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Of Bugs and Beads

Realities of Life in the Late Middle Kingdom Northwestern Town of Elephantine

Abstract: Since autumn 2013 several households in the northwestern town of Elephantine Island have been undergoing new investigations. This area of the town is only partially preserved, but within the framework of the ‘Realities of Life’ project one building – House 169 – which was part of a unit of at least three houses on the northeastern slope of the western ridge of the island, was studied in detail. The collaborative approach of various sciences to address questions about daily life in the late Middle Kingdom sheds new light on how it may have felt to live in the town 4000 years ago. Activities of the inhabitants of House 169, including issues such as cleanliness, as well as the sensory experience of occupying this building can be traced. The results presented here are preliminary, but they prove the value of a multidisciplinary approach to archaeological investigations when attempting to unravel everyday life in ancient Egypt.

1 Introduction

Since 1969 excavations by the German Archaeological Institute Cairo at Elephantine approached daily life and living conditions in the past, with the aim of identifying the functionality of buildings or rooms, and gaining insight into the status and socioeconomic background of the inhabitants.¹ But, the excavated houses and streets remained, with few exceptions,² ‘empty’ – a phenomenon that not only occurred on Elephantine:

While we seek answers to [...] big questions by analyzing millions of iterations of pottery, animal bone, plant remains, lithics, sealings and artefacts, it is ironic that we sometimes forget the people who generated this material culture, and who, in fact, constitute the society and economy in question.³

Stephan J. Seidlmayer has been active in the excavations on Elephantine and in research in the region of the first Nile cataract since his time as a young researcher. He initiated the idea to fill the ‘empty’ structures of the town on the island with life, to look beyond the architecture or the single find and to attempt to identify the human aspect, the actors of daily life in the ancient town. What did it feel like to live on Elephantine Island? How did the inhabitants of the settlement spend their days? Finding answers to questions such as these is the major aim of the project ‘Realities of Life’. In the following, some preliminary ideas on the topic of daily life in the ancient settlement of Elephantine will be presented. This article builds on information summarized and published in several reports by the Realities of Life-team, foremost by P. Kopp.⁴ The results of the work of the project members confirm the value of a multidisciplinary approach to archaeological investigations. However, a revision of the below stated conclusions at a later time has to be expected due to the fact that the analysis of samples and finds is not yet finished.

¹ Summary of works until 1999: Kaiser et al. 1999, 230–233. See compilation of publications in Raue et al. 2011, 181, note 1 and monographs on detailed studies in Seidlmayer et al. 2016a, 197, note 1. Annual reports in English and Arabic compiled for *Annales du Service des Antiquités de l’Égypte* (ASAE), which are replacing the season reports in *Mitteilungen des Deutschen Archäologischen Instituts Abteilung Kairo* (MDAIK) after the 42nd season (October 2011–March 2012), as well as the German Institute’s *e-Forschungsberichte* (e-reports) on the project are accessible online: <https://www.dainst.org/project/25953> – Download section.

² E. g. Arnold 2015; Arnold in preparation.

³ Lehner in preparation.

⁴ Sählhof et al. 2020, 13–39; Sigl/Kopp 2020; Kopp 2020; Warden 2019; Sigl et al. 2019, 2–42; Sigl/Kopp 2019; Warden et al. 2018; Sigl et al. 2018b, 2–16; Sigl et al. 2018a; Sigl et al. 2017, 2–27; Seidlmayer et al. 2016b, 2–22; Seidlmayer et al. 2015, 2–10, 17, 21–22; Sigl 2014; Arnold et al. 2014, 2–6.

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With this contribution I would like to thank Stephan J. Seidlmayer for taking me in as a researcher at the German Archaeological Institute in Cairo, for the opportunity to lead this fascinating project, for encouraging innovative ideas, for providing constructive criticism of my work, and for his support and trust.

2 The ‘Realities of Life’ Project

The project ‘Realities of Life’ focusses on domestic buildings in the northwestern part of the archaeological settlement hill of Elephantine. Fine-scale recovery methods and archaeometric techniques aid the standard archaeological process.⁵

Excavation work was carried out from autumn 2013 to the end of 2018 in two adjacent 10 × 10 m squares, the sides of which were aligned with the superficially visible structures (see Fig. 2) at the onset of the project. Within these, several building units were discovered. They were dated by stratigraphic examination and pottery evaluation to predominantly the time of the early to late Middle Kingdom (11th to 13th dynasties, c. 2000–1650 BCE).⁶ The exceptionally good preservation of the archaeological layers in the western⁷ square (excavated 2016–2018) led to the current research work focusing on this area.⁸ The square covers around two thirds of a single building, House 169. It is part of a group of (at least) three houses – Houses 169, 166 and 73 – which in the late 12th to 13th dynasty (c. 1850–1650 BCE; end of the Middle Kingdom) rose next to each other along the northwestern edge of the settlement mound (Fig. 1).⁹ Houses 166 and 73 are only preserved in small sections, mostly by their walls.¹⁰ They therefore can be used to a certain degree for comparison and support of the results from House 169, but will provide little information on household activities by themselves.

3 Houses 169, 166 and 73 in the Northwestern Town of Elephantine

Building activity in the late Middle Kingdom northwestern town of Elephantine still followed the general surface contours of the granite base of the western main ridge forming the island (Fig. 1). Thus, between and within buildings, floor heights varied in several locations, sloping down in an eastern direction.¹¹ In the northern and western direction the ground rose a few meters before again descending towards a former river channel.

Nowadays this depression is permanently dry, but it might once have dipped down as far as 88 m NN or even below,¹² which would some 4000 years ago still have been in the range of the Nile’s annual inundation, reaching at

⁵ See extensively on the aims and methods of the project: Sigl in: Seidlmayer et al. 2015, 2–4; Sigl in: Seidlmayer et al. 2016b, 2–6; Sigl in: Sigl et al. 2018a, 161–165.

⁶ Kopp in: Sigl et al. 2018a, 167–174; Kopp in: Seidlmayer et al. 2016b, 6–7; Kopp in: Sigl et al. 2017, 3–6; Kopp in: Sigl et al. 2018b, 3–7; Kopp in: Sigl et al. 2019, 3–4. Cf. dating method using pottery and stratigraphic sequencing, both executed by Kopp: Kopp 2020. On older and younger strata, which were examined in the squares see Kopp in Sigl et al. 2018a, 165–167; Kopp in: Arnold et al. 2014, 2; Kopp in: Seidlmayer et al. 2016b, 7.

⁷ To make the subsequent remarks easier to follow, the magnetic ‘north’ direction in all plan figures is supplemented by a ‘nominal north (N nom)’, which is slightly deviating to the magnetic north. This nominal direction is used in the descriptions.

⁸ On the scientific specializations of the ‘Realities of Life’ team members, the collaborating laboratories, and the status of scientific research until spring 2020 see Sigl/Kopp in preparation. I would like to thank my team for their dedication to the project and their extraordinary work!

