right shoulder joint show slight signs of marginal lipping (total grade 1.5/2) and the left radioulnar joint is also slightly affected (grade 1.25);

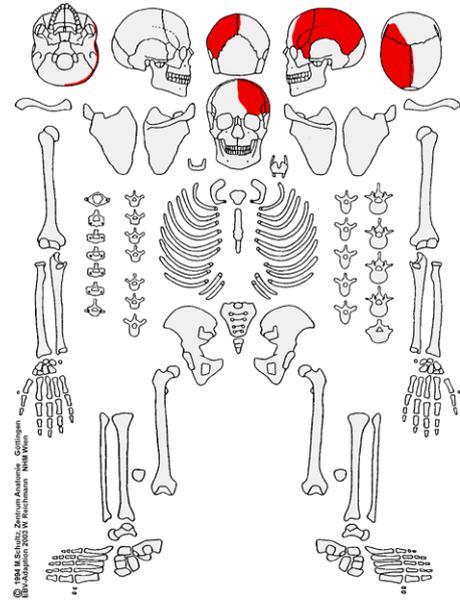
Staining: -

Artefacts: one disc bead, eggshell, on chest (SAC5 267); two beads, globular/roughly diamond shape, carnelian (SAC5 277); one ring bead, faience, on skull (SAC5 325); one pot sherd next to individual (SAC5 083/2016); a few sherds to the east of the individual (SAC5 140/2016); pottery next to (SAC5 183/2016) and pottery below Ind. 2 (SAC5 389/2016, SU 144);

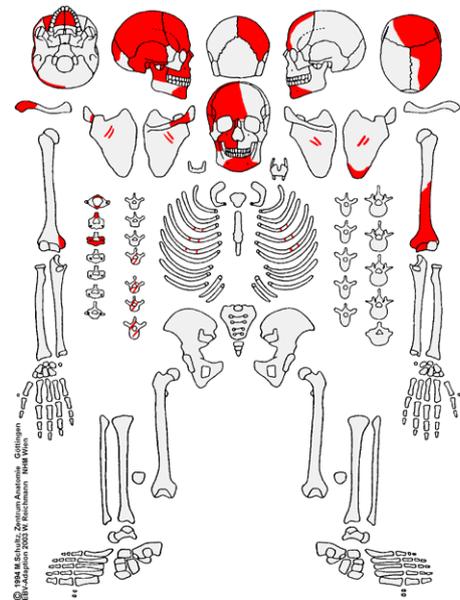
Notes: -



Individual: 3a
Find number: SAC5 356/2016
Stratigraphic unit: 131
Year of excavation: 2016
Posture and orientation of skeleton: supine, west-east
Age at death: >35 yrs.
Age group: adult-senile
Sex: indeterminate
Body height: -
Surface preservation: existing surfaces show signs of erosion
Dental / Oral status: -
Pathologies and variations: no visible pathologies;
Staining: -
Artefacts: pilgrim flask, alabaster, next to skull of Ind. 3a (SAC5 302); three pieces of charcoal directly underneath skull of Ind. 3a (SAC5 371/2017); pot sherds next to Ind. 3 (SAC5 181/2016 and 287/2016);
Notes: right skull bone fragments with attached vertebral fragments of an additional individual were found (Ind. 3b);



Individual: 3b
Find numbers: SAC5 182/2016, SAC5 260/2016, SAC5 286/2016, SAC5 356/2016
Stratigraphic unit: 110, 131
Year of excavation: 2016
Posture and orientation of skeleton: -, west-east
Age at death: >35 yrs.
Age group: adult-senile
Sex: indeterminate
Body height: -
Surface preservation: existing surfaces show severe signs of erosion
Dental / Oral status: postmortal loss of teeth 11 and 21; ante-mortem loss of teeth 12-18, and 46-48; postmortally damaged root remains of tooth 45; teeth and corresponding tooth sockets 31-38 and 41-44 missing;
Pathologies and variations: no visible pathologies on existing (and heavily eroded) bone fragments, the only gradable joint (anterior articular surface of the *dens axis*) shows extensive osteophyte formation (grade 3);
Staining: -
Artefacts: -
Notes: -



Individual: 4

Find numbers: SAC5 217/2016, SAC5 227/2016, SAC5 357/2016

Stratigraphic unit: 125, 126, 128

Year of excavation: 2016

Posture and orientation of skeleton: supine, north-south

Age at death: 25-35 yrs.

Age group: adult

Sex: indeterminate

Body height: f: 157.2cm; m: 163cm

Surface preservation: existing surfaces show severe signs of erosion

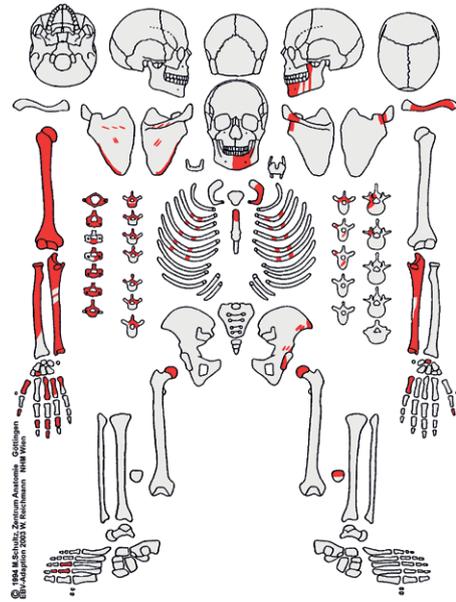
Dental / Oral status: teeth 18 and 28 only slightly worn (2+); signs of a periapical abscess in the alveole of tooth 32; postmortal loss of all other mandibular teeth;

Pathologies and variations: slight marginal lipping (grade 2) on cranial and caudal articular surfaces of at least one cervical vertebra; the thoracic and lumbar remains appeared too eroded for evaluation; no evidence of pathological changes on gradable joints (right shoulder joint, right elbow joint, right radioulnar joint, right proximal wrist, left hip joint), with the exception of the right proximal wrist (total grade 1.25), which shows slight marginal lipping on the ulnar head (grade 2);

Staining: -

Artefacts: two ring beads, faience (SAC5 289), and one piece of charcoal to the east of individual (SAC5 219/2016); one bag of charcoal around individual (SAC5 242/2016); pottery to the east of individual (SAC5 215/2016); a few pot sherds around individual (SAC5 243/2016);

Notes: -



Individual: 5

Find numbers: SAC5 285/2016, SAC5 358/2016, SAC5 367/2016, 380/2016, SAC5 382/2016

Stratigraphic unit: 136, 142

Year of excavation: 2016

Posture and orientation of skeleton: -

Age at death: 8-9 yrs.

Age group: Infant II

Sex: -

Body height: -

Surface preservation: existing surfaces show slight signs of erosion

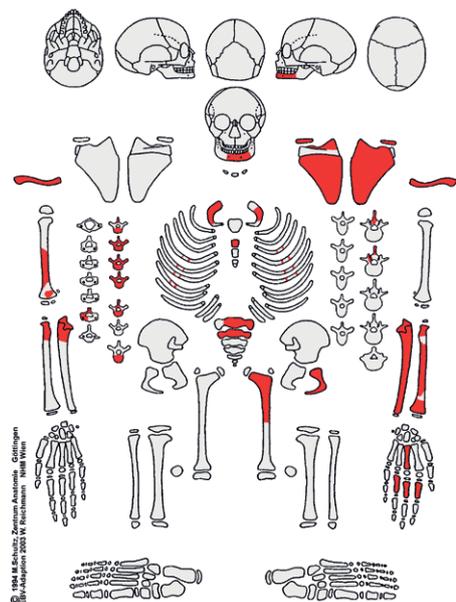
Dental / Oral status: one isolated deciduous incisor and one isolated deciduous canine, completely abraded and eroded; two isolated deciduous teeth (63 and 64), which appear severely abraded; permanent teeth 31, 41 and 42 present in socket and erupted; four not yet fully developed isolated permanent teeth (crown and more than half the root of teeth 11 and 21, as well as crown of one upper canine with slight linear enamel hypoplasia (grade 1) and one upper right premolar;

Pathologies and variations: no visible pathologies;

Staining: -

Artefacts: one tubular bead with rounded ends, faience, close to Ind. 5/6/7 (SAC5 332); pottery found close to Ind. 5/6/7 (SAC5 390/2016);

Notes: Ind. 5, 6 and 7 commingled underneath Ind. 2;



Individual: 6

Find numbers: SAC5 285/2016, SAC5 358/2016, SAC5 367/2016, SAC5 380/2016, SAC5 382/2016

Stratigraphic unit: 136, 142

Year of excavation: 2016

Posture and orientation of skeleton: -, approx. west-east

Age at death: 8-9 yrs.

Age group: Infant II

Sex: -

Body height: -

Surface preservation: existing surfaces show slight signs of erosion

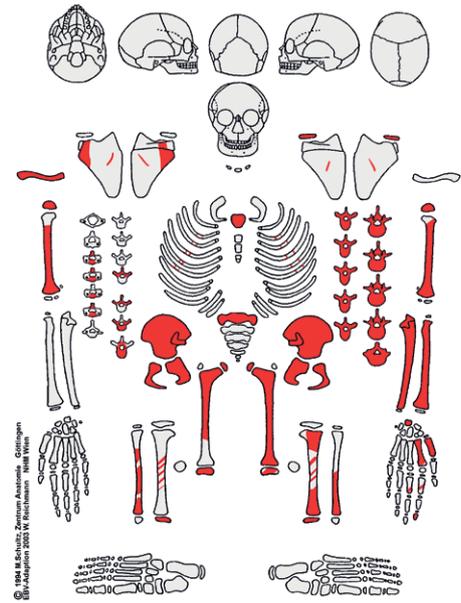
Dental / Oral status: -

Pathologies and variations: no visible pathologies;

Staining: -

Artefacts: three roughly diamond shaped beads, carnelian, around Ind. 6 (SAC5 331); one tubular bead with rounded ends, faience, close to Ind. 5/6/7 (SAC5 332); one roughly diamond shaped bead, faience, from cleaning Ind. 6/7 (SAC5 308); pottery found close to Ind. 5/6/7 (SAC5 390/2016);

Notes: Ind. 5, 6 and 7 underneath Ind. 2 (to the south and the west); bones intermingled with remains from Ind. 7;



Individual: 7

Find numbers: SAC5 285/2016, SAC5 358/2016, SAC5 367/2016, SAC5 380/2016, SAC5 382/2016

Stratigraphic unit: 136, 142

Year of excavation: 2016

Posture and orientation of skeleton: -

Age at death: 10-11 yrs.

Age group: Infant II

Sex: -

Body height: -

Surface preservation: existing surfaces show slight signs of erosion

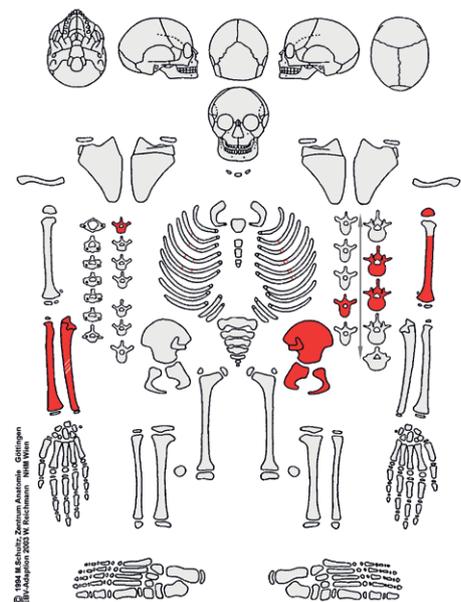
Dental / Oral status: -

Pathologies and variations: no visible pathologies;

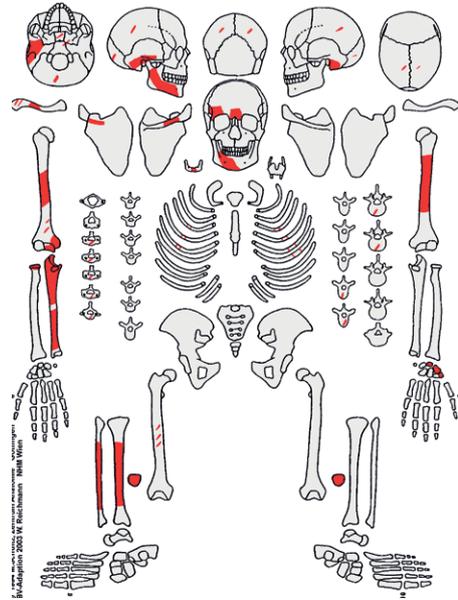
Staining: -

Artefacts: one roughly diamond shaped bead, faience, from cleaning Ind. 6/7 (SAC5 308); one tubular bead with rounded ends, faience, close to Ind. 5/6/7 (SAC5 332); pottery found close to Ind. 5/6/7 (SAC5 390/2016);

Notes: Ind. 5, 6 and 7 commingled underneath Ind. 2 (south and the west); bones mixed with remains from Ind. 6;



Individual: 8a
Find number: SAC5 359/2016
Stratigraphic unit: 136
Year of excavation: 2016
Posture and orientation of skeleton: supine, northeast-southwest
Age at death: >20 yrs.
Age group: adult-senile
Sex: male
Body height: -
Surface preservation: existing surfaces show severe signs of erosion
Dental / Oral status: ante-mortem loss of tooth 46; root residues of teeth 47 and 48 present in sockets; no other teeth or tooth sockets available for evaluation;
Pathologies and variations: no visible pathologies on remaining long bone surfaces;
 extensive osteophyte formation and degeneration of the subchondral bone (grade 3) on the vertebral body of CVII; the only other gradable vertebral fragment is a vertebral body from the lumbar region with less severe osteophyte formation (grade 2);
 the gradable joints (left shoulder joint, right elbow joint, right radio-ulnar joint, left proximal wrist, left and right proximal ankle, left and right distal ankle) show no evidence of pathological changes (grade 1);
Staining: -
Artefacts: -
Notes: underneath, to the southeast of Ind. 5, 6 and 7; additional occipital bone and left patella, in the tibial region, as well as foot bones (see Ind. 8b), too gracile for Ind. 8a;



Individual: 8b
Find number: SAC5 359/2016
Stratigraphic unit: 136
Year of excavation: 2016
Posture and orientation of skeleton: -
Age at death: >20 yrs.
Age group: adult-senile
Sex: female?
Body height: -
Surface preservation: existing surfaces show severe signs of erosion
Dental / Oral status: -
Pathologies and variations: -
Staining: -
Artefacts: -
Notes: occipital bone fragment, left patella and foot bones redundant or inconsistent with individual 8a;

Individual: 9a
Find number: SAC5 360/2016
Stratigraphic unit: 136
Year of excavation: 2016
Posture and orientation of skeleton: -
Age at death: 25-35 yrs.
Age group: adult
Sex: female

Body height: 154.4cm

Surface preservation: existing surfaces show severe signs of erosion

Dental / Oral status: maxillary teeth and tooth sockets missing; postmortal loss of teeth 31-35, 38 and 41-45; tooth 36 with severe abrasion (grade 5+), abrasion also on teeth 47 (grade 4) and 48 (grade 2); like the other present molars, the crown of tooth 46 is too fragmented for further evaluation; however, its roots show clear signs of hypercementosis;

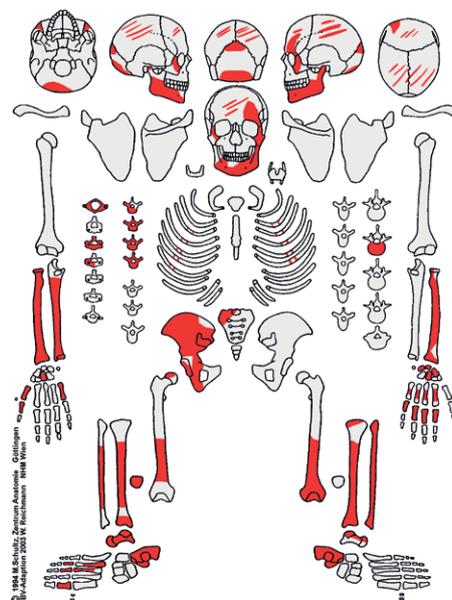
Pathologies and variations: the cranial and long bone fragments show no signs of pathological change; the few gradable cervical, thoracic and lumbar vertebrae show no signs of change (grade 1);

the evaluated joints (right elbow, left and right radio-ulnar joint, proximal wrists, right hip joint, left knee joint, both proximal and distal ankles) show no evidence of pathological changes with exception of the right wrist joint (total grade 1.25), which appears to suffer from slight marginal changes on the ulnar head (grade 2);

Staining: -

Artefacts: five ring beads, faience (SAC5 333); pottery: dish (20th Dynasty) on lower jaw of Ind. 9a (SAC5 399/2016);

Notes: bones intermingled with very robust remains from Ind. 9b;



Individual: 9b
Find number: SAC5 360/2016
Stratigraphic unit: 136
Year of excavation: 2016

Posture and orientation of skeleton: -, south-north

Age at death: >20 yrs.

Age group: adult-senile

Sex: male

Body height: -

Surface preservation: existing surfaces show severe signs of erosion

Dental / Oral status: -

Pathologies and variations: evaluation was undertaken for the left distal fibula alone, which shows severe osteophyte formation around the joint (grade 3);

Staining: -

Artefacts: -

Notes: bones intermingled with remains from the female, Ind. 9a; remains appear heavily eroded, yet very robust;

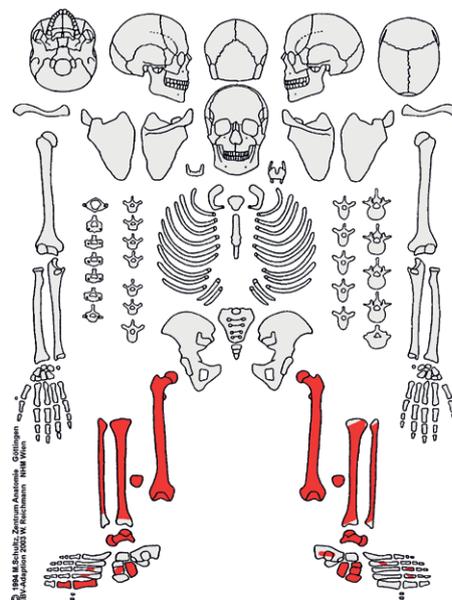




Figure 6.2: state of preservation of teeth in lower right mandible of Ind. 10, Feature 2 (photo: A. Stadlmayr).

Individual: 10

Find numbers: SAC5 229/2016, SAC5 244/2016, SAC5 288/2016, SAC5 289/2016, SAC5 290/2016, SAC5 321/2016, SAC5 361/2016

Stratigraphic unit: 138, 139, 142

Year of excavation: 2016

Posture and orientation of skeleton: supine, south-north

Age at death: >20 yrs.

Age group: adult-senile

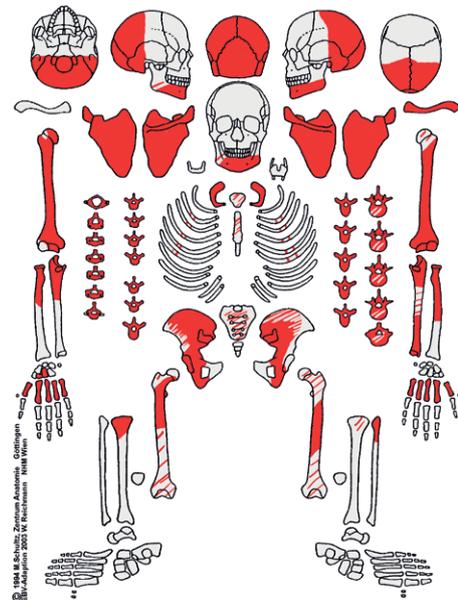
Sex: male

Body height: 163cm

Surface preservation: existing surfaces show slight to severe signs of erosion

Dental / Oral status: maxillary teeth (including corresponding tooth sockets), as well as mandibular teeth 47 and 48 missing; teeth 33, 34 and 42-44 were found *in situ*, but disintegrated in the course of excavation due to poor preservation (Fig. 6.2); ante-mortem loss of teeth 31, 32, 35-38, 41 and 46; crown of tooth 45 completely abraded;

Pathologies and variations: bifurcated rib on the left side; no signs of infectious disease in the cranial and postcranial remains; the cervical vertebrae III-VI and the cranial half of VII have developed extensive osteophytes on their bodies (grade 3), with the left side generally more affected than the right side, and changes of grade 2 on the articular joints; as opposed to all other unaffected thoracic vertebrae (grade 1), the lowest thoracic vertebra (THXII) again shows severe osteophyte formation on its body (grade 3), while its joints are less affected (grade 2); because of poor preservation, evaluation is impossible for the lumbar vertebrae, however, the left sacral articular margin can be rated grade 2 with slight osteophyte formation; with the exception of the right proximal wrist, all joints are gradable: the left shoulder, both radio-ulnar joints, the left proximal wrist, the proximal, as well as the distal ankles show



no signs of pathological change (grade 1); both elbows (total grade 1.25) have developed slight changes in the trochlear notch (grade 2); the hip joints (total grade left: 1.33, total grade right: 1.4) display slight marginal lipping of grade 2 on the respective femoral heads, as well as the right acetabulum; the left acetabular cavity (edge has eroded) is also slightly affected by degenerative changes of grade 2, the knee joints show a total grade of 1.5 on the left and 1.3 on the right, as both patellas have developed slight marginal lipping (grade 2) on the medial, as well as the lateral edges;

Staining: -

Artefacts: one piece of charcoal by feet (SAC5 291/2016), one bag of mortar/plaster around Ind. 10 (SAC5 246/2016), one bag of mortar/plaster by feet (SAC5 292/2016); pottery around Ind. 10 (SAC5 245/2016), two complete pottery jars along southern wall (SAC5 303/2016 and 304/2016), one Base Ring II jug to the west of the skull (SAC5 305/2016), pottery by feet (SAC5 293/2016 and 320/2016), jar/sherds (SAC5 377/2016), and dish/plate underneath the individual (SAC5 378/2016), soft steatite scarab adjacent to left femur, where the left hand was positioned (SAC5 313);

Notes: -

Individual: 11

Find numbers: SAC5 033/2016, SAC5 034/2016

Stratigraphic unit: 108

Year of excavation: 2016

Posture and orientation of skeleton: supine, southwest-northeast

Age at death: >20 yrs.

Age group: adult-senile

Sex: -

Body height: -

Surface preservation: existing surfaces show severe signs of erosion

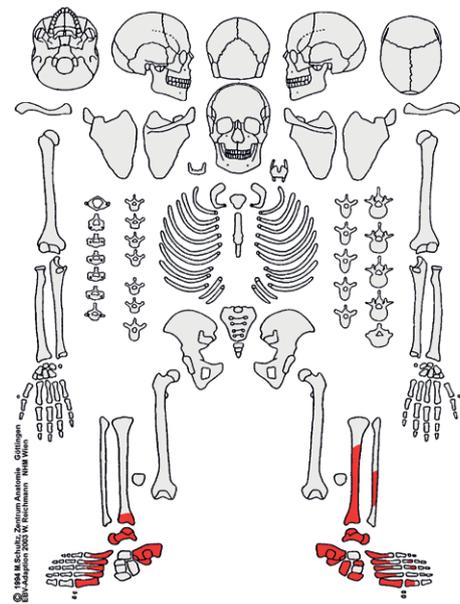
Dental / Oral status: -

Pathologies and variations: -

Staining: -

Artefacts: -

Notes: -



Individual: 12

Find numbers: SAC5 035/2016

Stratigraphic unit: 108

Year of excavation: 2016

Posture and orientation of skeleton: supine, west-east

Age at death: >20 yrs.

Age group: adult-senile

Sex: male?

Body height: -

Surface preservation: existing surfaces show signs of erosion

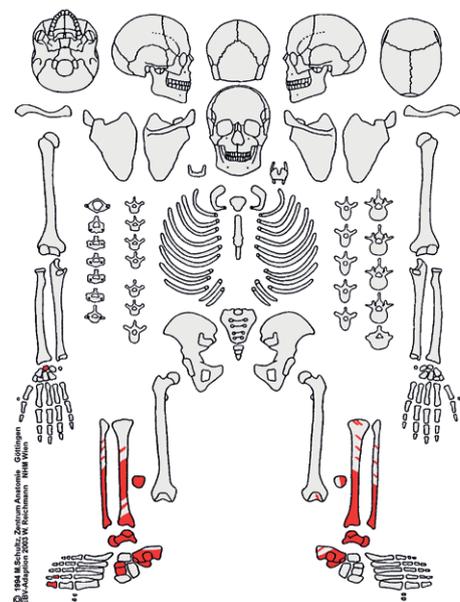
Dental / Oral status: -

Pathologies and variations: extensive osteophyte formation on both fibulas (*extensor digitorum longus*);

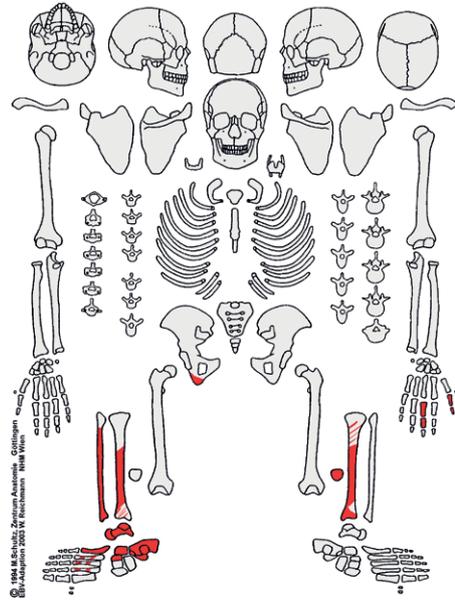
Staining: -

Artefacts: -

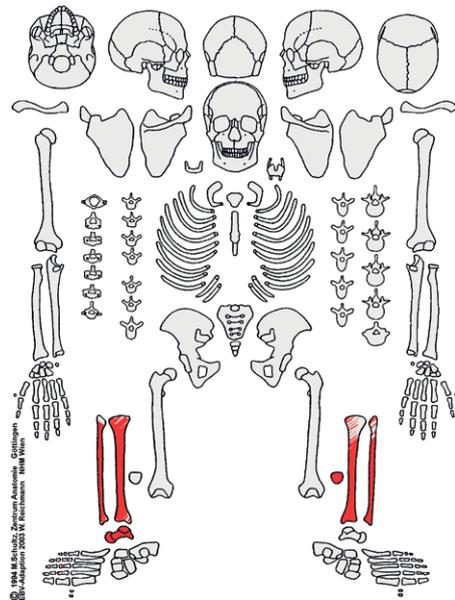
Notes: very robust long bones;



Individual: 13
Find number: SAC5 363/2016
Stratigraphic unit: 137
Year of excavation: 2016
Posture and orientation of skeleton: supine, south-north
Age at death: >20 yrs.
Age group: adult-senile
Sex: -
Body height: -
Surface preservation: existing surfaces show signs of erosion
Dental / Oral status: -
Pathologies and variations: -
Staining: -
Artefacts: -
Notes: additional right subadult mandible and right subadult clavicle shaft fragment (see commingled remains);



Individual: 14
Find number: SAC5 364/2016
Stratigraphic unit: 137
Year of excavation: 2016
Posture and orientation of skeleton: supine, south-north
Age at death: >20 yrs.
Age group: adult-senile
Sex: -
Body height: -
Surface preservation: existing surfaces show signs of erosion
Dental / Oral status: -
Pathologies and variations: -
Staining: -
Artefacts: -
Notes: -



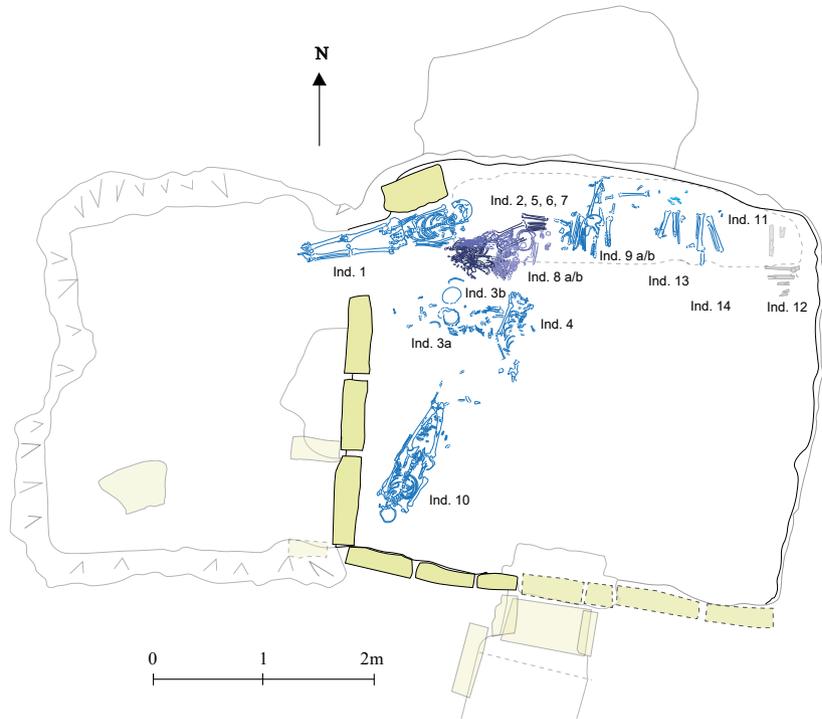


Figure 6.3: human remains in Feature 2 (note: the size and position of the bones in the northeastern corner are tentative, see Fig. 8.25) (illustration: P. Heindl, ©AcrossBorders).

Individual no.	Sex	Age range	Mean age	Age class	Approx. height
1	female?	18-25 yrs.	21.5 yrs.	juvenile-adult	152.7cm
2	indeterminate	>35 yrs.	57.5 yrs.	adult-senile	f: 155.2cm / m: 161.7cm
3a	indeterminate	>35 yrs.	57.5 yrs.	adult-senile	-
3b	indeterminate	>20 yrs.	-	adult-senile	-
4	indeterminate	25-35 yrs.	30 yrs.	adult	f: 157.2cm / m: 163cm
5	-	8-9 yrs.	8.5 yrs.	Infant II	-
6	-	8-9 yrs.	8.5 yrs.	Infant II	-
7	-	10-11 yrs.	10.5 yrs.	Infant II	-
8a	male	>20 yrs.	-	adult-senile	-
8b	female?	>20 yrs.	-	adult-senile	-
9a	female	25-35 yrs.	30 yrs.	adult	154.4cm
9b	male	>20 yrs.	-	adult-senile	-
10	male	>20 yrs.	-	adult-senile	163cm
11	indeterminate	>20 yrs.	-	adult-senile	-
12	male?	>20 yrs.	-	adult-senile	-
13	indeterminate	>20 yrs.	-	adult-senile	-
14	indeterminate	>20 yrs.	-	adult-senile	-

Table 6.1: sex, age and approx. height of the 17 distinguishable individuals in Feature 2.

6.3.1.1 Summary results Feature 2

In general, the skeletal remains in Feature 2 were very poorly preserved. However, the feature hosted 17 distinguishable individuals (Fig. 6.3; Table 6.1).

The chamber contained 17.7% female and 23.5% male individuals, as well as 35.3% indeterminate individuals. 23.5% could not be classified either because they are children or because of the limited number of preserved remains (Fig. 6.4, Table 6.1).

The estimation of age at death showed that of the 17 individuals, 17.6% could be classified as Infant II, 17.6% as adult and 11.8% as mature. 53% were fully grown individuals where further classification was not possible (Fig. 6.5, Table 6.1). The minimum percentage of sub-adults in Feature 2 is 17.6%.

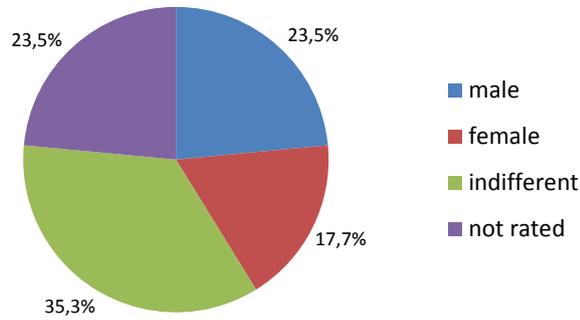


Figure 6.4: percentage of males, females, indeterminate individuals and unrated individuals within Feature 2, N=17.

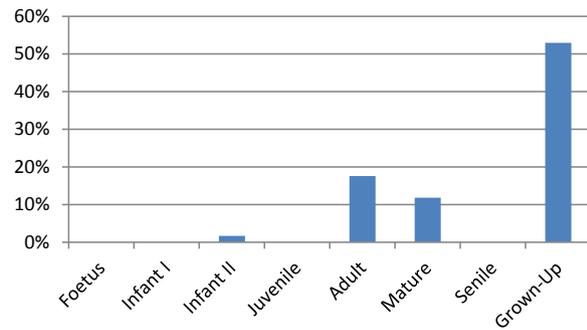


Figure 6.5: age class distribution (%) within Feature 2, N=17.

Modification	Number of investigated individuals (N)	Number (n) and percent (%) of affected individuals
Intravital chipping	0	-
Periodontal disease (only FGI)	1	0 (0%)
Calculus (only FGI)	0	-
Enamel hypoplasia	4	2 (50%)
Periapical abscess (only FGI)	2	2 (100%)
Caries	4	0 (0%)
Ante-mortem tooth loss (only FGI)	4	4 (100%)
Porotic hyperostosis	4	1 (25%)
Cribral orbitalia	3	0 (0%)
Endocranial changes	6	0 (0%)
Periosteal reactions	7	0 (0%)
Inflammatory reactions	7	0 (0%)
Spinal osteophytosis (only FGI)	6	3 (50%)
Apophyseal joint degeneration (only FGI)	6	4 (66.6%)
Schmorl's nodes (only FGI)	6	0 (0%)
Disc prolapse (only FGI)	6	0 (0%)

Table 6.2: bone modifications, number (N) of investigated individuals and number (n) and percent (%) of affected individuals in Feature 2; FGI=fully grown individuals.

Two females in Feature 2 reached a height of *approx.* 152.7cm and 154.4cm respectively, and the male, Ind. 10, was *approx.* 163cm tall (Table 6.1).

None of the individuals could be screened for intravital chipping or calculus and only one adult was rated in terms of periodontal disease (N=1) and showed no signs. One of the permanent teeth of one child (Ind. 5) and one adult individual (Ind. 2) respectively had developed slight enamel hypoplasia (grade 1), which is not considered as pathological (50%, N=4). Periapical abscesses were recorded for both rateable individuals (N=2), and all of the four evaluated adult individuals appeared affected by ante-mortem tooth loss (N=4). None of the investigated fully-grown individuals showed signs of caries (N=4). In total, four individuals were screened for porotic hyperostosis, of which one adult (Ind. 2) showed slight signs (25%, N=4). In the cases of *cribra orbitalia* (N=3), endocranial changes including haemorrhagic processes, lesions and perisinusitis (N=6), periosteal reactions on long bones (N=7), inflammatory reactions

including stomatitis, sinusitis, otitis, pleuritis and osteomyelitis (N=7), none of the investigated individuals showed any kind of unusual alteration (Table 6.2). The fibulas of Ind. 12, however, had both developed extensive osteophytes on the shaft (at the origin of the muscle *extensor digitorum longus*);

In terms of vertebral degeneration 50% (N=6) showed signs of spinal osteophytosis and 66.6% (N=6) showed degenerative changes on their apophyseal joints. Ind. 3b, Ind. 8a and Ind. 10 had formed extensive osteophytes (grade 3) in the cervical region and Ind. 10 also on the thoracic vertebra XII (lumbar region missing). The other rateable individuals appeared less affected (maximum: grade 2). None of the individuals developed Schmorl's nodes (N=6) or suffered from disc prolapse (N=6) (Table 6.2).

The majority of investigated joints in Feature 2 showed no more than slight degenerative/productive changes, while Ind. 9b had developed severe marginal lipping on the left distal fibula (the only rateable joint in this individual) with no signs of eburnation.

6.3.2 Individual burials in Feature 4

Individual: 51

Find number: SAC5 051/2017

Stratigraphic unit: 156/157, 157

Year of excavation: 2017

Posture and orientation of skeleton: supine/upper body leaning against western trench wall; west-east

Age at death: 40-60 yrs.

Age group: mature

Sex: female

Body height: 162.9cm

Surface preservation: existing surfaces show signs of erosion

Dental / Oral status: ante-mortem loss of teeth 13, 23 and 44-48; teeth 32 and 33 present, but isolated: they do not show any signs of caries (grade 0), enamel hypoplasia (grade 0), calculus (grade 0) or ante-mortem chipping (grade 0);

Pathologies and variations: the nuchal line has a hyper-masculine appearance (grade +2 after Acsádi and Nemeskeri 1970), similar to Ind. 160 from Feature 6; no cranial pathologies;

during excavation, an oval shaped calcified uterine fibroid/leiomyoma (size approx. 5 × 4.5cm) was found *in situ* in the pelvic cavity (Figs. 6.6-7);

extensive osteophyte formation is evident on the cervical and thoracic fragments, whereas the lumbar vertebrae and the sacrum appear too eroded for any kind of evaluation; at least two thoracic vertebrae had originally fused (*ankylosis*);

the rateable joints (right elbow joint, right radio-ulnar joint, right proximal wrist, both knee joints, both proximal and distal ankle joints) are each given a total grade 1;

Staining: -

Artefacts: charcoal next to Ind. 51 (SAC5 055/2017), traces of blue pigment and mud/clay along eastern edge (SAC5 041/2017); residues of wood and yellow pigment (SAC5 056/2017);

Notes: -

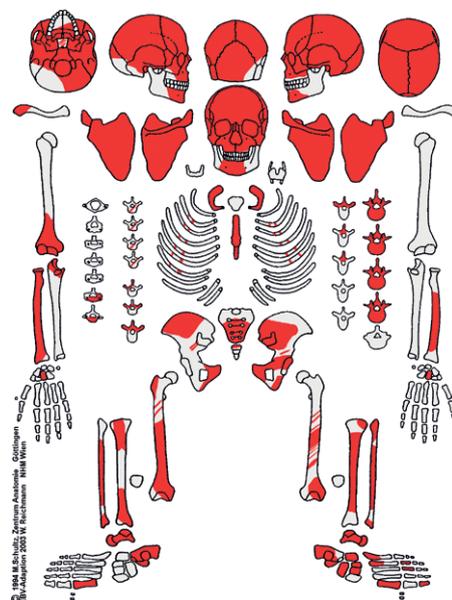


Figure 6.6: calcified uterine leiomyoma *in situ* in pelvic cavity of Ind. 51, Feature 4 (photo: A. Stadlmayr).



Figure 6.7: calcified uterine leiomyoma in Ind. 51, Feature 4 (photo: C. Geiger).

Individual: 60
Find numbers: SAC5 060/2017-1 to 060/2017-14, SAC5 085/2017
Stratigraphic unit: 157, 158
Year of excavation: 2017
Posture and orientation of skeleton: -, west-east
Age at death: >26 yrs.
Age group: adult-senile
Sex: male?
Body height: -
Surface preservation: existing surfaces show signs of erosion, termites?
Dental / Oral status: -
Pathologies and variations: -
Staining: -
Artefacts: blue pigment: to the west of the individual (SAC5 079/2017), close to the hand (SAC5 080/2017) and close to the hip-bone (SAC5 086/2017);
Notes: postcranial remains commingled with remains from Ind. 75 and Ind. 77;

Individual: 75
Find number: SAC5 075/2017
Stratigraphic unit: 157
Year of excavation: 2017
Posture and orientation of skeleton: -
Age at death: 17-25 yrs.
Age group: juvenile-adult
Sex: male
Body height: -
Surface preservation: existing surfaces show severe signs of erosion
Dental / Oral status: eroded fragments of teeth 16 and 17 present, evaluation impossible; postmortal loss of teeth 11-15, 18, 21-28, 31-38 and 41-48; no signs of periodontal disease (grade 0);
Pathologies and variations: no signs of *cribra orbitalia* (grade 1); evaluation of cranium impossible due to severe erosion;
Staining: -
Artefacts: traces of yellow pigment on mud in the eastern part, to the east of the individual's skull (SAC5 058/2017) and traces of blue pigment on mud by the southern wall, adjacent to the skull (SAC5 068/2017); pottery in the eastern part, between the skull and the flowerpot 074/2017 (SAC5 068/2017);
Notes: postcranial remains commingled with remains from Ind. 60 and Ind. 77;

Individual: 77
Find number: SAC5 077/2017
Stratigraphic unit: 157
Year of excavation: 2017
Posture and orientation of skeleton: -, west-east
Age at death: >20 yrs.
Age group: adult-senile
Sex: female?
Body height: -
Surface preservation: existing surfaces show signs of erosion

Dental / Oral status: postmortal loss of maxilla and the respective teeth 11-18, 21-28; mandibular teeth were present *in situ*, but they disintegrated in the course of excavation due to poor preservation;

Pathologies and variations: no visible cranial or postcranial disease; severe cranial osteophytes (grade 3) on the body of a cervical vertebra (CVI);

the only gradable joint is the left elbow joint, which shows no signs of change (total grade 1);

Staining: -

Artefacts: -

Notes: postcranial remains commingled with remains from Ind. 60 and Ind. 75;

Individual: 87

Find number: SAC5 087/2017

Stratigraphic unit: 157

Year of excavation: 2017

Posture and orientation of skeleton: supine, west-east

Age at death: >20 yrs.

Age group: adult-senile

Sex: male?

Body height: -

Surface preservation: existing surfaces show severe signs of erosion

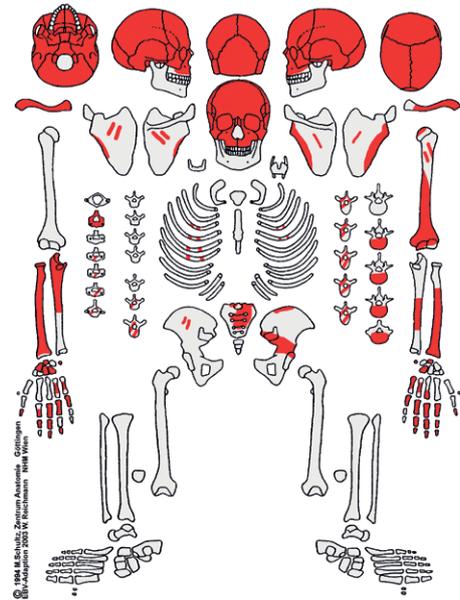
Dental / Oral status: teeth 11 and 14 completely abraded but still in socket; teeth 31 and 32, as well as root of tooth 33 still in sockets but poorly preserved, therefore evaluation impossible; ante-mortem loss of teeth 12, 13, 15-18, 22-28; postmortal loss of tooth 21; 36-38 and 41-48 (because of eroded tooth sockets it is impossible to tell whether teeth 34 and 35 were lost intravitaly or postmortem);

Pathologies and variations: formation of osteophytes on cervical and lumbar vertebrae (grade 3);

Staining: traces of red pigment directly on skull (SAC5 088/2017)

Artefacts: traces of red pigment adjacent to the skull (SAC5 065/2017 and 081/2017), blue-yellow pigment adjacent to the skull (SAC5 091/2017), yellow and blue pigment on the skull and bones (SAC5 092/2017), red pigment on the skull and thoracic vertebrae (SAC5 153/2017) and blue pigment on the individual's skull (SAC5 121/2017);

Notes: -



Individual: 124

Find number: SAC5 124/2017

Stratigraphic unit: 158

Year of excavation: 2017

Posture and orientation of skeleton: supine (disturbance of upper body half), west-east

Age at death: 35-45 yrs.

Age group: adult-mature

Sex: female

Body height: 158.7cm

Surface preservation: existing surfaces show signs of erosion

Dental / Oral status: the periapical abscess on tooth 14 lies buccally and is pin-sized, while the one on tooth 24 also lies buccally but has the size of a peppercorn;

Pathologies and variations: the cranium shows no pathological signs; the calcifications located between the right radius and ulna (Fig. 6.8 and Fig. 6.9) are a possible sign of atherosclerosis in this individual whereas the calcification adjacent to the right femur (Fig. 6.8 and Fig. 6.10) probably represents a dislocated right elongated styloid process (Eagle's Syndrome) as a result of bilateral calcification of the stylohyoid ligament (secondary elongation) which is also present on the lingual side of the left mandibular ramus (Fig. 6.11); as opposed to metacarpal III and IV on the right, and metacarpal II and III on the left, the second right metacarpal has developed very prominent marginal ridges (insertion of the first interosseus muscle); the gradable cervical vertebrae have developed extensive osteophytes with signs of eburnation on their bodies (grade 3) (Fig. 6.11) and also on their vertebral joints (grade 2), whereas the gradable thoracic and lumbar vertebrae appear less affected (grade 2); since the existing remains of the cervical vertebrae are all asymmetric along their vertical axis and appear "leaning" to the left, scoliosis is likely for this individual; in addition, the last lumbar vertebra has completely fused with the sacrum on the left side (sacralised LV segment) and has generated a unilateral lumbosacral transitional vertebra, which can also lead to scoliosis;

the graded joints are: right shoulder joint (total grade 1), both elbows (both total grade 1), both radio-ulnar joints (both total grade 1), left proximal wrist (total grade 1.25), right proximal wrist (total grade 1), right hip joint (total grade 2), both knee joints (total grade 2/2.1), both proximal ankles (both total grade 1) and both distal ankles (both total grade 1); the medial condyle of the right femur contains a cyst-like impression (approx. 1.5 × 1cm) that suggests the former presence of a loose fragment in the knee joint (*osteochondritis dissecans*), whereas small productive changes of the bone (appositions) are found on the lateral condyle of the left femur;

Staining: -

Artefacts: charcoal close to the feet (SAC5 083/2017) and in the individual's orbit (SAC5 389/2017); plaster next to Ind. 124 (SAC5 123/2017);

Notes: -

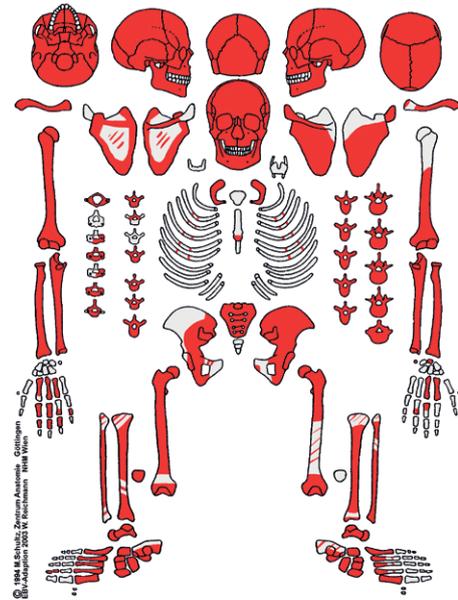


Figure 6.8: calcifications *in situ* between radius and ulna and adjacent to right femur of Ind. 124, Feature 4 (photo: C. Geiger).

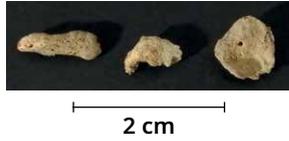


Figure 6.9: calcifications between radius and ulna of Ind. 124, Feature 4 (photo: M. Wohlschlagler).



Figure 6.10: dislocated calcification (elongated right stylohyoid process) of Ind. 124, Feature 4 (photo: M. Wohlschlagler).



Figure 6.11: *in situ* calcification (elongated left stylohyoid process) of Ind. 124, Feature 4 (photo: A. Stadlmayr).

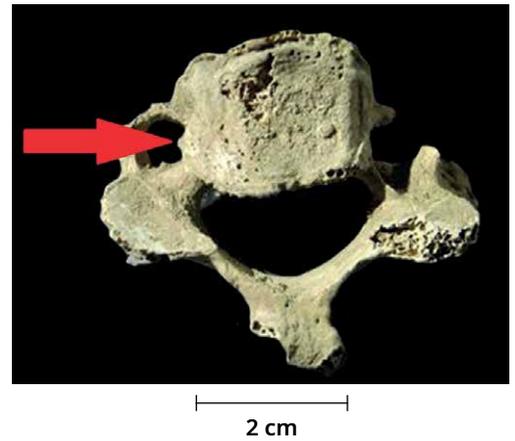


Figure 6.12: eburnation on body of cervical vertebra of Ind. 124, Feature 4 (photo: C. Geiger).

Intravit. Ch.	X	0	0	X	X	0	X	X	0	X	0	0	X	0	0	0
Abrasion	X	3+/4	5+	X	X	X	X	X	X	X	X	X	X	5+	3+/4	2
Periodont.	X	1	1	X	X	1	0	0	0	0	1	X	2	2	1	1
Calculus	X	2	2	X	1	1	X	X	1	1	1	1	X	1	1	1
Enam. Hyp.	X	0	0	X	X	0	X	X	0	0	0	0	X	X	0	0
Peri. Absc.	X	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0
Caries Size	X	0	0	X	0	0	X	X	0	0	0	0	0	0	0	0
Caries Loc.	X	0	0	X	0	0	X	X	0	0	0	0	0	0	0	0
Status	7	1	1	2	2	1	1	1	2	2	1	2	1	1	1	1
	18	17	16	15	14	13	12	11	21	22	23	24	25	26	27	28
	48	47	46	45	44	43	42	41	31	32	33	34	35	36	37	38
Status	1	1	1	1	1	1	2	1	4	2	1	1	4	1	1	1
Caries Loc.	0	0	0	0	0	0	0	X	X	X	X	X	X	0	X	0
Caries Size	0	0	0	0	0	0	0	X	X	X	X	X	X	0	X	0
Peri. Abs.	0	0	0	0	0	0	0	X	X	0	0	0	0	0	0	0
Enam. Hyp.	0	0	0	0	0	X	X	X	X	X	X	X	X	0	X	X
Calculus	1	X	X	1	1	1	1	X	X	1	1	X	X	1	X	X
Periodont.	1	1	1	1	1	1	X	X	X	X	1	1	X	1	1	0
Abrasion	2+	3+/4	4+	X	X	X	X	X	X	X	X	X	X	5	X	2+
Intravit. Ch.	0	0	0	0	X	X	X	X	X	X	X	X	X	0	0	0

Caries Loc. = caries location; Peri. Absc. = periapical abscess; Enam. Hyp. = enamel hypoplasia; Periodont. = periodontal disease; Intravit. Ch. = intravital chipping; X = missing, evaluation impossible;

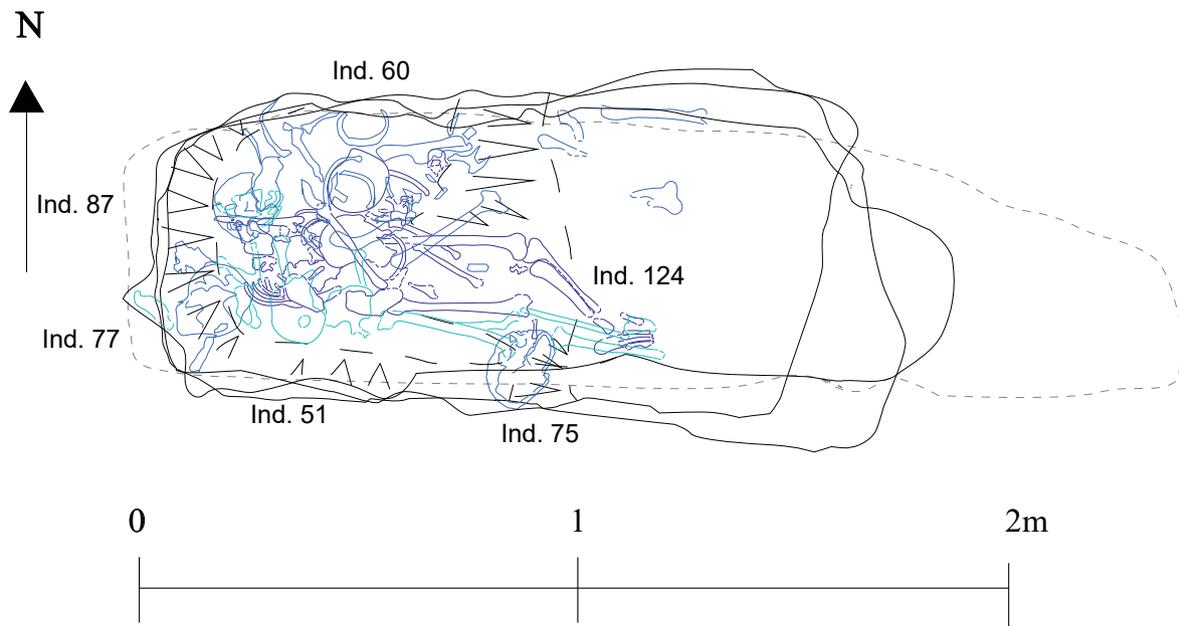


Figure 6.13: human remains in Feature 4 (illustration: P. Heindl, ©AcrossBorders).

6.3.2.1 Summary results Feature 4

The interred remains in Feature 4 (trench) revealed six distinguishable individuals (Fig. 6.13, Table 6.3). The skulls of Inds. 60, 75 and 77 could not be clearly assigned to the existing commingled postcranial remains (Fig. 6.14).

The features revealed a total of six individuals with 50% of the remains being males/possible males and 50% females/possible females (Fig. 6.15, Table 6.3).

Feature 4 did not hold any distinct sub-adult interments. 16.7% of the individuals were classified as adult and 33.3% of the individuals as mature. The remaining 50% could not be assigned to any specific age class (Fig. 6.16, Table 6.3).

The postcranial measurements of three of the females/possible females showed heights ranging from *approx.* 154.3cm to 162.9cm (Table 6.3).

The bones in Feature 4 were partly eroded. None of the evaluated individuals showed signs of intravital chipping (N=2), enamel hypoplasia (N=2), caries (N=2), porotic hyperostosis (N=3), *cribra orbitalia* (N=4), endocranial changes (including haemorrhagic processes, lesions, perisinusitis) (N=3), periosteal reactions on long bones (N=3) or inflammatory reactions (including stomatitis, sinusitis, otitis, pleuritis, osteomyelitis) (N= 3). Ind. 124 suffered from slight signs of periodontal disease (50%, N=2), showed remains of calculus (50%, N=2) and had formed periapical abscesses (100%, N=1). Two individuals showed ante-mortem tooth loss (66.7%, N=3) (Table 6.4). Ind. 51, a mature female, had developed a calcified uterine leiomyoma (benign tumour), while arterial calcifications suggest atherosclerosis for Ind. 124. In addition, Ind. 124 showed secondary elongation of the stylohyoid ligament through calcification.

Extensive osteophyte formation was found in all the present vertebral remains within Feature 4 (spinal osteophytosis: N=4; apophyseal joint degeneration: N=2) while no signs of Schmorl's nodes (N=2) or disc prolapse (N=2) were detected (Table 6.4). Joint fusion (*ankylosis* of two thoracic vertebrae) was present in Ind. 51, and Ind. 124 was a carrier of a sacralised segment of the fifth lumbar vertebra and probably suffered from scoliosis.

The investigated joints in Feature 4 revealed no degenerative/productive changes in Ind. 51 and Ind. 77 (in the latter, only the left elbow joint could be rated). Ind. 124 did not show any major modifications on the upper half of the body, but the left knee had formed small appositions of grade 2 in the lateral femoral condyle, and the medial femoral condyle in the right knee showed signs of *osteochondritis dissecans*.



Figure 6.14: commingled remains of Inds. 60, 75 and 77 in Feature 4 (photo: J. Budka).

Individual no.	Sex	Age range	Mean age	Age class	Approx. height
51	female	>45 yrs.	52.5 yrs.	mature	162.9cm
60	male?	>26 yrs.	-	adult-senile	-
75	male	17-25 yrs.	21 yrs.	juvenile-adult	-
77	female?	>26 yrs.	-	adult-senile	154.3cm
87	male?	>26 yrs.	-	adult-senile	-
124	female	35-45 yrs.	40 yrs.	adult-mature	158.7cm

Modification	Number of investigated individuals (N)	Number (n) and percent (%) of affected individuals
Intravital chipping	2	0 (0%)
Periodontal disease (only FGI)	2	1 (50%)
Calculus (only FGI)	2	1 (50%)
Enamel hypoplasia	2	0 (0%)
Periapical abscess (only FGI)	1	1 (100%)
Caries	2	0 (0%)
Ante-mortem tooth loss (only FGI)	3	2 (66.7%)
Porotic hyperostosis	3	0 (0%)
Cribrra orbitalia	4	0 (0%)
Endocranial changes	3	0 (0%)
Periosteal reactions	3	0 (0%)
Inflammatory reactions	3	0 (0%)
Spinal osteophytosis (only FGI)	4	4 (100%)
Apophyseal joint degeneration (only FGI)	2	2 (100%)
Schmorl's nodes (only FGI)	2	0 (0%)
Disc prolapse (only FGI)	2	0 (0%)

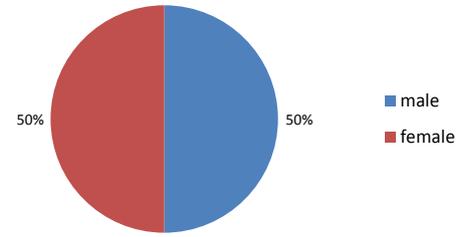


Figure 6.15: percentage of males and females in Feature 4.

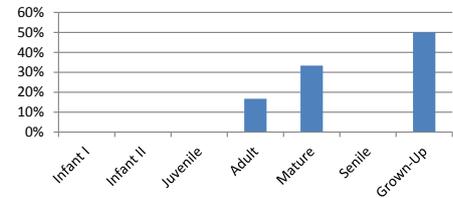


Figure 6.16: age class distribution (%) within Feature 4, N=6.

Table 6.3: sex, age and *approx.* height of the 6 distinguishable individuals in Feature 4.

Table 6.4: bone modifications, number (N) of investigated individuals and number (n) and percent (%) of affected individuals in Feature 4; FGI=fully grown individuals.

6.3.3 Individual burials in Feature 6

Individual: 159

Find number: SAC5 159/2017

Stratigraphic unit: 162

Year of excavation: 2017

Posture and orientation of skeleton: supine, west-east

Age at death: 35-50 yrs.

Age group: adult-mature

Sex: male

Body height: 167.1cm

Surface preservation: existing surfaces show signs of erosion

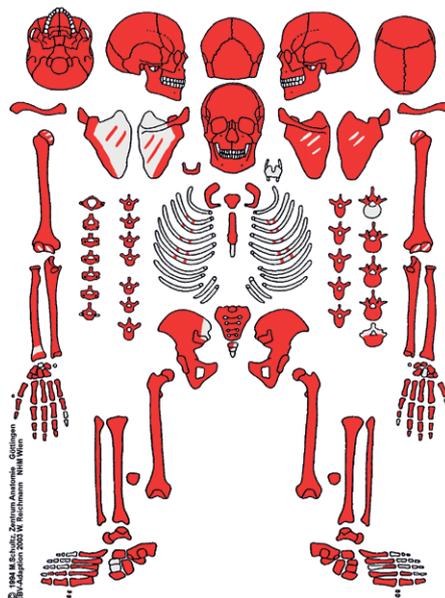
Dental / Oral status: all teeth cracked during excavation due to extremely poor preservation, which made most of the evaluation impossible; both periapical abscesses adjacent to the left and right lower first molar respectively, are peppercorn-sized and are located around the distal root; the maxilla shows slight signs of periodontal recession in the left and right molar regions;

Pathologies and variations: no cranial pathologies; however, the shape of the skull suggests a mild case of craniosynostosis as (Fig. 6.17); one right rib fragment (height: thoracic vertebrae X/XI/XII) contains a healed fracture with the formation of callus on the inside only, which is common for partial or “greenstick” fractures (Fig. 6.18);

the posterior arch is missing from the sacrum which indicates a *spina bifida occulta*, however in this case, this developmental defect of the spine comes as a relatively common variant without clinical signs or symptoms; both clavicles show productive changes in the area of the tuberosity of the costoclavicular ligament and the right clavicle also in the area of the trapezoid line (*Lig. trapezoideum*); the right scapula is affected the same way at the infraglenoidal tuberosity (*triceps brachii*) and the acromion (*Fac. art. clavicularis*); the lateral epicondyle of the right humerus has developed osteophytes (approx. 5mm) at the insertion point of the collateral radial ligament; the left radius displays a very pronounced radial tuberosity (*flexor pollicis longus*) and the same applies to the pronator tuberosity (*pronator teres*) on the right radius; the insertion point of the collateral tibial ligament on the right medial femur epicondyle is also affected by productive changes and the femoral crest is massive (>8mm); the left metacarpals III and V show pronounced insertions of the long vinculum and the right metacarpal V of the long palmar muscle; the first proximal phalange on the right hand has developed a dorsally elongated articular surface on its distal end and the left proximal phalanges II and III display pronounced plantar ridges; an inferior calcaneal spur (>5mm) has formed on the right calcaneus and the insertion of the *adductor hallucis* on first right proximal phalange has ossified;

residues of artery calcification adjacent to the fifth thoracic vertebra (aorta?) (Fig. 6.19) and also directly above the left iliac crest (*A. iliaca?*), to the left of the spine (Fig. 6.20), are a possible sign of atherosclerosis in this individual;

the cervical vertebrae IV-VII and the thoracic vertebrae VI-XI carry cranial, as well as caudal Schmorl's nodes; extensive osteophyte formation (>7mm) is present in most cervical (Fig. 6.21), thoracic and lumbar vertebrae (Fig. 6.22); the costal fovea of THXII shows severe marginal lipping and destructive processes on the face;



Intravit. Ch.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Abrasion	2+	4	5+	X	X	X	X	X	X	X	X	X	X	X	X	2+
Periodont.	1	1	X	0	X	X	X	0	0	0	0	X	X	X	X	1
Calculus	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Enam. Hyp.	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Peri. Absc.	0	0	0	X	X	X	X	X	X	X	X	X	X	0	0	0
Caries Size	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Caries Loc.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Status	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	18	17	16	15	14	13	12	11	21	22	23	24	25	26	27	28
	48	47	46	45	44	43	42	41	31	32	33	34	35	36	37	38
Status	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Caries Loc.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Caries Size	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Peri. Abs.	0	0	1	X	X	X	0	0	0	X	X	X	X	1	0	0
Enam. Hyp.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Calculus	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Periodont.	0	0	X	X	X	X	X	X	X	X	X	X	X	X	0	0
Abrasion	X	X	X	X	X	X	X	X	X	X	X	X	X	5++	5+	4+
Intravit. Ch.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Caries Loc. = caries location; Peri. Absc. = periapical abscess; Enam. Hyp. = enamel hypoplasia; Periodont. = periodontal disease; Intravit. Ch. = intravital chipping;

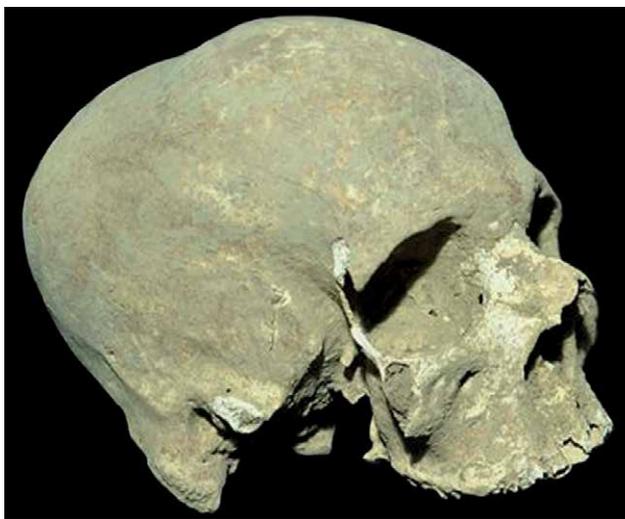


Figure 6.17: mild form of craniosynostosis in Ind. 159, Feature 6 (photo: C. Geiger).



Figure 6.18: healed fracture with callus formation on right rib fragment of Ind. 159, Feature 6 (photo: C. Geiger).



Figure 6.19: calcifications found on the ventral side of the fifth thoracic vertebra of Ind. 159, Feature 6 (photo: M. Wohlschlager).



Figure 6.20: calcifications found to the left of the vertebral column, adjacent to/to the north of the left iliac crest of Ind. 159, Feature 6 (photo: M. Wohlschlager).

in general, the joints are only slightly affected, with the left proximal and distal ankle showing no signs of modification (total grade 1); the shoulder joints show slight changes with a total grade of 1.5 respectively; the elbow joints are both given a total grade of 1.25 and also the left radio-ulnar joint, whereas the right radio-ulnar joint is graded 1.29; the proximal wrists are also slightly affected with a total grade of 1.25 each and the hip joints reach a total grade of 1.4 respectively; the left knee joint is rated 1.12, whereas the right knee joint is slightly more affected with a total grade of 1.45; very slight productive changes lead to a total grade of 1.1 for the right proximal ankle and the right distal ankle is given a total grade of 1.4;

Staining: residues of blue pigment and wood on the skull (SAC5 190/2017) and tuberosity of the right navicular bone;

Artefacts: coffin fragment, blue and yellow, head part (SAC5 218/2017), various pigments from coffin/mask (blue, red, yellow and white) and wood (?) associated with Ind. 159 in Feature 6 (SAC5 137/2017, 141/2017, 142/2017, 150/2017, 151/2017, 158/2017, 176/2017, 177/2017, 180/2017, 181/2017, 182/2017, 183/2017, 184/2017, 192/2017, 193/2017, 195/2017, 196/2017, 197/2017, 199/2017, 201/2017, 202/2017, 215/2017); one eye from coffin, painted (white, blue and red pigment), belonging to coffin (?) (SAC5 136/2017); one left eye inlay from coffin/funerary mask, plaster and unspecified stone, in the head area (SAC5 356), one pair of eye inlays from coffin/funerary mask, bronze, plaster and unspecified stone, the left one to the north of the skull and the right one on top of Ind. 159 (SAC 5 346); a set of four complete faience vessels (SAC5 352, SAC5 353, SAC5 354 and SAC5 355) of which three (SAC5 352, SAC5 353 and SAC5 355) carry remains of inscriptions; one piece of gold foil below the flowerpot 203/2017 (SAC5 372), four pieces of gold foil on top of coffin in the right hip area (SAC5 374), seven pieces of gold foil underneath the right shoulder and in the thorax area (SAC5 375); plaster and blue pigment to the south of the skull (SAC5 161/2017), white plaster (?) and blue pigment in the upper body half (SAC5 178/2017), one plaster fragment, painted, from the mask, to the west of the right eye (SAC5 421); one flowerpot to the west of the shabti (SAC5 203/2017), one flowerpot in the feet area (SAC5 204/2017) and one flowerpot to the south-east of Ind. 159 (205/2017); one small pot sherd, below scarab to the south of the individual (SAC5 216/2017); one complete heart scarab, serpentinite and a total of twenty-six associated pieces of gold foil to the south of the individual (SAC5 349), one complete scarab, steatite, next to skull (SAC5 351), one complete shabti, serpentinite, to the south of Ind. 159 (SAC5 350); residues of wood and blue pigment in the eastern area (SAC5 152/2017), wood traces/organic and blue to the south of Ind. 159 (SAC5 185/2017);

Notes: -



2 cm

Figure 6.21: osteophyte formation on cervical vertebrae of Ind. 159, Feature 6 (photo: C. Geiger).



2 cm

Figure 6.22: osteophyte formation on lumbar vertebrae of Ind. 159, Feature 6 (photo: C. Geiger).

Individual: 160

Find number: SAC5 160/2017

Stratigraphic unit: 162

Year of excavation: 2017

Posture and orientation of skeleton: supine, west-east

Age at death: 45-60 yrs.

Age group: mature

Sex: female?

Body height: 151.5cm

Surface preservation: existing surfaces show severe signs of erosion

Dental / Oral status: the existing upper right molars, as well as the upper right incisor are very unevenly abraded (sloping down lingually);

Pathologies and variations: the nuchal line has a hyper-masculine appearance (grade +2 after Acsádi and Nemeskeri 1970), similar to Ind. 51 from Feature 4;

no cranial pathologies, but at this point it should be borne in mind that the remains (especially the bone surfaces) are in very poor condition and most bones were not sufficiently preserved for evaluation;

small Schmorl's nodes appear from the cervical vertebra CVII down to the lumbar vertebra LI; the cervical and lumbar vertebrae have developed massive osteophytes, while the thoracic region is only slightly affected;

because of the bad erosion, only a few joints could be graded: the left shoulder (total grade 1.25), the left elbow (total grade 1), the left radio-ulnar joint (total grade 1.14), the left proximal wrist (total grade 1), an indeterminate (l/r?) pisiform bone with eburnation, the left knee (total grade 3) with massive eburnation on the lateral femur condyle and the patella (Fig. 6.23 and Fig. 6.24), the right knee (total grade 2.5 with productive changes, as well as massive eburnation on the patella) and the left proximal ankle (total grade 1);

Staining: -

Artefacts: charcoal from the left pelvis (SAC5 189/2017) and the right leg (SAC5 243/2017); coffin fragments, blue and red on white pigments (SAC5 219/2017); one pair of eye inlays from funerary mask, bronze, plaster and unspecified stone (SAC5 362); two complete miniature vessels, faience, in head area (SAC5 347 and SAC5 348), forty-one small fragments, ivory inlays (?), in head area (SAC5 428); plaster, partly painted, from coffin in head area (SAC5 229/2017); one beaker in the feet area (SAC5 206/2017), one flowerpot to the south of Ind. 160 (SAC5 207/2017), one dish (SAC5 208/2017) and four miniature vessels (SAC5 209/2017, 210/2017, 211/2017 and 212/2017), pottery, in the head area; one sherd to the south of the right leg (SAC5 227/2017) and one sherd below coffin (SAC5 231/2017); twenty very fragile fragments of unclear substance (horn?)/raw material on top of coffin and nine more in the shoulder area, next to the ivory inlays (SAC5 409);

Notes: -

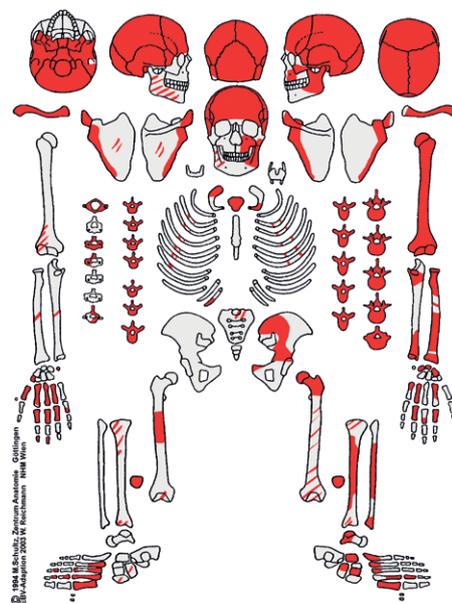


Figure 6.23: eburnation on the left lateral femur condyle of Ind. 160, Feature 6 (photo: C. Geiger).



Figure 6.24: eburnation on the left and right patella of Ind. 160, Feature 6 (photo: C. Geiger).

Intravit. Ch.	X	X	X	X	X	X	0	X	X	X	X	X	X	X	X	X
Abrasion	X	X	5+	X	X	X	X	X	X	X	X	X	X	5++	X	X
Periodont.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Calculus	X	X	X	X	X	X	0	X	X	X	X	X	X	X	X	X
Enam. Hyp.	X	X	X	X	X	X	0	X	X	X	X	X	X	X	X	X
Peri. Absc.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Caries Size	X	X	X	X	X	X	0	X	X	X	X	X	X	0	X	X
Caries Loc.	X	X	X	X	X	X	0	X	X	X	X	X	X	0	X	X
Status	4	2	2	4	4	4	2	4	4	4	4	4	4	2	4	4
	18	17	16	15	14	13	12	11	21	22	23	24	25	26	27	28
	48	47	46	45	44	43	42	41	31	32	33	34	35	36	37	38
Status	2	1	1	4	4	4	4	4	4	4	4	1	1	4	4	4
Caries Loc.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Caries Size	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Peri. Absc.	X	0	X	X	X	X	X	X	X	X	0	X	X	X	X	X
Enam. Hyp.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Calculus	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Periodont.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Abrasion	6	6	7	X	X	X	X	X	X	X	X	X	X	X	X	X
Intravit. Ch.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Caries Loc. = caries location; Peri. Absc. = periapical abscess; Enam. Hyp. = enamel hypoplasia; Periodont. = periodontal disease; Intravit. Ch. = intravital chipping;

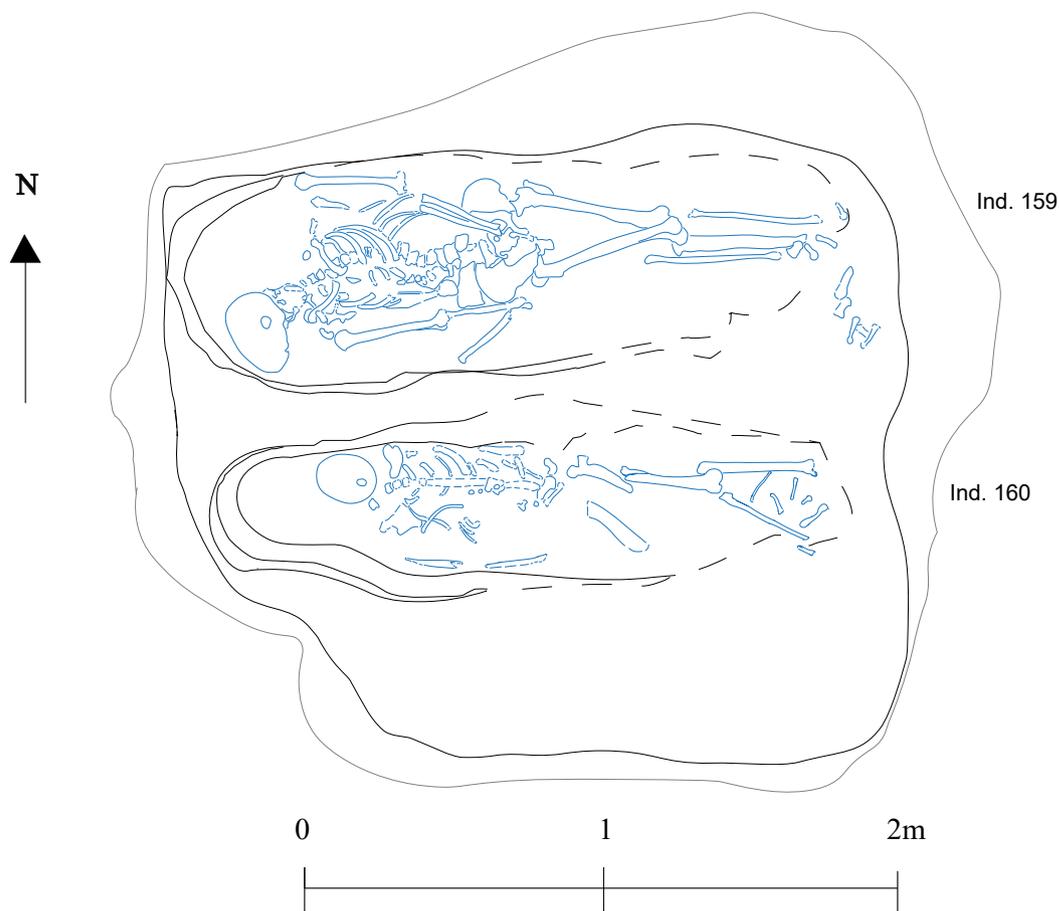


Figure 6.25: human remains in Feature 6 (illustration: P. Heindl, ©AcrossBorders).

6.3.3.1 Summary results Feature 6

Table 6.5: sex, age and approx. height of the distinguishable individuals in Feature 6.

Individual no.	Sex	Age range	Mean age	Age class	Approx. height
159	male	35-50 yrs.	42.5 yrs.	adult-mature	167.1cm
160	female?	45-60 yrs.	52.5 yrs.	mature	151.5cm

Table 6.6: bone modifications, number (N) of investigated individuals and number (n) and percent (%) of affected individuals in Feature 6; FGI=fully grown individuals.

Modification	Number of investigated individuals (N)	Number (n) and percent (%) of affected individuals
Intravital chipping	1	0 (0%)
Periodontal disease (only FGI)	1	1 (100%)
Calculus (only FGI)	2	0 (0%)
Enamel hypoplasia	2	1 (50%)
Periapical abscess (only FGI)	2	1 (50%)
Caries	1	0 (0%)
Ante-mortem tooth loss (only FGI)	2	0 (0%)
Porotic hyperostosis	2	0 (0%)
Cribral orbitalia	2	0 (0%)
Endocranial changes	2	0 (0%)
Periosteal reactions	2	0 (0%)
Inflammatory reactions	2	0 (0%)
Spinal osteophytosis (only FGI)	2	2 (100%)
Apophyseal joint degeneration (only FGI)	2	2 (100%)
Schmorl's nodes (only FGI)	2	2 (100%)
Disc prolapse (only FGI)	2	0 (0%)

Feature 6 revealed two distinguishable individuals (Fig. 6.25, Table 6.5) who appeared almost undisturbed (see Chapter 8).

The feature revealed one male and one female clearly still *in situ* together with their grave goods and largely deteriorated funerary equipment. Both individuals appeared to have reached a mature age with the female probably having lived slightly longer than the male, Khnummose. The female was *approx.* 151.5cm and the male was *approx.* 167.1cm tall (Table 6.5).

The bones in Feature 6 were partly eroded. None of the evaluated individuals showed signs of intravital chipping (N=1), calculus (N=2), caries (N=1), ante-mortem tooth loss (N=2), porotic hyperostosis (N=2), *cribra orbitalia* (N=2), endocranial changes (including haemorrhagic processes, lesions, perisinusitis) (N=2), periosteal reactions on long bones (N=2) or inflammatory reactions (including stomatitis, sinusitis, otitis, pleuritis, osteomyelitis) (N= 2) (Table 6.6). Ind. 159, Khnummose, suffered from slight to moderate signs of periodontal disease (100%, N=1), showed slight signs of enamel hypoplasia (50%, N=2) which is not considered as pathological, and had formed periapical abscesses (50%, N=2) (Table 6.6). In addition, arterial calcifications suggest atherosclerosis for Khnummose and the developed multiple enthesopathies and bony spurs at tendon and ligament insertion points reflect a possible onset of DISH (diffuse idiopathic skeletal hyperostosis). In terms of fractures, Khnummose bore a healed greenstick fracture on one of the lower right ribs.

Extensive osteophyte formation (spinal osteophytosis: N=2; apophyseal joint degeneration: N=2) and Schmorl's nodes (N=2) were found in all the present vertebral remains while no signs of disc prolapse were detected (N=2) (Table 6.6). A relatively common developmental defect of the spine is the so-called *spina bifida occulta*, which was present in Ind. 159, Khnummose, and usually comes without any symptoms.

In terms of joint degeneration, Ind. 159, Khnummose, developed slight changes whereas Ind. 160 showed severe changes (productive changes and massive eburnation) in her knee joints.

6.3.4 Individual burials in Feature 5

6.3.4.1 Individual burials in Feature 5a

Individual: 145

Find number: SAC5 145/2017

Stratigraphic unit: 191

Year of excavation: 2017

Posture and orientation of skeleton: supine, west-east

Age at death: 30-45 yrs.

Age group: adult-mature

Sex: male

Body height: 164.3cm

Surface preservation: existing surfaces show signs of erosion

Dental / Oral status: -

Pathologies and variations: no cranial pathologies; six calcified artery fragments (Fig. 6.26), one with an estimated diameter of approx. 16mm (*A. pulmonalis?*), were found adjacent to some ribs in the right mid-thoracic region suggesting atherosclerosis; the left metacarpal V contains a healed fracture;

the following observations were made: osteophyte formation on the clavicular articular facet of the acromion on the right scapula; degenerative changes on the acromial and sternal articular surface of the right clavicle (the left clavicle appears far less affected); pronounced plantar ridges on the left metacarpals I and II and III, as well as the left proximal phalange II; osteophytes around the proximal articular surfaces of the left metacarpals II and III and the distal articular surface of the same metacarpal III is elongated on the plantar side; osteophyte development at the insertion point of the ischiofemoral ligament on the right ischium (the left ischium appears only slightly affected); massive femoral crest (>7mm) on the right femur (the left femur is slightly less affected) and osteophyte formation around the insertion point of the tibial collateral ligament of the left and right femurs, as well as the minor and especially the major trochanter of the left and right femurs (insertion *iliopsoas* muscle); the head of the left femur is posteriorly elongated; exaggerated soleal line with osteophyte formation on the left and right tibiae (insertion *soleus* muscle); pronounced plantar ridges on the right metatarsals II and IV; osteophyte formation around distal articular surface of the right metatarsal I and the proximal and distal articular surfaces of the right proximal foot phalange I;

Schmorl's nodes on the second lumbar vertebra (cranial and caudal); no signs of prolapsed discs; extensive osteophyte formation on all existing vertebral bodies and the articular surfaces of the lumbar vertebrae, whereas the articular surfaces of the cervical and thoracic vertebrae appear slightly less affected; the anterior longitudinal ligament has ossified in the thoracic area, between the seventh and twelfth thoracic vertebrae, THVII and THXII (Fig. 6.27 and Fig. 6.28), which is a clear sign of DISH (diffuse idiopathic skeletal hyperostosis or Forestier's disease), particularly when taking the aforementioned extraspinal bone modifications into account; in addition, the left auricular surface of the sacrum appears unilaterally fused with the corresponding pelvic auricular surface and the first coccygeal unit has sacralised (Fig. 6.29);

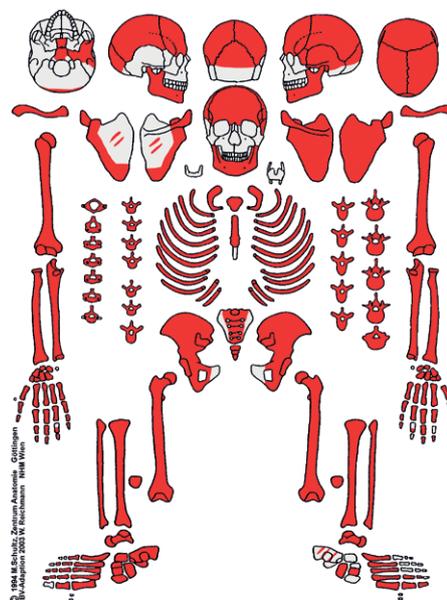


Figure 6.26: calcifications from the right mid-thoracic region of Ind. 145, Feature 5 (photo: M. Wohlschlager).

Intravit. Ch.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Abrasion	2	2+	5+	X	X	X	X	X	X	X	X	X	X	X	2+	X
Periodont.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Calculus	2	X	1	X	X	X	X	X	X	X	X	X	X	X	2	X
Enam. Hyp.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Peri. Absc.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Caries Size	0	4	3	X	X	X	X	X	X	X	X	X	X	X	3	X
Caries Loc.	0	4	5	X	X	X	X	X	X	X	X	X	X	X	4	X
Status	2	2	2	4	4	4	4	4	4	4	4	4	4	4	4	4
	18	17	16	15	14	13	12	11	21	22	23	24	25	26	27	28
	48	47	46	45	44	43	42	41	31	32	33	34	35	36	37	38
Status	1	2	4	2	4	4	2	4	4	4	4	9	9	1	4	4
Caries Loc.	X	2	X	0	X	X	0	X	X	X	X	X	X	X	X	X
Caries Size	X	3	X	0	X	X	0	X	X	X	X	X	X	X	X	X
Peri. Abs.	0	0	1	X	X	X	X	X	X	X	X	X	X	0	X	X
Enam. Hyp.	X	0	X	X	X	X	0	X	X	X	X	X	X	X	X	X
Calculus	2	0	X	X	X	X	0	X	X	X	X	X	X	X	X	X
Periodont.	3	3	X	X	X	X	X	X	X	X	X	X	X	3	X	X
Abrasion	2+	4+	X	X	X	X	X	X	X	X	X	X	X	5+	X	X
Intravit. Ch.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Caries Loc. = caries location; Peri. Absc. = periapical abscess; Enam. Hyp. = enamel hypoplasia; Periodont. = periodontal disease; Intravit. Ch. = intravital chipping; X = missing, evaluation impossible;



Figure 6.27: ossification of the right anterior longitudinal ligament and osteophyte formation, a typical indicator for DISH (diffuse idiopathic skeletal hyperostosis or Forestier's disease) *in situ* in Ind. 145, Feature 5 (photo: J. Budka).

all joints appeared suitable for grading: the left shoulder joint (total grade 1.25), the right shoulder joint (total grade 1.85), the left elbow joint (total grade 1.13), the right elbow joint (total grade 1.25), the left radio-ulnar joint (total grade 1.13), the right radio-ulnar joint (total grade 1.14), both proximal wrists (total grade 1.33), the left hip joint (total grade 1.16), the right hip joint (total grade 1.5), the left knee joint (total grade 1.92), the right knee joint (total grade 2.03), the left proximal ankle (total grade 1), the right proximal ankle (total grade 1.1), both distal ankles (total grade 1); the articular face of the right medial femoral condyle contains an eburnated area (1.5 × 10mm);

Staining: -

Artefacts: residues of bitumen (SAC5 134/2017) along the southern wall, alongside Ind. 145, and also on the right femur (SAC5 167/2017); a bone fragment (animal?) adjacent to the individual's skull (SAC5 169/2017); one canopic lid, clay, to the west of Ind. 145 (SAC5 390), two canopic lids, clay, close to the western wall (SAC5 391 and SAC5 392), one canopic lid, clay, and eleven associated pieces of gold foil, to the north-east of the skull (SAC5 393); charcoal in the feet area (SAC5 165/2017, 186/2017 and 188/2017); approx. seventy fragmented and badly deteriorated wooden remains (coffin) below Ind. 145 (SAC5 417) and one badly deteriorated wooden fragment with a small spot of red pigment on one surface (coffin) underneath the right tibia (SAC5 418); eye inlay, bronze, stone and plaster, and two pieces of associated gold foil to the west of the skull (SAC5 384), eye inlay, bronze, stone and plaster, and five associated small gold flakes, as well as three badly deteriorated funerary mask fragments, wood, to the east of the skull (SAC5 385), eye inlay, stone and plaster (SAC5 383), below the previous eye inlay to the east of the skull, and fragment of possible eye inlay, plaster, to the south-west of the cranium; eight badly deteriorated wooden remains (funerary mask), three with imbedded gold flakes, on the left shoulder (SAC5 408); two pieces of gold foil and 159 gold flakes from the coffin or funerary mask in various locations around or on the individual (SAC5 407 and SAC5 368), as well as from along the western wall (SAC5 286/2017 and 314/2017), and gold foil associated with the canopic lids (SAC5 393), the model vessel (SAC5 397) and one of the eye inlays (SAC5 384); more gold foil associated with the individual was found below the stone (SAC5 426) and in the southeastern corner, underneath one flowerpot (SAC5 413); four complete model vessel imitating canopic jars, pottery, to the north-west of the cranium (SAC5 394, SAC5 395, SAC5 396 and SAC5 397); plaster along the southern wall (SAC5 135/2017), and to the south of the individual's right knee (SAC5 173/2017); one dish, pottery, between individual and southern wall (SAC5 344/2017), one jug, pottery, between the canopic jars to the north-west of Ind. 145; one complete scarab, steatite, to the north of the individual (SAC5 381), one complete heart scarab, plaster, on the spine, below sternum (SAC5 411); one small blue "stick shaped" fragment, from cranial filling (SAC5 415); wooden fragment along the southern wall (SAC5 133/2017) and possible wooden fragment 15-20cm to the north of the left femur (SAC5 170/2017);

Notes: together with Ind. 162, Ind. 145 can be regarded as the first interments in Tomb 26;



4 cm

Figure 6.28: ossification of the right anterior longitudinal ligament and osteophyte formation, a typical indicator for DISH (diffuse idiopathic skeletal hyperostosis or Forestier's disease) in Ind. 145, Feature 5 (photo: C. Geiger).



Figure 6.29: sacralisation of the first coccygeal unit in Ind. 145, Feature 5 (photo: C. Geiger).

Individual: 162
Find number: SAC5 162/2017
Stratigraphic unit: 191
Year of excavation: 2017
Posture and orientation of skeleton: supine, west-east
Age at death: >35 yrs.
Age group: adult-senile
Sex: indeterminate
Body height: f: 154.6cm; m: 160.6cm
Surface preservation: existing surfaces show signs of erosion and termite traces

Dental / Oral status: the maxilla and its teeth are missing, and the mandibular teeth were all intravitaly lost; the alveoli of the lower right canine and the lower right first premolar are the only ones left and show signs of remodelling, as generally seen after recent tooth loss; the periapical abscess around the apex of the lower right canine is peppercorn-sized;

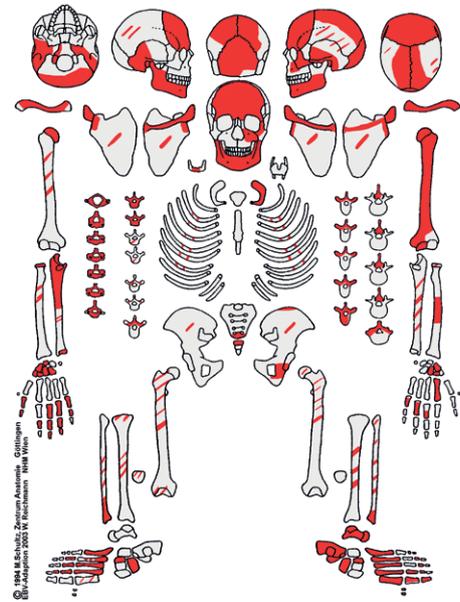
Pathologies and variations: a slight porosity has developed between the nuchal line and the right lambda suture and signs of healed inflammatory changes can be found in the left maxillary sinus; the right frontal bone contains a roundish healed lesion with callus formation above the right orbit and lateral to the glabella (Fig. 6.30);

complete fusion (*ankylosis*) of the cervical vertebrae CIII and CIV, as well as half of CV (right side) (Fig. 6.31); the remaining vertebral fragments show extensive osteophyte formation on their bodies and articular surfaces, and the present right superior articular surface of the sacrum is also severely degenerated (large pitting and marginal lipping);

the gradable joints are the left shoulder joint (total grade 1.5), the right shoulder joint (total grade 1.25), the left elbow joint (total grade 1), the right elbow joint (total grade 2.5), the right radio-ulnar joint (total grade 1), both proximal wrists (total grade 1), the left hip joint (total grade 1), the right knee joint (total grade 1.5), both proximal and both distal ankles (total grade 1); half of the right radial head is present with complete eburnation of the articular surface; the left metatarsal I also contains a pea-sized area of eburnation on the plantar side of its distal articular surface;

Staining: residues of gold and wood on the cranium (Fig. 6.32); small residues of blue colour can be observed on the upper cervical vertebrae, together with wooden remains;

Artefacts: animal bones from the mid-area (SAC5 400/2017); charcoal next to the feet (SAC5 187/2017); one badly deteriorated fragment (coffin or funerary mask) with remains of blue pigment on one surface (SAC5 416) below cranium; one eye inlay fragment, bronze (SAC5 363) from the central part, maybe associated with individual, one pair of eye inlays from coffin



Status	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	18	17	16	15	14	13	12	11	21	22	23	24	25	26	27	28
	48	47	46	45	44	43	42	41	31	32	33	34	35	36	37	38
Status	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Peri. Abs.	X	X	X	X	0	1	X	X	X	X	X	X	X	X	X	X
Periodont.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Peri. Absc. = periapical abscess; Periodont. = periodontal disease;



Figure 6.30: healed lesion with callus formation above the right orbit in the glabella area of Ind. 162, Feature 5 (photo: C. Geiger).

or funerary mask, bronze and plaster (SAC5 380), around the cranium; a total of eighteen pieces of gold foil (SAC5 400 and SAC5 424) to the south of the cranium, two pieces of gold foil in the jug to the north-west of Ind. 162 (SAC5 406), twenty-four pieces of gold foil between Ind. 162 and Ind. 300 (SAC5 423), 204 pieces of gold foil from head (Fig. 6.32), thorax and arm area of the individual (SAC5 400), 105 pieces of gold foil to the north of Ind. 162 (SAC5 425); eight pieces of unclear organic material (mask fragments?), possibly a thin layer of wood, below the right shoulder (SAC5 400); one small piece of blue pigment between Ind. 162 and Ind. 300 (SAC5 383/2017); plaster above/next to the left ulna/pelvis (SAC5 174/2017), above the legs (SAC5 175/2017), in the feet area, from the chamber floor (SAC5 379/2017) and three small fragments with remains of red pigment on the surface, to the north of the mandible (SAC5 427); two pottery sherds above plaster on individual (SAC5 164/2017), one jug to the north-west of Ind. 162 (SAC5 342/2017), one flowerpot fragment to the north of the individual (SAC5 353/2017), one dish below the cranium (SAC5 388/2017), one rim, pottery, in the area of the feet (SAC5 404/2017); one complete scarab, steatite, on the lateral side of the right femur (SAC5 386); sediment with black traces on top of lower part of the left eye surround (SAC5 166/2017); wooden remains of coffin/funerary mask to the west of Ind. 162 (SAC5 318/2017);

Notes: together with Ind. 145, Ind. 162 can be regarded as the first interments in Tomb 26;



Figure 6.31: fusion of the three cervical vertebrae (CIII and CIV complete and right side of CV) in Ind. 162, Feature 5 (photo: C. Geiger).



Figure 6.32: residues of gold and wood on right parietal of Ind. 162, Feature 5 (photo: C. Geiger).

6.3.4.2 Individual burials in Feature 5b

Individual: 245

Find number: SAC5 245/2017

Stratigraphic unit: 191

Year of excavation: 2017

Posture and orientation of skeleton: upper body supine, legs tilted, left leg bones rotated along long bone axis; west-east

Age at death: 25-35 yrs.

Age group: adult

Sex: female

Body height: 157.5cm

Surface preservation: existing surfaces show signs of erosion and termite traces

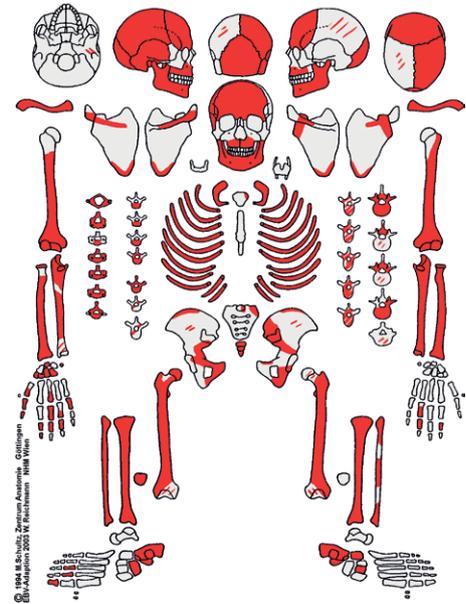
Dental/Oral status: because of the bad preservation, most teeth disintegrated during excavation; the maxillary second molars and the lower left third molar contain slight enamel pitting solely on their occlusal surfaces;

Pathologies and variations: no cranial or postcranial pathology on intact bone surfaces; no kind of pathology or degeneration is found in the cervical, thoracic and lumbar vertebrae or the sacrum;

the gradable joints (left shoulder, both elbow and radio-ulnar joints, both proximal wrists, both hips, both proximal and distal ankle joints) are graded as a total grade 1;

Staining: -

Artefacts: one complete crocodile amulet, carnelian, by the left lower arm of Ind. 245 (SAC5 325/2017), once part of a necklace associated with the neighbouring Ind. 324 (SAC5 378); a minimum of ten badly damaged bracelet fragments, ivory, from the left radius and ulna (SAC5 389) (Fig. 6.33); charcoal to the south of the individual (SAC5 365/2017); seventeen small pieces of unclear material (bone?), once imbedded in degraded coffin material, from the upper body, between the bracelet



Intravit. Ch.	0	0	0	X	X	X	X	X	X	X	X	X	X	X	0	0
Abrasion	2	2	2+	X	X	X	X	X	X	X	X	X	X	2+	2	2
Periodont.	0	0	0	X	X	X	X	X	X	X	X	X	X	X	0	0
Calculus	0	0	0	X	X	X	X	X	X	X	X	X	X	X	0	0
Enam. Hyp.	0	P	0	X	X	X	X	X	X	X	X	X	X	X	P	0
Peri. Absc.	0	0	0	X	X	X	X	X	X	X	X	X	X	X	0	0
Caries Size	0	0	0	X	X	X	X	X	X	X	X	X	X	X	0	0
Caries Loc.	0	0	0	X	X	X	X	X	X	X	X	X	X	X	0	0
Status	1	1	1	1	1	4	1	1	1	1	1	1	1	1	1	1
	18	17	16	15	14	13	12	11	21	22	23	24	25	26	27	28
	48	47	46	45	44	43	42	41	31	32	33	34	35	36	37	38
Status	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Caries Loc.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	0
Caries Size	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	0
Peri. Absc.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	0
Enam. Hyp.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	P
Calculus	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	1
Periodont.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	0
Abrasion	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	2
Intravit. Ch.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	0

Caries Loc. = caries location; Peri. Absc. = periapical abscess; Enam. Hyp. = enamel hypoplasia; Periodont. = periodontal disease; Intravit. Ch. = intravital chipping; P = occlusal enamel pits.

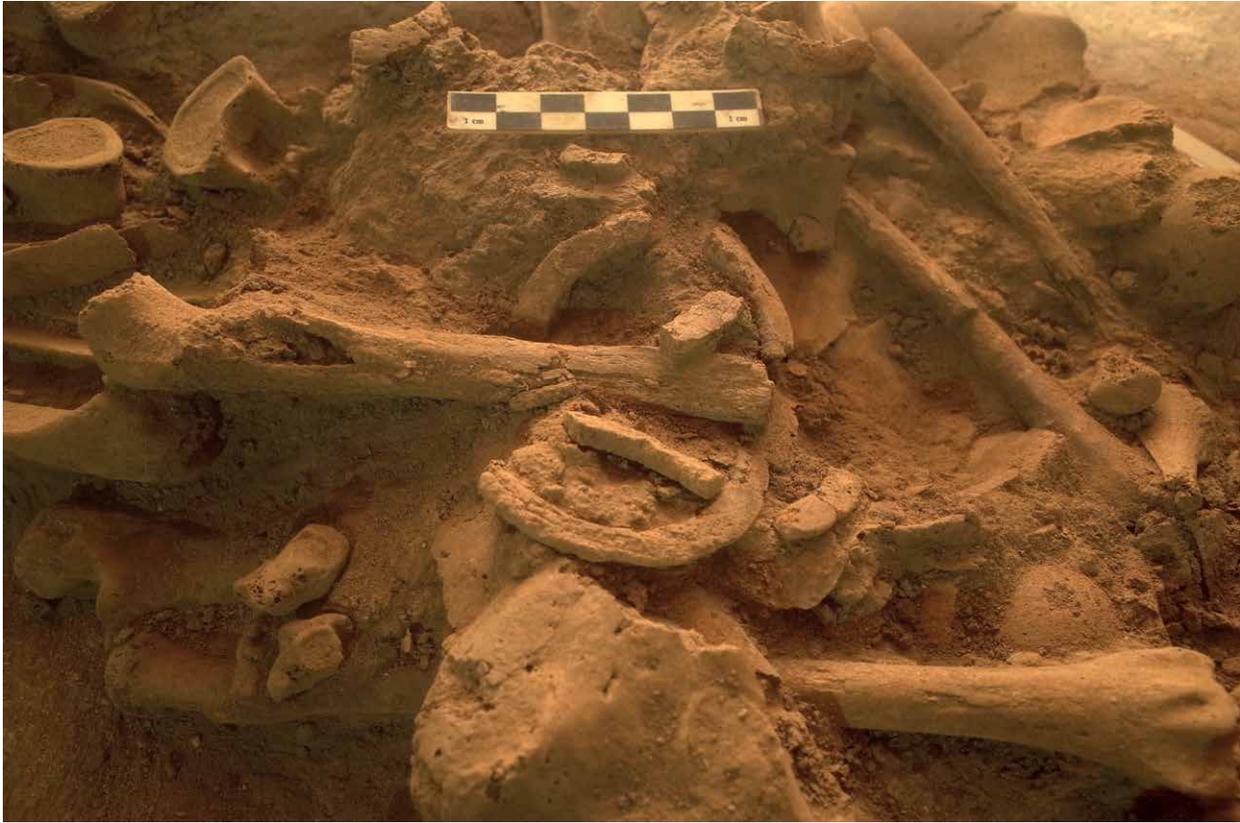


Figure 6.33: ivory bracelet around the left ulna of Ind. 245, Feature 5 (photo: J. Budka).

and the individual (SAC5 431); unidentified object (pigment?) with blue surface and traces of red, from the upper right thorax area (SAC5 371);

Notes: this female individual was found with a foetus (Ind. 323) between her femurs;

Individual: 259

Find number: SAC5 259/2017

Stratigraphic unit: 191

Year of excavation: 2017

Posture and orientation of skeleton: upper body supine, secondary disturbance of legs, as they appear slightly moved to the left; west-east

Age at death: 25-35 yrs.