⁹ Following von Pilgrim’s study, a block of houses in the Middle Kingdom settlement of Elephantine can be formed by up to six buildings surrounded on all sides by streets (von Pilgrim 1996, 223). A high brick wall on the southern sides of H169, H166 and H73 continues without visible intersection to the west. It incorporates various building phases (probably spanning several centuries) throughout which this east-west alley has never been overbuilt. Thus, connected to H169’s western wall further contemporary buildings can be expected.

¹⁰ Cf. Kopp with references in: Sigl et al. 2018a, 165–167; see also Kopp in: Arnold et al. 2014, 2.

¹¹ Cf. Kopp on this observation and the consequences for stratigraphic sequencing in the area in: Seidlmayer et al. 2015, 9–10.

¹² NN refers to the middle sea-level of the Mediterranean at Alexandria (Seidlmayer 2001, 12, note 4). 92 m elevation cf. Ziermann 1993, vorläufiger Gesamtplan; 88 m elevation = reconstructed topography of 1st dynasty: Ziermann 1993, Abb. 8; elevation of the channel during the Middle Kingdom is currently unknown.



Fig. 1: Aerial photo of Elephantine with highlighted topographic and archaeological details.

Aswan on average 91.0–91.5 m NN.¹³ Support for this hypothesis could be seen in the course of the town wall built at the end of the Middle Kingdom (and re-erected various times in subsequent periods). However, during most of the Middle Kingdom, the town probably remained without a surrounding wall, protected only by the river.¹⁴

The river was an important source for the daily water and food supply of the households on the island, as well as being crucial for travel and trade for the inhabitants of the settlement.¹⁵ Therefore, access to the river must have featured importantly in the life of the townspeople. A harbor at the northeastern end of the settlement and a southern landing place are known to have seen regular traffic to/from the river (Fig. 1). They were connected with each other and with the settlement by a street running through the channel, which divided the predominantly administrative and cultic areas on the eastern ridge from the living quarters of the town on the western outcrop forming the base of the island.¹⁶ While the northeastern docks were the main access point of the settlement and served royal as well as cultic travels, the southern mooring was used for economic reasons.¹⁷ Additionally, further paths to the river may have existed.¹⁸

Unit 169-166-73 was situated at the northeastern slope of the western ridge of Elephantine island at an elevation above 100 m NN. It was surrounded on three sides by the typical narrow alleys of the island town, across from which further contemporary houses must be anticipated.¹⁹ The walking distance from this unit to reach the southern harbor of the island can be calculated by following the known streets of the Middle Kingdom. One would have turned left (east) out of, for example, House 169's door onto a gently northeast descending alley, about two meter wide (room enough for a donkey laden e.g. with water jars).²⁰ Immediately turning right (south) again, one would have followed a path that zigzagged towards the area of Heqaib's sanctuary. Here going right (southwest), one would be following the aforementioned street between the two harbors of the island. Taking this route would resemble a walk of at least 200 m during the time of the inundation. In times of low water (ranging between 82.5–83.5 m NN),²¹ at which the shores of the island retreated more than 50 m from the borders of the town, approximately 250 m would have to be crossed.

A closer point of access to the river from Unit 169-166-73 would have been the area of the northwestern river channel, which was only about 100 m away, as the crow flies. If it fell dry during low water season, the inhabitants could maybe have followed a route, which is used until today, passing by the eastern side of another rocky outcrop now sitting under the German Institute's excavation house (Fig. 1). Unfortunately, these suggestions cannot be verified, because neither the Middle Kingdom town quarters in this area nor other evidence such as rock inscriptions are preserved.

¹³ Seidlmayer 2001, especially 81–92 (considering archaeological data of the early and Old Kingdom settlement on Elephantine) and 104 (summary).

¹⁴ von Pilgrim (2010, 266–267) states that the town wall existed between the late 12th and early 18th dynasties. I assume these dates correspond in his opinion with the end of the Middle Kingdom/beginning of the 2nd Intermediate Period to the end of the latter period, because he further writes: “Im Mittleren Reich, als die politische Grenze bis an den Zweiten Katarakt verschoben worden war, blieb Elephantine ohne den Schutz einer Stadtmauer. Erst mit dem beginnenden Verlust der Kontrolle über Unterubien und der daraus erwachsenden Gefährdung wurde Elephantine wieder zu einer Festungsstadt ausgebaut.” (von Pilgrim 2010, 267). The archaeological remains from our current excavations do not give evidence for political unrest or deterioration of the system and major changes within the settlement in the 13th dynasty. The material evidence shows a re-definition of the area under investigation only by a construction horizon dating to the late 2nd Intermediate Period (Kopp in: Seidlmayer et al. 2016b, 8–9). For this reason, the occupation of Unit 169-166-73 is still included in the Middle Kingdom. Furthermore, the 12th dynasty dating given by von Pilgrim might have to be crosschecked with the results from our recent studies, because discrepancies have been noted (in other contexts) between the chronological settings of this author and others (Seiler in: Kaiser et al. 1999, 223; Seiler 2005, 129–130; Kopp in: Seidlmayer et al. 2015, 9–10). Therefore, for the discussion below it is assumed that there was no town wall present, which would have blocked the access to the river.

¹⁵ So far no wells have been found in the Middle Kingdom settlement and the predominantly rocky base of the island probably did not permit their construction in most areas anyway (von Pilgrim 2010, 265–266).

¹⁶ On the importance and longevity of this street see: von Pilgrim 2010, 262–264.

¹⁷ Seidlmayer 2005, especially 293–294, 300–301 and Abb. 1.

¹⁸ E. g. similar to those indicated in the southeast of the Old Kingdom settlement by Ziermann 1993, Abb. 8.

¹⁹ Most of these have either not yet been excavated (= west and southwest of the unit), or are not preserved nowadays (= north of the unit around the Old Kingdom pyramid). Thus, the appearance of considerable stretches of the northwestern town quarters of the Middle Kingdom remains unknown.

²⁰ Thus von Pilgrim 2010, 265.

²¹ Seidlmayer 2001, especially 81–92 (considering archaeological data of the early dynastic and Old Kingdom settlement on Elephantine) and 104 (summary).

Apart from the river's shores and public areas within the town, such as the harbors or the celebration place for the inundation close to the Satet temple (the so-called 'Wasserhof' / 'drinking-place'),²² the inhabitants of Unit 169-166-73 might have wanted to access the available agricultural land downstream on the island (Fig. 1).²³ Neither the size nor the exact location and use of this land are known for the Middle Kingdom. The area is covered today by the village Koti and modern farmland. Around 4000 years ago it might have been used communally to keep a few beasts of burden, like donkeys, which would aid the transport of goods, or other household animals, such as sheep and goat.²⁴ Additionally small amounts of crops could have been planted here. If the inhabitants of the houses in question participated in the use of this land, they would have to cross a distance of approximately 100 m as the crow flies to reach it.

4 The Layout of and Activities in House 169 and its Neighbors

Houses 169, 166 and 73 were not abandoned in the spur of a moment due to causes such as earthquakes, flood or fire, but their inhabitants moved out, taking all moveable and valuable items with them. What stayed behind were the architectural elements, and objects or materials, which were lost, discarded as well as deposited intentionally either between building phases or while the buildings were unoccupied.²⁵ Thus, all of the objects found during the archaeological excavations could therefore be called 'waste'/'refuse'²⁶ and it has to be kept in mind that "the archaeological context of an object relates not to the time when the object was put to its proper use, but to the time when the object was no longer in use. [... Nevertheless,] the way [and location at which] waste products are deposited does reveal something about the way houses were used and – more importantly – how the inhabitants perceived different spaces of the house".²⁷ This perception of space may be better grasped by investigating the shape and setting of the surrounding architecture and installations.

House 169, at approximately 150 m² in size, is one of the largest residential buildings of the late Middle Kingdom settlement of Elephantine studied to-date.²⁸ Three main use phases, consisting of related archaeological layers and architectural elements, can be summarized. The initial phase, dating to the late 12th/early 13th dynasty, had mostly been removed during the later alteration of the structure. The following descriptions and interpretations therefore concentrate on the strata of mid-13th and mid to late-13th dynasty (c. 1750–1650 BCE), marked in Fig. 2 as H169b and H169c. A similar, but less certain chronological division can be made for narrow patches of layers along the western

²² On its use during public feasts see Arnold in preparation.

²³ The presence of such land is suggested by Ziermann (1993, Abb. 8) for Early Dynastic and Old Kingdom times, and shown in both its dry season extension and during inundation by Kopp (2018, Abb. 2). It may be assumed that approximately the same extent of farming space was available during the Middle Kingdom. Further space for agriculture might have existed on nearby smaller islands, in a lesser amount along the sandy shores (similar to nowadays), at the estuaries of wadis in the vicinity and on the wider planes at the eastern shore of the Nile.

²⁴ All of these animals have been found in the zoological material from the excavations on the island (see e.g. Sigl in: Sigl et al. 2019, 30–41).

²⁵ Additionally, items, which presumably did not belong to the households of Unit 169-166-73, were introduced into the buildings by levelling and filling activities: rubble (household waste, windblown material, etc.) collected somewhere in the town (probably in a close-by abandoned structure or vacant plot) was dumped into a certain place in the buildings and, ideally, covered with a new mud floor to level out ground. Such fill/levelling rubble includes ceramic finds of prior and contemporary date (see as well Kopp 2020, 246). Some of such layers might consist fully or to a large percentage of refuse from the houses themselves, which had been dumped and retrieved by the inhabitants close by. Nevertheless, the following analysis focusses on material close to or within floor layers and thus more closely connectable to the use phases of the houses.

²⁶ The categories 'de facto' ("tools and materials abandoned at an activity area but still usable"), 'primary' ("intentional discard of items at or near the end of their use life, but crucially still in the area where they were being used"), 'secondary' ("disposal of items in areas other than where they were used") and 'tertiary' refuse ("all the items of refuse that become incorporated into deposits as background constituents of the deposit matrix"), as defined by Schiffer 1976 and Hodder 2012, 73 (here cited as summarized by Shaw 2013, 318–319), cannot fully be applied on the Elephantine material: cf. already von Pilgrim 1996, 21; Arnold 2015, 152.

²⁷ Arnold 2015, 152.

²⁸ Kopp in: Sigl et al. 2017, 4: coverage excludes the outer walls that are partly shared with other buildings.



Fig. 2: Plan drawings of Unit 169-166-73 during the mid-13th (top) and mid to late-13th dynasty (bottom).

and eastern walls of Room 02 and at the northern end of Room 05 in House 166. Only some fragmentary walls and few installations remain of House 73, which is why no use-phases could be distinguished for this building.²⁹

Based on their general layout the three Houses 169, 166 and 73 fit into the typical Middle Kingdom domestic building style of the town of Elephantine.³⁰ Each of them could be accessed (throughout their approximately 100 years of use in the second half of the 13th dynasty) from the same east–west running street along the southern side of the unit. Entrance corridors (H169: (R01 +) R02;³¹ H166/H73: R01) led to a central court. This court (H169: R03³² + R04; H166/73: R02) functioned as main distribution area to all other parts of the buildings. As indicated by staircases along the eastern walls of all three houses and sets of columns in Room 08 of House 169 (Fig. 2), this included the roof or first-floor rooms.³³

During the mid-13th dynasty a visitor to House 169 would have walked up several stone steps in Corridor 02 to turn left into Court 04. On the right (northern) side of this courtyard the main fireplace of the house was situated: at first inside Installation 603, later on the other side of its eastern wall and fenced off by a low, slightly curving setting of mudbricks, over which one had to step to enter Room 07. In its initial state, this wall might have functioned as an absorbent of the radiating heat of the fire, allowing people to approach the hearth for cooking or baking. Furthermore, it held in the ashes, which were allowed to accumulate “not least because ash is perfect for keeping and equalizing heat”.³⁴ These functions probably became obsolete after the ashy layers had risen to the top of the wall.

Macroscopic and micromorphological studies (samples M46–1 and 47–1; Fig. 3) showed that the ashes from the main hearth consisted of a mix of collected fuel (wood shavings, chaff, dung of small ruminants and animal remains) and discarded household items. Some of the material was highly vitrified, some just partially charred. Varying temperatures or oxygen regimes, the moving of the actual firing spot, and a secondary mixing of the ashes through human intervention such as sweeping, removing some of the ashes to use them for e.g. fertilization of fields, or foot traffic through Room 07 for example while preparing fuel for firing, could be seen as causes for the heterogeneous composition.³⁵

Walking deeper into Court 04 the visitor to House 169 would have crossed a mud flooring, the level of which sloped downwards about 15 cm at the western side and around 60 cm towards the southern end of this L-shaped space. The floor was renewed several times in subsequent periods, and fill layers were added in between, maybe in an attempt to level the area. However, the slope persisted until the end of occupation of the house (Figs. 2 and 7).

Several small shallow pits were spread out on one of the primary floors (47501U/e) of the mid-13th dynasty at the western side of Court 04. They were used to light additional fires. It remains uncertain which of these firepits functioned contemporaneously; several of them showed various layers of burned surfaces (e.g. 47501Q/l over Q/w), which indicates the reuse of the same spot for lighting a fire at different times. They contained a variety of household items and residue of tool or jewelry production, which might have been thrown into the fire in the course of (re-) shaping objects, cleaning up Court 04, or could have found their way into the features by accident.³⁶

²⁹ On the initial phases of H169 and H166: Kopp in: Sigl et al. 2019, 3 and fig. 1. On the later phases: Kopp in: Sigl et al. 2018b, 3–7; Kopp in: Sigl et al. 2017, 3–6. On H73: Kopp in: Sigl et al. 2018a, 171–172 (most remarks on H166 in this contribution have been revised since the aforementioned articles).

³⁰ Established by von Pilgrim 1996, 190–205.

³¹ Due to R01 being mainly hypothetical in its layout, because it lay outside of the excavated area, R02 is mostly referred to in the following as ‘entrance’ corridor. However, if the postulated layout of H169 in fig. 2 is correct, the room would better be described as a connecting passage of the front of the house to the middle and rear.