Age group: adult

Sex: female

Body height: 150cm

Surface preservation: existing surfaces show severe signs of erosion and partly contain termite traces

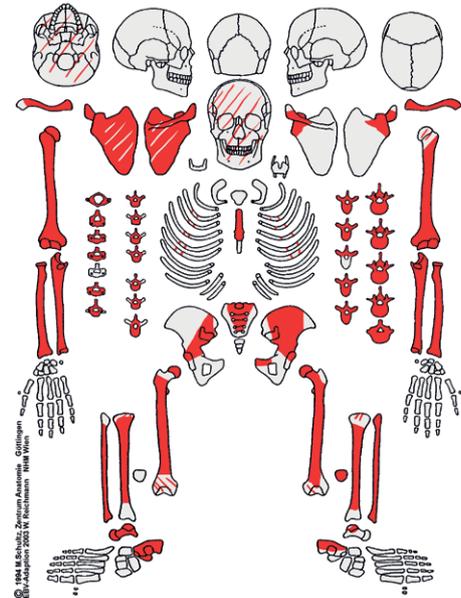
Dental / Oral status: the following teeth were present *in situ*, but disintegrated during excavation: 11, 12, 13, 15, 21, 22, 31, 32, 35, 36, 41, 42, 43 and 45; teeth 38 and 48 contain a buccal pit, a so-called *foramen caecum*, as a nonmetric trait;

Pathologies and variations: no signs of pathology on the remaining bone surfaces including the existing vertebrae; the gradable joints (both shoulder joints, elbow joints, radio-ulnar joints, proximal wrists, hip joints and the left knee joint) show no signs of degeneration (total grade 1);

Staining: -

Artefacts: two ring beads next to the individual, close to the northern wall (SAC5 296/2017); charcoal between the femurs (SAC5 266/20147); organic material above cranium (SAC5 252/2017); one complete scarab, steatite, 45cm from the northern wall and 95cm from the eastern wall, associated with Ind. 259 (SAC5 364);

Notes: -



Intravit. Ch.	0	X	0	X	X	X	X	X	X	X	X	X	0	0	0	0
Abrasion	2	X	3+	X	X	X	X	X	X	X	X	X	-4/4	2+	2	
Periodont.	X	X	X	X	X	X	X	X	X	X	X	X	1	1	1	1
Calculus	1	X	1	X	X	X	X	X	X	X	X	X	0	1	0	0
Enam. Hyp.	0	X	0	X	X	X	X	X	X	X	X	X	0	0	0	0
Peri. Absc.	X	0	X	X	X	X	X	X	X	X	X	X	0	0	0	0
Caries Size	0	X	0	X	X	X	X	X	X	X	X	X	0	0	0	0
Caries Loc.	0	X	0	X	X	X	X	X	X	X	X	X	0	0	0	0
Status	2	4	2	1	1	1	1	1	1	1	4	4	1	1	1	1
	18	17	16	15	14	13	12	11	21	22	23	24	25	26	27	28
	48	47	46	45	44	43	42	41	31	32	33	34	35	36	37	38
Status	1	1	4	1	1	1	1	1	1	1	4	4	1	1	4	2
Caries Loc.	0	0	X	X	X	X	X	X	X	X	X	X	X	X	X	0
Caries Size	0	0	X	X	X	X	X	X	X	X	X	X	X	X	X	0
Peri. Absc.	0	0	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Enam. Hyp.	0	0	X	X	X	X	X	X	X	X	X	X	X	X	X	P
Calculus	0	0	X	X	X	X	X	X	X	X	X	X	X	X	X	0
Periodont.	0	0	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Abrasion	X	2	3-4	X	X	X	X	X	X	X	X	X	X	3-4	2	X
Intravit. Ch.	0	0	X	X	X	X	X	X	X	X	X	X	X	X	X	0

Caries Loc. = caries location; peri. Absc. = periapical abscess; Enam. Hyp. = enamel hypoplasia; Periodont. = periodontal disease; Intravit. Ch. = intravital chipping;

Individual: 260

Find number: SAC5 260/2017

Stratigraphic unit: 191

Year of excavation: 2017

Posture and orientation of skeleton: legs crouched, probably due to secondary disturbance; east-west

Age at death: 25-45 yrs.

Age group: adult-mature

Sex: indeterminate

Body height: f: 152.7cm; m: 159.5cm

Surface preservation: existing surfaces show severe signs of erosion

Dental / Oral Status: the existing tooth sockets too deteriorated for evaluation;

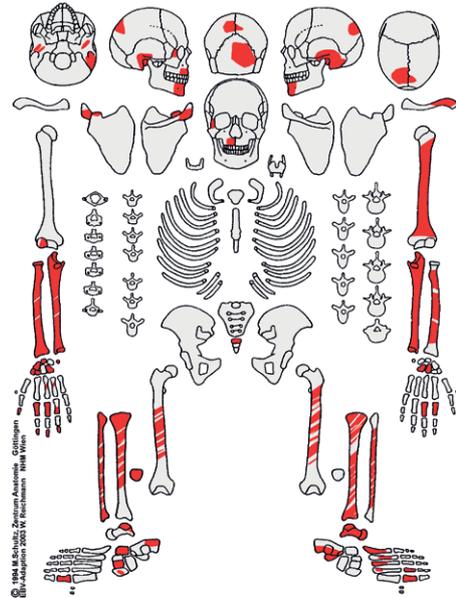
Pathologies and Variations: the existing remains largely too eroded and fragmented for evaluation;

the gradable joints – right elbow joint, right radio-ulnar joint, right proximal wrist, right proximal ankle, both distal ankles – do not show any signs of modification (total grade 1);

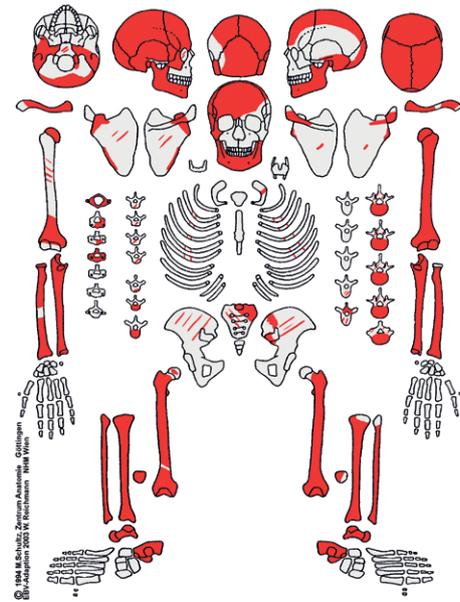
Staining: -

Artefacts: three fragile fragments of an amulet (?), ivory/bone (?), to the south of the individual's lower arms (SAC5 402); two pieces of gold foil close to the cranium (SAC5 412); plaster on the fibula (SAC5 382/2017); rodent bones underneath the individual (SAC5 415/2017 and 334/2017);

Notes: individual orientated with its head towards the east;



Individual: 279
Find number: SAC5 279/2017
Stratigraphic unit: 191
Year of excavation: 2017
Posture and orientation of skeleton: supine, west-east
Age at death: >35 yrs.
Age group: adult-senile
Sex: female
Body height: 161.3cm
Surface preservation: existing surfaces show signs of erosion and termite traces
Dental / Oral status: teeth 34 and 44 disintegrated during excavation;
Pathologies and variations: no visible cranial or postcranial pathologies on the existing remains;
 Schmorl's nodes are found on the cranial side of the fifth lumbar vertebral body and the caudal side shows signs of a healed compression fracture (Fig. 6.34), the atlas (*Fovea dens*) shows slight cranial osteophyte formation and the articular surfaces of the other cervical vertebrae have developed more severe osteophytes, whereas the existing thoracic vertebrae show no signs of modification at all; the lumbar region again displays severe osteophytes;
 all joints except the left distal ankle (missing) are given a total grade 1;
Staining: -
Artefacts: -
Notes: -



3 cm

Figure 6.34: caudal compression fracture on the fifth lumbar vertebra of Ind. 279, Feature 5 (photo: C. Geiger).

Status	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	18	17	16	15	14	13	12	11	21	22	23	24	25	26	27	28
	48	47	46	45	44	43	42	41	31	32	33	34	35	36	37	38
Status	3	3	3	3	1	4	4	4	4	4	4	1	4	4	3	2
Caries Loc.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Caries Size	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Peri. Abs.	X	X	X	X	X	X	X	X	X	X	X	0	0	0	X	0
Enam. Hyp.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Calculus	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Periodont.	X	X	X	X	X	X	X	X	X	X	X	X	3	3	X	2
Abrasion	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Intravit. Ch.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Caries Loc. = caries location; peri. Absc. = periapical abscess; Enam. Hyp. = enamel hypoplasia; Periodont. = periodontal disease; Intravit. Ch. = intravital chipping;

Individual: 297

Find number: SAC5 297/2017

Stratigraphic unit: 191

Year of excavation: 2017

Posture and orientation of skeleton: supine, west-east

Age at death: 25-45 yrs.

Age group: adult-mature

Sex: female

Body height: 161.3cm

Surface preservation: existing surfaces show severe signs of erosion

Dental / Oral status: postmortal loss of teeth 11-18, 21-25, 31-35, 41-48; the existing molars 26-28 and 36-38 are very fragmented and badly preserved, which makes any kind of evaluation impossible;

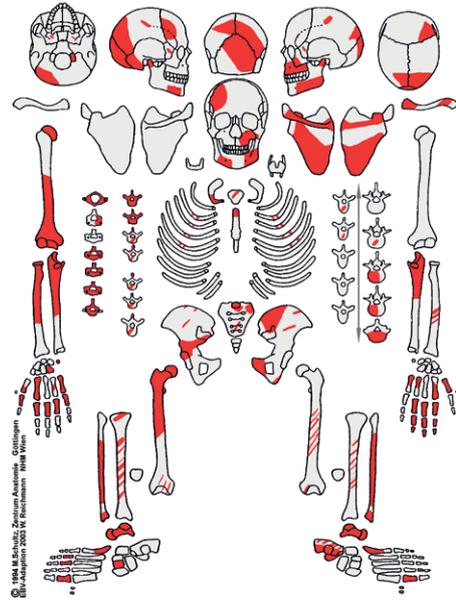
Pathologies and variations: evaluation is impossible for most cranial and postcranial remains (long bones), due to the grade of erosion; the left metacarpal V has formed a pronounced lateral plantar ridge (*opponens digiti quinti*) in contrast to the other existing metacarpals; the existing cervical, thoracic and lumbar vertebrae, as well as the sacrum show no signs of modification;

the gradable joints – shoulders, elbow and radio-ulnar joints, the left proximal wrist, proximal and distal ankles – are given a total grade of 1, the only exception being the right hip with a total grade of 1.2, where the acetabulum is beginning to develop small bony appositions (size: 1 × 0.5cm);

Staining: -

Artefacts: two tiny ring bead fragments, faience, in the lower leg area (SAC5 401); charcoal next to individual (SAC5 298/2017);

Notes: -



Individual: 299
Find number: SAC5 299/2017
Stratigraphic unit: 191
Year of excavation: 2017
Posture and orientation of skeleton: -
Age at death: 6-9 mths.
Age group: Infant I
Sex: -

Body height: -
Surface preservation: existing surfaces show slight signs of erosion
Dental / Oral status: no dental pathologies on existing teeth;

Pathologies and variations: slight pitting is present on the external lamina of the left parietal and also partly on the right parietal (porotic hyperostosis); the right orbit shows slight *cribra orbitalia* (left side missing); the internal lamina displays inflammatory modifications (without signs of healing) on the left and right parietal (Fig. 6.35), as well as the frontal bone; the occipital part of the sagittal sinus and the left and right sigmoid sinus also show inflammatory changes; the left parietal bone contains a healed fracture;

Staining: -
Artefacts: animal bones, below and around the individual (SAC5 354/2017); charcoal along and next to individual (SAC5 264/2017); 77 bone inlays, maybe of coffin (SAC5 430), one large fragment (coffin material?), organic, with remains of blue and yellow pigment, to the north of the individual (SAC5 432); blue pigment below the cranium (SAC5 393/2017);

Notes: measurements:
petrous and mastoid portions of the temporal bone: width 13mm (left) and 15mm (right); basilar part of the occipital: length 16mm and width 18mm; lateral part of the occipital: width 26mm (right); zygomatic bone: width 28mm (left) and length 31mm (right); mandible: length of the body *approx.* 49mm (left), width of the arc 25mm (right) and full length of half mandible 66mm (right); humerus: length 86mm (left) and >84mm (right), distal extremity width >19mm (left) and 21mm (right); femur: length 112mm (left) and distal extremity width *approx.* 28mm (left); tibia: length >85mm (left); ilium: length >44mm (right); ischium length >25mm (left) and width 18mm (left); pubis: length *approx.* 21mm (left);

Status	6	6	4	4	4	4	4	4	6	6
	55	54	53	52	51	61	62	63	64	65
	85	84	83	82	81	71	72	73	74	75
Status	6	6	4	4	2	2	4	4	6	6

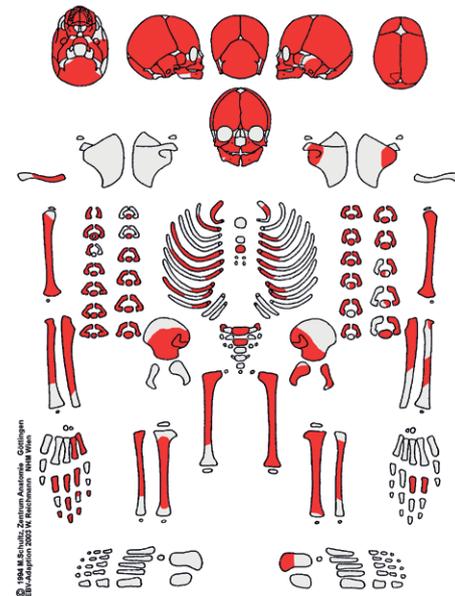
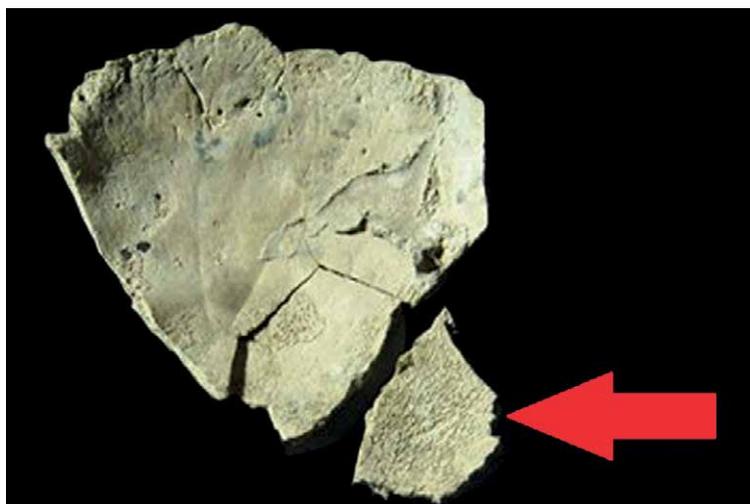


Figure 6.35: inflammatory changes on right parietal of Ind. 299, Feature 5 (photo: C. Geiger).

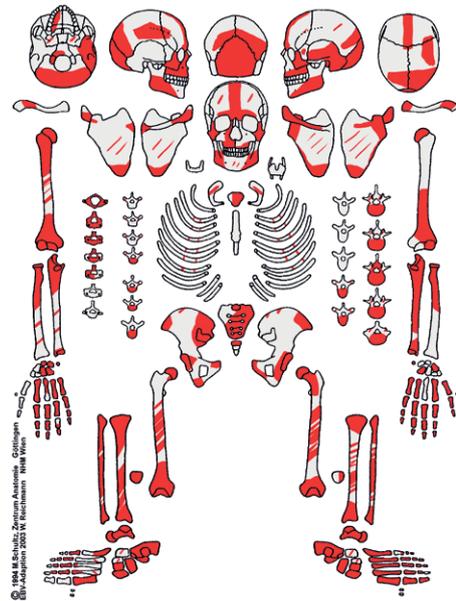
Individual: 300
Find number: SAC5 300/2017
Stratigraphic unit: 191
Year of excavation: 2017
Posture and orientation of skeleton: supine, west-east
Age at death: 30-45 yrs.
Age group: adult-mature
Sex: male
Body height: 165cm

Surface preservation: existing surfaces show severe signs of erosion
Dental / Oral status: the fragile teeth disintegrated during excavation and made much of the evaluation impossible;

Pathologies and variations: the external cranial lamina contains a small porosity, approx. 2.5cm above the external occipital protuberance and the left orbit (right side is missing) displays slight *cribra orbitalia*; the proximal and distal phalange of the left thumb have fused (*ankylosis*), probably after a fracture (Fig. 6.36); no kinds of disease or degeneration in the cervical, thoracic and lumbar vertebrae, as well as the sacrum; the following joints are gradable: left shoulder (total grade 1.33), right shoulder (total grade 1), both elbow joints (total grade 1), both radio-ulnar joints (total grade 1), the left proximal wrist (total grade 2), both hips (total grade 1), the left knee (total grade 1), the right knee (total grade 1.11), both proximal and distal ankles (total grade 1);

Staining: -

Artefacts: amulet (?) fragments (fragile, rounded object with loop), ivory (?), to the north of the individual (SAC5 379), one complete amulet of a



Intravit. Ch.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Abrasion	X	X	5+	X	X	X	X	X	X	X	X	X	X	X	X	X
Periodont.	X	X	2	X	X	X	X	X	X	X	X	X	X	X	X	X
Calculus	X	X	X	X	X	X	X	0	X	X	X	X	X	X	X	X
Enam. Hyp.	X	X	X	X	X	X	X	0	X	X	X	X	X	X	X	X
Peri. Absc.	X	X	0	X	X	X	X	0	X	X	X	X	X	X	X	X
Caries Size	X	X	0	X	X	X	X	0	X	X	X	X	X	X	X	X
Caries Loc.	X	X	0	X	X	X	X	0	X	X	X	X	X	X	X	X
Status	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	18	17	16	15	14	13	12	11	21	22	23	24	25	26	27	28
	48	47	46	45	44	43	42	41	31	32	33	34	35	36	37	38
Status	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Caries Loc.	0	X	X	X	X	X	X	X	0	X	X	X	X	X	X	X
Caries Size	0	X	X	X	X	X	X	X	0	X	X	X	X	X	X	X
Peri. Absc.	0	X	0	X	X	X	X	X	X	X	X	X	X	X	X	X
Enam. Hyp.	0	X	X	X	X	X	X	X	0	X	X	X	X	X	X	X
Calculus	0	X	X	X	X	X	X	X	0	X	X	X	X	X	X	X
Periodont.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Abrasion	3+	X	5+	X	X	X	X	X	X	X	X	X	X	X	X	X
Intravit. Ch.	0	X	X	X	X	X	X	X	0	X	X	X	X	X	X	X

Caries Loc. = caries location; peri. Absc. = periapical abscess; Enam. Hyp. = enamel hypoplasia; Periodont. = periodontal disease; Intravit. Ch. = intravital chipping;

rearing cobra, faience, in the hip area (SAC5 376), one complete amulet of a rearing cobra, jasper, in the hip area (SAC5 377); one clay bead in the feet area (SAC5 405); one ring bead, jasper, to the north of the individual (SAC5 419); several fragments of eye inlays, stone and plaster, in the feet area (SAC5 399); three pieces of gold foil in the head area (SAC5 422); plaster in the feet area (SAC5 335/2017); “eastern flowerpot” (SAC5 305/2017) and “western flowerpot” (SAC5 306/2017) to the north of the individual; one complete scarab, steatite, to the south of the individual (SAC5 367); four unidentified sticks/fragments with red colour (pigment?), to the north of the individual’s feet (SAC5 371), one unidentified stick with red surface (pigment?) to the north of the individual (SAC5 307/2017);

Notes: -



Figure 6.36: ankylosis of the two left thumb phalanges of Ind. 300, Feature 5 (photo: C. Geiger).

Individual: 323
Find number: SAC5 323/2017
Stratigraphic unit: 191
Year of excavation: 2017
Posture and orientation of skeleton: -
Age at death: 8-9 lunar months
Age group: foetus
Sex: -
Body height: -
Surface preservation: existing surfaces show signs of erosion
Dental / Oral status: -
Pathologies and variations: no signs of pathological change on the existing bone surfaces;
Staining: -
Artefacts: -
Notes: this foetus was found between the femurs of Ind. 245 (Fig. 6.37); measurements:
 squamous part of occipital: height *approx.* 38mm; body of sphenoid: length 11mm and width 16mm; petrous and mastoid portions of the temporal: length >27mm (left) and 28mm (right), width 13mm (left) and 11mm (right); basilar part of the occipital: length 12mm and width 12mm; lateral part of the occipital: width 10mm (left); mandible: length of body 34mm (left) and 36mm (right), full length of half mandible *approx.* 41mm (right); scapula: width 22mm (right); clavicle: length *approx.* 34mm (right); humerus: length 56mm (right), width of distal extremity 13mm (left) and 13mm (right); femur: length 59mm (left) and 60mm (right), width of distal extremity *approx.* 16mm (left); tibia: length 53mm (right) and width of proximal extremity >11mm (right); ilium: length *approx.* 23mm (left) and 25mm (right), width *approx.* 21mm (left) and <23mm (right); ischium: length 13mm (left) and 13mm (right), width 9mm (left) and 9mm (right); pubis: length 9mm (left) and 9mm (right);

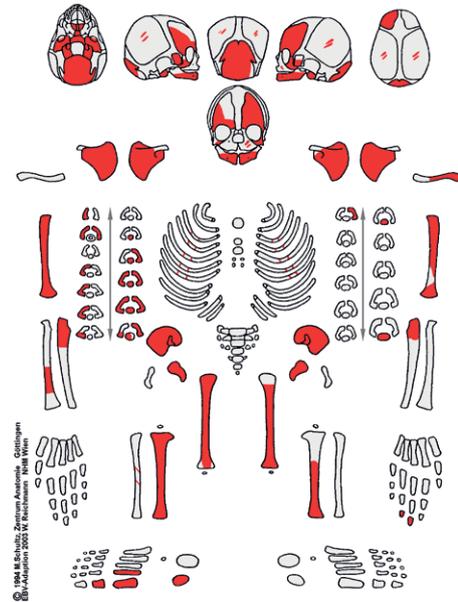


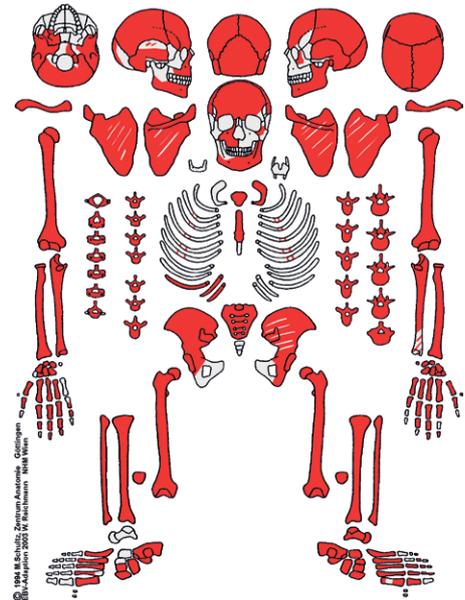
Figure 6.37: *in situ* position of remains of Ind. 323 between the femurs of Ind. 245 in Feature 5 (photo: J. Budka).

Individual: 324
Find number: SAC5 324/2017
Stratigraphic unit: 191
Year of excavation: 2017
Posture and orientation of skeleton: supine, west-east
Age at death: 25-35 yrs.
Age group: adult
Sex: female
Body height: 153.8cm

Surface preservation: existing surfaces show signs of erosion
Dental/Oral status: the teeth with status 1 (see table above) were originally *in situ* (already partly eroded), and disintegrated during excavation;
Pathologies and variations: no pathological changes on the existing bone surfaces; slight osteophyte formation on the right side of the bodies of the cervical vertebrae III (caudally) and IV (cranially), all other vertebrae – cervical, thoracic and lumbar, as well as the sacrum show no signs of disease; the joints were all well enough preserved for evaluation and could be each rated grade 1 in total;

Staining: -

Artefacts: broken amphora to the south of and above the individual (SAC5 343/2017); one complete wedjat eye amulet, carnelian, from the feet area (SAC5 382); three complete crocodile amulets, bone (?), in thoracic area, three complete crocodile amulets, carnelian, in the right thoracic area, as well as two crocodile amulets, one bone and one carnelian below the left shoulder, three crocodile amulets, one bone, two carnelian, to the south of Ind. 324, fragments of a crocodile amulet, bone underneath right pelvis



Intravit. Ch.	0	X	X	X	X	X	X	0	0	X	X	X	X	X	0	X
Abrasion	2	X	X	X	X	X	X	X	X	X	X	X	X	3	2	2
Periodont.	X	X	X	X	X	X	X	X	X	X	X	X	X	1	1	X
Calculus	1	X	X	X	X	X	0	0	1	X	X	X	X	X	X	X
Enam. Hyp.	0	X	X	X	X	X	0	0	0	X	X	X	X	X	X	X
Peri. Absc.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Caries Size	X	X	X	X	X	X	0	0	0	X	X	X	X	X	X	X
Caries Loc.	X	X	X	X	X	X	0	0	0	X	X	X	X	X	X	X
Status	2	4	4	4	4	4	2	2	2	4	4	4	4	1	1	1
	18	17	16	15	14	13	12	11	21	22	23	24	25	26	27	28
	48	47	46	45	44	43	42	41	31	32	33	34	35	36	37	38
Status	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Caries Loc.	X	X	X	X	X	X	X	X	X	0	X	X	X	X	X	X
Caries Size	X	X	X	X	X	X	X	X	X	0	X	X	X	X	X	X
Peri. Abs.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Enam. Hyp.	X	X	X	X	X	X	X	X	X	0	X	X	X	X	X	X
Calculus	X	X	X	X	X	X	X	X	X	0	X	X	X	X	X	X
Periodont.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Abrasion	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Intravit. Ch.	X	X	X	X	X	X	X	X	X	0	X	X	X	X	X	X

Caries Loc. = caries location; Peri. Absc. = periapical abscess; Enam. Hyp. = enamel hypoplasia; Periodont. = periodontal disease; Intravit. Ch. = intravital chipping;

and the proximal part of the right humerus, and 345 beads (once part of a necklace) made of various materials including carnelian, stone, gold, in the upper body half and between the legs of individual (all SAC5 378); charcoal between the legs (SAC5 399/2017); one exceptionally well-preserved finger ring with integrated scarab, gold, silver and steatite (scarab) between the legs (SAC5 388); four square pieces (inlays?) of an unclear material (bone?), next to femur (SAC5 429); one dish (SAC5 345/2017) and one pot sherd (SAC5 346/2017) in the feet area, two flowerpots (SAC5 350/2017 and 351/2017) to the south-west of the individual, one sherd to the north of the individual's feet (SAC5 357/2017), one lid or miniature-dish, in dish SAC5 345/2017 (SAC5 358/2017); one complete scarab, steatite, in lower leg area (SAC5 387);

Notes: -

6.3.4.3 Summary results Feature 5a/b

Feature 5a/b held at least 11 individuals (Fig. 6.38, Table 6.7) from the mid- to late 18th Dynasty still more or less *in situ* (Budka 2017b; 2017c). The burials Ind. 145 and Ind. 162 in Feature 5a represent the oldest burials from Thutmoseid times (see Chapter 8), followed by Ind. 300, Ind. 324 and Ind. 297 that

were found on the chamber floor of Feature 5b, sealed by debris and flood levels. Ind. 260 was probably interred soon after (see Chapters 7 and 8). Ind. 245, Ind. 259, Ind. 279 and Ind. 323 were placed in the now connected Feature 5a/b at a slightly later point. It remains unclear, when the child, Ind. 299, was buried in the chamber (see Chapter 8).

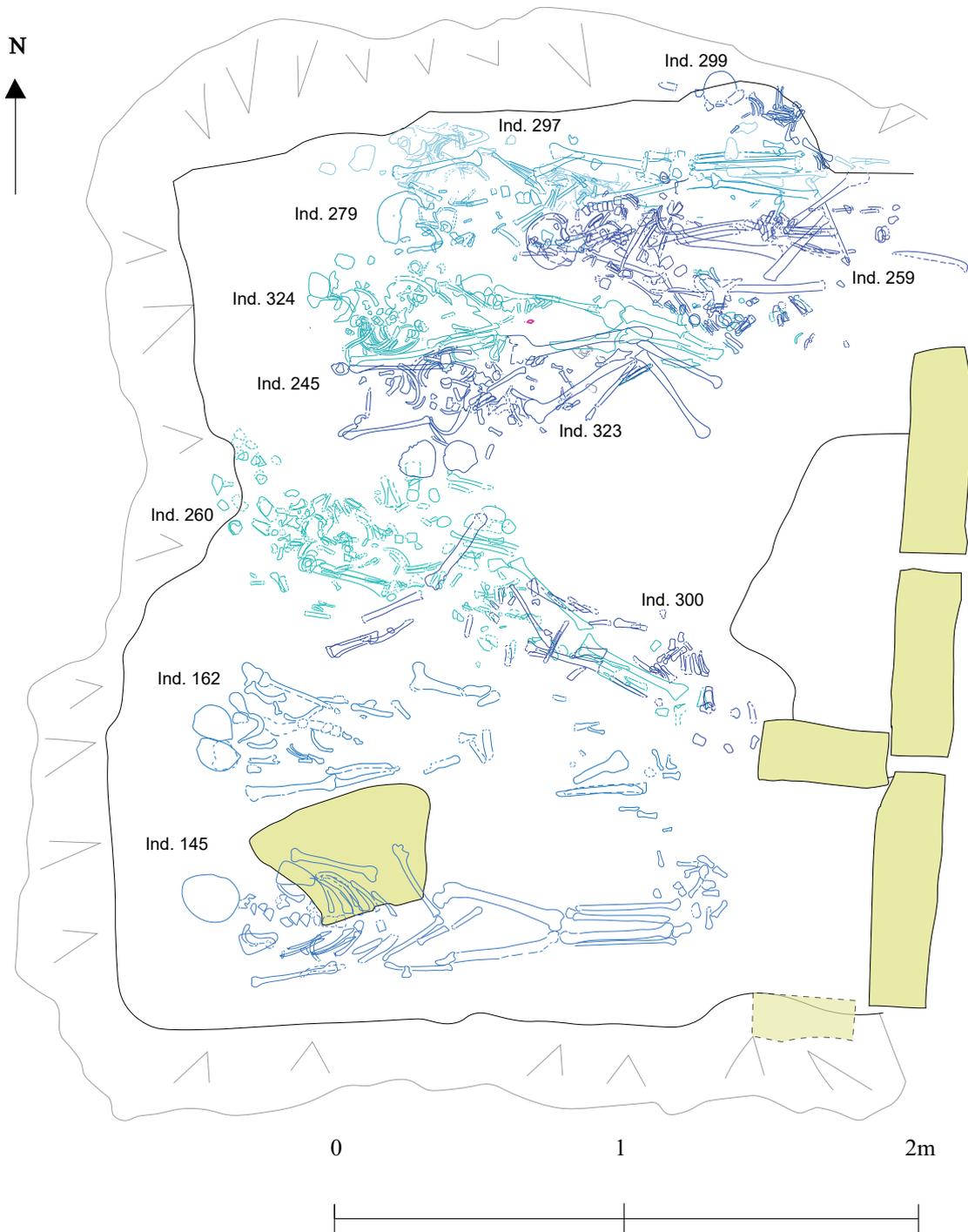


Figure 6.38: human remains in Feature 5a/b (illustration: P. Heindl, ©AcrossBorders).

Individual no.	Sex	Age range	Mean age	Age class	approx. height
<i>Feature 5a</i>					
145	male	30-45 yrs.	37.5 yrs.	adult-mature	164.3cm
162	indeterminate	>35 yrs.	57.5 yrs.	adult-senile	f: 154.6cm / m: 160.6cm
<i>Feature 5b</i>					
245	female	25-35 yrs.	30 yrs.	adult	157.5cm
259	female	25-35 yrs.	30 yrs.	adult	150cm
260	indeterminate	25-45 yrs.	35 yrs.	adult-mature	f: 152.7cm / m: 159.5cm
279	female	>35 yrs.	57.5 yrs.	adult-senile	161.3cm
297	female	25-45 yrs.	35 yrs.	adult-mature	-
299	-	6-9 mths.	7.5 mths	Infant I	-
300	male	30-45 yrs.	37.5 yrs.	adult-mature	165cm
323	-	8-9 LM	8.5 LM	foetus	-
324	female	25-35 yrs.	30 yrs.	adult	153.8cm

Table 6.7: sex, age and approx. height of the 11 distinguishable individuals in Feature 5a/b.

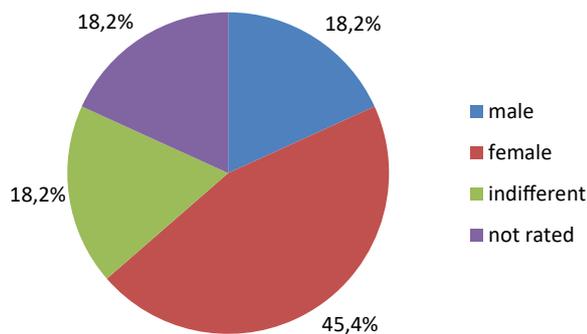


Figure 6.39: percentage of males, females, indeterminate individuals and unrated individuals within Feature 5a/b, N=11.

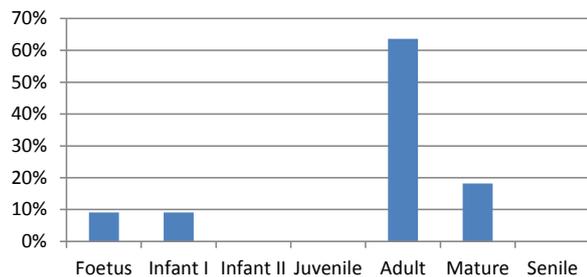


Figure 6.40: age class distribution within Feature 5a/b, N=11.

Feature 5a/b held 18.2% males, 45.4% females, 18.2% indeterminate individuals and 18.2% children, who were not classified (Fig. 6.39, Table 6.7).

Feature 5a/b held 9.1% foeti, 9.1% Infant I, 63.6% adults and 18.2% mature individuals (Fig. 6.40, Table 6.7).

Female heights ranged from approx. 150cm to 161.3cm and the two males were approx. 164.3cm and 165cm tall (Table 6.7).

The remains in Feature 5a/b were mostly eroded. None of the evaluated fully grown individuals showed signs of intravital chipping (N=5). Periodontal disease was present in 83.3% (N=6) and calculus in 80% (N=4) of the fully grown individuals. Ind. 259 had developed a *foramen caecum* on tooth 48, and Ind. 245 was affected by spotted enamel defects on teeth 17 and 27, but none of the investigated individuals showed signs of linear enamel hypoplasia (N=6). 33.3% (N=6) had formed a periapical abscess: Ind. 145 at the tip of the lower, first molar and Ind. 162 at the tip of the lower right canine, which must have been one of the last two intravitaly lost teeth of the mandible. Caries was only present in Ind. 145 (20%, N=5), who suffered from at least peppercorn-sized interproximal caries between teeth 16 and 17, and 26 and 27 respectively, and occlusal peppercorn-sized caries on tooth 47. 28.6% (N=7) were affected by ante-mortem tooth loss. Slight porotic changes on the cranial vault (*cribra cranii*) were recorded in 37.5% (N=8) and signs of *cribra orbitalia* in 28.6% of the cases (N=7). The infant, Ind. 299, not only showed slight signs of porotic hyperostosis and *cribra orbitalia*, but also endocranial changes (perisinusitis) in the occipital part of the sagittal sinus and the left and right sigmoid sinus. No other endocranial changes including haemorrhagic

Table 6.8: bone modifications, number (N) of investigated individuals and number (N) and percent (%) of affected individuals in Feature 5a/b; FGI=fully grown individuals.

Modification	Number of investigated individuals (N)	Number (n) and percent (%) of affected individuals
Intravital chipping	5	0 (0%)
Periodontal disease (only FGI)	6	5 (83.3%)
Calculus (only FGI)	5	4 (80%)
Enamel hypoplasia	6	2 (33.3%)
Periapical abscess (only FGI)	6	2 (33.3%)
Caries	5	1 (20%)
Ante-mortem tooth loss (only FGI)	7	2 (28.6%)
Porotic hyperostosis	8	3 (37.5%)
Cribr orbitalia	7	2 (28.6%)
Endocranial changes	8	1 (12.5%)
Periosteal reactions	8	0 (0%)
Inflammatory reactions	8	2 (25%)
Spinal osteophytosis (only FGI)	8	4 (50%)
Apophyseal joint degeneration (only FGI)	8	3 (37.5%)
Schmorl's nodes (only FGI)	7	2 (28.6%)
Disc prolapse (only FGI)	7	0 (0%)

processes, lesions and perisinusitis could be detected for the other investigated individuals (12.5%, N=8). In addition, Ind. 299 showed inflammatory modifications with no signs of healing on the internal lamina of the left and right parietal (the left parietal bone contained a healed fracture), as well as the frontal bone. Ind. 162 was the only other individual to display signs of inflammation (25%, N=8), in this case in the left maxillary sinus, probably resulting from sinusitis, while no other inflammatory reactions including stomatitis, otitis, pleuritis and osteomyelitis were found. None of the individuals showed periosteal reactions on long bones (N=8) (Table 6.8). However, six calcified artery fragments, which can be associated with atherosclerosis, were found in the right mid-thoracic region of the male individual 145, the same individual that showed typical signs of DISH. In terms of fractures, Ind. 145 contained a healed fracture on the left metacarpal V, Ind. 162 a roundish healed lesion on the right frontal bone and the proximal and distal phalange of the left thumb of Ind. 300 had fused, possibly also due to previous fracture.

50% (N=8) of the individuals in Feature 5a/b showed signs of osteophytosis and 37.5% (N=8) suffered from apophyseal joint degeneration. Complete joint fusion (ankylosis) of the cervical vertebrae CIII and CIV, as well as the right side of CV was present in Ind. 162. In Ind. 145, the left auricular surface of the sacrum appeared unilaterally fused with the pelvic auricular surface and the first coccygeal unit had sacralised. Schmorl's nodes were recorded for 28.6% (N=7), but no signs of disc prolapse were found in any of the individuals (N=7) (Table 6.8). Ind. 279 suffered from a compression fracture in the lumbar region (LV).

The investigated joints of five individuals in Feature 5 revealed no changes at all (grade 1), whereas the other four had developed osteophytes and/or degenerative/productive changes on at least one of the joints. The articular face of the right medial femoral condyle in Ind. 145 and half of the right radial head, as well as the distal articular surface of the left metatarsal I in Ind. 162 contained areas of eburnation.



Figure 6.41: commingled remains from one of the finds bags from Feature 1, the shaft (photo: M. Wohlschlager).

Find no.	SACS	SU	Feature	Not identifiable	Animal bone	Human bone	Identified human bone fragments
156/2015	055	1	50-75%	<25%	25-50%	skull, teeth, clavicle, ribs, vertebrae, os coxae, ulnae, radii, femur, patellae, tibia, fibula, carpals, metacarpals, tarsals, metatarsals, phalanges	
166/2015	056	1	>75%	-	<25%	skull, tooth, radius, patella, phalanges	
175/2015	057	1	50-75%	<25%	25-50%	skull, teeth, ribs, vertebra, radius, patella, tibia, metacarpal, tarsal, phalanges	
181/2015	058	1	50-75%	-	25-50%	cranium, tooth, rib, vertebrae, sacrum, phalanges	
185/2015	059	1	50-75%	<25%	25-50%	skull, teeth, hyoid, clavicle, rib, vertebrae, sacrum, os coxae, humerus, ulna, radii, tibia, carpals, metacarpals, tarsals, metatarsals, phalanges	
194/2015	060	1	50%	<25%	50%	skull, teeth, scapula, vertebrae, os coxae, humerus, ulna, radius, femur, patellae, tibia, fibula, carpals, metacarpals, tarsals, phalanges	
202/2015	061	1	50-75%	<25%	25-50%	cranium, ribs, vertebrae, os coxae, radius, fibula, carpals, metacarpals, tarsals, phalanges	
209/2015	062	1	75%	-	25%	skull, maxilla, mandible, radius, tibia, carpal, metacarpals, tarsal, phalanges	
216/2015	063	1	50-75%	<25%	25-50%	skull, mandible, teeth, ribs, sternum, vertebrae, os coxae, humerus, ulna, radius, femur, patella, tibia, carpals, metacarpals, tarsals, metatarsals, phalanges	
225/2015	064	1	>75%	<25%	<25%	skull, mandible, teeth, scapula, vertebrae, os coxae, humerus, ulnae, radius, femur, patella, tibia, carpals, metacarpals, tarsal, phalanges	
233/2015	065	1	50-75%	-	25-50%	skull, teeth, scapula, ribs, vertebrae, os coxae, humerus, ulna, radius (distal epiphysis), tibia, carpals, metacarpal, tarsals, phalanges	
240/2015	066	1	50-75%	-	25-50%	skull, mandible, scapula, rib, vertebrae, radius, ulna, femur, patella, carpals, phalanges	
246/2015	067	1	50%	<25%	50%	skull, vertebrae, sacrum, ulna, femur, carpals, metacarpals, phalanges	
248/2015	067	1	75%	-	25%	skull, rib, vertebra, humerus, radius, femur, metacarpal, phalanges	
251/2015	068	1	50%	<25%	50%	skull, mandible, teeth, scapula, clavicle, ribs, vertebrae, sacrum, os coxae, humerus, ulna, radius, femur, patellae, tibia, fibula, carpals, metacarpals, tarsals, metatarsals, phalanges	
257/2015	069	1	50%	-	50%	skull, teeth, ribs, sternum, vertebrae, os coxae, femur, tarsals, phalanges	
261/2015	070	1	25-50%	<25%	50-75%	skull, mandible, teeth, ribs, scapula, clavicle, sternum, vertebrae, sacrum, os coxae, humerus, ulna, radius, femur, patella, tibia, fibula, carpals, metacarpals, tarsals, metatarsals, phalanges	
270/2015	070	1	25-50%	-	50-75%	skull, mandible, teeth, scapula, clavicle, ribs, vertebrae, sacrum, os coxae, humerus, ulna, radius, patella, tibia, fibula, carpals, metacarpals, tarsals, phalanges	
287/2015	071	1	50%	-	50%	skull, mandible, teeth, scapula, vertebrae, ulna, femur, patella, tibia, carpals, tarsals, metatarsals, phalanges	
006/2016	101	1	-	-	100%	skull, mandible, tooth roots, scapula, ribs, vertebra, radius, phalanges	
010/2016	101	1	-	-	100%	tooth, scapula, ribs, vertebrae, carpal, tarsal, phalanges	

Table 6.9: shaft findings (Feature 1).

6.3.5 Commingled remains

Each feature of Tomb 26 hosted a number of commingled remains that could not be assigned with certainty to any of the distinguishable individuals.

Feature 1, the shaft, did not reveal any *in situ* burials. The discovered commingled remains probably derived from the mid- to late 18th Dynasty (ceramics), the early and late Ramesside period, the pre-Napatan era and the Napatan era and have possibly been disturbed more than once (Budka 2017c; see also Chapter 8). They were mixed with animal bone fragments (Table 6.9) and the vast majority of bones ranged from mere grain-size to a maximum of *approx.* 2cm (Fig. 6.41). All of the fragments were very poorly preserved and none of them could be rejoined.

The remains within the upper shaft refill (SU 055-SU 069) were too finely fragmented to enable assessment of a minimum number of individuals (MNI). The number of fully grown and fused axes (fragments) as the most represented human element, in addition to the assessed age classes for the existing children's remains results in a MNI within the lower shaft refill (SU 070, SU 071 and SU 072).

The MNI on the bottom layer of shaft (SU 070 and SU 071) and the entry area (SU 072) is seven:

- 1 foetus/neonatus (SU 070/071)
- 2 infants: 3-5 yrs. and 3-10 yrs. (SU 070/071)
- 1 infant-adult: 12-25 yrs. (SU 070)
- 2 adult: >26 yrs. (SU 070)
- 1 individual of unknown age: >12 yrs., probably adult (SU 070)

The MNI within the plundered shaft refill, also present in Feature 2 (SU 073-SU 075, SU 101) is five:

- 1 foetus-infant: <18 mths. (SU 073)
- 1 infant: 3-12 yrs. (SU 074)
- 1 juvenile (SU 073)
- 2 adults: >25 yrs. (SU 073 and 074)

The total MNI in SU 070-SU 075 and SU 101 is 8.

Features 2 (Table 6.10), 3 (Table 6.11), 4 (Table 6.12), 6 (Table 6.13) and 5 (Table 6.14) also contained a number of fragmented commingled remains, which could not be directly assigned to any of the identified individuals. However, it is possible that they still *could* belong to at least one of the recovered individuals.

Find no. SACS	SU	Find location	Identifiable pieces	Un-identifiable cranial fragments (approx. no.)	Un-identifiable long bone fragments (approx. no.)	Un-identifiable other fragments (approx. no.)
300/2015	073		fragments of: cranium, mandible, tooth, clavicle, scapula, sternum, ribs, vertebrae, os coxae, humerus, radius, ulna, carpals, metacarpals, carpal phalanges, femur, tibia, fibula, tarsals, metatarsals, tarsal phalanges	-	-	50
309/2015	074		fragments of: cranium, mandible, tooth, clavicle, scapula, ribs, vertebrae, os coxae, humerus, radius, ulna, carpals, metacarpals, carpal phalanges, femur, tibia, tarsals, metatarsals, tarsal phalanges			
315/2015	075		fragments of: skull, tooth, clavicle, metacarpal, phalange, vertebra, and ribs	-	-	-
013/2016	102	plundered sediment	fragments of: permanent tooth, vertebra, metacarpal I (neonate), fibula	20	20	-
016/2016	103		right orbit, left and right temporal bone, left and right maxilla; fragments of: parietal, tooth, left and right petrous bone, first right rib, atlas, thoracic vertebrae, sacrum, iliac crest, left distal radius, proximal femur, distal femur, proximal tibia, tibial shaft, left and right distal tibia, 4 fibula shafts, left distal fibula, various carpal and tarsal bones	20	20	20
018/2016	104		right orbit, ramus of left mandible, left patella, left calcaneus; fragments of: tooth, cranium (infant, possibly frontal bone), occipital, scapula, first right rib, thoracic vertebrae, iliac crest, coccygeal, various carpal and tarsal bones, right proximal tibia, fibula shaft	20	15	30
020/2016	105		fragments of: cranium, maxilla, mandible (including alveolar cavities of incisors), teeth, clavicle, ribs, right proximal ulna, left distal fibula, thoracic vertebrae (child/adolescent), right lateral cuneiform, medial cuneiform, pisiform	<10	<10	-
022/2016	106		2 right zygomatic bones, 3 adult dens axis, 1 subadult dens axis, left patella; fragments of: squamous, parietale, 2 nasal bones, tooth, clavicle, ribs, vertebrae, right proximal ulna, radial shaft, left and right iliac crest, tarsal bones, tarsal phalanges	30	50	-
029/2016	107	entrance area	upper left molar (root not yet fully developed - child),	-	-	-
029/2016	107	centre of chamber	right patella, 3 right tali (incl. 1 sub-adult), 3 left tali, right calcaneus (subadult); fragments of: ribs, vertebrae, right distal femur, right distal tibia	>50	>50	>50
039/2016	107	north of entrance	left mastoid process (gracile); fragments of: tooth, right frontal, manubrium, thoracic vertebrae, coccygeal, anterior superior iliac spine, iliac crest, acetabulum (child), femur, <i>approx.</i> 30 carpal and tarsal bones (including 1 talus)	20	20	20

Table 6.10: list of commingled remains in Feature 2.

Find no. SAC5	SU	Find location	Identifiable pieces	Un-identifiable cranial fragments (approx. no.)	Un-identifiable long bone fragments (approx. no.)	Un-identifiable other fragments (approx. no.)
142/2016	107	entrance area	-	-	-	20
032/2016	108	northeastern corner	2 right patellae, right talus, 4 carpals, 2 metacarpals, 13 carpal phalanges, 7 tarsals, 7 metatarsals, 7 tarsal phalanges; fragments of: iliac bone, proximal femur, right fibula shaft	-	-	-
040/2016	109	northwestern corner, profile	right iliac bone (male), left and right ischial bone (male), 2 carpal phalanges, metatarsal; fragments of: parietal, right maxilla including both deciduous molars and one permanent molar in development (child), ribs, lumbar vertebrae (child), left acetabulum (male), proximal fibula	-	-	-
060/2016	109	northwestern corner, from sieving	-	-	-	10
362/2016	109	northwestern corner, profile	right parietal, occipital (child), left mandible, right iliac bone (child), 2 cervical vertebrae, 2 thoracic vertebrae; 2 carpals, 4 metacarpals, 2 carpal phalanges, 2 tarsal phalanges; fragments of: ribs (adult and child) thoracic vertebrae (child) lumbar vertebrae, left acetabulum, right distal tibia	-	-	-
047/2016	110	northwestern corner, profile	-	-	-	30
073/2016	110	northwestern corner, profile	-	-	-	30
084/2016	111	northwestern corner, profile	-	-	-	3
133/2016	112	to the west of Ind. 3, in front of entrance to Feature 5	fragment of left calcaneus	-	-	-
138/2016	113	southwestern corner	tooth 13, one deciduous canine (child), one carpal phalange, left tibia (child), right talus; fragments of: ribs (child), left proximal ulna (child)	-	-	20
180/2016	114	entrance area	tooth 15, axis, cervical vertebra, 1 carpal, 2 carpal phalanges, left patella; fragments of: ribs	-	-	20
173/2016	115	southeastern corner	-	-	-	10
154/2016	116	along eastern wall	right proximal fibula fragment	-	-	-
160/2016	117	entrance area	right temporal bone, 1 carpal, left patella, left and right talus, left and right calcaneus, 3 tarsals, 4 metatarsals; fragments of: right parietal, ribs, cervical and thoracic vertebrae, right radius (shaft and ends), metacarpals, carpal phalanges, right femur (shaft and ends), tarsal phalanges	-	-	30
164/2016	118	centre of chamber	2 carpals, 4 carpal phalanges, left talus, 1 metatarsal, 1 tarsal phalange; fragments of: right patella	-	-	-
171/2016	119		right triquetral bone, lower left deciduous incisor (child), 2 ribs (child), carpal phalange (child); fragment of right mandible, tooth root, vertebra (child/adolescent), distal humerus, proximal femur (child/adolescent), metatarsals, tarsal phalanges	-	30	2
195/2016	120	entrance area, underneath "entrance stone"	-	-	-	5
196/2016	121	southwestern corner	-	-	-	5
190/2016	122	behind stone in southern wall; from flood levels	left femur, right calcaneus; fragments of: cranium, distal radius, right calcaneus	-	-	1
199/2016	123	southwestern corner	-	-	-	5
217/2016	125	centre of chamber, to the east of Ind. 4	right patella; fragment of right fibula shaft	-	-	-
218/2016	125	entrance area, southwestern part of SU	cervical vertebra, metatarsal	-	-	-
237/2016	129	entrance area, underneath threshold	-	-	-	10
262/2016	132	northwestern corner, profile, by northern wall	-	-	-	10
264/2016	133	northwestern corner, profile	-	-	-	10
365/2016	133	northwestern corner, profile, above Ind. 1	2 metatarsals	-	-	10
266/2016	134		-	-	-	10
281/2016	137	eastern part of "leg trench", from sieving	-	-	-	20

Table 6.10: continued.

Find no. SAC5	SU	Find location	Identifiable pieces	Un-identifiable cranial fragments (approx. no.)	Un-identifiable long bone fragments (approx. no.)	Un-identifiable other fragments (approx. no.)
311/2016	137	eastern part of "leg trench", underneath vessel 310/2016	proximal half of left ulna (gracile)	-	-	-
312/2016	137	eastern part of "leg trench", underneath 309/2016	-	-	-	5
318/2016	137	eastern part of "leg trench"	fragment of thoracic vertebra	-	-	5
323/2016	137	eastern part of "leg trench"	2 carpal phalanges, 1 tarsal phalange	-	-	-
343/2016	137	eastern part of "leg trench"	-	-	-	5
363/2016	137	eastern part of "leg trench", to the west of 364/2016	right mandible (child); fragment of clavicle shaft (child)	-	-	-
301/2016	140	northwestern corner profile	2 temporal bones, lower left molar (root development incomplete, child), 1 carpal, 2 metacarpals and 5 phalanges, right calcaneus, 1 metatarsal; fragments of: left and right frontal, ribs (including 1 child rib), distal half of left humerus (robust), left distal ulna, right distal ulna, left acetabulum, femur shaft (child), left patella, proximal fibula, thoracic vertebrae, sacrum	-	-	30
307/2016	140	northwestern corner, profile	2 ribs, sacrum (male), distal half of left femur (robust); fragment of right parietal	-	-	-
396/2016	145	southwestern corner	-	-	-	5
398/2016	146	to the west of Ind. 3, along western wall, in front of entrance to Feature 5	8 tarsal phalanges	-	-	-
004/2017	153	western part of SU	fragments of: cranium, tarsal phalanges	-	-	-
007/2017	153	eastern part of SU	fragments of: parietal, molar root, vertebrae	-	-	30
- /2016	170	to the west of Ind. 3	left frontal, left orbit, left parietal, left mastoid process, left temporal, 3 tarsals, 6 metatarsals, 5 phalanges; fragments of: left maxilla, right mandible, tooth root (C/P?), proximal half of left clavicle, ribs, left distal fibula, left and right talus, left calcaneus	10	-	-

Table 6.10: continued.

Find no. SAC5	SU	Find location	Identifiable pieces	Un-identifiable cranial fragments (approx. no.)	Un-identifiable long bone fragments (approx. no.)	Un-identifiable other fragments (approx. no.)
292/2015	072	entrance area	fragments of: skull, mandible, tooth, clavicle, vertebra, carpal, carpal phalanges, patella	-	-	-
296/2015	072	entrance area	fragments of: skull, mandible, teeth, scapula, ribs, vertebrae, humerus, os coxae, femur, tarsals, metatarsals, tarsal phalanges	-	-	-
002/2016	100	from pile of modern robbery (plundering)	fragments of: occipital, parietal, mandible, tooth, scapula, os coxae, humerus, ulna, carpal, tarsal, metatarsal I; 10 burnt bone fragments;	40	200	15

Table 6.11: commingled fragments in Feature 3, the entrance area.

Find no. SAC5	SU	Find location	Identifiable pieces	Un-identifiable cranial fragments (approx. no.)	Un-identifiable long bone fragments (approx. no.)	Un-identifiable other fragments (approx. no.)
329/2016	143	"leg trench", eastern part	fragments of: proximal tibia, fibula shaft,	-	-	-
345/2016	143	"leg trench" below bones	-	-	-	5
347/2016	143	"leg trench", lower level	fragments of: distal ulna, 3 tarsals, 3 metatarsals, 3 tarsal phalanges	-	-	-
374/2016	143	"leg trench", eastern part; south of zir 372/2016	right talus, 2 tarsals, 5 metatarsals, 3 tarsal phalanges	-	-	-
384/2016	143	"leg trench", eastern part; content zir 372/2016	-	-	-	5
386/2016	143	"leg trench", eastern part; in zir vessel; from sieving	tarsal	-	-	5
393/2016	143	"leg trench", eastern part; trench along northern wall	right temporal, left patella, tarsal; fragments of: right distal femur	-	5	-
001/2017	150	-	tarsal phalange	-	3	-
002/2017	151	beside leg bones at BS of SU	fragments of: tooth (child), talus, metacarpals, carpal phalanges, metatarsal, tarsal phalanges	-	-	-
010/2017	153	cf. SU 137 in eastern part of the trench, 2016	right temporal, right mandible, right maxilla, cervical vertebra (III-VII); fragments of: cranium, maxilla, tooth 15, 16 and 17; mandible, vertebrae, 2 tarsals, metatarsal	20	20	100
014/2017	154	southwestern corner of trench	-	-	-	5
015/2017	154	western edge of trench	fragments of: iliac bone	-	-	-
016/2017	154	35cm to the east of western corner of trench	fragments of: carpal and tarsal bones	-	-	-
017/2017	154	lower part of SU	fragments of: carpal and tarsal bones	-	-	-
018/2017	154	from sieving	right temporal (neonate); fragments of: carpals, metacarpals (Infant I and adult-senile), tarsal bones	-	-	-
019/2017	154	eastern part of SU	fragments of: right calcaneus, metacarpal	-	-	-
027/2017	155	from sieving	tooth 13; fragments of: right lateral clavicle, right distal fibula, metatarsal, tarsal phalanges	-	-	20
033/2017	155	against northern wall, below femur 3-033/2017	distal half of left tibia, fragment of fibula	-	-	-
033/2017-1	155	at eastern edge; southeastern corner	1 carpal, 2 metacarpals and 4 carpal phalanges	-	-	-
033/2017-2	155	along eastern edge	-	-	-	4
033/2017-4	155	partly above western edge, sliding into Feature 4	distal half of right humerus	-	-	-
033/2017-5	155	along western edge	right iliac bone (Infant I-II), left ischial bone (Infant I-II), left calcaneus	-	-	-
033/2017-6	155	southwestern corner, below 033/2017-5	fragment of scapula	-	-	-
033/2017-7	155		lumbar vertebra, fragment of left clavicle shaft	-	-	-
033/2017-8	155	parallel to southern edge	left ischial bone	-	-	-
033/2017-9	155	along southern edge	fragments of: left iliac bone, distal half of right femur (Infant I), proximal left tibia, distal left tibia, vertebrae	-	-	-
033/2017-10	155	parallel to eastern edge	right zygomatic bone, left patella, left tibia	-	-	-
033/2017-11	155	eastern edge	right radius (Infant I-II, probably same child as in 033/2017-13 and -15)	-	-	-
033/2017-12	155	partly below vessel 032/2017; along northern wall	proximal half of right femur	-	-	-
033/2017-13	155	close to western edge	right fibula (Infant I-II, probably same child as in 033/2017-11 and -15)	-	-	-
033/2017-14	155	along southern edge of trench	distal half of left ulna	-	-	-

Table 6.12: list of commingled remains from Feature 4.

Find no. SAC5	SU	Find location	Identifiable pieces	Un-identifiable cranial fragments (approx. no.)	Un-identifiable long bone fragments (approx. no.)	Un-identifiable other fragments (approx. no.)
033/2017-15	155	parallel to southern edge, southeastern corner	left femur (maybe same individual as in 033/2017-12), right tibia (maybe same individual as in 033/2017-10); left fibula (Infant I-II, probably same child as in 033/2017-11 and -13); fragments of: fibula	-	-	-
034/2017	155	various locations	-	-	-	30
035/2017	155	southwestern corner	-	-	-	5
039/2017	155	from vessel 032/2017	-	-	-	5
040/2017	156	western part	lateral part of right occipital (Infant), mandibular molar crown - root not yet developed (Infant), proximal half of right radius, lumbar vertebra	-	-	-
043/2017	156	from sieving and various locations	-	-	-	10
052/2017	156	eastern part of SU	distal half of left humerus (Infant I), proximal half of left femur (Infant I-II), left tibia; fragments of: fibula, right talus, right calcaneus, segment of sacrum	-	-	-
-/2017	156	western part of SU	mid section of mandible (Infant, probably same child as in 040/2017), mandibular molar crown - root not yet developed (Infant, probably same child as in 040/2017), mandibular molar crown in development (Infant, probably same child as in 040/2017), proximal half of right clavicle; fragments of: proximal radius (probably the matching left radius to the right radius in 040/2017)	-	-	-
061/2017	157	below entrance to Feature 6	left patella	-	-	-
062/2017	157		tooth 54 (age: approx. 1 yr.), distal right humerus (yellow colour staining)	-	-	-
067/2017	157	eastern part of SU	2 right patellas (one of them matches the left patella in 061/2017), 1 left patella	-	-	-
071/2017	157	eastern part	fragments of: a vertebra (child)	-	-	10
082/2017	158	entrance to Feature 6, eastern part	left talus, proximal half of left calcaneus, 2 carpals, 2 metacarpals, 1 carpal phalange, 7 tarsals, 8 metatarsals, 1 tarsal phalange	-	-	-
085/2017	158	western section, BS	left patella, distal right fibula	-	-	-
096/2017	158		basal part of occipital (probably part of Ind. 77), axis, lumbar vertebra, sacrum (robust, sacralisation of L5), 2 distal halves of left humerus (both gracile), proximal half of right radius, metacarpal, right calcaneus, 3 metatarsals; fragments of: right mandible (Infant I, approx. 3 yrs.), coracoid process of right scapula, ulnar shaft, right femur shaft	-	-	5
155/2017	158		-	-	-	10

Table 6.12: continued.

Find no. SAC5	SU	Find location	Identifiable pieces	Un-identifiable cranial fragments (approx. no.)	Un-identifiable long bone fragments (approx. no.)	Un-identifiable other fragments (approx. no.)
125/2017	160		1 left pubic (child), 2 carpal phalanges (child), 1 tarsal, 3 tarsal phalanges; fragments of: ribs	-	-	-
127/2017	161		tooth 25 and 27, right patella (adult, but very small: 24mm width), right talus, 1 metacarpal, 2 carpal phalanges, 1 tarsal (adult navicular - very small!), 4 metatarsals; fragments of: left maxilla, distal end and shaft of left tibia, left talus	-	-	-
129/2017	161	northeastern corner	1 left fibula, 1 metatarsal	-	-	-
143/2017	161		1 right talus	-	-	-
139/2017	162	in southern baulk	-	-	-	5
156/2017	162	stray finds	-	-	-	10

Table 6.13: list of commingled remains from Feature 6.

Find no. SAC5	SU	Find location	Identifiable pieces	Un-identifiable cranial fragments (approx. no.)	Un-identifiable long bone fragments (approx. no.)	Un-identifiable other fragments (approx. no.)
351/2016	140	northwestern corner, profile	1 left orbit (child), left patella, right patella, distal half of right fibula, 1 carpal, 2 metatarsals; fragments of: parietal and ribs	-	-	20
097/2017	190			-	-	10
102/2017	190		2 right orbits (1 adult, 1 child), 1 left parietal, 1 right temporal, left zygomatic, 3 permanent molars (adult), 2 permanent molars and 1 permanent canine and 1 pre-molar in development (child, 6-8 yrs.), 1 deciduous canine and 1 deciduous molar (child, 6-8 yrs.), left scapula, 8 carpals, 5 metacarpals, left patella, distal half of left tibia, left talus, left calcaneus, 7 tarsals, 8 metatarsals, tarsal phalanges; fragments of: frontal (child), right parietal (1 adult, 1 child), left lateral occipital, right zygomatic bone, left maxilla (1 adult, 1 child 6-8 yrs.), right mandible (child), mid-section of mandible, tooth roots, proximal half of left clavicle, axis, cervical, thoracic and lumbar vertebrae (adult), vertebrae (child), proximal and distal ends of right humerus, proximal and distal end, as well as shaft of right radius, ulna shaft (child), carpal phalanges, acetabulum, proximal femur, femur shaft (child), tibia shaft (child), proximal and distal end, as well as shaft of left fibula	-	-	30
103/2017	190		1 right mastoid process, 1 right temporal, 2 left temporals, 2 permanent maxillary right molars (adult), 1 deteriorated deciduous molar (child), 2 right scapulas, 1 cervical, 2 thoracic and 4 lumbar vertebrae, 3 metacarpals, 2 carpal phalanges, left patella, 4 tarsals, 1 metatarsal, 4 tarsal phalanges; fragments of: right parietal (child), lateral left occipital, right mandible, proximal end and shaft of radius, ulna shaft, ilium, metatarsal (child)	-	-	-
163/2017	190	southern baulk	1 metacarpal (child)	-	-	-
097/2017	190	flood levels	fragments of: parietal	-	-	-
105/2017	191		2 right orbits (1 adult, 1 child), right maxilla with tooth 12, 13 and 14, 3 cervical and 2 thoracic vertebrae, 2 carpals, 4 metacarpals, 3 carpal phalanges, left talus; fragments of: parietal, proximal end of humerus, left calcaneus	-	-	-
109/2017	191	southeastern corner	1 right talus, 1 right calcaneus, 1 tarsal, 1 tarsal phalange	-	-	-
111/2017	191	along eastern wall + centre	1 right temporal, 1 right zygomatic, 2 roots of permanent teeth, 1 molar in development (child), 2 thoracic vertebrae, 3 carpals, 5 metacarpals, 5 phalanges (adult and child), left patella, 1 tarsal, 1 tarsal phalange; fragments of: proximal end and shaft of humerus, left talus,	-	-	-
116/2017	191	along southern wall	tooth 15 in development (child, 6-8 yrs.), distal half of left ulna (child), proximal half of left tibia (child), 3 metatarsals; fragments of: right parietal (child), proximal and distal ends of right clavicle (child), ribs (child), vertebrae (child), proximal end and shaft of humerus (child), shaft of radius (child), shaft of right tibia (child)	-	-	-
117/2017	191	close to flowerpot 347/2017 in northwestern corner	1 right patella	-	-	-
118/2017	191	in northwestern corner	1 right mastoid process, 1 right zygomatic; fragments of: proximal end of humerus, atlas	-	-	-
246/2017	191	northern part, from sieving	-	-	-	15
258/2017	191	northern part, from sieving	-	-	-	10
262/2017	191	northern part, from sieving	-	-	-	10
295/2017	191	from sieving	-	-	-	15
332/2017	191	from sieving	-	-	-	-
-/2017	191	northeastern corner, above entrance to Feature 5	fragment of fibula shaft	-	-	-

Table 6.14: list of commingled remains in Feature 5.

The commingled remains in Features 4 and 6 must have been relocated in one or more flooding events and the majority, including the isolated infant bones, were probably originally placed in Feature 2.

6.3.6 Summary results

Tomb 26 revealed 36 distinguishable individuals in Features 2, 4, 6 and 5a/b, as well as a minimum number of eight individuals in Feature 1, the shaft, stretching from the mid-18th Dynasty at least to the Ramesside period. In total, ten males, twelve females and eight indeterminate individuals were identified, while six individuals could not be classified, either because they were children (five individuals) or because of the limited number of remains

(one individual). The 36 distinguishable individuals were assigned to the following age classes: one foetus, one Infant I, three Infant II, eleven adults and eight mature, and twelve fully grown individuals could not be assigned to a specific age class (a detailed list of age and sex markers of individuals from Tomb 26 is available at: <https://doi.org/10.5282/ubm/data.218>).

Table 6.15 sums up the postcranial measurements for individuals from all features.

Individual / Finds bag no.	left humerus			right humerus			left radius		right radius		left ulna		right ulna		left femur		right femur		left tibia		right tibia		left fibula		right fibula	
	length	head height	head width	length	head height	head width	length	head diameter	length	head diameter	length	length	length	head diameter	length	head diameter	length	length	length	length	length	length	length	length	length	
<i>Feature 2</i>																										
1	-	-	-	300	37	35	-	20	228	20	-	255	395	39	-	39	335	340	-	-	-	-	-	-	-	-
2	310	-	-	-	-	-	22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3b	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	-	-	-	305	39	-	-	-	-	19	-	265	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	-	-	-	-	-	-	-	-	-	-	167	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	-	-	-	-	-	-	150	-	-	-	166	-	269	-	-	-	-	-	-	-	-	-	-	-	-	-
7	-	-	-	-	-	-	-	-	158	-	-	174	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8a	-	-	-	-	-	-	-	-	-	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8b	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9a	-	-	-	-	-	-	-	-	230	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9b	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	-	-	-	305	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Feature 4</i>																										
51	-	-	-	-	325	-	-	-	-	19	-	-	455	-	450	-	-	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-	19	-	-	*	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 6.15: long bone measurements (mm) of individuals in Tomb 26, *three left femurs (445mm, 445mm and 450mm) cannot be assigned to a specific individual, however, they are considered to belong to Inds. 60, 75, 77 or 87, respectively.

Individual / Finds bag no.	left humerus			right humerus			left radius		right radius		left ulna	right ulna	left femur		right femur		left tibia	right tibia	left fibula	right fibula
	length	head height	head width	length	head height	head width	length	head diameter	length	head diameter	length	length	length	head diameter	length	head diameter	length	length	length	length
75	-	-	-	-	-	-	-	-	-	-	-	-	*	-	-	-	-	-	-	-
77	-	-	-	295	-	-	-	-	-	-	-	-	*	-	-	-	-	-	-	-
87	-	-	-	-	-	-	-	-	23	-	-	*	-	-	-	-	-	-	-	-
124	-	-	-	315	38	35	240	-	-	19	262	255	-	38	425	38	-	372	-	-
<i>Feature 6</i>																				
159	315	50	41	325	-	-	250	22	-	23	275	275	458	46	455	-	382	388	-	380
160	285	41	37	-	-	-	-	19	-	-	-	-	-	38	-	-	-	-	-	-
<i>Feature 5a/b</i>																				
145	315	-	-	314	37	35	245	22	245	23	273	274	440	43	428	45	-	371	357	360
162	296	42	37	-	43	-	-	-	-	22	-	-	-	-	-	-	-	-	-	-
245	-	-	-	-	-	-	230	19	241	18	262	-	-	41	425	-	365	365	-	-
259	280	-	-	290	36	35	210	17	215	18	230	235	385	38	-	38	-	-	-	330
260	285	-	-	-	-	-	-	-	228	20	247	259	-	-	-	-	-	-	-	-
279	305	36	34	-	37	33	-	-	-	19	270	270	-	36	460	-	375	370	-	365
297	-	-	-	-	35	32	-	-	-	18	-	-	-	-	-	35	-	-	-	-
299	86	-	-	-	-	-	-	-	-	-	-	-	112	-	-	-	-	-	-	-
300	-	-	-	314	44	-	-	22	-	22	-	-	-	44	-	44	-	374	-	-
323	-	-	-	56	-	-	-	-	-	-	-	-	-	-	60	-	-	53	-	-
324	290	37	35	290	38	36	220	20	222	19	-	240	-	39	425	39	350	345	-	-

Table 6.15: continued.

Female heights range from *approx.* 150cm to 162.9cm with an average of 155.7cm (N=10) and male heights range from *approx.* 163cm to 167.1cm with an average of 164.8cm (N=4).

6.4 Discussion

In general, the remains within Tomb 26 were in a poor condition and appeared deteriorated to a certain degree, particularly in Feature 2 and the top levels of Feature 4 where disturbances such as flooding events caused the most damage (see Budka 2017c; Chapter 8). Nonetheless, a MNI of 36 could be evaluated. The other tombs within the pyramid cemetery SAC5, Tomb 8 with a MNI of 40 and

Tomb 14 with a MNI of 41 individuals, also hold a similar number of distinguishable individuals (Minault-Gout and Thill 2012, 15). At comparable sites, such as Dra Abu el-Naga, Buhen J, Mirgissa MX and Soleb, the average number of burials per tomb lay between 13.5 and 17.5 individuals and the highest number of individuals in one tomb at Aniba is 21 (Näser 2017). Another similar tomb in Tombos, dating to the mid-18th Dynasty, was built for *Siamun* who held the title *scribe reckoner of the gold of Kush*. Here, at least 20 individuals were discovered in the tomb (Smith and Buzon 2018). New Kingdom tombs are known to have been reused (Budka 2017c; Näser 2017) and this certainly took place in SAC5 including Tomb 26 which was in use

Table 6.16: comparison of the age and sex distribution within Tomb 26 and Tomb 8 in SAC5.

	Tomb 26 (MNI 36)	Tomb 8 (MNI 40, 31 investigated individuals)
Sex	10 males 12 females 9 indeterminate 5 children	3 males 5 females 15 indeterminate 8 children
Age	1 foetus (8-9 lunar months) 1 Infant I (6-9 months) 3 Infant II (2x 8-9 yrs., 10-11 yrs.) 11 adult - 8 mature - 12 adult-senile	- 3 Infant I (2x 0-6 months, 3-5 yrs.) 5 Infant II (9-10 yrs., 11 yrs., 12-13yrs., 10-15 yrs., 12-15 yrs.) 3 adult 1 adult-mature 14 mature 3 mature-senile 2 senile

up until the Napatan period (Budka 2017c; Chapter 8). The only other tomb in SAC5 which was investigated in terms of human remains is the neighbouring Tomb 8 (Murail and Adam 2012) and the distribution of age and sex within the two tombs is compared in Table 6.16:

Because of the high number of indeterminate individuals, the slightly higher number of distinguished females than males in Tomb 26 (and also Tomb 8) may be coincidental.

In general, it is believed that in ancient societies *approx.* 20% of all newborn died in the first year of their life (infant mortality rate) and the chance of reaching adulthood was little more than 50% (Filer 1998; Lewis 2007). In the non-elite South Tomb Cemetery at Amarna, for example, 26.1% of the individuals died before they reached the age of seven (Dabbs *et al.* 2015). The percentage of deceased children in Tomb 26 on Sai is 13.9% when taking all the chambers into account. However, this percentage is an underestimation since the commingled remains suggest additional children in the tomb that could not be assigned to a particular feature. When focussing on Feature 5a/b (mid- to late 18th Dynasty), the infant mortality rate is 9.1%. Since no other child remains under the age of 5 years were recovered in Feature 5a/b the infant mortality rate equals the childhood mortality rate (death before the age of 5 years). Interestingly, more than 50 countries including modern-day Sudan still had childhood mortality rates of over 100 per 1000 live births in 1998 (WHO 1999).

In addition to a vast array of typical grave goods, coffin remains and pigments (Fulcher and Budka 2020; Chapter 5), residues of bitumen were detected in one of the ceramic vessels associated with the main burial, Ind. 145 (Feature 5a), as well as next to the individual, along the southern wall, and on its right femur (Fulcher and Budka 2020; Chapter 5). Despite the fact that body wrappings and masks display a certain interest in body preservation in New Kingdom Nubia, there is currently no evidence of mummification processes in this area. The little evidence there is of the practice of using a ritual black anointing liquid which was poured over the outside of a wrapped body was found in shrouds at Aniba and on linen and coffin fragments at Amara West (see Fulcher and Budka

2020). Since no soft tissue or wrappings were found in association with Ind. 145 in Tomb 26, mummification cannot be presumed. However, the use of a ritual black anointing liquid as was the case in Aniba or Amara West seems plausible, and the tight position of the arms and legs could indicate wrapping. The residues from Sai can be dated back to the 18th Dynasty and not only represent one of the earliest definitive identifications of the funerary use of bitumen in the Nile Valley, but also to date the southernmost site where examples have been found (Fulcher and Budka 2020).

6.4.1 Dental health

Food residues in combination with various components from the saliva form dental plaque (calculus) on teeth. This can lead to temporary inflammation of the bone around the tooth and alternating periods of inflammation and recovery result in alveolar recession and eventually tooth loss. Dwelling bacteria within the plaque can also metabolise carbohydrates and produce acidic waste products that start to attack the dental hard tissue (Hillson 2008, 313). The strong cariogenic effect of a diet rich in carbohydrates (particularly sucrose) is well known (White and Folkens 2005, 329; Hillson 2008, 313; Forshaw 2014a). Once the pulp is reached, infections can quickly lead to the formation of an abscess around the apex of the root, followed by ante-mortem tooth loss (Hillson 2008, 313; Mays 2010, 225; Forshaw 2014a). In ancient skeletal material, carious lesions tend to be located between the teeth (often at the cemento-enamel junction), as opposed to the occlusal surface, since abrasives in the food or a “high attrition environment” generally polish the biting surface and wear away small pits and grooves before dental decay can advance (Chazel *et al.* 2005; Mays 2010, 225). Gross attrition is frequently found in all age groups of ancient Egypt and Nubia (Leek 1972; Hillson 1979; Forshaw 2009; 2014b) and this certainly also applies to the individuals in Tomb 26. Studies on Egyptian bread demonstrated the contamination with inorganic particles (Leek 1972, 131), most likely through wind-blown sand, but also from the soil in which the grain was grown, through mudbrick silos that were used for storage of the grain, grinding stones,

and during the process of baking (Forshaw 2009; Gamza and Irish 2010; Forshaw 2014a; 2014b). The only case of caries was present in the adult individual 145 (Feature 5) who displays peppercorn-sized mesial/distal caries on the cervical/approximal surface of the existing molars. Because high attrition and periodontal remodelling can ultimately lead to ante-mortem tooth loss (Hillson 2008, 307, 311; Forshaw 2014a), and ante-mortem tooth loss, periapical abscesses and high abrasion rates which can be connected to caries, are all present in Tomb 26, the frequency of caries on its own is not considered representative for this sample. However, it is likely that pulp cavity exposure accounts for the majority of tooth loss in Tomb 26.

6.4.2 Stress markers

Stress markers on skeletal material allow conclusions about the general state of health. Enamel hypoplasia on teeth, porotic hyperostosis (including *cribra crania* and *cribra orbitalia*), periosteal modifications on long bones and reduced height can reveal non-specific forms of nutritional deficiencies and/or infectious disease (Mays 2010, 179; Roberts and Manchester 2010, 39, 222-240).

Developmental defects of enamel (most commonly expressed as pitted or transverse lines) are frequently encountered in archaeological remains. They are a result of slow or suspended growth during childhood due to metabolic insults such as nutritional deficiencies (e.g. calcium, vitamin D or general malnutrition) and/or various diseases such as fevers, gut parasites, diarrhoea, rickets, scurvy, measles and whooping cough (Goodmann 1991; Larsen 1997; Mann and Hunt 2005, 30; Mays 2010, 228; Forshaw 2014a). Goodman (1991) demonstrated that individuals with enamel hypoplasia are exposed to higher levels of stress than those without and many authors have been able to associate stress and the frequency of enamel defects at the population level (see Mays 2010, 231-232). The permanent tooth of one child (Ind. 5, Feature 2) and two adult individuals (Ind. 2, Feature 2 and Ind. 159, Feature 6) respectively had developed slight enamel hypoplasia (grade 1), which is not considered as pathological. Ind. 245 (Feature 5) was affected by small spotted enamel defects on two of her molars, but none of the investigated individuals in Tomb 26 showed moderate or severe signs of enamel hypoplasia (N=14). This suggests that, in general, they might have enjoyed a rather privileged life. The buccal pit in the lower third molars of Ind. 259 is an example of a so-called *foramen caecum*, which is seen as a nonmetric trait.

Porotic hyperostosis (*cribra cranii* and *cribra orbitalia*) can be associated with specific genetic anaemias such as sickle-cell anaemia or thalassemia, with diseases involving inflammatory processes such as periostitis or injury or, most commonly, with chronic dietary deficiencies in iron or vitamins (White and Folkens 2005, 320; Lewis and Roberts 1997; Ortner 2003,

89; Walker *et al.* 2009). *Cribra cranii* is diagnosed when the cranial vault is thickened and the external surface appears porotic, and porotic modifications of the orbital roof are known as *cribra orbitalia*. The absorption of iron seems to play a key role and a number of authors have shown the connection of porotic hyperostosis with iron-absorbing pathogens, as well as bilharzia (shistosomiasis) and hookworm (see Keita and Boyce 2001). Holland and O'Brien (1997), as well as Roberts and Manchester (2010, 221-247) highlight the importance of incorporating diet, as well as bacterial/parasitic pathogens into a symbiotic model when it comes to the aetiology of porotic hyperostosis. Interestingly, Wapler *et al.* (2003) investigated the relationship between *cribra orbitalia* and anaemia in a Nubian population and found no indication of anaemia in at least 56.5% of *cribra orbitalia* cases but conditions such as inflammation or osteoporosis instead. In all three cases of adults with *cribra cranii* in Tomb 26, the porosity was only slight and located on the occipital bone. One individual additionally showed signs of *cribra orbitalia*, whereas the other gradable one did not and the third one could not be evaluated for *cribra orbitalia*. In the infant, the slight porosity was mainly located on the left and right parietal bone and signs of *cribra orbitalia* were also present. In this case, the healed trauma on the left parietal bone and the signs of inflammation on the endocranial side of the skull may be connected to the development of porotic hyperostosis.

Periostitis (infection of the periosteum) is an inflammation process which manifests itself as fine pitting, longitudinal striation and eventually plaque-like new bone formation on the bone surface, while osteomyelitis (infection of the medullary cavity) is a process of bone destruction and pus formation, as well as bone repair (Roberts and Manchester 2010, 168). Most commonly, bone infections like periostitis and osteomyelitis are the result of nutritional deficiencies, overstraining and trauma, as well as bacterial infection; however, fungi, parasites and viruses can also affect the bone (Roberts and Manchester 2010, 168). Periostitis, in particular, is a common finding in historic remains throughout time (Ortner 2003, 207), but none of the individuals in Tomb 26 showed signs of periostitis or osteomyelitis (N=20).

Compared to neighbouring sites, such as Tombos (Buzon 2006), the general level of stress appears to have been low for the Sai Islanders in Tomb 26, though poor preservation and disturbances may have influenced these results. *Cribra crania* and *cribra orbitalia* rates are often overestimated as erosion can mimic porosities, and the rate of periosteal reactions is often underestimated since any kind of appositions could have disappeared due to erosion.

6.4.3 Calcifications

6.4.3.1 Vascular calcifications

Vascular or arterial calcifications are an indicator for atherosclerosis (Stary *et al.* 1995). The aetiology of atherosclerosis is very complex. It is influenced by multiple factors including age, as well as genetic and environmental risk factors (Lusis 2000; Lusis *et al.* 2004; Clarke *et al.* 2014; Thomas *et al.* 2014). There are at least four different types of vascular calcification (Demer and Tintut 2008; Towler 2008; Binder and Roberts 2014). Medial arterial calcification, as found in Tomb 26, can be a result of diabetes, chronic kidney disease and old age (Aufderheide and Rodriguez-Martin 1998, 342; Towler 2008). Age may play an important role (Allam *et al.* 2014), but today, smoking, lack of physical activity, hypertension, a high-fat diet and diabetes are recognized as the main contributors to the disease (see *e.g.* van Dam *et al.* 2002; Jamkhande *et al.* 2014) and examples in elite Chinese burials (c. 700 BCE) and Canadian Inuit (c. 400 CE to c. 1520 CE) have demonstrated a connection with increased meat consumption (David *et al.* 2010). At least some of the factors mentioned above were likely to have been present in ancient Egypt. Cereal grains, domestic animals such as sheep, goats, cows and pigs, wild birds (*e.g.* geese), fish, and game were available in the region (Buzon 2006; David *et al.* 2010; Budka 2015a), as well as lentils, melons, various types of weed and fruit, including the sycamore fig and doum-palm (Ryan *et al.* 2012; Heinrich and Hansen 2020). It appears that the number of cattle on Sai Island increased in Thutmoside times and pigs were imported to the island in the early 18th Dynasty, together with such utensils as cooking pots and storage vessels (Budka 2015a; 2020). Because fat, sugar and protein were all available in abundance, as well as in all likelihood salt which was often used as a preservative (David *et al.* 2010), it can be presumed that the more affluent individuals on the island, one of whom would have been Khnummose, had sufficient access to these kinds of “unhealthy” foods. During the New Kingdom, feasting was not only conducted by state individuals; private banquets with a vast array of luxurious foods were carried out to celebrate important events such as birth, birthdays, marriages and death and not only reflected the social order, but also allowed the wealthy to ‘enhance their position through hosting elaborate feasts’ (Smith 2003b, 47). Saturated fat, cholesterol, nitrites and advanced glycation end-products can lead to hypertension, obesity and diabetes mellitus (van Dam *et al.* 2002; Peppas *et al.* 2002; Montonen *et al.* 2005). The possibility of chronic kidney disease (CKD) which is also related to hypertension and diabetes (Kazancıoğlu 2013; Cañadas-Garre *et al.* 2019) is noteworthy. Both environmental and genomic factors contribute to the development of CKD, and heritability has been estimated at 30-75% (Kazancıoğlu 2013).

Studies on vascular calcification in royal/elite Egyptian mummies ranging from the Middle Kingdom to the Greek Roman Period (David *et al.* 2010; Allam *et al.* 2011; Abdelfattah *et al.* 2012) showed that atherosclerosis was quite common among the privileged in Ancient Egypt, particularly within the New Kingdom. David *et al.* (2010) emphasize the difference between royalty and priests who had access to high levels of saturated fat and the majority of Egyptians whose diet was mainly vegetarian. However, the fact that there is little record of arterial calcifications in ancient skeletal remains does not necessarily signify that only high-ranking people could suffer from this disease, the mummified remains of the elite are simply better preserved. Another rare example of arterial calcification in skeletal remains was found in the neighbouring burial site Amara West, northern Sudan (1300-800 BCE), where suspected calcified blood vessels were also discovered in five burials (Binder and Roberts 2014). It is notable that the affected Amara West individuals all showed signs of moderate or severe periodontal disease and new bone formation on the visceral side of the ribs. Though the three individuals with calcifications from Sai Island also displayed slight to moderate signs of periodontal disease, no modifications of any kind on the existing ribs were recorded, so any link to chronic pulmonary diseases (Thompson *et al.* 2013; Binder and Roberts 2014; Thomas *et al.* 2014) can be excluded here. Of the three affected individuals in Tomb 26 at least two, Ind. 145 and Ind. 159 – both with signs of DISH (see below) – could have even been related, so hypertension and/or diabetes possibly in combination with CKD is a plausible cause for the vascular calcifications in Tomb 26.

6.4.3.2 Calcified uterine leiomyoma

An isolated rounded to oval concretion resembling a coral (*approx.* 5 × 4.5cm) was detected in the pelvic cavity of a female of at least 40 years of age, Ind. 51 (Feature 4). The *in situ* find suggests it was not fused to any skeletal element but must have originated from the soft tissue of the pelvic region which limits the number of possible diagnoses. After morphological comparison with calcifications housed in the pathological-anatomical collection of the Department of Anthropology in the Natural History Museum, Vienna, and with published examples such as Strouhal (1976), Strouhal and Jungwirth (1977), Baud and Kramar (1991), Quintelier (2009) and Binder *et al.* (2016), the preliminary diagnosis “calcified uterine leiomyoma” (Wohlschlagler and Stadlmayr 2018) was able to be confirmed in the course of further radiological and chemical analysis (scanning electron microscope), while the possibility of its being a renal/bladder stone was ruled out (Wohlschlagler and Stadlmayr 2019, unpublished raw data).

Uterine leiomyomas are non-cancerous uterine tumours (benign neoplasms) that develop within the

smooth muscle tissue of the uterus. They usually affect women in their childbearing years and can grow as large as a football (Möbius 1961). Genetics and hormone levels (particularly oestrogen levels) appear to play an important role in the formation (Möbius 1961), as well as risk factors such as obesity, diabetes and hypertension (Flake *et al.* 2003; Walker and Stewart 2005; Evans and Brunzell 2007; Okolo 2008). Uterine leiomyomas can cause various symptoms such as abdominal pressure, menorrhagia and even miscarriage/infertility, depending on their size and location (Cramer and Patel 1990; Baird *et al.* 2003; Parker 2007). Once they have outgrown their blood supply, degenerative changes including calcium deposition commence. This generally happens in the final phase, when oestrogen levels decrease, and the menopausal stage is reached (Casillas *et al.* 1990; Wilde and Scott-Barrett 2009). Though most affected patients develop multiple leiomyomas, calcification may occur in only one of the tumours (Casillas *et al.* 1990).

Ind. 51 currently ranks amongst the most ancient cases of individuals with calcified uterine leiomyomas. To date, the here presented uterine leiomyoma is the oldest discovered example on the African continent that we know of, predating the one from Sayala in Nubia which is dated between the 3rd and 4th century CE, described by Strouhal and Jungwirth in 1977. The only older one was found in Switzerland and was described by Kramar *et al.* in 1983: it dates to the Middle Neolithic Age (3200-2500 BCE) (see Fornaciari and Giuffra 2012).

6.4.3.3 Calcification of the stylohyoid ligament (Eagle's Syndrome)

In most cases, the elongation of styloid processes (>30mm) through calcification occurs bilaterally and appears to be slightly more common in females (see Piagkou *et al.* 2009). Once the elongated styloid process causes clinical symptoms such as neck and/or face pain, swallowing difficulties, tinnitus or ear diseases, it is referred to as Eagle's syndrome. However, merely 4-10% of the affected individuals experience such symptoms (Rodríguez-Vázquez *et al.* 2006; Piagkou *et al.* 2009; Al-Kaki *et al.* 2016). Although the exact aetiology is unknown, chronic irritations, trauma, endocrine disorders in menopausal women, persistence of mesenchymal elements and stress during the developmental stage of the process have been suggested to cause the condition in the past (Piagkou *et al.* 2009; Sisman *et al.* 2009). Abnormal calcium, phosphorus and Vitamin D metabolism, commonly occurring in individuals with end-stage renal disease and associated secondary hyperparathyroidism, have also been associated with vascular and extraskelatal (ectopic) soft tissue calcifications including the stylohyoid ligament (see Gokce *et al.* 2008; Piagkou *et al.* 2009; Sisman *et al.* 2009; Freyschmidt 2016, 902-903). The calcified stylohyoid

ligament found adjacent to the right femur of Ind. 124 in Feature 4 seems to have been dislocated in one or more flooding events which disturbed the upper body half of this female (Fig. 6.8 and Fig. 6.10). However, the left calcified stylohyoid ligament was found adjacent to the left lingual ramus of the mandible (Fig. 6.11) which is where it would be expected. Since this individual had also developed vascular calcifications, an abnormal calcium or phosphorus metabolism could be a feasible reason for the alterations.

6.4.4 Trauma

Physical injuries or wounds are referred to as trauma. Type and frequency of traumas within a population can provide an insight into the lifestyle of individuals, such as their living environment, occupation and interpersonal violence (Roberts and Manchester 2010, 84).

One of the lower right ribs of Khnummose, Ind. 159, contained a healed "greenstick fracture" with remodelled callus on the inside. "Greenstick fractures" are partial or incomplete fractures which are commonly found in children's bones and adult ribs (Aufderheide and Rodríguez-Martin 1998, 20; Mays 2010, 238). Rib fractures can result from direct trauma, such as a fall against a hard object, or interpersonal violence (see Brickley 2006), as well as from repeated stress, such as persistent coughing or sneezing, and from underlying diseases, such as osteoporosis, that weaken the bone structure (Roberts and Manchester 2010, 90). The location of Khnummose's fracture suggests an impact on the back. However, because the posterior angle is the weakest part of the rib, it appears to be a common site for fractures, regardless of the type of impact (Lovell 2008, 356). The remodelled callus implies that this fracture must have occurred at least several months to years before death. Rib fractures can cause pain and varying degrees of disability (Lovell 2008, 356) but in Khnummose's case this partial fracture should not have had any major effect.

Feature 5 revealed various types of trauma, including the healed left metacarpal (V) of a 30-45 year old male (Ind. 145) and the fused thumb phalanges in a 30-45 year old male (Ind. 300). The latter probably involved fracturing of the joint. Such injuries can be caused by direct force (commonly by accident), but also by underlying diseases and degenerative processes.

The indeterminate individual 162 showed a lesion on the right frontal bone with callus formation. Circular fractures with a depression of bone tissue can be caused by injuries. If they heal they appear as circular depressions in the cranial vault. At this stage they resemble dermoid cysts and it is often impossible to distinguish one from another in archaeological human remains (Ortner 2003, 121). One criterion that should be considered is that neoplasms, such as dermoid cysts, tend to affect the internal table more

often than depressed fractures (Ortner 2003, 121). Despite the poor state of preservation, the internal table does not appear involved in Ind. 162 and a healed circular fracture can be assumed.

Compression fractures of vertebrae as observed in the female, Ind. 279, are often a result of underlying diseases such as osteoporosis, which weaken the bone and lead to a collapse of the body (Aufderheide and Rodríguez-Martin 1998, 21; Ortner 2003, 411; Roberts and Manchester 2010, 91) but can also be caused by forced flexion of the spine (Mays 2010, 238) or an accident (Aufderheide and Rodríguez-Martin 1998, 20; Ortner 2003, 121). Since the remains were poorly preserved, it is hard to determine whether or not this female suffered from osteoporosis, but with a minimum age of 35 years, it is a reasonable assumption.

The healed fracture in the left parietal bone of the 6-9 month old infant (Ind. 299) is discussed below.

6.4.5 Degenerative joint disease (DJD) / Osteoarthritis (OA)

Degenerative joint disease (DJD) is a non-inflammatory condition characterized by the loss of joint cartilage and the formation of adjacent bone (osteophytes) and/or subsequent lesions within the joints (Aufderheide and Rodríguez-Martin 1998, 93; White and Folkens 2005, 325). It is also known as osteoarthritis (OA), particularly if eburnation – a polished, shiny surface resulting from bone-to-bone contact in areas free of cartilage – is present (Waldron 2009, 28). The effects of the degenerative process most commonly affect persons older than 40-50 years, and 90% of octogenarians (Mann and Hunt 2005, 15; Khurana 2009, 191; Waldron 2009, 28). It is much more common in women than in men and various factors contribute to the disease, in which the joints are damaged in either of two clinical patterns: primary or secondary OA. Primary OA is idiopathic and has no known cause. In contrast, secondary OA can be related to genetic, endocrine or biomechanical aspects in combination with ageing, obesity, trauma and repetitive joint use (“wear and tear”) (Aufderheide and Rodríguez-Martin 1998, 93; Ortner 2003, 546-547; Mann and Hunt 2005, 15; Khurana 2009, 191; Waldron 2012, 519). Since the reasons for the degeneration of cartilage are still not fully understood, and “ageing” as the sole contributor to the disease has been challenged in the past, the only consensus at the moment seems to be that “joint use” plays an important role. Generally, the large, weight-bearing joints in the hip and lower extremities are affected earliest and most commonly (Aufderheide and Rodríguez-Martin 1998, 94; White and Folkens 2005, 325). Obesity increases the load on weight-bearing joints, and knee OA as, for example, in Khnummose’s presumed wife (45-60 years) appears to be highly correlated with obesity, particularly in women (Lementowski and Zelicof 2008; Waldron 2009, 37; King *et al.* 2013). Studies have shown that for every two units of body mass index gain (*approx.* 5kg),

the risk of OA of the knee increases by 36% (Hart and Spector 1993; March and Bagga 2004). A possible sign of overuse can be found in a 30-40 year old male from Feature 5 with eburnation in the right knee and the right elbow, and in the indeterminate individual of at least 35 years with eburnation on the left metatarsal I. Signs of DJD in the feet area usually indicate previous trauma (Aufderheide and Rodríguez-Martin 1998, 95), but can also reflect the biomechanical stress through locomotion (Ortner 2003, 548-549). However, in general, the severity of DJD in the individuals in Tomb 26, including Khnummose, appears mostly age-related. Signs of *osteochondritis dissecans* were detected in the right knee of a 35-45 year old female in Feature 4. This condition is caused by an osteochondral fracture either through direct trauma or repetitive microtrauma due to overuse (Waldron 2009, 153-154). Once a loose piece of bone and/or cartilage is detached because of a loss in blood supply, it can move around in the joint space and make the joint painful and unstable (Lovell 2008, 372). Here again, the knee joint is the most frequently concerned site (Lovell 2008, 372; Waldron 2009, 154).

DJD or OA in the spine includes changes induced by intervertebral disc degeneration, spinal osteophytosis and degenerative processes in the articular facets. These alterations usually occur from the age of 30 years onwards and affect 80-90% of individuals over the age of 75 years (Aufderheide and Rodríguez-Martin 1998, 96). Schmorl’s nodes are associated with the degeneration of the intervertebral discs. They are a result of intervertebral disc pressure on both sides of the vertebral bodies that leaves behind visible depressions (Mann and Hunt 2005, 84-88; Waldron 2009, 45; Roberts and Manchester 2010, 140). Schmorl’s nodes are sometimes associated with trauma, congenital defects and various spinal diseases (Mann and Hunt 2005, 87-88; Roberts and Manchester 2010, 140-141), but most commonly they appear age-related (Dar *et al.* 2010) and degenerative arthritis (Ortner and Putschar 1981, 430). Of the four individuals with Schmorl’s nodes, two were diagnosed with “DISH” (Ind. 145) and “possible DISH” (Ind. 159) (see below) and one with severe osteophytosis in the spine and the knees (Ind. 160). The fourth one (Ind. 279) showed only slight osteophyte formation on the remaining cervical vertebrae, but suffered from a healed compression fracture on the caudal side of the fifth lumbar vertebra.

Intervertebral discs undergo chemical and degenerative changes with advancing age and increasing stress. Ruptures in the disc stimulate bone growth (osteophytes) from the margins of the vertebral body as a compensatory reaction. In this condition called spinal osteophytosis, the size of osteophytes increases according to the level of stress, and porosity and pitting of the vertebral bodies (intervertebral osteochondrosis) can occur in more severe cases. Ultimately, osteophytes

from neighbouring vertebrae can fuse (ankylosis) and the affected individuals were likely to have suffered from backache and stiffness (Aufderheide and Rodriguez-Martin 1998, 96; Ortner 2003, 549; Faccia and Williams 2008; Roberts and Manchester 2010, 140). Changes in the articular facets such as pronounced marginal lipping, porosities and eburnation are also characteristic of DJD (Aufderheide and Rodriguez-Martin 1998, 96; Ortner 2003, 549; Mann and Hunt 2005, 75; Roberts and Manchester 2010, 140). Despite its association with the aging process, a more active lifestyle or heavier manual workload, as well as obesity, can lead to an earlier onset of the disease (O'Neill *et al.* 1999; Borenstein 2004; Roberts and Manchester 2010, 141). The percentage of Tomb 26 individuals with spinal osteophytosis and/or apophyseal joint degeneration is higher than 68%. It appears that the degenerative changes are mostly age-related. However, 12 of the 31 fully grown individuals in Tomb 26 were not assignable to any specific age class, so the contribution of activity-related stress and/or obesity to spinal DJD remains unclear.