³² R03 was at first thought to be a separated structure within H169, but in the end turned out to be a transit area, partially belonging to R08.

³³ Both H169 and H166 did not feature a staircase in the late 12th/early 13th dynasty! If the roof in this phase was accessible, it was only via a ladder (Kopp in: Sigl et al. 2019, 3).

³⁴ Arnold 2015, 157.

³⁵ On the micromorphological results: Fritzsche in: Sigl et al. 2019, 5–6. On the topic of ashes used as insecticide: Panagiotakopulu et al. 1995 or as fertilizers: Jones 2015, 302; own observation in Koti on modern *Gezirat Aswan*, March 2019.

³⁶ The question, which activities could be connected to those fires, has yet to be answered. On suggestions for the most peculiar of these fireplaces consisting of a set of holes in the ground, found in the southwestern corner of the square, see Kopp in: Sigl et al. 2018b, 5 and Sigl/Kopp 2020, 21.



Fig. 3: Sample M47-1 in situ (left) and contents of sample M46-1 (right): charred chaff (top, PPL), charcoal (second from top, PPL), vitrified phytoliths (second from bottom, PPL), fecal spherulites (bottom, XPL).



Fig. 4: Amethyst fragments from Court 4 feature 47501M/d.

At the outside of the northwestern corner of Room 05, near the half-round one-brick-wide ‘Wall’ M1982 more than 250 flakes and fragments of amethyst (Fig. 4), ranging from c. $2.1 \times 1.5 \times 0.3$ cm to $0.6 \times 0.6 \times 0.3$ cm in size, were found together with ceramic fragments and plant fibers as well as some other discarded household items, such as a ceramic scraper and an ostrich egg bead, corroded metal and broken sealing remains (feature 47501M/d positioned on 0.2 cm thick fill 47501T/b on floor 47501U/f). Only a few of the amethyst fragments were big enough to manufacture beads or other items out of them. Thus, the assemblage consists not of raw material, but rather of production waste, which was swept together with other discarded items into this corner while cleaning up Court 04. The violet to whitish amethyst had been quarried at Wadi el-Hudi, where similar hues of the stone were found.³⁷ On Elephantine Island amethyst was shaped into small pieces of jewelry or other such items.³⁸ Further fragments and beads of amethyst in various stages of production were spread out throughout the whole house, but predominantly occurring in features from Court 04, amongst them later floor layers. This indicates that this task was kept up by the inhabitants throughout the 13th dynasty.³⁹ No other raw material was found in such quantities as the amethyst in House 169. The presence, however, of various semi-precious stones in different stages of shaping, e.g. rock crystal, agate and carnelian, of fragments of red (and yellow) ochre as well as limestone, which could be used for producing pigments, of both silex tools and silex production waste, and of worked ostrich egg and mollusk shell indicates that the people living in the house worked with these materials (in R04) as well.⁴⁰

From Court 04 the front rooms of House 169 could be reached. Thin walls surrounded Room 05.⁴¹ Rooms 01 and 06 in House 169 have to remain hypothetical in layout and function, because they were situated outside of the excavation square. Only for the youngest phase the superficially visible remains of a north-south wall support the stated division in Fig. 2. The same layout since the mid-13th dynasty is therefore suggested.⁴²

Continuing the walk through the house and turning right at the western wall of Court 04 into Room 09, one would encounter two vessels (48501D/h-1-1 and D/i-1-1; Fig. 5), which probably sat in the mud floor, not preserved today. They were found open and filled with most likely secondarily introduced materials, amongst them chaff, *Synodontis*-fishbones and rodent droppings (48501D/l-n in 48501D/h-1-1). The vessels point towards a storage function of Room 09. The same is assumed for various rounded or angular bins (Inst. 600–602 and 604 plus R05) in Courts 04 and 08, and the space, over which the staircase arched (Inst. 84). Debris found close to or inside their mud floors and plaster gave only limited indication as to which items they once contained.⁴³ Installation 604 in the front court might, judging from its rounded shape, have been intended and originally served as a granary. The material found inside consisted, amongst other things, of chaff, bones, ashes and very little ceramic material. The structure could therefore have been re-used as collection place for fuel for the adjacent fireplace, similar to Installation 492 in the later phase of the house (see below). A first assessment of insect remains revealed that the floor layers of Installation 600 in Room 08 (mainly features 47501Z/m and Z/n) contained a wide variety of species of insects⁴⁴ e.g. flour and grain pests like *Tribolium castaneum*, *Phyzopertha dominica* and *Alphitobius diaperinus*, legumes-feeding Bruchidae as well as meat and skin eating species such as *Attagenus* cf. *astacurus* and *Dermestes* sp. This assortment points towards the storage or processing of foodstuff in the installation. It also shows the inability of the inhabitants of the houses to prevent these pests from participating in their meals. *Aphodius* sp. and *Gnathoncus* cf. *rotundatus*, which are generally associated with dung and rotting material, were also found here, and might indicate that the foodstuffs could not be kept in what would be considered a ‘hygienic’ environment by modern standards.

37 Aston 2009, 51. Confirmed by the project’s geologist H. Khozaym through comparative material from Wadi el-Hudi in his collection; microanalytical procedures are planned for exact location determination.

38 As an example, half of a scarab with an unfinished drill hole (47501N/r-16) was found discarded and trodden into a floor layer of neighboring Room 08, which was approximately contemporary to the accumulation.

39 Cf. Sigl/Kopp 2020, fig. 10; Sigl/Kopp in preparation, fig. 6.

40 On amounts of various of those materials see Sigl/Kopp in preparation, tables 1 and 2. On pigments see Gehad in: Sigl et al. 2019, 13–28. On the production of ostrich eggshell beads see Kopp in: Sigl et al. 2019, 12–13.

41 It is debatable if this ‘room’ was a room in the actual sense or should rather be called an ‘installation’ (the term describes any built-in features in the houses: e.g. storage bins or jars as well as staircases or underground cellars) or a (storage) compartment off the central court (R04).

42 Cf. on the reasons for the restriction on the fixed square sizes: Sigl/Kopp 2020, 9 and Sigl/Kopp in preparation.

43 Kopp in: Sigl et al. 2018b, 5.

44 Panagiotakopulu in: Sigl et al. 2019, 41–42.



Fig. 5: The phase of the mid-13th dynasty during excavation with R05 in the bottom center of the picture, R09 with the two vessels in situ in the western corner and R08 with bin-installations, most of the pegs in situ (red arrows) and staircase in the top center of the square.