6.4.6 DISH

DISH (diffuse idiopathic skeletal hyperostosis or Forestier's disease) is a fairly common systemic disorder meaning that it affects a number of organs/tissues or the body as a whole. This non-inflammatory arthritic disease is diagnosed when at least four contiguous vertebral bodies have continuously ossified along the right anterolateral aspect and/or when multiple enthesopathies and bony spurs occur at the insertion areas of tendons and ligaments (Crubézy 1990; Aufderheide and Rodriguez-Martin 1998, 97-98; Roberts and Manchester 2010, 159-160; Verlaan *et al.* 2007; Olivieri *et al.* 2009; Waldron 2009, 73-74). Genetic, as well as external factors, are commonly associated with the development of DISH and more recent studies show a strong relationship with obesity, hypertension and type 2 diabetes mellitus (Rogers and Waldron 2001; Verlaan *et al.* 2007; Mader and Lavi 2009; Olivieri *et al.* 2009; Waldron 2009, 74). It mainly concerns the elderly and is found more often in males than females (Rogers *et al.* 1985; Aufderheide and Rodriguez-Martin 1998, 97; Ortner 2003, 559; Roberts and Manchester 2010, 159; Olivieri *et al.* 2009; Waldron 2009, 74). Though the disease is asymptomatic in most patients, the ossifications can cause stiffness, pain and even airway obstruction (Resnick *et al.* 1975; Roberts and Manchester 2010, 160; Verlaan *et al.* 2007). Khnummose (Ind. 159) showed a possible onset of DISH as he displayed several enthesal ossifications and the two lowest thoracic vertebrae have formed a non-fused bony bridge on the right side. DISH can resemble inflammatory spondylarthropathies such as ankylosing spondylitis (AS), which can make it very hard to distinguish one from the other (see *e.g.* Rogers *et al.* 1985; Olivieri *et al.* 2009; Waldron 2012). By definition,

the intervertebral disc space, as well as the bony joints, particularly the sacroiliac joints, are preserved in DISH, whereas in the generally more painful AS they have fused (Resnick *et al.* 1975; Resnick and Niwayama 1976; Verlaan *et al.* 2007). Ind. 145 from Feature 5a depicted signs of DISH, as well as possible AS: the anterior longitudinal ligament had ossified without any involvement of the intervertebral disc space, which is a typical sign for DISH; various enthesopathies and bony spurs had formed (DISH and AS); the left sacroiliac joint appeared fused as it does in AS. The three presumed cases of AS in Tomb 8 (Minault-Gout and Thill 2012, 131) add to the confusion: the mainly antero-lateral '*flow of osteophytes*' from ThIII to ThVIII together with enthesopathies and bony spurs, as well as the '*partial fusion*' of the right sacroiliac joint in Sq4 could also indicate "DISH"; Sq25, the second individual in Tomb 8, had developed enthesopathies and bony spurs (DISH and AS), whereas the vertebrae of Sq28 had anteriorly and posteriorly fused from ThIV to LV (including the spinous process), the sacroiliac joints appeared completely fused, and enthesopathies and bony spurs were present (AS). However, Olivieri *et al.* (2009) explain that in some cases '*DISH may also affect the sacroiliac joints, which can further result in being mistaken for sacroiliitis of AS*'. In a clear case of AS, the synovial part of the joint shows sclerosis, whereas with regard to Tomb 26, in Ind. 145, only the ligamentous part of the joint was affected without any involvement of the synovial area. With this in mind, "DISH" is suggested for Ind. 145 and "possible DISH" for Khnummose, according to Utsinger's classification (see Crubézy 1990). At this point it also should be noted that Tomb 26 held several individuals with nonmetric traits in the pelvic area, such as cranial/caudal shift in vertebral numbers (*e.g.* sacralised LV segment in Ind. 124 and sacralisation of the first coccygeal unit in Ind. 145), and a *spina bifida occulta* in Ind. 159, Khnummose, which may further complicate diagnoses. Interestingly, the individuals with "DISH" and "possible DISH" are two of the three individuals that developed vascular calcifications which can also be a sign of hypertension and/or diabetes mellitus (see above). Because there are no pathological skeletal characteristics for diabetes mellitus, diagnosis from skeletal remains is almost impossible. However, a case study from Dayr al-Barsha in Egypt described an individual dated to the Middle Kingdom with a number of pathological conditions including DISH, osteoarthritis (DJD), caries, periodontal disease and ante-mortem tooth loss, that when considered together, present a strong case for the diagnosis of type 2 diabetes mellitus (Dupras *et al.* 2010). Khnummose and Ind. 145 also displayed an array of pathological characteristics indicating obesity and type 2 diabetes mellitus, including DISH, DJD, vascular calcifications and dental alterations.

6.4.7 Children

Feature 2 held the intermingled remains of three children, two aged 8-9 years (Ind. 5 and Ind. 6) and one 10-11 years (Ind. 7), however, the state of preservation limited the number of observations. Features 4 and 6 did not hold any distinct sub-adult burials, whereas the remains of two children were discovered in Feature 5. A 6-9 month old infant (Ind. 299) with a healed fracture on the left parietal bone showed slight signs of porotic hyperostosis on both parietals, as well as slight *cribra orbitalia*, possibly a result of physical stress (e.g. deficiencies, infections, parasites). The acute inflammatory modifications on the internal lamina and signs of perisinusitis point to a fatal infectious process that was probably fuelled by the physiological stress. Cranial trauma in children under 2 years is traditionally seen as an indicator of abuse (Hobbs 1984; Lewis 2014), but it appears to occur by accident more often than previously thought (Weber 1985; Lewis 2014). Another reason for the already healed fracture could be a birth trauma which can be a result of compression and traction forces during the birth process, abnormal foetal position, difficult labour, large foetal size and caesarean sections (Lewis 2007; 2014).

The remains of a foetus aged 8-9 lunar months, Ind. 323, were found inferior to and in line with the pelvic outlet and with the head just above the knee area between the femurs of a 25-35 year old female, Ind. 245. The phenomenon of postmortem extrusion of a foetus into the grave is traditionally referred to as coffin birth (Lewis 2007; Halcrow *et al.* 2018) and takes place 44 to 72 hours after maternal death when the decomposition gases increase the abdominal pressure and the uterus prolapses (Smith 1955, 25). However, Sayer and Dickinson (2013) argue that in an earthen grave the body becomes completely covered by soil which would certainly prevent the extrusion of an intact, fully articulated foetus. This would certainly also apply to a wrapped body. The authors suspect that the unusual taphonomic situation needed for the occurrence of a coffin birth may be limited to coffin-like cavities (see Viva *et al.* 2020). In addition, they suggest that coffin births can only be diagnosed with certainty if the foetus is situated inside the pelvic canal. They argue that extruded foetuses are likely to have been related to death in childbirth, since infection, haemorrhage, sepsis and eclampsia can lead to infant and female death up to forty-two days after delivery. In the presented cases the prematurely delivered child was usually placed next to the mother or on her chest, and with its head oriented in the same direction. Ind. 323 in Tomb 26 was also found orientated in the same direction as the mother and it cannot be excluded that the body was moved from the chest to the knee area in the course of flooding

events as the female's legs appear slightly disturbed. Interestingly, Filer (1998) presents four post-Meroitic/Christian burials from Gabati where foeti, including one full-term or nearly full-term baby, were placed 1) against the women's legs, 2) in front of the woman, 3) just above the knee area and 4) at her ankles. Ind. 323 may have also intentionally been placed in this manner, but it remains equally possible that it was originally placed on the mother's chest and later slipped between her legs. The female individual did not show any signs of stress. The major causes of maternal morbidity today include haemorrhage, infection, high blood pressure and obstructed labour (Halcrow *et al.* 2018).

6.4.8 Identity

Recent studies on the identities of people buried at neighbouring sites such as Tombos or Amara West have highlighted the social diversity in this New Kingdom region (see Buzon 2008; Binder and Spencer 2014; Smith and Buzon 2014a; 2014b; Spencer *et al.* 2014; Binder 2017; Smith and Buzon 2017). In Tombos, for example, immigrant Egyptians were evidently present during the New Kingdom occupation in Nubia (Buzon *et al.* 2007; Buzon and Bowen 2010; Buzon and Simonetti 2013). The Egyptian style burials in the SAC5 cemetery emphasize the increased Egyptian influence and cultural identity on Sai Island. Egyptian style burials are customarily in an extended position with the body wrapped and placed in a coffin. Specialized grave goods were added for aid in the afterlife which reflected Egyptian beliefs (Smith 2003a; Smith and Buzon 2014b, 199-200; Buzon *et al.* 2016). In contrast, traditional Nubian burials are traditionally in a flexed position, with the bodies placed on beds and cowhides, underneath tumuli and often with associated animal sacrifices (Smith 1992; Smith and Buzon 2014b, 199-200; Buzon *et al.* 2016; Williams 2018). Most of the *in situ* interments in Tomb 26 were found in an extended position. The slightly flexed leg bones in Ind. 260 probably reflect disturbances or flooding events as the upper extremities are not flexed and still *in situ*. In order to gain insight into the question whether the individuals from the New Kingdom Tomb 26 were first generation immigrants from Egypt (*allochthonous*), or members of a local Egyptian or "Egyptianised" population, inhabiting the area of Sai Island (*autochthonous*), strontium samples were taken from the tooth enamel of nine individuals (Retzmann *et al.* 2020, see Chapter 10): Inds. 1, 3 and 5 from Feature 2, Ind. 124 from Feature 4, Inds. 159 (Khnummose) and 160 from Feature 6 and Inds. 145, 259 and 324 from Feature 5. The individuals were classified as '*supposedly autochthonous*', with strontium ranges that suggest small-scale migration between the Egyptian centres in the Second and Third Cataract region.

6.5 Conclusion

In Tomb 26, ante-mortem tooth loss, periapical abscesses and high dental abrasion rates reflect the “gross attrition environment” in which the individuals lived and caries rates cannot be considered representative. In general, no distinct signs of stress markers that indicate nutritional deficiencies and/or chronic infectious diseases, and that are typically found in ancient skeletal material, were found in Tomb 26. On the contrary, there are several indications for the occurrence of diseases related to obesity and the consumption of high fat foods. Vascular calcifications, uterine leiomyomas, DISH and osteoarthritis in weight-bearing joints are commonly associated with obeseness and type 2 diabetes. Whether this is an expression of the general improvement of the living conditions in the New Kingdom under the reign of the kings of the 18th Dynasty (Haikal 2002; Smith 2003b; Redford 2006; Spalinger 2006) or a sign of the privileged position of Khnummose and his associates within the microcosm of the New Kingdom town on Sai Island remains uncertain. Whatever the case may be, evidence of calcification in skeletal remains is scarce, and the vascular calcifications and the calcified uterine leiomyoma in particular, currently range amongst the oldest known examples.

6.6 Acknowledgements

We would like to thank Julia Budka, Principal Investigator of the AcrossBorders project, for the opportunity to take part in this project. The research presented here is the outcome of Julia Budka’s FWF START project Y615-G19, funded by the Austrian Science Fund. We also owe our thanks to the National Corporation for Museums and Antiquities of Sudan (NCAM), and the General Director Abdelrahman Ali Mohamed and our Inspector Huda Magzoub in particular, who gave us permission to carry out our work on Sai Island, Sudan. We also wish to express our gratitude to Cajetan Geiger for the photos, Patrizia Heindl for the illustrations and Maria Marschler (Natural History Museum, Vienna) for her constructive advice.

The individual tomb groups of Tomb 26

Julia Budka

7.1 Introduction

The complete set of finds was discussed in Chapter 5 and the human remains were presented in detail in Chapter 6. The main aim of the present chapter is to move further from the key categories of tomb furnishing and tomb equipment in order to reconstruct the original tomb groups, thus assemblages of the individual burials. Within the burial chambers which were largely found intact (Features 5 and 6), this is an easy task. For Features 1 and 2, the shaft and the main chamber, this becomes more tentative and challenging, due to the state of plundering and destruction and because of the consequent mixing of materials.

The second goal of this chapter is to illustrate the variability of burial assemblages within Tomb 26 – this will allow us to address questions of social and cultural identity and also of personal taste and individual choices. That these factors influence the funerary practice in spite of a seemingly uniform elite and sub-elite funerary culture in Egypt and New Kingdom Nubia, was illustrated by fresh research in the past years (see, *e.g.*, Minault-Gout and Thill 2012, *passim*; Lemos 2017; Franzmeier 2017; Näser 2017; Spence 2019; Lemos 2020).

The final objective of this section is to outline the differences in dating of the individual burials which will be elaborated on in Chapter 8.

7.2 The first tomb groups of Tomb 26

Both Features 5 and 6 yielded undisturbed burials of the mid-late 18th Dynasty. Because of the dating of the equipment, but especially because of the architectural setting and the formation processes observed during excavation, it is safe to assume that Feature 5a is the oldest chamber for the first interments of Tomb 26. Two burials were found and will be described in the following.

7.2.1 *The tomb group of an anonymous indeterminate individual, TG 01*

Within the small original chamber, Feature 5a, two coffined burials were placed next to each other. Because of the access into the chamber from the southern side and also because of archaeological evidence (see Chapter 8), the northern individual must have been interred first. This indeterminate individual, Individual 162, was found north of Individual 145. This burial, labelled as tomb group 01 (TG 01), has partly suffered from the collapse of the ceiling in the central part of the chamber and also most probably from the construction work when Feature 5b was merged with Feature 5a into one large chamber (see Chapters 3 and 8).

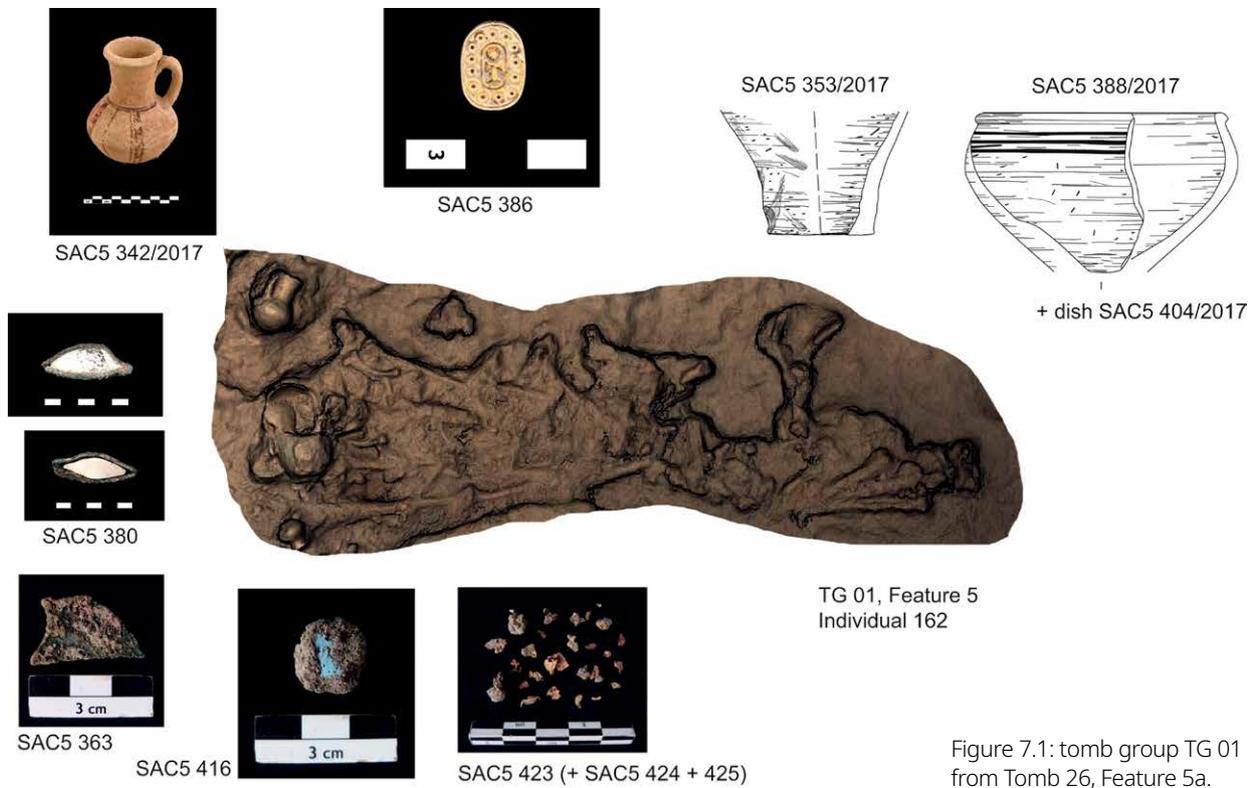


Figure 7.1: tomb group TG 01 from Tomb 26, Feature 5a.

Type of tomb equipment	Attestation
Coffin/funerary mask	Coffin, wood, anthropoid, painted (SAC5 416) with eye inlay (SAC5 363); wooden remains (SAC5 318/2017) Funerary mask, gilded (SAC5 400) with pair of eye inlays (SAC5 380); gold foil (SAC5 423, 424, 425; see Appendix)
Bodily adornment	Steatite scarab SAC5 386
Funerary objects	No heart scarab or shabti
Ceramic vessels	Jug, painted (SAC5 342/2017), flowerpot (SAC5 353/2017), dish (SAC5 404/2017), bowl (SAC5 388/2017)
Stone/faience vessels	None
Other	None

Table 7.1: composition of TG 01.

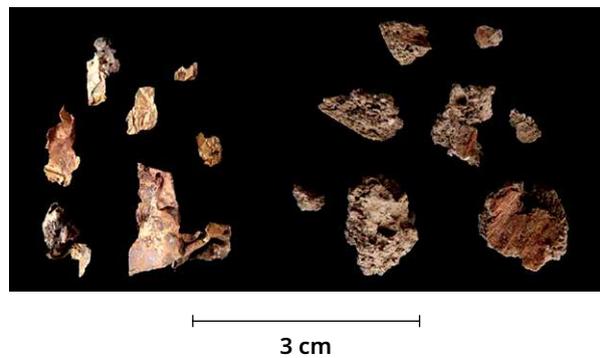


Figure 7.3: gold leaf fragments associated with SAC5 400 (photo: M. Gundlach, ©AcrossBorders).

Figure 7.2 (left): eye inlay SAC5 363 (photo: M. Gundlach, ©AcrossBorders).

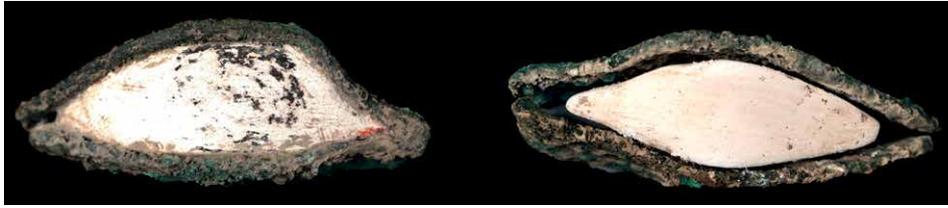


Figure 7.4: pair of eye inlays SAC5 380 (photo: C. Geiger, ©AcrossBorders).

Traces of a wooden coffin (SAC5 416) with eye inlays (SAC5 363), a wooden funerary mask (SAC5 400) with eye inlays (SAC5 380) and several hundred pieces of gold foil attest to the high quality of the extremely disintegrated coffin assemblage of TG 01 (Fig. 7.1). Gilded funerary masks were found in other tombs in SAC5, e.g. in Tomb 14 (Minault-Gout and Thill 2012, pl. 88) and gold leaf was also common in burials of the concession of the Scandinavian Joint Expedition to Nubia (see Säve-Söderbergh and Troy 1991, 66).

SAC5 416 is a small, badly deteriorated fragment (15 × 11 × 15mm) from the wooden coffin. Since two pairs of eye inlays were found with Individual 162, there was most probably one for the coffin and one for the mask. SAC5 363 (Fig. 7.2) is only fragmentarily preserved and represents a thin bronze fragment in the shape of one half of the “white” of an eye. The metal is heavily oxidized and was almost entirely covered by a coat of hard dirt (27 × 3x16mm).

Multiple find numbers were registered as SAC5 400, the presumed gilded mask of Individual 162 (Fig. 7.3). A total of 215 small fragments of gold foil and eight pieces of organic material (most likely wood) were found from around the cranium of Individual 162 (see also Fig. 6.32).

A complete pair of eye inlays has survived with SAC5 380 (Fig. 7.4). The right inlay is complete, the left one fragmentary. The well-defined tear ducts make the eyes easy to distinguish. Both eyes have whites made of a fragile paste and a bronze surround. A stone pupil like for the other eye inlays from Tomb 26 (see below) was not identifiable for the left eye and the right one most probably had a painted one. Associated loose gold and bronze fragments as well as some disintegrated pieces of wood were also documented.

The right eye inlay was found southwest of the cranium of Individual 162 and is well preserved (54 × 19 × 21mm), the metal being bright green through oxidation. The upper and lower bronze surrounds of the left eye (54 × 20 × 10mm and 56 × 16 × 9mm) were discovered west of the cranium. There, four fragments from the left eye were also found, the most prominent of which is the well-preserved white paste inlay. The smaller piece recovered has one black surface and has tentatively been identified as the iris. Though it was difficult to determine, the black areas appear to be only a few millimetres thick. The remainder of the piece was plaster and thus the black pupil was probably painted on.

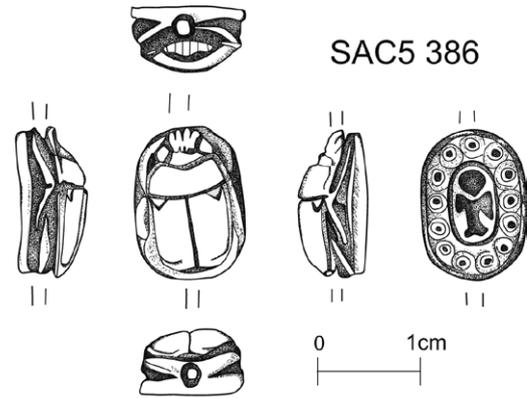


Figure 7.5: scarab SAC5 386 of TG 01.

Apart from a wooden coffin and funerary mask, eye inlays and gold foil, this tomb group is restricted to one scarab amulet and four partly fragmented ceramic vessels (see Fig. 7.1). One dish was placed at the feet and one painted bowl and jug at the head. No clear traces of bitumen as observed for TG 02 were found on this body.

The scarab SAC5 386 shows a very specific design on its reverse with a large *nh* enclosed within an oval (Fig. 7.5). The space between this oval and the perimeter line of the reverse is filled with thirteen discs, each with a dot in the centre. Similar designs with discs having a central dot are known from Fadrus (Säve-Söderbergh and Troy 1991, pl. 12, 185/119:1). Although the ankh-sign is commonly found on scarab amulets, no precise parallel was noted among published records. The general design with an oval surrounded by discs with dots is, for example, attested by scarabs showing royal cartouches of Thutmose III (Jaeger 1982, fig. 72a) and Ramesses II (Newberry 1907, pl. V, CG 36268).

Among the ceramics, a small painted one-handed jug is of particular interest (Fig. 7.6). SAC5 342/2017 is made of Marl A2 and monochrome painted on its globular body with a characteristic vertical decoration pattern (Holthoer 1977, pl. 20, 185/463: 4). It can be attributed to the mid-18th Dynasty and finds plenty of parallels, both in Egypt and Nubia (Williams 1992, 41, 86, fig. 80; Steindorff 1937, pl. 81, form 36; cf. also Tomb 8 from SAC5, Minault-Gout and Thill 2012, pl. 138 bottom). Many of these vessels have been dated to the reign of Thutmose III (see Chapter 8).

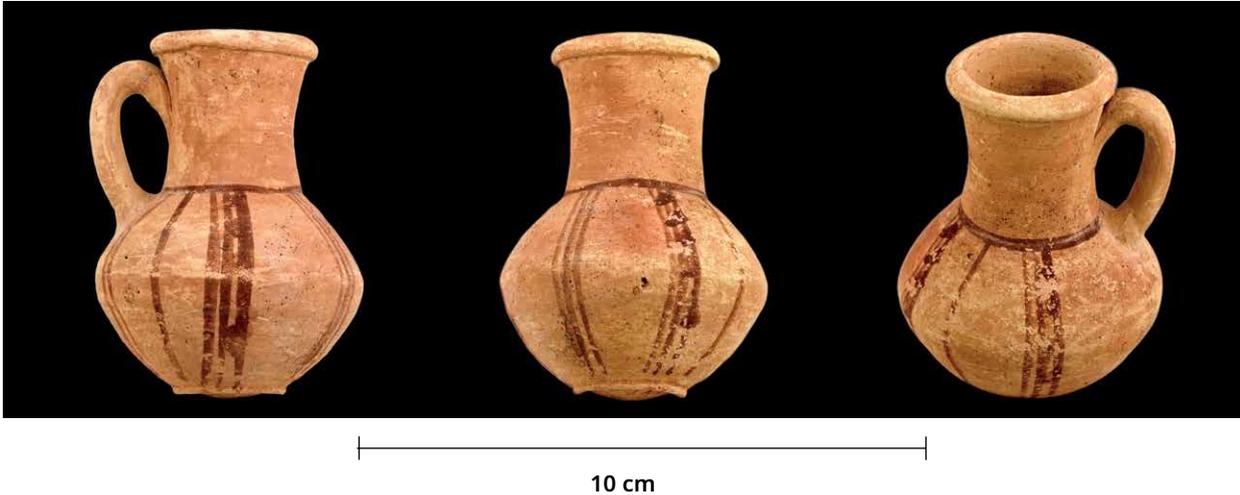


Figure 7.6: painted jug SAC5 342/2017 from TG 01 (photo: C. Geiger, ©AcrossBorders).

Type of tomb equipment	Attestation
Coffin/funerary mask	Coffin, wood, anthropoid, painted (SAC5 417 and 418) with eye inlay (SAC5 384); wooden fragments (SAC5 133/2017 and 170/2017) Funerary mask, gilded (SAC5 408) with eye inlays (SAC5 383 and 385); gold foil (see Appendix for details) Miniature plaster mask (SAC5 370)
Bodily adornment	Steatite scarab SAC5 381
Funerary objects	Heart scarab (SAC5 411) Set of ‘canopic jars’: four model vessels SAC5 394, 395, 396 and 397 with canopic lids SAC5 390, 391, 392, 393
Ceramic vessels	Two jugs with human heads attached (SAC5 315/2017 and SAC5 352/2017), one dish (SAC5 344/2017) Cluster of vessels in niche/blocked entrance at feet: two dishes, six flowerpots (SAC5 268-275/2017)
Stone vessels	Stone vessel (SAC5 398, within cluster of vessels)
Other	Stick of Egyptian blue (SAC5 415) Bitumen on the body (SAC5 134/2017 and 167/2017)

Table 7.2: composition of TG 02.

7.2.2 The tomb group of an anonymous male, TG 02

The burial of an adult male was placed within a wooden anthropoid coffin along the southern wall of Feature 5a (Individual 145).

Next to Khnummose (7.4.1), this burial is probably the richest in Tomb 26 (Fig. 7.7). Since the heart scarab SAC5 411 (Fig. 7.8) was maybe once inscribed, the name of this individual probably has simply disappeared, but may have once been written down (although heart scarabs do not necessarily give the name of their owner).

The heart scarab SAC5 411 is in several respects unusual – it was made of plaster rather than stone and its horizontal piercing through its width is uncommon for this type of *funeralia*. It seems as if this Egyptian style object marking high status in New Kingdom Nubia (see Spence 2019; Lemos 2020) was slightly modified within its local context, similar to the adjustment traceable for this burial regarding the use of bitumen and “canopic jars” (see below and Chapter 9).

Another comparable feature of TG 02 with the equipment of Khnummose is the presence of a miniature plaster mask SAC5 370 (see Fig. 5.39) and the elaborate craftsmanship of the poorly preserved wooden coffin. Many fragments of gold leaf were documented at TG 02, attesting to gilding of the coffin and/or the funerary mask such as was the case for TG 01 and Khnummose (see Chapter 5).

One remarkable object could be related in this respect: SAC5 415 is a small stick-shaped fragment of an unclear object, with one broken and one pointed end (17 × 6x8mm). It was found around the cranium of Individual 145, associated with gold flakes (SAC5 368). The object is probably mould-made, with one flat surface and the other mostly rounded; the sides are somewhat angular (Fig. 7.9).

The shape of this object and its find position in the head area of the coffin/skeleton does suggest that it is related to inlays of the coffin or mask, maybe with the cutting of the eyebrow. Since the material is very fragile, the blue stick cannot have functioned itself as the inlay. However, recent work in Egypt’s Valley of the Kings has unearthed a remarkable coffin of a royal nurse from the

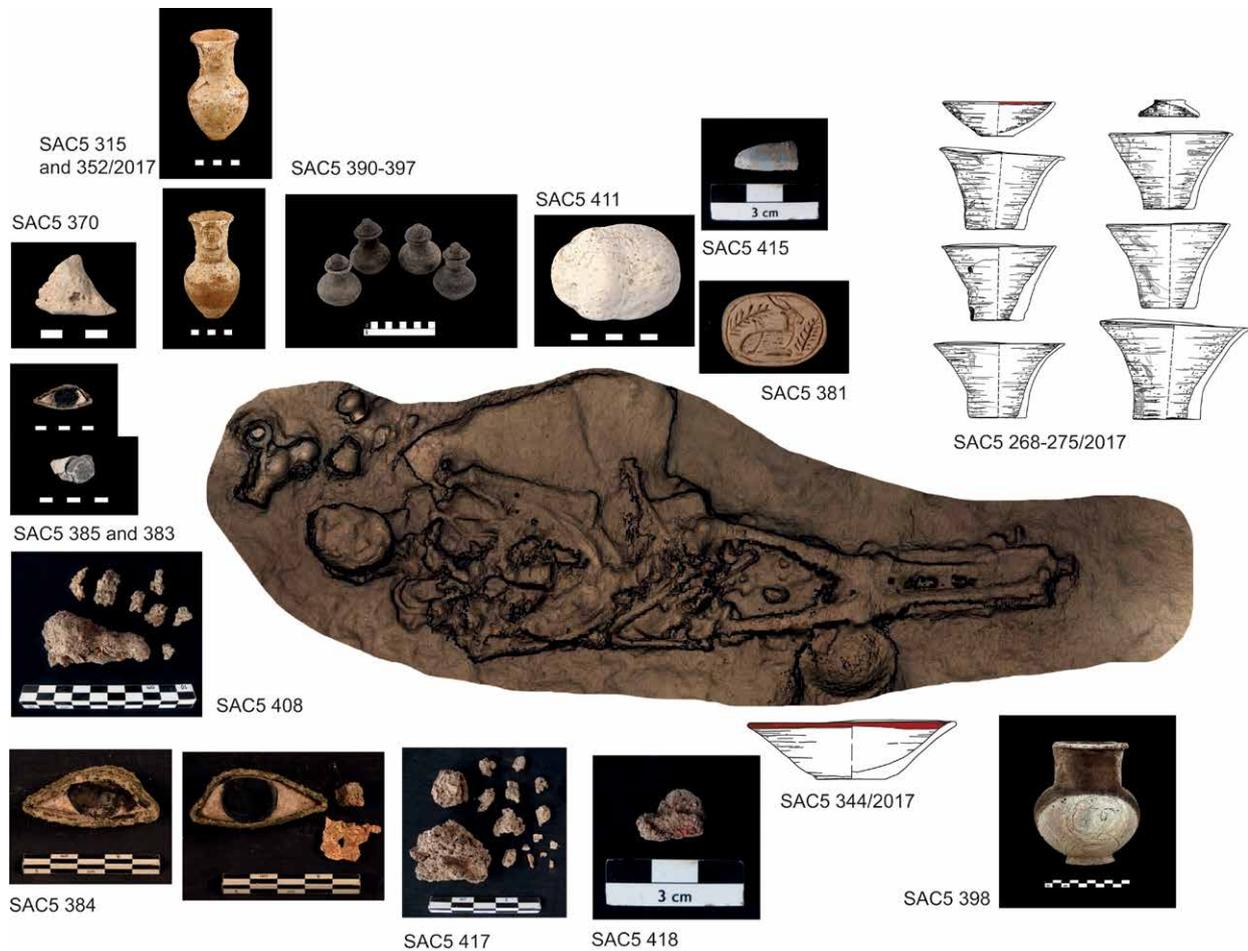


Figure 7.7: tomb group TG 02 from Tomb 26, Feature 5.

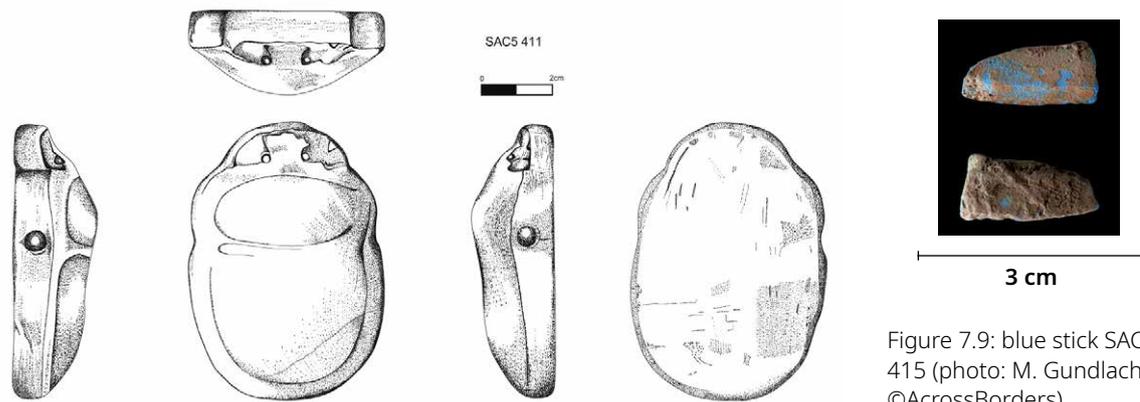


Figure 7.8: heart scarab SAC5 411.

Figure 7.9: blue stick SAC5 415 (photo: M. Gundlach, ©AcrossBorders).

18th Dynasty with inlaid elements. The excavators found remains of glass inlays and suggested: *‘They had been inlaid into the incised borders, probably affixed with Egyptian blue or similar paste adhesives’* (Schaden and Ertman 2013, 40). It is therefore possible that SAC5 415, as well as the other

blue sticks from Feature 5, were employed for fixing inlays to the cut depressions in coffins. If this was the case, the quality of these coffins in Tomb 26 was extraordinary.

Apart from the heart scarab the scarab amulet SAC5 381 is the only bodily adornment of Individual 145. This steatite

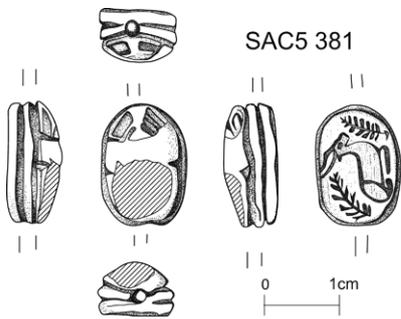


Figure 7.10: scarab SAC5 381.

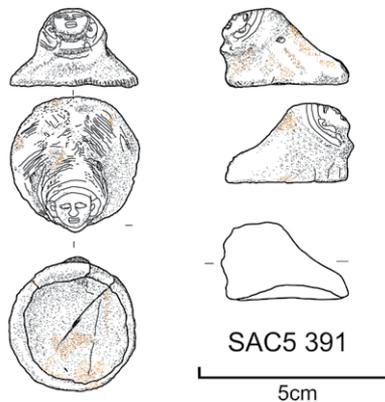


Figure 7.11: lid for the miniature canopic jar (SAC5 391).

scarab shows a design with a recumbent antelope and palm fronds on its reverse (Fig. 7.10). An exact parallel was found in a New Kingdom tomb in Fadrus with an adult burial in a wooden coffin (Säve-Söderbergh and Troy 1991, 98-99, fig. 27, pl. 17, 185/658:1, pl. 140). Similar scarabs are also known from other sites (see Newberry 1907, pl. VII, CG 36344 and 36366).

Besides the blue stick and the presumably gilded coffin with inlaid decoration, a set of miniature canopic jars is remarkable for TG 02. SAC5 394, SAC5 395, SAC5 396 and SAC5 397 are model vessels made of Marl clay A2, presumably imitating stone vessels. A use of this type of miniature jar as “canopic” is unique to SAC5 since otherwise clay canopic jars are hole-mouth jars (Minault-Gout and Thill 2012, pl. 150) similar to ones in other cemeteries (e.g. Soleb, Schiff Giorgini 1971, pl. 14, no. 18). Since the miniature jars are made of an Egyptian Marl clay, they must have been imported from Egypt, presumably as cosmetic vessels. Very similar vessels in a comparable fabric were found in Aniba and labelled as ointment jars (see Helmbold-Doyé and Seiler 2019, 346-347, 350, VI.2.2).

Lids fitting the miniature jars were found with SAC5 390, SAC5 391 (Fig. 7.11), SAC5 392 and SAC5 393

which all have a human face attached to the top. The facial features of these heads are vague. A typology of ceramic canopic jar lids with human faces was presented by Peter Dorman (2002). These are, however, all larger and more sophisticated than the ones found in Tomb 26 which only functioned as model of Egyptian standard funerary items which are rarely found in New Kingdom Nubia. Comparable models are the ones found in other tombs in SAC5 (Minault-Gout and Thill 2012, 170-173, pls. 94, 137). A set of real canopic jars in stone was found in the tomb of Amenemhat at site Q opposite of Serra (Säve-Söderbergh and Troy 1991, 76-77, pl. 59); two sets are known from Aniba (Steindorff 1937, 74, pl. 41) and a single canopic lid was found in Tomb 11 at Soleb (Schiff Giorgini 1971, 162-163, fig. 259). The rarity of canopic vessels and the preference of miniature vessels in New Kingdom Nubia suggest that canopic jars were part of a locally developed system of display of Egyptian funerary customs within Nubia (see Lemos 2018; Spence 2019; Lemos 2020).

The model canopic jars of Individual 145 in Feature 5 of Tomb 26 seem to stress local modifications of funerary practices because they were found associated with an intriguing pair of ceramic jugs with human heads attached to the necks (Fig. 5.57). One of these vessels was found without any content but with some traces of a black substance on the rim and the other one was filled with a black substance, identified by chemical analysis as bitumen (Fulcher and Budka 2020).

Human-headed vessels are in general well-known from New Kingdom funerary contexts and feminoform vessels also appear at settlement sites, including the New Kingdom town of Sai (see Budka 2016b with references). The most likely explanation for these ceramic jars with attachments of a human face/head, arms and nipples is an association with the goddess Hathor and an embeddedness in the festival sphere. From tombs, an association of the vessel with Isis was proposed by Seiler (2006). One of such Isis vessels with attached arms and obviously a ritual connotation was also found in a New Kingdom tomb at Aniba (Helmbold-Doyé and Seiler 2019, 340-341). However, both Hathor and Isis vessels are markedly different from the jars found with Individual 145. They are made of a Nile clay and are white slipped; possibly this colour is a reference to funerary rituals.

The most unusual aspect of the vessels is the applique itself: the human head attached to the neck and rim of each vessel has a very small face and a very large, rounded headdress or wig. It does not end with the neck but appears almost like a bust – no anatomical details of neck or shoulder are evident. In conclusion, I believe this representation depicts not a living being or goddess but the upper part of a mummy with a large funerary mask. For these masks found in New Kingdom

tombs in Nubia, the face was usually manufactured separately and inserted in the head part with a very dominant wig which sometimes appears ‘helmet-like’ (Säve-Söderbergh and Troy 1991, 65-67, pls. 4-5; *cf.* also Näser 2017, fig. 5; for similar masks from Egypt see Sedment, Grajetzki 2020).

This proposed interpretation of the pair of jugs showing attached “funerary masks” closely connects the vessels with the body and the burial. That SAC5 352/2017 contained bitumen can now be interpreted further. Although there is evidence in New Kingdom Nubia for interest in the preservation of the body in the form of body wrappings and masks (see findings in Fadrus, Aniba and Soleb, Lemos 2020, 17), there is not yet any indication for the preservation of body tissue through the use of mummification (Spence 2019, 559; Lemos 2020, 14). There is limited evidence for the practice of using the ritual black anointing liquid, poured over the outside of a wrapped body, from shrouds in a mid-18th Dynasty tomb at Aniba, and associated with linen and coffin fragments in two tombs at Amara West of 19th and 20th Dynasty date (Fulcher *et al.* 2020; Lemos 2020, 15). Individual 145 with his model canopic jars and a pair of vessel with attached “funerary masks” containing bitumen now adds to this small corpus of evidence. Two pieces of black material were also found in close association with the body. One piece came from the general area of the skeleton, one from the right upper leg. However, no wrappings and none of the soft tissues were preserved, which suggests that this was not an attempt at mummification. The black fragments on the body may indicate an application of the ritual black anointing liquid as seen at Aniba and Amara West. The use of bitumen suggests some degree of awareness of the ingredients of the Egyptian funerary black liquids (see Fulcher and Budka 2020). It is remarkable, that in the case of TG 02, specific vessels to hold the ritual substance were used, most probably locally produced and therefore without parallels elsewhere. Such a locally inspired setup to use bitumen would also correspond to the suggestion that probably a local Nubian source of bitumen was being exploited in the New Kingdom (Fulcher and Budka 2020).

Apart from these unusual and unique vessels, TG 02 included a standard set of Egyptian wheel-made vessels with a cluster of six flowerpots and two dishes placed in the niche in the southeastern corner of Feature 5 and thus at the feet of Individual 145. This “niche” is actually the blocked entrance area of Feature 5a (see Chapter 3). In addition, a dish was positioned at the southern side of the body, comparable to the situation of TG 08 in Feature 6.

Individual 145 was probably also the owner of a stone vessel, SAC5 398 which was found within the ceramic

cluster at his feet. This type of stone vessel is very common, both in Egypt and Nubia from mid-18th Dynasty contexts (Aston 1994, 151, type 173; see also Säve-Söderbergh and Troy 1991, pl. 34C).

7.3 The tomb groups from Phase 1b in Feature 5

As pointed out in Chapter 3, three distinct building phases can be described for Feature 5. Whereas TG 01 and TG 02 were placed in Phase 1a in the southern chamber (Feature 5a), four adult individuals were interred in the new space created in Phase 1b, the northern extension of Feature 5 (Feature 5b). No inscribed objects were found; thus, all individuals remain anonymous. The burial assemblage is Egyptian in style and comprises, amongst other objects, a remarkable gold and silver signet ring, several scarab amulets, an extraordinary necklace with crocodile pendants in various materials and pottery vessels. Whether these burials were confined like TG 01 and TG 02 is difficult to decide and is discussed below.

7.3.1 The tomb group of an anonymous male, TG 03

The burial which was placed centrally in Feature 5 (Individual 300, Fig. 7.12) suffered most from the collapse of the ceiling. Traces attest most probably a funerary mask; the presence of a coffin remains unclear but is likely. The specific position of Individual 300 and Individual 260 placed directly above him, suggests that these two bodies were once placed in a wooden coffin. This coffin was probably moved towards the south for reasons of space when Individual 245 was added to Feature 5 (see Chapter 8). The coffin was slightly twisted from its original east-west orientation in order to make it fit best in an area of Feature 5, where both in the east and on the west wall irregular rock formations have been left standing in Phase 1b (see Chapter 3).

Several fragments of an eye inlay, with no indication of a bronze surround, were found (SAC5 399, Fig. 7.13). The plaster white of the eye is well preserved and shows the whole shape of the eye (29 × 9 × 10 mm). A small hollow is left to insert the pupil of which only small fragments were recovered (maximum 15 × 6 × 10 mm). The material does not seem to be stone but rather painted plaster. Thus, the stone pupils of the finer inlays attested for TG 02, 07 and 08 were obviously replaced by a different material (see the painted version for TG 01).

The bead SAC5 405 is a unique piece from Tomb 26 made of unfired clay. Only a small fragment with one flat and one rounded surface has survived (6 × 7 × 8 mm). It resembles the end of the oblong faience beads from Tomb 26 and obviously represents a variation by means of material.

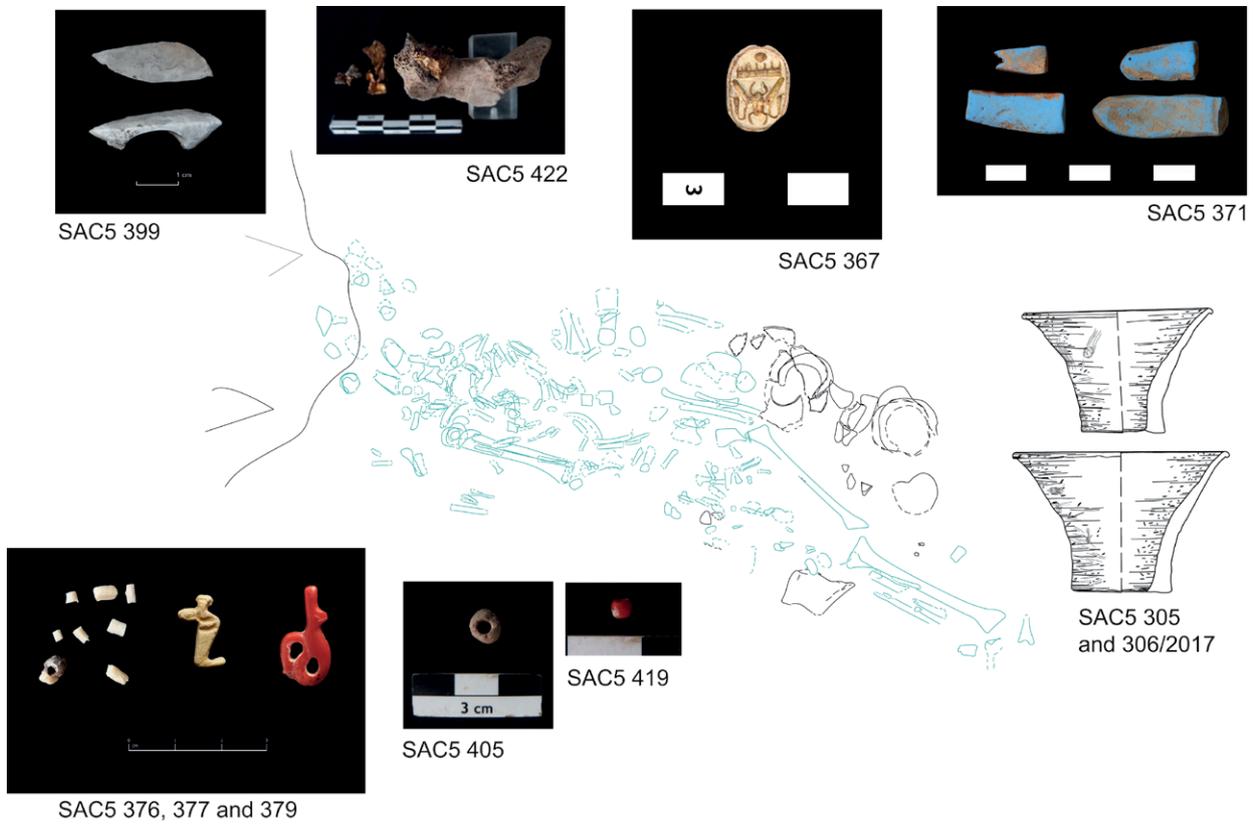


Figure 7.12: tomb group TG 03 from Tomb 26, Feature 5.

Type of tomb equipment	Attestation
Coffin/funerary mask	Coffin? [unclear, probably shared with Ind. 260] Funerary mask, gilded with pair of eye inlays (SAC5 399); gold foil (SAC5 422)
Bodily adornment	Amulets (SAC5 376, 377 and 379) Beads (SAC5 405, 419) [+ SAC5 098 from Feature 1, SU 062?] Steatite scarab (SAC5 367)
Funerary objects	No heart scarab or shabti
Ceramic vessels	Two flowerpots (SAC5 305/2017 and 306/2017)
Stone/faience vessels	None
Other	Five Egyptian blue sticks (SAC5 371)

Table 7.3: composition of TG 03.



Figure 7.13: remains of eye inlay SAC5 399 (photo: C. Geiger, ©AcrossBorders).

SAC5 419 is a small red stone bead (3×3x3mm), possibly of red jasper, making it a nice match with the *uraeus* amulet SAC5 377 (see below). The bead is nearly spherical but is not quite spherical around the piercing. The piercing itself narrows considerably from one side to the other. A perfect match to this bead with exactly the same dimensions is SAC5 098 which was found in SU 062 in the shaft. It was most likely once part of TG 05.

The amulets SAC5 376, 377 and 379 were already briefly described in Chapter 5; SAC5 376 and 377 are remarkable because they are the only attested cobra amulets from Tomb 26 (Fig. 7.14). They are both shown in profile but are very different: the faience amulet SAC5 376 shows a very rudimentary *uraeus* without any details, facing to the left. The shape is comparable to a cobra amulet made in stone and found with a child burial at Tombos (Smith 2003a, 160, fig. 6.27). SAC5 377 is carved of red jasper, facing to the right. The small extension for the piercing

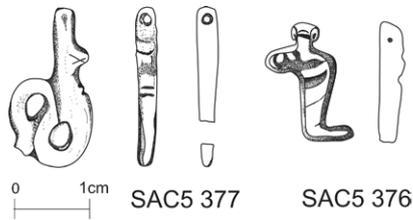


Figure 7.14: cobra amulets SAC5 376 and SAC5 377.

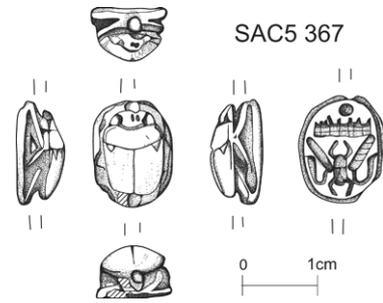


Figure 7.15: scarab SAC5 367 of TG 03 from Feature 5.

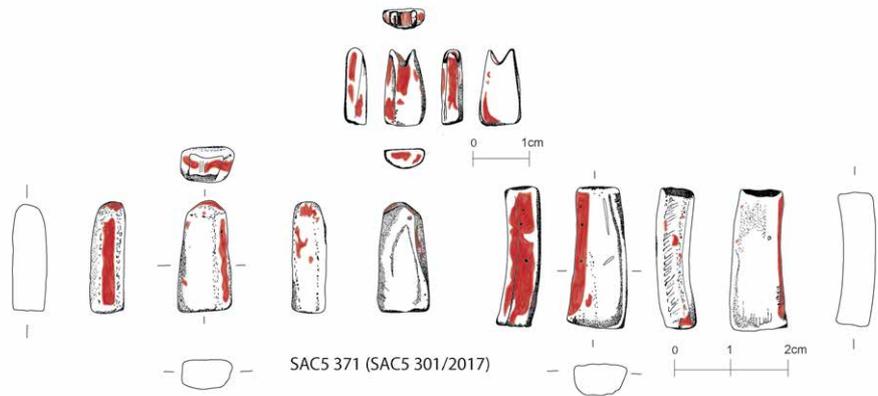


Figure 7.16: examples of blue stick from TG 03 in Feature 5 (SAC5 371).

resembles a crown (Red Crown) atop the head. The face is shown in profile and there appears to be some detail added in tiny incisions, perhaps for the mouth. Two incisions have been added to decorate the hood, though they are almost not visible from the hanging position. The tip of the tail has been broken off but is so small it is barely noticeable. The back is flat and smooth, with no carved details.

The scarab amulet SAC5 367 (Fig. 7.15) is one of the *Mn-hpr-R*-scarabs from Tomb 26. It finds close parallels in Tomb 25 of SAC5 (Minault-Gout and Thill 2012, 264, pl. 117, T25P14), in Soleb (Schiff Giorgini 1971, pl. XII, T17c7 and T19p9) and Aniba (Steindorff 1937, pl. 54.7 and 16). That the design is also attested in lower quality is reflected in one scarab amulet found at Fadrus (Säve-Söderbergh and Troy 1991, pl. 16, 185/493:1). Among the large group of *Mn-hpr-R*-scarabs, this type is contemporary to the reign of Thutmose III or the mid-18th Dynasty respectively (see Hornung and Staehelin 1976, 60-62; Jaeger 1982, 30, §39, fig. 1, London BM 64780; Säve-Söderbergh and Troy 1991, 94).

Two flowerpots of the type FP 2 were deposited with Individual 300 (Fig. 7.12) and are comparable to the ones of Khnummose in Feature 6 (see Fig. 5.59).

Objects of unclear function are so called blue sticks (Fig. 7.16), of which five small stick-shaped fragments are associated with this burial (SAC5 301/2017 and 307/2017). The four fragments labelled SAC5 301/2017

were found scattered on the ground north of the feet of Individual 300, the piece SAC5 307/2017 a bit further to the west. The sticks are made of Egyptian blue and red pigment is visible on the rounded surface of several (maximum 34 × 9 × 11 mm). The sticks differ in shape, two pieced have pointed ends, one a notched end, and one is broken at both ends. The small piece with one notched and one straight end and a roughly trapezoid shape is particularly interesting. The exterior is red coloured and no breaks are visible. The shape and size (13 × 6 × 3 mm) are the same as the ones of SAC5 307/2017, suggesting that these two pieces were maybe made with the same mould.

A possible function as fixing material for inlays of coffins was mentioned above (see 7.2.1) but does not explain the red paint. However, since Individual 300 was most probably buried coffined and with a funerary mask, such an inlay function is feasible for the case of TG 03. Interestingly, one of the fragments, SAC5 301/2017, matched with a piece found with Individual 245 (TG 09, see below). This seems to support the assumption that the coffin of Individual 300 was moved when Individual 245 was deposited; maybe the coffin was already in a fragile condition and its inlays partly fell out (see Chapter 8).

Type of tomb equipment	Attestation
Coffin/funerary mask	Coffin? [unclear, probably shared with Ind. 300] Gold foil (SAC5 412) of mask?
Bodily adornment	Amulet, ivory (SAC5 402)
Funerary objects	No heart scarab or shabti
Ceramic vessels	None
Stone/faience vessels	None
Other	None

Table 7.4: composition of TG 04.

Type of tomb equipment	Attestation
Coffin/funerary mask	Coffin rather unlikely Funerary mask with inlays in bone? (SAC5 429 on degraded wood/coffin material)
Bodily adornment	Wedjat amulet (SAC5 382) Steatite scarab (SAC5 387) Finger ring with scarab (SAC5 388) Necklace with crocodile amulets (SAC5 378)
Funerary objects	No heart scarab or shabti
Ceramic vessels	Six vessels (amphora SAC5 343/2017 and pot stand 346/2017, dish SAC5 345/2017, two flowerpots SAC5 350/2017 and SAC5 351/2017, lid SAC5 358/2017) + sherds SAC5 346/2017 and 357/2017
Stone/faience vessels	none
Other	none

Table 7.5: composition of TG 05.

7.3.2 The tomb group of an anonymous indeterminate individual, TG 04

The next tomb group is related to Individual 260, placed directly above Individual 300 in the central part of Feature 5 (see Chapter 6). Because of this position, it seems probably that Individual 260 shared one coffin with Individual 300. Except for two small pieces of gold leaf (SAC5 412), only a fragmentary amulet of which the shape remains unclear was recovered (SAC5 402).

7.3.3 The tomb group of an anonymous female, TG 05

Another burial of the early phase of interments in Feature 5 (see Chapter 8) is Individual 324. The burial assemblage of this female (Fig. 7.16) is remarkable because of a very elaborate finger ring and other elements of body adornment including the unique necklace with crocodile amulets (SAC5 378).

The position of Individual 324 makes it rather unlikely that this body was coffined. Some kind of wrapping is more likely and maybe a funerary mask was used. SAC5 429 are four thin square pieces (5 × 3x3mm and 7 × 3x5mm) of an unclear material (bone?) of which one is still embedded in degraded wooden material. They possibly functioned as inlays to a now lost wooden funerary mask. They compare well with the faience inlays found in Tomb 21 of SAC5 which were interpreted as coffin inlays (Minault-Gout and Thill 2012, pl. 127). However, since bone (and ivory) inlays are very common in the Kerma culture (e.g. for funerary beds, see Markowitz and Doxey 2014, 102-103, figs. 17-20) the original use of these inlays must remain open.

The bodily adornment of Individual 324 comprises a necklace with several pendants, two separate amulets and one finger ring (Fig. 7.17). The necklace SAC5 378 is unique in Tomb 26 and also in SAC5. Going by the beads found, it was made using various beads in different materials and shapes (Fig. 7.18): 345 complete ring beads were documented (180 in gold, 15 in carnelian, 83 in faience, 56 in bone and 11 in burnt faience or black stone). As pendants, SAC 378 included a dozen crocodile amulets of which six were fabricated in carnelian and six in whitish material, most probably bone (Fig. 7.19). Obviously, a conscious alternation of the colours was intended.

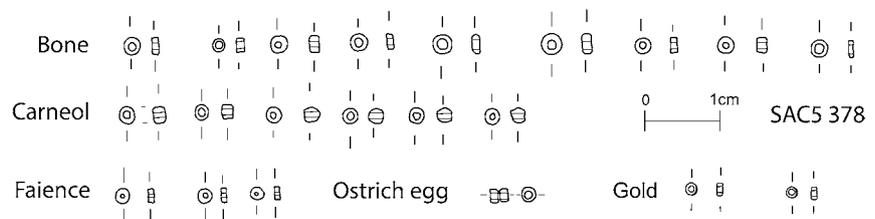
Among the set of crocodile amulets, one carnelian one was found on the left lower arm of Individual 245 (SAC5 325/2017, Fig. 7.19, second row left, see also below), but belongs to SAC5 378. It was carved from above, with the piercing going through its snout (5 × 3x21mm). All four legs have survived and are represented as tiny parallel stubs. The tail is also well preserved and is long and pointed. The entire surface of the crocodile's back and tail was incised with hatching, creating two rows of scales. Further incisions were made to the narrow sides to continue the appearance. The reverse surface is flat and smooth.

As a comparison, a crocodile made of whitish material, most likely bone, was found in the breast area of Individual 324. SAC5 338/2017 (Fig. 7.19, second row right) is again carved from above, with the piercing going through its snout (5 × 2x19mm). The four legs are represented as tiny parallel stubs as in the carnelian version. The tail has the



Figure 7.17: tomb group TG 05 from Tomb 26, Feature 5.

Figure 7.18: selected beads from SAC5 378.



same shape as in the carnelian amulet. The surface is covered in a dark grey patina, but it appears that a series of hatching has also been incised on the back and tail to create the scales.

Crocodile amulets are known to have been in use in Egypt even before the Early Dynastic period and throughout the entire historic period as apotropaic elements and symbols of rebirth (Andrews 1994, 36-37). No parallels are known to me from the elite cemeteries at Sai, Aniba or Soleb. A remarkable tomb in Ginis West, thus close to Amara West, yielded one faience crocodile amulet, most likely of Ramesside date (Vila 1977, site 3-P-50, 151-152, fig. 72.12). Furthermore, there is an intriguing find of a single carnelian amulet from Fadrus (Säve-Söderbergh and Troy 1991, 128, fig. 33, 185/481:1, pl. 22). It is much smaller than the ones from Tomb 26

(13×2x2mm). Interestingly, it was found together with other pendants with an infant burial. This might refer to both the protective function of the amulet and its symbolic value for rebirth.

The carnelian amulet in the shape of a wedjat eye (SAC5 382) was found in the feet area of the burial. Wedjat amulets are in general common in New Kingdom Nubia, but in different materials and very often in faience (Säve-Söderbergh and Troy 1991, pl. 25). Stone wedjat amulets with incised details are known from 18th Dynasty Egypt (Andrews 1994, fig. 46i) but such simplified forms as SAC5 382 seem to be exceptional in Nubia. SAC5 382 has no parallel within Tomb 26 or in SAC5. Only two carnelian wedjat amulets are known from Aniba (Steindorff 1937, pl. 51, 30), but they are more detailed and much larger than SAC5 382. Three

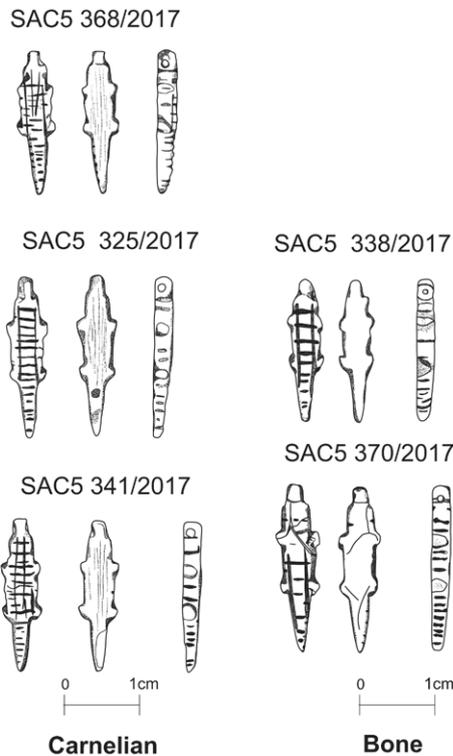


Figure 7.19: crocodile amulets in carnelian and bone from SAC5 378.

carnelian wedjat amulets were found in tomb G301 at Amara West which are also simplified but not as much as SAC5 382 (Binder 2014, 598, III.53).

The scarab amulet SAC5 387 of Individual 324 shows an elaborate decoration with the *smꜣ tꜣ.wj* symbol (Fig. 7.20). Such floral and symbolic designs are common for scarabs found in Nubia (see Steindorff 1937, pl. 56) and a comparable example was recorded in Fadrus (Säve-Söderbergh and Troy 1991, pl. 11, 185/47:1G). SAC5 387 seems to date to the Second Intermediate Period which is also indicated by its design of the beetle's back (type D after Steindorff 1937, 99).

Still found *in situ*, on the left hand of Individual 324, an exceptionally well-preserved finger ring of gold and silver with a steatite scarab set in the bezel (SAC5 388) was discovered (Fig. 7.21). The ring (29 × 4 × 30mm) with its thick silver band, gold accents and the scarab are perfectly preserved. Several similar finger rings were excavated in elite tombs in New Kingdom Nubia. The *in situ* finds were always documented on the left hand. Parallels are present in SAC5, especially with one from Tomb 8 (Minault-Gout and Thill 2012, 252, 305, pl. 122). Comparable pieces are also known from Soleb (Schiff Giorgini 1971, 305, fig. 601, T36c11) and Aniba (Steindorff 1937, 111, pl. 57, nos. 34 and 36). Rings found in the cemetery of Fadrus are slightly different (see Säve-Söderbergh and Troy 1991, pl. 19).

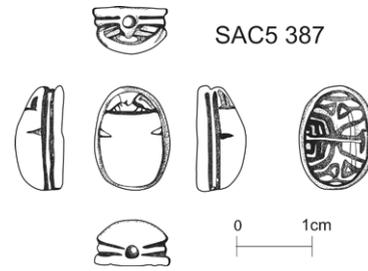


Figure 7.20: scarab SAC5 387.

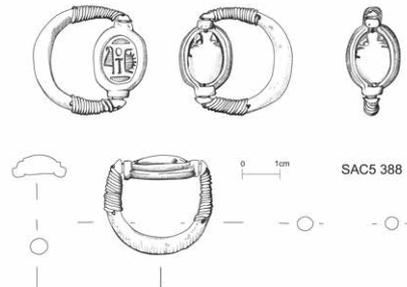


Figure 7.21: finger ring SAC5 388.

The shape of the back of the steatite scarab set into the ring SAC5 388 is comparable to SAC5 387 and suggests a dating of the scarab to the Second Intermediate Period/early 18th Dynasty. This is confirmed by the reverse design with the hieroglyphs *mꜣꜥt ꜥnh nbw* (balance, life, gold) and two small *nb*-signs added to either end. Similar, but not identical scarabs were collected by Newberry (1907, pl. 16); one of them was assigned to the early 18th Dynasty (Newberry 1907, 325, CG 37298, pl. 16). Overall, it seems obvious that an old seal was used as scarab mounted on the ring SAC5 388 (see Chapter 5).

TG 05 is rich in ceramics (see Fig. 7.17); two flowerpots (both of type FP 2) were found at the head of the individual (on the southern side) and are comparable to the ones found with other burials in Feature 5 and also Feature 6. The same holds true for the dish SAC5 345/2017. The small amphora SAC5 343/2017 with its pot stand SAC5 346/2017 and the lid SAC5 358/2017 are unique within Tomb 26 and support a dating to the mid-18th Dynasty (see Chapter 8).

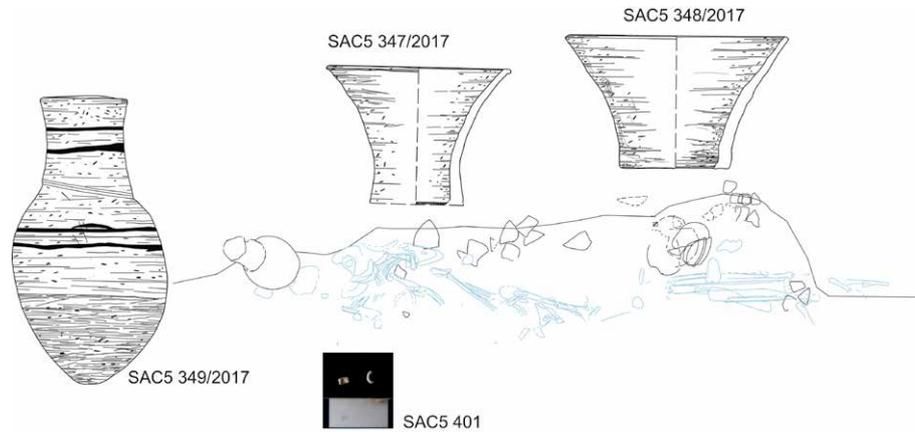


Figure 7.22: tomb group TG 06 from Tomb 26, Feature 5.

Type of tomb equipment	Attestation
Coffin/funerary mask	No evidence
Bodily adornment	Two faience ring beads (SAC5 401)
Funerary objects	No heart scarab or shabti
Ceramic vessels	Two flowerpots (SAC5 347/2017 and 328/2017); one monochrome painted bottle (SAC5 349/2017)
Stone/faience vessels	None
Other	None

Table 7.6: composition of TG 06.

7.3.4 The tomb group of an anonymous female, TG 06

Individual 297 was found in the northern part of Feature 5 and is poor in terms of grave goods. Only two small faience beads were discovered in the area of the lower body; three ceramic vessels found along the north wall of the chamber seem to be associated with TG 06 (Fig. 7.22). The limited equipment and the broken state of the flowerpots all attests to a post-depositional disturbance of this burial. Nevertheless, a clear difference of TG 06 to the other three burials of this phase in Feature 5 can be noted, potentially suggesting that this person was maybe a “satellite burial” rather than one of the direct relatives.

7.4 The tomb groups from Feature 6

As will be specified in Chapter 8, the next interments identifiable in Tomb 26 are the burials in Feature 6. A male and a female were buried in wooden coffins decorated with painted plaster and with elaborated equipment. The body in the north (male individual) was deposited first; the female in the entrance area followed soon after.

7.4.1 The tomb group of Khnummose, TG 07

The male individual buried in Feature 6 (Individual 159) can be identified by means of several inscribed objects (stone shabti and faience vessels) as overseer of goldworkers Khnummose. He is the only individual buried in Tomb 26 attested by name (*Hnm.w-ms*, Ranke 1935, 275.18) and with titles. Two occupational titles for Khnummose were recorded on his inscribed finds: *nb.y* ‘goldworker’ (Wb 2,

241.1-7; Taylor, J.A. 2001, 132, § 1215; Ayedi 2006, no. 988) and *jm.j-r’-nb.yw* ‘overseer of goldworkers’ (cf. Steinmann 1980). As Auenmüller (2020) has stressed, Khnummose is the only ‘overseer of goldworkers’ known so far in New Kingdom Nubia. The occupation *nb.y* ‘goldworker’ is confirmed for several persons in Nubia (Auenmüller 2020, tables 40-41).

Khnummose’s burial assemblage in Feature 6 is summarised in Table 7.7 and Fig. 7.23.

As described in Chapter 5, the painted wooden coffin of Khnummose is badly preserved. The main colours attested as pigments are blue, white, yellow and red. Other than in the case of TG 01 and TG 02 in Feature 5, there are no traces of a gilded coffin and/or funerary mask – the gold foil found with Individual 159 is associated with his heart scarab (see below). Two sets of eye inlays found with the skeleton of Khnummose suggest that both the wooden coffin and the wooden funerary mask once had the eyes made in different materials. In addition, one part of SAC5 356 can be interpreted as a miniature plaster mask (see Chapter 5, Fig. 5.70). Within Tomb 26, another miniature mask is attested for Individual 145 in Feature 5 (see above, TG 02).

In the same way as comparable finds of miniature masks in SAC5 (Minault-Gout and Thill 2012, 166-167, pl. 89), these mould-made objects were placed directly on the face. Similar masks are already attested in Middle Kingdom Egypt and in Nubia from the Second Intermediate Period until the early Ramesside Period (see Säve-Söderbergh and Troy 1991, 65 for a list of

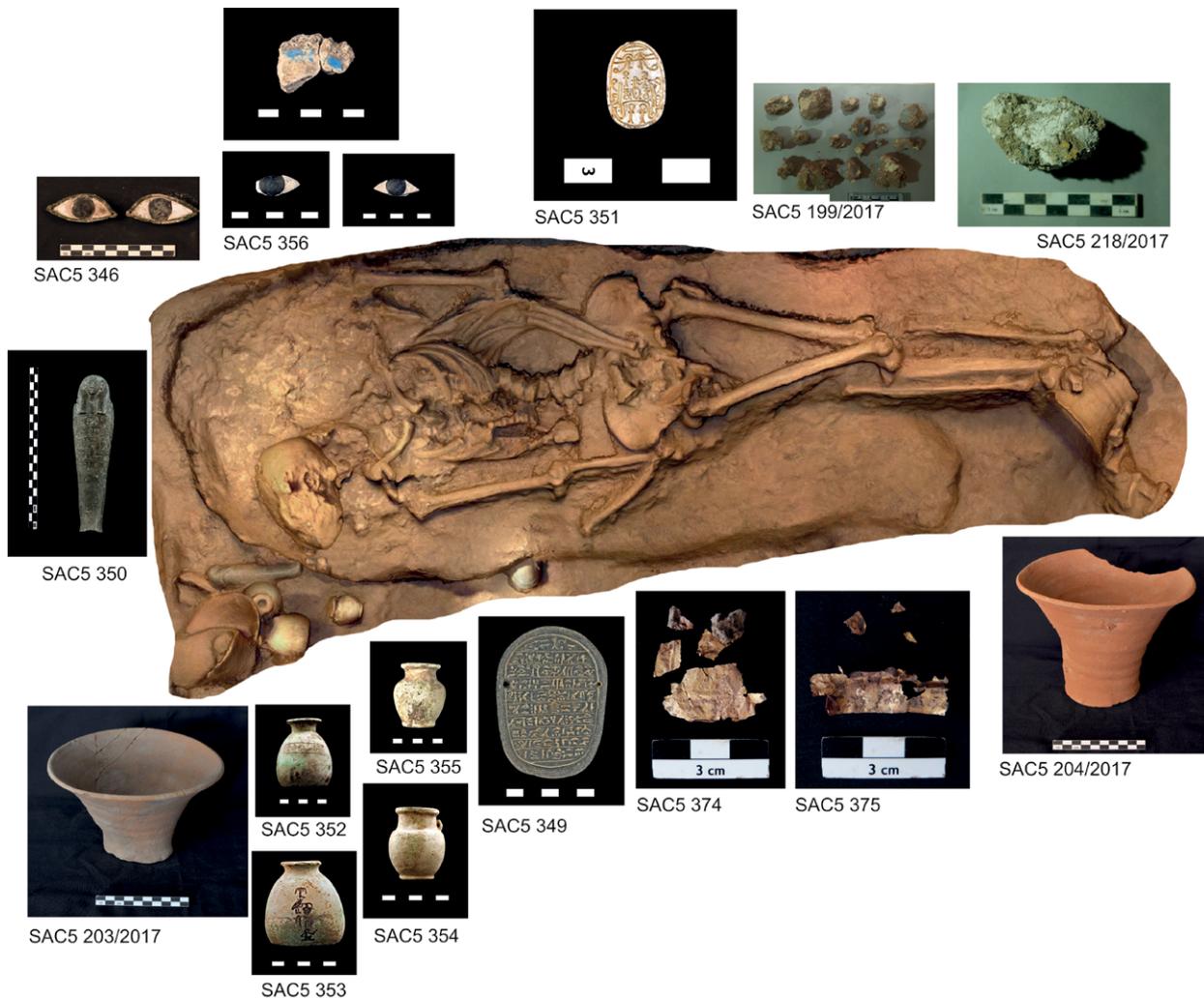


Figure 7.23: tomb group TG 07 from Tomb 26, Feature 6.

Type of tomb equipment	Attestation
Coffin/funerary mask	Coffin, wood, anthropoid, painted (SAC 218/2017 plus other find numbers, see Appendix) with eye inlays (SAC5 356) Funerary mask with eye inlays (SAC5 346) Miniature/model mask of plaster (SAC5 356)
Bodily adornment	Steatite scarab (SAC5 351) No beads/necklace/bracelet (but see heart scarab)
Funerary objects	Heart scarab mounted in a gold bezel (SAC5 349; see also gold foil from chain/bezel of heart scarab, SAC5 374 and 375; see Appendix) Serpentine shabti (SAC5 350)
Ceramic vessels	Two flowerpots SAC5 203/2017 and 204/2017
Faience vessels	Set of four ointment jars, partly inscribed (SAC5 352, 353, 354, 355)
Other	No stone vessels No other finds

Table 7.7: composition of TG 07, burial of Khnummose.

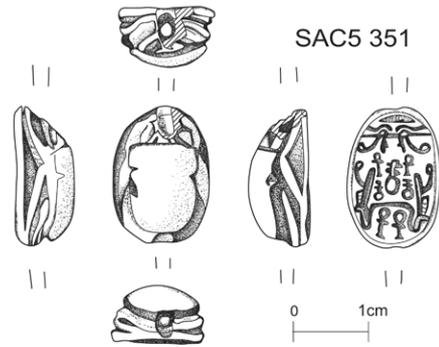
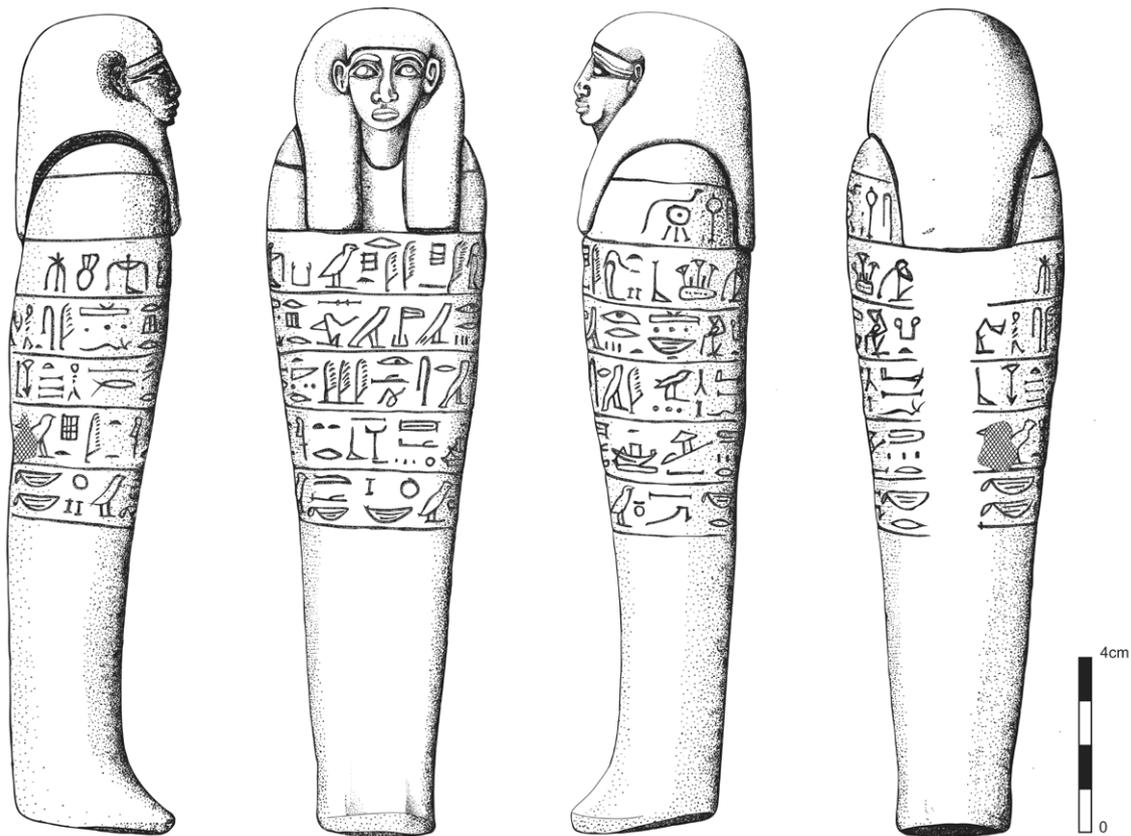


Figure 7.24: scarab SAC5 351 from Feature 6.

Figure 7.25: shabti SAC5 350 with inscription (illustration: P. Heindl, © AcrossBorders).



attestations; cf. also Näser 2017, 563-564 for a sub-group of *rishi* masks). Whereas the only two miniature masks in Tomb 26 were found on burials of male adults (Individuals 159 and 145), the evidence from other tombs in SAC5 is more diverse: while T16S2, T13P1 and T14Cb19 all remain undetermined regarding the sex of their owner, T8Cc80 was found *in situ* at the skull of a female burial (Minault-Gout and Thill 2012, pl. 67). That this is an incomplete picture is very likely given the fragile material these miniature masks were

made of. Troy already stressed that they might have been more common in New Kingdom burials in Nubia but have often been overlooked or are not preserved (Säve-Söderbergh and Troy 1991, 66). The poor state of preservation of these masks in Tomb 26 supports this assessment.

No beads were found with the burial of Khnummose. As amulets, the large heart scarab SAC5 349 and one steatite scarab, SAC5 351, can be named. SAC5 351 was discovered in the head area of the skeleton and shows an elaborate

design on its reverse side (Fig. 7.24) with hieroglyphic symbols. The decoration is dominated by a pair of wedjat eyes over a pair of *uraei* wearing the Red Crown; a central *nfr*-symbol is flanked by smaller ankh-signs and *nfr*-signs. Two larger ankh-signs are located below the *uraei*.

No comparable scarab was found in other tombs in SAC5. A similar piece, but not an exact parallel, was dated by Newberry to the Middle Kingdom or Second Intermediate Period (Newberry 1907, CG 36557, 140, pl. XI). Another parallel with a similar design comes from Aniba (Steindorff 1937, pl. 56, 131) and was assigned to the Middle Kingdom. Essentially, SAC5 351 seems to belong to the considerable group of scarabs pre-dating the New Kingdom but used in 18th Dynasty burials (see Chapter 1.2.2; cf. also Säve-Söderbergh and Troy 1991, pls. 9-16).

Two high-quality *funeralia* are associated with the burial of Khnummose. Both objects are made of serpentinite and must have been imported to Sai (Budka 2017b, 77; see also Chapter 11). One of the most remarkable finds from Tomb 26 is the shabti SAC5 350 (height: 19.2cm; width: 5cm; depth: 4.2cm). It was found lying on its side close to the head of Khnummose, just south of his coffin between a set of faience vessels, facing towards the burial of its owner.

The shabti's general form falls into class VA (mummiform, no hands, no beard, no collar) by Schneider (1977, fig. 22) and shows a slender body (Fig. 7.25). The plain tripartite wig falls into Schneider's class W4b (1977, fig. 11). The triangular face of SAC5 350 has a small round and receding chin and round upper cheekbones. The most characteristic facial features are the wide almond-shaped and rather close-set eyes with fairly straight lower eyelids and contoured upper eyelids that continue as makeup lines on the temples. The left eyebrow is placed higher above the eye. The nose is large with a flat tip and wide nasal wings. The rather wide and horizontal mouth has full rounded lips. The left larger ear has a round helix with a voluminous lobe, the scapha has a rough dent. The right ear is smaller and only cursorily worked. SAC5 350 has a rather long neck which ends in a small rounded hem at the transition to the mummy sheath. The feet show a rather shallow indentation at the front with less pronounced vertical ridges indicating the shins at both sides. The front is rounded and the flat base is slightly angled.

The text of SAC5 350 is the shabti spell in Schneider's version IVC (1977, fig. 5; Fig. 7.26). The layout of the text is a variant of Schneider 1c (1977, fig. 18) disposed in six lines with the text starting in the first strip on the left shoulder. The empty vertical area at the back of SAC5 350 is nicely delineated by the ends of the lines. Only the bottom border of line 2 from above is slightly shorter than the others on the right. Since this is the line where a blank was left for the name, this is likely to be either intentional or influenced by the specifications of leaving a blank during the carving process.

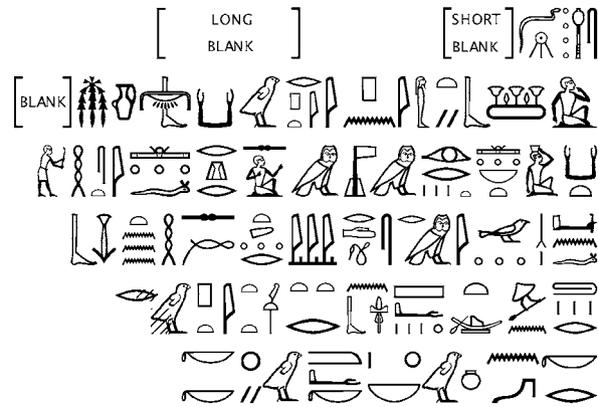


Figure 7.26: transliteration of inscription of SAC5 350 (illustration: J. Auenmüller, ©AcrossBorders).

Transliteration⁷:

- (1) *shd* [BLANK]^a [BLANK]^b
 (2) (*j*)^c *šz**b*.*ty*^d *jp**n jr jp*.*tw*^e *kz nb.y Hnm. w-ms*^f [BLANK]^g
 (3) *kz*.*t*^h *nb.t jrr.t m hr.t-ntr*ⁱ *m zj*^j *r hr*. (*t*)=*f jst hwi*
 (4) *n=f sdb.w jm r srd*^k *sh.wt r zmhi.t wdb*.
 (5) *w r hni.t šz(.y) n jzb.tjt r jmn.tjt jp tw*
 (6) *r=k r nw nb mk.w(j) zp 2 k(z)=k*^l

Notes on the text:

- After *shd*, there is a short blank on the left shoulder that could have been used for inscribing the title of the owner.
- The whole right shoulder is left blank; title and name of the owner could have been added here. The usual *dd=f* as introduction of the speech opening in line 2 is missing here as well.
- The vocative interjection *j* is written without the initial reed-sign (M 17).
- The word *šz(wz)b.ty* is written without *wz* (V 4).
- The verb *jp* is written without the book roll (Y 1) (cf. also in line 5).
- The term *kz* as well as the title and name were – based on the palaeography – added later and written by a different hand. The name was left unclassified (no A 1 after the name, see blank and next note).
- There is a short empty space after the name that could possibly have been reserved for the preposition *m* that is missing in front of *kz.t* (cf. next note).
- The preposition *m* is missing before *kz.t*. This *kz.t* is written with the *kz*-arms as well as A 9. The palaeography of the *kz*-arms is markedly different from the sign used in line 2.

⁷ The transliteration of the text of SAC5 350 was already undertaken during excavation by the author and Meg Gundlach; Johannes Auenmüller and Rennan Lemos have added some post-excavation comments which are included here.

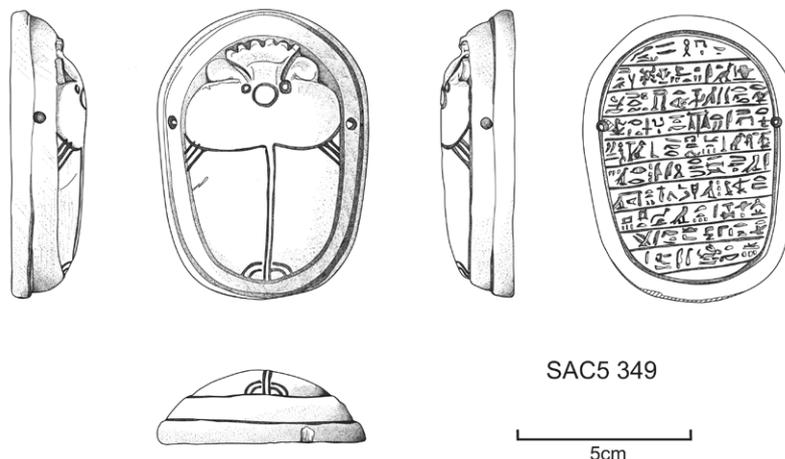


Figure 7.27: heart scarab SAC349 with inscription.

- i. The term *hr.t-ntr* is written in the form of a ligature of T 28 and R 8.
- j. The term *zj* is written without an ideogram stroke (Z 1).
- k. The verb *srwd* is written as *srd*.
- l. The verb *k3* is written without G 1 and A 2.

- (4) *hnmw swd3 ˘.wt(=j) pr.n=k r bwnfr hn.n*
- (5) *jm m shnš rn(=j) m šny.w(t) ıry.w*
- (6) *rmt m ˘h˘.w nfr n.n (nfr) (n) sdm*
- (7) *3w ıb (n) wd3-mdw m dd grg˘*
- (8) *r=j r-gs ntr ˘3 mk ın(w).t*
- (9) *k wn.ty m m3˘ hrw*

The name ends nearly two quadrats before the end of the second line, with the spell resuming in the third line. In conjunction with the fact that the similar example from Tomb 1 of SAC5 (T1Ca25, Minault-Gout and Thill 2012, pl. 93) has a gap but no name, it is clear that these figures were sent to Sai without names (Budka 2017b, 77). This is further supported by the different handwriting used for *k3*, title and name on SAC5 350. Khnummose's shabti falls into a distinct group of serpentinite shabtis traceable in Egypt and Nubia which will be discussed in detail in Chapter 11.

Notes on the text:

- a. The addition of *dd=f* is in general uncommon for heart scarabs, but well attested for examples found on Sai, e.g. Minault-Gout and Thill 2012, T8Cb45, T2C48, pl. 108, T3Cb64, pl. 110 and T5C32, pl. 111.
- b. The writing of *k3=j* instead of the common *jb=j* in Chapter 30B is unusual, but a misreading can be ruled out.
- c. The palaeography and spelling of *grg* is odd (W 11, D 21, W 11).

SAC5 349, the heart scarab, is of the same material as the shabti signifying that this was another import to Sai. It was found next to the body of Khnummose, but the inscription might associate this object with the female burial (TG 08, see below). The text itself is enclosed by an incised border and arranged in nine rows (Fig. 7.27). Added to the blank above the first row was the name and title of a woman, possibly the wife of Khnummose: *nb.t pr Hnn=f*.

Paleographically, the text on SAC5 349 is markedly different from the inscription on the shabti, thus they are unlikely to have been delivered from the same workshop (see also Chapter 11). The two serpentinite objects of TG 07 have the existence of two different handwritings and the separate addition of a personal name and title in common. In general, the name of the owner is rarely added to heart scarabs. Whether the text in line 0 really refers to the wife buried next to Khnummose (TG 08, see below) remains unclear. An alternative interpretation could be that the scarab inscribed for someone else (a lady of the House Hennef) was reused by Khnummose.

The text is typical for heart scarabs and includes excerpts of Chapter 30B of the Book of the Dead (Malaise 1978; Cooney 2008, 2; Lorand 2008; Gee 2009; Miniaci *et al.* 2018). It is arranged in nine lines giving the spell and an additional one, carved secondarily above the main text (labelled line 0).

The high-quality heart scarab SAC5 349 finds some parallels in other tombs in SAC5 (Minault-Gout and Thill 2012, pl. 102) as well as other elite New Kingdom sites in Nubia. As Spence has recently stressed (2019, 560): *Heart scarabs were found at the more important sites, but not in great numbers: around 30 at Aniba (Steindorff 1937, 86–89, pl. 47–50) and 17 at Sai (Fig. 9, Ca69, Cb47; Minault-Gout/Thill 2012, 197–227); only four were found at Soleb (Schiff*

Transliteration:

- (0) *nb.t pr hnn dd=f^a*
- (1) *jb(=j)m mw.t=j zp 2 h3ty(=j) n hprw(.w=j) m ˘h˘*
- (2) *r=j mtrw m hsf r=j m d3d3(w).t m ır rk(=k)*
- (3) *r=j m-b3h ıry mh3.t ntk k3=j^b jmj h.t=j*

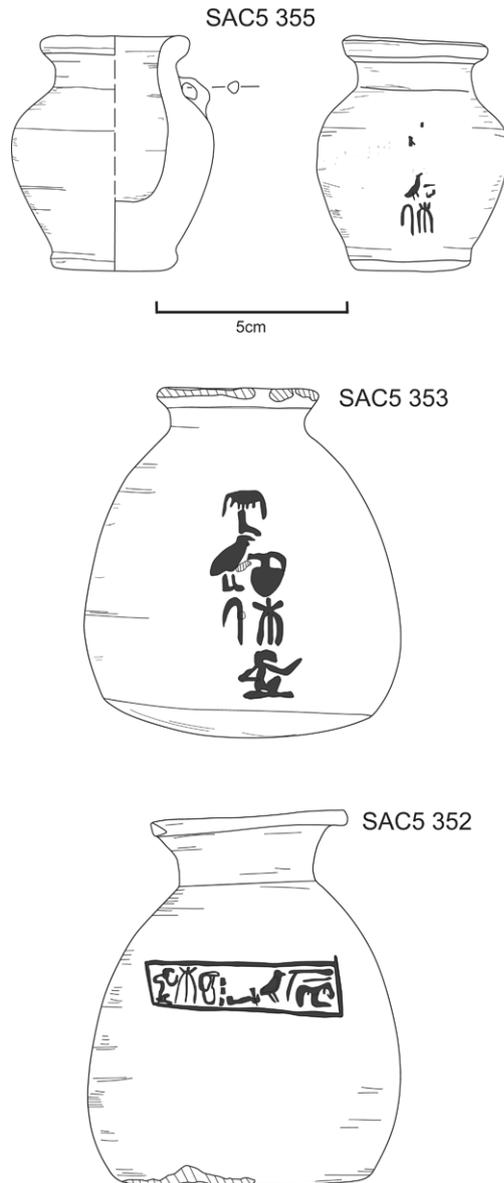


Figure 7.28: faience vessels with docketts of TG 07.

Giorgini 1971, 92).’ The total of 17 heart scarabs for Sai includes 13 heart scarabs excavated by the French Mission in SAC5, plus three heart scarabs integrated in pectorals, as well as the heart scarab of Khnummose from Tomb 26. However, AcrossBorders’ excavation has yielded a total of three new heart scarabs; thus the complete number known from SAC5 is now 19. The differences to both Soleb (far fewer heart scarabs) and Aniba (many more heart scarabs) are noteworthy (see below).

The shape of the beetle of SAC5 349 is slightly different to the other heart scarabs from SAC5. With all major parts delineated (*clypeus*, head, plate, *thorax* and *elytra*), it only finds a comparison in T3Ca53 (Minault-

Gout and Thill 2012, pl. 102). This piece has, similar to SAC5 349, no legs worked in detail, but it is sitting on a plinth. Because of the plinth in addition to the gold leaf remains of SAC5 349 (including SAC5 374 and 375), it is likely that the heart scarab of Khnummose was mounted in a gold bezel and originally hung from a gold chain as it is attested for high elite burials in Egypt (see Patch 2005, *cf.* also above, Chapter 5).

A set of four ointment jars, of which the inscription has only survived on three, was found close to the head of Khnummose and next to the shabti SAC5 350. These vessels are comparable to vessels from Tomb 11 at Soleb (Schiff Giorgini 1971, 166, figs. 268 and 270). They are the only inscribed faience vessels discovered in Tomb 26. Vessel SAC 352 has the name and title of Khnummose painted in a horizontal row (Fig. 7.28).

Though faded, the inscription is preserved in its entirety. A rectangular box encloses the line and is now the same pale brown colour. Written from right to left, the inscription reads *imy-r^c n nb(y)w Hnm-ms*, *overseer of the goldworkers Khnummose*. The use of the *n* in the title is redundant and does not appear in known contemporary parallels. At the start of the name the *hnm* vessel (W 9) appears to be written in reverse, with the handle to the back. As for the shabti SAC5 350, the phonetic complement *s* is not added to the end of the name.

The inscription of SAC5 353 vessel also contains the name and title of Khnummose, here in a vertical column without a perimeter line. This time, he is listed as only a *nby*, *goldworker*. The *hnm* vessel (W 9) faces the correct direction and the phonetic complement *s* has been added at the end of the name, presumably for balance across the quadrat. At the first glance, the appearance of the *w* phonogram (G 43) seems unusual. Following the *hnm* vessel, it is inserted needlessly into the middle of the personal name. However, similar faience vessels for a scribe Khnumhotep (*Hnm-hotp*) were found in Tomb 11 at Soleb. Here, the G 43 sign was also added after the W 9 sign. Within New Kingdom Nubia and the macro region of Sai-Soleb, this was obviously a standard way of writing names comprising the god’s name ‘Khnum’.

SAC5 355 shows an inscription on the surface opposite the handle and is as poorly preserved as the rest of the surface, giving only traces of the name of the owner. The only clearly visible signs are the *ms* and the phonetic complement *s* at the bottom, confirming the owner as *Hnm-ms*. Directly above the *s* there appears to be the body of a bird, which is reminiscent of the arrangement on SAC5 353 where the *hnm* vessel (missing here) is followed by a quail chick (G 43). There is no trace of or room for a seated figure below the name, an element that appears in both other inscribed vessels.

Figure 7.29: the female burial in Feature 6 next to Khnummose (photo: J. Budka).

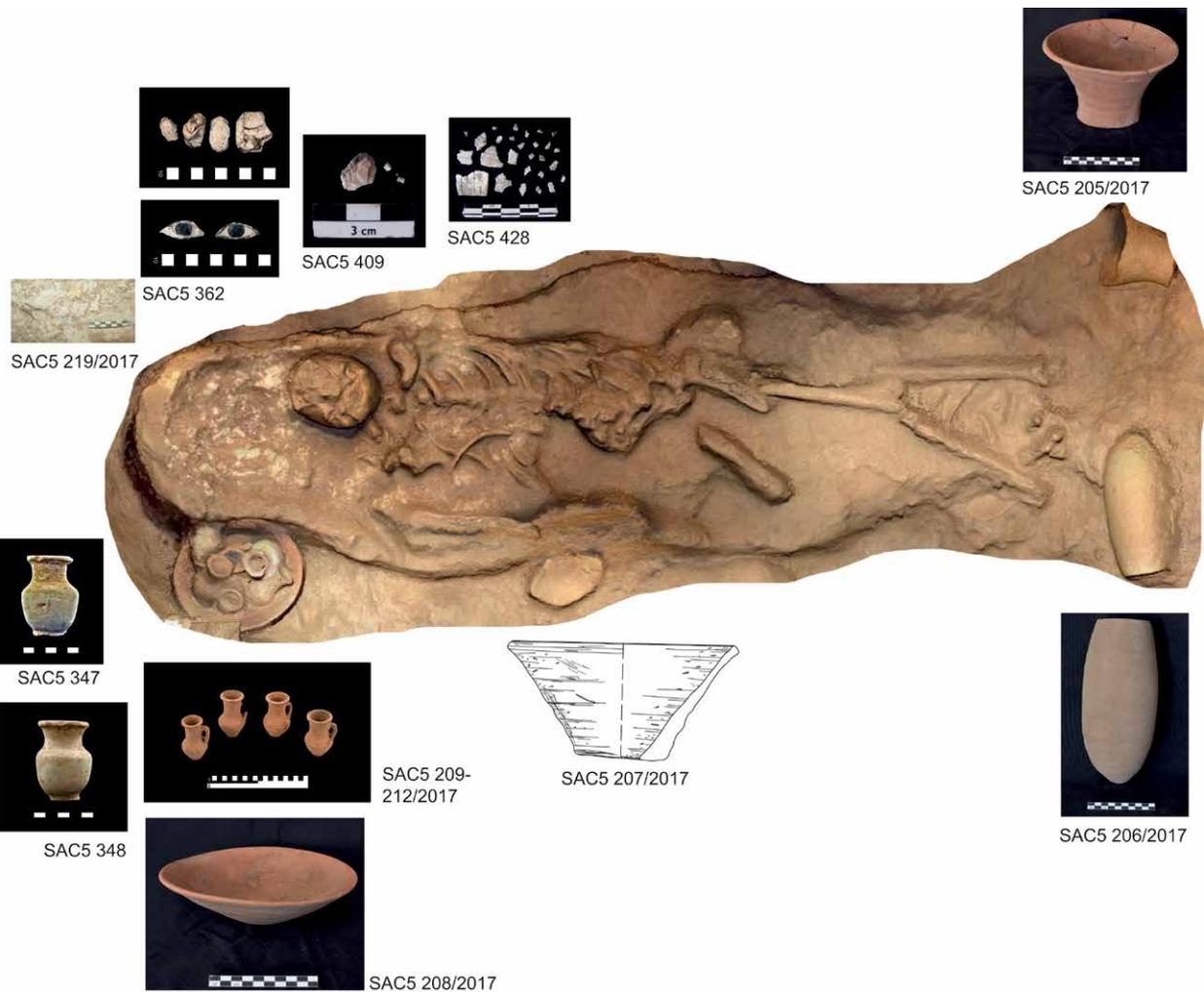


Figure 7.30: tomb group TG 08 from Tomb 26, Feature 6.

Type of tomb equipment	Attestation
Coffin/funerary mask	Coffin, wood, anthropoid, painted (SAC 219/2017 plus other find numbers, see Appendix) Funerary mask with eye inlays (SAC5 362) Ivory inlays of mask or coffin (SAC5 428); inlays of horn?/ivory (SAC5 409)
Bodily adornment	No scarab, beads/necklace/bracelet
Funerary objects	No funerary objects
Ceramic vessels	One beaker (SAC5 206/2017), two flowerpots (SAC5 205 and 207/2017), one dish (SAC5 208/2017), four miniature jars (SAC5 209-212/2017) Possible: one <i>zir</i> (SAC5 372/2016) and one flowerpot (SAC5 373/2016)
Faience vessels	Miniature faience vessels SAC5 347 and 348
Other	No stone vessels No other finds

Table 7.8: composition of TG 08.



Figure 7.31: detail of heart part of the coffin of TG 08 with some ivory and maybe horn inlays *in situ* (photo: J. Budka).

In conclusion, the faience vessels of TG 07 show slightly diverging patterns and include unusual styles of writing. Unlike the inscribed stone *funeralia*, it is likely that these vessels were painted with the texts on site at Sai. The parallels from Soleb also suggest a local tradition. Tomb 1 in SAC5 yielded similar faience vessels with docketts and it is notable that two scribal palettes were also found, symbolising the elite status of the ability to write (Minault-Gout and Thill 2012, pl. 51; see Chapter 9).

Besides the inscribed objects and here especially shabti SAC5 350, the ceramics from TG 07 were relevant for dating the burial. Two flowerpots support a dating to

the mid-18th Dynasty (see Chapter 8). These conical deep bowls have a modelled rim (see Fig. 5.76) and fall into the category ‘FP 2’ by Holthoer (1977, pl. 18). Flowerpots are chronological markers for the mid-18th Dynasty and well attested in SAC5 (Minault-Gout and Thill 2012, pl. 132) as well as in other elite cemeteries of New Kingdom Nubia (e.g. Wolf 1937, pl. 77, ‘Form 25’; Holthoer 1977, pl. 18; Williams 1992, 34-35; Helmbold-Doyé and Seiler 2019, 122-130). The distribution of the set of Khnumose’s flowerpots finds parallels in Soleb where one vessel was placed at the head and another one at the feet (Schiff Giorgini 1971, fig. 580; Helmbold-Doyé and Seiler 2019, 124).