From Room 09 the rear Room 08 could be reached. Two columns initially supported its ceiling. It remains open for discussion if the entirety of the court was covered (with exception of the opening for the staircase) or only half of it (Fig. 7A; see below). Seen from the perspective of the ground plan of the house, Installations 600 and 84 + 601 were set up in a very similar fashion. Both consisted of a large and a small bin. They were set between the outer walls of the room and the outer faces of the columns, restricting movement to the area between both columns but not shielding the area behind them from view (Figs. 2, 6 and 7B). Furthermore, in the pathway towards the staircase and in the center of the room, sets of pegs had been driven into one of the oldest mud floors of the room (47501V/q; Figs. 2 and 5). Two wooden pegs (47501V/t) were set at a distance of about 1.50 m from three wooden and one bone stake (47501V/u) in a parallel line to the southern wall of the room. Two single wooden pegs (47501V/r and V/s), anchored at the same distance to each other as the aforementioned ones, were found at a right angle to the first set in the middle of the room. A use of the pegs in the context of cloth production could be suggested.⁴⁵ Models and paintings of daily life found in Middle Kingdom tombs show that a horizontal loom was used during this period in Egypt. The weaving beams of this device were fixed at two parallel sets of pegs driven into the ground.⁴⁶ According to pictorial and archaeological evidence, the vertical loom was used only at a later date, in addition to (and to a certain extent replacing) this weaving apparatus.⁴⁷ But only a vertical construction, attached at the upper end to the roofing beams

⁴⁵ Suggested by Kopp.

⁴⁶ See e.g. model from TT 280, Egyptian Museum Cairo JE 46723, Winlock 1955, 31–33, 88–89, pl. 25–27, 66, 67; wall painting in tomb of Khnumhotep II, Beni Hassan No. 3, Roth 1913, 3–7.

⁴⁷ See e.g. wall painting in tomb of Thotnefer, TT 104; Shedid 1988, 128, pl. 5a, 27; *talatat*-block from Amarna, Malawi Museum: Messiah/Elhitta 1979, 24, pl. XXXI: 589. Reconstruction of the vertical loom based on evidence from Tell el-Amarna: Kemp/Vogelsang-Eastwood 2001, 405–426.

above Court 08 and fixed with the lower beam at two of the pegs in the floor for tensioning the warp, would fit the encountered arrangement of stakes in House 169. This construction would be similar to a modern loom observed in Zaire several decades ago,⁴⁸ but it would have no known contemporary parallels in Egypt. A loom fixed to the pegs in the middle of the room would have divided the southern half of it into quarters. Alternatively, the wooden posts could have functioned as a warping frame, but no evidence of a device with pegs set at these distances and in the same pattern is known from ancient Egyptian or modern sources.⁴⁹ Other purposes such as tensioning of a canopy to provide shade, if the southern half of Court 08 was not roofed, or the use in leather working unfortunately remain similarly hypothetical.

More than 15 layers of mud floor separated by thin or no fills could be distinguished in Room 08 resulting in an approximately 50 cm increase in the ground level throughout the phase of the mid-13th dynasty. The area furthermore “lacked fireplaces or any kind of [accumulations of] production residues”.⁵⁰ Fragments of impressed sealing clay (most of them only showing back types, i.e. the imprints of the objects the clay was fixed to, but no actual impressions of a seal/front types) embedded in the multiple floors occurred in slightly higher numbers in Room 08, when compared with floors of the other rooms of the house. About 50 fragments, which probably came from a smaller number of actual mud items, were found in Room 08 compared to about 10 fragments from floors in R04.⁵¹ The impressions on the backs of most of the studied sealings came from ropes and pegs, which once might have closed wooden boxes (or doors).⁵² Boxes might have been used to store textiles⁵³ and thus support the aforementioned loom hypothesis.

In the mid to late-13th dynasty the path through House 169 was changed (Figs. 2 and 7A). It now lead straight and without steps, but still ascending 40–50 cm, via a stone floored transit area (R03) from Corridor 02 into the northern room (R08) – or respectively onto the staircase to the top floor – and from there into Rooms 09 and 10. Four columns now supported the ceiling in Court 08. Felix Arnold suggested a loggia-style construction for a similar setting of architectural elements in nearby Middle Kingdom House 70. He depicts the ground floor courtyard as only partially covered.⁵⁴ Unfortunately, in the case of House 169 there is neither clear evidence for a complete coverage, nor for a half roofing of Room 08 or an additional upstairs loggia. Apart from Court 08 the northwestern rooms (R09 or respectively R09 + 10) of the house were probably roofed since the mid-13th dynasty.

By the removal of the angular installations and pegs in Court 08, and the new setting with four columns, the room might have looked more spacious to the visitor than before. Flooring was only preserved in small parts from this phase, but again the close vertical succession of several mud layers is attested. In addition to whatever tasks were performed here, it was now a transit area. For example, the inhabitants of the house crossed through it in regular intervals during the process of baking bread: A quern emplacement (Inst. 491) in Room 09 was used to prepare the flour (and maybe also to grind other materials). High accumulations of bread mould fragments found in the ash deposits filling Room 07 in this later phase of the house, suggest that the main fireplace was amongst other things used for baking.⁵⁵ Thus, somewhere in between or around Room 07 and 09 there must have been places to mix the dough and store grain. From a fill (46501D/d) close to the floor of Room 05 (46501D/f) grain feeding insects

⁴⁸ Picton/Mack 1991, fig. 87.

⁴⁹ See examples of various warping devices and their discussion in Kemp/Vogelsang-Eastwood 2001, 314–324 or and modern examples from Africa in Picton/Mack 1991, depictions on pages 118–121.

⁵⁰ Kopp in: Sigl et al. 2018b, 5.

⁵¹ Several hundred other fragments from contemporary and later (floor) fill and demolition layers cannot be assigned with certainty to the use of the house. Of the studied material only one from Room 08, found in fill layer 47501V/m set between two of the older floors of the room, bore the name of a Middle Kingdom state official: Sigl after information provided by Roberson in: Sigl et al. 2019, 15.

⁵² Cf. Sigl after information provided by Roberson in: Sigl et al. 2019, 14–15. See as well on finds from the first excavated square: Roberson in: Sigl et al. 2017, 14–16.

⁵³ Cf. Arnold 2015, 154.

⁵⁴ Arnold 2015, 5 and fig. 7.2a.

⁵⁵ Cf. Sigl/Kopp 2020, 17–20; Kopp in: Sigl et al. 2018b, 5–6. Baguette-shaped bread made in cylindrical moulds was surely not the only type of bread eaten at that time (cf. on this topic with references: Warden 2019, 4), but in the archaeological record, it is the only one, which can actually be traced easily due to its distinctive pottery shape. The main fireplace of the house probably had the same function already in the early use phase, but evidence became only pronounced in the layers connected to the time after the refurbishing of the area.

were recovered. However, in the mud floor itself so far only meat and skin eating species could be identified.⁵⁶ The room, therefore, was probably used to store foodstuffs in the mid-/late 13th dynasty and possibly earlier. It was conveniently close to the main hearth (R07), thus optimizing the workflow and the efficiency of food production.

The redirection of the pathway from the front of House 169 to the rear was connected with a rearrangement of so-called Room 07.⁵⁷ The fireplace was surrounded by (slightly more) solid and probably higher walls than before. The eastern wall of Hearth area 07 also served as a visual elongation of Corridor 02 plus Transit area 03 (Figs. 2 and 7). Only the western side of Room 07 remained open, separated from Court 04 solely by a one brick high threshold. Ashes were allowed to accumulate, continuing the ‘tradition’ of the previous use phase. From the middle to the end of the 13th dynasty an ash package of up to 100 cm in the center of the hearth, which is in the middle of the earlier Room 07 and forms the walled area of the later phase of this room⁵⁸ could be attested. Assuming the two phases covered about 100 years, a deposition rate of one centimeter per year can be determined for the ashy layers. A half-round brick installation (Inst. 499) in a middle layer of the ash package shows that fires were lit not only inside the walled section (R07) but also in front of it, leading to a greater ash production than the calculated one centimeter per year in total. At times there probably was a difference in heights of ground level between the inside of the hearth and the surrounding floors of the rooms (see Fig. 2). However, as can be seen in the example of the preserved mud floor levels of the two phases in other parts of the house, an approximately equivalent surface level increase to the accumulation of ashes can be attested over time (in average around 50 cm during the mid-13th dynasty, e.g. in R03 from 102.35 m to 102.71 m and in southern R08 from 102.64 m to 103.03 m).

Amongst the fuel collected in angular Installation 492, a high amount of dung of small ruminants was found. It did not derive from the animals being stabled in this 1.5 × 1.5 m area or anywhere on the ground floor of the building, a scenario which was previously suggested for other Middle Kingdom houses.⁵⁹ The dung was probably collected on the street, where the animals might have roamed free during daytime, or in stables located in the agricultural area of the island.⁶⁰

In Houses 166 and 73 similar changes in pathways or floor level situations could not be discerned (Fig. 2). The main hearth was located in Room 05 of House 166, as indicated by a half-round brick setting for banking the fire in the mid-13th dynasty and accumulated ashes throughout the 13th dynasty. Several angular installations in Room 02 (Inst. 469 and 605) and the space under the staircase (Inst. 468) provided storage space. A mud floor, renewed multiple times, covered the room’s (entire) ground (fragments of floor were recorded as e.g. 47501B/i and B/o, 43501C/p). Some long individual bundles of dried grass (47501B/d) and others tied together into the form of a thick mat (47501B/b-3) were found at the western side of Room 02 amongst rubble in a demolition layer⁶¹ (47501B/b, 47501B/d) on top of mud-floors 47501B/i and 47501B/k. The mat and grass fragments could derive from a light roof (or from a floor cover) of the main courtyard (R02), which leads to the assumption that a similar coverage of at least parts of Court 04 (including Area 03) and Room 05 in House 169 might have existed (Fig. 7A).

Next to the entrance to Room 05 two broken vessels, so-called beer jars (43501C/p-1-1 and -1-2), were found on the floor of Room 02 and can be attributed to the mid-late 13th dynasty phase of use of the house (Fig. 2). Additionally, the former angular bins at the western wall of Room 02 were replaced by a quern emplacement (Inst. 605) and a door separating Room 01 from Room 02 was installed. The quern suggests that bread was baked in the house. Furthermore, semi-precious stone beads (other than amethyst) and pigments might have been processed in House 166 similarly to House 169, judging from the finds of raw materials, tools and unfinished products.

⁵⁶ Panagiotakopulu in: Sigl et al. 2019, 41–42.

⁵⁷ These compartments or actual rooms (like in R05 in H166) have been called ‘oven-rooms’. However, no oven-like structures have been found in any of them anywhere in the settlement. In contrast to von Pilgrim’s assumption that ovens inside said rooms nevertheless must have existed (von Pilgrim 1996, 35, 45, 132 and 161), the structures most likely were used as a whole as cooking space.

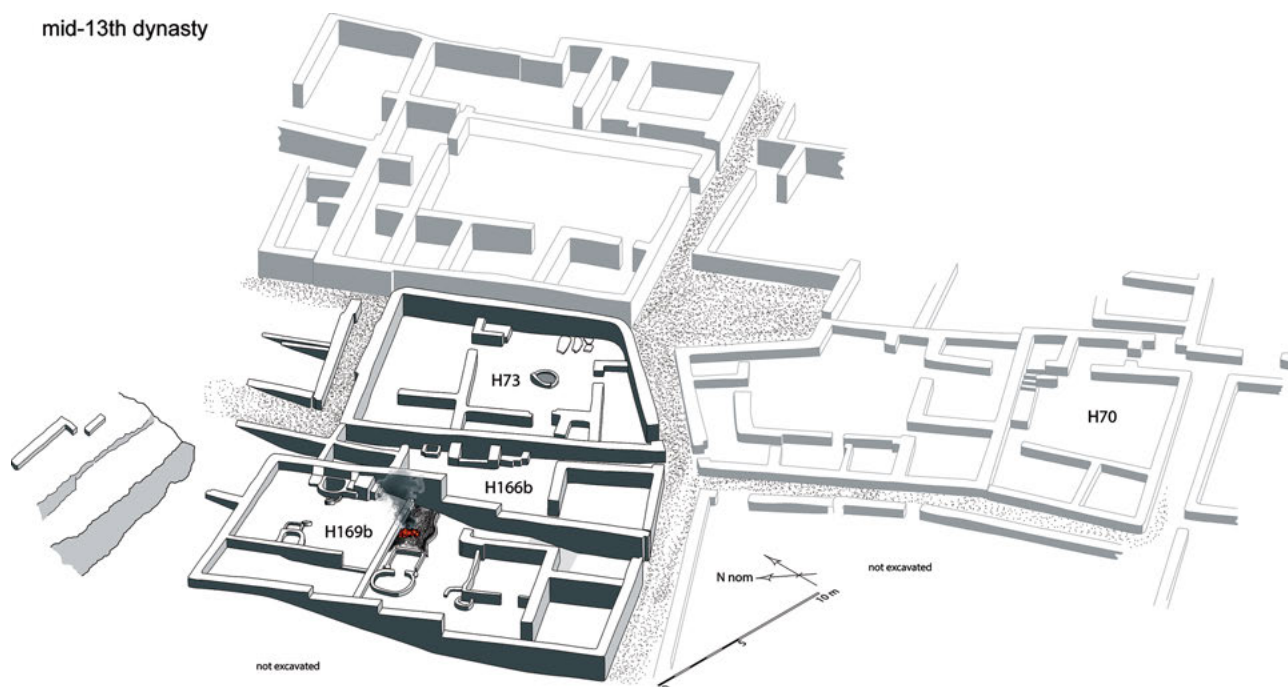
⁵⁸ The lowest elevation of the oldest ash layer is at 102.09 m, the highest elevation of the youngest layer at 103.09 m.

⁵⁹ Cf. von Pilgrim 1996, 216.

⁶⁰ Within the town according to the known map of the Middle Kingdom no stabling space seems to have been available. Cf. as well on the topic of dung from House 169: Sigl/Kopp in preparation; Sigl in: Sählhof et al. 2020, 36–37.