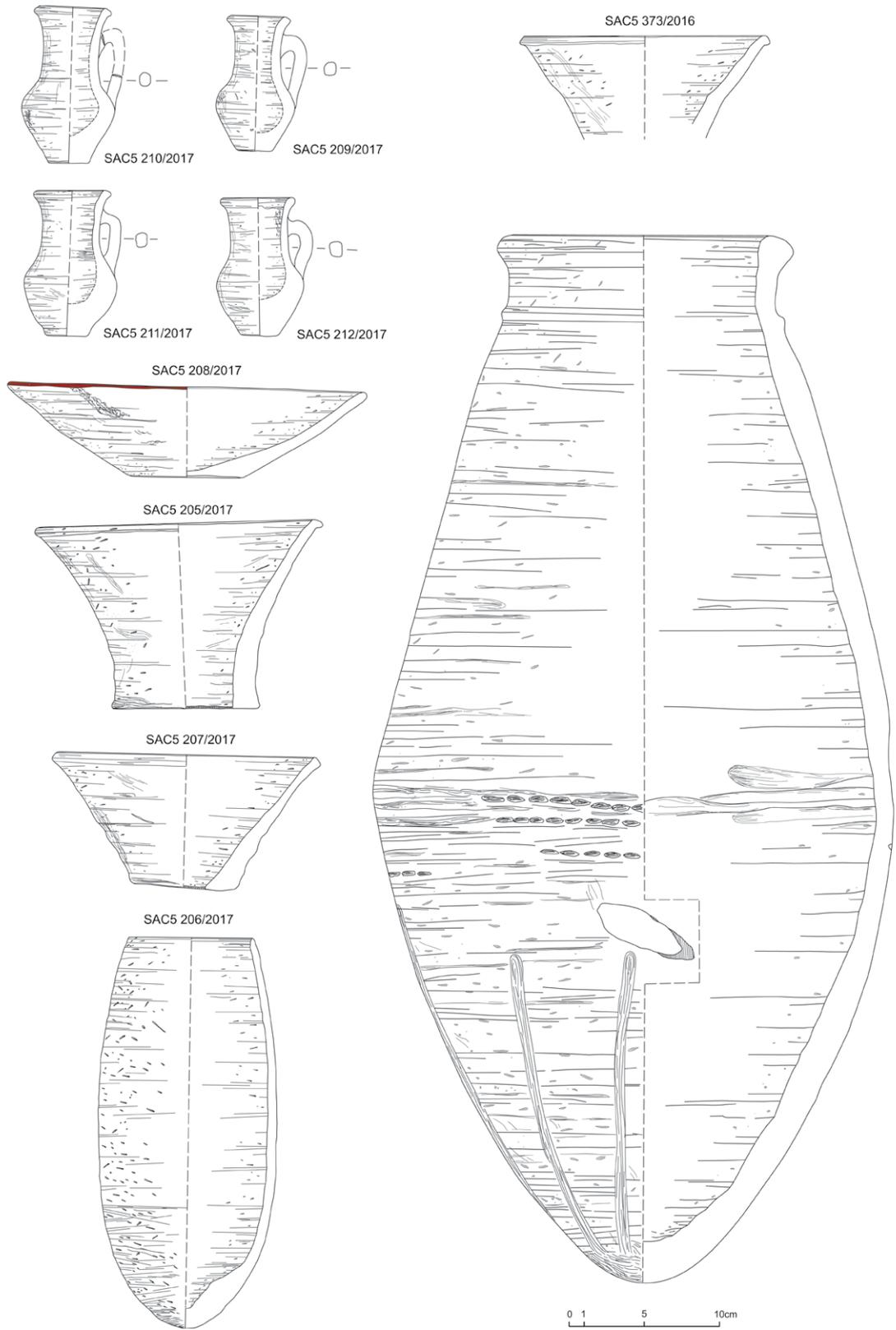


Figure 7.32: hypothetical complete set of ceramics of TG 08 from Tomb 26.

7.4.2 The tomb group of an (anonymous) female, TG 08

The second interment in Feature 6 is a female (Individual 160) placed in a wooden anthropoid coffin just to the south of Khnummose, thus situated in the entrance of Feature 6, partly reaching into Feature 4 (Fig. 7.29). I have suggested that the name of the heart scarab of Khnummose relates to this individual, but this remains tentative (Budka 2017b, 75-78; 2017c, 119-123; 2018a). She was therefore possibly the wife (*nb.t-pr*) of Khnummose and her name was read as *Hnn-f*. Since this identification remains uncertain, the heart scarab was described above, classified as part of TG 07 in line with its find position.

In contrast to the tomb group of Khnummose, this equipment does not include funerary objects and no inscribed objects (see Table 7.8). The burial therefore remains anonymous (note, however, the inscription of the heart scarab SAC5 349, see above).

TG 08 (Fig. 7.30) does not include any bodily adornment; besides the painted coffin (which shows no evidence for gilding) and the funerary mask only ceramic and faience vessels were used as burial gifts. Small fragments of what was interpreted as ivory and horn inlays (SAC5 409 and SAC5 428, Fig. 7.31) confirm the high quality and craftsmanship of the anthropoid coffin. Interestingly, two ceramic vessels were placed at the feet, one dish at the lateral side and one dish at the head of Individual 160. The latter served as a platter for six model/miniature vessels – four ceramic and two faience.

The beaker, flowerpots and dish are common mid-18th Dynasty vessels well attested in the New Kingdom town of Sai and in other tombs of SAC5, as well as in other cemeteries of Nubia, *e.g.* at Soleb (see Schiff Giorgini 1971, pl. 14, no 6 [dish], no. 20 [beaker]). The miniature jugs are specifically produced as funerary vessels. They find close parallels in Soleb, in particular in Tomb 15, dated by Schiff Giorgini to the reign of Amenhotep III (Schiff Giorgini 1971, 194, fig. 344, T 15 p9 and p14, and 196, fig. 348, T 15 p20) and are also attested in other tombs of SAC5 (Minault-Gout and Thill 2012, pl. 139).

It is likely that two more ceramic vessels were originally part of TG 08. The complete *zir*, SAC5 372/2016 and the upper part of a flowerpot with a modelled rim, SAC5 373/2016, were found close to the bottom of Feature 4 and are contemporaneous to TG 07 and TG 08. In terms of space, a placement at the feet of Individual 160, maybe together with the beaker, would be the most logical reconstruction, resulting in a total corpus of ten ceramic vessels for TG 08 which is the largest amount in all of Tomb 26 (Fig. 7.32).

7.5 The tomb groups from the late use of Feature 5

Maybe contemporaneous to TG 07 and TG 08, most probably a little bit later (see Chapter 8), more interments were placed in the northern part of Feature 5. All of these are female as well as two infant burials. These later burials within Feature 5 are equipped with less objects than the ones from the earlier phases; they were probably not coffined but simply wrapped.

7.5.1 The tomb group of an anonymous female, TG 09

Individual 245 was placed just to the south of Individual 324 together with her new-born baby or foetus (see Chapter 6). A crocodile amulet found by the left arm of this burial attests that these two females were interred close to each. Remains of possible inlays suggest that Individual 245 was probably equipped with a funerary mask (SAC5 431, see Chapter 5); similar to Individual 324, there is no evidence that it was a coffined burial and a wrapping is more likely.

A single piece of bodily adornment was found with TG 09 (Fig. 7.33). Individual 245 is the only burial in Tomb 26 found with a bracelet. This ivory item, SAC5 389, was badly damaged and broken, but its find position over the ulna of Individual 245 allowed a clear interpretation (see Fig. 6.33). Similar bracelets are known from several New Kingdom sites in Nubia (*e.g.* Buhen and Mirgissa) and two examples from Fadrus offer exact parallels (Säve-Söderbergh and Troy 1991, pl. 28.10, 185/511:158). These bracelets of which the material is tentatively identified as bone, are associated with child burials (Säve-Söderbergh and Troy 1991, 134-136) and have therefore a smaller diameter than SAC5 389.

Finally, one of the so-called blue sticks from Feature 5 was found close to Individual 245. The object was found at the right upper arm of the skeleton (SAC5 255/2017) but finds a match with pieces already described for TG 03 (see above, Fig. 7.16). Since TG 03 was probably moved towards the south at the occasion of the interment of Individual 245, it is likely that the blue stick is associated with the earlier burial.

The stick (Fig. 7.34) with a blue surface (7.5B7/6, light sky blue) and traces of red (10R4/8, red) is broken at both ends (18 × 9 × 6 mm) and matches with the pointed fragment from SAC5 301/2017. Individually this piece is reminiscent of a fragment from a tiny shabti or a bracelet, but the other pieces of SAC5 301/2017 eliminate these options. As discussed above, a relation to the inlaid decoration for coffins/mask seems possible. Such a potential use could also explain the scattering of the objects across Feature 5 during the process of wood decay.



Figure 7.33: tomb group TG 09 from Feature 5.

Type of tomb equipment	Attestation
Funerary mask	Inlays, bone?, from mask? (SAC5 431)
Bodily adornment	Bracelet, ivory (SAC5 389)
Funerary objects	No heart scarab or shabti
Ceramic vessels	None
Stone/faience vessels	None
Other	[Egyptian blue stick (SAC5 371), probably part of TG 03]

Table 7.9: composition of TG 09.

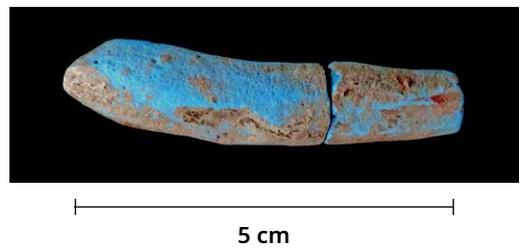


Figure 7.34: blue stick found at TG 09 with its match from TG 03 (photo: M. Gundlach, ©AcrossBorders).

Type of tomb equipment	Attestation
Coffin/funerary mask	Coffin material (SAC5 432, 1 large fragment, organic, with remains of blue and yellow pigment, including one unclear bone inlay) Inlays, bone, 77 pieces (SAC5 430)
Bodily adornment	None
Funerary objects	No heart scarab or shabti
Ceramic vessels	None
Stone/faience vessels	None
Other	None

Table 7.10: composition of child burial of TG 10.

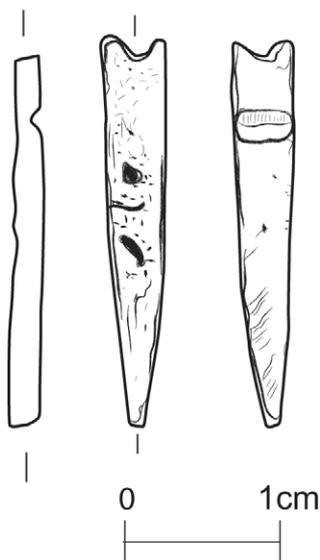


Figure 7.35: inlay SAC5 432.

7.5.2 The tomb group of an anonymous infant, TG 10

Individual 279 (see Chapter 6) was recorded without finds and thus no tomb group can be reconstructed. It remains unclear whether this is due to plundering or a simple state of preservation. Furthermore, multiple burials were positioned in the northern part of Feature 5 and because of taphonomical processes, some objects might have been misplaced (see the necklace SAC5 378 above) and thus not identified for Individual 279. This female was maybe deposited together with her child, Individual 299 (see Chapter 8).

Individual 299 is an infant placed along the northern wall of Feature 5 (see Chapter 6), labelled as TG 10. No burial gifts were found, but remains of a possible coffin or chest were recorded (Fig. 7.35).

SAC5 432 is a comparatively large fragment of coffin material, with remains of blue and yellow (orangey) pigment on one surface (see Fig. 5.42). Emerging from just below this surface is the notched end of an unclear bone inlay (24 × 4 × 2 mm, Fig. 7.35). This is like the pieces recorded as SAC5 430, supported the assumption that both

SAC5 432 and SAC5 430 attest to a now lost chest/box or coffin for the infant burial.

77 small pieces of worked bone of mostly triangular shape were documented as SAC5 430 (Fig. 7.36). Some rectangular and square/tiled examples were also collected. An interpretation as inlays for a wooden coffin (or box) is based on the corresponding assessment of similar ivory objects from Soleb (Schiff Giorgini 1971, 330, T45 p2, fig. 651).

7.5.3 The tomb group of an anonymous female, TG 11

Individual 259 (see Chapter 6) was recorded without any traces of a coffin or mask. No tomb equipment was found except for a small amount of bodily adornments, two faience ring beads and one scarab amulet (Fig. 7.37).

The base decoration of scarab SAC5 364 (Fig. 7.37) is oriented in line with the oval shape of the reverse and shows three animals. The central figure is a lion with a raised right frontal paw, obviously attacking a crocodile curved in front and below it. To the rear of the lion is a flared cobra over two small horizontal dashes, possibly an abbreviation for *nb.t t3.wj*. This design with a combination of these three animals finds several parallels (see Cooney and Tyrrell 2005, cat. No. 63, LACMA M.86.313.35 with references). Within Nubia, Aniba yielded a comparative piece (Steindorff 1937, pl. 55, 75) and Soleb a slightly different design (a lion above a crocodile, but instead of a cobra with a sun disc, Schiff Giorgini 1971, 173, fig. 290, pl. 12, T12 p6). The parallels have mostly been dated to the Second Intermediate Period, but the detailed design of the back of the scarab suggests a production date in the 18th Dynasty for SAC5 364.

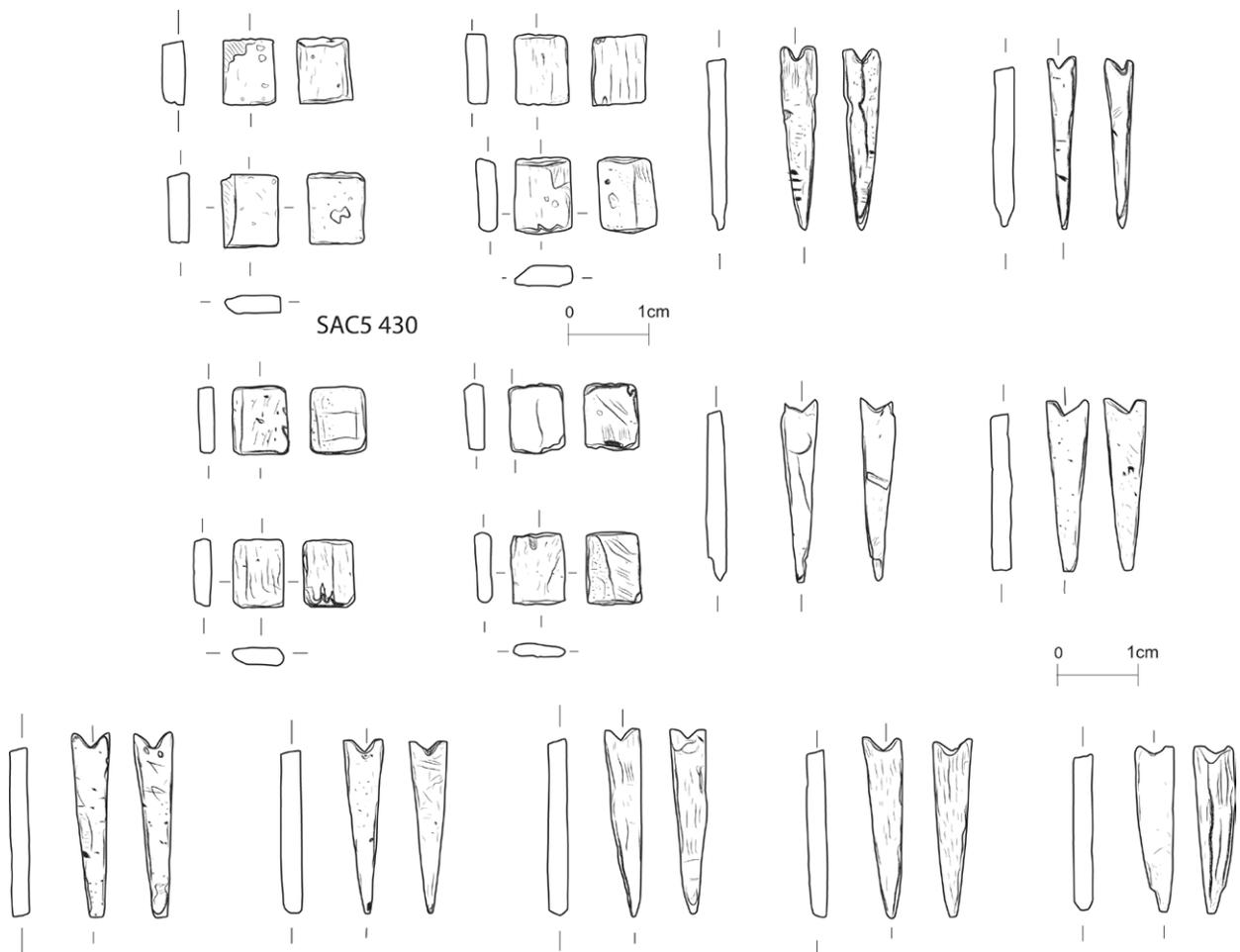


Figure 7.36: inlays SAC5 430.

Type of tomb equipment	Attestation
Coffin/funerary mask	No evidence, probably not coffined
Bodily adornment	Two faience ring beads (SAC5 296/2017) Steatite scarab (SAC5 364)
Funerary objects	No heart scarab or shabti
Ceramic vessels	None
Stone/faience vessels	None
Other	None

Table 7.11: composition of TG 11.

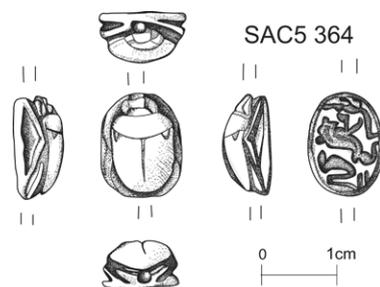


Figure 7.37: scarab SAC5 364.



Figure 7.38: inlays SAC5 339 and 340 (photos: M. Gundlach, ©AcrossBorders).

7.6 The tomb groups from Feature 4

As outlined in Chapter 5, the remains of burials in Feature 4 are difficult to assess, especially in terms of tomb groups. Various bones and several individuals were found in the muddy filling of Feature 4, including a single ring bead in faience and a small number of pottery fragments. Two complete vessels, a *zir* and a dish found at the bottom of Feature 4, have already been discussed since they most probably derive from TG 08 from Feature 6 (see above). Several finds, including pottery sherds, unearthed in Feature 4 may be associated with burials in Feature 2 (see Chapter 5, *cf.* also Chapter 8). Overall, no reconstruction of any specific tomb group in Feature 4 is possible. It may, however, be noted that almost no bodily adornment was found, neither were scarabs nor *funeralia*. One small fragment attests to a metal object of unclear function (SAC5 337). Evidence for coffins is present and will be discussed in the following.

7.6.1 Coffin remains and one flowerpot

Two ivory inlays (SAC5 339 and 340) were found in SU 155. SAC5 339 is a thin fragment of ivory (23 × 4 × 20mm) which is partly broken (Fig. 7.38). The opposite straight and curved edges are original, while the other two are breaks. The worked surfaces are textured with shallow grooves (result of smoothing?) and have a pale orange patina.

SAC5 340 is very similar (61 × 4 × 19mm), but different in shape (Fig. 7.38). The worked surfaces are textured with shallow grooves (result of smoothing?) and blackened. The intended shape of this ivory fragment is unclear and both short ends appear broken. The curved edge at the top is clearly a preserved worked part. This upper edge is strikingly reminiscent of the back line of the ibexes, which are attested as inlays of a funerary bed from Kerma (tomb K1053, Harvard University – Boston Museum of Fine Arts Expedition excavations; MFA

13.4219c, f, Museum of Fine Arts, Boston; see Markowitz and Doxey 2014, 102-103, fig. 18).

These inlays cannot be associated with one specific individual and it remains unclear whether they were part of a furniture item like a bed or of a coffin or mask (see below). No further evidence of inlays of coffins or funerary masks was found in Feature 4. Remains of wood and pigments (yellow and blue, SAC5 041/2017 and 056/2017) were documented together with Individual 051. Three more remains of skeletons were associated with some pigments, presumably deriving from painted wooden coffins or funerary masks (Individual 60, Individual 75 and Individual 77). These individuals were all found in SU 157 and the flowerpot SAC5 074/2017 may belong to the burial assemblage of one of them. Flowerpots were found as part of tomb groups in both Features 5 and 6 (see above).

7.7 The tomb groups from Feature 2

A minimum of fourteen individuals were found in Feature 2 (see Chapter 6). Not all of them can be associated with specific tomb groups. As has already been mentioned and will be specified in Chapter 8, several plundering phases occurred in Tomb 26 and particularly objects from Feature 2 were affected by movements and post-depositional modifications, as is for example evident by finding matches in the debris from Feature 1, the shaft. Also a group of objects found close to the entrance behind the door in the upper filling layer SU 073 had obviously been moved there from another original position in Feature 2. This group comprises the lower part of a pottery vessel, the obsidian vessel and an almost complete alabaster vessel. Since all of them are associated with the late 18th Dynasty, the only possible candidate as the original owner of these items appears to be Individual 10, TG 12 (see below). However, these objects could also originate from Feature 5 or a now lost burial in Feature 2 and this reconstruction therefore remains tentative.

Table 7.12: basic composition of TG 12.

Type of tomb equipment	Attestation
Coffin/funerary mask	No evidence
Bodily adornment	Steatite scarab (SAC5 313)
Funerary objects	No heart scarab or shabti
Ceramic vessels	Four complete vessels (two jars, SAC5 303/2016 and 304/2016; one Base Ring II jug SAC5 305/2016, one lid SAC5 378/2016) Pottery sherds (SAC5 293/2016, 320/2016, 377/2016)
Stone/faience vessels	None
Other	None

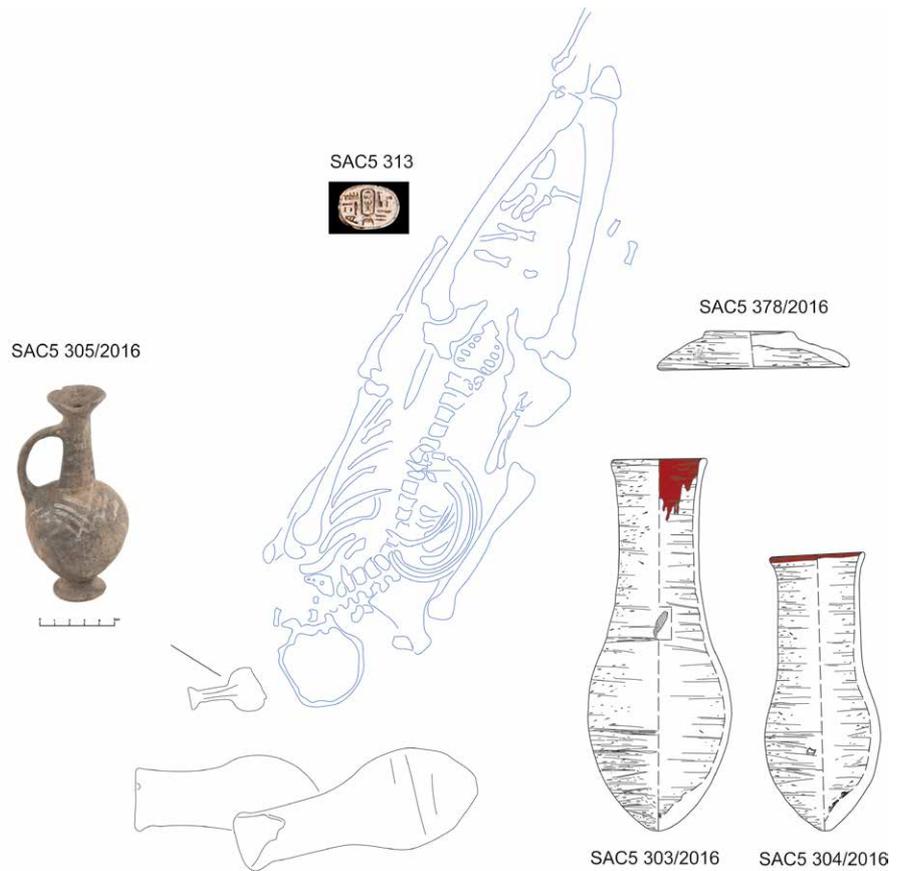


Figure 7.39: tomb group TG 12 from Tomb 26, Feature 2.

7.7.1 The tomb group of an anonymous male, TG 12

The earliest and best-preserved burial in Feature 2 is Individual 10 placed in the southwestern corner (see Chapter 6; Budka 2017b, 116-117). Both burial gifts and bodily adornment were still found associated with the skeleton (Fig. 7.39). No evidence for a coffin was noted during excavation (although two bags of mortar/plaster were collected around the individual, SAC5 246/2016 and 292/2016).

The dating of TG 12 can be established as late 18th Dynasty based on the combination of the scarab and the pottery vessels (see Chapter 8). Since no other burial of this period was found in Feature 2, it is interesting to assess whether additional finds dating to the late 18th Dynasty and found not to be associated with the skeleton of TG 12 nevertheless potentially belong to this tomb group.

Because of the position of the burial in the southwestern corner of the chamber, objects found in the entrance area are of interest.

The lower part of a large storage vessel made of a coarse Nile clay was found directly behind the entrance to Feature 2. The bag-shaped vessel SAC5 301/2015 shows a small intentional perforation in the lower part of the body, presumably a so-called killing hole. This feature, as well as the dating and the spatial closeness to Individual 10, suggests that this container was most probably once part of TG 12 (see Fig. 7.41).

Another ceramic vessel from the late 18th Dynasty is the fragmentarily preserved vessel in the shape of a baboon (see Fig. 5.26). SAC5 214 was reconstructed from several fragments found in the shaft as well as in the entrance area of Feature 2 (SUs 071, 073 and 074).

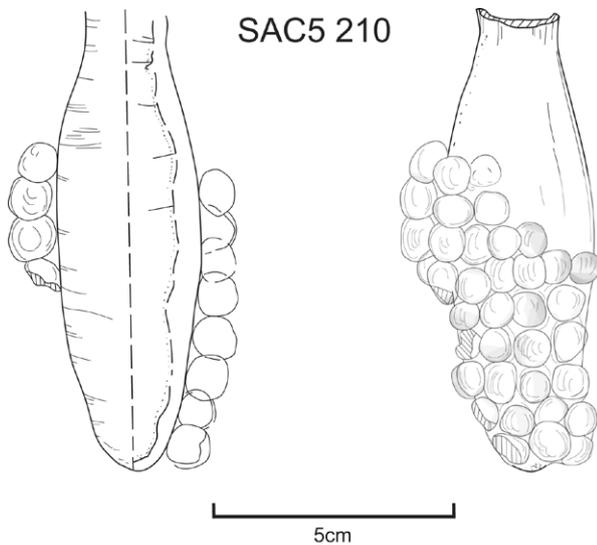


Figure 7.40: grape-shaped vessel SAC5 210.

Type of tomb equipment	Attestation
Coffin/funerary mask	No evidence
Bodily adornment	Steatite scarab (SAC5 313)
Funerary objects	No heart scarab or shabti
Ceramic vessels	Four complete vessels (two jars, SAC5 303/2016 and 304/2016; one Base Ring II jug SAC5 305/2016, one dish SAC5 378/2016) Pottery sherds (SAC5 293/2016, 320/2016, 377/2016) Storage vessel SAC5 301/2015 Monkey-shaped vessel SAC5 214
Stone/faience vessels	Obsidian vessel in shape of grape bunch SAC5 210 Ointment jar SAC5 211?
Other	None

Table 7.13: composition of TG 12 with possible additions found scattered in Feature 2.

The figurative vessel was made of a soft variant of Marl A2 and was nicely polished on its exterior surface. Although other ceramic vessels in shape of animals are known from SAC5 such as the fish vessel from Tomb 8 (Minault-Gout and Thill 2012, pl. 160, T8 87), SAC5 214 is the first attestation of a monkey shaped vessel from Sai. Its reconstruction is based on the complete vessel found in Tomb 15 at Soleb (Schiff Giorgini 1971, 194-195, T15 p2, fig. 345). Monkey-shaped vessels made of stone have already been attested in the Old Kingdom in Egypt (see Fischer 1993; Scott 2015). The two ceramic versions from Soleb and Sai are clearly exceptional variants of the pottery corpus of New Kingdom Nubia and may refer to the importance of the two administrative centers within the trade and transport of African goods towards Egypt (see Chapter 10). Monkeys and especially baboons are known to have been imported to Egypt from Sudan and from Punt (see most recently Dominy *et al.* 2020).

Two remarkable stone vessels are also possible elements of TG 12, having been found in the entrance area of Feature 2 and partly in the shaft. The obsidian vessel SAC5 210 (Fig. 7.40) is in many respects remarkable

and has no direct parallel in SAC5 or in other elite tombs of New Kingdom Nubia. The vessel itself has a core-built body and grapes made of stone were attached to this elongated body. The known rare parallels from the New Kingdom are made of faience (Brovarski 1982, 42, no. 12), glass (Goldstein 1982, 168, no. 190) or Egyptian blue (Schulz 1987b).

The unique vessels SAC5 214 and SAC5 210, vessels in the shape of a monkey respectively a grape bunch, would make TG 12 a very remarkable tomb equipment. The “foreign” motives (monkey) and the material (obsidian) are well in line with the Cypriote vessel SAC5 305/2016 which is definitely attributable to Individual 10. The potential social background of this person living in New Kingdom Sai and being buried with international objects will be discussed in Chapter 10.

Unlike SAC5 214 and 210, the complete alabaster vessel SAC5 211 (Fig. 5.30) is of a common type. It is very similar in shape to the faience vessels of Khnummose found in Feature 6. The vessel is most probably slightly older than SAC5 210, dating to the mid-18th Dynasty. It is feasible this piece was therefore stolen/removed from one of the burials in Feature 5 rather than from Individual 10.

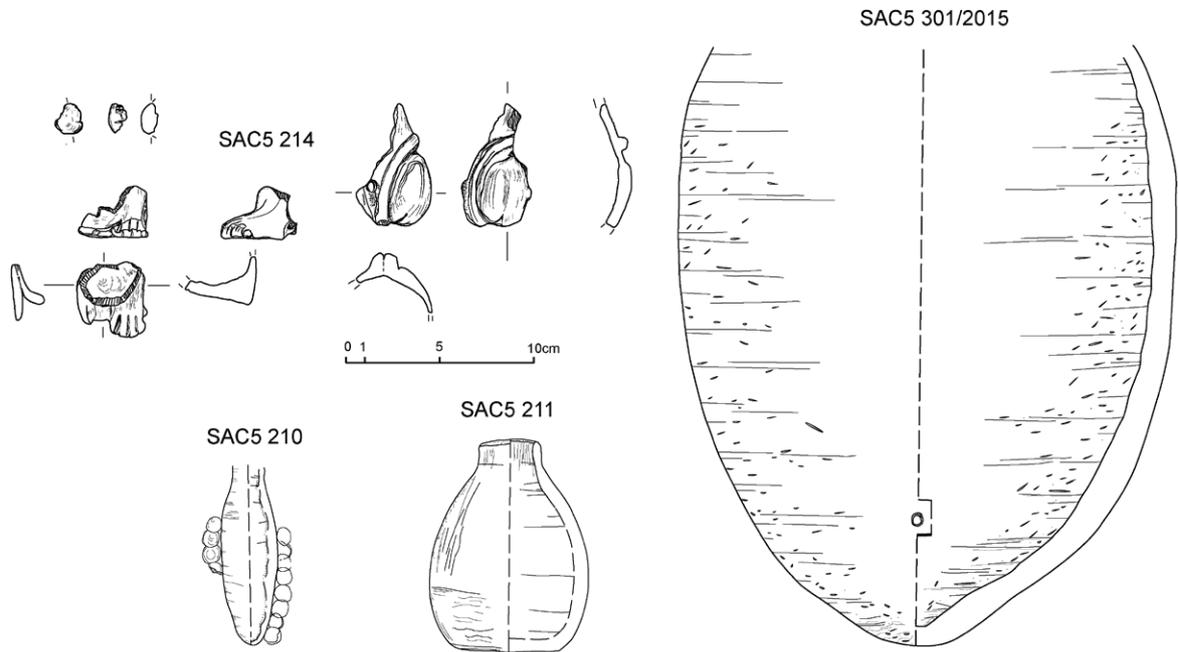


Figure 7.41: hypothetical additions to tomb group TG 12.

Although the complete set of ceramic and stone vessels attributed to TG 12 (Fig. 7.41) remains hypothetical, it is worth stressing that three of the pottery vessels show deliberate perforations in their bodies (SAC5 301, 303 and 304/2015). Two of these vessels (SAC5 303 and 304/2015) were treated with a red wash on their exterior surface and indicate an association with the well-known Egyptian ritual *'Breaking of the Red Pots'* (see Seiler 2005). However, evidence for breaking and "killing" vessels in Sudan, is diverse and not necessarily comparable to the Egyptian context (see Budka 2014b with references; for *'Breaking of the Red Pots'* at the New Kingdom site of Tombos in Upper Nubia see Smith 2003a, 159-160). The "killing holes" in the three vessels attributed to TG 12 suggest a ritual activity as part of the funerary practice performed for this individual buried in Tomb 26. The exact performance and details remain unclear but the most likely scenario, based on parallels from Egyptian cemeteries, is that the pots were "killed" prior to being placed next to the body, safeguarding the vessels from reuse. That several pottery vessels from Tomb 26 show a ritual "killing hole" is remarkable – in comparison, only a single vessel from Tomb SA 29 in Aniba was perforated (Helmbold-Doyé and Seiler 2019, 154, E 11302) and "killing holes" were in general rare in this necropolis (e.g. Helmbold-Doyé and Seiler 2019, 233, 6240; 240, 6251; 241, E 11250, 268, 6337; 274, 2958). Based on the published records, it remains unclear whether vessels from other tombs in SAC5 showed "killing holes".

7.7.2 The tomb group of an anonymous indeterminate individual, TG 13

The next burial of which some remains of the original tomb group in Feature 2 have survived in a fragmentary state is Individual 3a (Fig. 7.42).

As mentioned in Chapter 5, the small pilgrim flask SAC5 302 (Fig. 7.41) can be dated to the 19th Dynasty according to parallels (Aston 1994, 157, no. 195). Thus, other objects of this date from Feature 2 are of potential interest to reconstruct TG 13 further. Here, several Ramesside scarabs from Feature 2 (see Chapter 5) are relevant. It is difficult to assign one of them with certainty to Individual 3a, because Individual 4 was found very close by and seems to be almost contemporaneous (see below, TG 14). The scarab amulet SAC5 279 (Fig. 7.43) was found in the close vicinity of these two burials and can be associated with the 19th Dynasty. It might once have belonged to TG 13.

The decoration of the base of SAC5 279 contains two goddesses, Satet (left) and Anuket (right). These deities are neither attested on scarabs from SAC5 nor from Soleb or Aniba. The cemeteries of the Fadrus region did not yield any parallels either, nor did Qustul or Serra. One 19th Dynasty scarab showing a seated Anuket is included in Newberry's corpus (1907, 267, pl. ix, 37066). The presence of the main two female deities from the First Cataract region on SAC5 279 is especially of interest in relation to the town of Sai (see Chapter 10).

Type of tomb equipment	Attestation
Coffin/funerary mask	No evidence
Bodily adornment	None Maybe steatite scarab SAC5 279?
Funerary objects	No heart scarab or shabti
Ceramic vessels	Pottery sherds (SAC5 181/2016 and 287/2016)
Stone/faience vessels	Alabaster pilgrim flask SAC5 302
Other	None

Table 7.14: composition of TG 13 from Feature 2.

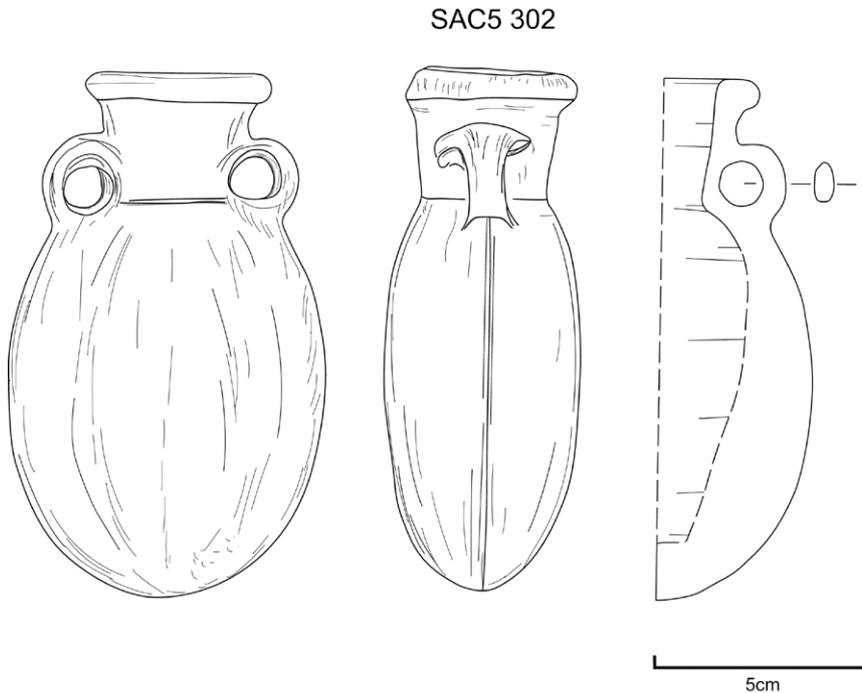


Figure 7.42: alabaster pilgrim flask SAC5 302.

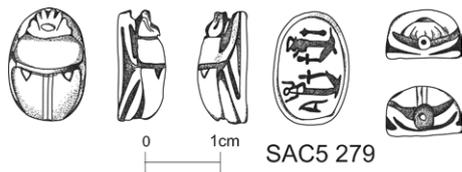


Figure 7.43: scarab SAC5 279.

7.7.3 The tomb group of an anonymous indeterminate individual, TG 14

Positioned next to Individual 3a, Individual 4 was found with some remains of its burial assemblage. Just east of the skeleton, two ring beads of faience, stuck together with mud, were found. SAC5 289 (5 × 5x4mm, Fig. 7.44) possibly belongs to two other sets of ring beads found in an upper level of Feature 2 (SU 110): SAC5 244 and SAC5 251 have the same dimensions. As was mentioned above, scarab SAC5 279 may belong to this burial (or to Individual 3, TG 13). Other possible candidates are the scarab SAC5 281 (Fig. 7.45), found in SU 125 and thus

associated with Individual 4, or the scarab SAC5 121 found in the shaft (Fig. 7.46).

Scarab SAC5 281 (Fig. 7.45) is probably the most likely adornment for TG 14 although it would then probably have to be interpreted as old piece. It is one of the scarabs from Tomb 26 referring to the king Thutmose III. Its reverse shows the cryptographic writing of the name of Thutmose III, *Mn-hpr-R^c*, with a lion (*R^c*), the *mn*-sign, and a beetle (*hpr*). Interestingly, its surface is much worn and suggests a long life history of the piece.

SAC5 121 (Fig. 7.46) is a steatite scarab with a possible dating to the 19th Dynasty. The reverse of this scarab shows three signs: a central recumbent sphinx wearing the double crown with a winged cobra in its back and a seated *Mꜣꜥt*-figure in its front. The motif of a sphinx with *uraeus* is regularly found on scarabs in New Kingdom Nubia, for example in Soleb (Schiff Giorgini 1971, pl. 12, T17 c17, T8 p4 and T36 p3). The sphinx is here not related to the king but rather the god Amun (see Hornung and Staehelin 1976, 143).

Type of tomb equipment	Attestation
Coffin/funerary mask	No evidence
Bodily adornment	Faience ring beads (SAC5 289) [+ SAC5 244 and SAC5 251?] Faience scarab SAC5 281? or steatite scarab? SAC5 121?
Funerary objects	No heart scarab or shabti
Ceramic vessels	Pottery sherds (SAC5 215/2016 and 243/2016)
Stone/faience vessels	None
Other	None

Table 7.15: composition of TG 14 in Feature 2.



Figure 7.44: faience ring beads of TG 14 (photos: M. Gundlach, ©AcrossBorders).

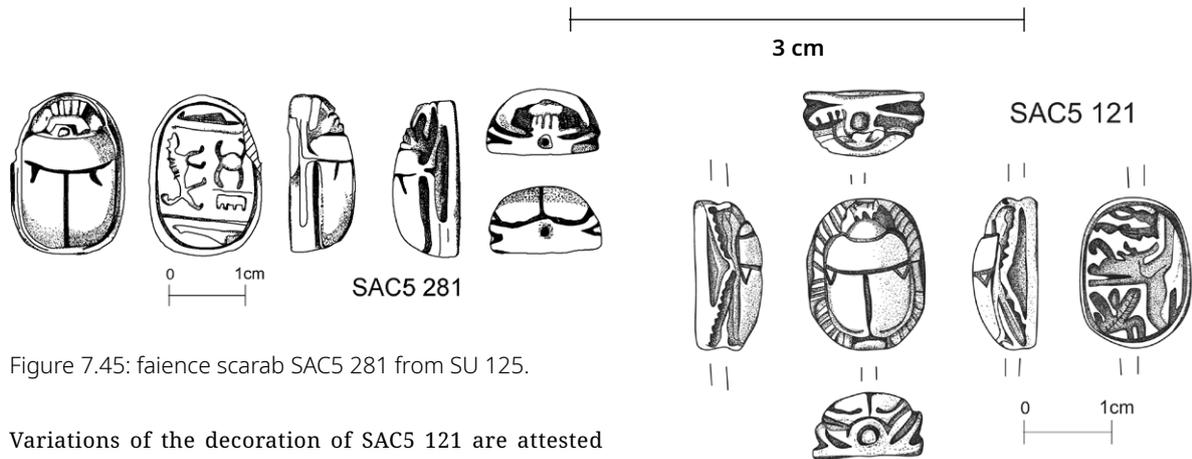


Figure 7.45: faience scarab SAC5 281 from SU 125.

Figure 7.46: steatite scarab SAC5 121 from Feature 1.

Variations of the decoration of SAC5 121 are attested with the sphinx without the double crown (Newberry 1907, pl. VII). Exact parallels were recorded in Swiss collections (Hornung and Staehelin 1976, 255, no. 322; 313, no. 615; 399, no. MV25).

Another find from the shaft which is likely to belong to one of the 19th Dynasty burials in Feature 2 (TG 13 or TG 14) is the stone vessel SAC5 212 (Fig. 7.47) from SU 070 (Feature 1) and SU 072 (Feature 3). Since this vessel shows similar stains from black residue (bitumen) like the scarab SAC5 281 (see above, Fig. 7.45), these two artefacts were probably part of one burial assemblage, most likely of TG 14.

This type is not attested from other tombs in SAC5 (see Minault-Gout and Thill 2012, *passim*), nor in the elite cemeteries of Soleb and Aniba. Comparable vessels are also missing in the cemeteries of Fadrus. In Egypt, by contrast, this is a common type attested from several sites (Riqqeh, Gurob and Abydos, see Aston 1994, 152, types 178 and 179).

Type of tomb equipment	Attestation
Coffin/funerary mask	No evidence
Bodily adornment	Faience ring beads (SAC5 333)
Funerary objects	No heart scarab or shabti
Ceramic vessels	Unclear, maybe dish SAC5 399/2016
Stone/faience vessels	None
Other	None

Table 7.16: composition of TG 15 in Feature 2.

SAC5 212

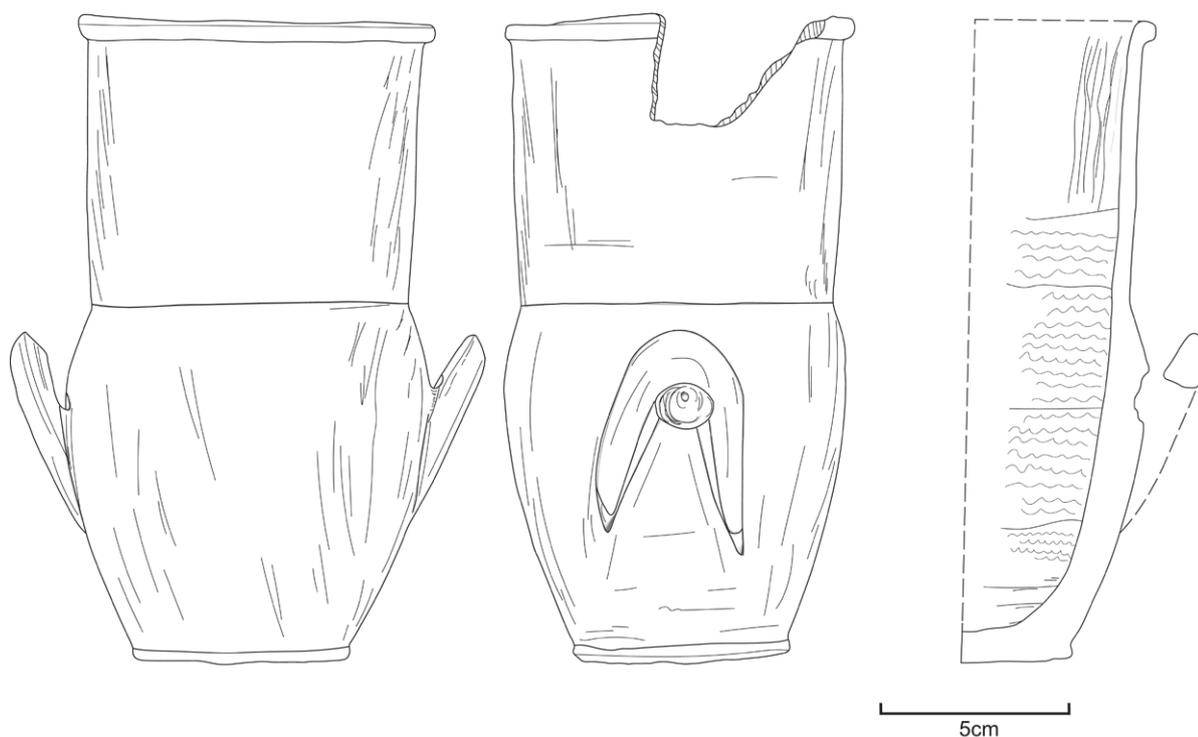


Figure 7.47: stone vessel SAC 212.

7.7.4 The tomb group of an anonymous female, TG 15

Whereas Individual 8a was found without associated finds, Individual 9a can be regarded as the next tomb group from Feature 2, TG 15. Only some faience ring beads (SAC5 333) are clearly associated with this burial (Fig. 7.48). A pottery dish was found on the lower jaw of Individual 9a. This vessel, SAC5 399/2016, can be dated to the 20th Dynasty and this together with the unusual find position, makes it more likely that the dish was from another burial, most likely Individual 2 (see below, TG 17).

SAC 333 comprises five blue-greenish faience ring beads, of which three have a heavily degraded surface and one is well preserved. Two sizes are present, a larger one, 6mm in diameter, 1mm thick and a smaller one, 4mm in diameter, 1mm thick. Faience ring beads with exactly the same measurements are attested from several places of Tomb 26 (Fig. 7.49a). The smaller variant is known from Feature 2 for the following beads SAC5 188 from SU 074 and SAC5 243 from SU 109. Five registered sets of beads of the same dimensions come from the shaft: SAC5 027 (SU 058), SAC5 033 (SU 056), SAC5 075 (SU 060), SAC5 088 (SU 065) and SAC5 115 (SU 070). The larger version is also known from SAC5 240, found in SU 107 in Feature 2 (Fig. 7.49b). That these beads were transported throughout the tomb is illustrated by two alluvial layers from Feature 5 which

yielded the same ring beads: SAC5 329 from SU 140 of the small type and SAC5 342 from SU 190 of the large type. In conclusion, it is likely that TG 15 once had more than the five ring beads still found with the burial.

7.7.5 The tomb group of three infants, TG 16

Individuals 5, 6 and 7 were found in a poorly preserved state which made a clear distinction between these three child burials almost impossible (see Chapter 6). The small amount of tomb equipment associated with them is therefore presented as one set. It is limited to some beads (Fig. 7.50) and a few pottery sherds (Table 7.17).

One roughly diamond-shaped faience bead was found with SAC5 308 from the cleaning of Individuals 6/7. With dimensions of 7 × 5 × 5mm it is the sole example from Tomb 26. For an infant burial, it is likely that only one bead was used as adornment.

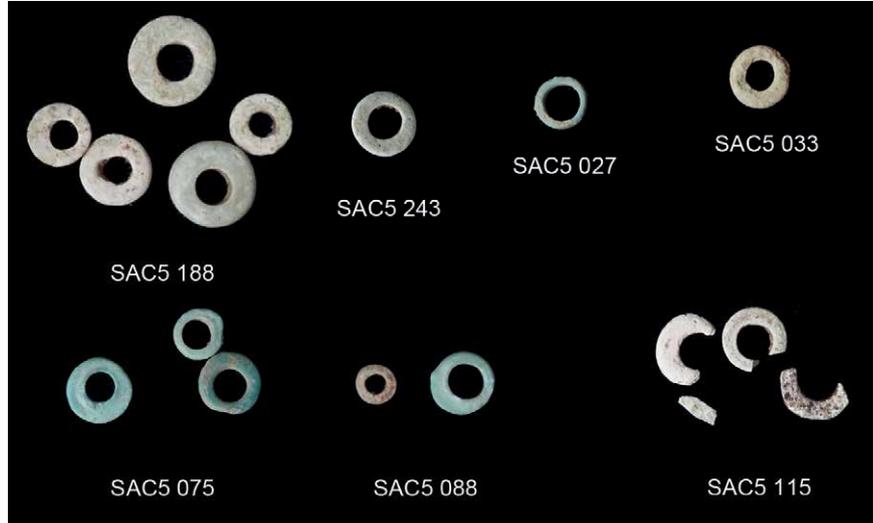
Around Individual 6 three more beads were found, this time roughly diamond-shaped beads of carnelian (SAC5 331). With the dimensions of 4 × 5 × 5mm other examples of the same type and material can be named – SAC 330 from SU 140 in Feature 5 and SAC5 099 from SU 062 in the shaft. It is feasible that these diamond-shaped carnelian beads, well attested in New Kingdom Nubia (e.g. at Soleb, Schiff Giorgini 1971, pl. 11), were arranged as a small necklace or bracelet for one of the infants.



1 cm

Figure 7.48: faience ring beads of TG 15.

Figure 7.49a: faience ring beads likely to be part of TG 15, smaller variant.



3 cm

Figure 7.49b: faience ring beads likely to be part of TG 15, larger variant.



3 cm

Table 7.17: composition of TG 16 in Feature 2.

Type of tomb equipment	Attestation
Coffin/funerary mask	No evidence
Bodily adornment	Faience beads (SAC5 308 and 332); carnelian beads (SAC5 331)
Funerary objects	No heart scarab or shabti
Ceramic vessels	Pottery sherds SAC5 390/2016
Stone/faience vessels	None
Other	None

Figure 7.50: beads from TG 16 (photo: M. Gundlach, ©AcrossBorders).



3 cm

Type of tomb equipment	Attestation
Coffin/funerary mask	No evidence
Bodily adornment	Shell ring bead (SAC5 267); carnelian beads (SAC5 277); faience ring bead (SAC5 325)
Funerary objects	No heart scarab or shabti
Ceramic vessels	Pottery sherds SAC5 083/2016; 140/2016; 183/2016; 389/2016
Stone/faience vessels	None
Other	None

Table 7.18: composition of TG 17 in Feature 2.

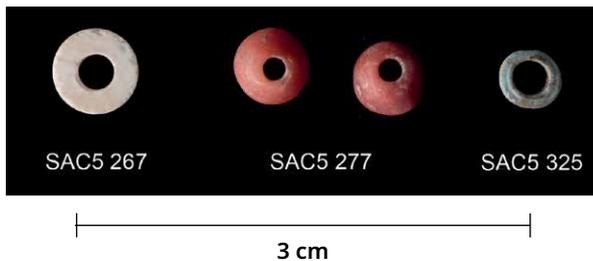


Figure 7.51: beads from TG 17 (photo: M. Gundlach, ©AcrossBorders).

The last type of bead was found close to the general assemblage of all three individuals. SAC5 332 is one tubular faience bead with rounded ends (8 × 3x3mm). Although several tubular faience beads are attested in Tomb 26, none has the same dimensions.

A small number of pottery sherds was found close to the infant burials but remained unspecific in terms of shape and dating (SAC5 390/2016).

7.7.6 The tomb group of an anonymous indeterminate individual, TG 17

Individual 1 found in Feature 2 was not associated with any finds. This burial extends with its lower body into the entrance of Feature 5 and must date from a period when this chamber was already filled with sediments/blocked (see Chapter 8).

The final tomb group which can to be partly reconstructed in Feature 2 is Individual 2, dating to the late New Kingdom. The equipment is again restricted to a small number of beads (Fig. 7.51) and pottery sherds. One disc-shaped eggshell bead was recovered from the chest of Individual 2 (SAC5 267). Two other types of beads were also found associated with the burial: two pieces of globular/roughly diamond-shaped carnelian beads (SAC5 277) and one faience ring bead (SAC5 325) which was discovered next to the skull of Individual 2. Like TG 16, the pottery sherds found around the burial are undiagnostic. There are, however, almost complete pottery vessels from the 20th Dynasty which may belong to TG 17 (see below).

Other remains from Feature 2 associated with the 20th Dynasty are several ceramic fragments and vessels (Fig. 7.52), here in particular the large complete

amphora by the northern wall and several dishes. The vessel SAC5 401/2016 is made of Nile silt and covered with a white slip. It was found solidly stuck in several layers of dense flood deposits above Feature 4 and close to Individual 9a. Such amphorae are attested from both Egypt and Nubia. Close parallels were found in Tomb 15 at Soleb (Schiff Giorgini 1971, 194, fig. 344, T15 p12) and in Hillat el-Arab in several tombs (Vincentelli 2006, figs. 2.32-33 and passim).

Furthermore, the Marl clay amphorae and pilgrim flasks (Fig. 7.53) found in the lower levels of the shaft filling (see Chapter 5) probably date to the late New Kingdom. It remains uncertain to which burial they originally belonged, but an association with TG 17 would be possible by means of dating.

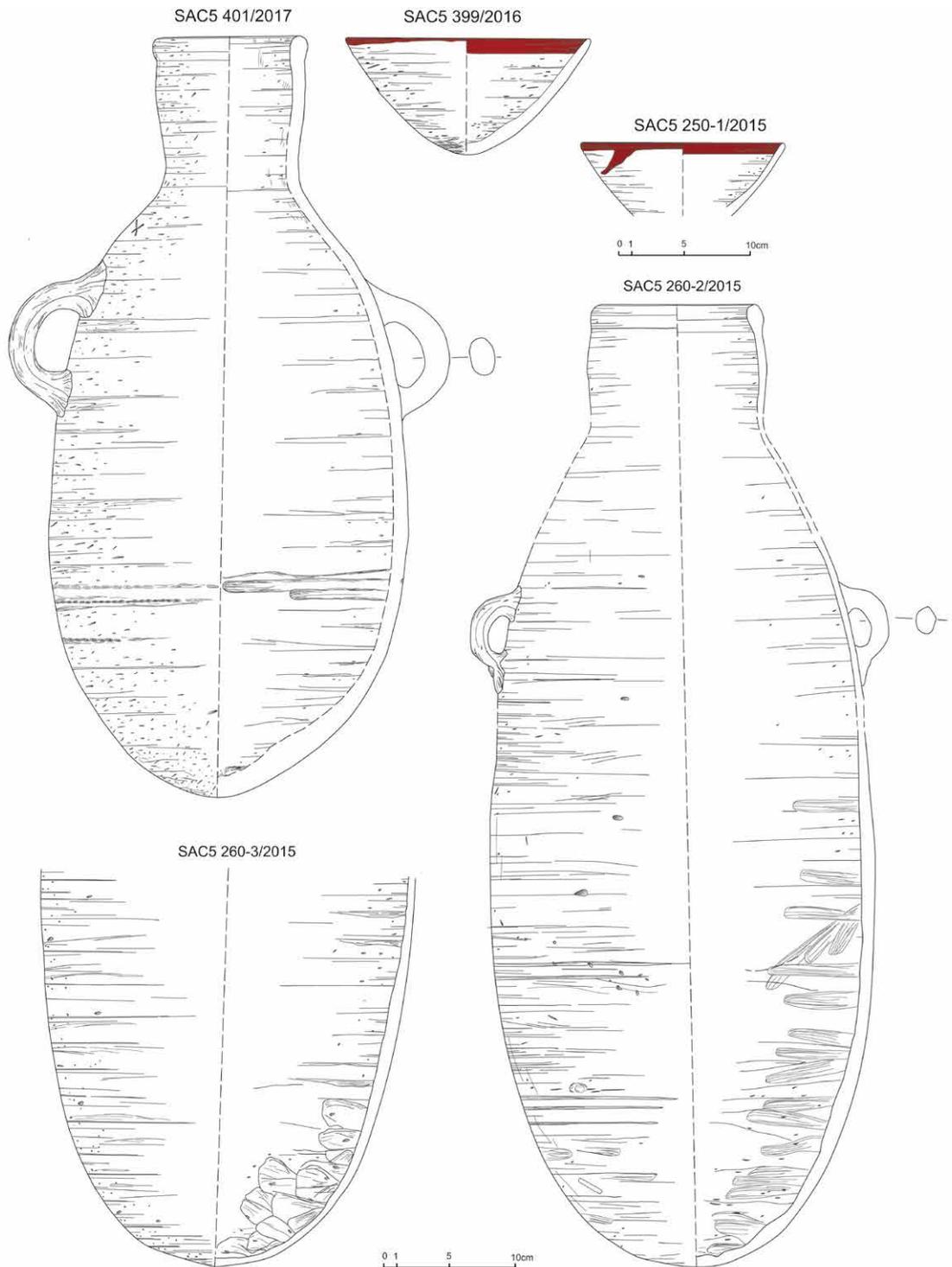


Figure 7.52: ceramics associated with one of the 20th Dynasty burials in Feature 2, possibly TG 17.



Figure 7.53: Marl clay pilgrim flasks from Feature 1, probably associated with one of the 20th Dynasty burials in Feature 2, possibly TG 17 (photos: C. Geiger, ©AcrossBorders).

Type of tomb equipment	Attestation
Coffin/funerary mask	No evidence
Bodily adornment	Faience scarab SAC5 266
Funerary objects	None
Ceramic vessels	Pottery sherds, especially of cups and beakers, see Chapter 5 from Feature 1 (shaft)?
Stone/faience vessels	None
Other	None

Table 7.19: composition of TG 18 in Feature 2.

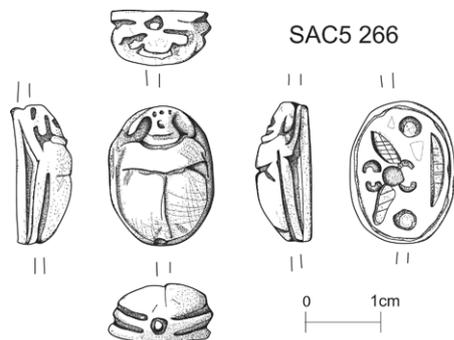


Figure 7.54: scarab SAC5 266.

SAC5 266 from SU 114 is a small faience scarab (Fig. 7.54) with a detailed execution of the back (Type D after Minault-Gout and Thill 2012, pl. 116). The base decoration is dominated by an abstractly formed winged scarab. The wings are asymmetrical, and there are only four legs. Below the scarab is a *nb*-sign and a circular sun disk appears on either side. The execution and design of this scarab suggest a pre-Napatan dating. A similar base decoration was found on a piece from Soleb (Schiff Giorgini 1971, 291, fig. 566, T32 p16). SAC5 266 finds a close parallel regarding its back in a scarab from Tomb 21 of SAC5, T21CC54 (Minault-Gout and Thill 2012, pl. 116). This piece was left undated, but Tomb 21 experienced a similar reuse in the pre-Napatan and Napatan era like Tomb 26 (and also Tomb 32 in Soleb).

7.7.7 Remains of a pre-Napatan tomb group in Feature 2, TG 18

One of the scarabs found in Feature 2 remains unclear regarding its dating but most probably can be associated with a pre-Napatan burial in this chamber. Even if this evidence remains vague, TG 18 was defined in order to stress the necessity to consider post-New Kingdom burials which were inserted into Feature 2, even if most of the finds from this period and especially the ceramics were found in the shaft (see below).

7.8 The tomb groups from Feature 1

A reconstruction of tomb groups from Feature 1 was not possible. As outlined in Chapter 2 and chiefly in Chapter 5, the filling of the shaft of Tomb 26 yielded mixed material and only scattered human remains. Apart from Ramesside tomb equipment remains in the form of architectural pieces, New Kingdom, pre-Napatan and Napatan burial items were found. A large variety of beads and ceramics show that this material ended up here after processes

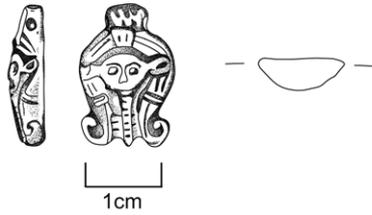


Figure 7.55: amulet SAC5 085.

of plundering and disturbance in the shaft. Some of the possible matches with bead sets from Feature 2 have already been mentioned above.

One example of an amulet which ended up in Feature 1 but was once part of a tomb group from Feature 2, is SAC 085 (Fig. 7.55). This faience Hathor amulet does not compare to one found in Tomb 24 of SAC5 (Minault-Gout and Thill 2012, T24P2, 269, pl. 119). It rather finds parallels in the area of Fadrus (Säve-Söderbergh and Troy 1991, 124) and especially in cemetery V in Qustul (Williams 1992, 119). Tomb V54-7 yielded the burial of a female who was equipped with eleven blue faience Hathor amulets very similar to SAC5 085 (Williams 1992, fig. 17x). Since the burial in Qustul can safely be dated to the late 18th Dynasty, this is the most likely dating for the amulet from Tomb 26. TG 12 is, therefore, its most probable original tomb group. One needs to mention, however, two faience Hathor amulets from Amara West which are slightly more simplified than SAC5 085 and were dated to the post-New Kingdom era (Binder 2014, 597, III.50, tomb G211).

The final suggestion is that all New Kingdom material from Feature 1 actually derives from one of the chambers. It remains, however, uncertain whether this is also the case for the pre-Napatan and Napatan finds (see also the tentative reconstruction of TG 18 from Feature 2). Burials in the main chamber (Feature 2) are the most likely scenario for these periods, but we cannot rule out that the shaft was also used as extra burial space.

For the pre-Napatan period, several types of pottery can be named, especially beakers and some amphorae/storage vessels (see Chapter 5). These amphorae are difficult to fine date as there is some kind of transitional phase between the Late New Kingdom and the pre-Napatan era respectively the Third Intermediate Period in Egypt (see Aston 1999, 82). Parallels from Hillat el-Arab (Vincetelli 2006, 60, fig. 239, nos. 238 and 239) suggest that the complete Marl A4 amphora with a killing hole, SAC5 273/2015, attests to a pre-Napatan reuse of Tomb 26 (Fig. 7.56).

One steatite scarab amulet remains unclear in its dating but may also belong to the pre-Napatan era. SAC5 120 from SU 068 (Fig. 7.57) is very similar regarding the execution

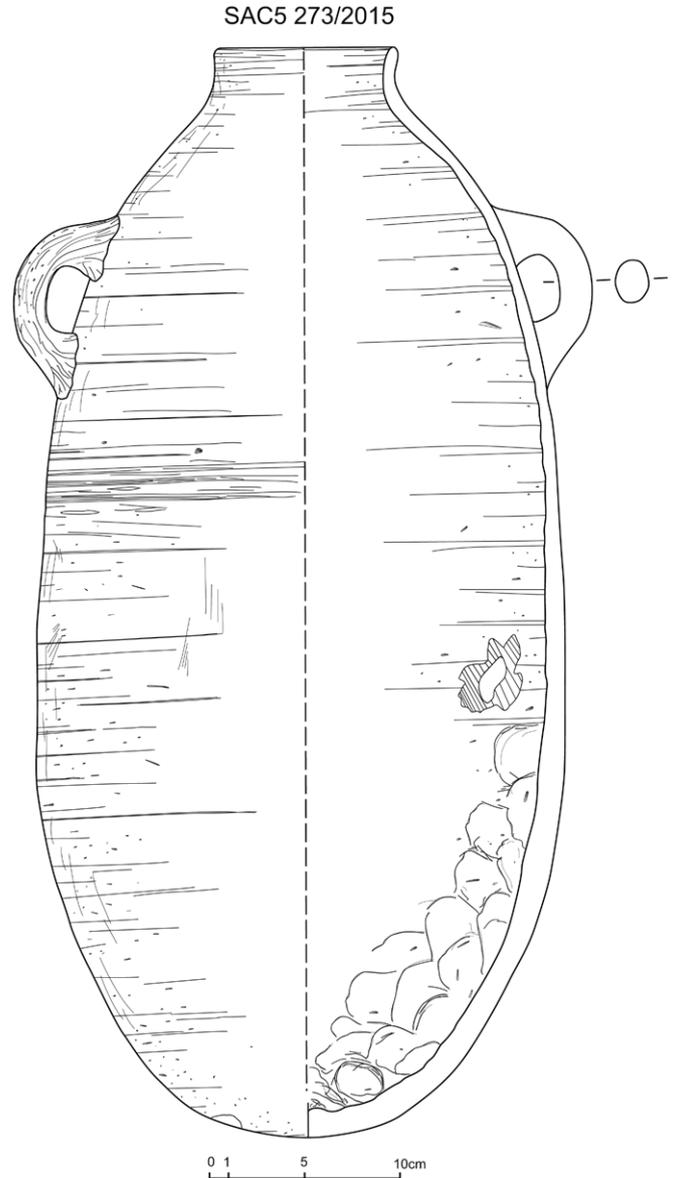


Figure 7.56: pre-Napatan amphora from SU 070 in Feature 1.

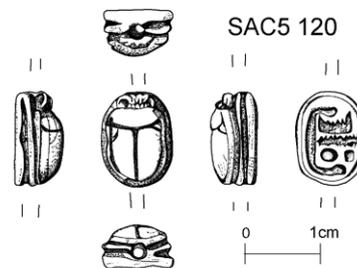


Figure 7.57: scarab SAC5 120.

of its back to SAC5 266 and the previously mentioned comparable piece from Tomb 21 in SAC5 (see above, TG 18). Its base decoration would be highly unusual for a New Kingdom scarab and is also points to a later dating.

Napatan pottery was more numerous than pre-Napatan ceramics in the shaft of Tomb 26 and here again dishes, beakers and storage vessels were found. All of them are typical vessel forms attested in other New Kingdom tombs in SAC5 as well as in Napatan burials elsewhere (see, e.g. Williams 1990, *passim*). No other potential remains of Napatan burials such as amulets, scarabs or beads were clearly identified.

7.9 Similar tomb groups in other tombs and cemeteries

After presenting the tomb groups from Tomb 26 and the problems connected with identifying specific assemblages, it is essential to compare these findings with other tombs and cemeteries and especially to previous assessments of funerary culture in New Kingdom Nubia in elite cemeteries. Although only a total of 18 tomb groups could be differentiated in Tomb 26, it became clear that they not only differ regarding their dating, but also in respect of their composition. Tomb 26 allows us to look for comparisons of three different groups of burials: 1) wealthy ones equipped with rare and '*specialised goods such as shabtis and heart scarabs*' (Spence 2019, 559), 2) rich burials with coffins, scarabs, stone and pottery vessels and 3) simple burials with a small number of pottery vessels and possibly such adornments as beads or scarab amulets.

As recently stressed by Spence (2019, 559) and Lemos (2020, 11), coffins and masks are common at all cemetery sites, including non-elite burials like the cemetery of Fadrus, but special funerary objects like heart scarabs and shabtis are rare and not considered as essential without conflicting with Egyptian practices (see also Smith 2003a, 156). One of the most relevant objects to address parallels is the stone shabti of Khnummose since it falls into a homogenous group of funerary figurines attested for various officials of the Egyptian administration of Nubia, who were buried at major sites of the mid-18th Dynasty like Aniba, Toshka and Sai (Minault-Gout 2012; see for details Chapter 11).

The following survey of comparative materials for the individual tomb groups of Tomb 26 starts with Sai Island, SAC5. The close parallels with the New Kingdom town which can be drawn based on the ceramics and the inscribed stone blocks will be addressed in Chapter 10.

7.9.1 Parallels from SAC5

The two most prestigious funerary objects from Tomb 26, the stone shabti and heart scarab of Khnummose (TG 07), both find close parallels in other tombs of SAC5. The shabti will be discussed in Chapter 11. The heart scarab of Khnummose falls into the category of scarab-shaped

heart scarabs without wings, attested in Tombs 1, 2, 3 and 5. The closest parallels are the ones from Tombs 3 and 5 (T3CA53 and T5C32, see Minault-Gout and Thill 2012, pl. 111). The second heart scarab from Tomb 26, SAC5 411 from TG 02 in Feature 5, is more unusual but compares to T3Ca50 from Tomb 3 (Minault-Gout and Thill 2012, pl. 107).

In Tomb 26 only these two examples of scarab-shaped heart scarabs were found. At other tombs in SAC5, winged heart scarabs as well as human-headed heart scarabs are also attested (see Minault-Gout and Thill 2012, pl. 104). Human-headed heart scarabs seem to represent the earliest version of this amulet attested for royal persons in Egypt (see Miniaci *et al.* 2018), but only appear considerably later in Nubia (see Quirke 2002). During AcrossBorders' excavations, one new example was found of the latter type with SAC5 268. This heart scarab from Area 2 outside Tomb 26 is also made of serpentinite and must have been imported to Sai, as were Khnummose's shabti and heart scarab. It shows the characteristic Chapter 30B of the Book of the Dead without giving the name of its owner (Fig. 7.58). A small forward-facing human head has been added instead of the head of the beetle. This head is probably male and wears a lappet wig which pushes the large ears forward. The eyes, nose and mouth are all present, but not particularly well carved. The right eye of the scarab is carved at a different height from the left one and this also holds true for the ears (right one higher than the left). This asymmetric impression is further strengthened by a very wide, but irregular mouth. The line with which the perimeter of the mouth was carved was left open on the right side.

Human-headed heart scarabs are rare within the group of heart scarabs in Nubia – four examples are attested from SAC5 (Minault-Gout and Thill 2012, pl. 104) and SAC5 268 is now the fifth example. Comparable pieces have been found in Aniba (Steindorff 1937, pl. 48, 16, pl. 49, 21, pl. 50, 22) and most recently in Tombos (Burzacott 2018, 15 from burial of the lady Weret). SAC5 268 probably dates from the late 18th Dynasty (see also the example from Aniba which was dated to the 19th Dynasty, Steindorff 1937, pl. 50, 22).

The burial assemblages of all tombs from SAC5 can be easily assessed thanks to the publication by Minault-Gout and Thill. Tomb 1 provides a close parallel for the burial of Khnummose (TG 07) with a stone shabti, a set of faience miniature vessels with docketts and the remains of a funerary mask with eye inlays (Minault-Gout and Thill 2012, pl. 51). This burial seems to slightly post-date TG 07 in Tomb 26, because it is well datable to Amenhotep III based on two pilgrim flasks.

Tomb 3 provides very close parallels for the 20th Dynasty pottery vessels associated with TG 17 in Tomb 26, in particular a painted pilgrim flask,

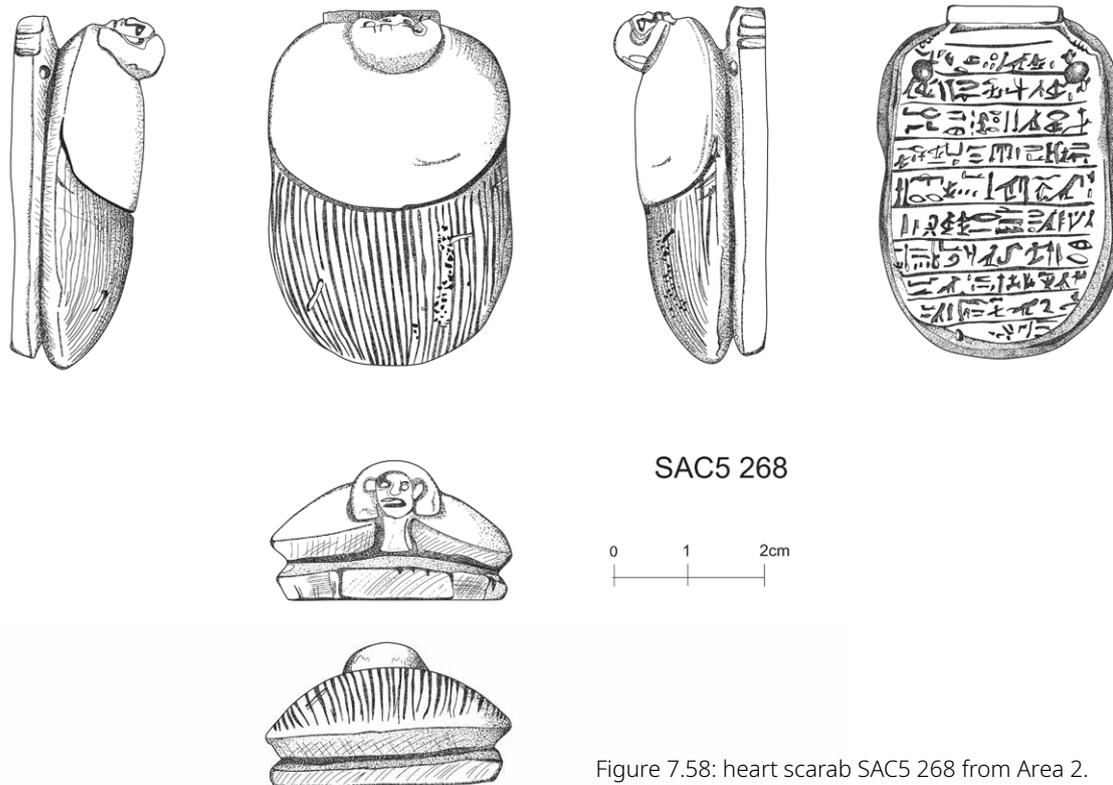


Figure 7.58: heart scarab SAC5 268 from Area 2.

amphorae and dishes (Minault-Gout and Thill 2012, pl. 54). Since a plaquette with the name of the viceroy of Kush Ramessesnakht was found in this tomb, suggesting a subordinate high official as the owner of this burial reusing Tomb 3, this gives us a slight idea of a potential high status for TG 17. The original 18th Dynasty tomb groups from Tomb 3 are largely destroyed (Minault-Gout and Thill 2012, pls. 55-56) but ceramics like flowerpots are well comparable to pottery from burials of both Feature 5 and 6 in Tomb 26.

Several mid-18th Dynasty tomb groups are traceable in Tomb 5 (Minault-Gout and Thill 2012, pl. 57) and compare well in respect of stone shabti (although a different type from SAC5 350), funerary mask with eye inlay, faience vessel with horizontal docket, miniature pottery vessels, pottery amphora and steatite scarabs with the original tomb groups from Tomb 26, TG 07 and 08 (and partly also equipment from Feature 5). Since the palaeographic evidence from Tomb 26 is rich with three personal names and titles (two male and one female), this close match to Tomb 26 is of special importance.

The tomb groups from Tomb 7 also provide close parallels for several assemblages from Tomb 26 (Minault-Gout and Thill 2012, pl. 59). First, ceramics including painted pilgrim flasks, amphorae and dishes compare well to vessels from TG 17. This tomb is also very similar in terms of architecture (providing the only parallels for the stone-built wall between two chambers) and it

is regrettable that the equipment of the original phase is largely destroyed/not preserved except for ceramic vessels. The latter includes a deposit of flowerpots nicely matching with the one of TG 02 in Feature 5 in Tomb 26.

Tomb 8 yielded a few Napatan ceramics which match the vessels attested from the shaft in Tomb 26 (Minault-Gout and Thill 2012, pl. 61). The burial assemblage of Chamber Cc is in parts like TG 07 and TG 08 in Tomb 26: a double burial was equipped with a stone shabti, a stone heart scarab and a miniature plaster mask (Minault-Gout and Thill 2012, pl. 62). Most importantly, the individual with a stone shabti and a heart scarab was a mature male like Khnummose while the individual with the mask was a female of the same age group (see Murail 2012, 151-155). Chamber Ca yielded several ceramic vessels including flowerpots, dishes and beer jars comparable to the ones found in Features 5 and 6. Chamber Cb is interesting for a comparison of TG 01 and TG 02 with stone vessels and painted jugs. Like Tomb 5, Tomb 8 yielded some inscribed objects and therefore provides important prosopographic information which can be used for the final assessment of Tomb 26. Furthermore, the human remains from Tomb 8 have been published (Murail 2012) and represent a valuable set of comparative material for our skeletal material (see Chapter 6). Thill (2006) already worked out the most important parallels for Tomb 8 in Nubia (Aniba, Tomb 356 in Fadrus) and Egypt (e.g. Deir el-Medineh) and these are also relevant for Tomb 26.

Tomb 14 was very rich in finds and provides especially comparative material for the advanced mid-18th Dynasty burials in Tomb 26 in Feature 5 (Minault-Gout and Thill 2012, pl. 71). The most relevant objects making the burials comparable are ceramic vessels (flowerpots, miniature jugs, dishes, canopic jars, painted jugs, jars with pot stands) and plaster masks/funerary masks. In addition, a shabti and a heart scarab, both different from Khnummose's assemblage, were found. The shabti is made in faience and the heart scarab is human-headed.

During the excavation of Tomb 20, a situation comparable to that of Feature 1 of Tomb 26 was found in the shaft (Minault-Gout and Thill 2012, pl. 76). Mixed ceramics were found including Napatian beakers but also some parallels for TG 17 (painted pilgrim flasks and Marl amphorae). This tomb is of special importance since Ramesside tomb groups have partly survived in the chambers and allow a comparison for Feature 2 in Tomb 26 (Minault-Gout and Thill 2012, pl. 77). Fragments of Ramesside wooden coffins and masks are especially notable and suggest that TG 13 and TG 14 may have been deposited in wooden coffins of which no evidence has survived.

7.9.2 Parallels from Soleb

As has been stressed throughout this chapter, several parallels can be named in the elite cemetery at Soleb (Schiff Giorgini 1971). Remarkable matches can especially be noted between Tomb 26 and Tomb 15 at Soleb. A close connection between the two sites is possible, but it is even more likely that these close parallels are the result of the almost identical status of both sites as administrative centres of New Kingdom Nubia.

Tomb 15 (Schiff Giorgini 1971, 184-197) shows a complex development of its superstructure (see Chapter 3). The finds from this tomb are rare and probably contemporaneous to TG 12 from Tomb 26 and therefore, unsurprisingly, represent a mixture of TG 07, TG 08 and TG 12. A stone shabti is attested, not made of serpentinite but of limestone (belonging to a woman with the title *nb.t pr* and the name Meritsherit; a sandstone shabti with the same name was found in Tomb 24). Miniature pottery vessels are very similar to TG 08 and faience vessels are present of a type also attested within the set of Khnummose (TG 07). This tomb also yielded the complete monkey-shaped pottery vessel (T 15 p2) which allowed the reconstruction of the fragmented vessel from Tomb 26 attributed to TG 12. Since this kind of vessel is rare, this close comparison is particularly noteworthy.

Tomb 11 at Soleb is also comparable to TG 07 and TG 08 of Tomb 26 because among other objects, a stone shabti, plaster mask, heart scarab, faience vessels with docketts and flowerpots were found (Schiff Giorgini 1971, 157-168). The faience vessels belong to Khnumhotep and the writing of his name nicely compares to Khnummose (see above).

7.9.3 Parallels from other sites in Nubia

A recent overview of the tombs (Spence 2019) and material culture (Lemos 2020) of New Kingdom cemeteries in Nubia illustrate general patterns which reveal common features in both Upper and Lower Nubia, in both so-called provincial cemeteries and elite cemeteries attached to temple towns. At the same time, regional patterns and local peculiarities are attested, which are also evident in SAC5. Furthermore, differences between 18th Dynasty and Ramesside cemeteries are notable. For example, Amara West, one of the neighbouring sites and the administrative centre of New Kingdom Upper Nubia in the Ramesside era, is markedly different from SAC5 in respect of tomb assemblages (see Binder 2014).

In the following, three cemetery sites are mentioned. Like Soleb, Aniba held an administrative position comparable to Sai in the 18th Dynasty. Close parallels between the two sites, therefore, do not come as a surprise. As mentioned throughout the chapter, Aniba offers comparative pieces for Tomb 26 in terms of shabtis, heart scarabs, wooden coffins with eye inlays, funerary masks, scarab amulets, amulets, beads, stone vessels and ceramic vessels. Tomb S28 is particularly interesting (Steindorff 1937, *passim*). It yielded a similar serpentinite shabti to SAC5 350 from TG 07 in Tomb 26, had four wooden faces of coffins, four funerary masks, one heart scarab with a human head, a steatite scarab amulet and a finger ring, as well as a set of ceramic vessels including flowerpots and beer jars (see Helmbold-Doyé and Seiler 2019, 437-438). The second close parallel for Tomb 26 in Aniba is Tomb S91. The tomb groups of User with a serpentinite shabti like Khnummose (Cat. 5 in Chapter 11) and of his wife Taneferet with bodily adornment similar to Individual 324 offer comparative material of mid-18th Dynasty date (Steindorff 1937, 199; Helmbold-Doyé and Seiler 2019, 82-83).

Tombos was an Egyptian colonial site at the Third Cataract where rich funerary records were found (Smith 2003a, 136-166). In the late 18th Dynasty, pyramidal tombs for high officials were built at Tombos, the second site after Aniba which yielded funerary cones as part of the superstructure. In most of the New Kingdom tombs at Tombos, remains of anthropoid coffins were found. These are like examples found in Soleb with some preserved hieroglyphic inscriptions and depictions of gods and not directly comparable to Tomb 26. Heart scarabs are rare in Tombos, but scarab amulets and pendants were commonly found. The closest parallels for tomb groups in Tomb 26 can be found in ceramic vessels such as flowerpots, dishes and incense burners. One of the *wraei* amulets found with TG 03 in Tomb 26 has a parallel in Tombos (see above, Smith 2003a, 160, fig. 6.27). In conclusion, Tombos provides some parallels for mediocre burials in Feature 5 like TG 03 or TG 04, but not for the wealthiest interments such as TG 02 or TG 07.

Table 7.20: reconstructed tomb groups in Tomb 26 according to phases.

TG	Feature	Individual	Phase	Comment
TG 01	5	Ind. 162	Phase 1a	Oldest burial in Tomb 26
TG 02	5	Ind. 145	Phase 1b	Original owner of Tomb 26, with heart scarab
TG 03	5	Ind. 300	Phase 2a	Shared coffin with Ind. 260?
TG 04	5	Ind. 260	Phase 2b	Shared coffin with Ind. 300?
TG 05	5	Ind. 324	Phase 2c	Signet ring
TG 06	5	Ind. 297	Phase 2d	Pottery vessels
TG 07	6	Ind. 159	Phase 3a	Khnummose
TG 08	6	Ind. 160	Phase 3b	Wife of Khnummose?
TG 09	5	Ind. 245 and 323	Phase 4a	Mother and newborn
TG 10	5	Ind. 299 (and Ind. 279?)	Phase 4b	Child (and mother?)
TG 11	5	Ind. 259	Phase 4c	
-	4	Ind. 124	Phase 5a	
-	4	Individuals 87, 60, 75 and 77	Phase 5b	
TG 12	2	Individual 10	Phase 5c	Extraordinary pottery and stone vessels
TG 13	2	Individual 3a	Phase 6a	
TG 14	2	Individual 8a	Phase 6b	
-	5	Individual 51	Phase 6c	Uterus myom, see Chapter 6
TG 15	2	Individual 9 (plus Ind. 11 and 12?)	Phase 7a	
TG 16	2	Individuals 5, 6 and 7	Phase 7b	3 infants
TG 17	2	Individual 2 (and Ind. 1?)	Phase 7c	
TG 18	2	(maybe Individuals 11 and 12?)	Phase 8	

Table 7.21: classification of reconstructed tomb groups in Tomb 26.

Classification	TG	Feature	Comment
Wealthy/sub-elite	TG 07	6	Overseer of goldworkers Khnummose
	TG 02	5	Anonymous, with heart scarab
	TG 08	6	Presumed wife of Khnummose
	TG 01	5	First interment in Tomb 26
Rich/sub-elite	TG 03	5	Egyptian blue sticks; shared coffin?
	TG 05	5	Signet ring
	TG 09	5	With funerary mask/inlays
	TG 12	2	Extraordinary pottery and stone vessels
Simple	TG 13	2	Stone vessel; Ramesside
	TG 04	5	Only beads; shared coffin with TG 03?
	TG 06	5	
	TG 11	5	Largely lost?
	TG 10	5	Infant
	TG 14	2	Ramesside
	TG 15	2	
	TG 16	2	Infants
	TG 17	2	
	TG 18	2	

The same holds true for the cemetery of Fadrus – this site has already been mentioned as a comparison for several items from Tomb 26 and here especially for the mediocre and poorer burials and their scarab amulets (Säve-Söderbergh and Troy 1991, *passim*; see also Smith 2003a, 149). Tomb 356 in site 185 of Fadrus was already stated by Thill (2006) as a good comparison to Tomb 8 of SAC5. This is mainly because of the ceramics which are also comparable with Tomb 26; the tomb furthermore yielded a scaraboid with the name of Amenhotep III.

Only one heart scarab was found in Fadrus (Tomb 511, Säve-Söderbergh and Troy 1991, pl. 31.4) and this piece is different from the one of TG 02 in Feature 5 of Tomb 26 or TG 07 in Feature 6. An exact parallel for the scarab amulet of TG 02 was found in Tomb 658 in Fadrus within a wooden coffin (Säve-Söderbergh and Troy 1991, 98-99, fig. 27, pl. 17, 185/658:1, pl. 140). This burial was furthermore well equipped with beads and pendants, many of them of carnelian, being another parallel to Tomb 26. The ceramic vessels are also comparable, comprising flowerpots.

To conclude the comparisons with other sites, the topic of infant burials in Tomb 26 will now be addressed. Four identifiable child burials were found, one in Feature 5 (TG 10, plus the foetus Individual 323) and three in Feature 2 (TG 16) (for details of sub-adult remains in Tomb 26 see Chapter 6). In general, the evidence for burials of infants in New Kingdom Nubia is rich and quite diverse, comprising pot burials in settlement areas for very young children (*e.g.* at Askut, see Smith 1995; Binder 2014, 260; *cf.* also Kilroe 2015), but also specific tombs and cemeteries. A considerable number of child burials were found in Mirgissa where 50% of the skeletons were identified as children under 2 years of age (Baines and Lacovara 2002, 14; Harrington 2007, 60). A decorated pottery coffin for a child was found at Amada (Lacovara 1988, 60, 160, cat. 112; Harrington 2007, 61), illustrating local differences and a varying equipment which could be somewhat meagre as in the case of Individual 299 in Tomb 26 (TG 10). At Tombos, child burials in shallow pits in the superstructures of New Kingdom pyramid tombs were documented (Smith 2003a, 156). Sub-adults are largely lacking in New Kingdom Amara West, but there is evidence for comparable shallow surface pits surrounding the pyramids (Binder 2014, 260-262).

Since the individuals buried in Tomb 26 were identified as belonging to the local population of Sai and not as “colonialists” from Egypt (see Chapter 10), it is worth considering pre-New Kingdom Nubian traditions attested in Upper Nubia. Relevant evidence can be found on Sai Island itself. Associated with the Kerma Classique period, an infant cemetery was documented on the island as site 8B51 (Murail *et al.* 2004). At this site, nearly 80% of the buried individuals were stillborn or died shortly after

birth. Differences were identified regarding three age groups, with a marked break at the age of six months: *‘It is thus interesting to note that, from the age of six months, the children received burial rites identical to those of the adults in other cemeteries: East-west orientation, funeral bed, pottery in the northeastern corner of the pit, bead necklace or amulet’* (Murail *et al.* 2004, 275-276).

Infant burials in Egypt were recently discussed (see, *e.g.*, Näser 2001, 236 and also Zillhardt 2009) and show a diverse equipment which could include painted coffins and wooden boxes but could also represent pot burials without or with very few burial gifts like beads (see also Binder 2014, 260-261). In conclusion, both the local tradition on Sai with the Kerma infant cemetery 8B51 as well as the Egyptian tradition would allow the reconstruction of Individual 299 as being buried within Feature 5 in a coffin or box and thus similar to the burials in Feature 5 of his/her adult relatives. Poor child burials such as TG 16 in Feature 2 with only a few beads and one or two ceramic vessels were certainly the more common mode of burial within New Kingdom cemeteries.

7.10 Summary

Tomb 26 yielded several burials from the mid- to late 18th Dynasty with rich funerary equipment, of which the reconstruction of 18 tomb groups was possible (Table 7.20). These include the assemblage of the overseer of goldworkers Khnummose, thus of an official connected with the Egyptian administration and involved in gold working and exploitation in Upper Nubia. Based on the mode of burial (extended position in wooden gilded coffins with funerary masks) and the tomb equipment (scarabs, amulets and jewellery as well as ceramics) the earliest burials in Feature 5 seem to be almost contemporary with Khnummose, suggesting that they probably represent family members (Budka 2017a, 79; 2017c). As a family tomb, Tomb 26 has much potential to illustrate the status and corresponding material culture traceable for sub-elite individuals from Thutmoside times onwards (see Chapters 10 and 12).

The tomb groups reconstructed for Tomb 26 fall into three categories (Table 7.21): 1) wealthy ones including shabtis and/or heart scarabs, 2) rich burials with coffins, scarabs, stone/faience and pottery vessels and 3) simple burials with a small number of pottery vessels and possibly some adornment like beads or a scarab amulet. As illustrated in Table 7.21, the original burial chambers Features 6 and 5 each yielded a single wealthy, male burial. The remaining two categories “rich” and “simple” are almost equally distributed – seven burials with elite-like burial assemblages were positioned in Features 2, 5 and 6; nine simple burials were noted in Features 5 and 2. The category “simple” also comprises the child burials of Tomb 26.

One needs to stress that the classification into three categories of the tomb groups from Tomb 26 considers the parallels from other sites mentioned above but is chiefly driven by a tomb-specific approach and insight view. Tomb 26 can be used as a case study as to whether perceptions of status may well differ, depending whether they are viewed from a micro, meso or a macro perspective (see Chapter 12). The flourishing families on New Kingdom Sai Island who were buried like the anonymous builder of Tomb 26 and Khnummose in SAC5 were not holding overly significant positions within the administration like officials buried in Soleb or Aniba, but still represent the local wealth of the island which was a dynamic microcosm in New Kingdom Nubia (Budka 2017a, 80).

Furthermore, within the seemingly uniform burial practice using coffins, scarabs and ceramic vessels, there are also certain differences within the tomb groups in general and within the three categories. For example, TG 01 and TG 02 have used gilded coffins or funerary masks whereas TG 07 and 08 were buried in painted coffins of which one also had with some inlays. TG 02 is also slightly different from Khnummose because of the missing stone shabti and a plaster heart scarab instead of a stone one. On the other hand, TG 02 was equipped with ritual vessels carrying bitumen and had traces of this ritual fluid on his body. The female burials in Feature 5 all show slight differences. Most interesting is the attestation of inlays for tomb groups associated with females (in Feature 5 Individuals 324 and 245 as well as the infant Individual 299; in Feature 6 Individual 160). Although these inlays are similar with the faience inlays found in Tomb 21 of SAC5 (Minault-Gout and Thill 2012, pl. 127), they are also reminiscent of the Kerma tradition of inlays, especially because in Tomb 26 only bone and ivory and possibly horn was used. One remarkable ivory inlay was found in Feature 4 and cannot be associated with a specific individual. As mentioned above, the fragmented inlay SAC5 340 may represent an animal, perhaps an ibex like the ones of funerary beds from

Kerma. This raises the possibility that also bed burials in Nubian tradition were carried out in Tomb 26. Evidence for such a funerary ritual is rare in New Kingdom Nubia, but attested at Tombos (Smith 2021, 387) and possibly also in Hillat el-Arab (Smith 2021, 389). Bed burials are found more common in post-New Kingdom contexts, for example at Amara West (Binder 2014) and at Tombos (Smith 2021, 389). Overall, the ivory and bone inlays associated with the supine female burials in Tomb 26 probably attest to the blending of Nubian cultural practises like inlays with Egyptian practices such as the use of coffins and masks.

A variability within tomb groups was highlighted by recent research, not only for cemeteries located in Egypt such as Sedment (Franzmeier 2017) but also in Nubia, for example Aniba (Näser 2017; Seidel 2020). The changeability of the composition of tomb groups within Tomb 26 was probably also a question of personal taste and individual choices (see especially TG 05 and the infant burials; see also Chapter 12).

On the meso level, Tomb 26 and its tomb groups complement the tombs already excavated in SAC5 – with fresh evidence of coffins, masks, stone shabtis and heart scarabs. There are also unusual and new aspects like the evidence of the ritual use of bitumen and the presence of obscure objects in Egyptian blue, possibly fittings for inlaid coffin decoration. A considerable amount of gold and especially gold leaf in Tomb 26 is also noteworthy and potentially connected with the occupation of the earliest male interment, who might have been the father of Khnummose (see Chapter 12).

The tomb groups of Tomb 26 are also relevant on the macro level for New Kingdom Nubia and beyond. Here, TG 12 is particularly important – a rare monkey-shaped pottery vessel, a unique stone vessel in the shape of a grape bunch and a Cypriote Base Ring II juglet illustrate the international age of 18th Dynasty Egypt which was fully developed on Sai Island.

Reconstruction of the use-life of Tomb 26

Julia Budka

8.1 Introduction

The individual burials in Tomb 26 were not all placed in the respective chambers at the same point in time but in a sequence of events (for general aspects of the multiple use of tombs in ancient Egypt see Miniaci 2019). Reconstructing these events and in particular their precise sequence poses several challenges. First, although a minimum number of 36 individuals were buried in Features 6, 5, 4 and 2, only 18 tomb groups can be reconstructed (see Chapter 7). Thus, for some burials, we simply lack any data other than the human remains, due to both plundering events and the various taphonomic processes related to repeated flooding, other environmental influences and decay. The latter as well as secondary burials in Tomb 26 often resulted in a commingled status of the human remains (see Knüssel and Robb 2016, 668 and Chapter 6). Second, within an individual chamber, the fine dating of the sequence of the interments is almost impossible and it can only be surmised who was in all probability buried first. Furthermore, in Feature 5 two individuals seem to have been buried in a common coffin and thus maybe at almost the same time (TG 03 and TG 04, see Chapter 7). However, since the coffin was probably deposited empty for practical and logistic reasons (as was suggested for Egypt, see Näser 2001, 379 with references), this remains uncertain. The sequence of the individuals within one shared coffin (Individual 260 on top of Individual 300) might reflect a certain time difference of the interments after all. Third, plundering phases are sometimes difficult to separate from a reuse of the tomb with resulting redepositions of burials. In addition, even if plundering phases and/or phases of abandonment can be recognised, an absolute dating of these events is rarely possible.

The dating of the individual burials in Tomb 26 was arrived at by considering all archaeological remains and material as well as the find position and context. Prominent markers giving clear dating indications are highlighted in the respective sections. In some cases, C14 dates of associated charcoal were also included (see Chapter 2.4).

In the following, all phases of use attested in Tomb 26 will first be discussed according to features. A summary brings together these specific histories in order to create a complete picture of the use-life of Tomb 26.

8.1.1 Terminology of use-life

In Egyptian archaeology, especially in funerary archaeology in Thebes (Luxor), the terms use-life as well as ‘systemic’ and ‘non-systemic’ uses are well established to describe the phases of use of tombs (see Polz 1987; Guksch 1995; Budka 2010c, 50; Budka 2011a, 196-197; cf. also Strudwick 2009-2010), building on the theoretical considerations of Michael Schiffer on the formation of archaeological processes (Schiffer 1972; 1983; 1987). This terminology was also used for Tomb 26 on Sai, implying that the complete

life history including building phases, multiple burials and events of robbery and of abandonment is considered (cf. the concept labelled as ‘grave activity’ by de Voogt and Francigny 2012; see also ‘entanglement of temporalities’ by Lemos *et al.* 2017). Some events remain vague in their reconstruction, but as was argued by Guksch (1995), it is nevertheless essential to list them, even with a question mark. Both Polz (1987) and Guksch (1995) tried to develop a set of criteria which enables the identification of specific formation processes based on empirical data. This method was proposed based on New Kingdom Theban rock-cut tombs and although there are some site-specific aspects, the approach is suitable for other contexts (see Budka 2010a) and also for our case study in SAC5 on Sai Island in Sudan.

The formation processes in Tomb 26 happened during and especially after the individual interments and the processes may vary depending on context, deposit or burial, even for interments deposited more or less simultaneously (see Features 5 and 6). The most relevant processes leading to several taphonomic developments and redeposition of artefacts are: 1) looting, 2) flooding of the tomb by Nile alluvium caused by rains/flash floods/inundation of the river and 3) abandonment and filling with wind-blown sand. The latter is only traceable in the shaft, the other processes at several places in the tomb. Since the recording of plundering ‘as part of the formation process of Nubian burial sites’ (de Voogt and Francigny 2012, 60) has not yet been carried out at many sites in modern Sudan, one of the emphasis of this chapter will be on looting events in Tomb 26 (intra-cultural plundering in New Kingdom tombs in Egypt was already analysed, see Näser 2001, 2008 and 2013).

According to Schiffer (1983), several qualities of the objects were considered in order to reconstruct potential formation processes such as: the *size and weight of artefacts* in Tomb 26. Is an object moveable by a looter and/or a flood deposit? What happened with large stone objects like the pyramidion and the roof slab found in the shaft?

The *orientation of artefacts* is also highly relevant – has something been turned over by a looter or by a natural process, or is it still in its original position? Bodily adornment and also ceramic vessels can potentially answer several questions about the use-life.

The *artefact quantity* within tombs is never accidental. In the case of Tomb 26, why were a large number of beads found in some parts of the structure and none in others? Why were most of the scrapers (reused sherds) discovered in Feature 1? How can we explain the situation in Feature 4 where no coffins were recorded – is this because none were used or do we have to consider decay processes in this part of the tomb, affected by the alluvial sediments, maybe diminishing ‘perishable’ materials (Schiffer 1983,

684) like wooden coffins? How much did our scholarly knowledge and work procedure influence us here? After all, Feature 4 was excavated before any traces of wooden coffins were found in Tomb 26.

Is the *artefact diversity* (Schiffer 1983) or the attested range of types of objects (e.g. amulets, beads, pottery vessels) directly related to formation processes and if so, to which ones?

Apart from the objects, observations regarding the funerary taphonomy in Tomb 26 are essential (cf. also Aspöck and Fera 2015). These are complex and remain partly unclear but are highly relevant in understanding the state of preservation of the human remains considering the occurrence of natural decay, floods and looting. The sediments in Tomb 26 show occasional inhomogeneities in fabric/texture which most likely refer to decayed material (in our case painted wood). Ecofacts (Schiffer 1983, 691) are generally numerous in Egyptian style tombs and in the case of Tomb 26 shells, snails, bones of vertebrates like a snake skeleton and remains of birds or bats can be named. Backfilling of tombs of Egyptian style with deep shafts like Tomb 26 was in general carried out several times – because of the many periods of use in our case study, the bulk of the fill still found in Tomb 26 is secondary in character, comprising mostly alluvial sediments and also wind-blown sand and maybe refuse in some of the layers.

8.1.2 Chronology and dating

The stratigraphy and the stratigraphic sequence (see Chapter 2.3), typology of findings and typology of objects are the main criteria for the relative chronological dating of burials in Tomb 26.

It was also planned to check the archaeological phases of use in Tomb 26 by radiocarbon dating. For this purpose, ribs of three individuals were taken from Feature 2 as sample material and sent for analysis in 2016 to the Poznań Radiocarbon Laboratory in Poland. Since the result was unfortunately negative, because no collagen had been preserved in the samples due to the strong water ingress in Tomb 26, we sampled in 2017 the petrous bones from individuals in Features 4, 5 and 6. Another laboratory (Beta Analytic Radiocarbon Dating Laboratory, Miami, Florida) was now involved with the C14 analysis, but unfortunately could not determine any sufficient collagen content either. Since such a negative result had already been anticipated, this time we also took charcoal samples. A total of five such samples from Tomb 26 were analysed in 2018 and provided valuable chronological data (see Chapter 2.4). Of course, these charcoal finds are less informative than direct data from bone material would have been. Since only materials were tested that appeared to be directly associated with the burials, the results are usable, although an

uncertainty factor remains (because the charcoal could on the one hand be younger than the burials and there is, on the other hand, the “waste wood” problem, *i.e.* a possible storage of the wood/charcoal before its use must be taken into account). The C14 dates support an approximate simultaneity of the burials in Features 5 and 6, while the samples from Feature 4 were somewhat younger (see Chapter 2.4 and below).

As mentioned above, finds such as scarabs and amulets can be misleading since these are often “old pieces” (*cf.* Budka 2014a). Overall, pottery vessels can be used as the main criteria for dating. In this respect, the imported Base Ring II juglet from Feature 2 is particularly relevant. Other finds, especially *funeralia*, are stylistically significant like the stone shabti and the heart scarabs (see also Chapter 11).

It was possible to date the ceramics from Tomb 26 because of a number of published and also unpublished parallels: 1) the comparable material from the AcrossBorders excavations in the town of Sai (see Budka 2020 and unpublished material, courtesy of the author); 2) the published material from other tombs in SAC5 (Minault-Gout and Thill 2012); 3) published parallels from Soleb (Schiff Giorgini 1971); 4) the recently re-published material from Aniba (Helmbold-Doyé and Seiler 2019; see also Wolf 1937) and 5) published pottery from one of the large provincial cemeteries in Egypt, Sedment (Franzmeier 2017) as well as other Egyptian sites (*e.g.* Amarna, Rose 2007).

In general, the main phases of SAC5 are the following: Thutmoside, mid- to late 18th Dynasty, Ramesside (19th and 20th Dynasties), pre-Napatan and Napatan. As will be outlined in the following, these phases are also reflected in the use of Tomb 26.

8.2 Phases of use in the individual parts of Tomb 26

The primary burial of the original owner of Tomb 26 was the interment of TG 01 in Feature 5a, soon followed by TG 02. The new northern chamber, Feature 5b, yielded four burials from a slightly later period (TG 03-06). More or less contemporaneously, Feature 6 was newly built and the interments of the overseer of goldworkers Khnummose and his wife, TG 07 and TG 08, took place. This number of primary deposits of individuals in Feature 5a/b and 6 shaped Tomb 26 into a communal tomb for an extended family with continuous burials in Feature 5. Feature 2 was only used as a burial place once the space in Feature 5 had run out and interments took place over several centuries in the form of multiple burials and in the framework of repeated reuse. The question of whether Hornakht whose pyramidion was found at the bottom of Feature 1 was involved in the reuse of Tomb 26 remains difficult to answer.

8.3 Phases of use in Feature 5a

For the complete number of nine adult burials and one infant burial from Feature 5 (see Chapter 6), three distinct burial phases with several subphases can be proposed. Going by the associated objects, these burial assemblages are datable to the Thutmoside time and the mid-late 18th Dynasty and thus partly contemporaneous to the interments in Feature 6 (TG 07 and 08). Several natural formation processes affected the burials in Feature 5, but no clear traces of plundering were found. The first phase of use is associated with Feature 5a, the first southern annexe.

8.3.1 The original burials and their sequence in Feature 5a

As was specified in Chapter 3, the primary burials in Tomb 26 took place in Feature 5a, a small southern annexe to the western side of Feature 2. Here, two anonymous coffined burials were deposited, presumably soon after each other (Fig. 8.1). Phase 1a is the interment of Individual 162 whose sex remains unclear (TG 01). In Phase 1b a male adult, Individual 145, was placed along the southern wall within a painted wooden coffin (TG 03).

Among the grave goods of TG 01 and TG 02 the following are relevant for dating: ceramic vessels and one stone vessel. Other objects like scarab amulets, a heart scarab, canopic jars and human-headed vessels are either irrelevant for dating as “old pieces” (scarabs) or unique without close parallels (see Chapter 7).

The first interment in Tomb 26, Individual 162, was found associated with a painted ceramic jug (SAC5 342/2017), one flowerpot (SAC5 353/2017), one bowl (SAC5 388/2017) and one dish (SAC5 404/2017). The small painted one-handed jug made of Marl A2 is diagnostic for dating. It can be attributed to the mid-18th Dynasty and finds plenty of parallels, both in Egypt and Nubia (*e.g.* Williams 1992, 41, 86, fig. 80; Steindorff 1937, pl. 81, form 36; *cf.* also Tomb 8 from SAC5, Minault-Gout and Thill 2012, pl. 138 bottom). Such handled jugs are most common during the Thutmoside time (see Helmbold-Doyé and Seiler 2019, 196 with references). SAC5 388/2017 is a deep bowl with monochrome linear decoration in black; similar vessels are common in mid-18th Dynasty contexts in the New Kingdom town of Sai (unpublished records). Comparable bowls were not found in other tombs in SAC5 or at Soleb or Aniba. In conclusion, TG 01 can be dated to the mid-18th Dynasty, most probably the time of Thutmose III.

The ceramic vessels of TG 02 include one dish placed next to the body (SAC5 344/2017) and a cluster of ceramic vessels at the feet of the burial, blocking the entrance into Feature 5a. The latter comprised two dishes, six flowerpots and one stone vessel SAC5 398. The flowerpots probably functioned as gift baskets (*‘Präsentkörbe’*, see Näser 2001, 379 with references; Helmbold-Doyé and Seiler 2019, 123)



Figure 8.1: the first phase of burials in Feature 5a (illustration: P. Heindl, ©AcrossBorders).

carrying grave goods in the form of fruits, bread or other food (see below, 8.6.3). This type of vessel is very common in New Kingdom tombs in Nubia and attested from the reigns of Hatshepsut/Thutmose III until the late 18th Dynasty (see Helmbold-Doyé and Seiler 2019, 122-125 with references and examples). The examples from the first burial phase in Feature 5a are comparable to the ones from Feature 6 (see

below). The same holds true for the dishes – SAC5 344/2017 is type DP 6 with a shallow form and a flat base. It is well attested from Thutmoside context in the New Kingdom town on Sai (Budka 2018d, fig. 7, SAV1E P140) and finds parallels in Soleb (Schiff Giorgini 1971, pl. XIV, 6), Aniba (Tomb SA 11 (E 11246); Helmbold-Doyé and Seiler 2019, 106 with references; 109, I.A.3.3.2) as well as in Egypt,



Figure 8.2: detail of plaster on top of dish SAC5 344/2017 and the lower body of Individual 145 (photo: J. Budka).

e.g. at Elephantine (Budka 2018d, fig. 12, 45602R/a-04 and unpublished records).

The type of stone vessel represented by SAC5 398 is very common in Egypt and Nubia from mid-18th Dynasty contexts (Aston 1994, 151, type 173; see also Säve-Söderbergh and Troy 1991, pl. 34C). In conclusion, also TG 02 can be dated to the mid-18th Dynasty and a date in the second half of the reign of Thutmose III is most likely.

8.3.2 *The question of plundering of Feature 5a*

The state of Feature 5a with a blocked entrance and its interments make it clear that no looting occurred in this original chamber. However, Individual 162 shows several disturbances, especially in the leg and feet area, which must be manmade. Other than plundering, this damage to the burial was caused during the construction of Feature 5b and the merging of the new northern chamber into a large one with Feature 5a (see Chapter 3).

8.3.3 *Taphonomic and other formation processes of Feature 5a*

Within Feature 5, only two stratigraphical units were separated – SU 190 was the uppermost alluvial deposit, SU 191 the lower part which yielded the burials. Within SU 190, some post-New Kingdom material such as Napatan sherds were also found – obviously, this level was formed at a later time and includes mixed material

from around the tomb, especially small and light items like pottery sherds or beads. SU 191, on the other hand, was found undisturbed and without intrusive material. Thus, no looting took place in this chamber, but all the coffins, skeletons and grave goods were “baked” in alluvial sediment and partly smashed from roof collapse, in particular along the western wall.

We have to imagine that the wood of the coffins in Feature 5a decayed quite quickly, was possibly also eaten by termites and finally perished in the alluvial sediments. Coffin inlays such as the eye inlays of Individuals 145 and 162 fell out and were recovered more or less *in situ* in the head area.

Feature 5a was originally plastered white on its sidewalls. When the decision was made to cut a new northern chamber with Feature 5b and to remove the former northern wall of the old chamber in order to create a new joined space, plaster fell off and partly damaged Individual 162. This burial was affected most by the new construction work having been deposited just along the former northern wall which was now being removed. In contrast, Individual 145 seems to have survived these building phases without any damage. The plaster on the southern wall probably collapsed at a much later stage, when the wood of the coffin of Individual 145 had already completely decayed. Large fragments of wall plaster were found on top of dish SAC5 344/2017 and the faded lateral side of the wooden coffin of TG 02 (Fig. 8.2).

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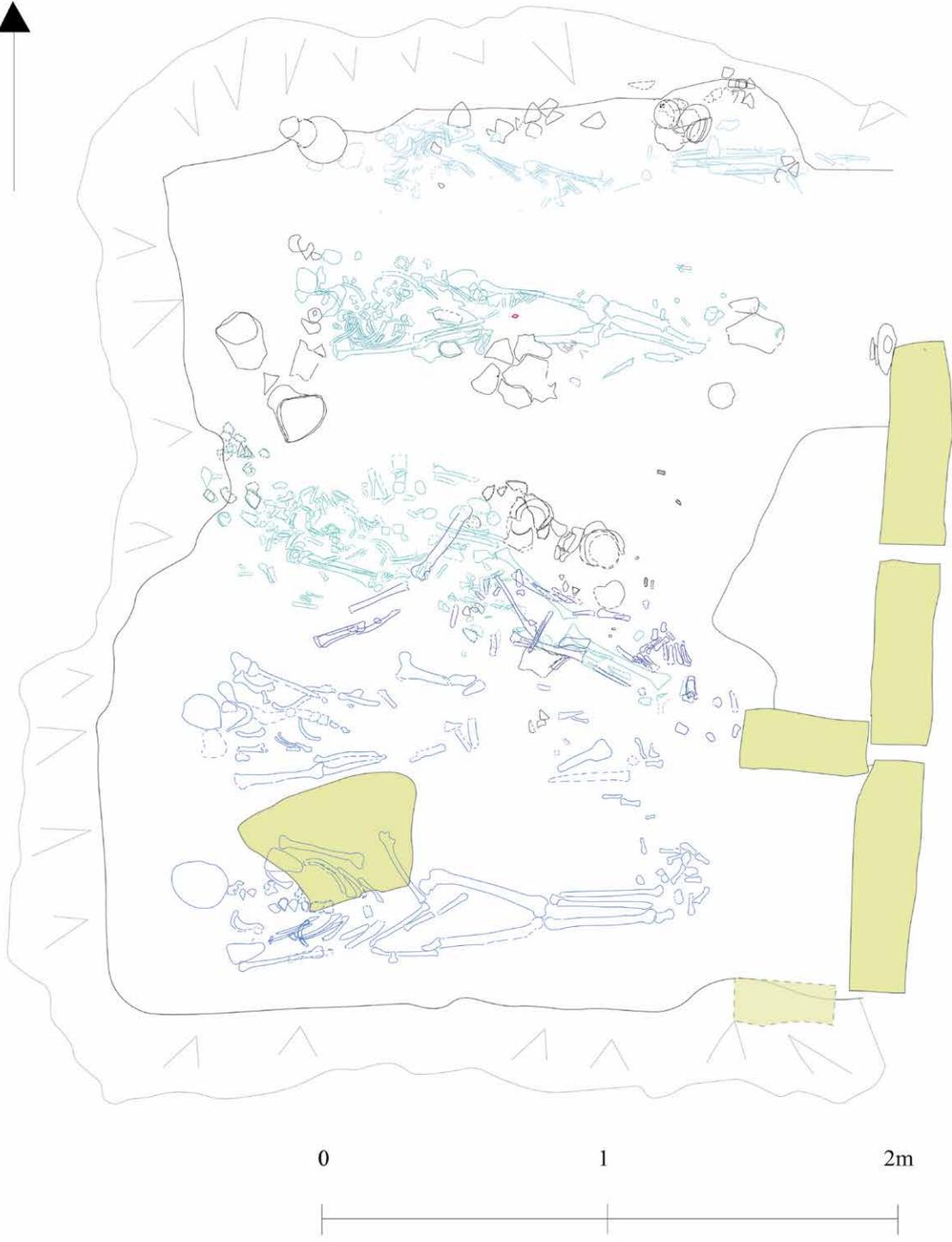


Figure 8.3: the second phase of burials in Feature 5 (illustration: P. Heindl, ©AcrossBorders).

8.4. Phases of use in Feature 5b

Soon after the interments in Feature 5a, a new chamber in the north was planned, Feature 5b (for details see Chapter 3). This burial compartment was re-designed during the building process and resulted in a merging of the new, northern chamber and the older southern chamber into one large room (Feature 5). The usage of this first phase is discussed in the following.

8.4.1 The first phase of burials in Feature 5b

The second phase of burials in Feature 5 (Fig. 8.3) is associated with the construction of Feature 5b in the northern part (Chapter 3) and first burials being deposited there. These are Individuals 300 and 260 who were probably buried in one coffin. Whereas TG 04 (Individual 260, the upper body in the coffin) was only found with unspecific beads and amulets, TG 03 (Individual 300, the lower body in the coffin) was deposited with some objects which are relevant for dating. First, this is his scarab amulet SAC5 367. According to parallels, this type of *Mn-hpr-R*-scarab is contemporary to the reign of Thutmose III or the mid-18th Dynasty respectively (see Hornung and Staehelin 1976, 60-62; Jaeger 1982, 30, §39, fig. 1). Such a mid-18th Dynasty date is also supported by two flowerpots (SAC5 305/2017 and 306/2017) which are like the ones found as part of TG 02. In conclusion, the first interments in Feature 5b are associated with the mid-18th Dynasty too, suggesting that the first four burials (TG 01-04) in the chamber were deposited at close intervals.

This also includes the next burial associated with Phase 2 in Feature 5, the first subphase in Feature 5b. Individual 324 (TG 05) was buried with one scarab amulet and one finger ring with a scarab – both of which pre-date the New Kingdom and are thus “old pieces”. A considerable number of pottery vessels were placed around the burial and are useful to date the assemblage. Six complete vessels are especially noteworthy: a small amphora (SAC5 343/2017) with a matching pot stand (SAC5 346/2017), a dish (SAC5 345/2017), two flowerpots (SAC5 350/2017 and SAC5 351/2017) and one lid (SAC5 358/2017). The flowerpots and the dish are comparable to the ones found with the other burials in Features 5 and 6. The small amphora (SAC5 343/2017) and the lid/cup (SAC5 358/2017) are unique within Tomb 26 and support a dating to the mid-18th Dynasty. SAC5 343/2017 is made of Nile clay, has a red wash and finds parallels in other tombs of SAC5, especially in Tomb 3 (Minault-Gout and Thill 2012, T3 42, pl. 136). There, the exact parallel was also found associated with flowerpots and dishes. SAC5 358/2017 is unusual. It is a small simple cup or lid with a direct rim and linear decoration around the rim and with a spiral decoration on the rounded base in black on red wash. It was found within the dish SAC5 345/2017 at the feet of Individual 324 and would be too small to function as lid for the amphora SAC5 343/2017. Maybe it was a decorative cup and not a lid, but this remains unclear. Black on red linear decoration is

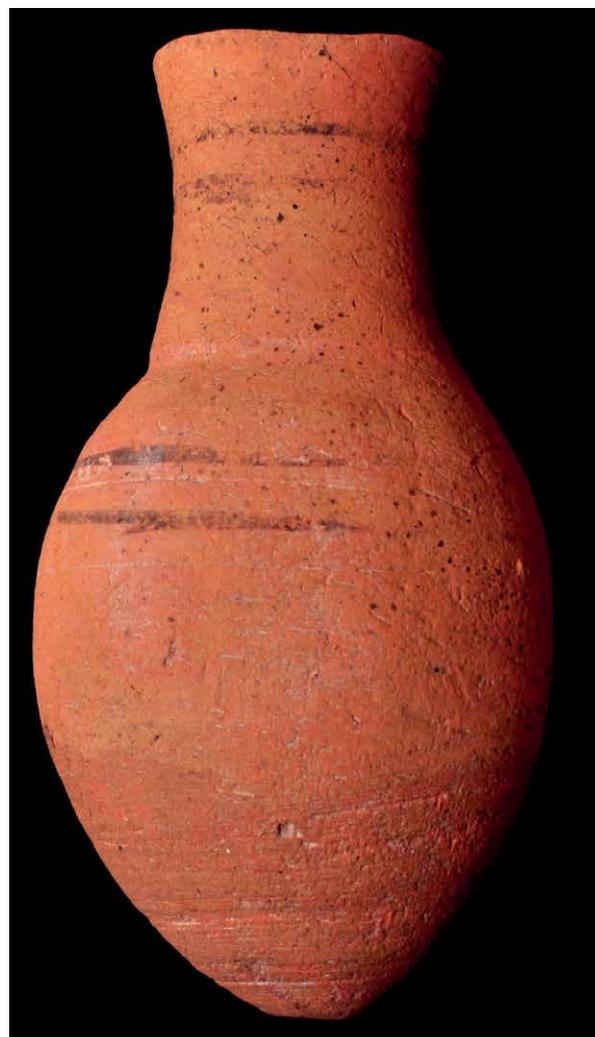


Figure 8.4: monochrome painted jar from second phase of burials in Feature 5 (photo: C. Geiger, ©AcrossBorders).

very common in the early to mid-18th Dynasty, including conical lids (Holthoer 1977, pl. 15, LL and *passim*), but no exact parallel is attested for the vessel from Feature 5.

In addition to the ceramic vessels, one charcoal C14 sample is associated with this burial assemblage. Charcoal sample 25 (see Chapter 2.4) was taken from between the legs of Individual 324 and gives with 95.4% probability a date range of 1505–1396 BCE and with 68.2% probability a range of 1459–1416 BCE, thus covering the first half of the 18th Dynasty from Amenhotep I to Amenhotep II/Thutmose IV with a preference for the period of Thutmose III to Amenhotep II/Thutmose IV.

The fourth interment associated with the second phase of burials in Feature 5 is Individual 297 deposited along the north wall of the chamber. Several ceramic vessels were

found scattered around this burial, TG 06. These are relevant for dating and comprise two flowerpots (SAC5 347/2017 and 348/2017) and a tall-necked jar with monochrome linear decoration on red wash (SAC5 349/2017, Fig. 8.4). The latter is comparable in style of decoration to the small lid/cup SAC5 358/2017. Its shape and especially neck and direct rim are, however, unusual. Ellipsoid vessels with linear black decoration are common as burial gifts in 18th Dynasty tombs both in Egypt (e.g. Sedment) and in Nubia (e.g. Aniba), but usually show a proper lip or modelled rim.

The decoration with bands in black is most common during the time of Hatshepsut and Thutmose III (see Helmbold-Doyé and Seiler, 271 and 299). A comparable piece, though with a flaring rim, was found in Tomb 14 in SAC5 (Minault-Gout and Thill 2012, T14 30, pl. 135). It derives from Chamber Cb in this structure and can be dated to the mid-18th Dynasty (see Minault-Gout and Thill 2012, 410). The flowerpots associated with TG 06 are similar to the others found in Feature 5, including the set of TG 02.

In addition to the ceramic vessels, there is a C14 date for one charcoal sample found next to Individual 297 (sample 24, Chapter 2.4, Fig. 2.21). It gives with 95.4% probability the date range of 1451–1291 BCE and with 68.2% probability 1432–1385 BCE, covering the period from Thutmose III to Ramesses I with a slight preference to the reigns of Thutmose III, Amenhotep II and Thutmose IV. This is in line with the dating of the ceramics and suggests a mid-18th Dynasty date for the second burial phase in Feature 5.

8.4.2 The question of plundering

Like the first phase in Feature 5a, there are no traces of looting in Feature 5b respectively the new large chamber Feature 5. Individual 324 with her rich bodily adornment including gold beads and the gold and silver signet ring illustrates that also moveable objects with a high raw material value were left in place.

The coffin of Individuals 300 and 260 seems to have been found in a secondary position, being moved after the original burial, but this probably happened during a later interment (see below).

8.4.3 Taphonomic and other processes

The roof collapse occurred in the central part of Feature 5, at the former junction of Features 5a and 5b. It mostly affected Individuals 260 and 300. The skull of Individual 300 was smashed. Probably the wood of the coffin of these two burials decayed quite quickly, leaving the skeletons unprotected. The so-called blue sticks found scattered in Feature 5 and which might have functioned as fixing inlays to the coffins, also fell out of the wood and, being of light weight and small in size, were perhaps partly transported by formation processes caused by the sediments (and/or

during the rearrangement of the coffin on the occasion of the interment of Individual 245, see below).

Smaller items like beads were partly affected by the water damage sustained during the repeated flooding of Feature 5. For Individual 300 it seems as if matching beads were found in Feature 1. SAC5 419 was found with the body in Feature 5, SAC5 098 in SU 062 in the shaft in mixed filling layers.

Individual 297 had only two small faience beads in the area of the lower body – they are therefore out of place and probably slid down from the torso during post-depositional processes. Maybe more beads were either destroyed or transported to another part of Tomb 26 with the alluvial sediments.

The fact that heavy beads ended up still in place despite the decay of the relevant body and the wooden coffin is illustrated by the necklace SAC5 378. Most of the 345 ring beads made of various materials from this necklace were still found in the area of the upper body of Individual 324, some had slid down and were found between the legs. The 180 gold ring beads and the 15 carnelian beads were obviously heavy enough to have remained in place; the 83 faience beads and 56 bone beads were more likely to have slid down from their original position. In addition to the beads, this necklace comprised a number of crocodile amulets in carnelian and in bone. As outlined in Chapter 7, the general find situation of these crocodile amulets was difficult to interpret since a small number was also associated with Individual 245. Obviously, the amulets were partly moved through post-depositional processes and originally belonged to Individual 324. The latter is clear from the *in situ* recording of some of the amulets – they were still in place in the shoulder area, the upper body and around the pelvis of Individual 324 (Fig. 8.5).

8.5 Phases of use in Feature 6

As was already stressed in Chapter 3, the architectural features, building technique and position of Feature 6 testify that it was built in a later phase for the burial of Khnummose and his presumed wife, presumably shortly after Phase 2 in Feature 5.

8.5.1 The original burials

The burial assemblage of Khnummose, TG 07, was found in the northern part of the chamber. A female burial, TG 08, was added slightly later, just to the south of it and thus in the entrance area of Feature 6 (Fig. 8.6). Because of space restrictions and logistics, it is obvious that the coffin of Khnummose was placed there first. The somewhat older age of the female individual hints at a slight time difference in these interments (see Chapter 6).

Khnummose is the only individual buried in Tomb 26 with several inscribed grave goods. Most relevant for dating

Figure 8.5: *in situ* position of crocodile amulets SAC5 371/2017 below the left shoulder blade of Individual 324 (photo: J. Budka).



Figure 8.6: the original burials in Feature 6 (illustration: P. Heindl, ©AcrossBorders).

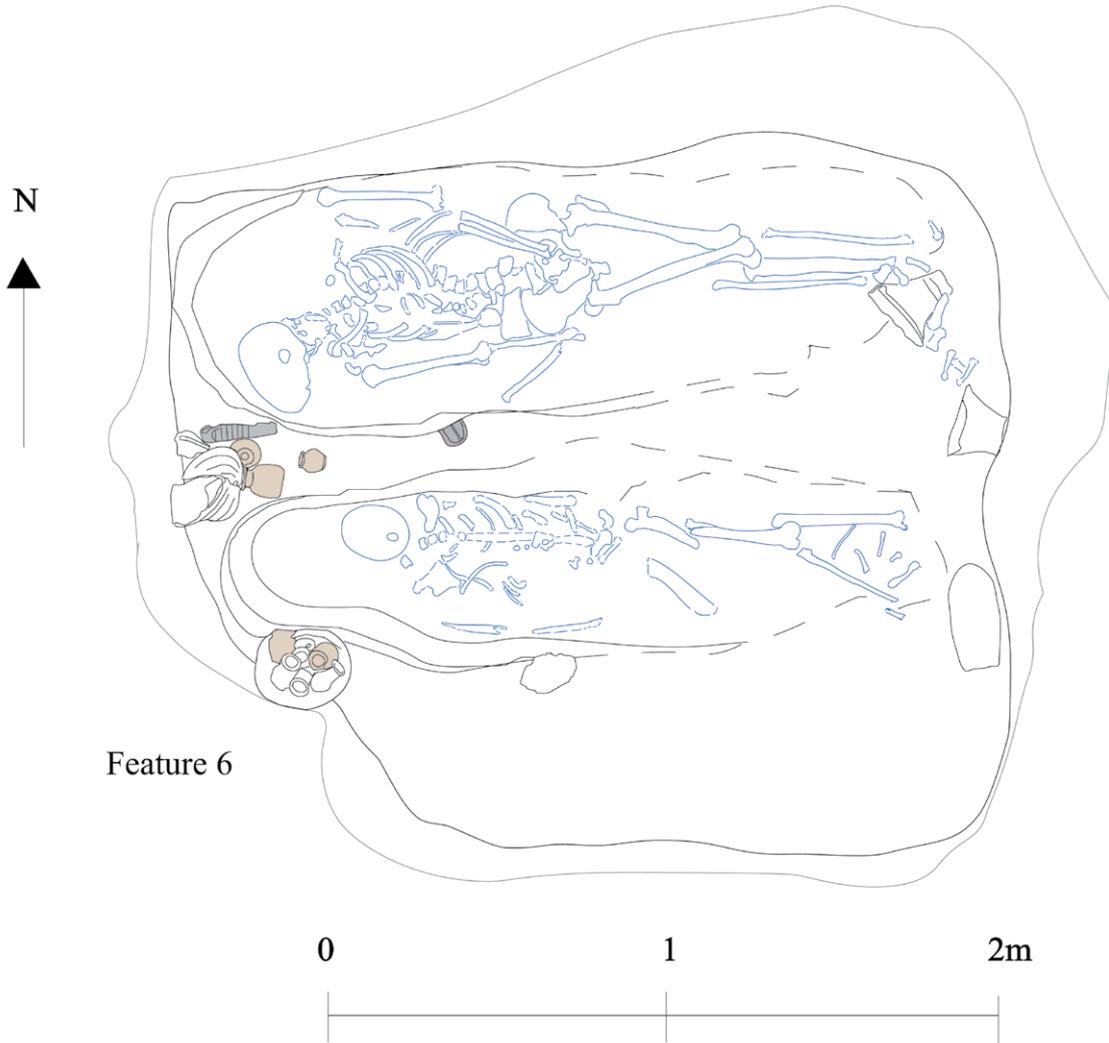




Figure 8.7: gold foil presumably belonging to the bezel of the heart scarab, found in the shoulder and breast area of Individual 159, SAC5 375 (photo: M. Gundlach, ©AcrossBorders).

are his stone shabti and heart scarab. The shabti SAC5 350 finds close parallels at other sites and indicates a dating between the reigns of Amenhotep II and Thutmose IV. A mid-18th Dynasty date also applies to the heart scarab SAC5 349. Its best parallel from Tomb 3 in SAC5 was dated more broadly to the 18th-19th Dynasty (T3Ca53, Minault-Gout and Thill 2012, 407, pl. 102).

The set of four faience ointment jars of Khnummose also supports a dating to the second half of the 18th Dynasty. These vessels are comparable to vessels from Tomb 11 at Soleb (Schiff Giorgini 1971, 166, figs. 268 and 270). This tomb is also similar in terms of ceramics (especially regarding flowerpots and the round-based beaker of TG 08) and its interments are associated with the late 18th Dynasty, the reign of Amenhotep III or later (Schiff Giorgini 1971, 157-168).

Khnummose was buried with two pottery vessels, so-called flowerpots. As already mentioned for Feature 5, these vessels are most common in the mid-18th Dynasty and might have been used as gift baskets and once carried grave goods in the form of fruits, bread or other food (see below, 8.6.3).

The scarab amulet found with Khnummose, SAC5 351, is not relevant for dating the tomb group since it predates the New Kingdom and is one of the “old pieces” in Tomb 26.

The female in Feature 6, TG 08, can be dated by means of the faience and ceramic vessels. The two miniature faience vessels are comparable to two vessels from Tomb 1 in SAC5 which were attributed to the time span of Thutmose III to Amenhotep III (Minault-Gout and Thill 2012, 407, pl. 170). The beaker, two flowerpots and dish of TG 08 are common mid-18th Dynasty vessels, well attested in the New Kingdom town of Sai, in other tombs of SAC5 and at Soleb (see Chapter 7). The miniature jugs find close parallels in Soleb, in particular in Tomb 15, dated to the reign of Amenhotep III (Schiff Giorgini 1971, 194, fig. 344, T 15 p9 and p14, and 196, fig. 348, T 15 p20). The flowerpots from TG 08 fall into the same category as the ones from Khnummose and probably once carried perishable food gifts.

In addition to the faience and ceramic vessels, one C14 sample (charcoal) is associated with Individual 160, TG 08 (see Chapter 2.4, Fig. 2.23). The calibrated dates give a range of 1437–1288 BCE with 95.4% probability which covers the timespan of Thutmose III to Seti I and with 68.2% probability 1425–1381 BCE (Thutmose III to Thutmose IV/ Amenhotep III). Thus, this sample too, supports a dating to the mid- or maximum late 18th Dynasty.

In conclusion, the two burials in Feature 6 were deposited in the mid-18th Dynasty. Because of the building sequences in Tomb 26, it is safe to assume the reigns of Amenhotep II/Thutmose IV as the earliest date and the one of Amenhotep III as the latest.

8.5.2 The question of plundering

Feature 6 was most probably once blocked after the interments of Khnummose and his wife were completed. Since no stone blocks were found, mud bricks seem the most likely option as blocking material. As both the entrance shaft to Feature 6, Feature 4, and the chamber itself were found filled with solid layers of alluvial sediment, no traces of mud bricks were recorded. It therefore remains unclear, whether this blocking was destroyed in antiquity.

The assemblage of Khnummose is almost untouched and small modifications can be explained by taphonomic processes (see 8.5.3.). However, one finding implies maybe some looting soon after burial. As explained in Chapter 5, the heart scarab SAC5 349 was once probably mounted in a gold bezel and a necklace. Its find position at the right side of the individual implies that it has fallen from the chest. Considering the weight of the heart scarab and the presumed necklace, this seems to indicate plundering rather than natural formation processes. Only parts of the gold foil from the gold bezel of SAC5 349 were still found with the scarabs, others must have been lost due to the



Figure 8.8: the find situation of the heart scarab, upper body and skull of Individual 159 (photo: J. Budka).

alluvial sediments. Furthermore, fragments of gold foil were found above the skeleton of Khnummose – in the hip area (SAC5 374) and especially in the right shoulder and breast area (SAC5 375, see Fig. 8.7). This strongly supports the theory that the heart scarab was once put on the chest of the deceased and not in the position it was found. But could this have happened by means of natural formation processes only? If we believe that the bezel was originally mounted in a necklace, it is extremely unlikely that a complete necklace simply disappeared. The distribution of the gold foil on the upper body, hip area and next to the heart scarab could rather suggest that someone ripped the necklace with its heavy pendant off the body. However, since the necklace was just reconstructed based on parallels and the existence of the bezel, such a proposed looting attack on the body of Khnummose must remain tentative. Though, tearing a necklace away from Khnummose's neck could also explain the unnatural position of his skull (Fig. 8.8).

The case of the female individual, TG 08, is also unclear regarding looting. The skeleton itself is poorly preserved and obviously suffered more from the water damage than Khnummose, having been more exposed in its position at the entrance. No bodily adornment was found, and the skull was documented in a similar “flipped” position like Khnummose – maybe a quick search for precious objects on the upper body was undertaken and a necklace ripped apart?

Some grave goods like the ceramic dish with miniature vessels were clearly found *in situ*. The beaker by the feet also seems to be in place, maybe just fallen to the side. The flowerpot was placed to the south of the skeleton in the area of the hip. It was found broken into pieces, maybe because of the coffin collapse or maybe because of human intervention since this vessel is directly in the entrance space.

Apart from these *in situ* ceramic finds, it is possible that additional parts of the ceramic assemblage of TG 08 were displaced and found in Feature 4. As was specified in Chapter 7, the complete *zir*, SAC5 372/2016 and the upper part of a flowerpot with a modelled rim, SAC5 373/2016, were found close to the bottom of Feature 4 in the eastern part. An original placement at the feet of Individual 160, TG 08, is possible. We then must expect that parts of the blocking of Feature 6 were destroyed or had already collapsed and that these vessels were taken out for some reason, most probably in conjunction with a hypothetical looting or the use of Feature 4 as a burial place.

8.5.3 Taphonomic and other processes

The alluvial sediments filling Feature 6 resulted in an almost complete decay of the painted wooden coffins. Only remains of the decoration and the eye inlays were found (see Chapter 7). The sediments showed some changes in colour which were interpreted as reflecting the decayed anthropoid coffins. It is clear that some

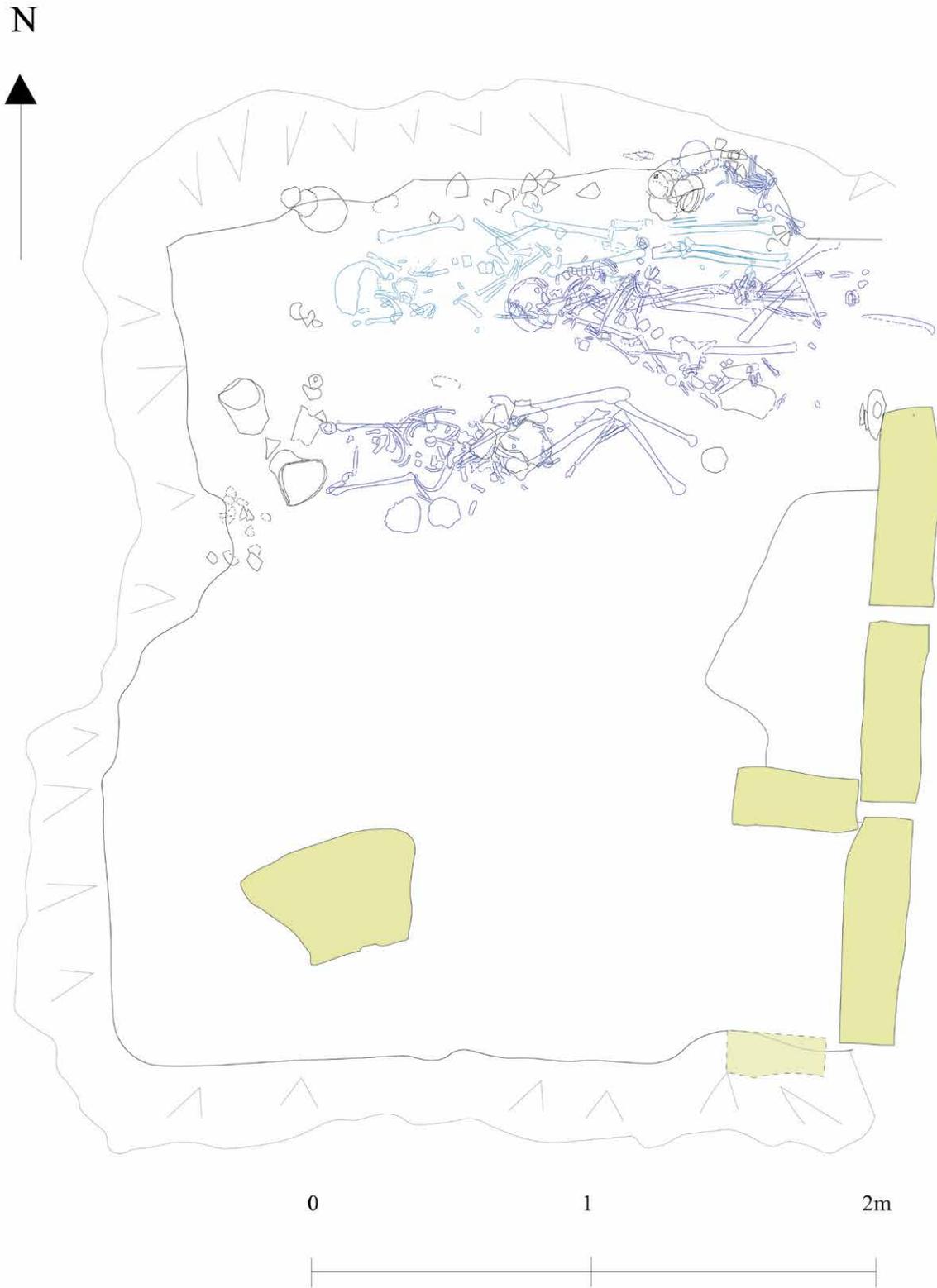


Figure 8.9: the third phase of burials in Feature 5 (illustration: P. Heindl, ©AcrossBorders).

of the burial gifts were placed around the coffins: this holds true for the ceramic vessels, the faience vessels and also the shabti. All of these are more or less in place and were only broken under the heavy load of sediments. In the case of Khnummose, some objects positioned on his body were transported by formation processes to their actual find position. This is evident in the case of the scarab amulet SAC5 351 which was found in the head area of Khnummose. It was probably originally deposited close to the hands on the left side. Given the amulet's small size and weight, it could have been transported by the water/sediments to its find position (an alternative explanation could be a use of the scarab on a string around the neck rather than the more common placement on the left hand).

As was already noted above (8.5.2), the female individual was more heavily exposed to the pressure created by the flooding of Feature 6 and the fragile bones found during excavation do not represent a complete skeleton. Although this might just be the result of natural formation processes, we cannot rule out the possibility that TG 08 was partly accessible from Feature 4 and consequently also partly modified after its primary deposition (see above).

Finally, no organic grave goods were found in Feature 6. One has to expect that especially the so-called flowerpots functioned as gift baskets and were deposited around the coffins with some food offerings. Any traces of such offerings have disappeared as a consequence of natural decay processes and the impact of the alluvial sediments which buried all objects in Feature 6.

8.6 Final use of Feature 5

Contemporaneous to or slightly after the new burial compartment, Feature 6, was occupied with TG 07 and TG 08, also the old western chamber, Feature 5, was again used for burials. The absolute dating of these interments is difficult to assess, but their relative dating is quite clear. They seem to predate the burials in Feature 4 which postdate the ones in Feature 6.

8.6.1 The burials

The third phase in Feature 5 (Fig. 8.9) is associated with the deposition of three females and two infants in the northern part of the chamber. The grave goods of Individual 245 (TG 09) who was buried together with Foetus 323 are not relevant for fine dating this burial.

The interments of Individuals 279 and 259 were clearly deposited with some time difference since Individual 259 is partly overlaying the other. Individual 279 was partly placed above the older Individual 297. Both female burials of Phase 3 along the north wall of Feature 5 had only very few grave goods (TG 11) respectively no finds at all (Individual 279). Individual 259 was buried with a scarab

amulet (SAC5 364) which finds parallels at Aniba and Soleb of 18th Dynasty date (see Chapter 7).

The infant burial of Individual 299 (TG 10) was found next to the flowerpot SAC5 347/2017 in a kind of small niche in the northern wall, just around the corner of the entrance to Feature 5. As outlined in Chapter 7, it is likely that this infant was placed there in a wooden box. Such an arrangement with a box of an infant burial at the foot of a female coffin finds parallels in Egypt (see Miniaci 2019, 12, fig. 8). The association of Individual 299 with one of the female burials remains, however, unclear, but it seems to be at best contemporary or slightly later than Individual 279.

One unusual monochrome painted jug was found in the general area of the northernmost individuals in Feature 5 and cannot be attributed to a specific tomb group. SAC5 244/2017 (Fig. 8.10) is a small one-handled vessel made of Nile clay, covered with a white slip and painted in a dark colour.

Since the painting is much faded, it is unclear whether the vessel showed linear bands or a pattern with short vertical strokes (see Fig. 5.62). SAC5 244/2017 is unique in Tomb 26 and seems to imitate an imported vessel. Similar jugs of 18th Dynasty date were found in other Egyptian tombs in Nubia, e.g. at Aniba (see Helmbold-Doyé and Seiler 2019, 386 with references).

Another ceramic vessel which was found along the northern wall and could not be assigned to a specific tomb group is SAC5 119/2017 (Fig. 8.11). This is the fragment of a handle of a Marl A2 miniature pilgrim flask which was red burnished. Similar vessels are well attested from other tombs in SAC5 (Minault-Gout and Thill 2012, pl. 140). Such pilgrim flasks are datable to the mid to late 18th Dynasty.

In conclusion, the third phase of burial in Feature 5 is still associated with the 18th Dynasty, here with the advanced/late 18th Dynasty. Since the earliest deposition in Feature 5a is likely to date around 1450/1430 BCE and the latest in Feature 5 to c. 1380 BCE, little time elapsed between the individual interments. The three phases comprise 50-70 years, implying that not more than three or four generations of one family were buried here.

8.6.2 The question of plundering

The state of Feature 5 and its interments make it clear that no looting occurred in the chamber. All transport of small sized items like beads can be explained by flooding events and the smashed skeletons and ceramic vessels reflect the collapse of part of the roof of Feature 5. The interment of Individual 279 obviously affected the older burial along the northern side, Individual 297 which was moved out of the way and partly destroyed. Individual 259 has an unusual position and it seems as if this burial was pushed from the entrance area at a later time, most probably on the occasion of the interment of Individual 1 of whom the feet and legs protrude into Feature 5.



10 cm

Figure 8.10: monochrome painted jug SAC5 244/2017 (photo: C. Geiger, ©AcrossBorders).

SAC5 119/2017

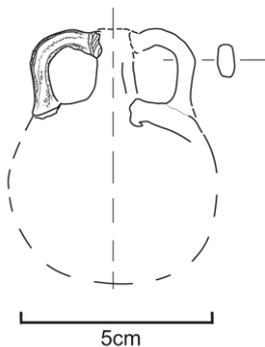


Figure 8.11: miniature pilgrim flask SAC5 119/2017.

8.6.3 Taphonomic and other formation processes

The reconstruction of the burial phases in Feature 5 with the final interments in the northern part close to the entrance is also supported by an ecofact found in the northeastern corner of the chamber. SAC5 115/2017 is the fragment of a snake skeleton, suggesting that the animal was either entering from the doorway or on its way out. Since similar snake skeletons were found in Feature 4, this might refer to a phase of abandonment in Tomb 26. The snake may have been looking for a quiet place to rest or rather hunting rodents. The latter would be connected with potential food offerings deposited in Feature 5. A small number of animal bones have survived from the chamber (at the head area of Individual 145, in the mid area of Individual 162 and thus close to his pottery vessels and around the flowerpot next to infant Individual 299; for details of the animal bones from Tomb 26 see the Appendix). Here, the so-called flowerpots which were found in various places in Feature 5 are of interest. The most likely explanation for the common

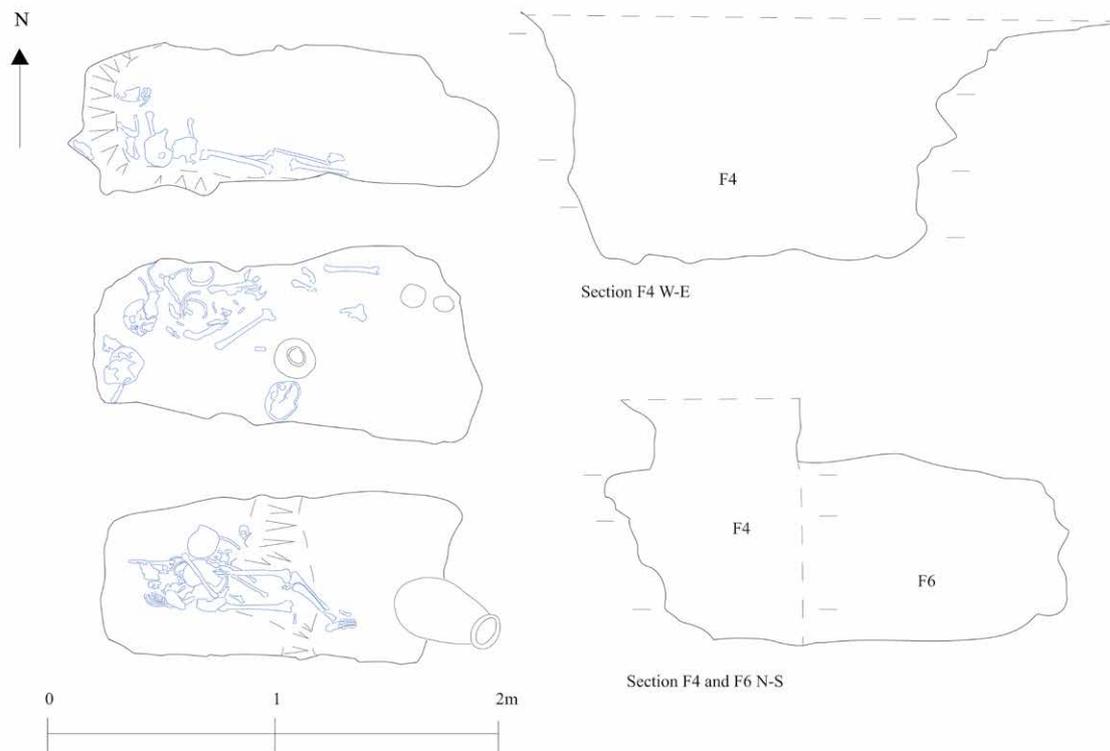


Figure 8.12: the three burial phases in Feature 4 (illustration: P. Heindl, ©AcrossBorders).

flowerpots in Tomb 26 is the use as gift baskets which once held fruits, nuts, bread or other food items (see above). All of these food offerings, except for the small amount of animal bones, have perished due to the alluvial sediments in Feature 5 – or were they perhaps eaten by rodents? For Feature 5, it is likely that all flowerpots except the ones in the ceramic cluster in the southeastern corner were placed next to the coffins respectively burials with gifts. For the ceramic cluster, where the vessels were piled on top of each other, two explanations or maybe even a combination of these are possible: 1) the gift baskets were used during a ritual/the funerary ceremony and laid empty in front of the entrance prior to its original blocking (see Chapter 3); 2) the gift baskets were piled up on the occasion of the construction work for Feature 5b and thus when the food offerings were already decayed. It is possible that the flowerpots from the cluster were originally positioned at the coffin of Individual 162 and were moved to a safe corner when the bridge between Features 5a and 5b was torn. Interestingly, two small bone ring beads (SAC5 420) were found below the vessels in the cluster in the southwestern corner of Feature 5, indicating that this was maybe not their original place of deposition. This example illustrates how difficult it is in Feature 5, in spite of its un plundered status, at times to differentiate between depositional and post-depositional processes. Similar movements of burials resulting from

later depositions were also recorded in other cemeteries in Nubia, e.g. at Tomb 511 at Fadrus (see Säve-Söderbergh and Troy 1991, 281-282).⁸

8.7 Phases of use in Feature 4

The situation in Feature 4 is complex and as outlined in Chapter 7, no reconstruction of individual tomb groups was possible. Nevertheless, a sequence of the burials discovered in this descent to Feature 6 was established and is presented in the following.

8.7.1 The burials and their sequence

Six individuals were buried in Feature 4, but only three of them, Individuals 51, 87 and 124, are more or less complete while the others are largely represented by the skull only (see Chapter 6).

Three phases of burials can be differentiated in Feature 4 (Fig. 8.12). The first interment is the female Individual 124. Its feet were found on the same level as a large *zir* vessel and a broken flowerpot. Since these may belong to TG 08, the female buried in Feature 6 (see above),

⁸ I am thankful to Rennan Lemos for bringing this Nubian comparison to my attention; reopening of tombs and resulting movements in chambers is of course also attested in New Kingdom Egypt, see, e.g., Näser 2008 and 2013.



Figure 8.13: the find position of SAC5 310/2016 in Feature 4 (photo: J. Budka).



Figure 8.14: reconstructed vessel SAC5 310/2016 (photo: C. Geiger).

they cannot be used as dating evidence. It seems, however, that the burial took place quite soon after the deposition of Khnummose and his wife, but maybe towards the end of the 18th Dynasty and contemporaneous with the final burial phase in Feature 5.

Burial phase 2 in Feature 4 comprises the interments of Individual 87 and possibly as a subphase also the ones of Individuals 60, 75 and 77 (Fig. 8.12). Since the latter are only fragmentarily preserved, it is clear that this is not a sealed and undisturbed context.

The only archaeological dating implications are given by two vessels which were found associated with this phase. One is a flowerpot (see Chapter 7), the other one a fragmented wine pitcher of Marl D, SAC5 310/2016 (see Chapter 5, Fig. 5.32), which was reconstructed from several pieces. The largest part of the body was found in Feature 4, but other matching fragments derive from SU 137 in Feature 2, just above Feature 4, and from SUs 60 and 69 in the shaft. These matches throughout Tomb 26 and the find position of SAC5 310/2016 at a level where also collapsed fragments of wall plaster were documented (Fig. 8.13) stresses the mixed and disturbed character of these upper levels of Feature 4.

The shape of SAC5 310/2016 (Fig. 8.14) is well attested, for example from the tomb of King Tutankhamun and it is most common from the reign of Amenhotep III to the end of the 18th Dynasty (see Bourriau 1982, 82, no. 61 with references). This would imply a late 18th Dynasty date for burial phase 2 in Feature 4 but must be regarded with caution as the situation is disturbed.

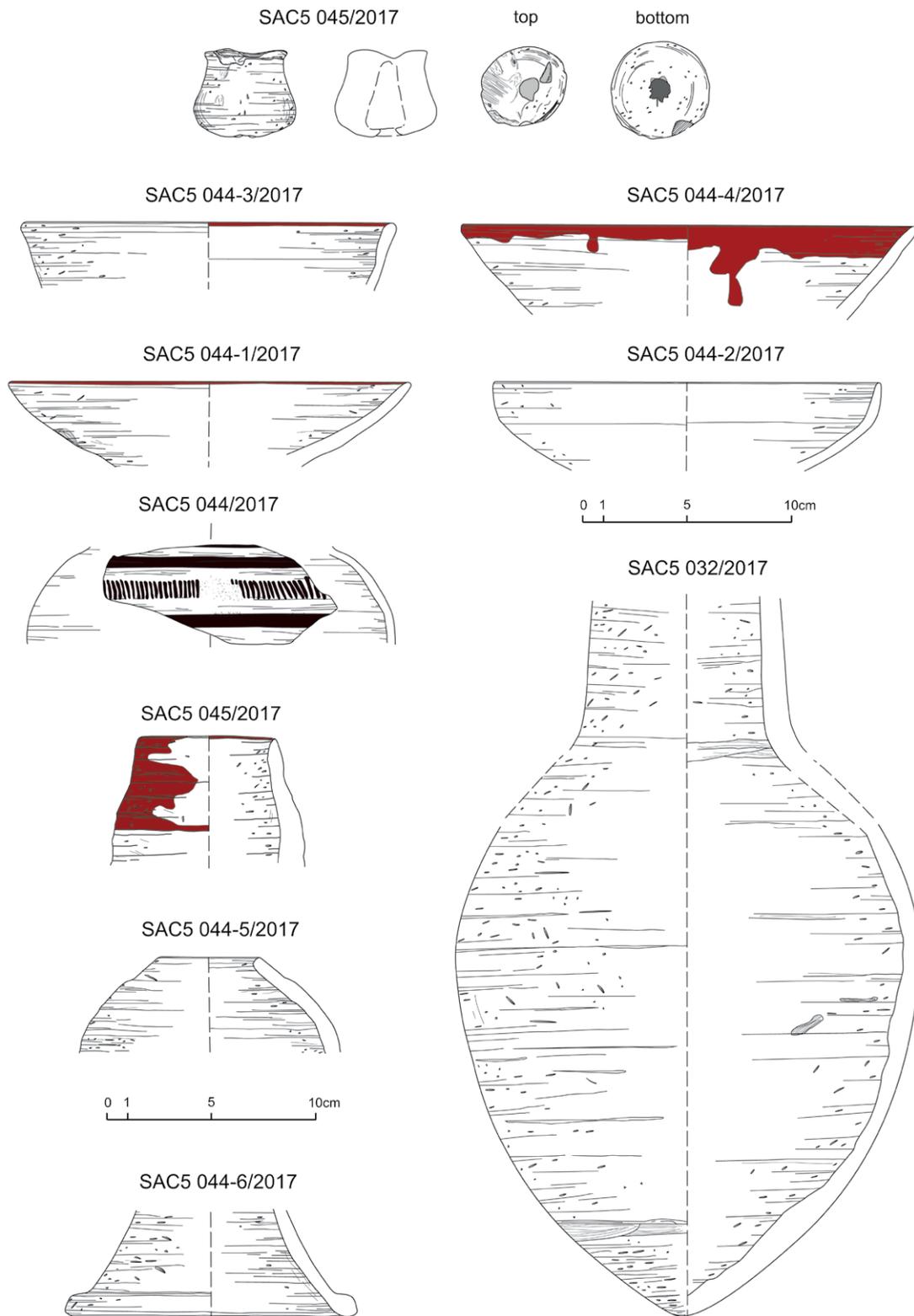


Figure 8.15: mixed and fragmented ceramics from the upper levels in Feature 4.

Since the archaeological dating is therefore complicated, two charcoal samples from the context above Individual 124 (SU 157) and their C14 dating are highly relevant. Sample 17 is a piece of charcoal which was found in the flowerpot SAC5 074/2017 associated with Individual 87. It gives with a 95.4% probability a date range of 1297–1112 BCE or with a 68.2% probability 1260–1190 BCE (Fig. 2.19). These dates span the very end of the 18th Dynasty to Ramesses IX. The second charcoal sample 18 gives slightly earlier dates with 1415–1260 BCE at 95.4% probability and 1393–1334 BCE at 68.2% probability (Fig. 2.20). This defines the time span of the reigns of Amenhotep II to Ramesses II. In conclusion, the C14 dates in combination with the ceramic vessels favour a dating of phase 2 in Feature 4 towards the end of the 18th Dynasty or the very early 19th Dynasty.

Burial phase 3 in Feature 4 (Fig. 8.12) is associated with the female Individual 51 (see Chapter 6). No finds can be clearly associated with this interment and its dating depends on the general sequence within Feature 4. Since burials datable to the late New Kingdom were placed above Feature 4, thus sealing this descent, phase 3 must predate the 20th Dynasty. Overall, a dating to the 19th Dynasty is the most likely explanation.

The sediments above the burial of Individual 51 yielded small fragments of bones and mixed and fragmented ceramics (Fig. 8.15). The vessels seem to date to the late 18th Dynasty and probably the 19th Dynasty. It is obvious that this filling of Feature 4 has again been mixed because of the matching pieces of ceramics from other parts of Tomb 26 and the fragmented status. The ceramic assemblage labelled as SAC5 044/2017 included an isolated fragment of an imported vessel with monochrome decoration. SAC5 045/2017 represents an unusual piece, maybe a model vessel.

Also, large-sized vessels are attested from the upper levels of Feature 4 and the best example is SAC5 032/2017, a jar with an ovoid body and a tall neck. Importantly, only the lower part of this vessel was found in Feature 4 – joining sherds from the shoulder and neck derive from SU 073 in Feature 2 and SUs 055 and 069 in Feature 1. As dating for this jar, the late 18th Dynasty is most likely. This considers parallels from SAC5 (Minault-Gout and Thill 2012, T7 73, pl. 135, first half of 18th Dynasty) and Soleb (Schiff Giorgini 1971, pl. 16, 41, mid-late 18th Dynasty).

8.7.2 *The question of plundering*

Unlike Feature 5 and more clearly than Feature 6, Feature 4 does not represent an undisturbed context. As descent to Feature 6 and thus a pit opening on the floor of Feature 2, it is in part difficult to differentiate the mixed material as the result of backfilling processes respectively natural filling because of floods or as evidence of plundering. Matching

pieces of pottery from Features 2 and 1 imply looting events.

The clearest evidence for looting is the appearance of several pottery tools for digging. Four reused sherds in the shape of scrapers were found in the upper levels of Feature 4 which are also mixed according to the pottery record. Although this number is small in direct comparison with Features 1 and 2 (see Chapter 5, Table 5.5), the digging tool support the explanation of the fragmented burials in Feature 4 with looting. Since this happened before the 20th Dynasty, this is important evidence that plundering of the elite tombs on Sai was already undertaken in the New Kingdom, thus rather soon after the first interments (see also the proposed looting in Feature 6).

To illustrate the scrapers used as digging tools in Feature 4, one of the four examples is here described in detail. SAC5 366 from SU 155 is the large body sherd of a Canaanite amphora datable to the 18th Dynasty. Since no such imported vessel was found in Tomb 26, the sherd was probably picked up by the tomb robber elsewhere in SAC5, possibly because of the advantageous hardness of the sherd. The piece was worked into a scraper by re-shaping both short sides and the rounded edge (see Fig. 5.36).

8.7.3 *Taphonomic and other formation processes*

One of the most remarkable findings in Feature 4 was the fragmentary preservation of the skeletons, very much resembling the evidence in Feature 2 (see below). Furthermore, the well-preserved Individuals 51, 87 and 124 all show rather unusual positions (see Chapter 6 and Fig. 8.16), probably due in part to the looting events and especially because of the flooding of Feature 4. It is likely that the now lost blocking wall between Features 4 and 6 as well as a presumed looting hole in the eastern corner (see the large *zir* vessel) somehow created a kind of barrier for the alluvial sediments which consequently caused the re-shaping of the skeletal remains.

Although some pigment traces were documented at several spots in Feature 4, it remains uncertain whether the burials were deposited in wooden coffins or merely packed in linen. No traces of wood were found in this part of Tomb 26.

That Feature 4 was partly left open, especially after burial phase 2, is evident from some ecofacts of which the most remarkable is a complete snake skeleton (Fig. 8.17). SAC5 089/2017 was found along the south wall in SU 157. Another fragmentary snake skeleton was documented with SAC5 122/2017 in SU 158. The most likely explanation is that the animals entered the pit of Feature 4 in a phase of little use or even abandonment. The snakes were perhaps hunting rodents of which some remains still exist in Feature 2 (see below). The



Figure 8.16: the unusual position of Individual 124 in Feature 4 (photo: J. Budka).



Figure 8.17: snake skeleton SAC5 089/2017 in Feature 4 besides remains of Individual 087 (photo: J. Budka).



Figure 8.18: burial phase 1 in Feature 2 (illustration: P. Heindl, ©AcrossBorders).

appearance of rodents suggests that at least some of the food offerings/grave goods were still edible (note the flowerpot as potential gift basket in SU 157) – so maybe we have to expect very short periods for events such as “abandonment”.

8.8 Phases of use in Feature 2

Five distinct phases of interments in Feature 2 can be noted. In the largest chamber of Tomb 26, it is obvious that a fragmentary status was found during excavation, the result of both repeated plundering and multiple reuse.

8.8.1 The burials and their sequence

Burial phase 1 in Feature 2 is associated with remains which are clearly *in situ* on top of the chamber floor (Fig. 8.18). This applies to Individual 10 (TG 12) in the southwestern corner of Feature 2. Although no traces of wood were found, it is likely that this male individual with a high-quality tomb group was once buried within a coffin. This could also explain the slightly diagonal position of the skeleton. It must be stressed that Individual 10 differs from the general east-west position shown by the burials in Features 5 and 6, preferably with the head in the west according to Egyptian funerary customs. Individual 10 has its head in the southwestern corner of Feature 2 – an orientation which is unusual.

Not only the position on the chamber floor but also the grave goods suggest that TG 12 was the earliest interment in Feature 2. The following items are relevant for dating: the scarab amulet SAC5 313 and the ceramic vessels SAC5 303/2016, 304/2016 and 305/2016. The scarab is one of the *Mn-hpr-R* scarabs and firmly associated with the mid-18th Dynasty (see Budka 2017c, 117). The two ceramic jars SAC5 303/2016 and 304/2016 suggest that the scarab was probably used as an “old piece” for Individual 10. These two tall bottles find the closest parallels in Amarna in Egypt and probably date to the late 18th Dynasty (see Rose 2007, 90, type SG3, 230). Such a date is also in line with the ceramic juglet SAC5 305/2016 of the Base Ring II ware (Fig. 8.19). This Cypriot ware became common in Egypt during the reigns of Amenhotep III and Akhenaten (see Eriksson 2001, 65; Budka 2017c, 116-117). However, there is some discussion about an appearance as early as in the time of Thutmose III (see Seiler 2019, 390). Base Ring II vessels are attested in tombs at Aniba, although the preserved one is a different type from the juglet from Feature 2 (see Seiler 2019, 389-391). Overall, a dating late in the 18th Dynasty is the most likely for Individual 10.

Burial phase 2 in Feature 2 is associated with two individuals (Fig. 8.20). Individual 3a and Individual 4

Figure 8.19: Base Ring II juglet from Feature 2.

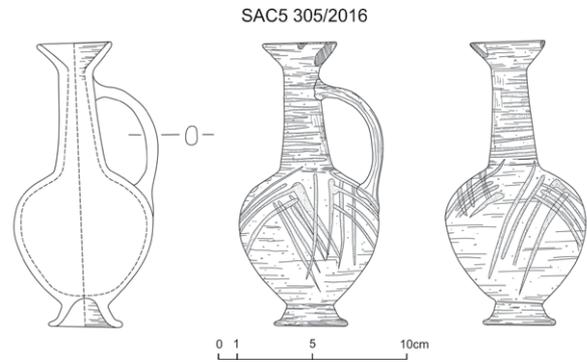


Figure 8.20: burial phase 2 in Feature 2 (illustration: P. Heindl, ©AcrossBorders).

(TG 13 and 14) are located close to each other and are both fragmentary. Based on the stratigraphy and levels of the alluvial sediments, Individual 4 seems a little older than Individual 3a. Unfortunately, both individuals were found with few burial gifts which can be attributed to them with certainty. Individual 4 had some faience beads and insignificant pottery sherds. Individual 3a can be dated to the 19th Dynasty because of the small pilgrim flask SAC5 302 which finds well-dated parallels (Aston 1994, 157, no. 195). As was discussed in Chapter 7, other items like scarab amulets and a stone vessel are probably associated with these burials but they cannot be used for dating them initially.

Another remarkable find associated with burial phase 2 in Feature 2 is a Mycenaean pottery sherd (Fig. 8.21). SAC5 170/2016 is a fragment of a small closed Mycenaean vessel, probably a stirrup jar of the fine line group of Late Helladic IIIA2/B with the Argolis as the most likely production place.⁹ Mycenaean vessels have been interpreted as luxury goods in burial contexts in New Kingdom Nubia (Smith 2003a, 152) and the presence of this sherd in Tomb 26 is important. It finds close parallels in the

9 I owe the dating and the identification as an Argolid piece to Philipp Stockhammer.

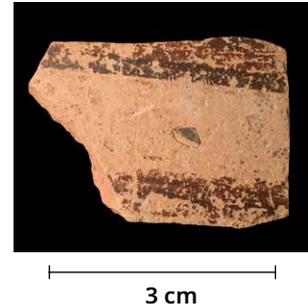


Figure 8.21: Mycenaean pottery sherd SAC5 170/2016 (photo: C. Geiger, ©AcrossBorders).

Figure 8.22: burial phase 3 in Feature 2 (illustration: Patrizia Heindl, ©AcrossBorders).

town of Amara West (Spataro *et al.* 2019) and is significant to discuss long-distance trade and the role of Sai for the distribution of goods arriving from Egypt and elsewhere (see Chapter 10).

Overall, the quantity and quality of objects datable to the 19th Dynasty suggest that, like the preceding phases in Features 6 and 5 and also comparable to Individual 10 in Feature 2, there was a continued use of Tomb 26 in early Ramesside time by the local elite of Sai. It remains uncertain whether Individuals 3a and 4 represent the only interments of this phase or are the only ones that remained preserved. This leads to the essential question whether the *jdnw n Kꜣꜥ* Hornakht is possibly among the 19th Dynasty burials in Tomb 26. As outlined in Chapters 3 and 5, this high official who was in office during the reign of Ramesses II is traceable by means of his pyramidion and other items of the tomb superstructure found in Feature 1 of Tomb 26. The first possible explanation is that Hornakht was buried in a tomb close by that has so far remained undiscovered. The pyramidion and fragments of the offering chapel ended up in the shaft of Tomb 26, probably around the end of the New Kingdom or later. The second scenario puts emphasis on the attested burial phase in Feature 2 which is contemporaneous with Hornakht. The usurpation of older structures seems to

represent the Ramesside standard modus of interment on Sai and other sites like Soleb (see Schiff Giorgini 1971, 100). Thus, it is likely that also Hornakht, as deputy of Kush, chose his burial place according to local contemporaneous traditions. Tomb 26 would have been reoccupied, its superstructure redesigned with a pyramid (including the inscribed capstone) and a new chapel with inscribed doorways. At the end of the New Kingdom, this superstructure was dismantled, the tomb was once again reused and the stone architectural pieces ended up in the shaft. However, it must be stressed that no material from the funerary equipment of Hornakht was identifiable as such from Tomb 26 (see also Chapters 10 and 12).

Burial phase 3 in Feature 2 can be divided into three subphases according to the stratigraphy (Fig. 8.22). The oldest burial from Phase 3a is Individual 8a. Slightly later is Phase 3b with Individual 9a and possibly Individuals 13 and 14. Phase 3c represents three infant burials (Individuals 5, 6 and 7).

Unfortunately, Individual 8a was found without associated finds and its dating depends on the relative position to Individual 9a (TG 15). Individual 9a was found with a pottery dish datable to the 20th Dynasty on top of its jaw. Post-depositional movements of this dish are likely and are best explained if Individual 9a

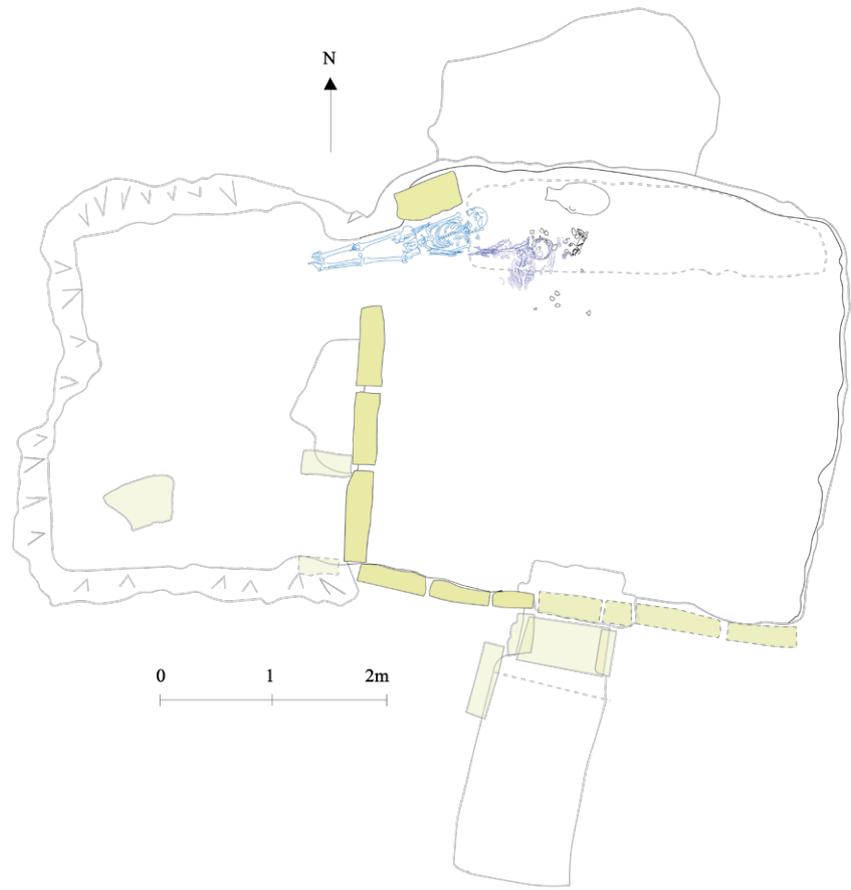


Figure 8.23: burial phase 4 in Feature 2 (illustration: P. Heindl, ©AcrossBorders).

pre-dates the late New Kingdom. The three infants were found with a small number of beads and unspecific pottery sherds.

Overall, the dating evidence for burial phase 3 is scarce but a 19th to 20th Dynasty dating is the most likely. The orientation of the bodies is difficult to ascertain, but they seem to follow Individual 10 and are mostly oriented north-south with the head in the south. Another important aspect related to this phase of use is the fact that Feature 4 was completely concealed – burials were placed above the former descent.

Burial phase 4 comprises Individuals 1 and 2 (Fig. 8.23). Although Individual 1 was found without associated artefacts and Individual 2 (TG 17) with only a few beads and pottery sherds, it is likely that these burials were associated with a number of pottery vessels found in Feature 2 and also in Feature 1 which can be dated to the late New Kingdom.

Whereas the large amphora along the northern wall of Feature 2 is close to Individual 2, an impression in the alluvial sediment suggests that a similar vessel was positioned near Individual 1 at its southern side. Here, an ovoid impression of *approx.* 40cm in length was found in the sediment which is most likely the imprint of a large round-based amphora which was once placed

next to the burial (Fig. 8.24). Its date and association with Individual 1 remain uncertain (a later date to post-New Kingdom periods would also be possible). However, it is tempting to speculate that this impression was made by one of the large amphorae found on the base of the shaft of Tomb 26 (see Fig. 5.13).

Overall, the burial phase 4 in Feature 2 can be associated with the 20th Dynasty. Apart from simple bodily adornments, the most common items of burial equipment are now pottery vessels, presumably with some offerings/food or drink. A noteworthy difference to earlier burial phases is that the heads of the skeletons were positioned in the east, not in the west.

Evidence for burial phase 5 is scarce and associated with TG 18 (see Chapter 7) and Individuals 11 und 12 (Fig. 8.25). These skeletons were found again with a west-east orientation, head in the west and feet towards the eastern wall of Feature 2. According to the deposit, these burials are the youngest ones in Feature 2, found in sediments which yielded mixed ceramics. Since no objects were directly associated with Individuals 11 and 12, their dating must remain tentative, but a pre-Napatan or Napatan date for burial phase 5 in Feature 2 takes the presence of funerary equipment datable to these eras into account, both in Feature 2 and Feature 1.



Figure 8.24: possible impression of since lost pottery vessel south of Individual 1 which is here still mostly buried in sediments (photo: J. Budka).



Figure 8.25: remains of Individuals 11 and 12 in the northeastern corner of Feature 2 (photo: J. Budka).

Figure 8.26: ceramic scraper
SAC5 219 (photo: M.
Gundlach, ©AcrossBorders).

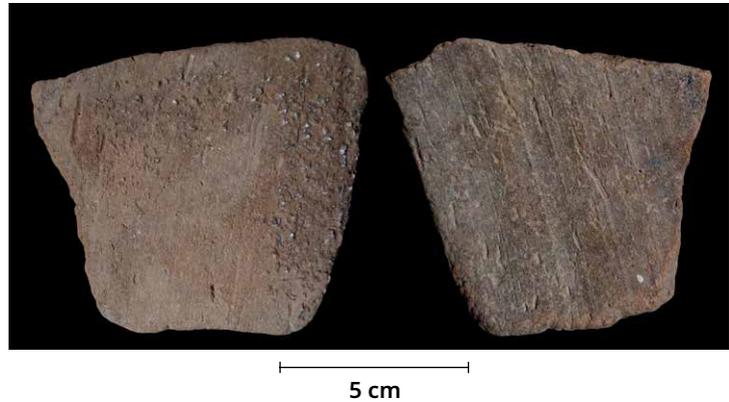
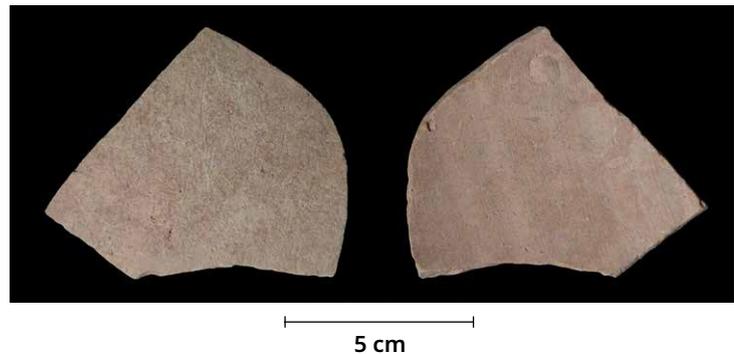


Figure 8.27: ceramic scraper
SAC5 221 (photo: M.
Gundlach, ©AcrossBorders).



8.8.2 *The question of plundering*

Feature 2 was without doubt exposed to several looting events. This plundering is evident from the fragmentary state of the skeletons, from negative impressions in the sediment hinting at removed pottery vessels and the generally mixed character of the upper layers. Furthermore, a number of matches between objects in Features 2 and 1 augment the idea of the removal of objects and repeated plundering. In contrast to Feature 5, matches can be made between solid, large and heavy objects like stone vessels and pottery vessels, thus an explanation of the matching pieces as having been transported by sediments can be ruled out.

Furthermore, Feature 2 yielded six ceramic digging tools similar to the ones from Feature 4. Two of these scrapers are described here. SAC5 219 (Fig. 8.26) is a storage vessel of the 18th Dynasty made of a Nile clay. One edge of the sherd was reworked to be used as digging tool. Salt crystals appear on the outer surface along the reused edge and the inner surface shows signs of fire damage. The latter are post-depositional formation processes and testify to the damp surroundings and the repeated looting for which such light sources as torches were probably used, resulted in traces of burning in Tomb 26.

SAC5 221 (Fig. 8.27) is a Marl clay amphora which seems to be Ramesside in date. All edges were reworked to shape the sherd into a scraper/shovel for digging.

Overall, repeated looting is traceable in Feature 2, probably as early as the New Kingdom, but clearly until post-Napatan and maybe even Medieval times (for Medieval tomb plundering on Sai see de Voogt and Francigny 2012).

8.8.3 *Taphonomic and other formation processes*

Several of the individuals buried in Feature 2 were documented as commingled remains (see Chapter 6) and are the result of several taphonomic formation processes. The clustering of the burials along the northern wall seems to be partly related to the natural post-depositional moving caused by the influences of water and also to the looting processes which obviously removed a number of items and burials closer to the shaft/exit for the tomb robbers.

Smaller items might still have been carried to different find positions caused by flood events, but the more likely explanation for the post-depositional movements in Feature 2 is looting (see above).

At the end of the 18th Dynasty, all walls of Feature 2 must have been whitewashed. During the Ramesside period, especially in burial phase 3, some of the plaster from the northern wall had already collapsed and fallen to the floor where it was superimposed by some individuals arranged above Feature 4.

One of the set stones in the southern wall must have collapsed at a later time which cannot be specified, but a considerable amount of sediment, including mixed

material (New Kingdom and post-New Kingdom) in the upper part had already accumulated above Individual 10.

Like Features 4 and 5, Feature 2 experienced several short periods of abandonment. No snake skeletons were found, but several rodent skeletons attest that these animals entered Tomb 26. Whether the mice were looking for edible items in Features 5 and 6, or whether there were also food offerings in Feature 2 is impossible to answer with the state of preservation. No flowerpots as gift baskets were deposited in Feature 2 (since the earliest burial already postdates this tradition), but other ceramic vessels might also have held food. That the vessels functioned as containers for provisions is also indicated by a stopper found in this chamber. SAC5 236 is the only fragment of a jar stopper from Tomb 26, found in SU 107, and attesting to the fragmented state of the original tomb groups, including the ceramics.

Another ecofact attesting to formation processes in Feature 2 is a small shell, SAC5 303/2015, which was found in the upper part of SU 073, directly behind the door, and probably relates to the latest phases of flooding Tomb 26.

Overall, Feature 2 as the largest chamber in Tomb 26 and the one directly accessible from the bottom of the shaft, experienced a large number of taphonomic and other formation processes which all contribute to the complex use-life of the monument and are markedly different to the ones documented in the chambers with undisturbed burials, Features 5 and 6.

8.9 Phases of use in Feature 1

As outlined in Chapter 7, the mixing of materials in Feature 1 does not allow the reconstruction of tomb groups and therefore of burial phases. The human remains were found in commingled assemblages and in a very fragmented state (see Chapter 6). Most of the evidence found in Feature 1 is the result of a secondary deposition, deriving originally from Feature 2 or even from another tomb in SAC5.

8.9.1 *The original use of the shaft*

The original use and function of Feature 1 is giving access to the burial chambers; the shaft was not originally designed to hold burials itself. As outlined in Chapter 3, there are several unusual aspects of Feature 1. One is the lining with worked stone of the lateral sides in the lower part. The other is the “dummy entrance” on a higher level than the real entrance, but directly above and with the same measurements (see Figs. 3.6-7).

As discussed in Chapter 3, the dating of this “dummy entrance” is difficult. It could represent a “test” while digging Feature 1, looking for an appropriate place to cut the chamber. We know that the New Kingdom tomb diggers in SAC5 were familiar with the local geology and were looking for a lower quality of sandstone which is easier to break (see Chapter 4). With the final depth of Feature 1, the desired layer was found. Because of the neighbouring tombs of Tomb 26 which all share similar

dimensions regarding their shafts and in combination with a layer of stone blocks and ceramics, I have argued that rather than a “test”, the “dummy entrance” of Tomb 26 is a later addition (see Chapter 3 and below).

8.9.2 *The secondary use of the shaft*

The shaft of Tomb 26 yielded substantial remains of what was interpreted as looted material from Feature 2 (see Chapter 7 and below). The filling of the shaft comprises material from all periods ranging from the New Kingdom to the 8th century BCE. Whether in the later phases of use Feature 1 was also used for burials remains unclear because of the fragmented state of the human remains.

Possible in a late building phase of Tomb 26 (Phase 3, see Chapter 3) new constructions plans were carried out but were stopped at the very beginning as is evident from the “dummy entrance”. This remains, however, tentative since no precise dating criteria for this event are available.

8.9.3 *The question of plundering*

Like Feature 2 but on an even larger scale, looting has left traces in Feature 1. Since the original chambers with burials of the mid-18th Dynasty, Features 6 and 5, were left untouched, the evidence for looting starts with material from the late 18th Dynasty and burial phase 1 in Feature 2. Several grave goods such as scarabs, stone vessels and especially pottery vessels such as painted pilgrim flasks, were removed from the interior of Tomb 26 (in particular Features 2 and 4) and ended up in the mixed filling of the shaft (see Chapter 7). Matches of objects found in Feature 1 with material from Features 2 and 4 illustrate the traces of repeated processes of looting; matches with beads from Feature 5 are more likely the result of natural formation processes.

As in Features 2 and 4, the most obvious evidence for plundering in Feature 1 is a considerable quantity of digging tools made of ceramic sherds. Most of the scrapers within Tomb 26 originate from the shaft (see Chapter 5, Table 5.5). Besides several examples from New Kingdom vessels, there is also a considerable amount of pre-Napatan and Napatan sherds, illustrating the wider span of use traceable in Feature 1.

One of the roof slabs of the shaft was found within Feature 1 – given the size and weight of this slab and its position at the level of the “dummy entrance”, this is unlikely to be a coincidence. Maybe a large-scale looting activity followed the last building phase in Napatan times. The slab fell into the shaft and then Feature 1 was left open for some time. The ceramics from the debris layer suggest that this happened after the early Napatan period. However, since digging tools made out of Napatan ceramics were found as far as the base of the shaft (SU 072), the collapsed roof slab does not mark the final end of looting events in Tomb 26.

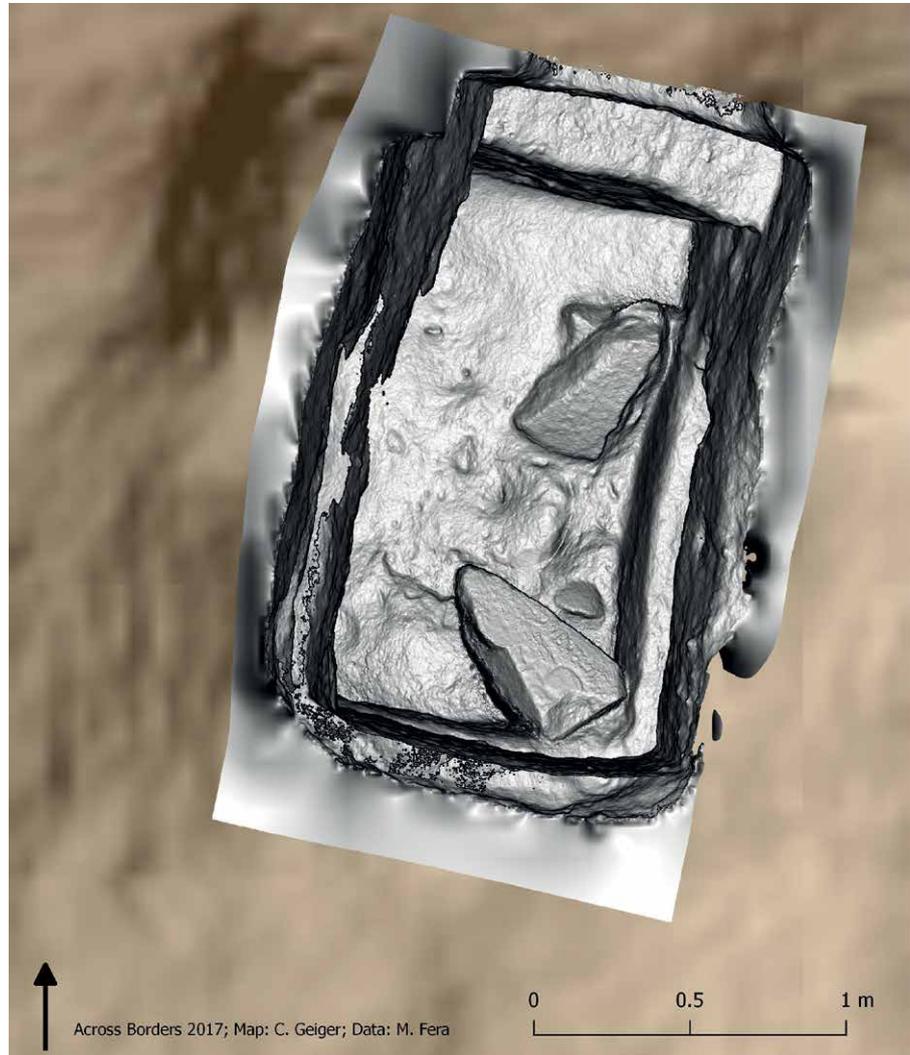


Figure 8.28: find position of the pyramidion of Hornakht in Feature 1 (illustration: C. Geiger, ©AcrossBorders).

8.9.4 Taphonomic and other formation processes

The upper levels of Feature 1 consist of windblown sand and faint traces of several flood levels. They partly contained sub recent material like a fragment of a cloth, cocoons and botanical material from SU 055. A layer with several stone fragments was reached at a depth of 2.5m, including architectural blocks and then the large roof slab, many fragments of pottery vessels and a large quantity of human bones.

The presence of the pyramidion, jambs and lintel of the deputy of Kush under the reign of Ramesses II, Hornakht, close to the bottom of the shaft questions (Fig. 8.28), above a layer of broken Ramesside pottery, raises several questions and is most probably connected with the dismantling of the superstructure of Tomb 26 (see Chapter 3). An alternative explanation is that suitable stone blocks for use as blocking stones were sought in the surroundings of Tomb 26 in the Late New Kingdom or even later.

Like other parts of Tomb 26, the lower shaft fillings indicate that flooding had already occurred in antiquity. Several shells can be named as ecofacts for these formation processes (six pieces from SUs 55, 59, 62, 63 and 66; for an assemblage of shells from Tomb 26 including Features 2 and 4 besides Feature 1 see Sattmann *et al.* 2020, 354).

8.10 Main phases of use of Tomb 26

Tomb 26 in SAC5 on Sai Island is remarkable in several respects: its architecture, rich burial assemblage and complex use-life. With the discovery of Features 5 and 6, much information was gained on the original use of Tomb 26 as a joint monument for a family. The monument was originally built in Thutmoseid times for two officials/ persons who remain anonymous (TG 01 and 02). In the mid-18th Dynasty, most likely during the reigns of Amenhotep II to Thutmose IV, the overseer of goldworkers Khnummose built a new burial compartment and was probably related to the primary owners. Khnummose

was buried, together with his wife (who died shortly after him), in Feature 6. Until the late 18th Dynasty other presumed family members of Khnummose used the tomb as their burial place, with interments taking place in Feature 5. Shortly after the space in Feature 5 was filled up, an interment was deposited in Feature 2 (Individual 10). By the Ramesside period, the original chamber (Feature 6) and its descent (Feature 4) were completely sealed by flood levels. The reuse of Feature 2 as a burial chamber continued into the 19th and 20th Dynasties. It is also likely that the entrance to Feature 5 was concealed and that this lateral room was forgotten; part of its roof must have collapsed soon after the 18th Dynasty. Consequently, interments of the pre-Napatan and Napatan era primarily took place in the central room, Feature 2, which remained open and functioning well into the 8th/7th centuries BCE (see Budka 2017c, 126, table 1).

8.10.1 Main burial phases

Overall, eight main phases of burials with several subphases can be differentiated in Tomb 26 (Table 8.1). The first five phases all date to the 18th Dynasty and attest to the heyday of use of the burial monument. Phases 6 and 7 describe the Ramesside use and mark some distinct changes. Phase 8 comprises multiple post-New Kingdom reuse.

Phase 1 marks the beginning of interments in Tomb 26 with two coffined burials of Egyptian style in Feature 5a. Phase 2 comprises a sequence of four burials in the newly cut Feature 5b which was merged into the large chamber Feature 5 with Feature 5a. Together with Phase 3, the burials of Khnummose and his presumed wife in the new burial compartment Feature 6, these early periods of use date to the mid-18th Dynasty and most probably span the time from 1450 BCE to *approx.* 1390 BCE, comprising *approx.* 60 years and maybe less, implying that three generations of one family were buried in Tomb 26 at quite short intervals.

We have to assume that the anonymous original owner of Tomb 26, most probably Individual 145, was already at the zenith of his professional career when he started building the tomb, most probably with grown-up children. It is likely to assume that Khnummose was one of them. Individual's 145 age at death was between 30-45 years (see Chapter 6); from an historical/archaeological perspective, an age between 40-45 would seem most likely. The first interment in Feature 5a, Individual 162 of unspecified sex, died in an age older than 35 years.

The following is a tentative reconstruction of the relationship of the people buried in Features 5 and 6 – it goes without saying that this is a simplified version and the reality may have been considerably different. Variations with more or additional siblings and other kinships are of course possible, but the present

model respects a maximum of possible generations. In all likelihood, the oldest generation (= parents, Generation 1) was laid to rest in Feature 5a (Phase 1) and the presumed second generation (Phases 2a-2d) in Feature 5b. These could be, *e.g.* with Individual 300 the son of Individual 145 plus siblings/spouses. All persons interred in Phase 2 were between 25-45 years old at the age of death. The pair buried in Feature 6 in Phase 3, Khnummose and his presumed wife, were slightly older; the age at death was estimated as 35-50 years for Individual 159 and as 45-60 years for Individual 160. Thus, they could belong to Generation 2 like the burials of Phase 2 but simply died slightly later.

The women buried in Feature 5 during Phase 4 could represent a third generation; the associated foetus and the infant Individual 299 embody therefore a fourth generation, but maybe also a side branch of the family. The slightly older Individual 279 (older than 35 years at the age of death) might still belong to Generation 2.

Phase 5 is more complex and might mark a change in the family line. Since this phase, the original burial compartments, Features 5 and 6, were no longer used. The burials in Phase 5 were placed in Feature 2 and in Feature 4. The richest interment is the male Individual 10 deposited in Feature 2. The burials in Feature 4 seem to be markedly different and might belong to a separate group of persons.

Phase 6 comprises several burials of the 19th Dynasty, at least two in Feature 2 and probably one in the upper level of Feature 4. All these burials are fragmented and were obviously moved during post-depositional processes.

Phase 7 can be separated into two phases and includes several interments in Feature 2. Phase 7a marks the blocking of Feature 4, with Individuals 9, 13 and 14 placed above the filled descent. Individuals 1 and 2 mark a use with an east-west orientation of the skeletons in the Late New Kingdom (20th Dynasty, Phase 7b). Individual 1 testifies that the entrance to Feature 5 was open at this time.

Finally, Phase 8 comprises burials from the pre-Napatan and Napatan periods (10th-8th centuries BCE) in Feature 2 and perhaps also in the shaft. TG 18 and possibly Individuals 11 and 12 illustrate that, just as during the Late New Kingdom, mostly pottery was used as grave goods.

Overall, the burial procedures in Tomb 26 change with the end of the 18th Dynasty and the turn to the Ramesside period. The assumption is that the original burial chambers, Features 5 and 6, were full and maybe also already partly filled with alluvial sediments. Subsequent burials were therefore primarily placed in the central, spacious chamber, Feature 2. It is impossible to ascertain whether one of the male burials from the phase of the 19th Dynasty is actually Hornakht. Apart from Khnummose and maybe his presumed wife, all individuals buried in Tomb 26 remain anonymous. Their

Table 8.1: phasing of reconstructed tomb groups in Tomb 26 including the evidence from Feature 4.

Phasing	Dating	TG	Feature	Comment
1a	Thutmoside	TG 01	5a	Anonymous
1b		TG 02	5a	Anonymous, male main burial of Feature 5a with heart scarab and cluster of pottery vessels
2a	Thutmose III-Amenhotep II	TG 03	5b	Shared coffin with Ind. 260?
2b		TG 04	5b	Shared coffin with Ind. 300?
2c		TG 05	5b	Signet ring and necklace
2d		TG 06	5b	Female
3a	Mid-18th Dynasty (Amenhotep II-Thutmose IV)	TG 07	6	Overseer of goldworkers Khnummose
3b		TG 08	6	Presumed wife of Khnummose
4a	Mid- to late 18th Dynasty	TG 09	5	Mother and newborn
4b		TG 10	5	Infant
4c		TG 11	5	
5	Late 18th Dynasty	TG 12	2	Extraordinary pottery and probably stone vessels
5a*	Amenhotep III or later	-	4	Individual 124
5b*	Late 18th Dynasty	-	4	Individuals 87, 60, 75 and 77
6	19th Dynasty	TG 13 and TG 14	2	Stone vessel
6*		-	4	Individual 51
7a	19th-20th Dynasties	TG 15, TG 16	2	TG 16 = three infants Similar position to TG 15: Individuals 13 and 14
7b	20th Dynasty	TG 17	2	Most likely also Individual 1
8	pre-Napatan and Napatan periods	TG 18 + others	2 (+ 1?)	Most likely also Individuals 11 and 12

Table 8.2: overview of the use-life of Tomb 26.

Use of the tomb	Archaeological evidence	Dating
a) Building of original structure & burial of owners	Features 1, 2, 3, 5a and TG 01 and 02	Thutmose III (second half of reign) -1450 BCE
a*) Additional burial chamber	Feature 5b; merging with 5a into 5; some destruction on TG 01 and collapsed plaster from the former northern wall of Feature 5a	Thutmose III (second half of reign)
b) Continued use (family members)	TGs 03-06 in Feature 5	Thutmose III (second half of reign)
a**) Additional burial chamber & burial of Khnummose and female	Features 4 and 6; TG 07 and 08 in Feature 6	Amenhotep II-Thutmose IV
c) Continued use (extended family members?) in Feature 5	TGs 09-11 + Ind. 279 in Feature 5	Mid- to late 18th Dynasty
Plundering?	Looting of TGs 07 and 08 in Feature 6?	Late 18th Dynasty?
d) Continued use (extended family members?) in different part so the tomb	TG 12 in Feature 2; Individuals 124, 87, 60, 75 and 77 in Feature 4	Late 18th Dynasty
Short intervals of abandonment	Snake skeletons in Features 4 and 5	Late 18th Dynasty to 19th Dynasty
Destruction of monument	Collapse of roof in Feature 5	Ramesside?
e) Reuse with burials and mortuary cult, possibly with new superstructure	TG 13 and TG 14 in Feature 2 Individual 51 in Feature 4 Pyramidion; parts of superstructure	Ramesside, 19th Dynasty Hornakht?
Plundering and abandonment	Destruction of burial assemblage; mixing of material; displaced objects in Feature 4	19th Dynasty
Destruction of monument	Collapse of mortar on northern wall of Feature 2; collapse of stone in entrance of Feature 5 (and of plaster in southern part of Feature 5?)	19th Dynasty
f) Multiple reuse with burials	TG 15 and TG 16 and Individuals 13 and 14 in Feature 2	19th-20th Dynasties
g) Multiple reuse with burials	TG 17 and Individual 1 in Feature 2	20th Dynasty
Plundering and abandonment	Destruction of burial assemblage; mixing of material; displaced objects in Feature 2	Subsequent phases
h) Multiple reuse with burials	TG 18 and maybe Individuals 11 and 12 in Feature 2	pre-Napatan
Destruction of monument	Collapse of stone from southern wall in Feature 2	Subsequent phase
Plundering and abandonment	Destruction of burial assemblage; mixing of material; displaced objects in Features 1 and 2	Subsequent phase
i) Multiple reuse with burials; maybe planning of new chamber at a higher level?	Feature 2 (ceramics); Feature 1 (ceramics) "Dummy door" in Feature 1?	Napatan
Destruction of monument	Collapse of plaster in Feature 2	Subsequent phases
Plundering and abandonment	Destruction of burial assemblage; mixing of material; displaced objects in Features 1 and 2; collapsed roof slab in Feature 1; wind-blown sand in Feature 1	Subsequent phases

sequence and the burial equipment suggest family ties, at least during the 18th Dynasty. A possible kinship between the primary owner/builder of Tomb 26, Individual 145, and Khnummose, Individual 159, is also likely from the anthropological assessment of the human remains (see Chapter 6).

8.10.2 Summary of the use-life of Tomb 26

Apart from burial phases, the use-life of Tomb 26 also included phases of construction, of abandonment and of looting. The archaeological excavation between 2015 and 2017 including the present publication represents the most recent use of a tomb monument erected *approx.* 3470 years ago.

Even if Table 8.2 gives a somewhat idealised overview, its core information should be clear: not only the building and burial phases in Tomb 26 were multiple, but also phases of plundering, abandonment and decay, as well as destruction/collapse, were repeated multiple times. Although question marks remain regarding the dating of some events and interventions, the general picture of complex funerary practices and changing preferences regarding the use of space is evident. Whereas the first phases of interments concentrated on Feature 5 and Feature 6, eventually also using Feature 4, the focus shifted to Feature 2 in the transition of the late 18th Dynasty to 19th Dynasty. This main chamber of Tomb 26 was then continuously used until Napatan times.

Connected with this evolution of the spatial distribution of the burials, is the fact that also the plundering phases in Tomb 26 can be closely linked to certain areas of the tomb, starting with maybe Feature 6, then Feature 4, Feature 2 and finally Feature 1. Feature 5 was left unlooted and there was only little damage in Feature 6 (if plundering took place at all, see above), mainly because these chambers were soon filled with alluvial sediments from flood events.

Question marks remain about the reuse of Tomb 26 in Ramesside time and whether Hornakht whose pyramidion was found in the shaft was indeed involved and modified the superstructure.

Overall, Tomb 26 is not unique in its general use-life – Egyptian tombs in general and especially elite tombs in New Kingdom Nubia were used as burial places multiple times, were shaped into communal monuments and experienced several building phases and changes, repeated collapse, plundering and abandonment (see, *e.g.*, Näser 2017 for the occupational histories in Aniba). Other examples of monuments similar to Tomb 26 can be found in SAC5 (see Chapter 9) and in Soleb.

Tomb 26 in the context of cemetery SAC5

Julia Budka

9.1 Introduction

The Egyptian style pyramid cemetery SAC5 (see Chapter 1, Fig. 1.3) represents the most significant New Kingdom burial ground on Sai Island (Minault-Gout and Thill 2012, 3; Budka 2014a; 2015b; 2017c). The architecture and grave goods of all excavated tombs from SAC5 can be easily assessed thanks to the publication by Minault-Gout and Thill (2012). This volume comprises a concise catalogue of 23 rock-cut shaft tombs with mudbrick chapels and mostly pyramidal superstructures, Tombs 1-21 and 24-25; Tomb 23 is treated separately (see Thill 2017). The latter was interpreted as a landmark of the burial ground with a specific cultic function (Thill 2017 proposes a Ra-Horakhty cult).

Parallels to the tomb groups in Tomb 26 from other tombs in SAC5 regarding the burial equipment were already pointed out in Chapter 7. The aim of this chapter is to contextualise Tomb 26 within the cemetery and to show the main parallels regarding both building and burial phases. Parallels outside of Sai have already been mentioned throughout the volume and will be specified in Chapter 12. The attested owners of the tombs of SAC5 and their relevance for the reconstruction of the social fabric of New Kingdom Sai, as well as evidence for writing and scribal habits, are presented. The confirmed burial customs and rituals are also discussed. Finally, negative evidence of objects, funerary practices or other aspects which are likely to appear in a New Kingdom elite necropolis is discoursed as well.

9.2 The neighbouring tombs of Tomb 26

Tomb 26 lies in the southeastern part of SAC5 and its directly adjacent tombs are the following structures (Table 9.1): Tombs 1, 6, 7, 8 and 9 (Minault-Gout and Thill 2012, pl. 8). These tombs form a larger cluster together with Tombs 2, 3, 4, 12 and 13.

Table 9.1 illustrates that this small group of tombs attests all three main types of superstructures notable at SAC5: Type 1, the chapel enclosure for Tombs 1 and 7, Type 2 with a pyramid for Tombs 6 and 8, and the developed Type 3 (courtyard, chapel and pyramid) for Tomb 9. These different superstructures, which show an architectural evolution, also group the tombs into three phases: Thutmoside/mid-18th Dynasty for Tombs 1 and 2 and mid- to late 18th Dynasty for Tombs 6 and 8. Tomb 9 was dated by Minault-Gout and Thill (2012, 409) to the Ramesside period based on architectural parallels from Thebes. However, parallels located at Egyptian cemeteries in Nubia, and here especially at Soleb (*e.g.* Tomb 15), were attributed to the late 18th Dynasty. Such a date, most probably the reign of Amenhotep III or later, is in my view the most likely periodisation of Tomb 9. It would then correspond to the dating attributed to Tomb 20 with a Type 3 superstructure which is located in the northern part of SAC5 (Minault-Gout and Thill 2012, 411). The other parallel with a Type 3 superstructure can be found in

Tomb no.	Type super-structure*	Type substructure	Dating (first phase)	Comment
Tomb 1	Type 1	Main chamber with annexe	Mid-18th Dynasty	
Tomb 6	Type 2	Main chamber with annexe plus chamber south of shaft; plus descent from main chamber in southwestern corner	Mid- to late 18th Dynasty	Animal offering in annexe
Tomb 7	Type 1	Main chamber and western chamber	Mid-18th Dynasty	Dividing wall in substructure built with worked stones as in Tomb 26
Tomb 8	Type 2	Main chamber with one annexe in the southeastern corner, one small chamber on a lower level in the southwestern corner	Mid- to late 18th Dynasty	Lower chamber Cb like Feature 6 in Tomb 26
Tomb 9	Type 3	Main chamber with three side chambers	Rameside? (too plundered, date established by means of parallels with Thebes?)	Paintings in chapel preserved

Table 9.1: the neighbouring tombs of Tomb 26 in SAC5. *after Minault-Gout and Thill 2012 (see Chapter 3).