⁶¹ In the scope of following construction works, their remains were at some point deliberately destroyed and the bricks (as well as other reusable materials) probably smashed and reshaped for later buildings. This handling of abandoned architecture has been observed throughout all periods in the settlement of Elephantine (see e.g. Sigl/Kopp 2020, 11–13; for site formation processes summarized see: von Pilgrim 1996, 18–22).

mid-13th dynasty



mid-/late-13th dynasty

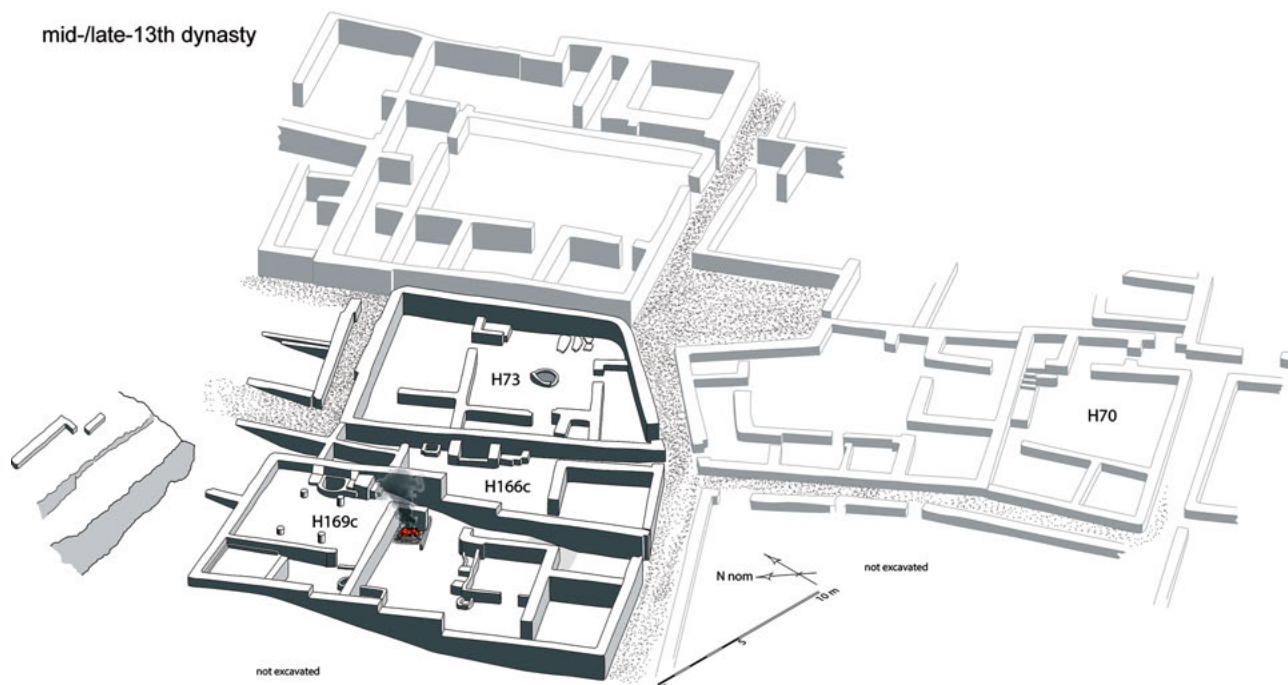


Fig. 6: Three dimensional plans of Unit 169-166-73 in the northwestern town of Elephantine during the mid-13th (top) and mid to late-13th dynasty (bottom).

In House 166 the direction of the staircase indicates that Rooms 05 and 04 were roofed, which means that the smoke of the fireplace might have dissipated through Court 02 or the opening of the staircase. When comparing the ground plan of this house to that of nearby House 70, the similarly wide distance between the rear block supporting the staircases and the front wall of the rear rooms becomes evident. One could assume that House 166 featured columns in Court 02 as well, which would allow the extension of the roof at least as far as the top part of the staircase, but maybe even further, depending on how many columns there once might have been (Fig. 7A).⁶² Whatever space may have remained open to the sky could then have been covered by the above mentioned mats.

Both in Houses 169 and 166 the widths of the walls and dimensions of the rooms of maximum four meters, in the front Rooms 01-02-06 and 01-03, would have allowed roofs to be accessible. But these would have to have been climbed onto by a ladder. In contrast to that, a reconstruction of a continuous roof over all rooms of House 73, apart from the Court 02, can be assumed (Fig. 7A).⁶³

5 Living in House 169 (and its Neighbors) During the Late Middle Kingdom

The architecture of House 169 provided the framework for all kinds of daily activities of its inhabitants. Among these, provisioning tasks, like baking and cooking, and cottage industry like the production of beads from amethyst and other materials could be located and traced in the house. However, some activities that might be expected in a household cannot be located (with certainty) based on the archaeological material, such as sleeping, receiving visitors or personal hygiene / bathroom activities. Furthermore, several locations in the house remain unknown in structure and use, such as the upper floor area, which is not preserved. Nevertheless, on a theoretical basis the finds and features may illustrate more about the daily life of the inhabitants of the late Middle Kingdom building (and its neighbors).

We still do not know enough about who the people occupying House 169 were. From the raw materials and finished items found during the excavations, it becomes obvious that they were part of a network, connecting working and living zones in the cataract area, such as the mines at Wadi el-Hudi and the island of Elephantine. No clues on the status of the inhabitants can be gained from the textual evidence consisting of sealing impressions and very few papyri and ostraca. However, using the concept and examples of Hillier and Hanson's analysis of social space (Fig. 7B)⁶⁴ and the fact that Court 08 was kept exceptionally neat and structured, one might assume that this space was of high social value to the inhabitants. Adding the aspect of visibility from the outside, following Sanders' reconstruction of sensory experiences,⁶⁵ it becomes apparent that this space was only visible to a visitor after crossing through most of the front of the building. Court 08 could, therefore, have served for both very private activities like sleeping and public activities such as receiving visitors. Additionally, the peg installations could point towards it temporarily being used as a working area as well.⁶⁶

Assuming again the role of a visitor to House 169, one would have approached the building on the southern street. Along this street, on both sides, houses with a first floor can be reconstructed, judging from the presence of staircases in the all structures of the unit discussed here as well as in other approximately contemporary buildings

⁶² Arnold (2015, 154) suggests that in House 70 the central court initially had only been roofed until the rear two columns.

⁶³ If such a roof existed, the front roofs of Houses 169 and 166 could then also have been walked on (probably by crossing a slight difference in floor heights) from House 73. Such above ground pathways connecting various buildings have been in use for example in Ghana in the 1970s (Fletcher 1995, fig. 2.4). They are also known from ancient Near Eastern sites, e.g. from the eighth mill. BCE dating Çatalhöyük (see <http://www.catalhoyuk.com/site/architecture>). However, for Elephantine (or other settlements in Egypt) this scenario remains largely hypothetical.

⁶⁴ Hillier/Hanson 1984, 143–175: here without the calculation of relative asymmetry values etc.

⁶⁵ Sanders 1993.

⁶⁶ It is interesting to note that the path towards this room in the mid-13th dynasty lead through the main fire-dependent working area, while in the later phase the route was changed to completely exclude this part of the house, maybe even visually through small buttresses narrowing the junction between Rooms 03 and Court 04.