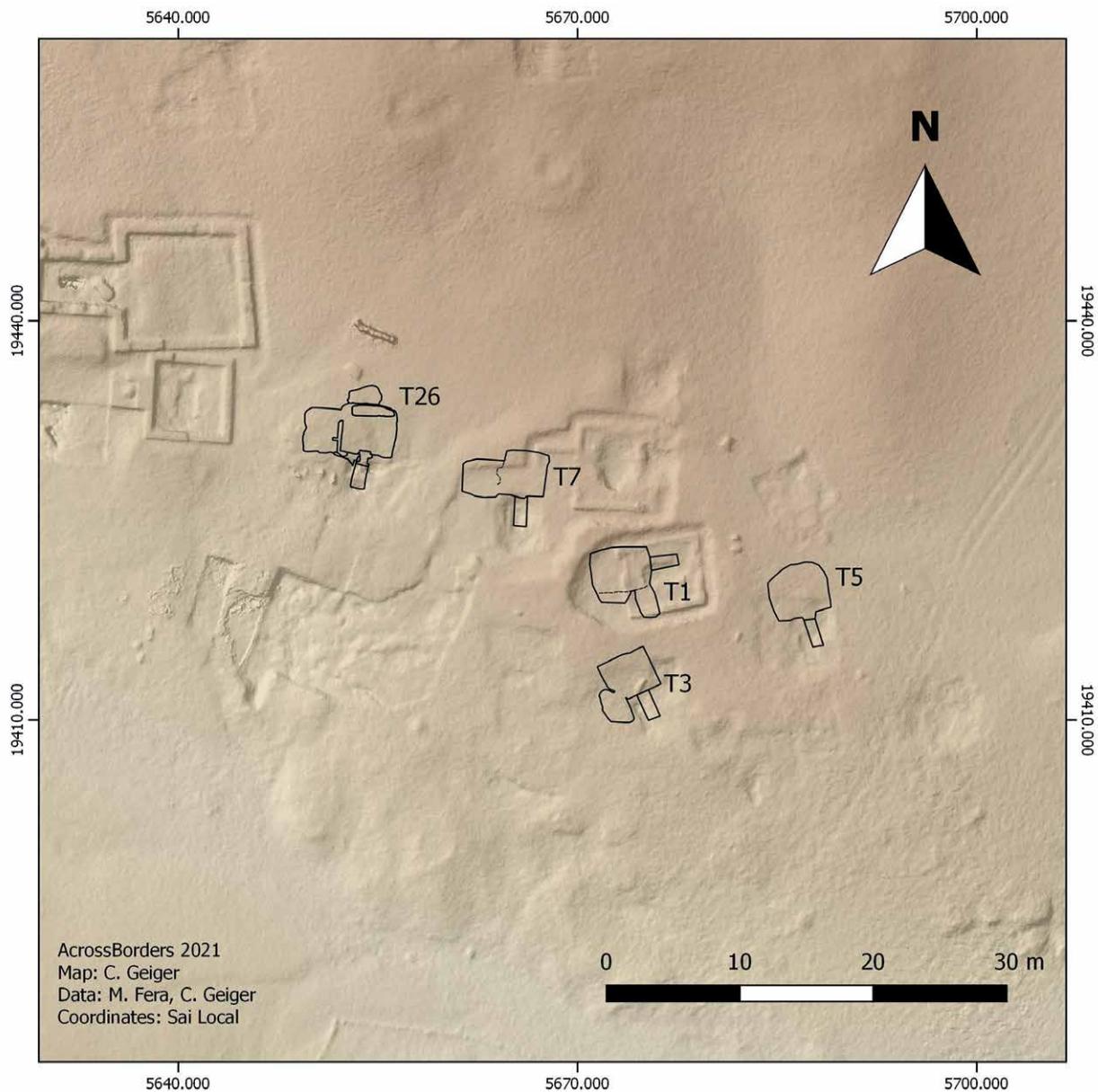


Figure 9.1: plan of southeastern sector of SAC5 with mid-18th Dynasty tombs (substructures) (map: C. Geiger, ©AcrossBorders).

Tomb 25. Some mid-18th Dynasty scarabs were found in this tomb, but a dating prior to the late 18th Dynasty is not proven by any ceramics since exclusively post-New Kingdom pottery was found (Minault-Gout and Thill 2012, 411). Tomb 9 is remarkable because remains of the painting of the mudbrick chapel of the superstructure have survived (Minault-Gout and Thill 2012, 20).

In terms of substructures, all five tombs share the shaft and a main chamber but differ regarding the specific layout (Table 9.1). Interestingly, Tomb 1 is very similar to the first building phase of Tomb 26 with Feature 5a as annexe to Feature 2 (see Chapter 3). This corresponds well to the layout of Tomb 1, although the general orientation of this tomb differs from Tomb 26. Tomb 7 with a second western chamber is close in its ground plan to the advanced stage of Tomb 26 with the final shape of Feature 5. The final layout of Tomb 26 with the added burial compartment of Features 4 and 6 finds, however, no close parallel in SAC5. Within the group of directly adjacent tombs, Tombs 6 and 8 are the only examples where a comparable descent to a lower level was found. Different to Tomb 26, the descents are not located in the northern part of the main chamber, but in the southwestern corner.

Tomb 9 has a complex substructure consisting of four chambers (Minault-Gout and Thill 2012, pls. 30-31) which is very similar to Tomb 25 (Minault-Gout and Thill 2012, pl. 49) and different to Tomb 26.

In conclusion, Tomb 26 corresponds well with features attested in its neighbouring tombs and finds the closest parallel in terms of architecture in Tomb 1 (first building phase) and in Tomb 7 (second building phase). These correspondences are especially remarkable because they suggest a common design for a group of neighbouring tombs: during the primary use of Tomb 26, its only adjacent structures were Tombs 1 and 7; slightly further away Tombs 3 and 5 were built (Fig. 9.1). Only during the later use, especially in the late 18th Dynasty, Tombs 6 and 8 were added to this part of the necropolis.

9.3 Contemporary 18th Dynasty tombs in SAC5

The use-life of Tomb 26 is pointed out in Chapter 8. According to its main chronological markers – ceramics and *funeralia* like the stone shabti and heart scarabs – its heyday of use was the mid-18th Dynasty, especially the time between Thutmose III and Thutmose IV. In addition, a phase of burials is attested during the later 18th Dynasty, especially under Amenhotep III. Tomb 26 underlines the general evolution of SAC5 as an elite cemetery on Sai: the burial ground was not in use prior to Thutmose III (Budka 2014a *contra* Minault-Gout and Thill 2012) and flourished until the late 18th Dynasty. This zenith reflects the general importance of New Kingdom Sai which became an Egyptian centre under the advanced reign of Thutmose III and was replaced as the

presumed seat of the viceroy and thus the central place of the Egyptian administration by Soleb under the reign of Amenhotep III (see Budka 2020, 426-427 with references). In the New Kingdom town (see Chapter 10), a peak in building activity is traceable under the reign of Thutmose III (see Azim 1975; Adenstedt 2016; Budka 2020, 425). SAC5 was soon developed as the accompanying cemetery and the first tombs were built, including Tomb 26. The heydays of SAC5 were consequently the reigns of Thutmose III, Amenhotep II, Thutmose IV and Amenhotep III (Minault-Gout and Thill 2012, 415; Budka 2014a). A fine-dating between these reigns is not always possible.

For the building phase of Tomb 26 and its first substantial use with the burials in Features 5 and 6, Tombs 1, 3, 5 and 7 (see Fig. 9.1) in the southeastern sector of SAC5 can be regarded as contemporaneous. Tombs 1 and 7 were described above as neighbouring structures which share several architectural features with Tomb 26. Neither Tomb 3 nor 5 showed any traces of a superstructure. Their substructure is dominated by a main chamber similar to Feature 2 in Tomb 26; Tomb 3 has a small annexe in the southwestern corner. Unfortunately, the original 18th Dynasty tomb groups from Tomb 3 had largely been destroyed but ceramics such as flowerpots are well comparable to pottery from both Features 5 and 6 in Tomb 26.

Besides general comparison in terms of architecture and the location within SAC5, these four structures also yielded substantial material evidence which allows us to treat them as a group which is now enlarged by Tomb 26. Scarab-shaped heart scarabs without wings like SAC5 349 from the burial of Khnummose are also attested in Tombs 1, 3 and 5. The closest parallels are the ones from Tombs 3 and 5 (T3CA53 and T5C32, see Minault-Gout and Thill 2012, pl. 111). Furthermore, Tomb 1 provides a close equivalent for the burial of Khnummose (TG 07) with a stone shabti (see Chapter 11, Cat. 1), a set of faience miniature vessels with docketts and the remains of a funerary mask with eye inlays (Minault-Gout and Thill 2012, pl. 51). According to two pilgrim flasks, this burial placed in a niche on the southern side of the main chamber of Tomb 1, is probably slightly later in date than Khnummose (Thutmose IV-Amenhotep III, see Chapter 8). However, although the shabti is anonymous and no name or title of the person buried in Tomb 1 is available, the combination of stone shabti and heart scarab suggests for this burial assemblage a display of a social status and power comparable to the ones of Khnummose. The anonymous person furthermore displays close affinities with Egyptian standards and ideas by having two scribal palettes as burial gifts (see below, 9.5.2). Another stone shabti, this time uninscribed (T3Ca51), was found in Tomb 3 and might originate from the same serpentinite workshop as the one from Tomb 1 and from Khnummose (see Chapter 11, Table 11.5). Although this shabti was

not attributable to a specific individual, it is likely that a male person used it as burial gift together with one of the heart scarabs (T3Ca50 or T3Ca53) from the tomb (see Minault-Gout and Thill 2012, pl. 55 for the find situation) and consequently demonstrated a similar authority to Khnummose and the anonymous person from Tomb 1.

Several mid-18th Dynasty tomb groups are traceable in Tomb 5 (Minault-Gout and Thill 2012, pl. 57). These assemblages compare well in respect to a stone shabti (T5C33, although a different type from SAC5 350, and most likely datable to the reign of Amenhotep III), a funerary mask with eye inlay, a faience vessel with horizontal docket, miniature pottery vessels, pottery amphora and steatite scarabs, with the original tomb groups from Tomb 26 in Features 5 and 6. The shabti belongs to the HA.tj-a called Nby (see below for this person and two more names from Tomb 5).

A further stone shabti, comparable to the one of Nby from Tomb 5, was found in Tomb 8 (T8Cc79) which is probably the first tomb which was built to the west of Tomb 26. Together with other finds, the burial assemblage of Chamber Cc is in parts like TG 07 and TG 08 in Tomb 26: a double burial was equipped with the stone shabti, a stone heart scarab and a miniature plaster mask (Minault-Gout and Thill 2012, pl. 62). As in the case of Khnummose, the shabti and the heart scarab were placed with a mature male (see Chapter 7). However, it must be noted that the dating of the tomb groups in Chamber Cc as Thutmoside by Minault-Gout and Thill seems too early. I would propose a date in the advanced mid-18th Dynasty, most probably in the reign of Thutmose IV or later and thus slightly later than Khnummose. In chambers Ca and Cb ceramic vessels including flowerpots and painted jugs were found, which can be Thutmoside and suggest a building of Tomb 8 in the mid-18th Dynasty and probably soon after Tomb 26. The palaeographic evidence from Tomb 8 will be discussed below.

Tomb 7 is the structure which is the closest parallel for the layout of Tomb 26 (building phase 1c, see Chapter 3). Unfortunately, the burial equipment of the original phase has largely been destroyed except for ceramic vessels. The latter includes a deposit of flowerpots nicely matching the one of TG 02 in Feature 5a in Tomb 26. All in all, it seems likely that Tomb 7 and Tomb 26 were designed and built at roughly the same time, most probably in the second half of the reign of Thutmose III.

Shortly after the group of Tombs 1, 3, 5, 7 and 26, Tombs 8 and 6 were built which are different regarding their superstructures and subterranean parts. The importance of Tomb 8 has already been mentioned. Similar to the situation of Tombs 3 and 7, the original burial gifts from the advanced mid-18th Dynasty have almost been lost due to looting and destruction; only one faience vessel and one pottery vessel support this date.

The group of tombs discussed here is surrounded on the east and south by further structures: Tombs 2, 4, 12 and 13. Except for Tomb 13, which is located to the west of Tomb 3, these tombs form the southern limit of this tomb cluster and are arranged in a row. Tomb 4 is an unfinished monument of which only the shaft and the beginning of a chamber were executed (Minault-Gout and Thill 2012, pl. 23 bottom).

Tomb 2 has no preserved superstructure and a main chamber with two niches as the subterranean part. The shaft is very shallow. The burial assemblages are very rich and can be dated to the late 18th Dynasty, thus later than Tombs 1, 3, 5, 7 and 26 and maybe contemporaneous to Tombs 8 and 6. Tomb 12 cannot be dated as it was completely plundered. No superstructure is preserved, and the subterranean part is simple with a single main chamber to the north of the shaft.

Tomb 13 was also heavily affected by looting; it did not show a superstructure and the subterranean part is irregular and comparable to layouts of some of the tombs at Amara West (e.g. G101, see Binder 2017, fig. 3). The shaft is east-west oriented; the main chamber with a long appendix to the northwest is located to the west; another smaller chamber opens from the shaft to the east. Dating is difficult, but a mid-18th Dynasty origin is possible (see Minault-Gout and Thill 2012, 410).

Overall, it seems as if Tomb 13 could be contemporaneous to Tombs 3 and 5, suggesting that the burial monuments in this part of SAC5 were planned in kinds of rows and hewn out according to a plan and sequence. Tombs 2, 4 and 12 surround the others as an outer circle of tombs and were added later (Fig. 9.2).

Other parts of SAC5 also yielded tombs which are most likely contemporaneous to one of the first building phases of Tomb 26. Tomb 15 to the south is located next to Tomb 14 which seems to have been built in the advanced mid-/late 18th Dynasty. Tomb 15 is comparable in terms of the subterranean part to Tombs 5 and 12; no remains of the superstructure were found. With Tomb 14, Tomb 15 is located on the southernmost part of SAC5, just south of Area 1 of the AcrossBorders excavation (see Chapter 2). Unfortunately, almost no artefacts from the 18th Dynasty use were found in Tomb 15 and its fine dating must remain open.

Tomb 16 is located to the northwest of Tomb 26, has a Type 1 superstructure and a main chamber with two side chambers on the northeastern side (Minault-Gout and Thill 2012, pl. 73). Only a small number of objects were recovered from this tomb, but a use as early as in the mid-18th Dynasty is attested by pottery and scarabs.

9.4 Ramesside use of SAC5

The tradition of reusing older tombs in Ramesside times is not only traceable at SAC5, but also at Amara West, Soleb, Tombos and Aniba and can be considered as a regional feature of burial customs in Ramesside Nubia. Although

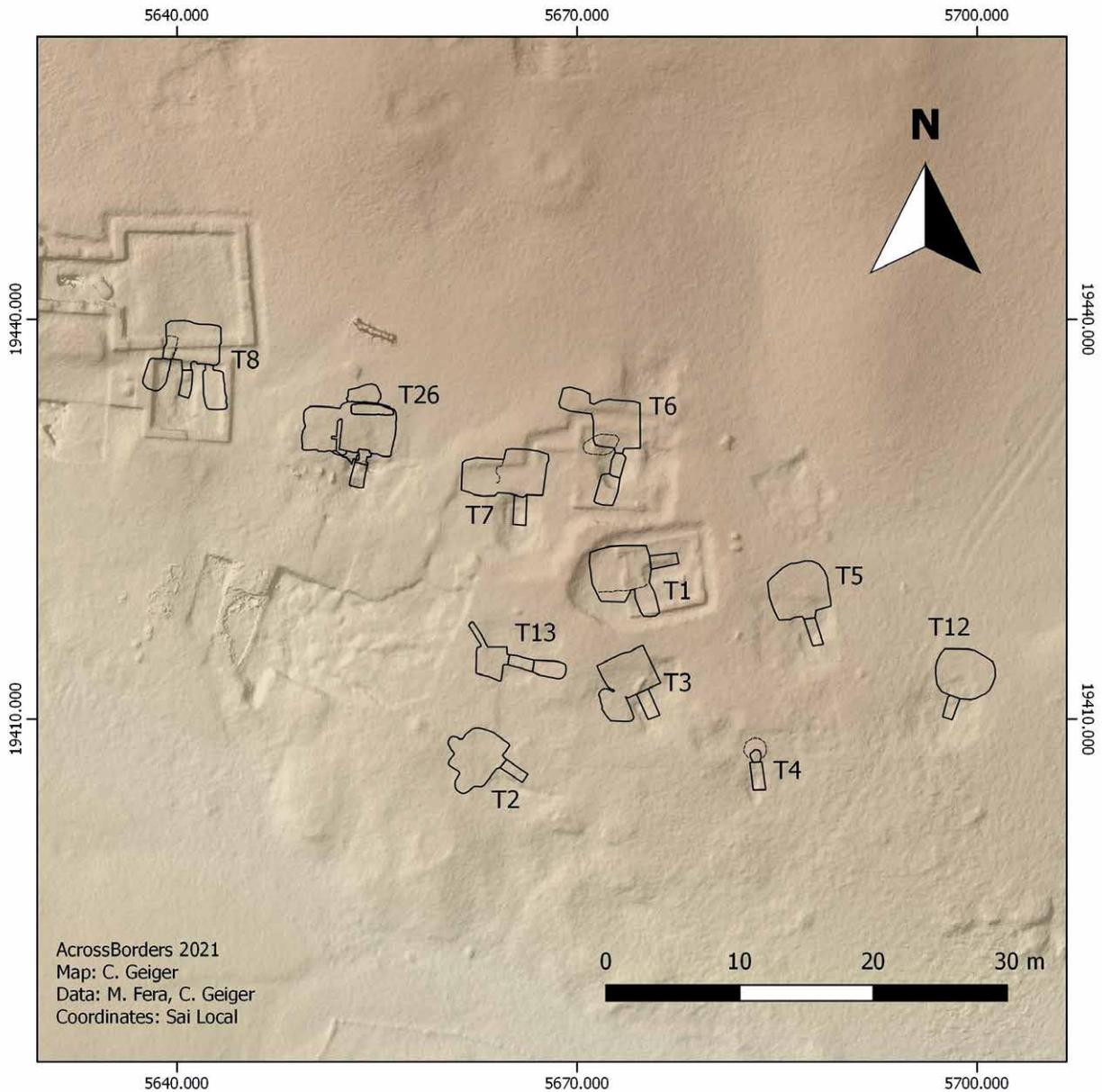


Figure 9.2: plan of southeastern sector of SAC5 with mid- and late 18th Dynasty tombs (substructures) showing the earliest core and extensions (map: C. Geiger, ©AcrossBorders).

a Ramesside date was suggested for Tomb 9 (Minault-Gout and Thill 2012, 409), there is no clear evidence of the erection of new structures in the 19th or 20th Dynasties (see Budka 2017b).

Tomb 26 was clearly reused in Ramesside times according to the local tradition, and several tomb groups as well as the sandstone blocks and pyramidion of Hornakht attest to an intense phase of burials and maybe also modification of the superstructure. The redesigning of its superstructure with a pyramid (including the inscribed capstone) and a new chapel with inscribed doorways remains, however, tentative. Nevertheless, in

the 19th Dynasty, some building phases in SAC5 are likely, but in the 20th Dynasty only restoration activities can be found (see Chapter 8). This changed use of SAC5 in the Late New Kingdom mirrors both the fading importance of Sai as a former centre and changing burial practices (for changes in burial practices in Ramesside times and especially towards the end of the New Kingdom see Cooney 2011; Franzmeier 2017; Grajetzki 2020).

Almost every tomb in SAC5 experienced a reuse during the Ramesside era. The findings in Tomb 3 are especially relevant. A plaquette with the name of the viceroy of Kush, Ramessesnakht, was found in this tomb, suggesting

a subordinate official reusing Tomb 3, similar but later in date to what may have happened in Tomb 26 under the deputy of Kush, Hornakht (see Chapter 7). Furthermore, Tomb 3 provides very close parallels for the 20th Dynasty pottery vessels associated with TG 17 in Tomb 26, in particular a painted pilgrim flask, amphorae and dishes (Minault-Gout and Thill 2012, pl. 54).

9.5 The social fabric of SAC5

The tombs and burials in SAC5, in combination with records from the New Kingdom town of Sai (see Chapter 10) enable us to reconstruct the social fabric of Sai during this period (see Auenmüller 2020). SAC5 was labelled Egyptian cemetery because its tombs and burials appear as *'de type complètement égyptien'* (Minault-Gout and Thill, 406). However, even if funerary objects reflect a contemporaneous Egyptian style, the individuals with Egyptian names and titles might still be of Nubian origin (Minault-Gout and Thill 2012, 415; Budka 2018a, 193). Similar to other temple towns in Nubia (e.g. Tombos, Smith and Buzon 2017), we know that the occupants of New Kingdom Sai included both Egyptians and Nubians (Budka 2020, 414-415 with references).

Major motivators for becoming overwhelmingly Egyptian in New Kingdom Nubia were probably the access to power, increased opportunity within the new system and simply convenience (Morris 2018, 224). People of Nubian origin who wanted to make a career at Egyptian sites like Sai Island needed to speak Egyptian, adopt an Egyptian name and cultivate an Egyptian appearance (Morris 2018, 224). In SAC5, a marked display of social hierarchies is, for example, traceable in Egyptian *funeralia* like stone shabtis and heart scarabs (see Chapter 11). In general, access to resources plays a role in investigating the status of the tomb owners in SAC5. Here, the number of tombs in SAC5 is too small and the tomb types too similar to apply other means of detecting social differentiation like, for example, the concept of *'energy expenditure'* (Trigger 1990, 126).¹⁰ The calculation of the workload depending on the volume of the shafts and chambers and its connection with social status was successfully studied for the large cemetery of Sedment in Egypt (Franzmeier 2017, 311-336). SAC5 on Sai must be regarded as an elite cemetery where persons of similar status were buried. However, as has already been stressed for Tomb 26 throughout this volume and will be specified in the following, the hierarchies within individual tombs and even chambers may differ according to access to resources, quality and quantities of objects and reflect the social differentiation within one community of a state-built Egyptian administrative centre.

10 Furthermore, as was outlined in Chapter 4, the hewing of the shafts in SAC5 and also the chambers seem to refer to geological realities and specific rock formations, resulting in very similar depths of shafts.

9.5.1 Owners of the tombs

Although only a small number of persons are known by name and title from SAC5 (see Minault-Gout and Thill 2012, 413-414; Auenmüller 2020), we must assume that Egyptian administrative staff and their families living in the New Kingdom town were buried here. Various social strata, especially representatives of the middle and elite classes of Sai, are likely to have used this burial ground. The fact that the main owners of the tombs partly used Egyptian style objects to show their respective status within the local population is reflected in such high-quality objects as stone shabtis (see Chapter 11). As was proposed by Ellen Morris, successful players in the higher social strata of New Kingdom Nubia like shabti owners were then in turn becoming *'role models'* (Morris 2018, 224) for fellow inhabitants of the colony who followed their example in contexts of the Egyptian administration. The overseer of goldsmiths Khnummose who was responsible for the building of a new burial compartment in Tomb 26 in SAC5 (see Chapters 7 and 8) is one of these successfully converted citizens on Sai. His tomb group is of Egyptian type, but the Strontium isotope analysis suggests that he was local to the region of Sai (see Retzmann *et al.* 2020 for details). Examples like Khnummose are to be expected at all New Kingdom sites of the 18th Dynasty in Nubia. As recently presented by Johannes Auenmüller (2018), the social fabric of Soleb is well comparable to Sai, whereas the prosopography from Amara West illustrates certain changes in the Ramesside period. All assessments of Nubian New Kingdom towns and their citizens must, therefore, consider both the chronological framework and the regional conditions.

To elaborate further on Khnummose and his function on Sai, his two occupational titles position him at two levels of the hierarchy of goldsmiths: nb.y *'goldworker/goldsmith'* and jm.j-r'-nb.yw *'overseer of goldworkers/goldsmiths'* (see Chapter 7; cf. Auenmüller 2020). The important economic role of gold and its mining in the region of Upper Nubia and at sites like Sai, Soleb and Sesebi during the New Kingdom has been stressed by recent research (see, e.g., Vieth 2018; Budka 2020, 404-407 with further references). Gold mining and production during the New Kingdom in both Egypt and Nubia is also well understood thanks to several dedicated studies (see Klemm and Klemm 2013, 21-27; cf. Müller 2013, 75-79; Lacovara and Markowitz 2019, 27-35). Interestingly, Khnummose is to date the only recorded *'overseer of goldworkers'* in New Kingdom Nubia, illustrating the important role Sai held during the mid-18th Dynasty for the exploitation of Nubian gold (see Lacovara and Markowitz 2019, 102-103, with figs. 73-74). Auenmüller (2020, tables 39-41) traced several people in Nubia carrying the simple *'goldworker'* occupation title. In Upper Nubia only one other nb.y is attested with a person named Bak from Soleb. This official is recorded by means of a fragmentary door lintel found in tomb T 38. We must assume



Figure 9.3: *in situ* position of Individual 145 with heart scarab, remains of a funerary mask and pottery vessels deposited closed to the head (photo: J. Budka).



Figure 9.4: *in situ* position of Individual 324 with signet ring and remains of pottery vessels (photo: J. Budka).

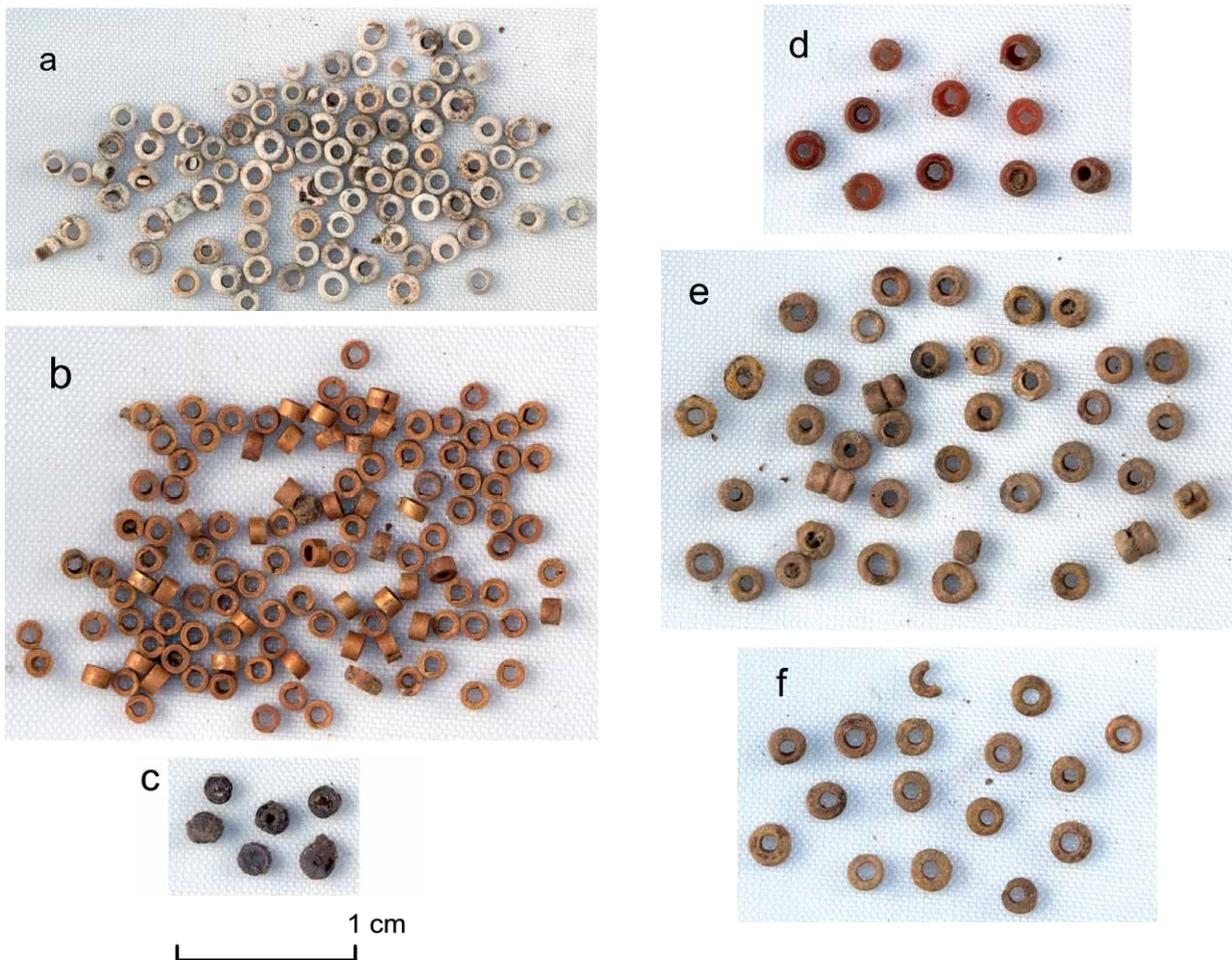


Figure 9.5 (left): beads from SAC5 378 in different materials (a: faience; b: gold; c: burnt faience? stone?; d: carnelian; e: ostrich egg; f: bone) (photo: C. Geiger, ©AcrossBorders).



Figure 9.6: *in situ* position of a large piece of gold foil found close to one of the canopic lids (SAC5 393) of TG 02, Individual 145 (photo: J. Budka).

that he was also buried in this elite cemetery at Soleb, if not in T 38 itself. Bak was probably in office during the reign of Amenhotep III, thus he slightly postdates Khnummose on Sai. Since at both sites, Sai and Soleb, gold production was carried out, the two goldworkers buried in elite tombs obviously had much authority within their local communities. Since Khnummose was also overseer of goldworkers, his prestigious burial assemblage must be considered as an open display of high status.

In consideration of the burial of Khnummose and the function of Sai Island as temple town, it seems reasonable to speculate that Tomb 26 was used by a family of officials engaged in goldworking. The early male interments in Feature 5, especially Individuals 145 and 300, could represent direct relatives of Khnummose and maybe shared similar duties within the Egyptian town. Both of these burials remain, however, anonymous and without titles. The high status of Individual 145 as the presumed

original owner of Tomb 26 becomes evident from both his use of *funeralia* – a heart scarab and a set of miniature canopic jars imported from Egypt besides a gilded funerary mask (Fig. 9.3) – and the ‘*energy expenditure*’ traceable by means of the first building phase (see Fig. 3.23).

In similar lines, Individual 300 as the first male burial buried in the new chamber Feature 5a/b invested much in the architectural development of Tomb 26. Maybe he was responsible (as the client) for the careful lining of some of the walls with plastered stone blocks in Phase 1c (see Chapter 3). The rich bodily adornment of the female Individual 324 (Fig. 9.4) who was probably buried shortly after Individual 300 might provide further indirect evidence to connect the users of Tomb 26 with goldsmith work. She was equipped with a gold and silver finger ring as well as an elaborate necklace including golden beads (Fig. 9.5, see also Chapter 7).

The signet ring was maybe used as a seal in daily life and could have belonged to a male official and just ended up as “property” of Individual 324 at the occasion of her death. A similar scenario is possible for the burial of Taneferet at Aniba, Tomb S91. She was interred with her husband User (*Wsr*, who had a similar serpentinite shabti like Khnummose, see Cat. 5 in Chapter 11) in the lower chamber of the monument and was equipped with five signet rings, comprising golden and silver ones (Steindorff 1937, 111; see also Helmbold-Doyé and Seiler 2019, 82-83). In this case, it seems certain that the rings were used as seals in daily life.¹¹ Could it be a complete coincidence that this tomb at Aniba also hold the interment of a goldworker, a man named Khay? The relationship of this later burial to Taneferet remains unclear but seems significant as a potential parallel for Tomb 26.

Furthermore, it may also be possible that the gilded funerary masks used by the primary owners of Tomb 26, TG 01 and TG 02, are directly related to the occupation of this family in the goldworking business. It needs to be noted, however, that gilded mummy masks are already known since the late Middle Kingdom in Nubia, especially from Mirgissa (see Näser 2017; Lacovara and Markowitz 2019, 39, fig. 17) and represent common parts of the burial assemblages. Still, the access to these objects may have been limited in New Kingdom Nubia and on Sai, especially in combination with other golden objects like it is the case in Tomb 26 (Fig. 9.6).

As mentioned in Chapter 7, it remains unclear whether the female individual buried in Feature 6 (TG 08) is associated with the female name on the heart scarab found with Khnummose, a *nb.t-pr Hnn=f*. Khnummose and *Hnn=f* are the only two individuals with prosopographical data for the 18th Dynasty use of Tomb 26. The presumed family relations of the individuals buried in Feature 5 remain hypothetical but are well in line with the traditions of family tombs attested both in Egypt and Nubia. Their burial assemblages, especially the one of TG 02, allow us to reconstruct a similar social fabric such as the one for Khnummose and the female buried with him.

The contemporaneous tombs in SAC5 which yielded prosopographical data on 18th Dynasty Sai are Tombs 2, 5 and 8 (Minault-Gout and Thill 2012, 414, table 10). This evidence is summarised here according to its rank within the social fabric of Sai.

Tomb 5 is, as put by Auenmüller (2020, 384), ‘of special importance for the upper end of the local social fabric of Sai.’ In the upper hierarchy of the local administration on Sai is the mayor (*h3.tj-ʿ*) of which two have been buried in Tomb 5. The older individual and maybe the father is *Jpy* who is attested with a heart scarab (T5C32) and was probably in office during the late reign of Thutmose III

until Thutmose IV. *Jpy* was therefore perhaps the mayor of Sai when the anonymous original owner of Tomb 26 obtained permission to build his tomb in SAC5. The younger mayor from Tomb 5 and maybe the son of *Jpy* is called *Nby* whose shabti (T5C33) and a set of copper alloy vessels (T5C38-44) were found. *Nby* seems to date between Thutmose IV and Amenhotep III and may have overseen the local administration of Sai during the time when Khnummose and some other relatives were buried in Tomb 26. The third name from Tomb 5 is a female singer (*šmʿ.yt*) *Hn.wt-ʿ3.t* evidenced with a faience vessel (T5C62, see Auenmüller 2020, 392).

Tombs 2 and 8 are slightly later in date than Tomb 26 (see above) and both structures mostly attest personnel of the religious sphere. At Tomb 2, the *h̄m-n̄tr* ‘priest’ *Mr-ms* (heart scarab T2C50) and the *hr.j-w3d.tj H̄wy* (heart scarab pectoral T2C25, see Thill 2017, 209) are datable to the late 18th Dynasty. These titles simply attest that cult officiants of different ranks and functions were buried in SAC5, but do not give detailed information about the specific local cult (see, however, Thill 2017). This also holds true for a mid-18th Dynasty priest who used Tomb 8 as his burial place as evidenced by his shabti T8C79, the *h̄m-n̄tr H̄n-sb3*. Recently, Thill (2017, 207-208) corrected the reading of a section on this shabti as the mother’s name *Nn3* (Minault-Gout and Thill 2012, 414) in favour of a specification of the priest title with the god’s name Ra or Ra-Horakhty, assumed to be connected with the cult of the pyramid (Tomb 23).

Not only Tomb 26, but also Tombs 2 and 3 yielded prosopographical data for the reuse of the 18th Dynasty tombs in Ramesside times. Although the question remains unanswered of whether Hornakht, deputy of Kush, actually reused Tomb 26 or rather a to date lost tomb near-by, his pyramidion is firm evidence that he was buried in SAC5. This makes him the highest-ranking official attested to be buried on Sai Island. The plaque with the name of the viceroy of Kush, Ramessesnakht, from Tomb 3 (T3Ca87) cannot be interpreted as evidence of the burial of this official dating either to the reigns of Ramesses III to VI or to Ramesses IX and the early years of Ramesses XI (Minault-Gout and Thill 2012, 243; Müller 2013, 146, Tabelle 2.1 A, no. 31; Spencer 2016, 40-41; most recently Auenmüller 2020, 378-379) but rather of one of his subordinates (Budka 2017f, 39).

A ‘letter-scribe’ was buried in the early 19th Dynasty in Tomb 2. He carried the title *sh3.w-n-šʿ(.t)* and the name *Hr-m-h3b* as evidenced on a shabti (T2C24) and a heart scarab (T2C11). At Tomb 2, one *wʿb*-priest *Ky-jry* dates to the 19th Dynasty, as is the case for *Wsr-h3.t* whose title is not attested (shabtis T2C20+C34 and amulet T2C23). Another priest was buried in Tomb 8, a *h̄m-n̄tr-[(m)-rʿ-pr?]* with the name *Sj*, evidenced by a heart scarab (T8Cb45), probably dating between the late 18th Dynasty and the 19th Dynasty.

All the owners of tombs in SAC5 attested by name and title adopted an Egyptian name and cultivated an Egyptian

11 I am grateful to Rennan Lemos to discuss this matter with me and for pointing out the example from Aniba.

appearance by means of their interments. The example of Khnummose shows that this does not necessarily mean that these persons were colonialists coming from Egypt, but rather were embedded in the prevailing social fabric on Sai which was predominantly Egyptian. In relation to the attested ‘*cultural entanglement*’ phenomena in the elite sphere of New Kingdom Nubia (see van Pelt 2013; Budka 2020, 411-414 with references; Smith 2021), the question of the use of writing and inscriptions in SAC5 seems highly relevant since the Nubian tradition is marked by an absence of writing (see Doyen and Gabolde 2017). Furthermore, the Egyptian New Kingdom is well known for a different approach towards writing in respect of the 18th Dynasty tradition versus the Ramesside era (see, e.g., Haring 2006). Most importantly, hieroglyphic or cursive writing was not the only communication system used in ancient Egypt; marked changes also occur between the 18th Dynasty and the Ramesside era in a well-established non-textual marking system (Haring 2017). Finally, clear changes in terms of written forms in tombs can be found in provincial Egyptian cemeteries like Sedment (Franzmeier 2017). Therefore, the written evidence from SAC5 will be briefly discussed in the following.

9.5.2 *The appearance of script in SAC5*

Much has been published about writing and its social implications in ancient Egypt (see, e.g., Baines 2007). Within New Kingdom Nubia, we must expect that the elite living in the Egyptian towns were within or close to the group of high-ranking persons being able to write, irrespective of whether they were of local or Egyptian origin (on New Kingdom literacy culture in Upper Nubia see Parkinson and Spencer 2017). As an elite cemetery, SAC5 could have produced plenty of written sources and inscribed evidence. The fact that the prosopographical data are nevertheless scarce, has already been discussed above. The aim of the following section is to present the evidence for the appearance of script in the individual tombs in SAC5 with respect to the diachronic development. This will allow us to note differences or similarities to cemeteries located in Egypt (*cf.* Franzmeier 2017) and to find matches between specific monuments in SAC5.

The evidence from SAC5 will be discussed in six categories, following the groups established by Franzmeier (2017, 351-352) for Sedment: 0) No appearance of script: this category can only be applied to undisturbed tombs and is therefore not relevant for SAC5. 1) Inscription with the name of the deceased: such objects attest that the owner of the respective item was directly in contact with a person able to write. 2) Inscription without the name of the deceased: here, the access to script but not the direct contact with a writer is evidenced. 3) Diverse inscribed objects like pottery vessels with hieratic docketts which were not specifically designed for the tomb. 4) Objects

with the name of a king, god or high official not identical with the owner of the tomb: such objects, most commonly scarabs or plaques, do not necessarily attest the literacy of a person. 5) Objects with hieroglyphs: Similar to scarabs of Type 4, some amulets/scarabs simply carry signs like an ankh- or nefer-hieroglyph. These are no evidence for the literacy of the owner or of the artist.

Table 9.2 summarises the current state of the presence of these categories in the excavated tombs of SAC5. Since none of them is undisturbed, category 0 is omitted – within our general assessment the negative evidence for any tomb which deliberately did not have a single inscribed item must be considered. According to Franzmeier, another category “disturbed tombs without evidence of script” was added as Category X, illustrating the problems arising from looting and other formation processes (see Chapter 8).

A first look at Table 9.2 reveals several aspects: First, the category 3 is never attested. There were no jars with docketts as in Aniba (see Helmbold-Doyé and Seiler 2019, 418-424) and this is in general a marked difference to evidence found in Egypt (see also Chapter 10). Second, there are two tombs which cannot be considered – Tomb 4 because it remained unfinished and Tomb 24 because it originates from post-New Kingdom times. Third, of the remaining 22 tombs, eight are disturbed without evidence of script. Here, Tomb 9 is a remarkable case: its substructure was too disturbed to enable the dating of the monument or to provide evidence of writing; however, this tomb is the only example with remains of a painted chapel in the superstructure. There, texts were used, illustrating the embeddedness of its owner within the elite sphere and writers/artists.

Among the 14 tombs where script appears (Tomb 9 is here excluded), two attest only one category, seven revealed two categories, three a total of three categories and only two tombs had evidence in four categories. The latter are Tombs 6 and 26. For Tomb 26, it is notable that TG 07, the burial of Khnummose, has objects in three categories, with the name of the owner, without the name of the owner and with hieroglyphs. Other inscribed objects from Tomb 26 fall into the category 4, scarabs with a king’s name (see Table 9.2).

It seems surprising at first glance that Tombs 6 and 26 yielded the largest variety of written evidence since prosopographic information from these tombs is very limited (none from Tomb 6, only Khnummose and maybe his wife/mother from Tomb 26). Tomb 5, which held at least two burials of mayors and therefore of the highest local administrators, only yielded three categories (name of the owner, name of king/god and with hieroglyphs). A closer look reveals that this first impression is misleading: whereas in Tomb 26 only Khnummose had objects of category 1 with his name, Tomb 5 yielded three

Tomb	Category 1	Category 2	Category 3	Category 4	Category 5	Category X
Tomb 1	—	18th Dynasty: heart scarab T1Ca28; shabti T1Ca25 (note also two scribe palettes, T1Ca21+22)	—	New Kingdom?: scarab T1Ca7	—	—
Tomb 2	18th Dynasty: heart scarab T2C50; pectoral heart scarab T2C25 Ramesside: heart scarab T2C48 and pair of shabtis T2C41+C47; shabtis T2C20+34 and amulet T2C23	Ramesside: faience shabti T2C24	—	—	Ramesside: scarab T2C52	—
Tomb 3	—	18th Dynasty: heart scarab T3Cb64 Late 18th Dynasty?: heart scarab T3Ca50 (inscription lost)	—	Ramesside: plaque with name of viceroy Ramessesnakht T3Ca87	—	—
Tomb 4	<i>unfinished tomb, no finds</i>					
Tomb 5	18th Dynasty: heart scarab T5C32; shabti T5C33; faience vessel T5C62	—	—	18th Dynasty?: scarab T5C56	18th Dynasty?: scarab T5C60	—
Tomb 6	New Kingdom: stela S18 (fragmented, no name preserved)	18th Dynasty: faience vessel T6S17 Ramesside: faience shabti T6Cap16	—	Date unclear: scarab T6Cc5	New Kingdom?: pendant T8S20	—
Tomb 7	—	—	—	18th Dynasty: scarabs T7Ca29; T7S96	18th Dynasty: scarabs T7P8, T8Ca66, T7Cb81	—
Tomb 8	18th Dynasty: shabti T8Cc79; heart scarab T8Cb45	18th Dynasty: heart scarab pectoral T8Ca19	—	—	18th Dynasty: scarabs T8Cap33; T8Ca72; T8CC94	—
Tomb 9	—	Late 18th Dynasty?: decoration with text in chapel (superstructure)	—	—	—	x (from substructure)
Tomb 10	—	—	—	—	—	x
Tomb 11	—	18th Dynasty: stela (fragmented, only some hieroglyphs)	—	Date unclear: scarab T11P1	—	—
Tomb 12	—	—	—	—	—	x
Tomb 13	—	—	—	—	—	x
Tomb 14	—	18th Dynasty: heart scarab T14Cb47; heart scarab pectoral T14Ca69 (note also one scribe palette, T14Ca58)	—	—	18th Dynasty: scarab T14Cb48	—
Tomb 15	—	—	—	—	—	x
Tomb 16	18th Dynasty to 19th Dynasty: stela T16S21	—	—	18th Dynasty: scarabs T16P8; T16Ca10	—	—
Tomb 17	—	—	—	—	—	x
Tomb 18	—	—	—	—	—	x
Tomb 19	—	—	—	—	—	x
Tomb 20	Ramesside: faience shabtis T20Ca92	—	—	—	—	—
Tomb 21	—	—	—	18th Dynasty: scarab T21P22 Unclear date: scarabs T21P4; T21Cc54	18th Dynasty: scarab T21P3	—
Tomb 24	<i>post-New Kingdom (Napatan)</i>					
Tomb 25	—	—	—	18th Dynasty: scarabs T25P14, P16 and P17 Unclear date: scarab T25P10	—	—
Tomb 26	18th Dynasty: stone shabti SAC5 350 and faience vessels SAC5 352, 353, 355 Ramesside: pyramidion and lintel SAC5 215 and 083	18th Dynasty: heart scarabs (maybe with added name of wife or mother?) SAC5 349 and SAC5 411 (inscription not preserved)	—	18th Dynasty: scarabs SAC5 281; SAC5 313; SAC5 367 Ramesside: scarab SAC5 279 Unclear date: scarab SAC5 120	18th Dynasty: scarabs SAC5 351; SAC5 386 Ramesside: scarab SAC5 121 Unclear date: scarab SAC5 266	—

Table 9.2: the presence of categories of script in SAC5.

Categories	18th Dynasty	Ramesside	New Kingdom	Unclear
Category 1	Tomb 2 Tomb 5 Tomb 8 Tomb 16 Tomb 26	Tomb 2 Tomb 20 Tomb 26	Tomb 6	—
Category 2	Tomb 1 Tomb 3 Tomb 6 Tomb 8 Tomb 11 Tomb 14 Tomb 26	Tomb 2 Tomb 6	—	—
Category 4	Tomb 5 Tomb 7 Tomb 16 Tomb 21 Tomb 25 Tomb 26	Tomb 3 Tomb 26	Tomb 1	Tomb 6 Tomb 11 Tomb 21 Tomb 25 Tomb 26
Category 5	Tomb 5 Tomb 7 Tomb 8 Tomb 14 Tomb 21 Tomb 26	Tomb 2 Tomb 26	Tomb 6	Tomb 26
Total pieces of evidence (multiple counts for tombs, per category)	24	9	3	6

Table 9.3: diachronic evidence for script in tombs in SAC5.

funeralia respectively with the name of a person. For the 18th Dynasty, Tomb 5 therefore remains at the highest level of the social fabric on Sai, also when considering the degree of written evidence. Nevertheless, Tomb 26 is marked as being situated in the upper sphere of the local community, comparable to Tomb 8 where a family of priests was buried.

Table 9.3 summarises the diachronic appearance of script in 14 tombs in SAC5; tombs which were too disturbed to yield written evidence were excluded. Category 1 is attested in five tombs in the 18th Dynasty, in three tombs during the Ramesside era and once in a general New Kingdom context. Category 2 is found in seven tombs of the 18th Dynasty and only two in Ramesside contexts. Category 4 is evidenced in six 18th Dynasty tombs, in two Ramesside ones, in one New Kingdom and in five unclear contexts. Category 5 was found in six 18th Dynasty tombs, in two Ramesside contexts and one each of New Kingdom and unclear date.

It does not come as a surprise that category 1 is the rarest attested category of script within all classes during the 18th Dynasty. This category is the only one attesting to direct contact of the tomb owner with a person able to write. Tomb 26 forms here a group with Tombs 2, 5 and 8, supporting on a new level the cluster of these monuments as described above. Furthermore, two other tombs, Tombs 1 and 14, are closely related to this group. Both monuments yielded votive scribal palettes which are known to be common status symbols in the New Kingdom (see Cashman 2015) and are in Nubia only attested from the tomb of Amenemhat, chief of Thekhet at Debeira for a scribe Paitsy, which is the second name of Djehutyhotep, the brother of Amenemhat (Säve-Söderbergh and Troy 1991, 147-148, fig. 47: D5, pl. 31, 1 and 3). While the context

of this high-ranking person in Lower Nubia is therefore clearly of the top hierarchy, the two cases in SAC5 remain unclear. Minault-Gout interpreted the scribal palettes as firm proof that the owners must have been important officials of the Egyptian administration, scribes at the very least (Minault-Gout and Thill 2012, 228). Although this is indeed likely, the case of Tomb 1 thus becomes even more interesting since it included the serpentinite shabti T1Ca25 (see Chapter 11, Cat. 1) which is of the same type as SAC5 350 of Khnummose. This shabti was found by the body of the same individual as where the scribe palettes were found. Unlike the shabti from Tomb 26, the name and title of the owner were not added to the shabti used in Tomb 1. This illustrates several things, most importantly that a stone shabti as an elite marker functioned even if it did not carry the name of the person it was buried with (*contra* Chapter 11, where Auenmüller and Lemos speculate that the owner of the shabti from Tomb 1 could belong to the ‘*social milieu of artisans or craftsmen*’ which is rather unlikely from my point of view and considering the pair of scribal palettes). In conclusion, although the scribal palettes deposited in Tombs 1 and 14 strongly indicate that their owners had direct contact with writers and/or were able to write themselves, conclusive evidence is lacking.

Overall, the outcome of the diachronic appearance of script in New Kingdom tombs in SAC5 is that the evidence in the 18th Dynasty is more diverse and numerous than in the following period, the Ramesside age. This finding needs to be contextualised: as stressed above, the heydays of SAC5 are the mid- to late 18th Dynasty and this is also the time when Sai flourished in New Kingdom Nubia as one of its most important centres. This seems to be reflected in the evidence of written sources in the tombs. Following Lemos (2018) it is likely that textual objects in



Figure 9.7: detail of lower head part of coffin of Khnummose in Feature 6 (photo: J. Budka).

18th Dynasty Nubia can mainly be regarded as means of elite strategies of differentiation, resulting in a diverse appearance in cemeteries such as SAC5.

The considerable amount of writing in Ramesside burials of SAC5 which are in general less sophisticated than the ones in the 18th Dynasty can be explained by marked changes regarding the attitude towards writing in this period and also by a modification of funerary customs which concentrated on *funeralia* and produced hundreds of shabtis in contrast to the rare occurrence of this type of burial gift in the 18th Dynasty (see Franzmeier 2017). However, one needs to keep the state of preservation of Ramesside burials in SAC5 in mind: they suffered more from looting and mixing of material than the earlier interments and are therefore incomplete.

9.6 Burial customs in SAC5

Based on the extended body position, the rock-cut tomb type with a superstructure, and burial goods as described in Chapter 7, the burials in SAC5 are clearly of Egyptian type (*cf.* for the difference between Egyptian and Nubian burials Spence 2019, 542). The Egyptian material culture used as burial goods comprised objects specifically designed for the tomb such as coffins, funerary masks, shabtis and heart scarabs, as well as so-called objects of

daily life like ceramics, jewellery, and cosmetic equipment. Ceramics found in SAC5 are primarily Egyptian style wheel-made vessels, but also include a small number of Nubian ceramics, particularly cooking pots (see Chapter 5). As outlined in Chapter 8, most assemblages have been partly destroyed or suffered from looting and thus are only complete in rare cases as the burial of Khnummose.

For cemeteries in Egypt (see Sedment, Franzmeier 2017) and in Nubia (see Fadrus, Säve-Söderbergh and Troy 1991, 224-225) it is common to sort the burials into distinct groups according to the quantity and variability of artefacts (Spence 2019, 557). For Tomb 26, three categories ranging from “simple” to “rich” and “wealthy/elite” were differentiated (see Chapter 7, Table 7.21). Such categories are also evident in other tombs in SAC5. One important point which needs to be stressed is that there is a notable variety within one tomb, supporting the assumption that the individual tomb groups reflect the social status and power of the respective individual. In the case of family tombs, such a status may vary from rather low to very influential, also depending on sex and age, as was reconstructed for Tomb 26. Furthermore, we must always keep in mind that objects have various values – a material value, but also a cultural value reflecting burial practices and other aspects embedded in the cultural framework (see

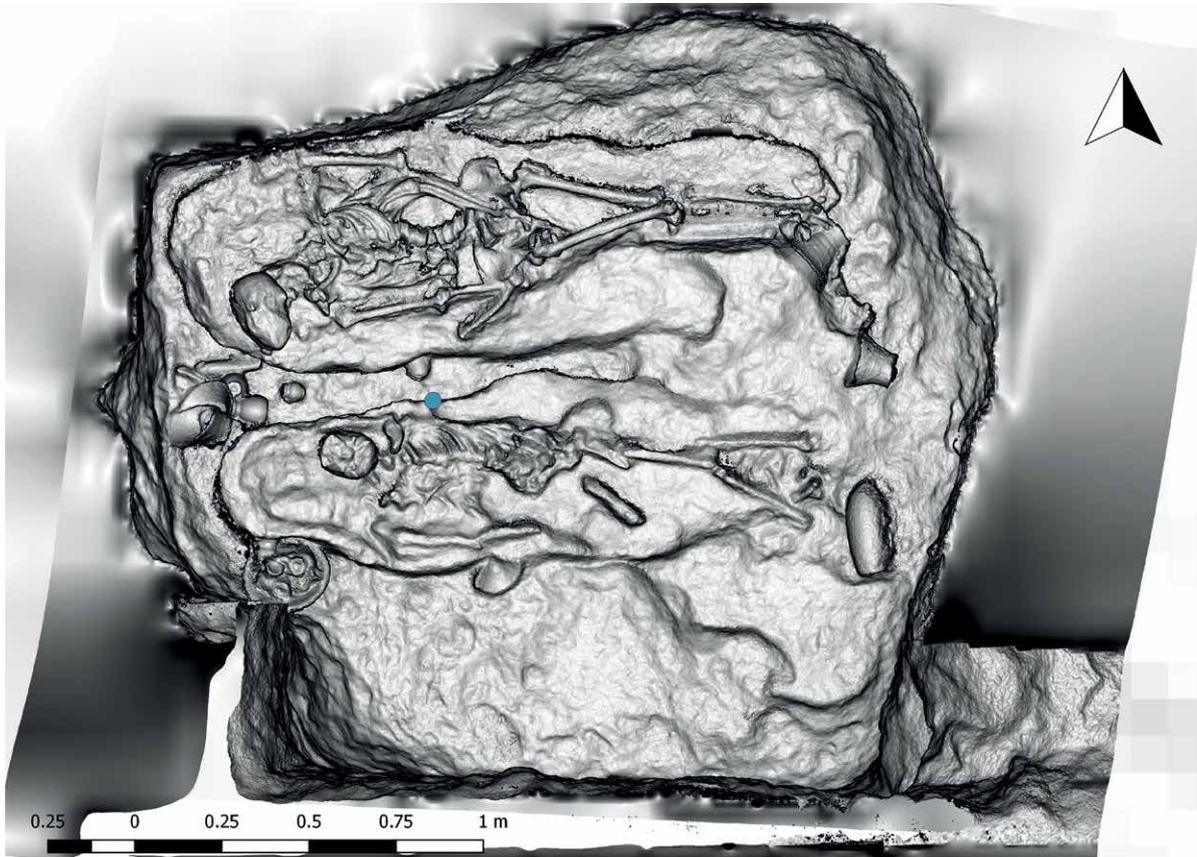


Figure 9.8: position where a painted eye was found associated with the coffin of Individual 160 (illustration: C. Geiger).

Franzmeier 2017, 334-336). The individual value within a specific burial usually remains obscured and we need to establish patterns traceable in cemeteries or regions like New Kingdom Nubia (see the comprehensive overview by Lemos 2020). Furthermore, the complex social role of objects must be considered which is especially evident for prestigious and rare grave goods like stone shabtis (see Chapter 11).

Most of the burials in SAC5 were, as in the case of Tomb 26, deposited within wooden coffins although the preservation of these objects is poor. The style of painting cannot be assessed with certainty, but the coffin of Khnummose (SAC 218/2017) was mostly painted in blue, yellow and black on white background which is a common 18th Dynasty decoration. The head part of his coffin shows blue and white stripes which indicate the strands of the wig of this anthropoid example (Fig. 9.7). The blue pigment of SAC5 218/2017 was identified as Egyptian blue (Fulcher and Budka 2020).

Nothing substantial has survived from the lid or side parts of the coffin of Khnummose, but a white background seems secure. The same holds true for the coffin of the female buried in Feature 6, Individual 160. Substantial

remains of pigments, especially white and blue were noted in the head part of this coffin. However, in the intriguing area of the right shoulder, remains of a painted eye in black and white were found (SAC5 136/2017, Fig. 9.8). These remains were extremely fragile and are difficult to interpret. The position on the shoulder allows to suggest that this decoration was part of the lateral side of the coffin case. Pair of eyes were frequently used as motif on the shoulder part of New Kingdom anthropoid painted coffins in Egypt and Nubia, for example on pieces from Debeira in Lower Nubia (Taylor 2017, 540, figs. 3 and 7).

Overall, it is not only difficult to assess the style of the coffins used in Tomb 26 and SAC5 in general because of the scarce remains of respective coffin decoration, but also because as Taylor (2017) has shown for Debeira, we have to expect regional patterns and variations in coffin decoration in New Kingdom Nubia.

Coffins were clearly of importance for elite burials in SAC5. Within Tomb 26 the practice of coffin-sharing was recorded in Feature 5 (TG 03 and 04), but other burials in the same chamber were placed in individual painted wooden coffins of anthropoid shape as well as without a coffin (see Chapters 7 and 8). Funerary masks were

TG	Feature	Coffined	Ceramics	Dating
TG 01	5a	yes	one flowerpot at the feet, one jug at the head plus painted bowl	Thutmocide
TG 02	5a	yes	cluster of vessels at feet (incl. six flowerpots); other vessels including decorated ritual vessels in head area; one dish at side	
TG 03	5b	yes	two flowerpots in leg area	
TG 05	5b	unlikely	two flowerpots at the head, four vessels along leg and feet	
TG 06	5b	unlikely	two flowerpots at the side, one decorated vessel on the head	
TG 07	6	yes	one flowerpot at the heat, one at the feet	
TG 08	6	yes	one dish with miniature vessels at head, one flowerpot at the side, one at the feet plus one beaker at the feet	Mid-18th Dynasty
TG 12	2	likely	three vessels, including decorated import in head area	Late 18th Dynasty

Table 9.4: distribution of pottery vessels in 18th Dynasty tomb groups.

commonly used on Sai but have survived mostly only in the form of such remains as gold leaf and eye inlays. Unlike in Egypt, full mummification was probably the exception in Nubia, although some indication for the preservation of body, of the ritual use of bitumen and of canopic jars was found (Spence 2019, 559; Lemos 2020, 14; see also Chapter 7).

Among the burial goods, ceramic jars often functioned as containers in order to equip the deceased with food. In SAC5 as well as in Aniba, Soleb and Fadrus the so-called flowerpots are numerous and seem to be more common in tombs in New Kingdom Nubia than in Egypt. The function of these conical deep bowls has been discussed controversially, but as outlined in Chapter 8, it is very likely that these vessels were used as gift baskets (*‘Präsentkörbe’*, see Näser 2001, 379 with references; Helmbold-Doyé and Seiler 2019, 123) and once carried grave goods in the form of fruits, bread or other food.

The publication of the French work in SAC5 (Minault-Gout and Thill 2012) put great emphasis on the find positions of the individual items. This is highly relevant because certain patterning is traceable. Vessels and other objects like shabtis, heart scarabs, combs and mirrors were recorded at specific positions around the body (Spence 2019, 561). For example, the *in situ* positions of the shabti of Khnummose close to the body in the head area and of the heart scarab of Individual 145 (TG 02) on the chest are not accidental but exemplary and find parallels (e.g. Minault-Gout and Thill 2012, 62; Smith 2003a, 148; for shabtis in general see Miniaci 2014, 262-269).

There also seems to be a pattern in the distribution of the ceramic vessels, especially for the flowerpots. Similar to Soleb (Schiff Giorgini 1971, fig. 580), one vessel was placed at the head and another one at the feet for Khnummose in Feature 6. Overall, eight of the tomb groups datable to the 18th Dynasty in Tomb 26 had pottery vessels still *in situ* and can therefore be assessed regarding a common pattern (Table 9.4). As was outlined in Chapter 7, several tomb groups like TG 08 and TG 12 might have had originally a larger ceramic corpus.

The data clearly show that coffined burials had a preference to place pottery vessels at the head and feet end. The head part seems to hold a special importance – decorated vessels were deposited there for TG 01, TG 02 and TG 12. In the case of TG 08, a complete dish with six miniature vessels (four ceramic, two faience) were placed next to the head part of the coffin. Out of eight tomb groups, five were equipped with two flowerpots which therefore seems as the desired number of these vessels which potentially functioned as gift baskets (see Chapter 8). One tomb group (TG 12) dates to a period when flowerpots were no longer fashionable. The other two cases, TG 01 and TG 02, are difficult to judge since a cluster of vessels including six flowerpots was found at the feet of TG 02, but it remains unclear whether all of them originally belonged to this burial or maybe also to TG 01 (see Chapter 8).

An aspect common in Egypt is also frequently found in cemeteries in New Kingdom Nubia and, for example, in Tomb 26: miniature versions of full-size items, whether this be miniature plaster masks or miniature faience or pottery vessels (see Chapter 7). These objects obviously partly substitute other materials (e.g. pottery to stone as in the case of the canopic jars of TG 02 in Feature 5) and other formats (see Nyord 2018). Unlike full-sized ceramic vessels, such miniature jars were specifically produced for funerary or temple cult (on Sai, several miniature vessels were found in temple deposits in the New Kingdom town, see Thill 1997). The case of the miniature canopic jars in Feature 5a for TG 02 is particularly interesting in this respect because the jars are manufactured in an Egyptian Marl clay, were thus imported from Egypt. Furthermore, the set of four globular jars with clay lids with human faces in the case of TG 02 differs in shape to ordinary canopic ceramic vessels. The jars rather resemble miniature ointment jars well-known in Aniba as imported pieces from Egypt (Helmbold-Doyé and Seiler 2019, 346-347, 350, VI.2.2) and were used in a new set of arrangement on Sai (see below).

Several tombs in Nubia, including some examples from Sai, have demonstrated a mixture of Nubian and Egyptian

tradition in terms of jewellery and here, for example, in the use of bracelets and earrings (see Lemos 2020). In the case of Tomb 26, this was rare even though all individuals tested for a Strontium signal showed a local signature. The comparatively small number of individuals that were recorded according to sex and age in SAC5 does not allow definite conclusions to be drawn, but the case of Tomb 26 seems to illustrate that female bodies were maybe more elaborately adorned as it is the case for Individual 324 (*cf.* the comparable example of Taneferet at Aniba mentioned above).

A remarkable finding in Tomb 26 was that neither Khnummose nor the female person in Feature 6 had a single bead attached to their bodies. This seems as a personal choice but remains, however, not without doubt as a looting of the bodily adornment of these two officials cannot be excluded (see Chapter 8 for details).

9.7 Rituals in SAC5

The Egyptian concept of a tomb refers in many respects to the social contexts of Egyptian mortuary cult which was practised as an ancestor cult (Nyord 2018) and therefore required firstly a superstructure to mark the place of the burial and secondly a space and cultic facilities for performing the burial ceremony and also thereafter (*cf.* Näser 2017 for installations at Aniba). Furthermore, funeral feasts with the consumption of food and drinks are well attested in Egyptian funerary rituals and used in many cases the architectural framework of the superstructure of the tombs (see Smith and Buzon 2014b).

In general, a large amount of evidence allows us to trace Egyptian funerary rituals, including textual and pictorial sources as well as architectonic remains (see Hays 2010 for a general outline). In the following, a short overview of material culture as a potential source for rituals in SAC5 is given. This is aimed at contextualising Tomb 26 within an Egyptian styled ritual framework.

Stelae and offering tables which are important installations for mortuary cult in the tomb superstructures according to the Egyptian concept are rare in SAC5, but they are attested in a small number of monuments (Minault-Gout and Thill 2012, 162-164). In cemeteries in Egypt, several ritual deposits were documented within or close to the superstructures of New Kingdom tombs (see Seiler 1995). These are associated with the funerary ceremonies and respective offerings, as well as with feasts in honour of the deceased (see Smith 2003a, 152; *cf.* Smith and Buzon 2014b). The elite cemetery in Aniba in Lower Nubia yielded several offering places in the tomb superstructures which compare to installations in Thebes in Egypt (Näser 2017, 564-565). The non-elite cemetery at Fadrus did not show substantial remains of mudbrick superstructures, but at least in one case, Tomb 211, fragmented bones in a mudbrick niche suggested some '*offer ceremonies*'

(Säve-Söderbergh and Troy 1991, 214). In Upper Nubia, ceramics as ritual remains of offerings and feasts were documented in superstructures of pyramid tombs at Tombos (Smith 2003a, 153-154).

In the case of SAC5, no pottery deposits in the superstructures of the tombs have been published and the superstructure of Tomb 26 is not preserved. Nevertheless, a few indicators can be named which attest to rituals involving ceramics. In several tombs including Tomb 26 two very common pottery types with a presumed religious function were found – the so-called beer jars (in Tomb 26 only fragmented, see Chapter 5) and the flowerpots. Smith repeated an old interpretation that these pottery vessels may be associated with the Egyptian offering list for his finds at Tombos (Smith 2003a, 159). Since beer jars are the most common drinking vessels in New Kingdom Sai (see Chapter 10), I would propose viewing these vessels in connection with drink offerings carried out during the funerary ceremony and/or the funerary feast. In the case of Tomb 26, the function of the flowerpots is most probably that of gift baskets. However, a connection with the Egyptian ritual '*Opening of the Mouth*' is also possible and has been discussed regarding the evidence in Aniba (Helmbold-Doyé and Seiler 2019, 123; see also Seidel 2020). The presence of the famous Egyptian ritual '*Breaking of the Red Pots*' was proposed for Tombos (Smith 2003a, 160). Since pottery breaking rituals are attested cross-culturally and throughout the ages and are also known from Nubian contexts, I remain rather sceptical here (see also Budka 2010a, 390-393; 2014b). However, the *killing of pots* is clearly attested on Egyptian wheel-made jars in Tomb 26 and finds parallels in Aniba (Helmbold-Doyé and Seiler 2019, 95, 271; see Chapter 7).

The ritual killing of animals and animal offerings within tombs is a well-attested Nubian practice (Spence 2019, 542) and some animal bones have been retrieved from New Kingdom burials in Nubia (Fadrus and Soleb, see Lemos 2020). At SAC5, only one tomb yielded a complete sheep and another animal skull in one of its chambers (Tomb 6), but the dating to the New Kingdom remains uncertain due to the post-New Kingdom reuse of this monument (Minault-Gout and Thill 2012, pl. 58). A small amount of animal bones was documented in Tomb 26, but rather than offerings these seem to be mostly related to intrusive animals like rodents, birds and snakes (see Chapter 8). The only exceptions are animal bones from the mid-area of Individual 162 (SAC5 400/2017) and animal bones below and around the flowerpot SAC5 347/2017 (SAC5 354/2017, see Appendix for details). Since both assemblages in Feature 5 are associated with Egyptian style pottery vessels and in one case a flowerpot, interpreted as gift basket, these bones could derive from a practice which represents the merging of the Nubian animal sacrifice with Egyptian food offerings.

Evidence for mummification remains rare in New Kingdom Nubia and in SAC5. New evidence from Tomb 26 is therefore of great importance: Individual 145 in Feature 5 (TG 02) was equipped with a set of model canopic jars and a pair of vessels with attached “funerary masks” containing bitumen; the latter was also found on parts of his skeleton (see Chapter 7). The unusual vessel shape of the “canopic jars” – being globular miniature ointment jars – illustrates that obviously, vessels which in an Egyptian context would not be associated with canopic jars, were well-suited to be included in a burial assemblage on Sai in order to emphasize some kind of reflection of mummification. In combination with the unique pair of vessel containing bitumen, this is intriguing evidence for a very specific fashion to integrate the ritual practice using the black anointing liquid associated with mummification. The ritual pouring of bitumen over the outside of a wrapped body can be reconstructed from shrouds in a mid-18th Dynasty tomb at Aniba, and from linen and coffin fragments in two Ramesside tombs at Amara West (Fulcher *et al.* 2020; Lemos 2020, 15). In Feature 5, we must imagine a similar ritual. The most likely scenario is that Individual 145 was placed in his coffin in the chamber, thus that the coffin had been deposited there first and was empty (see Chapter 8). Once the deceased was put inside the coffin, the black liquid was poured over the body. Such a practice might also explain smears of bitumen on small objects in Tomb 26, like scarab SAC5 281 which was found in Feature 2 (see Fig. 5.20). In the case of Individual 145, the innovative set of miniature/model canopic jars using vessel types imported from Egypt but usually not associated with mummification but with the ointment of the body, maybe were chosen to underline the set of meaning “mummification” which was obviously reinterpreted in New Kingdom Nubia to something like “ritual treatment of the body”. This also seems to be mirrored in the stone vessel SAC5 212, found in Feature 1 but once part of a burial in Feature 2 in Ramesside time, which once contained bitumen (see Chapter 7).

In conclusion, although several aspects of the burial customs as well as ritual activities are traceable in SAC5 and are comparable to Egyptian concepts, we cannot reconstruct the corresponding religious beliefs and whether they are fully in line with Egyptian ideas (*cf.* Säve-Söderbergh and Troy 1991; Smith 2003a, 155). Rather, we unearthed a range of burial practices which add another piece to the complex jigsaw puzzle being the reconstruction of life and death on New Kingdom Sai. Sai is here partly different and partly similar to other sites in Nubia. We need to consider these local variation within a certain set of rules, and, as recently stressed by Lemos (2020, 21) for the situation of New Kingdom Nubia: *‘Different burial communities point to the existence of different ideals of death and dying, but also conceptions*

of society and culture. These different views were grounded on various preferences related to the practice of dying, as well as on diverse demands for goods, including objects especially manufactured for the tomb such as shabtis, and objects that become mortuary items such as jewellery. However, a diversity of conceptions and demands, which result in different types and degrees of entanglement, took place in a context where most of the available items looked Egyptian in style.’

9.8 What is missing in SAC5?

In all previous sections, the presence and evidence of objects was offered. In order to fully contextualise Tomb 26, it is also relevant to discuss what is missing. Here, two sets of negative evidence must be considered for SAC5: 1) everything which is not preserved, *e.g.* organic materials such as baskets and food offering remains; 2) everything which was never used. In addition, the fragmentary state of many tomb groups because of the repeated interventions like looting needs to be considered (see Chapter 8).

The first category of negative evidence is extremely difficult to address and remains hypothetical. One can note, however, that in general objects made of metal, bone, ivory and wood are only very fragmentarily preserved in SAC5 and are almost impossible to reconstruct to their original shape (see Minault-Gout and Thill 2012, 399-401 and Chapters 5 and 7 for Tomb 26). That negative evidence is not always related to the fragile raw material of objects can be illustrated with pyramidions. Until the discovery of Tomb 26, evidence for pyramid capstones was missing in SAC5 – the find of the pyramidion of Hornakht indicates that there were more capstones for the pyramids on Sai. They may have been reused in other structures or have yet to be unearthed.

Within the class of food offerings, the original content of the flowerpots might be relevant (see above) and the question of bread offering can be addressed. A small number of bread moulds which were found in four tombs excavated by the French mission (Minault-Gout and Thill 2012, 339) as well as in Tomb 26 (see Chapter 5), indicate that conical bread, a common offering within the temple cult, was also deposited in the funerary context. Whether this happened at the funerary ceremony, at the funerary feast or as an actual offering inside the tombs must remain open. Within Tomb 26, the fragment of a bread mould was found in one of the upper filling layers of Feature 2 with mixed material.

The second category of negative evidence in Tomb 26 is slightly easier to address. So-called funerary cones, a Theban tradition used to furnish the tomb superstructure, are rare in Nubia and only attested at Aniba (maybe in a slightly different context, see Näser 2017, 570-571, suggesting an *‘extrasepulchral’* use of funerary cones at the site) and Tombos (Smith 2003a, 140-141). Evidence for

funerary cones at Soleb remains unclear (see Schiff Giorgini 1971, 83, for the unclear clay object T6s1) and no funerary cones were found on Sai. Two categories of stone objects known from other New Kingdom cemeteries in Nubia are at present not attested at SAC5: stone sarcophagi as we know from Soleb are not existing¹² and stone statues placed in the superstructures/cult chamber of the tombs according to the Egyptian concept known from Aniba (Steindorff 1937, pl. 37; Näser 2017, 566-569, figs. 8-9) and suggested for Soleb (Schiff Giorgini 1971, 82 mentions a so-called ‘*serdab*’ for the placement of statues in some of the pyramidal superstructures at the site) are not attested in SAC5. There is, however, a large cache of statues found close to the New Kingdom town (see Davies 2017a), thus the general tradition of private statues existed on Sai Island.

Both stone statues and stone sarcophagi seem to illustrate restricted access to material in New Kingdom Nubia. The case of the stone sarcophagus from Soleb made in local sandstone is particularly relevant in this respect. It belongs to the ‘*quarryman*’ Wabset, thus to an official engaged in the building activities related to the royal temple at Soleb (Leclant 1963). Obviously, he was in a special position to secure otherwise not available material for his coffin. This might correspond to comparable “personalised” access to raw materials as proposed for the case of Tomb 26, here for gold rather than stone. Another example of this category is the use of ivory for scarabs instead of the more common materials like steatite and faience. Such a usage is not attested on Sai, although ivory objects are present, but known at Sanam and Amara West, suggesting a local scarab production (Binder 2014, 65), maybe with “personalised” access for some people who were responsible for the shipment of ivory to Egypt.

Within the class of objects in other materials, one may mention a group of faience items found in Aniba which Steindorff labelled as ‘*Zaubergeräte*’ (magical tool) and which are unparalleled in Nubia and thus also in SAC5 (see most recently Seidel 2020).

Cemetery S at Aniba also yielded a small group of so-called soul houses (for these objects in general see Spence 2011; Solchaga 2020 with references) made of fired clay which were used in a similar way to offering tables and relate to the furnishing of the tomb superstructure. Except for parallels in Kuban, this type of funerary item does not seem to be attested in Nubia (Steindorff 1937, 69, pl. 35). Although such soul houses are attested until the early New Kingdom, they are much more common in the so-called First Intermediate Period and the Middle Kingdom. Since Cemetery S in Aniba already had a phase of use dating to the Middle Kingdom (Näser 2017; Helmbold-Doyé and Seiler 2019), these objects may very well pre-date the New

12 Clay coffins which are common at Tombos and Aniba are rare on Sai, but do exist in fragments (see Minault-Gout and Thill 2012, 165).



10 cm

Figure 9.9: pottery vessel SAC5 352/2017 from Feature 5 (photo: C. Geiger, ©AcrossBorders).

Kingdom and thus it is not surprising that they are missing in Upper Nubian New Kingdom sites.

Overall, a certain degree of local tradition within the elite burial assemblages of New Kingdom Nubia is traceable, although the general appearance is very similar in all colonial cemeteries (Lemos 2020). Differences between Lower and Upper Nubia are also evident. What emerges as local traditions may partly be related to questions of recording and preservation in the specific sites, but the main factors of these differences/peculiarities seem to be individual choices to compose a burial assemblage within a certain set of rules how these should look, as well as locally and chronologically varying resources and a confident degree of creativity in combining specific tomb groups (see, e.g., TG 02 in Feature 5a with the unusual set of miniature canopic jars and a pair of jugs partly filled with bitumen).

9.9 Unique features of Tomb 26 in SAC5

The parallels and close matches for the burial assemblages in Tomb 26 with other tombs of SAC5 were already highlighted in Chapter 7. A very similar cluster of tombs in the southeastern part of SAC5 of which Tomb 26 forms a part, was described above. However, there are also unusual finds from Tomb 26.

First, there are some notable discoveries from Feature 5 which derive from the undisturbed 18th Dynasty burials. Without parallel so far is the pottery vessel (SAC5 352/2017) with an attached human face (a “funerary mask”?, see Chapter 7) which contained bitumen (Fulcher and Budka 2020). This vessel is made in Nile clay and could have been produced locally (Fig. 9.9).



Figure 9.10: set of canopic lids of TG 02 used with vessels as newly composed “miniature canopic jars” (photo: C. Geiger, ©AcrossBorders).

This is markedly different from the set of four small globular miniature vessels which were obviously used in the same tomb group (TG 02) as reflections of canopic jars as evidenced by their human-headed lids (Fig. 9.10). These vessels are made in Marl clay and must have been imported from Egypt. They were obviously never produced as “miniature canopic jars”, but rather as miniature ointment jars (see parallels from Aniba, Helmbold-Doyé and Seiler 2019, 346-347, 350, VI.2.2) – they were composed as such a set on Sai, in the new burial context of a person who chose to be buried in Egyptian style but with certain “local” characteristics and obviously an own understanding of the ritual meaning (see also Chapter 12). Notable in this respect is also that the canopic lids are not shaped identically, but were apparently each manufactured separately, stressing the appearance that they were put together with the jars on site.

The presence of small obscure objects in Egyptian blue (SAC5 371, Fig. 9.11) among the burials in Feature 5 is unique in SAC5 and I was also unable to find parallels in other cemeteries in New Kingdom Nubia. These blue sticks remain uncertain in their function, but they were possibly fittings for inlaid coffin decoration (see Chapter 7).

One of the most remarkable finds from Tomb 26 is the fragmented grape vessel made of obsidian. SAC5 210 has no direct parallel in SAC5 or in other elite tombs of New Kingdom Nubia. The known rare parallels from the New Kingdom are made of faience (Brovarski 1982, 42, no. 12), glass (Goldstein 1982, 168, no. 190) or Egyptian blue (Schulz 1987a). No provenance has been ascertained for these objects. Although it seems unlikely that SAC5 210 is a local production from Sai or elsewhere in Nubia, scientific provenance analysis of its

stone beads which is planned will allow us to trace at least the source of raw material. The current theories consider an Ethiopian or west Asian origin as source for obsidian objects found in Sudan and Egypt (Lacovara and Markowitz 2019, 51).

The monkey-shaped vessel SAC5 214 is also of particular interest (Fig. 9.12). It is the first attestation of such a ceramic vessel in SAC5 and can be reconstructed despite its fragmentary state of preservation based on the complete vessel from Tomb 15 at Soleb (Schiff Giorgini 1971, 194-195, T15 p2, fig. 345). The figurative vessel from Tomb 26 was made of a soft variant of Marl A2 and probably therefore derives from Upper Egypt.

Assuming that both obsidian vessel and monkey-shaped vessel originally belonged to Individual 10 who was buried with a Cypriote Base Ring II ware juglet (see Chapter 7), it is evident that this person must have been an official of the local temple town administration, dealing with storing and shipping goods and therefore probably having more easy access to “international” objects than others.

Another unique feature of Tomb 26 which is unlikely to be the result of looting/decay is that within the group of so-called items of daily life, mirrors, cosmetic equipment and toiletry sets are entirely missing. Since they are attested in several tombs in SAC5 this may not be accidental (note, however, rare and very fragmented remains of metal artefacts of unknown function from various areas of Tomb 26, see Chapter 5).

9.10 Summary

The quantity and quality of data from SAC5 underlines the importance of Sai Island as an Egyptian administrative centre in Upper Nubia during the 18th Dynasty. The

heydays of use of this cemetery are reflected in the life history of Tomb 26 and are associated with the Thutmoseid era and the mid- to late 18th Dynasty in particular (see Chapter 8). Although Sai was still important during the Ramesside age, the site lost its prime status as an Egyptian centre. These changing roles of Sai are mirrored by the funerary record (see Chapter 10).

Tomb 26 enlarges a small group of tombs which was built in the mid-18th Dynasty in the southeastern part of SAC5. The closest parallel in terms of architecture can be found in Tombs 1 and 7; the best matches for the burial assemblages are provided by Tombs 3, 5 and 7. Overall, these tombs reflect a specific local ‘burial community’ (see Näser 2017; Lemos 2020) of their users (see also Chapter 12).

The range of male titles and functions attested from all tombs in SAC5 spans from scribes, priests and goldsmiths or overseer of goldworkers to the main representative of the urban administration (mayor) and even to a deputy of Kush. The female presence is represented by just a few attestations of the common title ‘*lady of the house*’ (*nb.t-pr*) and ‘*singer*’ (*Sma.yt*). This evidence reflects the social differentiation well attested in New Kingdom urban centres in Nubia, for example at Soleb (*cf.* Auenmüller 2018). Within this well stratified society embedded in the Egyptian administration of Upper Nubia evidenced by the prosopographical data, most of the residents of Sai and users of SAC5 remain, however, anonymous. Family tombs like Tomb 26 are therefore important data sets which enable us to understand actual realities of life organised around a person of authority like the original owner of this burial monument who is neither attested by name nor by title.

The elite cemetery SAC5, now broadened by the discovery of Tomb 26, displays certain local aspects (*e.g.* type of coffins and masks, scribal palettes) but shows multiple regional parallels, especially to Soleb and partly also to Tombos. Supra-regional parallels with the elite cemetery in the north, Aniba, are also noteworthy and underline that the elite sphere and the integration into the Egyptian administration of Nubia is the common framework for all these cemeteries. Tomb 26 allows the illustration of a certain degree of variability within one family and within a group of contemporaneous officials buried in Tombs 1, 3, 5, 7 and 26. Although most of the users of these tombs remain anonymous (with the exceptions of Khnummose and the mayors from Tomb 5), the display of the social status and cultural identity by means of the burial assemblages is partly of such a high degree of similarity, that it seems feasible to suggest a group of contemporaneous officials who were involved in similar tasks, namely the administration of the town, including overseeing one of the main activities, goldworking (see Chapter 10).

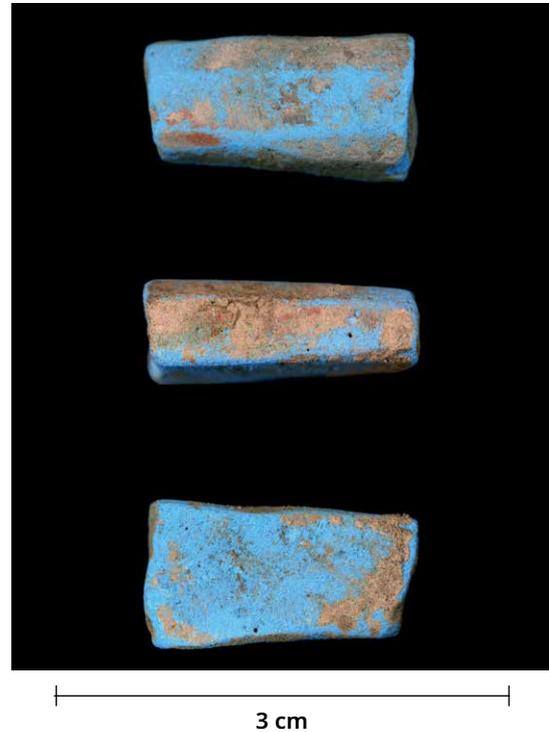


Figure 9.11: one of the blue sticks from Feature 5, SAC5 371 (photo: C. Geiger, ©AcrossBorders).

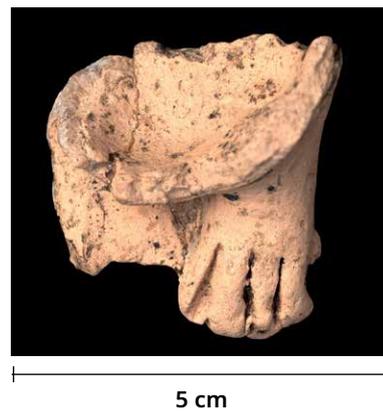


Figure 9.12: foot part of the monkey-shaped pottery vessel SAC5 214 (photo: C. Geiger, ©AcrossBorders).

Cemetery SAC5 and its relation to the New Kingdom town of Sai

Julia Budka

10.1 Introduction

Tomb 26 and its associated finds are of prime significance for understanding life on New Kingdom Sai. AcrossBorders' results from fieldwork at SAC5 nicely correspond to the results of the French Mission, which could rely on a much larger set of excavated tombs with large quantities of various materials. Most importantly, the new work in SAC5 also allows us to contribute to the proposed evolution of New Kingdom Sai based on excavation in the Egyptian town (see Budka 2015a, 51; Budka 2017a, 19; Budka 2020, 424-427). During the time of Thutmose III, Sai became an important administrative centre that was equipped with a large Egyptian style pyramid cemetery (for general aspects of the Egyptian administration in Nubia see Müller 2013; Valbelle 2021). Egyptian architecture and material culture from both the town and the cemetery SAC5 testify to the presence of Egyptians, but also to the mixing of Egyptian traditions with indigenous elements. This resulted in a lifestyle during the second half of the 18th Dynasty that is very similar, but not completely identical to sites in Egypt proper.

One of the differences between Nubian temple towns like Sai and towns located in Egypt is a scarcity of textual evidence within the categories of small finds. Jar docketts are extremely rare in the New Kingdom town of Sai (Budka and Doyen 2013, 198-199) and no ostraca have been found to date. This corresponds well to the presence of script in SAC5. As outlined in Chapter 9, category 3, pottery vessels with hieratic docketts, are neither attested in Tomb 26 nor in any other tomb of SAC5 (Table 9.2). The evidence from the New Kingdom town supports the interpretation of this negative evidence as not accidental due to the fragmented nature of the burials, but as characteristic for Nubian temple towns and their adjacent cemeteries. This is further supported by the findings in the concession of the Scandinavian Joint Expedition to Sudanese Nubia – only two docketts within the complete data set were noted, both coming from the cemetery of Fadrus, site 185 (Holthoer 1977, 58, 82).

The cemetery SAC5 and especially Tomb 26 and its surrounding monuments (see Chapter 9) are contemporaneous to the extensive building activities in the town, traceable in all town areas with a stone temple, an enclosure wall, magazines and cellars as well as the governor's residence (Azim 1975; Budka and Doyen 2013; Adenstedt 2016; Budka 2017b). Therefore, it comes as no surprise that the pottery from Tomb 26 finds very close parallels in the New Kingdom town area to a certain extent, especially regarding the common vessel types like beer jars and dishes (see Chapter 8 and Budka 2011b; 2017e; 2019b).

There are, however, also differences between the material culture in the New Kingdom town of Sai and SAC5 as reflected in Tomb 26. For example, although several faience vessels are attested in the tombs (see *passim* for Tomb 26 and Minault-Gout and Thill 2012, pls. 170-171), no fragments of so-called Nun bowls (see Strauss 1974; Nicholson 1998; Giddy 1999) were found. Since these bowls are well attested in the town area (Tschorn 2017) and have been used as grave goods in Nubian cemeteries of the New Kingdom (see Williams 1992, 131), this does not seem to be a coincidence but rather a choice. Similar to what was outlined already in Chapter 9, we also have to include gaps in the material evidence in order to achieve a comprehensive assessment of similarities between the town site and its adjacent cemetery.

10.2 The phasing of the New Kingdom town in comparison with SAC5

Evidence from AcrossBorders excavations suggests that Sai was largely dependent on Egypt in the early 18th Dynasty and supplies were at least in part brought from Egypt (*cf.* the evidence from the ceramics and the animal bones, in particular pigs, see Budka 2020, 350-351). Only during the reigns of Hatshepsut and Thutmose III there is increasing evidence for a more independent state of Sai and the so-called temple towns in Nubia in general. Thus, it is no coincidence that this phase is also related to the building of the first tombs in SAC5.

The evolution of the New Kingdom town of Sai seems to reflect the main phases of Egyptian involvement in Nubia (Budka 2020, 426). Sai was a changing microcosm throughout the New Kingdom, shaped by different individuals and adapting to historical and economic progress on its own local level. The following three main phases were proposed regarding the development of the town (Budka 2020, 424-427): Phase A) In the early 18th Dynasty, Sai functioned as a simple landing place and supply base for the Egyptians during the reigns of Ahmose Nebpehtyra, Amenhotep I and Thutmose I. Scattered proof of Egyptian presence on the island comes from the reign of Hatshepsut. The size and internal structure of the town at this early stage remains unclear; there is no firm evidence of an enclosure wall.

Phase B) The 240 × 120m large walled settlement with buttresses and the main city gate in the west was established during the time of Thutmose III, after the defeat of the Kerma Kingdom. The site became an important administrative centre with an Amun-Re temple, a governor's residence (SAF2) and an administrative building (Building A). The enlargement of the site goes hand in hand with an increasing complexity with varied lifestyles amongst the inhabitants, suggesting a complex social stratification.

Sai Island was now the administrative headquarters of Upper Nubia and continued to flourish until the reign of Amenhotep III.

Phase C) Although Amara West became the new administrative centre of Upper Nubia in the 19th Dynasty, some finds from the town site attest to the use of Sai in this period.

One of the main aims of AcrossBorders work in SAC5 was to investigate whether the mortuary evidence supports this model of distinctive phases established for the evolution of the New Kingdom town. Regarding Phase A, it is remarkable that early 18th Dynasty material was completely lacking in the finds during the fieldwork of AcrossBorders, both in Tomb 26 and also in other areas of the cemetery (see Chapter 2). Phase B is well traceable in cemetery SAC5 and can be interpreted as the founding period of the elite burial ground. This happened during a period when Sai Island functioned as the administrative centre of Upper Nubia during the Thutmoside Period as the predecessor of Soleb and Amara West (Minault-Gout and Thill 2012, 415, fn. 27; Budka 2014a; 2014c; 2015c, 74-81; Thill 2016).

Phase C is difficult to trace in the town area – scattered Ramesside sherds are attested in many areas, but unequivocal architectural remains are missing. One door sealing was found in the southern sector of the town which appears to show the cartouche of Seti I who also installed a stela on Sai (see Budka 2014c, 67, fig. 12), illustrating that the island was still considered relevant for royal activities in the 19th Dynasty. Important new evidence in this respect comes from cemetery SAC5 and particularly Tomb 26. Hornakht's pyramidal tomb at Sai attests that the current understanding of Ramesside Upper Nubia with a new residence for the deputies of Kush at Amara West is still limited. Whereas we know that high-ranking persons were buried in this new administrative centre (*cf.* Binder 2017), Hornakht used SAC5 as his burial ground. This deputy of Kush under Ramesses II is attested both from the town area where he probably had a residence and from Tomb 26 (see Auenmüller 2020, 379-381 with references). Maybe Hornakht's family ties were responsible for his refurbishment of an older tomb in SAC5 (see below). Although the exact reasons behind it remain unclear, we need to stress the new fact that Sai was still used by the highest officials of the Upper Nubian administration as a burial place in Ramesside time and that there was '*substantial administrative presence*' (Auenmüller 2020, 380) on the island during a period when a new centre of the Egyptian administration was set up at Amara West.

To conclude, the phases of the New Kingdom town of Sai and SAC5 are perfectly comparable and probably both illustrate major developments and changes during the Egyptian colonial period in Upper Nubia.

10.3 Tracing the community of New Kingdom Sai

The conversions regarding the administrative system and the religious landscapes in New Kingdom Nubia lead to the question of the cultural identity of the occupants of the newly founded towns such as Sai. Based primarily on funerary records, recent archaeological research (e.g. at Tombos, Smith 2003a; Buzon 2008; Smith 2014; Smith and Buzon 2017; 2018) has stressed that impenetrable boundaries and prominent ethnic categorisation as Egyptians and Nubians in New Kingdom Nubia are a modern conception. In line with more recent theoretical approaches to identities and cultural entanglement, these sites can be taken as examples to illustrate the dynamic and situational character of past societies (e.g. van Pelt 2013; Smith 2014; Spencer 2014; Smith 2015; Budka 2020).

Social, economic and cultural identities at the local level of New Kingdom sites in Nubia can change, interact and merge with each other. Here, a combined approach of settlement and funerary archaeology promises new insights into diverse aspects of life. At the site of Amara West, Neal Spencer could prove that *'the actions of individuals and small groups play a major role in maintaining and developing social organization and cultural expression'* (Spencer 2014, 47). Recent research at settlement sites like Amara and Sai stressed the necessity of a diachronic approach to Egyptian-Nubian relations since there is a clear chronological dimension for cultural encounters (Spencer 2017; Budka 2017b).

In general, the artefacts and especially ceramics excavated in the New Kingdom town of Sai testify to a cultural fusion from the foundation of the town in the early 18th Dynasty throughout the New Kingdom (Budka 2020, 410). The ceramics in particular indicate that there was a mixture of lifestyles, resulting in a great variability and also in "hybrid" forms that display both Egyptian and Nubian features attesting to *'a complex two-way entanglement of Nubian and Egyptian cultural features'* (Smith 2014, 2). This cultural mixing has to be embedded in the changing appearances of the respective towns, also taking generations into account (Spencer 2014, 42). For Sai it is clear that by the mid-18th Dynasty, during the reigns of Thutmose III and Amenhotep II, things had changed for its inhabitants — the outer appearance is that of an Egyptian fortified town, governed by viceroys like Nehy and Usersatet and a mayor of Δ Aa.t (Sai) as the highest local representative of the local administration. During this heyday of Egyptian building activity at the site the occupants living there were the second generation of witnesses to the campaigns of the first kings of the 18th Dynasty. It seems that the relationship of these individuals with the Egyptians was considerably different compared with their ancestors still living under Kerma rulers (cf. Williams 2018; Smith 2021). Considering the

general developments in Upper Nubia during the times of Ahmose to Thutmose III, it is not surprising that the persons traceable in the archaeological records were fully integrated into the Egyptian power structure and administrative system (cf. Morkot 1995, 181; Morris 2018).

This picture deriving from data of the New Kingdom town is supported by the funerary record of SAC5, where burials in Egyptian style are attested from Thutmose III onwards (see Chapters 1 and 9). Even if funerary objects reflect a contemporaneous Egyptian style, the individuals with Egyptian names and titles may still be of Nubian origin (see below, Chapter 10.3.1). This is particularly likely since the assessment of the material culture from the New Kingdom town suggests a multifaceted community on Sai Island with diverse concepts of cultural and social belonging (Budka 2015c, 68-69). This corresponds to recent studies of the biological identities of people buried at other New Kingdom sites in Nubia, for example at Tombos (Buzon 2008; Smith and Buzon 2014a) and Amara West (Binder and Spencer 2014; Spencer *et al.* 2014; Binder 2017). Research at these cemeteries has shown a complex social diversity during the entire period of the New Kingdom (both in the 18th Dynasty and the Ramesside era). Furthermore, aspects of appropriation and hybridisation in terms of funerary culture are traceable in Nubia already prior to the New Kingdom (see Williams 2018; Miniaci 2019).

10.3.1 Khnummose as an example of autochthonous individuals on Sai Island

As was already outlined in Chapter 9, the only person attested by name and title from Tomb 26, the overseer of goldsmiths Khnummose, was one of the successfully converted citizens on Sai who was local to the region of Sai according to Strontium isotope analysis ($^{87}\text{Sr}/^{86}\text{Sr}$) (Retzmann *et al.* 2020). This analysis was conducted on selected individuals from Tomb 26 in order to address one of the most pressing questions, the autochthony or allochthony of the skeletal remains from Tomb 26.

The study has already been published (Retzmann *et al.* 2020) and therefore only the most important results will be summarised in the following (see also Chapter 2). According to the local "isoscape", the established range of strontium using soil samples, water samples as well as modern and ancient animal samples from Sai Island showed that all tested individuals from Tomb 26 are to be regarded as local. This means that neither Khnummose, nor his presumed wife and potential relatives from Feature 5 spent time in Egypt in their childhood or youth.

In details, the following individuals were tested for their strontium signature: Individuals 145, 324 and 259 from Feature 5; Individuals 159 (Khnummose) and the female, Individual 160, from Feature 6 as well as the female Individual 124 from the first burial phase in Feature 4. All these individuals can be dated to the 18th Dynasty; most

importantly, Individual 145 is most likely the first owner of Tomb 26. Furthermore, three individuals were tested from Feature 2 who are associated with Ramesside times: Individual 3 and one of the commingled infants Individual 5, 6 and 7 as well as Individual 1.

These first results on the interments in Tomb 26 belonging to autochthonous individuals still need to be compared on a broader basis, *e.g.* with data from Tombos and Amara West (*cf.* Buzon 2021). But in combination with the Egyptian appearance of the respective tomb groups and Tomb 26 in general, these data are significant for the pressing questions of appropriation and the entanglement of cultures on Sai. It still remains imaginable that Khnummose was an offspring of an Egyptian “colonist” who came to Sai during the early 18th Dynasty, but it is more likely that a person who seems completely Egyptian based on his burial style and burial gifts in Tomb 26 and his Egyptian title (*“overseer of goldworkers”*), actually had roots in the indigenous population of Upper Nubia. The inhabitants of this region of the Nile valley had been confronted with Egyptian culture ever since the campaigns of King Ahmose in the early 18th Dynasty and found individual solutions to respond in a general scenario of conversion (see Williams 2018; Smith 2021). In the case of Khnummose, this seems even more probable since some kind of family relationship was proposed between him and the first owner of Tomb 26, the anonymous Individual 145 buried in Feature 5a. Since the latter was also identified as autochthonous person by means of strontium isotope analysis, a local origin of the complete family is the most likely scenario.

10.3.2 Combining the data from the New Kingdom town and SAC5

As was already outlined above, a combined assessment of the data from the town and the elite cemetery on Sai Island is very fruitful, especially in terms of prosopography and for tracing mayors and other high officials (*cf.* also Chapter 9). However, the occupants of New Kingdom Sai are not all traceable by means of textual records and most people remain anonymous, both in the town and in the cemetery. Furthermore, there are certain difficulties in assessing the inhabitants by means of the town alone. These are highlighted in the following, arguing for a joint approach using both funerary and settlement records if available to reconstruct past communities (see the excellent recent case study of Amarna in Egypt, Stevens 2018).

In settlement contexts, women and children are especially difficult to trace and gender and age are often concealed (see Smith 2013; Harrington 2018; Hinson 2018; Budka 2020, 414). In assessments of Egyptian sites in Nubia like Sai Island, the adult males performing administrative, military and economic functions usually appear as

dominant and active (Smith 2013, 269), also reflecting the preference for textual records by the researchers (Budka 2020, 414). A detailed look into the material culture of New Kingdom towns like Sai allows us to attest categories of possible children’s toys like small animal figurines, stone and clay balls and gaming pieces (Budka 2020, 414; *cf.* also Hinson 2018). We also know that in several production processes such as pottery making children were involved (Smith 2013, 275-275).

The question of women within the communities of New Kingdom towns like Sai is equally problematic, being mainly the result of an interpretative bias. I follow Meg Conkey and Janet Spector (1984, 6) who claimed, *‘that the archaeological “invisibility” of females is more the result of a false notion of objectivity and the gender paradigms archaeologists employ than of an inherent invisibility of data’*. In the case of Nubia, a certain bias becomes evident in assessments of the cooking traditions; Nubian cooking pots have been associated with Nubian women and cooking is thought to represent a predominantly female activity (Smith 2003a, 43-53, 190-193, 204). Such a gender-specific factor for the composition of the pottery corpora of Egyptian sites in Nubia assuming that indigenous females were responsible for cooking and were using Nubian cooking pots faces certain difficulties in interpretation (Budka 2018d, 149). The evidence from New Kingdom Nubia does not allow a precise gender-attribution for cooking and in various cultural contexts, male cooking activities are attested (Goody 1982, 101-102; Budka 2020, 414 with references).

In general, the Nubian elements traceable in the New Kingdom town of Sai, such as Nubian pottery vessels, may indeed be related to Nubian women who were married to members of the Egyptian town community. However, these elements and pots could also refer to Nubian families loyal to the new rulers from Egypt and engaged with food preparation, but maybe not living within the town. In Tomb 26, a number of Nubian sherds was also found. Although the number is small, Nubian wares account to 6.5% of the material from the shaft (Chapter 5) and this is a slightly higher percentage than in most contexts in the New Kingdom town (see Budka 2020, 223-225) and also considerable higher than 1% for ceramics in Tombos (Smith 2003a, 152). Most of these Nubian vessels from Tomb 26 are cooking pots which are also interesting because cooking ware is usually not part of a New Kingdom burial assemblage in the Egyptian tradition (some cooking pots were also found in the Egyptian style tombs at Tombos, see Smith 2021, 387). However, a complete handmade vessel, SAC5 215/2015, found in the shaft filling of Tomb 26 (Fig. 10.1) illustrates the difficulties we encounter when using pots as cultural markers. This small cup might postdate the New Kingdom, but it could also represent an example of a local production which cannot be identified

as ‘Egyptian’ or ‘Nubian’, but simply illustrates that the users of Tomb 26 lived in a community with various cultural influences and traditions (see below).

Other than ceramics, Nubian style objects are rare in Tomb 26, apart from the ivory bracelet of Individual 245 in Feature 5 (Fig. 10.2, see Chapter 7), a Kerma style rock crystal bead from Feature 1 (SAC5 026, Fig. 5.7) and ivory and bone inlays only associated with females (see Chapter 7).

Thus, one possible assumption is that either autochthonous female individuals married to successfully converted citizens with Egyptian names and titles like Khnummose still preferred Nubian style food preparation, but were, like their husbands, also converted in terms of religion and burial practices with the exception of being buried with some Nubian vessels (and sometimes Kerma style jewellery), or that these women were using the numerous Egyptian style cooking pots from the town area (see Budka 2016c), being fully converted to Egyptian lifestyle and burial traditions. As mentioned above for the general question of identities, drawing precise boundaries and classifying domestic activities like cooking or burial customs as either Egyptian or Nubian is misleading and ignores the actual dynamics traceable at sites like Sai as the results of multiple individual choices. Furthermore, as recently stressed by Smith (2021, 388): ‘*Nubian women who joined Egyptian colonial communities could have played a variety of roles, perhaps marrying into the colony, but also possible are more subordinating positions as servants, concubines, or slaves.*’

General questions about the presence of children and women on New Kingdom Sai require a contextualised approach and consideration of the chronological dimension. In the very early phase of Sai, the Egyptians arriving on the island were associated with the campaigns against the Kerma Kingdom. At this early stage, it is safe to assume that these settlers included various officials of military rank as well as craftsmen and others, probably travelling within small, labour related communities and not with their own families. Women and children are rather to be expected in the more consolidated stages of the Egyptian settlement on Sai, especially from the time of Thutmose III onwards, when also objects such as amulets and toys can tentatively relate to females and sub-adults. As was stressed above, it is of less importance to speculate about a ‘Nubian’ or ‘Egyptian’ origin of these people; more essential is reconstructing their importance within the social fabric of Sai and their sense of cultural and social belonging.

I have argued that the changing demography regarding females and sub-adults during the 18th Dynasty on Sai might be reflected in the built-up environment (Budka 2020, 415). The domestic buildings in the earliest sectors such as SAV1 North and SAV1 West are clearly lacking a second storey and seem unsuitable for larger families. For

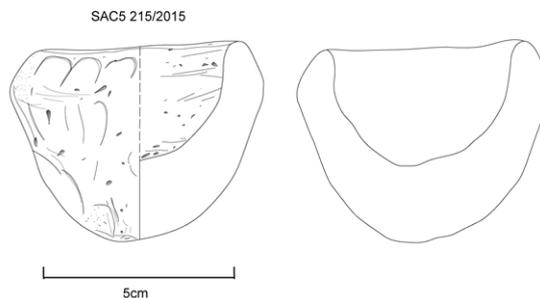


Figure 10.1: the handmade cup SAC5 215/2015 illustrating a local pottery production on Sai Island.

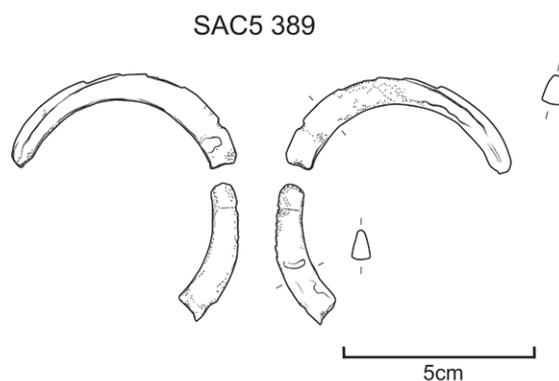


Figure 10.2: ivory bracelet SAC5 389 (illustration: H. Ramadan, ©AcrossBorders).

New Kingdom Egypt, Kate Spence has convincingly shown that at Amarna the second storeys of houses were spaces for female family members and generally dedicated to family life (Spence 2004). In line with this, the second building phase of Sai could reflect a more complex social stratification. In this phase, larger, more standardised houses which are comparable to the Amarna houses were built in the southern part of the town. A second storey is more likely for these buildings, perhaps indicating that Egyptian officials living there in the consolidated phase after defeating the Kingdom of Kerma were accompanied by their families (Budka 2020, 415), or that successfully converted citizens like Khnummose started to use domestic space within the town with their families.

Here, evidence from the pyramid cemetery SAC5 seems particularly important. This cemetery and Tomb 26 as an exceptional case study attest to family burials from the reign of Thutmose III onwards, clearly corroborating the presence of women and children in the New Kingdom town of Sai. In Tomb 26, several children of various age groups were buried, and many females of various age groups were also present (for details see Chapter 6). One of the female burials, Individual 245, was buried during the heyday of the New Kingdom town and had a clear Nubian marker with her, an ivory bracelet (see Fig. 10.2; for such

objects as markers of Nubian identity see Smith 2003a, 151; similar bracelets in bone and shell were already used in Nubia since the time of the so-called A-group, see Williams 1989, 37).

How many people lived within the New Kingdom town of Sai is still a challenging question and remains hypothetical (see Budka 2020, 427). Nevertheless, the fresh research of the AcrossBorders project in both SAC5 and the town allows a more detailed assessment of the citizens of Sai. A well stratified society embedded in the Egyptian administration of Upper Nubia is not only evident by the prosopographical data from Thutmose III onwards but also from the communities and horizontal hierarchies as reflected in the persons buried in Tomb 26.

10.4 The regional perspective

Finally, the material from Tomb 26 allows regional comparisons with other Egyptian settlement sites in Upper Nubia (see also Chapter 12). The better-understood settlements in this part of the Nile valley all fall into the category of so-called temple towns which were state-built foundations with administrative and cultic functions and elite residential places (Vieth 2018; Budka 2020, 397 with references). Like Sai, these sites usually had an elite cemetery attached to their town areas (see, e.g., Tombos, Soleb and Amara West). It is notable that funerary record in Upper Nubia was not traceable until the time of Thutmose III, contrasting to earlier findings in Lower Nubia (Näser 2017; Williams 2018). The Egyptian style tombs of SAC5 find close parallels at the Lower Nubian site of Aniba and in Upper Nubia at Soleb, Tombos and Amara West (see Steindorff 1937; Näser 2017; Schiff Giorgini 1971; Smith 2003a, 136-166; Binder 2014; 2017).

With the discovery of Tomb 26 on Sai, new parallels to the cemetery of another major administrative Egyptian site in Upper Nubia, Soleb, can be highlighted. Remarkable matches were noted between the new tomb on Sai and Tomb 15 at Soleb, regarding both architecture and finds. A close connection between the sites is indisputable. Furthermore, the almost identical status of both sites as administrative centres seems to be reflected in the comparative funerary record. In this respect, the stone shabti of Khnummose is also highly relevant (see Chapter 11). It falls into a homogenous group of funerary figurines attested for various officials of the Egyptian administration of Nubia, who were buried at major sites of the mid-18th Dynasty like Aniba and Toshka in the north as well as Sai in the south (see Chapter 11, Map 1). It is also remarkable that the second attested goldworker in Upper Nubia besides Khnummose, Bak, was buried in Soleb, probably in Tomb 38, during the reign of Amenhotep III (Auenmüller 2020, 386).

Apart from Soleb and Sai, the most important Upper Nubian sites in the mid- and late 18th Dynasty are Sesebi and Tombos. At Sesebi, only parts of the temple town have already been excavated, the cemeteries are still waiting for a concise research programme (see Spence 2019). Tombos is well known for both settlement and funerary remains. Based on the funerary evidence at the site, Tombos was one of the important Egyptian centres in the second half of the 18th Dynasty, being contemporaneous to both Sai and Soleb (see Smith and Buzon 2017; 2018). The pyramid necropolis of Tombos was investigated in the last decade and yielded burials from Thutmose III to Ramesside times (as well as Napatan interments). The New Kingdom tombs and the burials at Tombos are predominantly Egyptian style (Smith and Buzon 2018; Williams 2018, 105) and well comparable to Soleb and Sai. However, similar to the site of Amara West, there is also evidence for '*biological entanglement*' of the people buried at Tombos (Smith and Buzon 2017; 2018). The autochthony or allochthony of the skeletal remains was also tested with Strontium isotope analyses, revealing both a presence of colonialists as well as autochthonous persons (Buzon 2016; Smith and Buzon 2017, 618-619, fig. 5; Buzon 2021).

The major site of Ramesside Upper Nubia is clearly Amara West, which marks a change regarding settlement patterns. This newly founded town is located in the close neighbourhood of Sai and functioned as the administrative centre from Seti I onwards (see Spencer, P. 1997; Spencer 2017). Recent excavations in both the New Kingdom town and cemeteries at Amara West have revealed new aspects of domestic life in Ramesside Kush (see Spencer 2017 with references; for the cemeteries see Binder 2014; Binder and Spencer 2014; Spencer *et al.* 2014; Binder 2017, especially 606-609). The Ramesside use of Sai Island needs to be investigated with a close consideration of Amara West and here taking both the town and the cemeteries into account. Hornakht as the deputy of Kush under Ramesses II is well attested in the town of Sai and now also in SAC5, Tomb 26 and we must assume that he had regular business in the town of Amara West. Possible material evidence for this close connection between Amara West as the acting administrative town of Ramesside Nubia and the Ramesside use of cemetery SAC5 was found with the Mycenaean sherd in Feature 2 of Tomb 26 (see Fig. 8.21). SAC5 170/2016 is the tiny fragment of a small closed Mycenaean vessel, probably a stirrup jar. Its find position in Tomb 26 suggests a Ramesside date (19th Dynasty) which is in line with an attribution as Late Helladic IIIA2/B. Earlier Mycenaean vessels are known as burial gifts both from SAC5 (Minault-Gout and Thill 2012, pl. 161, T21 61) and in Tombos (Smith 2003a, 152, 154, fig. 6.21). A considerable group of Ramesside

Mycenaean pottery was found at Amara West, and here interestingly not in the tombs, but in the town area, both in elite and non-elite contexts (Spartaro *et al.* 2019). The Mycenaean vessels from Amara West were identified as primarily Peloponnesian and Cypriot products (Spartaro *et al.* 2019). SAC5 170/2016 from Tomb 26 is of Argolid origin and thus fits well into the Peloponnesian groups found at Amara West. As the seat of the deputy of Kush in Ramesside Nubia, Amara West functioned as main centre to distribute products arriving from and via Egypt, including luxury goods.¹³ High officials like Hornakht must have had easy access to such Mediterranean products and the sherd SAC5 170/2016 is potentially reflecting Hornakht's duties and possibilities during his career which resulted in the furnishing of his tomb on Sai.

10.5 Summary

The combined approach of the AcrossBorders project to assess the material culture of Sai with both finds from the town and from the elite cemetery SAC5, resulted in new information on the micro level. The discovery of Tomb 26 allowed us to trace a family who lived in 18th Dynasty Sai and some of the finds from the burials, especially the pottery, found close parallels in the town area. This case study illustrates that the examination of small groups and individuals within their social fabric enables the tracing of details and variants that disappear in a macroscale approach (*cf.* Boozer 2010, 141).

The heyday of the cemetery SAC5 on Sai was in the second half of the 18th Dynasty and thus concurrent with the main use of the city when it was the seat of the viceroy and had high regional importance as the administrative headquarters of Upper Nubia. As a temple town, Sai had above all economic importance – gold and other raw materials, particularly the local sandstone, but also the *jnw* taxes in general, were collected here and made ready for transport to Egypt. Persons like the overseer of goldworkers Khnummose were involved in this main function of Sai and are now traceable by direct evidence deriving from Tomb 26.

Evidence from Tomb 26 is also relevant for the Ramesside history of Sai. Together with new finds from the town site (especially sector SAV1 West, see Budka 2020, 427), the continued importance of the island during the 19th Dynasty can now be illustrated. Sai was still used by high officials as a burial place, including the deputy of Kush as attested by the example of Hornakht. Hornakht's tomb in SAC5 can be considered as a significant indicator

that Sai was in fact his hometown. Auenmüller (2020, 381) could show that '*such a nexus of tomb location to the place of origin is particularly valid in the provincial milieus of New Kingdom Egypt and Nubia*'. Since Hornakht's father @tjAy is likely to have held the same title as his son and is also attested in Sai and in Amara, this is of importance. Thinking further along these lines, it becomes obvious that Amara West was not created on new ground without a solid network in its close neighbourhood. Sai and the surroundings of the island are therefore likely to have functioned as the cultural environment in the late 18th Dynasty that produced the highest officials of the administration at the beginning of the Ramesside period.

Within a broader context, recent research at sites like Sai, Tombos and Amara West has shown that tombs and burials are of prime significance for understanding life in New Kingdom Nubia. Despite a general Egyptian character of the tombs and burials, case studies illustrate that at the local level social, economic and cultural identities were changing, interacting and merging with each other and that there was a complex intermingling of Egyptians and Nubians (Binder 2017, 606-611; Smith and Buzon 2017; 2018; Budka 2018a; Smith 2021).

13 A similar function can be assumed for Sai during the 18th Dynasty, see Budka 2015a; 2017b. The role of settlements in the internal distribution of goods in New Kingdom Nubia is currently being expanded based on excavations at H25, a rural settlement close to Kawa, see Porter 2019 and Kilroe 2019.

Khnummose and a group of New Kingdom serpentinite shabtis – insights into colonial society in 18th Dynasty Nubia

Johannes Auenmüller & Rennan Lemos

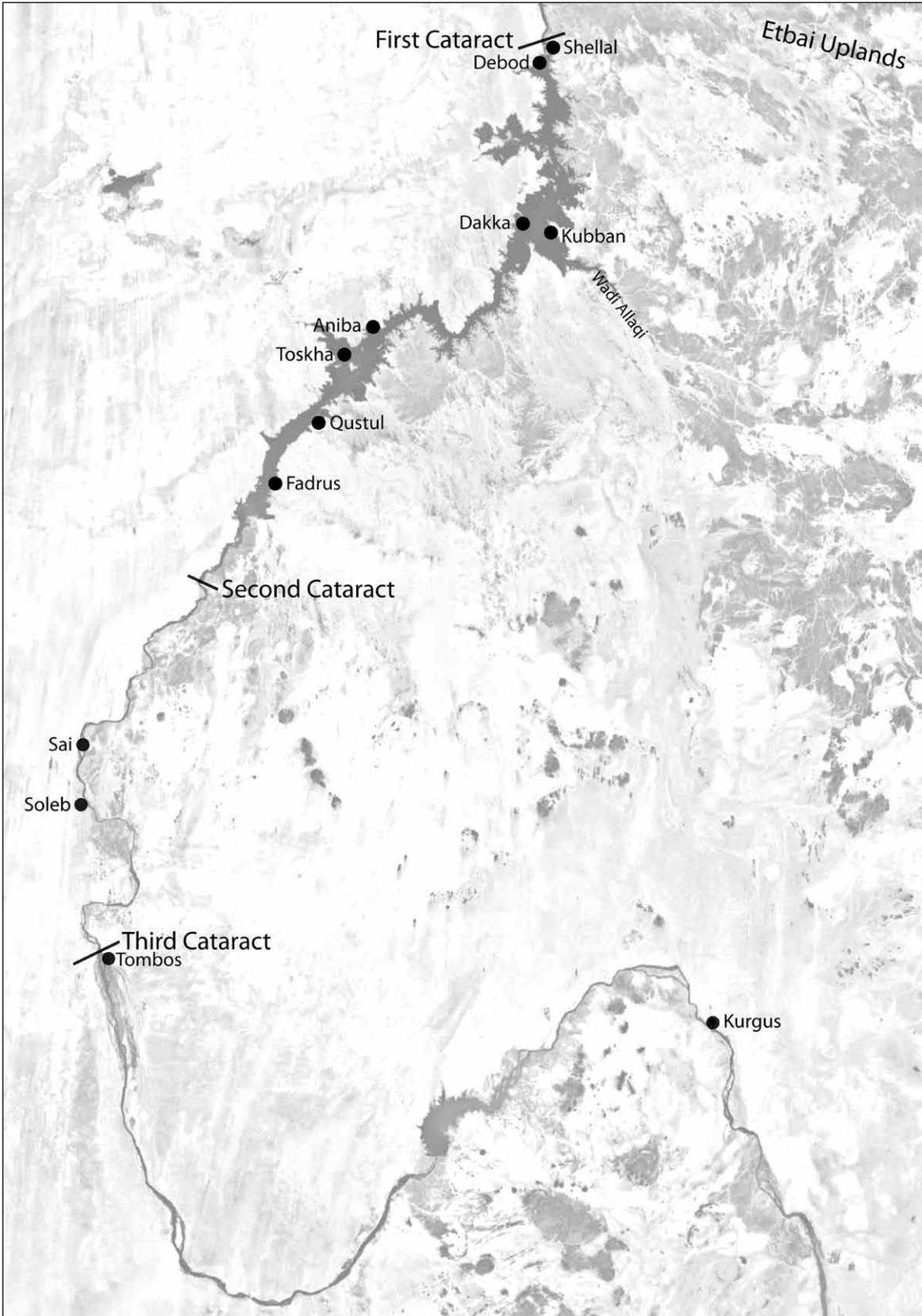
11.1 Introduction

A shabti made of serpentinite inscribed with the title ‘goldsmith’ (*nb.y*) and chapter 6 of the Book of the Dead was found next to *Hnm.w-ms*’s burial in Feature 6 of Tomb 26 (see Chapters 5 and 7, TG 07). The shabti belongs to a homogenous group of five funerary statuettes firstly identified by Anne Minault-Gout (2012), including an anonymous example found in the same necropolis on Sai in the 1970s (Minault-Gout and Thill 2012, 177-179, pl. 93). Following a detailed analysis of this group of shabtis from Sai and elsewhere, Minault-Gout concluded that they originated from the same mid-18th Dynasty workshop in Egypt and were made for elite officials, both of Egyptian and Nubian descent, active in the administration of Nubia in the New Kingdom and buried in local cemeteries in which some of these shabtis came to light. Besides being made of the same material, these objects exhibit a number of intriguing features that allow us to reconsider their date, manufacture, distribution, use and role in New Kingdom Nubia (cf. Map 1), as well as more broadly in the Egyptian empire (on shabtis and their meaning in general, cf. Schneider 1977; Schlögl and Brodbeck 1990, 15-50; Milde 2012; Miniaci 2014, 256-272).

New Kingdom tombs in Nubia were either intensely reused or heavily plundered, and cemeteries dating to the 18th Dynasty are rare – the cemetery of Fadrus (Debeira Site 185) being the main exception (Säve-Söderbergh and Troy 1991). Tomb 26 at Sai thus provides an opportunity for us to better understand the people behind the initial stages of Egyptian colonisation of Nubia in the 18th Dynasty, as it represents one of the few intact burial contexts excavated across New Kingdom elite cemeteries in Nubia. Within the tomb’s burial assemblage, the shabti of *Hnm.w-ms* allows us to explore broader sociocultural dynamics in New Kingdom Nubia, e.g., conceptions and practices of shabtis and the role of officials in the “social fabric” of the colonial headquarters (Auenmüller 2018; 2020). Moreover, the object is relevant for us to approach the question of how imported objects shaped Nubian colonial society in the New Kingdom, as it is part of a group of shabtis that were produced in Egypt and imported to Nubia in the mid-18th Dynasty.

This chapter expands Minault-Gout’s (2012) initial considerations on the homogenous group of serpentinite shabtis, the latest addition to which is the shabti of *Hnm.w-ms*. We will also explore further questions, e.g., about the role of imported “Egyptian” objects, such as the shabtis, in the funerary and social landscape of New Kingdom Nubia.

Shabtis were part of circulating “objectscapes” which reached the Middle Nile in the (early) New Kingdom through colonisation (Lemos 2020, 14). Objectscapes can be



Map 1: map of Nubia with the main sites in this region mentioned in this chapter.

understood as ‘*repertoire(s) of material culture available at a certain site in a certain period in terms of their material and stylistic characteristics*’ (Versluys 2017, 197). Colonial objects in the New Kingdom Middle Nile region included a series of Egyptian style objects that impacted on social relations and cultural negotiations across Nubia (Lemos 2020). Results of the impact of foreign objects in local contexts include the development of local relationships intrinsically connected with the materiality of those objects as well as “cultural entanglements” affecting the social display of cultural affiliations in elite settings (*cf.* van Pelt 2013; Budka 2018e, 20). The cohesive group of “foreign” serpentinite shabtis will be approached here through the lens of their impact on local social relations and displays of cultural affiliations, as objects that allowed local (elite) individuals, either Egyptians or Nubians, to negotiate their positions, power and status in 18th Dynasty colonial society.

The present chapter first provides the reader with a catalogue that includes the shabtis so far identified as belonging to the group. The shabti of *Hnm.w-ms* is comprehensively treated in Chapter 7. In the following sections, aspects such as dating, iconography, inscriptions

and palaeography will be discussed, followed by a review of the shabtis’ provenance and prosopographical information. In the last part, the group of serpentinite funerary statuettes will be contextualised as part of the shabti phenomenon in 18th Dynasty colonial Nubia in order to understand their role in the social landscape of this region in the New Kingdom.

11.2 The shabtis: object catalogue

The expanded group of serpentinite shabtis is comprehensively presented below with descriptions of iconographical features and the inscriptions. The catalogue includes the shabtis previously described by Minault-Gout (2012) (**Cat. 1-5**) and several additions (**Cat. 6-11**). The shabti of *Hnm.w-ms*, **SAC5 350**, is integral part of this group of shabtis and will be referred to throughout the present text. Typology follows Schneider (1977). All the inscriptions are presented in standard hieroglyphs to allow homogenous comparison of text and writing variability. Those parts of the inscriptions that were not visible in the available images were reconstructed based on data from other pieces in the catalogue. Reference codes of hieroglyphic signs follow Gardiner (1957, 438-548).



Figure 11.1a: the anonymous shabti **Cat. 1** (Sai T1Ca25, S. 964, SNM 23424; after Minault-Gout and Thill 2012, figs. 1.1 and 2.1).

11.2.1 Catalogue

Cat. 1: Sai T1Ca25 S. 964, Sudan National Museum SNM 23424
(Figs. 11.1 a-b)

References: Minault-Gout 2012, 190-192, figs. 1.1, 2.1, 3, no. 1; Minault-Gout and Thill 2012, 19-24, fig. 3; 177-179, pl. 93

Title: no

Name: no

Origin: Sai, SAC5, Tomb 1, chamber Ca with main burial

Date: mid-18th Dynasty (Amenhotep II - Thutmose IV)

Material: dark green serpentinite

Measurements: height: 13.4cm; width: 4.8cm; depth: not specified

Form: Schneider class VA (mummiform, no hands, no beard); slender body with a subtle indentation in between the two lowest text strips; bulge at back marking the buttocks

Wig: variation of Schneider W4b (plain tripartite wig) with horizontal band on each front lappet; small lines on front lappets not on same level, line on the right lappet is higher and slightly inclined; front and back lappets end at same level at height of second circumferential line

Details: triangular face with small round and pointed chin, slightly twisted towards the right, quite symmetrical; pronounced cheekbones and rather round cheeks; wide almond-shaped and wide set eyes, with contoured upper eyelids continuing as makeup lines on the temples and a slightly curved lower eyelid, the right eyebrow is placed considerably higher above the eye than the left one; straight nose with flat tip and quite wide nasal wings; small and horizontal mouth with full, yet rather straight lips; the left ear is larger and more flared than the right one, and has a rounded helix and a rather flat scapha, while the right ear is more recessed, smaller and less detailed; short round throat, seems not smoothed, with small bulging hem at transition to mummy sheath

Beard: no beard

Collar: small *wsj*-collar in between the front lappets, seven short curved lines in various spacings; small vertical dashes in the lowest band

Feet: rather shallow indentation at front with less pronounced vertical ridges indicating the shins at both sides; small edge; feet hidden in stand

Text: shabti spell Schneider version IVC

Text layout: variant of Schneider 1c disposed in six lines with text starting on left shoulder; rather narrow empty vertical area at back, since the lines come very close and leave only little space in between

Transliteration:

- (1) *šhḏ* [BLANK]^a [BLANK]^a *ḏd=f*
- (2) *j sꜣwꜣb(.ty)*^b *jpn jr jp.tw* [BLANK]^c *m kꜣ.t*^d
- (3) *nb.t jr(r).t^e jm m hr.t-nṯr^f m zj r h(r).t=f^g hwi n=f sḏb.w*
- (4) *jm r zr(d)^h zh.t r zmḥi.t wꜣḏb.wⁱ r hn <n>.(t)*^j
- (5) *š^c(.y) n jꜣb.tjt r jmn.tjt^k jp^l.tw r=k r nw nb jnk*
- (6) *mk.wj zp 2 kꜣ=k^m kⁿ*

Notes on the text:

- a. There are blanks for the title and name on the left and right shoulders.
- b. The term *šꜣwꜣb.ty* is written without the ending *.ty*.
- c. There is a short blank of 1 1/2 squares for the second mentioning of the name.
- d. The term *kꜣ.t* is written only with A 9.
- e. The imperfective passive participle *jr(r).t* is written without gemination.
- f. The word *hr.t-nṯr* is written in the form of a ligature of T 28 and R 8.
- g. The term *hr.t* is lacking the consonant *r* and the usual classifier Y 1.
- h. The verb *srwḏ* is with initial *z* and without *d*.
- i. *wḏb.w* is written in a rather short form.
- j. The *.t* of infinitive of *hni* is mistakenly written as *n* (N 35).
- k. The word *jmn.tt* is classified with N 25.
- l. The verb *jp* is written without Y 1.
- m. The verb *kꜣ* is written fully with *ꜣ* and classifier (A 2).
- n. The double *k* at end is redundant, one *k* would be sufficient as suffix pronoun.



Figure 11.1b: the inscription of Cat. 1.



Figure 11.2a: the shabti **Cat. 2** of *Jmn-ḥtp* (art market / private collection; after Schlögl and Brodbeck 1990, 66-67).

Cat. 2: Freiburg im Breisgau, private collection (Figs. 11.2a-b)

References: Schlögl and Brodbeck 1990, 66-67, no. 16; Puhze 2004, Lot 200; Minault-Gout 2012, 190-192, figs. 1.2, 2.2, no. 2

Title: *wr-n-Mjꜣm* (cf. Simpson 1963, 26-27; Taylor 2001, 103, § 943: *wr-n-Tjh-ḥt*)

Name: *Jmn-ḥtp* (Ranke 1935, 30.12)

Origin: Toshka? (ex-Joseph Ternbach Collection)

Date: mid-18th Dynasty (Amenhotep II)

Material: dark speckled serpentine

Measurements: height: 18.4cm; width: 5.5cm; depth: not specified

Form: Schneider class VA (mummiform, no hands, no beard); wider body with an indentation at height of the second text strip from below; short horizontal indentation marking the buttock zone

Wig: Schneider W4b (plain tripartite wig); front lappets end at height of second circumferential line; the back part extends slightly downwards

Details: triangular, asymmetrical face with round and protuberant chin, the left side seems to be skewed; round cheekbones and round cheeks; droopy-hooded and quite wide set of eyes with contoured upper eyelids that continue as makeup lines on the temples, the left eye and eyebrow are placed slightly higher, thick eyebrows, the area around the left eye seems to be more roughly worked (or is partly bruised?); straight nose with rounded tip and smaller nasal wings; small and horizontal mouth with full lips; the left ear is more recessed, both ears have a rounded helix and seem to be worked with the same details; thicker throat, with small curvy hem at transition from neck to mummy sheath

Beard: no beard

Collar: no collar, area shows vertical striation marks from manufacture

Feet: narrow indentation at front with pronounced vertical ridges indicating the shins at both sides; flat and more edged base is slightly angled

Text: shabti spell Schneider version IVC

Text layout: variant of Schneider 1c disposed in 7 lines with text starting in the first text strip on the left shoulder with the title of the owner; the empty vertical space at the back is quite wide and gets narrow towards the lower end, as the lines coming from the right get longer downwards

Transliteration:

- (1) *wr-n*^a [BLANK]^b
 (2) *shd Mj*^c *Jmn-htp*^c *dd=f*
 (3) *j šzwb.t(y)*^d *jpn jr jp.tw Jmn-htp*
 (4) *m k3.t nb.t jrr.t jm m hrt-ntr*^e *m zj r h(r.t)*^f
 (5) *jst hwi n=f sdb.w jm r zrd*^g *sh.wt r*
 (6) *zmhi.t w3db.w r hni.t šc(.y)*^h *n j3b.tjt*ⁱ *<n>*^j *r j(mn)*
 (7) *.tjt*^k *jp*^l *tw r=k r nw nb jnk mk(.wj)*^m *k3=k*

Notes on the text:

- The first part of the title is written on the left shoulder with an upper line added.
- The right shoulder is blank, no further line was added.
- The second element of the title is written behind *shd*. It thus seems that the name and title were added later, however, in a palaeography quite consistent with the other inscriptions.
- The term *šzwb.ty* is written without *.y*.
- The word *hrt-ntr* is written as a ligature of T 28 and R8.
- The term *hr.t* is written without *r, t* and the usual book roll-classifier.
- srwd* is written *zrd*.
- The classifier N 33 and the plural strokes Z 2 of *šc.y* look like the sign N8.
- The third *t* after *j3b.tjt* is superfluous.
- The *n* is superfluous.
- The term *jmn.tjt* starts with an inverted *j* and is classified with N 25
- The verb *jp* is written with Y 1.
- After *mk*, no enclitic pronoun *.wj*.

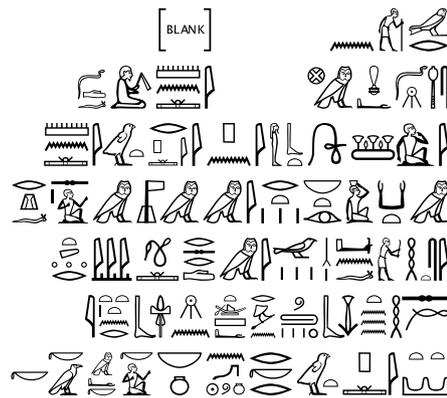


Figure 11.2b: the inscription of Cat. 2.



Figure 11.3a: the anonymous shabti **Cat. 3** (Nantes, Musée Dobrée 56.2771; ©C. Letertre / Musée Dobrée – Grand Patrimoine de Loire-Atlantique).

Cat. 3: Nantes, Musée Dobrée 56.2771 (Figs. 11.3a-b)

References: Santrot 2008, 95, fig. 6; Minault-Gout 2012, 190-192, fig. 1.3, no. 3

Title: no

Name: no

Origin: unknown (Caillaud Collection no. 118)

Date: mid-18th Dynasty (Amenhotep II - Thutmose IV)

Material: black serpentinite

Height: 17.3cm; width: 4.2cm; depth: not specified

Form: Schneider class VA (mummiform, no hands, no beard); slender body with a subtle indentation in between the two lowest text strips; small bulge above a shallow groove marking the buttocks

Wig: variation of Schneider W4b (plain tripartite wig) with horizontal band on each front lappet; front lappets end slightly above the second circumferential line; the back part ends at the height of the second line on the right and slightly further down on the left

Details: oval face with small round and receding chin, fairly symmetrical; small pronounced cheekbones, cheeks are receding; droopy hooded almond-shaped eyes with contoured upper eyelids that continue as larger makeup lines on the temples and fairly straight lower eyelids, the left eyebrow is more pronounced, the right eye seems slightly twisted; small straight nose with wide nasal wings; rather wide and horizontal mouth with less full lips; the left and larger ear has a more pronounced helix with some smaller irregularities, the right ear is more roughly worked than the left one; rather thick throat, with small bulging hem at transition to collar

Beard: no beard

Collar: *wsh*-collar in between front lappets, consisting of four regularly spaced lines (the second line from the top was drawn twice, this line is more inclined towards the left); between the lines including the second circumferential line there are four to five short vertical dashes

Feet: indentation at front with pronounced vertical edges indicating the shins at both sides; the base is almost horizontal

Text: shabti spell Schneider version IVC

Text layout: variant of Schneider 1c disposed in 7 lines with text starting in the first text strip on the left shoulder; the empty vertical space in the back is quite narrow and the lines coming from the front and ending here are oriented quite irregularly

Transliteration:

- (1) *shd* [BLANK]^a [BLANK]^b
(2) *dd=fj šzwzb.ty jpn jr jp.(t)w^c*
(3) *m k3.t nb(.t)^d jrr.t (jm)^e m hr.t-ntr^f m zj^g r hr(.t)=^h*
(4) *js(t)ⁱ hwi n=f sdb.w jm r zrd <.t>^j sh.t <t>^k r*
(5) *zmhi.t wzdb.w r hni.t š^c(.y) n*
(6) *jzb.tjt r jmn.tjt jp^l.(t)w^m r=k r nw*
(7) *nb jnk mk(.wj) k3=kⁿ*

Notes on the text:

- There is a short space after *shd*.
- The right shoulder is blank.
- The passive marker *tw* after *jp* is lacking the *t*.
- The adjective *nb* after *k3.t* is without *.t*.
- The usual adverb *jm* is missing.
- The word *hr.t-ntr* is written with the full preposition *hr* and *ntr* in honorific transposition.
- The term *zj* is without the ideogram stroke.
- The term *hr.t* is lacking its *.t*.
- The adverb *jst* (*js^l*) without *t*.
- The verb *srd* (*srw^d*) is written with added *.t*-ending.
- The term *sh.t* has a superfluous doubled *.t*.
- The verb *jp* is without Y 1.
- The enclitic pronoun *tw* is written without *t*.
- The bird-sign in the verb *k3* resembles an *m*-owl.

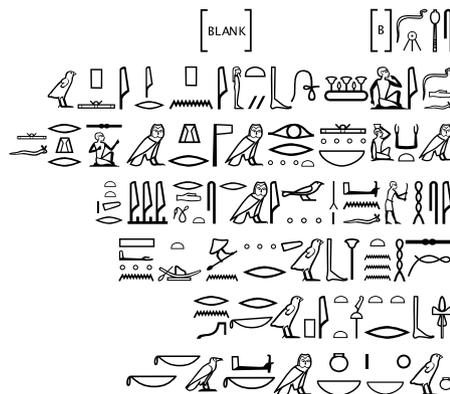


Figure 11.3b: the inscription of Cat. 3.



Figure 11.4a: the shabti **Cat. 4** of *Nb-mḥy.t* (France, private collection; after Aubert and Aubert 1974, fig. 4).

Cat. 4: France, private collection (Figs. 11.4a-b)

References: Aubert and Aubert 1974, 44, 289, fig. 4; Minault-Gout 2012, 190-191, fig. 1.4, no. 4

Title: *ḥrd-n-kꜣp* (Wb 3, 397.9; Wb 5, 105.14; Taylor 2001, 190, § 1862; Ayedi 2006, no. 1600)

Name: *Nb-mḥy.t* (Ranke 1935, 185.7)

Origin: unknown (previously kept in a private collection in England)

Date: mid-18th Dynasty (Amenhotep II - Thutmose IV)

Material: black serpentinite

Measurements: height: 12.7cm; width: not specified; depth: not specified

Form: Schneider class VA (mummiform, no hands, no beard); slender body with a more distinct indentation at the right side at height of the two lowermost text strips; (no information available for back side)

Wig: variation of Schneider W4b (plain tripartite wig) with horizontal band on each front lappet; small lines on lappets quite close to their ends; both lappets end a little above the second circumferential line

Details: the face has a rather round form and the chin is not perfectly visible on photo reproduction; round cheekbones and cheeks; almond-shaped eyes with pronounced upper eyelids and eyebrows, the lower eyelids seem to be quite straight; larger straight nose with less wide nasal wings; horizontal and small mouth with full lips; both ears are worked with the same details, the right ear is placed slightly upwards; protuberant neck, no details visible, with rounded hem at transition to collar

Beard: no beard

Collar: *wsh*-collar in between front lappets, consisting of five slightly curved lines forming two larger bands in the upper half, the space in between is filled with four longer vertical strokes; at the lower end, the lowest line is accompanied by small dots

Feet: wider indentation at front with less pronounced vertical ridges indicating the shins, feet hidden in stand

Text: shabti spell Schneider version IVc

Text layout: variant of Schneider 1c disposed in 7 lines with text starting in the first text strip on the left shoulder; the elements *hrd* and *n* of the owner's title are placed on the right lappet; lowest line at or above the knee area

Transliteration:

- (1) *shd hrd-n-k3p^a [Nb-mhy.t]*
- (2) *dd=fj š3]w3b.ty jpn jr jp.[(t)w]*
- (3) *[m k3.t] nb(.t)^b jrr.t m hr.t-ntr^c m [zj r hr(.t)=f]*
- (4) *[jst hwi] n=f sdb.w jm r srd <.t>^d [sh.wt r]*
- (5) *[zmhi.]t w3db.w^e r hni[.t š3(.y) n]*
- (6) *[j3b.tjt r jmn.tjt] jpf.(t)w^g r=k [r nw]*
- (7) *[nb] jnk mk[.w(j) k(š)=k]*

Notes on the text:

- a. The first element of the title is written on the left front lappet of the wig, possibly due to space issues.
- b. The adjective *nb* after *k3.t* is seemingly without *.t*.
- c. The word *hr.t-ntr* in written as a ligature (T 28 and R 8) followed by the full preposition *hr*.
- d. The verb *srd* (*srwd*) has an added *.t*-ending.
- e. *wdb* is written in the same way as in **Cat. 3**.
- f. *jp* is lacking Y 1.
- g. The enclitic pronoun *tw* is without *t*.



Figure 11.4b: the inscription of **Cat. 4**.



Figure 11.5a: the shabti **Cat. 5** of *Wsr* (Leipzig ÄMUL 6121; photos courtesy of Ägyptisches Museum – Georg Steindorff – der Universität Leipzig ©Anna Uhlschmidt).

Cat. 5: Aniba, Leipzig Ägyptisches Museum – Georg Steindorff – der Universität Leipzig ÄMUL 6121 (Figs. 11.5a-b)

References: Steindorff 1937, 79, 199, pl. 42.7; Minault-Gout 2012, 190-192, fig. 1.5, no. 5; Müller 2013, 422, 30.84

Title: *zḥꜣ. w* (Wb 3, 479.14-481.4; Taylor 2001, 208, § 2025 (as *sš*); Ayedi 2006, no. 1716)

Name: *Wsr* (Ranke 1935, 85.6)

Origin: Aniba, Tomb S 91, lower (=main) chamber¹⁴

Date: mid-18th Dynasty (Amenhotep II - Thutmose IV)

Material: black serpentinite

Measurements: height: 14cm; width: 3.5cm; depth: 3.1cm

Form: Schneider Class VC1 (mummiform, no hands, with beard); slender body with a subtle indentation in between the two lowermost text strips; bulge at back indicating the buttocks

Wig: mix of Schneider W6 (tripartite wig with horizontal band on front and back lappets and artificial beard) and W7 (striated lappet wig with horizontal band on front and back lappets); the front lappets end a little above second circumferential line; the back part ends at height of second line on the right and a little further down on the left; the striations at back are not symmetrically oriented

Details: small triangular and quite symmetrical face; pronounced cheekbones and flat cheeks; wide almond-shaped and wide set of eyes with contoured upper eyelids that continue as makeup lines on the temples, the right eye and eyebrow are placed slightly upwards; large straight nose with round tip and wide nasal wings; larger horizontal mouth with full lips; both ears are only cursorily worked with a defined helix and lobes, the right ear is placed slightly downwards; short throat, concealed by beard

Beard: longer tapering beard narrowing end, with widely spaced herringbone pattern indicating the braiding

Collar: *wšḥ*-collar in between the front lappets, consisting of six quite regularly spaced lines sloping downwards from right to left, in between the lowest two lines there are four short vertical strokes

¹⁴ Further shabtis from this tomb in Leipzig are ÄMUL 6127, 6120 and 6114.



Figure 11.6a: the shabti **Cat. 6** of *Ḳn-Jmn* (Liverpool WM 1977.112.10; after Janes 2016, 135-136).

Cat. 6: Abydos, Liverpool World Museum 1977.112.10 (Figs. 11.6a-b)

References: Janes 2016, 135-136, no. 41; <https://www.liverpoolmuseums.org.uk/artifact/shabti-of-qenamun> (last accessed 7 October 2020)

Title: *zḥꜣ.w* (Wb 3, 479.14-481.4; Taylor 2001, 208, § 2025; Ayedi 2006, no. 1716)

Name: *Ḳn-Jmn* (Ranke 1935, 334.18)

Origin: Abydos (Émile Amélineau excavations 1894-1898; acquired from Talbot-Ready in Paris in 1904; ex-Sir Francis Danson Collection; bequest of Lt. Col. J.R. Danson in 1977)

Date: mid-18th Dynasty (Amenhotep II - Thutmose IV)

Material: black serpentinite

Measurements: height: 19.2cm; width: 5.1cm; depth: 4.4cm

Form: Schneider Class VA (mummiform, no hands, no beard); slender body with subtle indentation below the lowest text strip; small bulge at back indicating the buttocks

Wig: Schneider W4b (plain tripartite wig); the front lappets end slightly below the second circumferential line; the back part ends at the height of the second line on the right and slightly further down on the left

Details: rather round and symmetrical face with receding chin; round cheekbones and cheeks; almond-shaped eyes with contoured upper eyelids that continue as flat makeup lines on the temples, the lower eyelids are less curved, the right eye seems slightly higher, the left eyebrow disappears under the front of the wig; straight nose with round tip and less wide nasal wings; horizontal mouth with full lips; both ears are worked with the same details, the left ear is more flared, while the right one is more recessed and placed slightly upwards; short throat, seems not to be fully smoothed, only small bulging hem at transition to collar

Beard: no beard

Collar: *wsḥ*-collar in between the front lappets, consisting of eight regularly spaced lines forming four rather vertical bands that are filled with 5-7 shorter and longer vertical strokes

Feet: wider indentation at front with quite pronounced vertical ridges indicating the shins, rather edgy front; the base is slightly angled

Text: shabti spell Schneider version IVC

Text layout: variant of Schneider 1c disposed in 6 lines with text starting in the first text strip on the left shoulder; the empty vertical space at the back is quite wide

Transliteration:

- (1) *shḏ zḥz.w* *Kn-Jmn ḏd=f*
 (2) *j šzwb.ty jpn jr jp.tw^a Kn-Jmn m kz.t^b*
 (3) *nb.t jrr.t m hr.t-nṯr^c m zj^d r hr.t=f jst ḥwi n=f sdb.*
 (4) *.w jm r srd sh.wt zmḥi.t wdb.w r ḥni.*
 (5) *t š^c(.y) n (j)zb.tjt^e r jmn.tjt^f jp^g.tw^h r=k r nw*
 (6) *nb mk.wjⁱ kz=kⁱ*

Notes on the text:

- The verb *jp* is without Y 1.
- The term *kz.t* classified with Y 1 and shows a superfluous added *t*.
- The word *hr.t-nṯr* is a ligature with T 28 and R 8.
- The word *zj* is written without ideogram stroke.
- The term *jzb.tjt* begins with U 23.
- Both *jzb.tt* and *jmn.tt* are classified with N 25.
- The verb *jp* is written without Y 1.
- The enclitic pronoun *.tw* is fully written.
- The enclitic pronoun *.wj* after *mk* is fully written.
- The verb *kz* is written in its full including A 2.



Figure 11.6b: the inscription of Cat. 6.



Figure 11.7a: the shabti
Cat. 7 of *Wsr-Stj.t* (Pushkin
 Museum I.1a 1702, IG 3575;
 ©The Pushkin State Museum
 of Fine Arts, Moscow).

**Cat. 7: Moscow, Pushkin Museum Moscow I.1a 1702 (IG 3575)
 (Figs. 11.7a-b)**

References: Chassinat 1912, 161; Rubinshtein 1980, 66, pl. 2.1; Hodjash 2002, 106, no. 261; Müller 2013, 462, 54.2; <https://goskatalog.ru/portal/#/collections?id=7468460> (last accessed 9 October 2020)

Titles: *z3-nswt* (Wb 3, 409.6-11; Taylor 2001, 193, §1885; Ayedi 2006, no. 1618) *jm.j-r'-h3s.wt-rs.jt* (Taylor 2001, 40, no. 372; Ayedi 2006, no. 337) *hrd-n-k3p* (Wb 3, 397.9; Wb 5, 105.11-14; Taylor 2001, 190, § 1862; Ayedi 2006, no. 1600)

Name: *Wsr-Stj.t* (Ranke 1935, 86.10)

Origin: unknown (with art dealer in Cairo in 1906, later part of Golenischeff Collection, bought by Pushkin Museum, Moscow, in 1911)

Date: mid-18th Dynasty (Amenhotep II)

Material: black serpentinite (as 'basalt' in museum records)

Measurements: height: 20.3cm; width: 6cm; depth: 5cm

Form: Schneider Class VA (mummiform, no hands, no beard); more voluminous body with indentation at height of the lowest text strip; small bulge at back indicating the buttocks at the height of the second-lowest text band

Wig: Schneider W4b (plain tripartite wig); front and back lappets end at same level at height of the second circumferential line

Details: triangular, symmetrical face with round chin; round cheekbones; wide almond-shaped eyes with contoured upper eyelids that continue as makeup lines on the temples, the upper eyebrows are also contoured and run along the temples; the nose is broken off flat and bruised on both its nasal wings; the large horizontal full-lipped mouth has suffered from a central impact (these traces could hint at the deliberate destruction of the mouth and nose); the right larger and slightly upwards positioned ear is worked with more care and detail, the left ear is, however, more flared; rather long and round neck, seems to be not fully smoothed, ends in small slightly rounded hem at transition to collar
 Beard: no beard

Collar: *wsj*-collar in between front lappets, consisting of five quite straight lines forming five larger bands in between the hem and the lowest line which is the second circumferential line, space in between the inner lines is filled with many small parallel vertical strokes; towards the lower bands, the number of the strokes decreases while their

volume increases so that the lowest band shows seven small oval incisions representing beads

Feet: relatively wide indentation at front with quite pronounced vertical ridges indicating the shins, rather short base lacking the modelling of the feet; short base seems to be quite straight

Text: shabti spell Schneider version IVC

Text layout: variant of Schneider 1c disposed in 6 lines with text starting in the first text strip on the left shoulder; the empty vertical space at the back is quite narrow with the lowest band ending with a vertical closing line

Transliteration:

- (1) *shd z3-nswt hrd-n- k3p Wsr-Stj.t m3c-hrw^a*
- (2) *dd=f j š3w3b.ty jpn jr jp.tw z3-nswt jm.j-r'-h3s.wt rs.jt*
- (3) *hrd-n-k3p^b Wsr-Stj.t m k3.t nb.t jrr.t jm m hr.t-ntr^c*
- (4) *m zj r hr.t=f jst hwi^d n=f sdb.w^e jm r srd <.t>^f sh.*
- (5) *wt r zmhi.t wdb.w^g j hni.t šc(.y) n j3b.tjt r jmn.t.t jp.(t)w^h*
- (6) *r=k r nw nb jnk mkⁱ k3=k*

Notes on the text:

- a. As with **Cat. 5**, the epithet *m3c-hrw* is written after the name.
- b. Here ends the longest title sequence integrated in any of the texts on the shabtis from this group. It thus seems to be clear that the inscription and its layout was conceived with this title sequence in mind.
- c. The word *hr.t-ntr* is written as ligature of T 28 and R 8.
- d. The sign D40 is written directly under A 25.
- e. The inverted sign O30 is positioned under *n=f* and thus shortened.
- f. The verb *srd* (*srwd*) is written with a rather frontal position of the sign T12 and has an added *.t*.
- g. The word *wdb.w* is written with *w3d* (M 13) and in the same way as **Cat. 1**.
- h. The verb *jp* is written without Y 1 and the enclitic pronoun *tw* lacks the *t*.
- i. There is no enclitic pronoun *wj* after *mk*.



Figure 11.7b: the inscription of **Cat. 7**.



Figure 11.8a: the shabti **Cat. 8** of *Nj3-nfr* (Europe, private collection; after Janes 2002, 32).

Cat. 8: Europe, private collection (Figs. 11.8a-b)

References: Janes 2002, 31-32, no. 12

Title: *zḥ3.w* (Wb 3, 479.14-481.4; Taylor 2001, 208, § 2025; Ayedi 2006, no. 1716)

Name: *Nj3-nfr* (not present in Ranke)

Origin: unknown

Date: mid-18th Dynasty (Amenhotep II - Thutmose IV)

Material: black serpentinite

Measurements: height: 11.2 + x cm; width: not specified; depth: not specified

Form: Schneider Class VC1 (mummiform, no hands, with beard); slender body with an indentation at height of lowest text strip; bulge at back indicating the buttocks

Wig: mix of Schneider W6 (tripartite wig with horizontal band on front and back lappets and artificial beard) and W7 (striated lappet wig with horizontal band on front and back lappets); small lines on front lappets in the same level; back lappet ends at height of second line on the right and slightly further down on the left; striations quite symmetrically oriented

Details: rather round face with receding chin, left side of face seems to be larger; round cheekbones, cheeks merge with receding chin; wide almond-shaped eyes with contoured eyelids and eyebrows, the upper eyelids continue as makeup lines on the temples, the right eye seems to be placed slightly upwards; straight nose with flat rounded tip and wide nasal wings; large horizontal mouth with full lips; both ears are worked with the same details, the helix of the right ear that is placed slightly upward appears more voluminous; short throat, concealed by beard

Beard: shorter tapering beard with round end; decorated with narrow spaced herringbone pattern indicating the braiding

Collar: *wsh*-collar in between the front lappets, consisting of four parallel lines in addition to the second circumferential line acting as the lower closing line, in between these regularly spaced lines there are up to seven vertical strokes each

Feet: not preserved

Text: shabti spell Schneider version IVC

Text layout: variant of Schneider 1c disposed in 6 + x lines with text starting in the first text strip on the left shoulder; the empty vertical space at the back is quite wide

Transliteration:

- (1) *shd^a zh^z.w Nj^z- nfr dd=f j*
- (2) *šzwb.ty^b jpn jr jp.tw^c zh^z.w Nj^z-nfr*
- (3) *m k^z.t nb.t jrr.t m hr.t-ntr^d m zj r h-*
- (4) *r.t=f jst hwi^e n=f sdb.w^f jm r zrd^g*
- (5) *sh.wt r zmhi.t^h wdb.wⁱ r*
- (6) *hni.t š^c(.y) n (j)zb.tjt^j r jmn.tjt^k jp.t(w)^l*
- (7) [missing]

Notes on the text:

- a. The term *shd* is written without *d* and N 8.
- b. The spelling of *šzw(š)b.ty* is singular in this group.
- c. The verb *jp* is without Y 1.
- d. The writing of the word *hr.t-ntr* with R 10 is singular in the group.
- e. The verb *hwi* lacks D 40 as its common classifier.
- f. The word *sdb.w* is written with an inverted O 30 and without ‘bad bird’ (M 37).
- g. The verb *zrd* (*zrw^d*) is written with rather much space.
- h. The infinitive *zmhi.t* shows – unique in this group – double reeds, possibly indicating the weak consonant *i*.
- i. The term *wdb.w* is written in its usual form with V 25.
- j. The word *jzb.tjt* begins with a form of *zb* (U 23).
- k. Both *jzb.tjt* and *jmn.tjt* are classified with N 25.
- l. The verb *jp* is without Y 1, but the *tw*-pronoun is fully written.

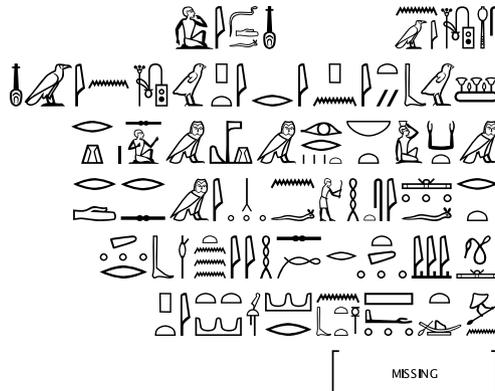


Figure 11.8b: the inscription of Cat. 8.



Figure 11.9a: the shabti **Cat. 9** of $\text{ḥ}3\text{-r-ḥ}3\text{-t=f}$ (Edinburgh, NMS A.1965.22; images ©National Museums Scotland).

Cat. 9: Edinburgh, National Museum of Scotland A.1965.22 (Figs. 11.9a-b)

References: https://www.nms.ac.uk/explore-our-collections/collection-search-results/?item_id=300005 (last accessed 7 October 2020)

Title: no

Name: $\text{ḥ}3\text{-r-ḥ}3\text{-t=f}$ (not present in Ranke)

Origin: unknown (bequeathed to the museum in 1965 by geologist and amateur archaeologist Dr Charles Taylor Trechmann [1884-1964])

Date: early to mid-18th Dynasty (Amenhotep II - Thutmose IV)

Material: black serpentinite

Measurements: height: 12.7cm (approx. 5 inches); width: not specified; depth: not specified

Form: Schneider Class VA (mummiform, no hands, no beard); slender stick-shaped body with indentation at the right side below the last text strip; bulge at back indicating the buttocks

Wig: variation of Schneider W4b (plain tripartite wig) with horizontal bands on each front lappet and the back lappet; small lines on front lappets on the same level; the front lappets end in same level at height of the second circumferential line, the back lappets end in a slightly higher level

Details: triangular face with small round chin, the left side of the face is slightly larger; rather small cheeks; close set almond-shaped eyes with less contoured eyelids that continue as makeup lines on the temples, the left eye is less tilted, while its eyebrow is placed higher than the right; straight nose with round tip and less wide nasal wings; larger horizontal mouth with full lips; the left ear is more flared, the right ear appears smaller, both are worked with the same details; short throat, small bulging hem at transition to collar

Beard: no beard

Collar: *wsḥ*-collar in between the front lappets, consisting of four thin bands (with the second circumferential line acting as the lower closing line) forming three wider areas that are filled with four (lowest area) to six (uppermost area) short vertical strokes

Feet: less pronounced indentation at front indicating the shins, small and rather round feet, base seems to be only a little angled

Text: shabti spell Schneider version IVC

Text layout: variant of Schneider 1c disposed in 7 lines with text starting in the first text strip on the left shoulder; the empty vertical space at the back is quite narrow as many of the text lines start or end in a rather irregular fashion

Transliteration:

- (1) *shḏ* $\overset{\text{c}}{\text{š}}\text{z-r-ḥz.t=f}^{\text{a}}$
- (2) *ḏd=f j šzwb.ty jpn^b jr jp(.tw)^c ḥz-r-ḥz.t=f^a*
- (3) *m kz.t nb.t jrr.t m ḥr.t-nṯr^e m zj^f r ḥr(.t)=f^b*
- (4) *jst ḥwi n=f sḏb.w jm r srd^b sh.wt rⁱ*
- (5) *zmḥi.t wdb.w r ḥni.t ḥ^c(.y)ⁱ n*
- (6) *[jmn.tjt r jzb.tjt]^k jp(.t)^l r=k r nw*
- (7) *nb jnk mk(.wj)^m kz=kⁿ*

Notes on the text:

- a. The phonetic complement *.t* belonging to *ḥz.t* is placed in between and under *r* and *f*. The same disposition can be found in line 2.
- b. The writer mistakenly added a book-roll (Y 1) to the demonstrative pronoun *jpn* as he was possibly already thinking about the following verb *jp* which regularly has such a classifier.
- c. The passive marker *tw* after *jp* is missing.
- d. Here, the name has no A 1-determinative in contrast to line 1.
- e. The word *ḥr.t-nṯr* is written with the full preposition *ḥr* and *nṯr* in honorific transposition.
- f. The term *zj* is only written with A 1.
- g. The term *ḥr.t* is written without *.t*.
- h. The verb *srd* is written as *srd*.
- i. The preposition *r* is written before three vertical plural dots belonging to *sh.wt*.
- j. The term *ḥ^c.y* misses plural and material classifier.
- k. This area was erased, there are still outlines of the signs visible. These outlines suggest to the reader the obviously incorrect sequence *jmn.tjt r jzb.tjt* that seems to have been the reason for the erasure.
- l. The *t*-element of the passive marker *tw* is missing.
- m. There is no enclitic pronoun *wj* after *mk*.
- n. The bird-sign in the verb *kz* resembles an *m*-owl.



Figure 11.9b: the inscription of Cat. 9.



Figure 11.10a: the shabti **Cat. 10** of *Jmn-m-ḥꜣ.t* (art market 1990; after Firth 1915, pl. 38b-c and Sotheby's 1990, Lot 45).

Cat. 10: Dakka, Cemetery 96/1, Tomb 2, no. xxiv (Art Market, Sotheby's New York) (Figs. 11.10a-b)

References: Firth 1915, 148, pl. 38b-c, no. xxiv; Sotheby's 1990, Sale #6108, Lot 45

Title: *ḥm-nṯr* (Wb 3, 88.19-90.7; Taylor 2001, 147, § 1436; Ayedi 2006, no. 1132)

Name: *Jmn-m-ḥꜣ.t* (Ranke 1935, 28.8)

Origin: Dakka, Cemetery 96/1, Tomb 2, east chamber

Date: mid-18th Dynasty (Amenhotep II - Thutmose IV)

Material: black serpentinite (as "slate" in Firth 1915, 148)

Measurements: height: 15.5cm; width: not specified; depth: not specified

Form: Schneider Class VC1 (mummiform, no hands, with beard); more voluminous body with indentation between the two lower text strips; small bulge at back indicating the buttocks

Wig: mix of Schneider W6 (tripartite wig with horizontal band on front lappets and artificial beard) and W7 (striated lappet wig with horizontal band on front lappets); small lines on the lappets quite close to their ends; the left lappet ends a little above the second circumferential line, the right extends a little over the line, the back lappets end on same level as front lappets

Details: rather round face with receding chin, seems to be quite symmetrical; round cheekbones, cheeks merge with receding chin; wide set almond-shaped eyes with contoured eyelids that continue as makeup lines on the temples, the left eye seems to be larger with the eyebrow higher; straight nose with partly broken tip and less wide nasal wings; horizontal mouth with full lips; both ears seem to be worked with the same details; short throat, concealed by beard

Beard: shorter tapering beard with pointy end, with herringbone pattern indicating the braiding

Collar: *wsh*-collar in between the front lappets, consisting of six quite parallel and quite regularly spaced lines, the second circumferential line acts as lowest line of the collar, in between the lines there are seven to eight short vertical strokes

Feet: wider indentation at front with quite pronounced vertical ridges indicating the shins, rather edgy and flat voluminous base; base is oriented flat

Text: shabti spell Schneider version IVC

Text layout: variant of Schneider 1c disposed in seven lines with text starting in the first text strip on the left shoulder; the empty vertical space at the back cannot be described due to the lack of an illustration. A noteworthy particularity of this inscription is that it is, according to Firth 1915, 148, gilded.

Transliteration:

- (1) [*shd*] *hm-ntr*^a *Jmn-m-h3.t^b dd=f*
 (2) [*j š3*] *w3b.ty jpn jr jp.(t)w^c hm-ntr^d [Jmn-m-h3.t]^e*
 (3) [*m k3.*] *t nb.t jrr.t m hr.t-ntr^f z(j)^g m^h r hr.(wt)=f* [?]ⁱ
 (4) [*jst hwi*] *n=f sdb.w^j jm r srd <.t>^k sh.wt* [?]
 (5) [*r zmhi.t*] *wdb.w^l r hni.t š^c.y* [?]
 (6) [*n j3b.*] *tjt r jmn.tjt jp^m (t)wⁿ r=k* [*r nw*]
 (7) *nb jnk^o mk.(wj)^p k3=k*

Notes on the text:

- a. Based on the visible signs, the title *hm-ntr* seems to be the most probable reading.
- b. The classifier behind the name seems to resemble A 17.
- c. The verb *jp* is written with Y 1.
- d. The reading of the title *hm-ntr* in the first line finds confirmation by the signs present.
- e. The presence of the title *hm-ntr* indicates that the name of the owner should be found here.
- f. The word *hr.t-ntr* is written with the preposition *hr* (its sign T 28 having the form of a *p*) and *ntr* in honorific transposition.
- g. The word *zj* is written only with the door bolt (O 34).
- h. The preposition *m* and the noun *zj* are inverted.
- i. It is not clear if there are further signs after *hr.(wt)=f*, e.g. for the word *jst*. This observation also applies to the following lines.
- j. The plural signs of *sdb.w* are a cluster of three dots.
- k. The verb *srd* (*srwd*) seems to have an added *.t*.
- l. The word *wdb.w* has no plural strokes, but its general writing is close to **Cat. 3** and **4**.
- m. The verb *jp* is without Y 1.
- n. The enclitic pronoun *tw* is lacking its *t*.
- o. *jnk* is – based on the photograph – written with a *nb*-basket (V 30).
- p. There is no enclitic pronoun *wj* after *mk*.



Figure 11.10b: the inscription of Cat. 10.



Figure 11.11: the shabtis grouped according to the iconographical indices “size”, “wig”, “collar” and “beard” (photos from the sources mentioned in the above catalogue).

Cat. 11: Dakka, Cemetery 96/1, Tomb 2, no. xxv

References: Firth 1915, 148, no. xxv.

Origin: Dakka, Cemetery 96/1, Tomb 2, east chamber

Comment: Firth 1915, 148 only states under no. xxv: ‘*foot of a second similar shabti*’. Based on this information, one has to assume that the material and overall typology of this fragment is comparable to **Cat. 10** (= Firth 1915, 148, no. xxiv) and the other shabtis catalogued here. The fragment **Cat. 11** thus seems to represent another entry in our catalogue. Since it is not illustrated and no inscription is mentioned, it cannot be considered in detail in the following paragraphs. It adds, however, another potential piece of evidence for the distribution of such serpentinite (?) shabtis in elite tomb contexts in New Kingdom Nubia.

11.2.2 Dating

Minault-Gout’s initial observation (2012, 198-199) that **Cat. 1, 2, 3, 4** and **5** were made in the same workshop somewhere in Egypt in the mid-18th Dynasty (most probably during the reigns of Amenhotep II and Thutmose IV) is supported by the additional shabtis presented here (**Cat. 6, 7, 8, 9, 10** and **11**). In their original publications, **Cat. 6, 8** and **9** were broadly assigned to the ‘18th Dynasty’, while **Cat. 10** and **11** were dated to the ‘early 18th Dynasty’ and ‘New Empire’, respectively. In terms of fixing their chronology, particularly the shabti of *Wsr-Sjt.t* (**Cat. 7**) is central, as his tenure as viceroy of Nubia is securely dated to the time of Amenhotep II (cf. Müller 2013, 110-112). Archaeological contexts at Sai, SAC5 Tomb 26 (Budka 2017c; 2018a; see also Chapter 8) and Tomb 1 (Minault-Gout and Thill 2012, 19-24, 177-179) with **Cat. 1** also support a general mid-18th Dynasty dating for the group.

11.2.3 Iconography

11.2.3.1 Iconographical groups

An assessment of the iconographic features of the eleven shabtis for which images are available allows the identification of three sub-groups (Fig. 11.11).¹⁵ The main criteria for defining sub-groups are the presence or absence and design of individual features (wig, collar and beard) in addition to the size of the shabti. The first two sub-groups consist of mummiform shabtis without hands or beard (Schneider 1977, 186-187: class VA), whilst the shabtis of the third sub-group have a false beard (Schneider 1977, 198-199: class VC1).

The first sub-group represented by **Cat. 2** and the shabti of *Hnm.w-ms* is characterised by a plain tripartite wig (Schneider W4b) and the absence of collar and beard. While the shabti of *Jmn-h3p* (**Cat. 2**) is slightly wider than the one of *Hnm.w-ms*, both differ in height by only approx. 0.8cm.

Regarding the second iconographical group, a *wsh*-collar is added in between the two front lappets (Schneider 1977, 175-176), which can also bear small horizontal bands at their front ends. Although the iconography of this group is overall consistent,¹⁶ the size of its representatives **Cat. 1, 3, 4, 6, 7** and **9** is less so. While the slender and tubular shabti of *Š3-r-h3.t=f* (**Cat. 9**) and the more standard shaped figurine of *Nb-mhy.t* (**Cat. 4**) are only 12.7cm tall, the far

15 These three basic iconographical groups discussed here were already implicitly recognized by Minault-Gout 2012, 193.

16 The absence of the front bands on the lappets could be used as further criterion for dividing this sub-group into another two parts. This would lead to separating the two largest shabtis **Cat. 6** and **7** from the others. In this way, these two funerary statuettes are also closer in size to the first iconographical sub-group than **Cat. 1, 3, 4** and **9**.

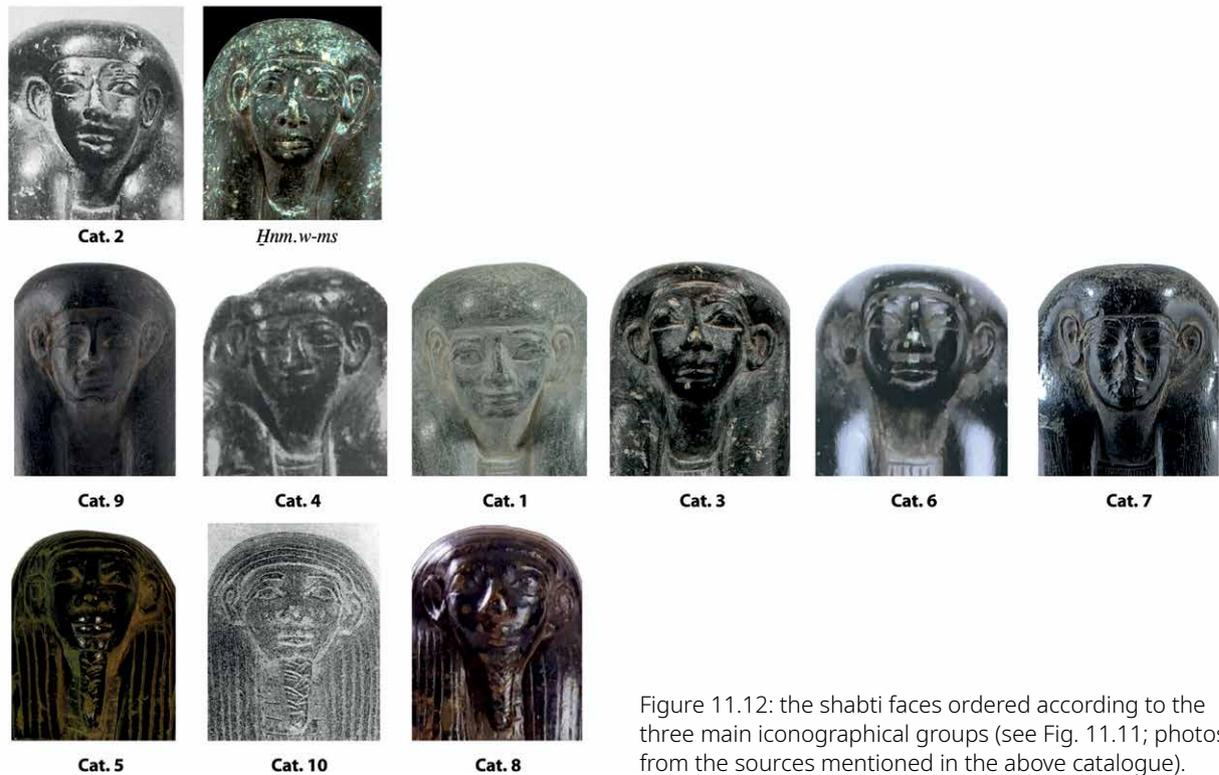


Figure 11.12: the shabti faces ordered according to the three main iconographical groups (see Fig. 11.11; photos from the sources mentioned in the above catalogue).

more voluminous and also largest object of the sub-group, the shabti of *Wsr-Sjt.t*, viceroy of Nubia (**Cat. 7**), measures 20.3cm in height. In between these two extremes, the size of the other figurines of this group is scaled in almost regular intervals (**Cat. 1**: 14.3cm; **Cat. 3**: 17.3cm; **Cat. 6**: 19.2cm).

The third sub-group including **Cat. 5**, **8** and **10** stands out with striations on the lappet wig and the presence of a braided beard, adding an even more *s^ch*-like appearance to the three figures (cf. Schneider 1977, 65-67). In terms of size, there is again a noticeable difference from 14cm (**Cat. 5**) to approx. 17cm (**Cat. 8**) within this sub-group.¹⁷

11.2.3.2 Individual features

From an artistic point of view, the facial features of the shabtis are the most individual parts of these objects. When analysing the faces, one immediately realizes the general similarity between them (Fig. 11.12).¹⁸ Taking the available photographs as precise representations of the faces and their inclination, **Cat. 3**, **5** and **6** (and possibly also **Cat. 8**) share the same upward looking face. Minault-Gout (2012, 193) already noted *‘un léger déséquilibre dans le volume latéral de la perruque donnant l'impression que la tête est inclinée d'un côté’* for **Cat. 1**, **2** and **4**, which can

also be recognised for the shabti of *Hnm.w-ms* and, to a lesser extent, **Cat. 6**. The other shabti faces seem to be more oriented towards the front. The most conspicuous individual details on the faces are the eyes and ears. While the majority of the shabtis have rather large open eyes (**Cat. 1**, **3**, **5**, **6**, **7**, **8** and the shabti of *Hnm.w-ms*), there are others with apparently narrower almond-shaped eyes very similar to each other (**Cat. 2**, **4**, **9** and **10**). In most cases, both ears did not undergo the same finishing touches, since one ear is often more carefully executed than the other (**Cat. 2**, **3**, **7** and the shabti of *Hnm.w-ms*). In some cases, one ear is also slightly larger than its counterpart (**Cat. 4** and the shabti of *Hnm.w-ms*) or even placed in a higher position (**Cat. 2**, **3**, **7**, **8** and the shabti of *Hnm.w-ms*), which adds to the impression that the faces are inclined to one side. Furthermore, in some cases, one ear also seems to be more flared due to the difference in volume of the wig on the respective side acting as the ear's background (**Cat. 1**, **2**, **6**, **7** and **8**).

Further individual solutions are recognisable in the execution of the *wsh*-collars in between the two front lappets of the wig (Fig. 11.13). As with the faces, each collar is a unique result of individual decisions and actual or mental templates on the part of the craftsman. However, the collars follow a certain standard model in that they all consist of several ribbons, which are characterised by vertical strokes or round to oval forms. Two pieces stand out from the group. In the case of **Cat. 3**,

¹⁷ The height of **Cat. 8** was reconstructed based on the proportions represented by **Cat. 5** and **10**.

¹⁸ A detailed assessment is certainly slightly impeded by the different angles of the photographs on which our observations are based.

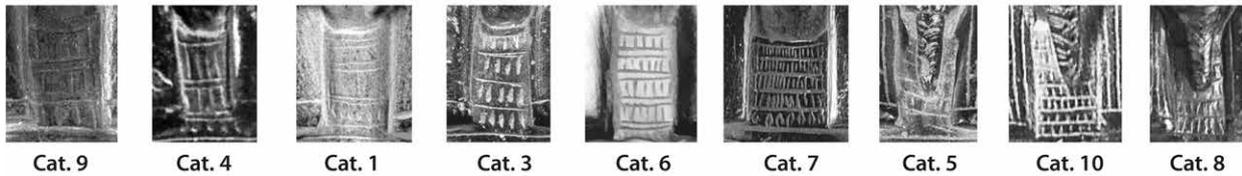


Figure 11.13: the *wsh*-collars in the order of the three main iconographical groups (cf. Fig. 11.11; photos from the sources mentioned in the above catalogue).

the *wsh*-collar is rather simple with four bands filled with four to five drop-shaped vertical incisions. The collar of *Wsr-Sjt.t*'s shabti (Cat. 7) represents the other extreme, with five ribbons in between the two lappets which are widely separated and filled with the highest number of small strokes and oval forms.

11.2.4 Inscriptions

11.2.4.1 Text and layout

All eleven shabtis in the group are inscribed with version IVC of chapter 6 of the Book of the Dead (Schneider 1977, 96-104, esp. 100-102).¹⁹ Besides spelling differences, the text layout also differs from one shabti to another, because the arrangement of the inscription was customised according to the shape and size of the object. In all cases, chapter 6 of the Book of the Dead was organised following position Tp 1c of Schneider (1977, 176-177). The text is either arranged in six (Cat. 1, 6, 7 and the shabti of *Hnm.w-ms*) or seven bands delineated with thin incised lines (Cat. 3, 4, 5, 8, 9 and 10). In the case of Cat. 2, the seventh text line was only created later on the left shoulder once the title and name of the new owner were added. The original number of lines would have been six, because *shd*, the usual opening word of the shabti spell, can be found at the beginning of the now second line. Nevertheless, the standard position of the text starting in the first delineated band on the left shoulder can be found in all the other shabtis.

The text bands do not continue into the space between the front lappets of the wig and do not regularly interfere with the lappets themselves. The shabti of *Nb-mhy.t* (Cat. 4) is an exception, since the elements *hrd* and *n* of the owner's title are placed on the wig's right front lappet. This was possibly due to space restrictions caused by the necessity of inscribing both the full title and name on a small blank space. The individual text bands are for the most part not completely oriented horizontally and in parallel to each other, since the lines delineating them are not drawn entirely straight. The text bands also become narrower towards the back in some cases. The vertical

empty area on the back of the shabtis varies in width from narrow (Cat. 1, 7 and 9) to wide (Cat. 2 and 8), depending on both the shape and size of the shabti, as well as the general text disposition. Regarding textual arrangement, it is worth noting that, e.g., in the case of Cat. 7, the inscription seems to have been conceived with respect to the main titles of viceroy *Wsr-Sjt.t*. The person inscribing the piece was aware of the necessary titles to be included and thus arranged the text accordingly. This also seems to be the case with Cat. 6 and 8. As regards Cat. 9, only a name had to be integrated in the text and both elements were obviously written in one go.

11.2.4.2 Blank spaces

Regarding the layout of inscriptions, the phenomenon of blank areas for adding the name and title of the owner (cf. Schneider 1977, 241-242) is of great significance for the understanding of the shabtis as either prefabricated products that were only meant to be inscribed with the identifying signature of their customers later at their place of destination, or as customised funerary items made for a specific person (i.e., already inscribed in the workshop with title and name). In the present group of shabtis, it is remarkable that such blanks can be found on at least three shabtis from elite cemeteries in Nubia. The shabti of *Hnm.w-ms* from Sai includes blank spaces in the first line on both shoulders after the word *shd*. The shabti can, however, still be attributed to *Hnm.w-ms*, because his name and title were inscribed by different hands (cf. Budka 2017c, 77) in the second line (see Chapter 7, Figs. 7.25-26), where the name of the shabti owner is usually mentioned a second time within the shabti spell (cf. Cat. 5, 6, 7, 8 and 9).

The place for the second mention of the owner's name, as well as the first line on both shoulders after the word *shd*, were left blank on the second shabti from Sai (Cat. 1). On the contrary, Cat. 2, which probably comes from Toskha East, includes only a blank space on the right shoulder. Here, however, no further line to delineate this zone as an area meant for any text was added. The left shoulder, originally blank and not intended for holding text, was used for inscribing the first element of the title (*wr-n-*) under a further added line, while the second element of the title (*Mj'm*) was written in an unusual position, directly behind *shd*. Clearly, this line after the

¹⁹ Cf. Minault-Gout 2012, 193-194, for initial observations on the inscriptions and their layout.

word *shd* was originally planned to contain the first line of the inscription. In this case, the name of the owner, *Jmn-htp*, can be found in its proper position in front of the introductory phrase *dd=f*, while its second occurrence is – as one might expect – in the following line.

At this point, one wonders whether the presence of blanks or evidence for later additions (in the form of titles and names) has any closer relationship with the shabtis of this group being sent to and/or found in Nubia. The existence of such blanks could then be understood as a hint at the provenance of **Cat. 3** from an elite cemetery in New Kingdom Nubia. This anonymous shabti shows a short space on the left shoulder after the word *shd*, where a first element of a title could have been inscribed. The right shoulder band is completely blank. In addition, there is also no space for any further mention of the owner's name in the second line, a particular feature that is only found on **Cat. 4**. In this case, the title and name seem to have been added later, so the original artefact was possibly imported with an empty first text band. However, **Cat. 5**, the shabti of *Wsr* from Aniba, has no blanks and the name and title were properly inscribed. It seems, however, that the incised lines of the name and title are deeper and wider than the rest of the inscription, suggesting that a later addition of the individualising details took place.

Regarding other pieces (**Cat. 6, 7, 8 and 9**), it is more difficult to determine whether titles and names were later inscribed or not. *Wsr-Stj.t*'s shabti text (**Cat. 7**) was clearly conceived with all the titles and the two occurrences of his name. This also seems to be the case for the shabtis of *Kn-Jmn* (**Cat. 6**), *Njz-nfr* (**Cat. 8**) and *šz-r-hz.t=f* (**Cat. 9**), since the names and titles were most likely written by the same hands as the shabti spell. In the case of *Jmn-m-hz.t*'s shabti (**Cat. 10**), the slightly odd disposition and perhaps also deeper incision of the name in the first line together with palaeographical details in the writing of the name seem to suggest that it was added later.

11.2.4.3 Writing peculiarities

All the shabtis show peculiarities in the writing of certain words and phrases. As such, each text is the individual outcome of an actual or mental template on the part of the craftsman. In comparing the text and its writings, one realizes several features that, on the one hand, set the shabtis apart from each other, but, on the other hand, also link several pieces together. The first group includes the writings or “spellings” that can only be found once within the group. The first is the case of **Cat. 8**, where the term *shd* is written without the usual I 10 and N 8. In addition, **Cat. 8** is the only example in which *hwi* shows no D 40, *zmhi.t* is characterised by double M 17 and *hr.t-nfr* is written as the full R 10. This word appears on other shabtis as either T 28/R 8 ligature (**Cat. 1, 2, 6, 7** and the shabti of *Hnm.w-ms*) or with R 8 and the preposition *hr* (**Cat. 3, 4, 5, 9** and **10** [here, T 28 is written in the form of Q 3]).

The shabti of *Hnm.w-ms* combines three unique features (see Chapter 7). It is the only example where the term *kz* appears in front of the name. Moreover, the vocative interjection *j* was written exclusively with A 2 and the preposition *m* is missing in front of *kz.t*. **Cat. 1** also includes three single features. The substantive *kz.t* was written only with A 9, the imperfective passive participle *jrr.t* lacks an evident gemination of *r* (D 21), and instead of the infinitive ending *.t* (X 1), the scribe alternatively added an N 35 after *hni*. Further unique writings are found on **Cat. 2**, where the classifier and the plural strokes behind *šz.y* resemble an N 8. **Cat. 3** is the only case where *jst* has no *t* (X 1), while **Cat. 5** and **9** show the vocative interjection spelled as M 17+A 1, as well as the word *zj* as the “seated man” (A 1) only, a sign which is lacking on **Cat. 10**, where just O 34 was used to write the word.

The scribe artisans also spelled the word ‘shabti’ in different ways (cf. Schneider 1977, 135-139; Schlögl and Brodbeck 1990, 15-28 with discussions about the meaning and etymology of the word). While the standard version *šzwšb.ty* is most frequent, the shabti of *Hnm.w-ms* bears the writing *šz.b.tj.šzwšb.šwb.ty* and *šzwšb.t* appear on **Cat. 1, 8** and **2**, respectively. While the term *shd* is always present in order to introduce the shabti's owner, the epithet *ms^c-hrw* was only added twice, for *Wsr* (**Cat. 5**) and *Wsr-Stj.t* (**Cat. 7**). A few other words are spelt inconsistently. The verb *jp* in the second line can either (and more commonly) be classified with the “book-roll” Y 1 (**Cat. 1, 2, 3, 4, 5, 7, 9** and **10**), while this sign is lacking on **Cat. 6, 8** and the shabti of *Hnm.w-ms*. The following passive marker *.tw* is fully written on **Cat. 1, 2, 6, 7, 8** and the shabti of *Hnm.w-ms*, while it is missing from **Cat. 3, 5** and **9** (no available data for **Cat. 4** and **10**). The term *hr.t* was also carved in different ways. It was fully written on **Cat. 6, 7** and **8** (no available data for **Cat. 4**), while the *r*-sign (D 21) is missing from **Cat. 1**. Both consonants *r+t* of *hr.t* are absent from **Cat. 2**, and on **Cat. 3, 5, 9** and the shabti of *Hnm.w-ms*, the final *.t*-ending was not indicated. The available photos for **Cat. 10** suggest that the writing is more or less complete.

The noun *sdb.w* appears in a consistent fashion on **Cat. 2, 3, 4, 5, 6, 9** and the shabti of *Hnm.w-ms*. The position of the plural signs is slightly unusual on **Cat. 10**. On **Cat. 1**, the plural strokes were oriented vertically under the “bad bird” G 37, while the inverted sign O 30 with its ideogram stroke was squeezed under the preceding *n=f* on **Cat. 7**. On **Cat. 8**, the term *sdb.w* was only written with the inverted O 30 and plural signs, with minor deviations. Additional particularities are identified in the writing of *jzb.tjt* with the *zb*-sign (U 23) on **Cat. 6** and **8**. Additionally, both shabtis show the words *jzb.tjt* and *jmn.tjt* followed by the foreign land-determinative N 25. On **Cat. 1** and **2**, only the word *jmn.tjt* was classified with N 25. **Cat. 9** represents a special case since the hieroglyphs still visible under the erasure suggest the wrong sequence *jmn.tjt r jzb.tjt*, while only

	Khnum-mose	Cat. 1 Anonymous	Cat. 2 Amenhotep	Cat. 3 Anonymous	Cat. 4 Nebmehyt	Cat. 5 User	Cat. 6 Kenamun	Cat. 7 Usersatet	Cat. 8 Nianefer	Cat. 9 Ashaerhatef	Cat. 10 Amennemhat
M17											
V28					no image available						no image available
M13											
R15					no image available					area erased	no image available
R14					no image available					area erased	
G17											
R10											
M21					no image available						

Figure 11.14: compilation A of the palaeographical features of the shabti inscriptions (photos after/from the sources mentioned in the catalogue).

jmn.tjt is followed by the foreign land-determinative. This erasure is also the only feature of such a kind on the shabtis in our group, most likely representing a mistake of the original scribe that was erased at a specific moment but not fully corrected.

A further interesting case is the writing of the verb *srd* (*srwḏ*). While the change in the first consonant between *s* (S 29) and *z* (O 34: **Cat. 1, 2 and 8**) cannot be considered as a “spelling” error given the phonetic interchangeability of both signs in the New Kingdom, the presence or absence of X 1 after the main radicals might have more implications. The infinitive marker *.t* is present in five cases (**Cat. 3, 4, 5, 7 and 10**), but absent in almost the same number of instances (**Cat. 1, 2, 6, 8, 9** and the shabti of *Hnm.w-ms*). The presence of the sign would suggest that *srd.t* was either understood as a causative infinitive of 2-lit. verb *rd* (admittedly originating in a 3-lit. *srwḏ*), or that the transposition of these signs into the text on the shabti was based on a hieratic template in which this sign was present. In the case of *wḏb.w*, the differences are of mainly palaeographical nature and lie in the use of certain signs for writing the element *wḏ* (see below). **Cat. 1, 2, 3, 4, 5, 6, 7, 9, 10** and the shabti of *Hnm.w-ms* show different forms of the *wḏ*-sign (M 13), while the proper *wḏ*-hieroglyph is only found on **Cat. 8**. In terms of consistency, the word *wḏb.w* appears in similar ways on **Cat. 3, 4, 5, 9 and 10**.

Regarding the verb *jp* in the second section of the shabti spell, only **Cat. 1 and 2** display the verb with Y 1. The presence or absence of X 1 in the following pronoun is, however, equally distributed: **Cat. 1, 2, 6, 8** and the shabti of *Hnm.w-ms* include the sign, while it is absent from **Cat. 3, 4, 5, 7, 9 and 10**. The situation is similar for the pronoun *.w(j)* after *mk*, *whiḥ* *ḥpeḥrs* on **Cat. 1, 5, 6** and the shabti of *Hnm.w-ms* (no available data for **Cat. 5 and 9**). Finally, the verb *kz* was written in its complete form only on **Cat. 1, 5 and 6**, while the shabti of *Hnm.w-ms* only includes a *k*-sign (V 31). **Cat. 2, 3, 7 and 10** spell it with the consonants *k* (V 31) and *z* (M 1). These signs were transposed on **Cat. 3 and 10**. In the cases of **Cat. 3 and 9**, the *z* resembles an *m*-owl (G 17).

11.2.5 Palaeography

In Minault-Gout’s (2012, 195-196) initial analysis, palaeography played a crucial role in determining connections between the shabtis. Minault-Gout also associated the graphical style with Type 3a defined by Henry G. Fischer (1976, 40-42, fig. 4). This semi-cursive style is in particular characterised by ‘short strokes or marginal stippling to summarize detail’ (Fischer 1976, 42). In his discussion, Fischer noted that it can be found on stone, wooden or metal objects dating to the New Kingdom, although less frequently than on Old or Middle Kingdom artefacts (cf. Fischer 1976, 42, fns. 48-50 for

	Khnum-mose	Cat. 1 Anonymous	Cat. 2 Amenhotep	Cat. 3 Anonymous	Cat. 4 Nebmehyt	Cat. 5 User	Cat. 6 Kenamun	Cat. 7 Usersatet	Cat. 8 Nianefer	Cat. 9 Ashaerhatet	Cat.10 Amennemhat
N(35)						no image available					no image available
A1						no image available			no image available		no image available
A9						no image available					no image available
A24						no image available					no image available
A53									no image available		
N8					no image available				not present		no image available
M8					no image available						no image available
D28			not present		no image available						no image available

Figure 11.15: compilation B of the palaeographical features of the shabti inscriptions (photos after/from the sources mentioned in the catalogue).

	Khnum-mose	Cat. 1 Anonymous	Cat. 2 Amenhotep	Cat. 3 Anonymous	Cat. 4 Nebmehyt	Cat. 5 User	Cat. 6 Kenamun	Cat. 7 Usersatet	Cat. 8 Nianefer	Cat. 9 Ashaerhatet	Cat.10 Amennemhat
V31									not present		
V30					no image available						
D4											
N37					no image available						
Q3											
T28											
W24									not present		
N35											
O34					no image						
D36											
Y1					no image						
Y5		not present		not present	not present	not present		not present	not present	not present	

Figure 11.16: compilation C of the palaeographical features of the shabti inscriptions (photos after/from the sources mentioned in the catalogue).

further references). A compilation which presents a number of palaeographical peculiarities encountered on the shabtis can be found in Figs. 11.14-16. Black and white cut-outs were chosen to provide a visually homogenous dataset. Due to the varied quality of the available imagery, both sharpness and depiction of details are considerably disparate. The compilation nevertheless serves as a basis for the following discussion.

11.2.5.1 Most consistent signs

Besides their shared material and iconography, the graphical style and execution of the signs carved onto our set of shabtis allowed Minault-Gout (2012) to group the initial five shabtis together. The reed-signs (M 17) and their composite derivative M 20 fully conform to Fischer's examples and share the characteristic diagonal dashes on the front side of the leaf. These lines are more or less regularly oriented and also vary in number, dimension and depth, as well as in general execution. In this way, each reed leaf is the unique result of the act of inscribing. The same is true for the small vertical stalks growing out of the baseline of M 20 that are only rarely represented (**Cat. 1** and **6** [in the case of **Cat. 6**, only one such stalk has been incised]).

The design of the *k*-sign (V 31) also represents one of the main characteristic features of the palaeographical style 3b of Fischer, together with the *nb*-basket (V 30) that is anyway only a simplified version of the *k*-basket without the handle. The main and common feature of these signs is their inner filling with one, two or three horizontal lines, possibly depending on their size. In some cases, one finds such decorated *k*- and *nb*-signs, as well as signs without these details (**Cat. 2**, **3**, **9** and **10**). Obviously, consistency was not a key aspect of the inscriptions, since in these latter cases there is no reason to assume that the different signs were made by different hands. A further differing detail can be observed in the design of the handle of V 31. On **Cat. 1**, **6**, **7** and the shabti of *Hnm.w-ms*, the handles were executed as small oval loop, while on **Cat. 4**, **9** and **10**, they were indicated as a short downward pointing stroke only. **Cat. 2** and **3** both show variants next to each other, while **Cat. 5** exhibits a rather rough and more spacious execution of the handle.

Individual choices within generally common forms can also be observed in the *p*-sign (Q 3). Interestingly, only a few shabtis follow the style 3b model of Fischer, in that their *p*-signs show two to three vertical lines as fill (**Cat. 5**, **8** and **9**). Some of the shabtis show this sign without fill (**Cat. 3** [one ex.], **4**, **9** and **10**), while others display it with one or two horizontal lines like the *k* and *nb*-signs (**Cat. 1**, **2**, **3**, **4**?, **5**, **6** and the shabti of *Hnm.w-ms*). The last group bears a combination of a horizontal line and small vertical dashes added in the spaces above and below (**Cat. 1**, **3** and **6**?). The most elaborate form, in fact more reminiscent

of Fischer 1967, fig. 4, style 1, can be found on **Cat. 7**. It follows the above-mentioned model, but the number and execution of the inner details stand out from the rest. The *p*-signs on the latter shabti are also fairly square and precise, in other cases (**Cat. 3**, **6** and the shabti of *Hnm.w-ms*), the lines are less accurately cut and oriented. Further differences of this sort can also be observed in other small signs such as *hr* (T 28) and *nw* (W 24), which share a common design, but show a range of individual forms.

The *m*-owl (G 17) exhibits a consistent design, with only minor differences in the volume of the head and body, the curvature of the back, the length of the legs and the presence of a short line to indicate the primaries. In the case of **Cat. 2**, the *m*-owl in the title *wr-n-Mjꜣm* (which was added later) differs from the other owls on this shabti since it displays two characteristic ears, which are also known in hieratic and in fact resemble the owl of Fischer's style 3b. Such ears, however, can also be encountered on **Cat. 5** and **10** as an original feature not associated with a later inscription. This fact again attests to the palaeographical variability of one sign on one shabti and within the whole group.

The *kꜣ*-arms (D 28) also follow the overall model of style 3b of Fischer, with the hands formed as small loops. Only the D 28 on the shabti of *Hnm.w-ms*, placed in front of the title and name in the second text line, was carved in a different way. Thus, it supports the idea that this part of the inscription is a later addition. Finally, the *jri*-eye (D 4) also represents an overall consistent design. The main differences lie in the layout and swing of the upper and lower lines and the execution of the pupil in between the simple form as a small single round incision (**Cat. 3**, **4** and **9**) or a small circle with an inner dot (**Cat. 7**).

The hieroglyph M 8 (šꜣ) also follows a consistent style. However, there are a number of variations, particularly in the orientation and rendering of the papyrus stems and umbels. The most intricate details of this sign can be found in the lower element: on **Cat. 3** and **9** without inner details, on **Cat. 1** (and possibly **Cat. 8**) with a short line across. **Cat. 3**, **6**, **7** and the shabti of *Hnm.w-ms* show small dots next to each other aligned along the centre, thus resembling each other considerably. It is, in fact, these details that connect the shabtis and their inscription variations. The inner filling in the form of lines observed in V 30, V 31 and partly M 8 can also be recognized in the šꜣ-lake sign (N 37) and the *mn*-gameboard hieroglyph (Y 5). In four cases (**Cat. 5**, **8**, **9** and **10**), N 37 has no inner line. In five other cases (**Cat. 1**, **2**, **6**, **7** and the shabti of *Hnm.w-ms*), such a line is present, while in one instance, N 37 was even written in an abbreviated linear form (**Cat. 3**). In regard to *mn*, which is only present on three shabtis because of the theophorous names of their owners, the inner filling line is visible only on **Cat. 2** and **6**.

The writing of šꜣ (N 37) on **Cat. 3** bears similarities with the book-roll sign (Y 1). There are cases in which

the lower element is drawn as a long and flat rectangle (Cat. 2, 3, 6, 7, 10 and the shabti of *Hnm.w-ms*) or as a small and large rectangle (Cat. 3, 5, 8 and 9). In a few other cases, this element was made in the form of a single line with small vertically indicated ends (Cat. 1 and 7). Such ends can also be found in several instances of the z-door bolt sign (O 34), which is otherwise consistently shown as a longer straight line. In several cases, it is also equipped with two small and clearly defined inner strokes (Cat. 5, 6 and 9). With regard to the “book-roll” Y 1, further details can be spotted in the individual rendering of the lacing and its individual elements. On Cat. 3, 4 and 10, another interesting use of signs can be observed. In the last line of the shabti spell, the “striking arm” (D 40) is employed in the particle *mk* instead of D 36. The forearm sign D 36 on the other pieces mainly differs in length and the way in which the hands are formed.

Finally, the group of signs representing “man and his occupations” needs to be discussed. The seated man (A 1) follows Fischer style 3b on all shabtis quite closely; there are also, however, some minor differences in the arrangement of the lines. The head is only rarely indicated with the left arm extending directly from this area. On Cat. 1, 5 and 6, the head of the man has the form of a small dot or circle. By way of exception, the seated man on Cat. 6 seems to miss his bent leg. A 1 on Cat. 9 seems to have been incised with less precision in terms of line thickness as its form is wider and less clear-cut. This also applies to A 9 and A 24 on Cat. 9. The “man steadying a basket on his head” (A 9) shows differences in the orientation of the right arm (only on Cat. 1 is this arm bent), the presence of the head in the form of a circle (Cat. 7 and the shabti of *Hnm.w-ms*) and the size and shape of the basket on the head amongst other minor variations. Many variations can also be recognised with A 24 (“man striking with stick”) and its general posture. In one case, the stick is not clearly indicated as such (Cat. 9). In other instances, the hieroglyphs resemble each other quite well, particularly in small details, such as the smaller extension at the back (Cat. 1, 2 and 7) and the indication of an apron (Cat. 2 and 7). A 53, the upright bearded mummy employed as classifier of the word shabti, is generally consistent, with only the volume of the individual signs varying from one shabti to another (cf. Cat. 7 and 9).

11.2.5.2 Less uniform and unique signs

Amongst the signs shown in Figs. 11.14-16, there are examples of even more diversity. For instance, the *h*-wick sign (V 28) can be found both as a continuous line with only two intersections (Cat. 3, 6, 8 and possibly 9) or as bearing two to three small horizontal or diagonal dashes under the round or oval upper loop (Cat. 1, 2, 5, 7 and the shabti of *Hnm.w-ms*). Whether this represents two different hands is, however, questionable, as no obvious correspondence between these signs and other particular

forms can be detected. The *wḏ*-sign (V 25) is only written in its usual form on Cat. 8, the other shabtis exhibit a form of *wḏ* (M 13), while Cat. 7 shows almost the canonical form. On Cat. 1, 3, 4 and 10, there is a simple vertical line with a papyrus umbel at the top (M 131). Cat. 2, 5, 6 and the shabti of *Hnm.w-ms* display this sign growing out of a small V-shaped form (M 13A), while Cat. 9 shows the plant growing from a base reminiscent of a *b* sign (D 58). By using such a form of *wḏ*, these texts engage in a visual and thematic pun in writing the term *wḏb.w* with *wḏ*, thus implying the semantic connection or result of the action *zmhi.t* ‘to water’ in relation to the yet dry *wḏb.w* that will become fertile and thus become *wḏ*, i.e., ‘green’.

A number of stark differences can be observed regarding the generally more complex sign *jḥb.t* ‘east’ (R 15) between abbreviated and elaborate designs. Cat. 5 and the shabti of *Hnm.w-ms* display only two small protrusions at the upper line, while Cat. 1 and 2 show three such lines. The bases of these signs that are not part of the canonical form differ in length and position. Cat. 3 and 7 bear three individual elements on top, either formed as oval dots or loops. Cat. 7 shows the most stylistically elaborate rendering of all, again supporting the impression that this piece was the most carefully executed one. In the case of Cat. 6 and 8, the *ḥb*-chisel sign (U 23) was used instead of the regular *jḥb*-sign, a well-known phenomenon in 18th Dynasty texts (Gardiner 1957, 502). The sign *jmn.t* ‘west’ (R 14) was more or less consistently written, but each time with individual traits. Some smaller inconsistencies in its design can be found on Cat. 1. In most cases, the upper feather is incised in outline, while on Cat. 5, it is smaller and completely incised. A unique rendering of *jmn.t* can be found on Cat. 2, where the left outline of the feather was alternatively designed as a stippled reed-leaf.

The writing of the term *hr.t-nṯr* ‘necropolis’ also presents some interesting variations. Cat. 1, 2, 6, 7 and the shabti of *Hnm.w-ms* display the word as a ligature of *nṯr* (R 8) and *hr* (T 28). Only in the case of the shabti of *Hnm.w-ms*, the upper closing line of *hr* was not connected with the vertical pole of *nṯr*. Cat. 3, 4, 5, 9 and 10 display the word with the *nṯr*-hieroglyph in honorific transposition followed by the preposition *hr*. Only Cat. 8 displays the term with the standard hieroglyphic combination R 10. In addition, the inner decoration of *hr* differs from one central vertical line connecting the lower and upper base line (Cat. 3 and 4) to two (Cat. 9) and three connecting lines (Cat. 5). In fact, this rendering is more consistent with the variants of *p* (Q 3) discussed above and does not resemble the actual signs T 28. Since Cat. 10 actually shows *hr* in a form that clearly resembles a simple *p*, one could again speculate that the *hr*-sign was indeed not understood as such or that the hieratic (?) text template was misinterpreted (cf. Möller 1909, nos. 388 and 397). Moreover, the flag of *nṯr* shows either no inner decoration (Cat. 4, 9 and 10) or one (Cat. 1, 2,



Figure 11.17: the bronze shabti of *Jwny* from Abydos, London, BM EA32692 (©The Trustees of the British Museum).

6 and the shabti of *Hnm. w-ms*) or two small horizontal lines (Cat. 3, 5 and 7). In this way, this sign is comparable to the renderings of V 30 and V 31 (as well as in part N 37 and Y 5).

Finally, another sign needs to be briefly discussed that shows particular variation: the “ripple of water” N 35 for *n* and its derivation N (35) used as classifier. Some shabtis write N 35 in a consistent way either as straight lines (Cat. 1, 2, 6, 8 and the shabti of *Hnm. w-ms*) with or without small vertical end lines, or as zig-zag lines (Cat. 3, 4, 9 and 10). However, there are also inscriptions in which both versions appear next to each other (Cat. 5 and 7). Particularly in the case of Cat. 7, one finds a few inconsistencies regarding the *n* sign: in the first *hrd-n-kꜣp*-title, N 35 was written with a horizontal stroke, while the second mention of this title includes the *n* in the form of a ripple of water. In addition, the N 35 after *hwi* could be inscribed as a simple line (Cat. 1, 2, 5, 6, 8 and the shabti of *Hnm. w-ms*) and in the form of a zig-zag line (Cat. 3, 7, 9 and 10). Interestingly, those shabtis on which N 35 is consistently written in such a way also exhibit the water-hieroglyph N 35A to be made of three zig-zag lines (Cat. 3 and 9). In the other cases, this determinative consists of the abbreviated form of three horizontal lines with or without small vertical endings.

11.2.5.3 Further individual forms

A few further examples allow us to understand the great variability of palaeographical traits in an otherwise coherent group of objects. The shabti of *Hnm. w-ms* stands out with its four vertically oriented dots within the word *shꜣ* and the later added *kꜣ*-arms (D 28). Cat. 1 is unique in its use of N 5 instead of N 8 within the word *shꜣ* and because of the different renderings of R 14 and Y 1 as well as the

fact that the *nw*-sign of *jnk* in line 5 appears as simple circle. Cat. 2 presents a unique rendering of *jmn.t* (R 14). Cat. 3 shows the sign N 37 as a simple line with a small diagonal stroke in the centre and the “striking man” A 24 resembles more the “standing man with arms in adoration” (A 30). Moreover, the letter *k* of *jnk* in the same line was written as V 30 and the bird-sign in the verb *kꜣ* looks more like an *m*-owl (G 17) than an *alef*-vulture (G 1). The same is true on Cat. 9. On Cat. 5, the N 8 determinative of *shꜣ* bears similarities with the sun hieroglyph N 5 resting on T 28, an impression that can also be partly gained from Cat. 6 and 9. Cat. 7 stands out with the most detailed ‘east’ hieroglyph R 15 and a canonical *wꜣd*-sign (M 13). Only on Cat. 8, both *wꜣb.w* (with V 25) and *hr.t-ntr* (with R 10) were written in the standard form. This feature sets this item well apart from the others. In the case of Cat. 9, the writer alternatively added a “book-roll” (Y 1) to *jpn* in line 2, while the erasure of the *jmn.tjt r jꜣb.tjt*-section seems to have been motivated by the realisation that this, in fact, was the “incorrect” sequence for the shabti spell. Furthermore, as on Cat. 3, the bird in the verb *kꜣ* in line 7 resembles an *m*-owl. For Cat. 10, only the potential rendering of the classifier of the name in the first line in the form of A 17 can be mentioned. The available photography does not allow us to draw further conclusions.

11.2.5.4 Palaeographical comparisons

Minault-Gout (2012, 196) pointed out a number of parallels in which a very similar style of writing individual signs can be recognised: e.g., the limestone shabti of King Ahmose (BM EA32191; Roehrig *et al.* 2005, 33-34, cat. 12) and the glazed steatite shabti of *Snjw* (MMA 19.3.206;

Roehrig *et al.* 2005, 38, cat. 16). A further example dates precisely from the time of Amenhotep II: the blue “glass” (=faience) shabti of the *jm.j-r'-jh.w-n-Jmn Kn-Jmn* (CG 46531; Newberry 1930-1957, 2, pl. XIV), on which the reed-signs (M 17) in particular, but also the *mn*-hieroglyph (Y 5) as well as the single-lined incised nature of the inscription bear similarities to the shabtis of our group.

Interestingly, the most direct parallels of palaeographical peculiarities encountered on the serpentine shabtis occur on rare metal funerary statuettes made of gold, silver, copper and bronze (*cf.* Fischer 1976, 42). The closest parallels can be found on the bronze shabti of the *zhz.w-nswt Jwny* from the Heqareshu Hill in Abydos (BM EA32692; Randall-Maciver and Mace 1902, 86, 96, pls. 39, 41.7; Fig. 11.17). The particular rendering of the reeds next to the inner lines of the more spacious signs such as *k* and *nb* immediately catch the eye. There are, however, also minor differences not only in the palaeography (the *p*-signs [X 1] are not filled with details), but also in the writing of certain words. Nevertheless, the resemblance is quite close and thus suggests a certain technical relationship between the execution of such kinds of inscriptions on bronze and serpentine.

Further examples dating to the reign of Amenhotep III are the gilded wooden shabti of the *wr.t-hnr.t-n-Jmn Twjw* (CG 51039), a shabti belonging to the *jtj-ntr Ywjz* made of copper worked around a wooden core (CG 51033) and another shabti of the *hkr.t-nswt Twjw* (CG 51038), which has a thin plaster layer covered with a silver foil around a wooden core (Quibell 1908, pl. XVII). However, the similarities are less articulate, but the characteristic reeds and filled-in *k*- and *nb*-signs occur. Two further late 18th Dynasty shabtis of bronze from Saqqara can be mentioned: Cairo CG 48408, inscribed for the *jm.j-hnt-n-nb-tz.wj Hr* and CG 48409, belonging to a *zhz.w-nswt jm.j-r'-jh.w Jmn-ms* (Newberry 1930-1957, 346-347, pl. XXVI). Although both type and text layout differ, a number of signs bear similarities with the shabtis in our group. The shabti of *Hs-mr=f* in the Calouste Gulbenkian Foundation, Lisbon (Schlögl and Brodbeck 1990, 83, fig. 20) also bears similar signs (*cf.* particularly the inner filling of V 30 and 31), as well as the 18th Dynasty basalt shabti of a certain *Kzb-n=f-Rc* in the Egyptian Museum, Florence (Cavillier 2016, 52-53, 312, N.18, Inv. 1861), especially the signs *j* and *p*.

The serpentinite shabtis in our group still stand out as unique artefacts due to their palaeography, even though parallels exist. Whether this style represents a workshop or rather a certain “palaeographical school” cannot be determined. In the case of the serpentinite shabtis discussed here, this style, however, was consistently used, suggesting that in this very workshop one (or more) scribe(s) applied it on a regular basis to such funerary statuettes made of serpentinite. Interestingly, **Cat. 7**, the shabti of the viceroy *Wsr-Stj.t*, shows the most detailed renderings with certain signs being closest to the canonical type models.

11.2.6 Provenance

Amongst the shabtis gathered here, at least six have a determined provenance (*cf.* Map 1). The shabti of *Hnm.w-ms* and **Cat. 1** were found in burial contexts within tombs at the elite cemetery SAC5 on Sai Island. **Cat. 5** was excavated in a New Kingdom shaft tomb in the elite necropolis of Aniba. **Cat. 10** and **11** both come from an elite tomb at Cemetery 96/1 at Dakka in Lower Nubia. Although the provenance of **Cat. 2** is unknown, it is highly likely that it comes from Toshka East in the greater Aniba region, the location of the rock-cut tomb of the *wr-n-Mjcm Hkz-nfr* from the time of Amenhotep III to Tutankhamun (Simpson 1963, 2-18; Müller 2013, 246-247). While those shabtis just mentioned suggest that New Kingdom Nubia was the main region of destination of funerary statuettes of this group (*cf.* Minault-Gout 2012, 196), **Cat. 6** from Abydos suggests that these serpentinite shabtis were also used in Egypt. **Cat. 7** might come from Thebes, if TT 116 in fact belongs to viceroy *Wsr-Stj.t*, as suggested by Hartwig (2010).

Regarding **Cat. 3, 4, 8** and **9**, no provenance can be determined. Minault-Gout (2012, 196) briefly suggested that **Cat. 3** as part of the Caillaud collection could come from Nubia.²⁰ Whereas the title *wr-n-Mjcm* (**Cat. 2**) suggests a specific provenance, other titles lack clear regional connections (**Cat. 4: hrd-n-kzp** and **Cat. 8: zhz.w**). Also, the iconography of the shabtis does not provide any indication about their provenance, since no sub-group seems to be specifically connected to Nubia. The shabtis with blanks (**Cat. 1, 3** and the shabti of *Hnm.w-ms*) and names/titles added later (**Cat. 2**, perhaps **Cat. 4**) might suggest a Nubian provenance, as stone shabtis from Nubia often include unfilled blank spaces due to their imported character (Steindorff 1937, 75; Lemos 2020, 12). However, blank spaces on shabtis are also known for Egypt (*cf.* Schneider 1977, 241-242). Overall, it seems that a connection between our group of shabtis and Nubia can be broadly accepted, even if the precise provenance of some objects is difficult to determine.

11.2.7 Prosopography

Prosopographical analysis allows us to understand who the people named in the inscriptions on the shabtis were. Table 11.1 summarizes the available personal information in terms of epigraphical evidence regarding the individuals named on the shabtis in our group. This information allows us to establish connections between individuals and places and reconstruct social hierarchies (Auenmüller 2018; 2020).

20 Between 1815 and 1822, Frederic Caillaud travelled along the Nile in Upper and Lower Nubia (*cf.* Bednarski 2014) and collected archaeological artefacts that he donated to the Musée Dobrée in Nantes (Santrot 2008, 91-95). There exists, however, no record about the findspot of **Cat. 4**.

Cat.	Name	Title(s)	Attestation	References
	<i>Hnm.w-ms</i> (SAC5 350)	<i>jm.j-r'-nb.yw</i>	faience vessel from Tomb 26 SAC5 352	this volume, TG 07.
		<i>nb.y</i>	faience vessel from Tomb 26 SAC5 353	Budka 2018b, 189-199, fig. 6; this volume, TG 07.
		[...]	faience vessel from Tomb 26 SAC5 555	this volume, TG 07.
2	<i>Jmn-htp</i>	<i>wr-n-Mj'm</i>	no further mentions	–
4	<i>Nb-mhy.t</i>	<i>hrd-n-ksp</i>	no further mentions?	see discussion & Table 11.2.
5	<i>Wsr</i>	<i>zhs.w</i>	two heart scarabs from tomb Aniba S 91	Steindorff 1937, 88, no. 15 & 21, pls. 48.15 & 49.21; Müller 2013, 422, 30.82.
		<i>zhs.w</i> [...]- <i>n-Wsws.t</i>	door lintel fragments Philadelphia E11368 found in tomb Aniba SA 6	Steindorff 1937, 59, pl. 34.12; Müller 2013, 422, 30.81.
		<i>zhs.w</i>	rock inscription Abu Sir H 69	Hintze and Reineke 1989, 39, no. H 69, pl. 32; Müller 2013, 446, 39.16.
		–	mentioned in rock inscription of his son <i>J'ht-ms</i> in Toshka East	Simpson 1963, 25, no. 2, fig. 20; Müller 2013, 425, 31.18.
	[<i>Wsr</i>]	[<i>zhs.w</i>]	wooden coffin from tomb Aniba S 91	Steindorff 1937, 198-200, pl. 39a; Müller 2013, 422, 30.83.
6	<i>Kn-Jmn</i>	<i>zhs.w</i>	no further mentions?	see discussion & Table 11.3.
7	<i>Wsr-Stj.t</i>	<i>jr.j-p'.t</i> <i>hs.tj-ε</i> <i>jtj-ntr-mry hr-d-n-ksp</i> <i>z3-nswt</i> <i>jm.j-r'-hss.wt-rs.jt</i>	fragmented statue from Deir el-Medina	Maystre 1935, 657-663, pl. I.1-4; Müller 2013, 368, 8.1.10.
	[<i>Wsr-Stj.t</i>]	<i>jr.j-p'.t</i> <i>hs.tj-ε</i> [...]	TT 116	Hartwig 2010.
	<i>Wsr-Stj.t</i>	<i>z3-nswt</i> <i>jm.j-r'-hss.wt-rs.jt</i>	rock-cut shrine 11 at Gebel Silsileh (rock statue 4)	Caminos and James 1963, 30-34, pl. 25; Müller 2013, 385, 13.2.
	[<i>Wsr-Stj.t</i>]	[<i>z3-nswt</i> <i>jm.j-r'-hss.wt-rs.jt</i>]	rock inscription at Gebel Tingar (also mentioned in smaller inscription of his <i>jd.n.w M'ht</i>)	Habachi 1957, 21-22, no. 11, fig. 6, pl. 6; Müller 2013, 385, 15.1.1.
	<i>Wsr-Stj.t</i>	[???	stela fragments from Gebel Tingar	Habachi 1980, 632, fn. 52; Müller 2013, 386, 15.1.2.
	<i>Wsr-Stj.t</i>	<i>z3-nswt</i> <i>jm.j-r'-hss.wt-rs.jt</i>	rock inscription Sehel SEH 253	Gasse and Rondot 2007, 148-149, 490; Müller 2013, 389, 15.3.4.
	<i>Wsr-Stj.t</i>	<i>z3-nswt</i> <i>jm.j-r'-hss.wt-rs.jt</i>	rock inscription Sehel SEH 255	Gasse and Rondot 2007, 150-151, 494; Müller 2013, 389, 15.3.5.
	<i>Wsr-Stj.t</i>	<i>z3-nswt</i>	rock inscription Sehel SEH 254	Gasse and Rondot 2007, 150, 491-492; Müller 2013, 389, 15.3.6.
	<i>Wsr-Stj.t</i>	<i>z3-nswt</i> <i>jm.j-r'-hss.wt-rs.jt</i>	mentioned in rock inscription of his <i>jd.n.w Sn-nfr</i> Sehel SEH 259	Gasse and Rondot 2007, 153-154, 495; Müller 2013, 389, 15.3.7.
	<i>Wsr-Stj.t</i>	<i>z3-nswt</i>	mentioned in rock inscription of his <i>kt.n.w NN</i> Sehel SEH 260	Gasse and Rondot 2007, 154, 497; Müller 2013, 389, 15.3.8.
	[<i>Wsr-Stj.t</i>]	[<i>z3-nswt</i>]	rock inscription Sehel SEH 257	Gasse and Rondot 2007, 152, 496; Müller 2013, 389, 15.3.9.
	[<i>Wsr-Stj.t</i>]	[...]- <i>nswt-nht</i> [<i>z3-nswt</i> <i>jm.j-r'-hss.wt-rs.jt</i>]	rock inscription Sehel SEH 256	Gasse and Rondot 2007, 151, 491 & 495; Müller 2013, 389, 15.3.10.
	<i>Wsr-Stj.t</i>	<i>z3-nswt</i>	mentioned in rock inscription of his scribe <i>Nhtsy</i> Sehel SEH 258	Gasse and Rondot 2007, 153, 494.
	[<i>Wsr-Stj.t</i>]	<i>z3-nswt</i> <i>jm.j-r'-hss.wt-rs.jt</i> <i>wbs-n-nswt-w'b-[-wj]</i>	fragmented stela from Wadi el-Hudi	Liszka 2017, 38-39, with two figs.
	<i>Wsr-Stj.t</i>	<i>jr.j-p'.t</i> <i>hs.tj-ε</i> <i>htm.w-[bj.tj]</i> <i>smr-w'.tj</i> <i>z3-nswt</i> <i>jm.j-r'-hss.wt-rs.jt</i>	rock-cut shrine 4 at Ibrim	Caminos 1968, 59-75, pls. 24-35; Müller 2013, 413, 29.2.
	<i>Wsr-Stj.t</i>	<i>jr.j-p'.t</i> <i>hs.tj-ε</i> <i>htm.w-bj.tj</i> <i>jm.j-r'-pr-n-Mr-tm</i> <i>z3-nswt</i> <i>jm.j-r'-hss.wt-rs.jt</i>	stela British Museum EA 623 from Wadi Halfa (originally from Buhen)	Hall 1925, 11, pl. 34; Smith 1976, 199; Davies 1991, 315 (1903); Zayed 1999; Müller 2013, 435, 38.12.
	[<i>Wsr-Stj.t</i>]	<i>wbs-nswt-wsb-ε.wj</i> <i>hrd-n-ksp</i> <i>z3-nswt</i>	rock inscription Kumma 122 (SNM 34340)	Dunham and Janssen 1960, 167, pl. 103; Hintze and Reineke 1989, 118, no. 422, pl. 156; Yvanez 2010, 37; Müller 2013, 449, 41.6; Davies 2017, 139, fn. 18.
	[<i>Wsr-Stj.t</i>]	<i>wbs-n-nswt-w'b-ε.wj</i> <i>hrd-n-ksp</i> <i>jm.j-r'-pr-m-Mryw-tm</i> <i>z3-nswt</i> <i>jm.j-r'-hss.wt-rs.jt</i>	statue from Uronarti (SNM 32)	Müller 2013, 445, 39.5; Davies 2018, 347-359, figs. 1-6.

Table 11.1: records of the shabti owners identified in our sample, with additional monuments mentioning them.

Cat.	Name	Title(s)	Attestation	References
	<i>Wsr-Stj.t</i>	<i>zmy</i> <i>z3-nswt</i>	stela Boston MFA 25.632 from Semna	Dunham and Janssen 1960, 17, Pl. 82; Helck 1955; Der Manuelian 1987, 155-158, fig. 37; Leprohon 1991, 3, 160-163; Müller 2013, 447, 40.7; Darnell 2014.
	<i>Wsr-Stj.t</i>	[<i>z3-nswt</i>] <i>jm.j-r'-h3s.wt-rs.jt</i>	stela Boston MFA 25.633 from Semna	Dunham and Janssen 1960, 43-444, pl. 39.c; Leprohon 1991, 3, 164-166; Müller 2013, 447, 40.8.
	<i>Wsr-Stj.t</i>	<i>jr.j-p^c.t</i> <i>hs.tj-^c</i> <i>htm.w-hj.tj</i> <i>smr-w^c.tj</i> <i>z3-nswt</i> <i>jm.j-r'-h3s.wt-rs.jt</i> <i>hrd-n-ksp</i>	stela Louvre E. 17341 from Amara West	Fairman 1939, 142, pl. 16.1; Barbotin 2005, 156-157, no. 85; Müller 2013, 452, 43.1; Spencer, P. 2016, pl. 201b.
	<i>Wsr-Stj.t</i>	<i>z3-nswt</i>	rock inscription at Debba, Dal Cataract	Davies 2014b, 41, pl. 24; Davies 2018, 52-53, pl. 12.
	[<i>Wsr-Stj.t</i>]	[<i>z3-nswt</i>] <i>jm.j-r'-h3s.wt-rs.jt</i>]	fragmented stela from Sai S. 63	Gabolde 2012, 130-135, figs. 13-15.
	<i>Wsr-Stj.t</i>	<i>jr.j-p^c.t</i> <i>hs.tj-^c</i> [<i>htm.w</i>]- <i>hj.tj</i> [<i>smr-w^c.tj</i>] <i>wb3-nswt-w^b-^c.wj</i> <i>z3-nswt</i> <i>jm.j-r'-h3s.wt-rs.jt</i>	fragmented seated figure from Sai cache, no. 1 (SNM 33130)	Davies 2017a, 134-137, figs. 1-6.
	<i>Wsr-Stj.t</i>	<i>z3-nswt</i>	fragmented stelophorous figure from Sai cache, no. 2 (SNM 33225)	Davies 2017a, 138, figs. 7-8.
	<i>Wsr-Stj.t</i>	<i>wb3-nswt-w^b-^c.wj</i> <i>hrd-n-ksp</i> <i>z3-nswt</i> <i>jm.j-r'-h3s.wt-rs.jt</i>	fragmented kneeling figure holding rectangular vessel from Sai cache, no. 3 (SNM 34947)	Davies 2017a, 138-139, figs. 9-10.
	<i>Wsr-Stj.t</i>	[<i>z3-nswt</i>] <i>jm.j-r'-[h3s.wt]-rs.jt</i>]	fragmented of inscription from Sai cache, no. 6 (no SNM number)	Davies 2017a, 140-141, fig. 14.
	[<i>Wsr-Stj.t</i>]	<i>jr.j-[p^c.t]</i> <i>hs.tj-^c</i>	fragmented seated figure from Sai cache, no. 7 (SNM 36537)	Davies 2017a, 140-141, fig. 15.
	<i>Wsr-Stj.t</i>	<i>z3-nswt</i>	stela fragments from Sai cache, no. 10 SNM 33224	Davies 2017a, 142, figs. 18-19.
	[<i>Wsr-Stj.t</i>]	[...]	inscribed sandstone fragments from Sai cache, no. 14 (no SNM number)	Davies 2017a, 143-144, fig. 24.
	<i>Wsr-Stj.t</i>	<i>z3-nswt</i> <i>jm.j-r'-h3s.wt-rs.jt</i>	rock stela at Tombos with Hekaemsasen	Davies 2009.
8	<i>Njs-nfr</i>	<i>zh3.w</i>	no further mentions	-
9	<i>ḥ3s-r-h3s.tsf</i>	-	no further mentions	-
10	<i>Jmn-m-h3s.t</i>	<i>hm-nfr</i>	no further mentions	-

Table 11.1: continued.

A first glance at Table 11.1 reveals stark differences in terms of the number of attestations of individual shabti owners. The owner of **Cat. 7**, the viceroy of Nubia *Wsr-Stj.t*, clearly stands out with no less than 32 attestations, including TT 116. In terms of social status, he is the top official of the administration of Nubia under Amenhotep II. The distribution of his records between Thebes and Tombos illustrates his sphere of influence in geographical terms. Among the shabti owners in our corpus, *Wsr-Stj.t* can be considered as the highest-ranking customer of the shabti workshop. The origin of *Wsr-Stj.t* is unknown, it is, however, often assumed that he came from the First Cataract area at Aswan, based on his theophoric name and the cluster of rock inscriptions which attest to his personal ties to this region. Besides the First Cataract, the fortified town of Sai and its temple were the second hotspot of his monumental presence, marked in the form of the largest group of 18th Dynasty private statuary in New Kingdom Nubia (see Davies 2017a).

The second ranking individual in terms of social prestige and administrative function in our group is the *wr-n-Mj^cm Jmn-htp* (**Cat. 2**). The shabti represents the only evidence of this local ‘chief of Miam/Aniba’ known to date (Schlögl and Brodbeck 1990, 66). As *wr-n-Mj^cm* during the time of Amenhotep II, he was possibly a predecessor of *R^c-htp* (pre-Amenhotep III) and certainly of *Hk3-nfr* (Amenhotep III-Tutankhamun) (Simpson 1963, 1-27; Müller 2013, 246-247). Since three rock-cut tombs are known in the conspicuous sandstone outcrop at Toskha East and Tomb I belongs to *Hk3-nfr*, Simpson (1963, 27) tentatively assigned Tomb II to *R^c-htp*. This would mean in consequence that Tomb III could belong to our *Jmn-htp* and that this is the place where his shabti **Cat. 2** was originally found. As *wr-n-Mj^cm*, *Jmn-htp* was a local Nubian ruler in the region of Aniba who adopted (or was actually given) an Egyptian name as he was integrated into the Egyptian administrative hierarchy in order to act as intermediary between the local sphere and the Pharaonic state and its agents.

No.	Title	Date	Attestation(s)	References
1	–	earlier Dyn. 18	stela Horniman Museum nn4246	https://www.horniman.ac.uk/object/nn4246 .
2	<i>mmj.w-n-pr-Jmn-ḥtp</i>	A. III	mentioned in pBerlin 9784, rt. 3,16+28 from Kahun	Gardiner 1906, 28-31, pls. 1-2; Murnane 1995, 43.
3	–	A. III	mentioned on stela Angers, Musée Pincé, III R 420.	Affholder-Gérard and Cornic 1990, 91-92 [71].
4	<i>jr.j-ḥ.t-n-ḥnk.t-nb.t-Sjt</i> <i>jr.j-ḥ.t-n-ḥnm.w-ḥnk.t-nb.t-Sjt</i>	Dyn. 18	rock inscription Sehel SEH 325 & 326	Gasse and Rondot 2007, 196-197, 449, 513.
5	<i>wbs-n-ms.w-nsw</i> <i>jm.j-r-ḥn-ḥms.w-nsw</i>	Dyn. 18	funerary cone FC 208	Davies and Macadam 1957, no. 208.
6	[...]	Dyn. 18	canopic jar fragment 2015.1287 from near TT 184	Fabian 2017, 23, 71, 76. (might belong to FC 208 <i>Nb-mḥy.t</i> above).
7	<i>zh3.w</i> <i>mmj-r-ḥt.wt</i>	Dyn. 18	funerary cone FC 504	Davies and Macadam 1957, no. 504.
8	<i>zsb</i>	late Dyn. 18	father of vizier <i>Wsr-Mnt.w</i>	Auenmüller 2015, 826.
9	<i>ḥ3.y-sryt-n-z3.w-ḥ5(w)-</i> <i>Nb-Mḥ.t-Rḥ</i>	late Dyn. 18 – early Dyn. 19.	mentioned in TT 51	Kitchen 1980, 401.9; Chevereau 1994, 113, no. 15.80.
10	<i>hr.j-ḥn-n-Hr</i>	Dyn. 18-19	limestone shabti CG 47257 from Abydos	Newberry 1930-1957, 120-121.

Table 11.2: working list of 18th Dynasty *Nb-mḥy.t* currently known to the authors.

If the reading of the title of *Jmn-m-ḥ3.t*, owner of **Cat. 10** and most probably also **Cat. 11**, as *ḥm-nṯr* is correct, he would be the only person from an explicitly religious milieu in the group of shabtis discussed here. Both his tomb at Dakka and his title attest to his personal ties to this place and the priestly responsibilities he carried out at the local sanctuary, which is attested by later reused stone blocks with the names of Thutmose III, Seti I and Merenptah (Firth 1915, 37-38, pl. 25; Farid 1979; Arnold 2003, 65).²¹ Given his local responsibilities, it is unlikely that further epigraphical evidence for the *ḥm-nṯr Jmn-m-ḥ3.t* will come to light. All identified rock inscriptions in Nubia known to the authors that mention the name *Jmn-m-ḥ3.t* date to the Middle Kingdom (Auenmüller 2019). A *zh3.w Jmn-m-ḥ3.t* from the time of either Thutmose I (or III) is known from an inscription at the Hagr er-Merwa at Kurgus next to a “standard(?)-bearer” of the same name (Davies 2017b, 82, nos. 12-13), although there is no conclusive evidence for either identification as our *Jmn-m-ḥ3.t*. Nevertheless, the priest *Jmn-m-ḥ3.t* from Dakka typologically belongs to the milieu of local priests attached to the main sanctuary of their urban centre in Nubia and buried in the respective elite cemetery (cf. Auenmüller 2020, 390-391).²²

21 These blocks are also attributed to a temple building at Quban on the other bank of the Nile (Roeder 1930, 15-16).

22 Other representatives of this local priestly milieu, mostly dating to the later 18th Dynasty or early Ramesside times, are *Mr-Jmn.w* (shabtis from Aniba Tomb S 57: Steindorff 1937, 78), *Mr-ms* (heart scarab from SAC5 Tomb 2: Minault-Gout and Thill 2012, 216, pls. 105 and 109); *ḥn-sb3* (shabti from SAC5 Tomb 8: Minault-Gout and Thill 2012, 183-187, pl. 92), *Zj* (heart scarab from SAC5 Tomb 8: Minault-Gout and Thill 2012, 223-224, pls. 103 and 108), *ḥ3-ḥpr-k3* (inscribed stone fragments from Soleb Tomb 22: Schiff Giorgini 1971, 242, figs. 471-472) and finally another *Mr-ms* (shabti and pot mark from Soleb Tomb 4: Schiff Giorgini 1971, 116, fig. 153 and 118, figs. 161-162). Further clearly Ramesside *ḥm-nṯr* priests are known from Aniba (*P3-n-Jmn*: shabtis from Tomb S 34: Steindorff 1937, 77; *T'-Jmn*: shabtis from Tomb SA 30: Steindorff 1937, 83).

As *hrd-n-k3p*, *Nb-mḥy.t* (**Cat. 4**) should have either belonged to the prestigious institution of the *k3p* which was connected with the education of the title holders at the royal court and thus offered the prestige of being in close proximity to the king (cf. Feucht 1985). Following a different interpretation, *Nb-mḥy.t* could otherwise have been a child who was born on the same day as the crown prince (and future king) and was thus granted such a special title (cf. Mathieu 2000). Given his relatively common name, the *Nb-mḥy.t* mentioned on shabti **Cat. 4** could possibly be identified with other known 18th Dynasty individuals bearing the same name. However, prosopographical research has so far not yielded any further data for a *hrd-n-k3p Nb-mḥy.t*, except from the shabti **Cat. 4**. Currently, ten 18th Dynasty individuals named *Nb-mḥy.t* are known to the authors (Table 11.2), none of which can be identified with our *Nb-mḥy.t*. He is, therefore, one of the many *hrd.w-n-k3p* who are only known from one object and who are not characterised by any high administrative office that would allow us to discuss further individual aspects.²³

Amongst the titles displayed by our shabti owners, the function of *zh3.w* ‘scribe’ appears most frequently: the owners of **Cat. 5**, **6** and **8** are all designated as such. In the case of *Wsr* (**Cat. 5**), both the location of his tomb and the partly destroyed title-addition [...]-*W3w3.t* found on the

23 Nevertheless, the title *hrd-n-k3p* connects *Nb-mḥy.t* to *Wsr-Sjt.t* (**Cat. 7**), who himself was a member of the same institution (pace Feucht 1985) or particular group of children (pace Mathieu 2000). As such, it could well be possible that both individuals were acquainted with each other. In an intermediate manner, *Jmn-ḥtp* (**Cat. 2**) could also have had a special relationship with this group, since the *wr-n-Mjfm ḥk3-nṯr*, one of his successors in office, was a ‘child of the *k3p*’ under Amenhotep III. He is also the only *hrd-n-k3p* known to have been buried in Nubia, while further ‘children of the *k3p*’ are known from at least a few rock inscriptions (cf. Žába 1979, 133, no. 95; Davies 2017b, 77-79, fig. 15, C6).

No.	Title	Date	Attestation(s)	References
1	<i>jm.j-r'-nb.yw</i> <i>s'nh-n-Jmn</i>	earlier Dyn. 18	mentioned in tomb TT 59 (tomb of his brother <i>w'eb-n-Jmn Jmn-m-hs.t</i>)	Eichler 2000, 319-320, no. 516.
2	<i>jm.j-r'-sh.wt-n-hm.t-nfr</i> <i>hs.tj-^c</i> <i>hr.j-pd.t</i>	T. III	a) canopic jar found in tomb of Psusennes I in Tanis Inv. 309 b) mentioned in tomb TT 24	a) Montet 1942, 89, fig. 56, pl. 28; Montet 1951, 58-59, fig. 22. b) Graefe 1981, 154-155, no. q50.
3	<i>wbs-nsw-w'eb-^c.wj-n-nfr-nfr-Mn-hpr-R'</i> <i>w'eb-n-Jmn</i> <i>jm.j-r'-šnw.tj</i> <i>hs.tj-^c-n-Mn-nfr</i> <i>zhs.w</i>	T. III - A. II	a) stelophor found in the Asasif b) funerary cone FC 23	a) Barakat 1983, 85-91; Van Siclen III, 1991, 156-159; Gessler-Löhr 1997, 34-36, pl. 2.2-3. b) Davies and Macadam 1957, no. 23. Eichler 2000, 320, no. 517; Auenmüller 2015, 872, BMMemphis-04.
4	<i>zhs.w-nsw</i> <i>zhs.w</i> <i>jm.j-r'-wdn.w-[n-Jmn]</i> <i>zhs.w-jr.jw</i> <i>jm.j-r'-pr-[...]</i>	T. III - A. II	tomb TT 412 including six canopic jars	Saleh 1983, 16-28, pls. 1-4.
5	[...]-n-(<i>Dsr-k3-R'</i>)	T. III - T. IV	stela MMA 28.9.6 probably from Thebes	Hayes 1959, 50-51, fig. 24.
6	<i>w'eb-n-Jmn</i>	T. IV - A. III	rock inscription on Sehel	Eichler 2000, 320, no. 519 (not mentioned in Gasse and Rondot 2007).
7	<i>jm.j-r'-šnw.tj-n-Jmn</i> <i>hs.tj-^c-n/m-n'.t-rs.jt</i>	A. III	a) tomb TT 162 b) funerary cone FC 12 c) monumental 'shabti' statue from Luxor temple	a) Porter and Moss 1960, 275. b) Davies and Macadam 1957, no. 12. c) Schögl 1983, 91-96. Eichler 2000, 319, no. 515; Auenmüller 2015, 905, BMTheben-10.
8	<i>w'eb-(n)-Mn-hpr-R'</i>	A. III	mentioned on stela of the <i>mn'.t-wr.t Nb.t-Kbny</i> CG 34117 from Abydos	Lacau 1926, 169, pl. 53; Urk. IV, 1940.10.
9	<i>w'hm.w-n-šs.tj</i>	mid Dyn. 18	stela from Karnak-Nord Inv.-no. A3853	Jacquet-Gordon 1999, 216-217, fig. 151.
10	<i>zhs.w-hsb-jt-n-Jmn</i>	Dyn. 18	funerary cone FC 72	Davies and Macadam 1957, no. 72; Eichler 2000, 320, no. 518.
11	<i>zhs.w-wr</i>	Dyn. 18	a) funerary cone FC 363 b) mentioned in rock inscription Sehel SEH 279 of his son <i>zhs.w P3-sr</i>	a) Davies and Macadam 1957, no. 363. b) Gasse and Rondot 2007, 170, 460.
12	<i>hr.j-šsy-hš(š)</i>	Dyn. 18	rock inscription Sehel SEH 292	Gasse and Rondot 2007, 117, 479.
13	-	Dyn. 18	oBerlin 10614 (letter of a <i>Kn-Jmn</i> to <i>Hr-ms</i>)	Wente 1990, 93.
14	<i>zhs.w w'eb</i>	Dyn. 18	owner of book of the dead pMoscow I, 1b, 132P & pMoscow I, 1b, 146	totenbuch.awk.nrw.de/objekt/tm133586 (last accessed 7 October 2020).

Table 11.3: working list of 18th Dynasty *Kn-Jmn* (except the *jm.j-r'-pr-wr-n-Prw-nfr Kn-Jmn*).

door lintel of his tomb point to his attachments to Aniba and Lower Nubia. While his son *J'h-ms* mentions his father in a rock inscription at Toshka East, *Wsr* himself inscribed his name and title at the Abu Sir massif, a prominent landmark on the east bank of the Nile at the northern end of the Second Cataract, overlooking the river. This inscription marks his own, quite possibly occupationally motivated presence south of Aniba at one of the most frequently visited and epigraphically used places in Nubia. Our understanding of *Wsr* as a local scribe at the administrative centre of Lower Nubia, Aniba, might also help us to locate his peers *Kn-Jmn* (Cat. 6) and *Nj3-nfr* (Cat. 8) as members of the scribal elite at the same social level and with comparable responsibilities, as was surely the case with *Kn-Jmn* in Egypt. While *Wsr* is better known through epigraphic sources than *Nj3-nfr* and *Kn-Jmn*, the latter could possibly be identified in the prosopographical record of the 18th Dynasty (see below). Since no other individuals named *Nj3-nfr* are known to the

authors, Cat. 8 seems the only epigraphical evidence that attests to his existence.

A preliminary prosopographical survey of the known attestations of individuals called *Kn-Jmn* dating to the 18th Dynasty is presented in Table 11.3. It provides the basis for potential further identifications of the owner of shabti Cat. 6. The most prominent *jm.j-r'-pr-wr-n-Prw-nfr Kn-Jmn*, active under Amenhotep II, can be excluded from the discussion. In his extensive dossier, there is no monument on which he bears the simple *zhs.w*-title and there are only two instances in which he bears the high-ranking status title *zhs.w-nswt* (Wild 1958, 237; Pumpenmeier 1998, 95-97).²⁴ The findspot of Cat. 6 seems to suggest a connection to the extra-sepulchral shabti depots of high-ranking non-local officials known from Abydos (Pumpenmeier 1998), but it

24 In addition, shabti Cat. 6 has, until now, never been attributed to this particular *Kn-Jmn* in the literature, since there is no compelling evidence for doing so.

might be equally conceivable that this shabti represents the sole remaining funerary object from the tomb of a local scribe called *Kn-Jmn*. Amongst the further 18th Dynasty officials with the name of *Kn-Jmn* listed in Table 11.3, at least five other *zḥz.w* appear: Nos. 3, 4, 10, 11 and 14. None of them can be unequivocally identified with the owner of shabti **Cat. 6**, however, Nos. 3 and 4 would be the most likely candidates from a chronological standpoint, given that the others (Nos. 10, 11 and 14) are only roughly dated (or rather dateable) to the 18th Dynasty.

The last title holder among the shabti owners is the goldsmith *Hnm.w-ms*. As *jm.j-r'-nb.yw* he also assumed the highest possible position in the professional milieu of the craft of gold workers (Auenmüller 2018; 2020). Interestingly, he is the only owner of a shabti from our group with a title related to craft activities. Thus, as goldsmith, *Hnm.w-ms* is the only clear representative of the social sphere of 'dependent specialists' (Trigger 2003, 154). It could well be that the owners of the anonymous shabtis **Cat. 1** and **3** as well as *šz-r-ḥz.t-f* (**Cat. 9**) were part of this social milieu of artisans or craftsmen, but any conclusive evidence for this idea is lacking. However, the fact that *Hnm.w-ms* managed to have access to a restricted foreign object such as a shabti suggests that he belonged to a higher "elite" group, at least in mid-18th Dynasty colonial Nubia, a position also established on the grounds of the display, through mortuary objects, of cultural affinities with Egypt.

11.3 Discussion: shabtis in 18th Dynasty Nubia

11.3.1 Provenance, materials and general typology

Over 1200 shabtis were found across New Kingdom cemeteries in Nubia (Lemos 2020, 11), only 78 (approx. 6-7%) of which could be dated to the 18th Dynasty (Table 11.4).²⁵ Thill (1996) produced a thorough list of New Kingdom cemeteries in Nubia containing shabtis that, although now out of date, remains an invaluable resource. Geographically, sites containing shabtis range from Shellal in Lower Nubia to Tombos in Upper Nubia. Comparison of distributions of shabtis at various sites reveals that these objects concentrate at elite sites, especially at Aniba (Lemos 2020, 17). Eighteenth Dynasty shabtis from Nubia were mostly made of various types of stone (56 items or 73% based on Table 11.4), but other materials include faience,

clay and wood (21 items or 27% based on Table 11.4). In general, faience and clay were the most common materials used to manufacture shabtis throughout the New Kingdom in Nubia, but their general style and typology suggest that such pieces mostly date from the later New Kingdom (e.g., Steindorff 1937, 74-85, pls. 74-78). Wooden shabtis are extremely rare in Nubia, which is probably related to the poor preservation of this material in the region (cf. Schiff Giorgini 1971, 304; Smith 2003a, 148-149).

Eighteenth Dynasty shabtis from Nubia seem to be mostly made of various stones (Minault-Gout and Thill 2012, 174; Table 11.4). Examples come from several sites, mainly Aniba (Steindorff 1937, pl. 42), Sai (Minault-Gout and Thill 2012, pls. 91-98) and Soleb (Schiff Giorgini 1971, 108, 118, 133, 167, 193, 289, 310 and 331). In 18th Dynasty Egypt, shabtis were often made of hard stones, especially dark ones (Schneider 1977, 233). Even though in Nubia shabtis usually come from reused and/or plundered contexts, typological analysis suggests that 18th Dynasty shabtis from local cemeteries follow the same pattern as in Egypt in the same period. These objects were usually mummiform with no hands apparent, or empty hands, and wear a tripartite wig. These characteristics fit Schneider's classes VA and VB (Schneider 1977, 186-198). The first tools seem to have appeared only at the end of the 18th Dynasty (Aubert and Aubert 1974, 35), which is also the case for the duplex wig (Aubert and Aubert 1974, 48) and the garment of the living (Martin 1986, 110). These features were rare in the 18th Dynasty, only becoming more common from the 19th Dynasty (Stewart 1995, 33; cf. also Milde 2012 and Miniaci 2014, 255-272). Burial assemblages from intact contexts in Nubia further suggest that mummiform stone shabtis generally date to the mid-18th Dynasty; SAC5 Tomb 26 (this volume) and Aniba Tomb S91 (Steindorff 1937, 199; Helmbold-Doyé and Seiler 2019, 82-83) are the main examples.

11.3.2 Serpentinite shabtis in Nubia

Ten serpentinite shabtis (cf. Table 11.4), five of which are included in our catalogue (**Cat. 1, 5, 10, 11** and the shabti of *Hnm.w-ms*) come from New Kingdom Nubia. The remaining five come from SAC5 Tombs 3 and 8 at Sai (shabtis T3Ca51 [uninscribed] and T8Cc79 [*ḥm-nṯr ḥn-sb3*]: Minault-Gout and Thill 2012, 180, 183-187, pls. 91-92), from Unit 6, Pit G at Tombos (anepigraphic: Smith 2003a, 41, fig. 3.4), and from Tomb 1 at Toskha East (TE 1.2 [= Cairo JdE 89629] and TE 1.3 [= Yale YPM 222256] of the *wr-n-Mj'm Ḥk3-nfr*: Simpson 1963, 14, pl. VIIa-c). A further possible example was excavated at Tomb 3 in Cemetery 7 at Shellal, although the available description is imprecise (Reisner 1910, 63).

Shabti T3Ca51 from Sai and the serpentinite shabti from Tombos are both anepigraphic and in general comparable in terms of style and quality of the material, while SAC5 T8Cc79 is a finely decorated figure made of green serpentinite and

25 Dates were established mostly based on photographs and descriptions available in archaeological reports. Shabtis from Aniba were analysed by Lemos in Leipzig. The total number of shabtis from New Kingdom Nubia is based on a data set collected by Lemos as part of his PhD thesis and can be considered to represent the shabti phenomenon in New Kingdom Nubia.

Site	Tomb	Material	Inscription	Name	Title
Aniba	S 10	limestone	-	-	-
Aniba	S 10	limestone	Ch. 6	no data	-
Aniba	S 10	wood	-	-	-
Aniba	S 28	granite	Ch. 6	left blank	-
Aniba	S 52	steatite	Ch. 6	left blank	-
Aniba	S 59	siltstone	Ch. 6	-	-
Aniba	S 62	wood	not preserved	-	-
Aniba	S 62	wood	not preserved	-	-
Aniba	S 62	wood	not preserved	-	-
Aniba	S 63	schist	Ch. 6	left blank	-
Aniba	S 66	limestone	Ch. 6	<i>Rwjw</i>	- [<i>jd.n.w-n-z3-nswt</i>] (on his two tomb statues, <i>Rwjw</i> is designated as <i>rh-nswt-tpj-n-z3-nswt</i> und <i>jd.n.w-n-z3-nswt</i> (Steindorff 1937, 69-70).
Aniba	S 66	limestone	corrupted	-	-
Aniba	S 68	clay	-	-	-
Aniba	S 68	clay	-	-	-
Aniba	S 68	clay	-	-	-
Aniba	S 68	clay	-	-	-
Aniba	S 91	serpentinite	Ch. 6	<i>Wsr</i>	<i>zhs.w</i>
Aniba	S 91	siltstone	Ch. 6	<i>H'cy</i>	<i>nb.y</i>
Aniba	S 91	siltstone	Ch. 6	left blank	-
Aniba	S 91	siltstone	Ch. 6	left blank	-
Aniba	S 91	faience	Ch. 6	illegible	-
Aniba	SA 11	steatite	Ch. 6	illegible	illegible
Aniba	SA 11	limestone	illegible	illegible	illegible
Aniba	SA 27	faience	-	<i>S'q.tw</i>	<i>nb.t-pr</i>
Aniba	SA 27	faience	-	<i>S'q.tw</i>	<i>nb.t-pr</i>
Aniba	SA 27	limestone	Ch. 6	left blank	-
Aniba	SA 27	limestone	-	-	-
Aniba	SA 33	limestone	illegible	illegible	illegible
Aniba	SA 33	limestone	illegible	illegible	illegible
Aniba	SA 33	siltstone	Ch. 6	<i>T3-h'.t</i>	-
Dabod	Cem. 24, Tomb 1	limestone	inscribed	illegible	illegible
Dakka	Cem. 96/1, Tomb 2	serpentinite	Ch. 6	<i>Jmn-m-h3.t</i>	<i>hm-ntr</i>
Dakka	Cem. 96/1, Tomb 2	serpentinite	-	-	-
Qustul	Cem. R, Tomb 94	wood	-	-	-
Sai, SACS	T 1	serpentinite	Ch. 6	left blank	-
Sai, SACS	T 2	clay	uninscribed	-	-
Sai, SACS	T 2	clay	uninscribed	-	-
Sai, SACS	T 3	serpentinite	uninscribed	-	-
Sai, SACS	T 5	steatite	Ch. 6	<i>Nby</i>	<i>hs.tj-c-n-Shm</i>
Sai, SACS	T 8	serpentinite	Ch. 6 + festival of the Lord of Busiris	<i>Hnsb3</i> and his mother <i>Nns</i>	<i>hm-ntr</i>
Sai, SACS	T 26	serpentinite	Ch. 6	<i>Hnm.w-ms</i>	<i>nb.y</i> (& <i>jm.j-r'-nb.yw</i>)
Shellal	Tomb 3	limestone	inscribed	illegible	-
Shellal	Tomb 3	serpentinite?	?	?	?
Shellal	Tomb 5	limestone	-	-	-
Soleb	T 2	clay	-	-	-

Table 11.4: working list of relatively well-dated 18th Dynasty shabtis from New Kingdom cemeteries in Nubia (as catalogued in Lemos' PhD thesis with minor additions and modifications). Entries in **bold** refer to our catalogue.

Site	Tomb	Material	Inscription	Name	Title
Soleb	T 2	sandstone	-	-	-
Soleb	T 3	sandstone	?	?	?
Soleb	T 4	sandstone	-	-	-
Soleb	T 4	faience	Ch. 6.	<i>Mr-ms</i>	<i>hm-nfr</i>
Soleb	T 4	sandstone	-	-	-
Soleb	T 4	sandstone	-	-	-
Soleb	T 5	schist	-	-	-
Soleb	T 6	sandstone	-	-	-
Soleb	T 10	sandstone	-	-	-
Soleb	T 11	limestone	-	-	-
Soleb	T 11	faience	-	-	-
Soleb	T 11	faience	Ch. 6	<i>Hnm.w-htp</i>	<i>zhs.w</i>
Soleb	T 11	limestone	-	-	-
Soleb	T 14	faience	inscribed	-	-
Soleb	T 15	limestone	Ch. 6	<i>Mr.yt-šr.yt</i>	<i>nb.t-pr</i>
Soleb	T 18	faience	-	-	-
Soleb	T 18	sandstone	-	-	-
Soleb	T 18	sandstone	-	-	-
Soleb	T 18	clay	Ch. 6	-	-
Soleb	T 21	limestone	?	?	?
Soleb	T 21	limestone	-	-	-
Soleb	T 21	sandstone	?	?	?
Soleb	T 21	sandstone	inscribed	?	?
Soleb	T 24	sandstone	Ch. 6	<i>Mr.yt-šr.yt</i>	<i>nb.t-pr</i>
Soleb	T 24	sandstone	-	-	-
Soleb	T 32	limestone	Ch. 6	<i>Hʿj-m-Wss.t</i>	<i>[jdn.w?]-n-Hʿj-m-msʿ.t</i>
Soleb	T 37	sandstone	-	-	-
Tombos	Unit 6	serpentinite	uninscribed	-	-
Tombos	Unit 30	steatite	Ch. 6	<i>Ty</i>	<i>wʿb</i>
Toshka	Hekanefer	steatite	Ch. 6	-	-
Toshka	Hekanefer	serpentinite	Ch. 6	<i>Hkz-nfr</i>	<i>wr-n-Mjʿm</i>
Toshka	Hekanefer	serpentinite	Ch. 6	<i>Hkz-nfr</i>	<i>wr-n-Mjʿm</i>
Toshka	Hekanefer	limestone	<i>shd Wsjr</i>	left blank	-

Table 11.4: continued.

possibly altered later in time (*cf.* Minault-Gout and Thill 2012, 186-187). SAC5 shabti T3Ca51 and the shabti from Unit 6 at Tombos were both found in close association with the body and coffin (Minault-Gout and Thill 2012, 62; Smith 2003a, 148), similarly to the serpentine shabti **Cat. 5** found *in situ* at Aniba Tomb S 91 and the shabti of *Hnm.w-ms* at SAC5 Tomb 26. Smith (2003a, 146-147) suggested that the shabti from Unit 6 at Tombos was discovered where ancient grave robbers had left it. Comparison with other stone shabtis, particularly **Cat. 1, 5** and the shabti of *Hnm.w-ms*, suggests that there is an underlying pattern regarding the placement of these figurines next to the body or coffin (*e.g.*, Minault-Gout and Thill 2012, pls. 51-62 for the location of funerary goods including shabtis in tombs at cemetery SAC5 on Sai; and Miniaci 2014, 262-269, about the development of the use and concept of the shabti statuettes during the New Kingdom).

11.3.2.1 Typology and dating

The group of serpentinite shabtis collected by Minault-Gout (2012) and expanded here can be considered as a suitable representative of the shabti phenomenon in the 18th Dynasty. The majority of the shabtis in the group fit Schneider's VA model (simple mummy with no apparent hands and no beard) with the exception of three examples (**Cat. 5, 8** and **10**) that can be classified as model VC1 (simple mummy with no apparent hands, with beard). Both types are typical of the earlier part of the New Kingdom in Egypt. The tripartite wig worn by all shabtis in the group can be considered as a further characteristic of 18th Dynasty funerary figurines. Another datable feature is the more complete version of the shabti formula present on them. From the 19th Dynasty, the simpler version of the shabti formula (*shd Wsjr* [title and name] *msʿ-lrw*) became more common (Taylor 2001, 226).

11.3.2.2 Resources and manufacture

Serpentine, a metamorphic and ‘*very tough and thus solid-looking, mainly greenish rock*’ with ‘*slightly streaky, dark green or occasionally reddish appearance*’ (Klemm and Klemm 2008, 18) was mainly sourced in the Eastern Desert around Qena-Luxor including some tributaries of the Wadi Hammamat (Klemm and Klemm 1993, 5; 2008, 294-295; Harell 2013, 6-7). The region around Barramiya to the east of Edfu and the Wadi Shaït to the east of Kom Ombo (Putter and Karlshausen 1992, 138) and the Eastern Etbai as well as the region of the Wadi Allaki (Aston 1994, 58) are also known as sources of raw serpentine. The exact geological origin of the serpentine used to manufacture the shabtis discussed here can currently not be determined because of the variety of sources on the one and the impossibility to ‘*achieve a regional, much less a precise local attribution*’ based on mineralogical and geochemical studies on the other hand (Klemm and Klemm 2008, 294).

Both black and green serpentine was used to manufacture funerary objects in pharaonic Egypt (cf. Putter and Karlshausen, 1992, 138-139; Harrell 2013, 21) or statuary (e.g., Minault-Gout 1996; Schulz 2008). Ten shabtis in our group were made of black serpentine, while one example was crafted from dark green serpentine. The ancient Egyptians referred to serpentine as *nmlhf* (etym. [*n*]-*mh-f*) or *shr.t* (Harris 1961, 113-115; 130-131; Putter and Karlshausen 1992, 136; Harrell 2013, 6-7). However, the same word was used to refer to dark greenish stones in general, e.g., nephrit (Wb 2, 268.17) and dolerite (cf. Morardet 1982; Aufrère 1991, 545-547). A *nmlhf*-stone is specifically mentioned in variants of chapter 30B of the Book of the Dead concerning the manufacture and use of heart scarabs (Naville 1886, 97, Ac, Ba, Ik; see also Hermann 1958; Malaise 1973; 1978, 45-49), examples of which were found in association with the burial of *Hnm.w-ms* (see Chapter 7.2.7, TG 07) or together with the shabti of *Jmn-m-ḥz.t* at Tomb 96:2, Dakka (Firth 1915, 148, pl. 38b-c). In addition, it has also been proposed that the term *ḥmwt/ḥmyt* designates serpentine besides talc and steatite (Aufrère 1989, 15-24).

In pharaonic Egypt, the production of luxury goods, amongst them funerary objects, was largely controlled by the state. Therefore, workshops producing such objects were associated with administrative centres and institutions such as temples and palaces (Schneider 1977, 242-244; Haring 1997, 237-245; Kemp 2006, 328-329; Hodgkinson 2018, 9-16). According to Schneider (1977, 240), workshops in Egypt specialised in materials and technologies, instead of focusing on specific categories of objects. Recent settlement excavations have provided evidence for “multi-material” workshops that worked glass, faience and metal in proximity to stone and textile. These workshops operated on

different scales, from industrial to household levels, and under distinctive intensities of state control (Prell 2011; Hodgkinson 2018). The concept of “workshop” and its identification in the archaeological record or based on particular object groups is currently also discussed (Ilin-Tomich 2017; Connor 2018). Connor (2018, 11-30) distinguishes materials worked, architectural context and “clientele” as the three main factors to identify different sculpture workshops. A further differentiation between “typological” and “material” workshops has recently been put forward based on research of scarab production (Boonstra 2020). Both these perspectives provide helpful guidelines for understanding the Egyptian workshop that crafted the serpentine shabtis collected here. In fact, the evidence gathered and discussed in regard to this group supports the workshop definition of Connor (2018, 28): ‘*a ‘group of craftsmen/artists producing works in a common and coherent style’. ‘Workshops’ are identified by recurrent stylistic specificities which allow us to single out distinctive groups within the corpus of the same period.*’

In terms of characterising the workshop, the attestation of a special title ‘*shabti maker*’ would help us to identify individual craftsmen and possibly also the location of their workshop. Such a title, however, has not been recorded for the New Kingdom (Valbelle 1972, 15). This might indicate that this craft was not regarded as a separate profession, or, even more plausibly, that the shabti makers were part of the larger group of *ḥmw.tj*-craftsmen working with different kinds of stone (Drenkhahn 1976, 52-69; Steinmann 1980, 138-142). For the Third Intermediate Period, the title *ms-ḥm.w* has been possibly identified as ‘*shabti maker*’ (Miniaci 2014, 247-249, note [b]). Later, the producers of faience shabtis were designated as *bꜥbꜥ* ‘*faience workers/glazers*’ (Černý 1942, esp. 114, note [m]; Ward 1977, 276; Poole 2005, 165).

11.3.2.3 Further products of the workshop?

Based on the above considerations, it can be assumed that the catalogued serpentine shabtis in fact only represent a small share of the entire produce of the workshop in which they were manufactured. Therefore, following Schneider (1977, 240), a shabti from Aniba Tomb S 28 with text blanks, whose material was identified by Steindorff as granite, has been excluded from our analysis, although it follows a similar decorative pattern to the funerary figurines in our catalogue (VA model, W4 wig, spaces for names are empty). It also shows differences in palaeography and the execution of the hieroglyphic signs (Steindorff 1937, 77, pl. 42.9). The material identification could, however, also be incorrect. In the cases of **Cat. 7** and **10**, the original description as ‘*basalt*’ and ‘*slate*’ could be amended to serpentine, thus also this shabti from Aniba Tomb S 28 could potentially have been misidentified in terms of material.

No.	Name	Title	Date	Attestation	Provenance	Material	Schneider Model	References
1	uninscribed	uninscribed	early Dyn. 18	T3Ca51, Inv. 914, Lille 2479	Sai, SAC5, Tomb 3	greywacke (or serpentinite)	VA	Minault-Gout and Thill 2012, 180, pl. 91.
2	uninscribed	uninscribed	Dyn. 18	shabti	Tombos, Unit 6, Pit G	serpentinite	VA	Smith 2003a, 41, fig. 3.4; 148, fig. 6.13.
3	left blank	left blank	Dyn. 18	shabti	Aniba, Tomb S 28	granite (?)	VA	Steindorff 1937, 77, pl. 42.9.
4	<i>Sn-nfr</i>	<i>ḥs.tj-^c-n-n'.t-rs.jt</i>	A. II	private collection Freiburg i.B. FP 26	possibly TT 96 or KV 42	dark speckled serpentinite	VA	Schögl and Brodbeck 1990, 68, no. 17.
5	uninscribed	uninscribed	late Dyn. 18	Museo Gregoriano Egizio 19170	unknown	"green hard stone"	VA	Grenier 1996, 24, pl. X, no. 25.
6	<i>Hnsbꜣ & Nns</i>	<i>ḥm-nfr / -</i>	mid-18th Dyn.	T8Cc79 (SNM Khartoum)	Sai, SAC5, Tomb 8	grey-green serpentinite	VA	Minault-Gout and Thill 2012, 183-187, pl. 92.
7	<i>Hwy</i>	<i>zḥs.w-nswt jm.j-r'-pr</i>	late Dyn. 18-early Dyn. 19	Museo Egizio Gregoriano 19333	unknown	"hard dark green stone"	VA	Grenier 1996, 80-81, pl. LI, cat. 118.
8	<i>Mry-mry</i>	<i>zꜣ.w[ty-pr-ḥd]</i>	A. III	Leiden AF 24d	Saqqara	greyish speckled serpentinite	VB1	Schneider 1977, 62, pl. 21, no. 3.2.1.21.
9	<i>Sꜣ-nw.t</i>	<i>ḥm-nfr-sn-nw-n-Jmn</i>	A. III-A. IV	Cairo CG 46539	Abydos	reddish black serpentinite	VB1	Newberry 1930-1957, 6-7, pl. XIII; Schneider 1977, 189.
10	<i>Hꜣy</i>	<i>ḥr.j-s.t-^cs(t)</i>	A. II	Turin, Museo Egizio, S. 8337	TT 8	steatite (green serpentinite in Schneider 1977, 189).	VB1	Schiaparelli 1927, 71, fig. 38; Ferraris 2018, 65-67, figs. 69-70.
11	<i>Ns-ḥr-ḥw</i>	<i>zḥs.w-nswt jm.j-r'-pr-wr</i>	late Dyn. 18-early Dyn. 19	Leiden AF 24e	Saqqara	serpentinite	VB1	Schneider 1977, 63, pl. 21, no. 3.2.1.24.
12	<i>Jmn-ḥtp</i>	-	A. III	Amiens, Musée de Picardie 94.3.26	unknown	dark serpentinite	VB3	Perdu and Rickal 1994, 67, no. 80.
13	<i>Kfrj</i>	<i>nb(.t)-pr</i>	late Dyn. 18	private collection Zurich ZP III 7	unknown	black serpentinite	VB3	Schögl and Brodbeck 1990, 80-81, no. 26
14	<i>Dbs-rnp.t</i>	<i>nb.t-pr</i>	A. III	Hans & Sonja Humbel collection HHS P.216 (ex-Kofler-Truniger)	unknown	black serpentinite	VB3	Wiese 2014, 62-63, no. 25.
15	<i>NN</i>	no data	mid Dyn. 18	art market	unknown	black serpentinite	VC1	Sotheby's 1992, lot 15.
16	<i>Ḥkꜣ-nfr</i>	<i>wr-n-Mꜣm</i>	Tut.	Cairo JdE 89629	Toshka East, tomb I	grey-green serpentinite	VC2 partly	Simpson 1963, 14, fig. 10, pl. 7a-c; Schneider 1977, 201.
17	<i>Ḥkꜣ-nfr</i>	<i>wr-n-Mꜣm</i>	Tut.	Yale YPM 222265	Toshka East, tomb I	grey-green serpentinite	VC2 partly	Simpson 1963, 14, fig. 10, pl. 7a-c; Scott 1986, 110-111, no. 61.
18	<i>Nfr-ḥr</i>	<i>*jm.j-r'-ḥm-w.t-n-ḥw.t-nfr</i>	late Dyn. 18-early Dyn. 19?	Helsinki private collection	Medinet Habu?	black serpentinite	VIIA1	Holthoer 1974; Scheider 1977, 212.
19	<i>Bnr-mrw.t & Jhm</i>	<i>jm.j-r'-ks.t ḥm-nsw / -</i>	T. III	double-shabti New York MMA 44.4.73	unknown	serpentinite?	VIIA2	Schneider 1977, 212-213; Capel and Markoe 1996, 54, cat.-no. 4.
20	<i>Ḥkꜣ-r-nḥḥ</i>	<i>[nm^c-n-zꜣ-nswt]</i>	T. IV	Cairo CG 46567	Valley of the Kings	black serpentinite	VA	Newberry 1930-1957, 22.
21	uninscribed?	uninscribed?	Dyn. 18	feet of a shabti	Shellal, Cemetery 7, Tomb 2	"black grey stone"	?	Reisner 1910, 63.

Table 11.5: working list of further 18th Dynasty serpentinite shabtis.

If we accept the existence of an Egyptian workshop producing shabtis alongside other objects made of serpentinite, we might actually be able to indicate additional funerary statuettes made of this material that could have been products of the same workshop. Table 11.5 lists several 18th Dynasty serpentinite shabtis belonging to private individuals, which could possibly be considered as products of the same workshop as the shabtis in our group.

A first look at the shabtis listed in Table 11.5 reveals several differences, not only in terms of typology, but also iconographical details. Nos. 1-7 follow Schneider's Type VA (mummiform, no hands, no beard). No. 6 stands out with a striated wig, whereas a collar was added to Nos. 5 and 7, while the latter also displays a single vertical text column. Regarding Nos. 1 and 2, certain deviations from the usual iconography can be recognised, which

suggests that these two figurines could also be local products. The closest relationship between these shabtis and our workshop is represented by No. 4, which Schlögl and Brodbeck (1990, 67) compared with **Cat. 2**. Based on material, type and execution of the facial features, they concluded that both figurines originated in the same mid-18th Dynasty, most probably Theban workshop. However, since the inscription was carved in a different manner, one could speculate that the texts on the serpentinite shabtis **Cat. 1-10** were inscribed by different hands than the ones who carved the shabti of *Sn-nfr*. The next group (Nos. 8-11) follows Schneider's Type VB1 (mummiform, empty hands, no beard). Workmanship and iconography provide no direct link to the shabtis **Cat. 1-10**. The same is true for Nos. 12-14. Nos. 12 and 14 display some palaeographical affinities with shabtis **Cat. 1-10**. However, the similarities are insufficient to establish any conclusive links to the workshop that produced the shabtis in our group.

On the contrary, No. 15 could potentially be assigned to this workshop, since the facial features, wig and beard compare well with our group, particularly **Cat. 5, 8 and 10**. However, No. 15 has not only a much larger collar, it was also inscribed in a different palaeographical style that can, for instance, be found on Nos. 10 and 12. The two serpentinite shabtis of *Hkz-nfr* (Nos. 16-17) comply only partially with Schneider's Type VC2 (mummiform, empty hands, with beard), since the incised hands hold small stylised whips. Simpson (1963, 14-15) already commented on both shabtis and their particularly fine workmanship and suggested a Theban provenance. In addition to iconographical features, both shabtis share a quite distinct physiognomy that is reminiscent of later 18th Dynasty artistic styles. This, however, does not link them to the serpentinite shabtis in our group; rather, it sets them apart quite widely. Nos. 18-19 are both special shabti types, in the case of Nos. 20-21, there is only little information available that would allow any further considerations.

To conclude, only Nos. 4 and 15 can be ascribed to the same workshop with reasonable certainty. In fact, it seems that our shabti group represents the core output of this Theban (?) workshop, not only in terms of chronology and stylistic features, but also in terms of its clients and their local and social integration. This supports Connor's statement (2018, 28) regarding stone sculpture workshops and the social status of their clients. According to him, *'[p]ieces with such homogenous stylistic particularities may have in common their place of extraction or production, the nature and hardness of their material, but more than anything else the people who commissioned them.'* In our case, those people are only partly known, particularly in the case of the shabtis used with blanks in Nubia. Nevertheless, the final customers seem to have been specially connected to the Egyptian administration of Nubia.

11.4 Stone shabtis and Nubian society in the 18th Dynasty

Eighteenth Dynasty stone shabtis in Nubia represent a very small sample of broader shabti data sets from New Kingdom Nubia. These funerary figurines were imported, especially given that the stones of which they were manufactured were not locally available in Nubia. Evidence firstly collected by Minault-Gout (2012) provides some conclusive insights into the foreign production and import of stone shabtis, especially **Cat. 1, 5 and 10**, enlarged by Budka (2017c; 2018b) with the discovery of the shabti of *Hnm.w-ms*. Typology and particularities regarding inscriptions and material allow us to distinguish our group as a cohesive assemblage of objects produced in the same Egyptian workshop, likely at Thebes. Contextualized parallels from Egypt (**Cat. 6** from Abydos) further strengthen our argument that 18th Dynasty shabtis from Nubian sites were mostly imported.

Our discussion of iconographic and palaeographical features supports Minault-Gout's first conclusion considering the catalogued pieces as originating in a common workshop. Thus, the smaller and larger differences in form and iconography as well as writing and palaeography could, on the one hand, point towards an internal stylistic development within the workshop emerging in the course of its activities. On the other hand, they could also originate from the individual choices by the artisans and scribes employed in the manufacturing of these objects or special demands of their future owners. This last idea applies, however, only to **Cat. 6** and 7, whose owners were buried in Egypt at Abydos and Thebes (?), respectively. They could thus have had more direct access to the workshop and associated craftsmen. In the case of the serpentinite shabtis imported to Nubia with blank text spaces, it is less likely that their future owners had any influence on the making and finishing on the figurines. However, people living in Nubia would have had access to artisans or others who could inscribe names and titles in blank spaces or add any other features they saw fit.

The particular "agency" of the shabtis can be seen in the fact that local modifications on the material features of shabtis were limited to adding names to blank spaces, as is certainly the case with the shabtis of *Hnm.w-ms* and *Jmn-htp* (**Cat. 2**). A few 18th Dynasty stone shabtis also had extra Egyptian style decorative elements added onto them, e.g., the steatite shabti of the *w^cb*-priest *Ty* from Unit 30 at Tombos, which had a vulture added to its chest (Smith and Buzon 2017, 624; 2018, 211, fig. 6) or the grey-green serpentinite shabti T8Cc79 from SAC5 Tomb 8 of the *hm-nfr Hn-sb3*, which had several Egyptian style iconographical features locally added to parts of shabtis which usually remain undecorated (e.g., feet and shoulders) (Minault-Gout and Thill 2012, 183-187, pl. 92). In the case of the two serpentinite shabtis of *Hkz-nfr*, the hands and tools seem

to have been added later. If we date these figurines based on their type, both shabtis represent mid-18th Dynasty pieces. If this is indeed the case, the later additions could be understood as a means of “updating” these pieces to the more “fashionable” style of the later 18th Dynasty. However, the particular fine physiognomic features of both serpentinite shabtis of *Hk3-nfr* speak strongly in favour of a late 18th Dynasty date. Interestingly, the steatite shabti from *Hk3-nfr*'s tomb at Toshka East that shows hands in relief, is not only of a ‘fairly crude and undistinguished’ workmanship, it is also ‘crudely inscribed with shawabti text but without name or title’ (Simpson 1963, 14). These features might suggest considering this piece as a local produce adapting both the contemporaneous iconography and configuration of funerary statuettes.

The presence of 18th Dynasty stone shabtis in New Kingdom cemeteries in Nubia thus strongly suggests that these objects were used to create social differentiation and prestige through the display of cultural affinities with Egypt. A few 18th Dynasty stone shabtis were found *in situ* or come from intact burial chambers. Examples include the shabti of *Hnm.w-ms*, the anonymous shabti from SAC5 Tomb 1 (Cat. 1), the shabti of *Wsr* from Aniba Tomb S 91 (Cat. 5) and the ones of *Jmn-m-h3.t* from Dakka (Cat. 10 and 11 (?)), as well as Units 6, 7 and 30 at Tombos (Smith 2003a, 146, 148-149; Smith and Buzon 2017, 624).

Provenance and prosopography offer further important information on the understanding of shabtis in 18th Dynasty Nubia in social terms. In 18th Dynasty Egypt, shabtis were linked to wealthier individuals (Aubert and Aubert 1974, 126; Smith 1992, 199). Schneider (1977, 9) suggests that ‘shabtis for the poor never existed’, while Smith (2003a, 149) states that such artefacts ‘are one of the hallmarks of an Egyptian burial’ and ‘only the wealthy could afford them’. This phenomenon can also be observed in colonial Nubia. In general, stone shabtis tend to concentrate at elite cemeteries associated with large urban sites such as Aniba, Toshka, Sai, Soleb and Tombos, where officials linked to the Egyptian colonial administration, identified by their titles on mortuary objects, were buried (Auenmüller 2018; Lemos 2020; Table 11.4). The small number of imported stone shabtis in Nubia and the few names and titles on these objects also suggest that these pieces were linked to a specific social space. The shabtis in our catalogue suggest a connection with elite colonial circles (Cat. 1 and the shabti of *Hnm.w-ms* from Sai, Cat. 2 possibly from Toshka, Cat. 5 from Aniba and Cat. 10 from Dakka). In fact, while the shabtis allow the detection of social and material connections between those sites, a group of scarab-pectorals found in local elite burials also interlinks Sai, Aniba and Toshka with each other in this manner (Vercoutter 1975; Thill 1985; Lemos 2020, 12).

The range of male titles and functions as represented by 18th Dynasty shabtis in Nubia including our group spans from goldsmiths (*nb.yw*), scribes (*zh3.w*), priests (*wcb* and

hm.w-ntr), urban administrators (*h3.tj-c-n-Shm*) and other high local officials (*[jdn.w?]n-Hj-m-M3c.t*) to indigenous local rulers (*wr-n-Mjcm*), a deputy of the viceroy (*jdn.w-n-z3-nswt*) and viceroy (*z3-nswt*). The female presence is represented by a few attestations of the title ‘lady of the house’ (*nb.t-pr*), namely *Mr.yt-šr.yt* from Soleb (Schiff Giorgini 1971, 193-194). The social landscape represented by these titles reflects the general composition and social differentiation of New Kingdom elites in the urban centres in Nubia (cf. Auenmüller 2018).

At this point, one should also – if only briefly – formulate an idea about how foreign shabtis (and other “foreign” Egyptian objects) used in local burial ceremonies reached Nubia in the context of the colonial project during the mid-18th Dynasty. Since the circulation of shabtis and their export to Nubia is well attested, particularly in the form of the anonymous shabtis excavated at Aniba (cf. Steindorff 1937, 75; Schneider 1977, 244) and pieces such as Cat. 2 and 4, we believe that foreign shabtis reached Nubia in the context of the regular mutual exchange of goods and information between the pharaonic foundations in Nubia and the state centres at Thebes and Memphis. Recent evidence from Upper Nubia is shedding new light onto trade networks, which inform us about how objects reached Nubia and were further distributed here (Rose 2017; Porter 2019; Kilroe 2019). Whether customers in Nubia could order a standard shabti or commission figurines of a certain type or made of specific materials, remains difficult to determine.

Nevertheless, 18th Dynasty shabtis imported to Nubia were used as integral parts of mortuary assemblages of elite individuals. The display of these objects most probably took place during funeral processions in which elements of the burial equipment including shabtis were brought to the tomb (cf. Eggebrecht 1991, fig. 27 for the scene in the tomb of the Theban mayor *Sn-nfr* [TT 96] who was active under Amenhotep II). Stone shabtis were thus probably special vectors for the display of social status, differentiation and power through the creation of affinities with Egyptian standards in 18th Dynasty Nubia. This perspective is supported by the fact that these objects were few and linked to people who also had access to other restricted and prestigious imported objects. Therefore, foreign objects such as shabtis might have produced a huge impact on colonial society in 18th Dynasty Nubia, playing a major role in establishing social relations and power differentiation between individuals aligned with Egyptian cultural standards and those outside elite Egyptian social circles.

11.5 Conclusion

An immense flow of Egyptian objects reached Nubia in the New Kingdom as materialisation of a colonial project. These objects were more than representatives of the adoption of Egyptian cultural practices on Nubian

ground. They impacted society to the point of changing social relations and the very nature of society. In the 18th Dynasty, foreign objects could be used to display foreign colonial power, and individuals made use of objects such as shabtis to display their connections and affinities with Egyptian standards and ideas. This probably allowed those individuals to contextually distinguish themselves, so that they were understood as prestigious and powerful in their local milieus.

The mid-18th Dynasty shabtis discussed here form a coherent group in terms of material, iconography, and palaeography. Nevertheless, there is also much variation in the areas of iconography in the form of three individual type/style groups, as well as palaeography in the form of many individual writings and spelling choices. These variations might be based on different actual or mental templates regarding style or text on the part of the artisans and scribes. They could, however, also represent chronological trends, pragmatic choices in terms of material and its availability or individual artisanal choices and special demands in view of the social status of the shabtis' clients. The discussion of the provenance and prosopography of the shabtis has shown that the same workshop produced these objects to fulfil demands of individuals living and working at various places and administrative levels in colonial Nubia as well as (however less frequently) in Egypt. The presence of shabtis with blank areas for inserting names and titles supports the idea of "off-the-shelf" shabtis being imported to Nubia to be used there in local funerary contexts (Budka 2017b, 78), with a particular chronological concentration in the mid-18th Dynasty.

Eighteenth Dynasty stone shabtis comprise a very small portion of the shabti phenomenon in colonial Nubia, since they were highly restricted objects, only available to rather few elite individuals living at sites such as Dakka, Aniba, Sai, Soleb and, to a lesser extent, Tombos (Spence 2019, 560). Very few individuals are named by inscriptions on shabtis, and the way these objects were used, based on evidence from *in situ* contexts, suggests great similarities with Egyptian shabti practices in the same period. Thus, Egyptian-influenced practices of shabtis in Nubian contexts probably affected how social relations of power and prestige were constituted and negotiated locally, changing the character of previous local society to an administrative and bureaucratic colonial society controlled by foreign elites, amongst which were *Hnm.w-ms* and other high officials.

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Chapter 12

Summary

Julia Budka

12.1 Introduction

Tomb 26 can be used as a case study of how perceptions of status may well differ, depending on whether they are viewed from a micro, meso or a macro perspective (for this tripartite approach *cf.* Butzer 2008). The flourishing families on New Kingdom Sai Island who were buried like those of Khnummose (*Hnm.w-ms*) in SAC5 were not all holding overly significant positions within the administration, but still represent the local wealth of the island which was a dynamic microcosm in New Kingdom Nubia. Furthermore, Khnummose and his family illustrate that also in text-based Egyptian archaeology we must always consider questions about the horizontal social rank of individual persons within the more general social stratification arranged according to socioeconomic factors. Factors of horizontal positions within a certain social group are less evident than the vertical ranking in different social strata based primarily on wealth and the occupation as attested by titles. The discovery of Tomb 26 and particularly Feature 5 with its multiple burials offers a glimpse into the social fabric of Sai which is often concealed in the written records and corresponding cultural narratives. As Claudia Näser recently stressed for the cemetery of Aniba, the mortuary remains including the architecture and the grave goods, *'allow us to take a closer look at the people behind them, at their concepts of social and cultural belonging, separation and integration'* (Näser 2017, 563).

Overall, the findings in Tomb 26 allow us to trace individuals not only on the micro scale, but also enable projections of the social fabric on Sai on the meso scale and in New Kingdom Nubia on the macro scale. The same holds true for questions of tomb architecture, burial assemblages and more broadly burial practices. In the following, the most important observations regarding Tomb 26 are summarised and testify to the relevance of this burial monument for Sai Island and beyond.

12.2 The significance of Tomb 26 on a micro scale level

This volume presented the newly discovered pyramid shaft tomb in cemetery SAC5 on Sai Island, Tomb 26. The methods of excavation, dating and sampling were described (Chapter 2). The archaeology and architecture were discussed. The concise assessment of all architectural features as well as parallels from other tombs in SAC5 allowed a reconstruction of at least four main building phases with several subphases during the New Kingdom (Chapter 3). Most importantly, the previous assumption that the burial of Khnummose in Feature 6 was the interment of the original owner of Tomb 26 could be revised, thanks to the exhaustive study of building phases including details like cutting marks and sequences of plastering.

As a rock-cut tomb it was of interest to explore the geology of Tomb 26 (Chapter 4). For the large chambers of Tomb 26, altered rock which had the big advantage of being

easily removable compared to the solid rock above, was chosen deliberately. However, within this rock material it was difficult to control the friable rock and to prevent the breaking of substantial parts. The entire entrance area (Feature 3) as well as the southwestern corner of Feature 2, with the original entrance to Feature 5a, broke in uncontrolled ways and left irregular side walls with cavities (see Feature 7, Chapter 4). Most interesting is that the builders of Tomb 26 invested much time and obviously resources to conceal this original building disaster. The broken-out parts of the wall of the shaft, Features 2 and 3 and the entrance of Feature 5a were closed by exactly fitting sandstone blocks and plastered. Such an elaborate investment of worked stones in subterranean parts of tombs in SAC5 is unique and can only be compared to Tomb 7 where a stone-built wall was erected to divide the chamber into two (see Chapter 3).

The comprehensive assessment of all finds from Tomb 26 – comprising various groups of burial assemblage like bodily adornment, scarabs, coffins and funerary masks as well as ceramic, faience and stone vessels – enabled a detailed monument-specific chronology as well as the reconstruction of a certain variability in burial customs.

An exhaustive presentation of the individual tomb groups and their parallels as well as dating can be found in Chapter 7. Despite certain similarities in the individual burials, it became clear that there are variances in their composition and that certain differences, most likely relevant for displaying social status including gender, can be noted. The quality of manufacture may differ, various materials were employed for the same objects (see *e.g.* beads which are attested in gold, carnelian, jasper, faience, clay and unidentified stone and note also the elite *funeralia* such as heart scarabs which are attested in different materials for the first owner of Tomb 26, Individual 145, and for Khnummose) and certain differences regarding the quantities of objects are observable. Here, the revised assumption that, other than previously thought, it was not Khnummose buried in Feature 6, who was the first owner and builder of Tomb 26, but rather Individual 145 in Feature 5a, is particularly relevant. Because of the complete examination of both building and burial phases, the original chamber was identified as Feature 5a (Chapter 3). In this first chamber of Tomb 26, two anonymous burials were placed in wooden coffins and can be dated to the Thutmoside period (TG 01 and 02). Khnummose was deposited in Feature 6 maybe up to one generation later. Taking the neighbouring monument Tomb 5 as a suitable comparison, one may speculate that Tomb 26 was used by a family of officials engaged in goldsmith work (such as in Tomb 5 in which a family of mayors was buried). Maybe Khnummose was therefore the son of the original burials in Feature 5a, but proof is lacking (see Chapter 8.10). However, also the assessment of the human remains

suggest that Khnummose and Individual 145 were related to each other (Chapter 6).

Besides the artefacts, the human remains from Tomb 26 offer important insights into the users of the monument on a micro scale level (Chapter 6). A minimum of 36 individuals could be reconstructed, but in total more persons were buried during the New Kingdom and afterwards in Tomb 26. The categories sex and age provided interesting results which allow observations regarding child mortality and the presence of sub-adults and females, and thus of the general demography of New Kingdom Sai. These observations are, in turn, also of high significance on the meso and macro scale levels (see Chapter 10).

The only person attested by name and title from the 18th Dynasty use of Tomb 26, Khnummose, was thoroughly analysed and is well understood within his own life history. As overseer of goldworkers he showed no distinct signs of stress. Besides a healed rib fracture, he was diagnosed with possible DISH (diffuse idiopathic skeletal hyperostosis) and residues of arterial calcification, which points towards a rather privileged lifestyle as we would expect from his occupation and his burial assemblage. The case study of Khnummose who, based on strontium isotope analysis, was identified like other individuals buried in Tomb 26 as an autochthonous individual from Sai, illustrates the complex cultural encounters traceable in New Kingdom Nubia. Drawing artificial border lines between Egyptians and Nubians is therefore an oversimplistic approach which does not refer to multifaceted and multicultural microcosms like Sai (see Budka 2020, 409-427) and to the complex '*Nubian experience of Egyptian domination during the New Kingdom*' (Smith 2021, 370).

The 18 tomb groups reconstructed for Tomb 26 fall into three categories regarding the complexity and quantities of the grave goods: 1) wealthy ones including shabtis and/or heart scarabs, 2) rich burials with coffins, scarabs, stone/faience and pottery vessels and 3) simple burials with a small number of pottery vessels and possibly some adornment like beads or a scarab amulet (Chapter 7). The original burial chambers, Features 5a and 6 each yielded only one wealthy burial of a male person. The remaining two categories "rich" and "simple" are attested with seven burials with "elite-like" assemblages positioned in Features 2, 5 and 6 and nine simple burials in Features 5 and 2. The category "simple" also comprises the child burials of Tomb 26. One needs to stress that the classification into three categories of the tomb groups from Tomb 26 takes into account the parallels from other sites in Nubia but is chiefly driven by a tomb-specific approach and insight perspective. As such, the categories illustrate internal hierarchies within a large family around the two wealthy burials – the anonymous male in Feature 5a (Individual 145) and Khnummose in Feature 6 (Individual 159) –

and therefore aspects of the ‘*social composition of the community*’ (Näser 2017) of Sai.

Apart from several building and burial phases, the use-life of Tomb 26 also included various phases of construction, of abandonment and of looting (Chapter 8). Not only were the burial phases in Tomb 26 multiple, but also phases of plundering, abandonment and decay, as well as destruction/collapse, were repeated several times. Although question marks remain regarding the dating of some events, the general picture of complex funerary practices and changing preferences regarding the use of space is evident throughout the monument. A remarkable aspect of the plundering phases in Tomb 26 is that they can be closely linked to certain areas of the tomb, starting with Feature 4 (and maybe Feature 6), then Feature 2 and finally Feature 1. The original burial chamber Feature 5 was left unlooted, mainly because similar to Feature 6 this chamber was soon filled with alluvial sediments from flood events and was well concealed.

12.3 The significance of Tomb 26 on a meso scale level

Tomb 26 and its finds are significant for an advanced understanding of cemetery SAC5 (Chapter 9) and they complement the findings in the New Kingdom town of Sai (Chapter 10). Tomb 26 attests all periods which can be assessed as the main phases of elite cemetery SAC5: reign of Thutmose III, mid- to late 18th Dynasty, Ramesside (19th and 20th Dynasties), pre-Napatan and Napatan (see Chapter 8). The rich finds from Tomb 26 relate both to burial practices including rituals but also to processes of plundering. Grave goods, including intact burials, are particularly well preserved in Features 5 and 6 and several representative tomb groups could be reconstructed (Chapter 7).

Tomb 26 enlarges a small group of tombs which were built in the mid-18th Dynasty in the southeastern part of SAC5. The closest parallels in terms of architecture can be found in Tombs 1 and 7 which probably also originate from the reign of Thutmose III. The best matches for the burial assemblages are provided by Tombs 3, 5 and 7. The elite cemetery SAC5, now broadened by the discovery of Tomb 26, displays certain local aspects (*e.g.* type of coffin and masks, scribal palettes) but shows multiple regional parallels, specifically to Soleb and in part also to Tombs and Aniba. Tomb 26 allows the illustration of a certain degree of variation within one family and within a wider community buried in Tombs 1, 3, 5, 7 and 26. Although most of the users of these tombs remain anonymous (including the original owner of Tomb 26 and with the exceptions of Khnummose and the mayors from Tomb 5), the display of the social status and cultural identity by means of the burial assemblages and funerary practices is in some respect of such a high degree of similarity, that

it seems feasible to suggest a group of contemporaneous officials who were involved in similar tasks, namely the administration of the town, but also in one of the main duties of temple towns, goldworking (see Chapter 10). The burial of the overseer of goldworkers Khnummose in Tomb 26 clearly attests to the participation of Sai in gold working and exploitation in Upper Nubia.

Based on the mode of burial (extended position in wooden gilded coffins with funerary masks) and the burial assemblage (scarabs, amulets and jewellery as well as ceramics) the first burials in Feature 5 are closely comparable to those of Khnummose and the female individual in Feature 6. According to the building phases, the first burials deposited in Feature 5a can be dated to the Thutmoside period (probably mid- to late reign of Thutmose III). Khnummose was buried slightly later during the reign of Amenhotep II or Thutmose IV and he was most likely a close relative of the earlier individuals (Budka 2017b, 79; 2017c). As a family tomb, Tomb 26 illustrates the status and corresponding material culture traceable for sub-elite individuals from Thutmoside times onwards. In this respect, the new information provided by Tomb 26 is relevant on the local level, particularly in combination with evidence from the New Kingdom town (Chapter 10). Although titles and concise information on the occupation of the individuals buried in Tomb 26 are missing, apart from Khnummose, the interments in this tomb can be treated as a small group within a specific social fabric which elucidate details like a general variation in status and a possible gender-related variance that often fade on a macro scale perspective.

Furthermore, within the seemingly uniform burial practice using coffins, scarabs and ceramic vessels, there are also certain differences within the tomb groups in general and within the three categories mentioned above. For example, TG 02 is slightly different from Khnummose, TG 07, because of the absence of a stone shabti, and a plaster heart scarab instead of a stone scarab. On the other hand, TG 02 was equipped with ritual vessels carrying bitumen and the body bore traces of this ritual fluid. The female burials in the northern part of Feature 5 all show slight differences and only female individuals were equipped with ivory items in Tomb 26, suggesting a Nubian cultural practice. The changeability of the composition of tomb groups within Tomb 26 was probably also the result of individual solutions and preferences (see particularly TG 05 and the infant burials) which may reflect variable lived experiences. These findings also correspond to the general variability within tomb groups highlighted by recent research both in Egypt (*e.g.* Franzmeier 2017) and Nubia (see, *e.g.*, Näser 2017; Seidel 2020).

On the meso level, Tomb 26 and its tomb groups complement the tombs already excavated in SAC5 with fresh evidence of coffins, masks, stone shabtis and heart

scarabs. There are also unusual and new aspects like the proof of the ritual use of bitumen and the presence of obscure objects in Egyptian blue, possibly fittings for inlaid coffin decoration. A considerable amount of gold and specifically gold leaf in Tomb 26 is also noteworthy and potentially connected with the occupation of Khnummose. Since a considerable amount of gold was also found in Feature 5, it could be inferred that the complete family buried in Tomb 26 was involved in the goldsmith business.

Tomb 26 and its occupational history is not unique (see Chapter 8) – Egyptian tombs and particularly elite tombs in New Kingdom Nubia were commonly used as burial places several times over, were shaped into communal monuments and experienced several building phases and changes, repeated collapse, plundering and abandonment. Other examples of monuments similar to Tomb 26 can be found in the local cemetery of Sai, SAC5, but also at major Nubian sites like Soleb, Tombos and Aniba. This leads to the relevance of Tomb 26 on a macro scale level.

12.4 The significance of Tomb 26 on a macro scale level

The quantity and quality of data from SAC5 underlines the importance of Sai Island as an Egyptian administrative centre in Upper Nubia during the 18th Dynasty. The heydays of use of this cemetery are reflected in the life history of Tomb 26 and are associated with the mid- to late 18th Dynasty, starting with the time of Thutmose III (see Chapter 8). Although Sai was still important during the Ramesside age, the site lost its prime status as an Egyptian centre. These changing roles of Sai are mirrored by the funerary record (see also Chapter 10 for the record from the town area).

The heyday of the cemetery SAC5 on Sai was in the second half of the 18th Dynasty and thus concurrent with the main use of the city when it was the seat of the viceroy and had high regional importance as the administrative headquarters of Upper Nubia. As a temple town, Sai had above all an economic position – gold and other raw materials, particularly the local sandstone, but also the *jnw* taxes in general, were collected here and made ready for transport to Egypt. Persons like the overseer of goldworkers Khnummose were involved in this main function of Sai and are now traceable by direct evidence deriving from Tomb 26.

The range of male titles and functions attested from SAC5 spans from scribes, priests and goldsmiths or overseer of goldworkers to the main representative of the urban administration (mayor) and even to a deputy of the viceroy (see Chapter 9). The female presence is represented by just a few attestations of the common title ‘*lady of the house*’ (*nb.t-pr*) and singer (*Sma.yt*). This evidence reflects the social differentiation well attested in New Kingdom urban centres in Nubia, for example at

Soleb (*cf.* Auenmüller 2018). Within this well stratified society embedded in the Egyptian administration of Upper Nubia evidenced by the prosopographical data, most of the residents of Sai and users of SAC5 remain, however, anonymous. Family tombs like Tomb 26 are therefore important data sets which enable us to understand actual realities of life organised around persons of authority like Khnummose (see above).

Supra-regional parallels of SAC5 and more specifically of Tomb 26 to the main elite cemetery in the north, Aniba, are noteworthy and underline that the elite sphere and the integration into the Egyptian administration of Nubia is the common framework for these cemeteries (for the users of the main cemetery of Aniba see Näser 2017, 562-563).

Some objects of the burial assemblages from Tomb 26 are mainly relevant on the macro scale level for New Kingdom Nubia and beyond. Here, TG 12 is particularly important – a rare monkey-shaped pottery vessel, a unique obsidian vessel in the shape of a grape bunch and a Cypriot Base Ring II juglet illustrate the international age of 18th Dynasty Egypt which was fully developed on Sai Island (see also Budka 2020, 403-407). Furthermore, the presence of Egyptian blue pigment sticks is noteworthy, providing new information about the availability of Egyptian blue in New Kingdom Nubia (see Fulcher and Budka 2020). Evidence for bitumen and its ritual function in the burial of the first owner of Tomb 26, Individual 145, raises far-reaching questions regarding the treatment of the bodies in elite cemeteries in New Kingdom Nubia.

The data from Tomb 26 are also relevant for the Ramesside history of Sai. Together with new finds from the town site (particularly sector SAV1 West, see Budka 2020, 427), the continued importance of the island during the 19th Dynasty can now be illustrated. Sai was still used by high officials as a burial place, including the deputy of Kush as attested by the example of Hornakht. Hornakht’s tomb in SAC5 can be considered as a significant indicator that Sai was in fact his hometown (see Chapter 10). Sai and its close neighbourhood are therefore likely to have functioned as the cultural environment in the late 18th Dynasty that produced the highest officials of the administration at the beginning of the Ramesside period who were actually working from the newly established site at Amara West, but still closely attached to Sai.

Within a broader context, recent research at sites like Sai, Tombos and Amara West has shown that tombs and burials are of prime significance for understanding life in New Kingdom Nubia (see Budka 2018e; Smith and Buzon 2018; Binder 2014; 2017). Despite the general Egyptian character of the tombs and burials there is a distinctive ‘*local variation within a generally shared repertoire of material culture*’ (Näser 2017, 566) which originates from specific social practices (*cf.* also Lemos 2020). As proposed

by Näser (2017), we may adapt the ‘communities of practice’ concept to address the funerary variability rather than to simply ask about the cultural identity of the users of these cemeteries (for a recent overview of theories related to material cultures and identities in Egyptian archaeology see Bader 2021, 32-40).

An enormous number of Egyptian objects reached Nubia in the New Kingdom as materialisation of the Egyptian domination (Lemos 2020). As Auenmüller and Lemos pointed out in Chapter 11, these objects were much more than evidence of the adoption of Egyptian cultural practices. In the 18th Dynasty, Egyptian objects could be used to display colonial power, and individuals made use of objects such as shabtis to display their connections with Egyptian ideas. This probably allowed those individuals to contextually distinguish themselves, so that they were understood as prestigious and powerful in their local milieus. The case of Khnummose in Tomb 26 is a perfect example of this: although he was not the first builder of the burial monument, he significantly modified the existing structure with a new burial chamber clearly separated from the earlier chamber, Feature 5. The appearance of his apparent power within Tomb 26 also caused the previous misinterpretation of his being the original owner (see Budka 2018a and Chapter 7). Thus, Khnummose, his individual preference to choose an existing (family) tomb to build a prestigious burial place for himself and his presumed wife, as well as all associated funerary practices rooted in his social and cultural belonging, illustrate the ability within elite cemeteries like SAC5 for converted citizens in New Kingdom Nubia to display both their affinities with the Egyptian authority and also their individual status within their peer group.

The discussion of the serpentinite shabtis like SAC5 350 of Khnummose illustrated that workshops produced *funeralia* for New Kingdom Nubia to fulfil demands of individuals at various places and administrative levels (Chapter 11). Some objects like shabtis with blanks instead of written names and titles were “off-the-shelf” elite burial gifts imported to Nubia for use in specific local funerary contexts (Budka 2017b, 78).

As highlighted throughout this volume by means of various categories and materials, Tomb 26 and its associated finds are of prime significance for understanding life and experiences on New Kingdom Sai. Furthermore, because of the site’s importance throughout the New Kingdom, in part undisturbed evidence such as was found in Tomb 26 is highly relevant within a broader context. Evidence is growing that New Kingdom Nubia must be considered as much more diverse than previously thought and that regional preferences are notable in almost every aspect of life as well as death (see, e.g., Näser 2017; Lemos 2020; Smith 2021).

The detailed assessment of Tomb 26 and the meticulous reconstruction of its life history therefore represent

important steps forward in achieving a more realistic view of how life was in one of the main colonial towns in New Kingdom Nubia which experienced several phases of heydays as well as periods of reduced regional significance. Khnummose, the only occupant of Tomb 26 who we can trace by means of name and title is a perfect case study for converted Nubians being involved in the Egyptian exploitation of Nubia’s raw materials. The anonymous persons buried in Tomb 26 are maybe even of greater significance: they represent most of the occupants of the island and reflect a complex horizontal hierarchy within the vertical ranking of elites in New Kingdom Sai. Their state of health, age and sex distribution is important additional information which needs to be incorporated into the settlement evidence and should be compared to neighbouring sites like Soleb and Amara West. Evidence for a general low level of stress for the persons buried in Tomb 26 is particularly remarkable, adding solid bioarchaeological data to our understanding of the local elite of Sai based on findings in the town, tomb architecture and burial assemblages. Furthermore, the considerable number of infants, sub-adults and young females buried in Tomb 26 reflect aspects of the lived experiences which are sometimes forgotten in text-based approaches to New Kingdom Nubia. In the words of Michaela Binder (2017, 611), who took Amara West as a case study, ‘*the study of the human skeletal remains [...] highlight how the combined results of the analysis of archaeological data derived from cemeteries, settlements and the environment provide the potential to move beyond traditional cultural narratives in order to ask questions about the lived experiences of the people within these colonial settlements, regardless of whether they were Nubian, Egyptians or something in between.*’

12.5 Conclusion and outlook

Tomb 26 was built during the time of Thutmose III and thus in the period when Sai became an important administrative centre in New Kingdom Nubia with a temple town and a large Egyptian style pyramid cemetery. The newly discovered tomb illustrates the heyday of use of the island in the second half of the 18th Dynasty and also provides important new data to understand the role of Sai in the Ramesside era. The life history of Tomb 26 thus mirrors important developments not only of Sai, but also of Upper Nubia as well as all of Nubia on a broader level.

The main objective of the AcrossBorders project was to reassess the coexistence of Nubians and Egyptians in a dynamic microcosm on Sai, and to reconstruct the concepts of social and cultural affiliation of people living on the island. Similar to the findings in the New Kingdom town (see Budka 2020, *passim*), the new finds including prosopographical data of Tomb 26 indicate that rigid stereotypes such as “Egyptian” and “Nubian” can no longer be upheld. The primary cultural identity of the

people buried in Tomb 26, as it is tangible or manifested by burial customs, can be addressed as Egyptian, illustrating the widespread '*adoption of Egyptian norms*' (Smith 2021) throughout New Kingdom Nubia. However, the Strontium isotope analyses show that the people including the only person of Tomb 26 we can address by name and title, the overseer of goldworkers Khnummose, grew up regionally on Sai or in the immediate vicinity. The state of health of Khnummose makes it clear that as a high-ranking official within the local social fabric of Sai he led a life of a high degree of comfort and a rather unhealthy, high-fat and high-sugar diet (see Chapter 6). In this respect, Tomb 26 contributes significantly to interpreting the findings from the city of the New Kingdom to the effect that the population structure of Sai was quite complex and that the inhabitants displayed a very specific identity only a few generations after the town was founded in the early 18th Dynasty, even without the people ever having been

to Egypt. Diverse cultural interrelationships and a set of responses by local groups to the Egyptian domination such as attested on Sai contributed to the distinct cultural character of Nubia during the New Kingdom which was marked by considerable variations and regional differences and still provides several open questions for future research. Tomb 26 on Sai Island illustrates as a case study the potential of investigating the variability of funerary practices within a common repertoire of burial customs adopted from Egyptian standards as being rooted in distinct social practices and thus reflecting in some respects the '*social composition of the community*' (Näser 2017). One of the main tasks for the near future is, therefore, to determine the degree of diversity not only in elite contexts such as SAC5 but also in social groups not belonging to the elite of New Kingdom Nubia in order to achieve a more comprehensive picture of past communities in the Middle Nile region.

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Appendix

A complete list of all finds from AcrossBorders' excavations in SAC5 is available at <https://data.ub.uni-muenchen.de/217/> (DOI: 10.5282/ubm/data.217)

Objects from Tomb 26 left for registration at the Sudan National Museum, Khartoum

Find no. AcrossBorders	Feature and SU in Tomb 26	Object
SACS 085	F1, SU 064	Amulet, faience
SACS 120	F1, SU 068	Scarab, steatite
SACS 121	F1, SU 070	Scarab, steatite
SACS 211	F2 SU 074	Stone vessel, alabaster
SACS 212	F1, SU 070	Stone vessel, alabaster
SACS 266	F2, SU 114	Scarab, faience
SACS 279	F2, SU 118	Scarab, serpentinite
SACS 281	F2, SU 125	Scarab, faience
SACS 302	F2, SU 201	Stone vessel, alabaster
SACS 313	F2, SU 142	Scarab, steatite
SACS 347	F4/6, SU 163	Faience vessel
SACS 348	F4/6, SU 163	Faience vessel
SACS 349	F6, SU 163	Heart scarab, serpentinite
SACS 350	F6, SU 163	Shabti, serpentinite
SACS 351	F6, SU 164	Scarab, steatite
SACS 352	F6, SU 163	Faience vessel
SACS 353	F6, SU 163	Faience vessel
SACS 354	F6, SU 163	Faience vessel
SACS 355	F6, SU 163	Faience vessel
SACS 364	F5, SU 191	Scarab, steatite
SACS 367	F5, SU 191	Scarab, steatite
SACS 376	F5, SU 191	Amulet, faience
SACS 377	F5, SU 191	Amulet, jasper
SACS 378	F5, SU 191	Necklace with crocodile amulets, carnelian, bone, gold
SACS 381	F5, SU 191	Scarab, steatite
SACS 382	F5, SU 191	Amulet, carnelian
SACS 386	F5, SU 191	Scarab, steatite
SACS 387	F5, SU 191	Scarab, steatite

Find no. AcrossBorders	Feature and SU in Tomb 26	Object
SAC5 388	F5, SU 191	Finger ring, gold, silver, steatite (scarab)
SAC5 390	F5, SU 191	Canopic lid, clay
SAC5 391	F5, SU 191	Canopic lid, clay
SAC5 392	F5, SU 191	Canopic lid, clay
SAC5 393	F5, SU 191	Canopic lid, clay
SAC5 394	F5, SU 191	Miniature canopic jar, pottery
SAC5 395	F5, SU 191	Miniature canopic jar, pottery
SAC5 396	F5, SU 191	Miniature canopic jar, pottery
SAC5 397	F5, SU 191	Miniature canopic jar, pottery
SAC5 398	F5, SU 191	Stone vessel, gneiss
SAC5 276/2015	F1, SU 070	Pilgrim flask, decorated, pottery
SAC5 283/2015	F1, SU 070	Pilgrim flask, decorated, pottery
SAC5 305/2016	F2, SU 138	Cypriote Base Ring II juglet
SAC5 208/2017	F6, SU 163	Dish, pottery
SAC5 209/2017	F6, SU 163, in SAC5 208/2017	Miniature vessel, pottery
SAC5 210/2017	F6, SU 163, in SAC5 208/2017	Miniature vessel, pottery
SAC5 211/2017	F6, SU 163, in SAC5 208/2017	Miniature vessel, pottery
SAC5 212/2017	F6, SU 163, in SAC5 208/2017	Miniature vessel, pottery
SAC5 315/2017	F5, SU 191	Vessel with attached human head/face, pottery
SAC5 352/2017	F5, SU 191	Vessel with attached human head/face, pottery
SAC5 349/2017	F5, SU 191	Bottle, monochrome painted, pottery
SAC5 342/2017	F5, SU 191	Marl clay jug, monochrome painted, pottery

Object from outside of Tomb 26 left for registration at the Sudan National Museum, Khartoum

Find no. AcrossBorders	Feature and SU in Tomb 26	Object
SAC5 268	Area 2, south of Tomb 26, SU 216	Heart scarab, serpentinite

TOMB 26 ON SAI ISLAND

New Kingdom burial customs in Nubia (northern Sudan) are well traceable by means of large cemeteries, in particular Egyptian style rock-cut shaft tombs with pyramidal superstructures. These tombs and their contents have lately been discussed as important data sets offering insights into the diverse population, material culture, funerary and social practices in New Kingdom Nubia.

A new rock-cut shaft tomb, potentially with pyramidal superstructure (Tomb 26), was discovered by the AcrossBorders project on Sai Island in 2015. This tomb yielded intact interments of officials connected with the Egyptian administration of colonial Nubia, buried together with family members and rich burial assemblages. Tomb 26 allows a close comparison with contemporaneous evidence from the nearby New Kingdom town of Sai, therefore providing a more complete picture of life and death in New Kingdom colonial Nubia. This book is the final publication

of Tomb 26, its architecture and material culture, including chapters on geology, human remains, scientific analyses and a compilation of the material discovered. New information provided by AcrossBorders excavations of Tomb 26 contribute to recently discussed questions regarding cultural encounters and social practices in New Kingdom Nubia. Comparable material from other tombs on Sai and elsewhere in Nubia is discussed in order to stress the relevance of the new discovery.

The archaeological contextualisation of Tomb 26, in combination with scientific analyses like strontium isotope analysis, offers fresh information on the complex coexistence of various cultural groups on Sai with slightly different approaches to their cultural and social affinities during the New Kingdom. Overall, Tomb 26 and its associated finds are of prime significance for understanding lived experience on New Kingdom Sai and more broadly in New Kingdom Nubia.

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