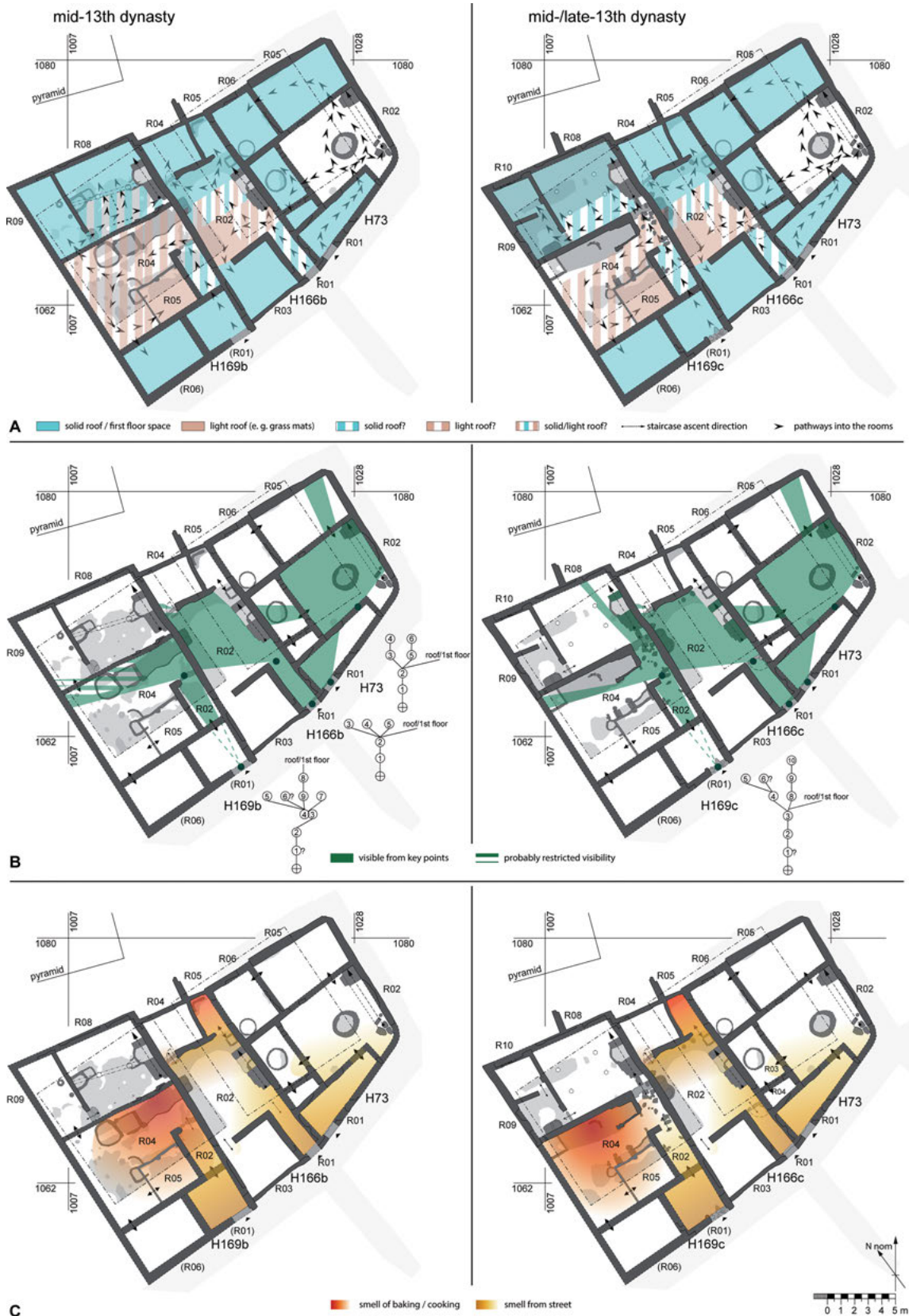


Fig. 7: A – roofing of Houses 169, 166, 73 (for H166 after suggestions for H70 by Arnold 2015) and pathways through the building from the entrance; B – major sight lines from the entrance (after Sanders 1993) and first threshold within the buildings plus access diagrams of houses after Hiller/Hansen 1984; C – range of smells (after Sanders 1993) from the street and from the main hearths.

such as House 70.⁶⁷ Due to this fact and the east-west orientation of the alley and its course sloping down the northeastern flank of the western ridge of the island, these buildings shielded the street from direct sunlight during most of the day (Fig. 6). The sun might have had direct access to the alley in the late afternoon, but then the higher ground elevation and further buildings towards the west of Unit 169-166-73 provided protection.

Entering the house from the street, one then would cross Room 01 and walk up the stairs in Room 02, which might both have been solidly roofed. One thus had moved from the light, noise and smells⁶⁸ of the street into a darker (and cooler) transit area. Window constructions have never been discovered *in situ* in any of the Middle Kingdom houses excavated on Elephantine Island.⁶⁹ At least two walls in both Houses 169 and 166 were always shared with neighboring structures and therefore not suitable for windows. Thus, it might be assumed that the lower rooms of all houses were lit only by natural top-light, its intensity depending on the areas having no roof or one made only of reeds and mats, or by artificial sources.⁷⁰ Even before emerging from Corridor 02 into Court 04, smells of cooking or baking, especially in times when these tasks had just been carried out, might be encountered. They would probably have been more intense, if odours could not be carried away due to a roof covering the entire area (Fig. 7A and 7C).⁷¹ Due to the fact that no door could be attested between Corridor 02 and Area 03 or Area 03 and Court 04 in either phase of the building, only a removable blockage like a curtain could have held smells away from the entrance area and rear parts of the house at that time.⁷²

In Transit area 03 people would have walked close to the heat of the cooking-/baking-fire. Further inside Room 04, additional fire-based activities added to the heat. A light roofing might have provided additional shade to that cast by the surrounding walls. Nevertheless, this area was probably one of the warmest places in the house. Walking through this area would have commanded attention, not only due to the various tasks being performed here (some of them maybe at the same time), but also due to the sloping floor in Court 04. It would have been a noisy area at times, when stones were broken into smaller pieces or shaped into jewelry. Some of these noises might even have reached the street, adding to the general sounds of the town.⁷³

One would then cross into the darker Room 09, which especially at its northern end (later separated as Room 10) might have remained one of the darkest and coolest places in the house. It was insulated from the top through the first floor structures. It cannot be ruled out that – if no other house was directly attached to House 169 – small openings close to the ceiling could have existed in its northern wall (similar to Fig. 8).⁷⁴ These would have allowed cool air from the shadowy side of the house and even wind⁷⁵ to enter the building, but not much light. The draft resulting from different pressure zones due to the different temperatures in shadow vs. light and inside vs. outside would have carried away heat and odours of Court 04. The slits would, however, also have been an access point for

⁶⁷ Cf. summary on the topic von Pilgrim 1996, 211–212.

⁶⁸ See on noise and smell reach radius: Sanders 1993; Kopp in: Sigl et al. 2018a, 174.

⁶⁹ von Pilgrim (1996, 212) nevertheless reconstructed windows in the upper region of the walls of the central courts and a raised solid roofing.

⁷⁰ None of the walls of the three houses were preserved high enough to show lamp niches. However, amongst the finds from a late-13th dynasty fill layer in Room 10 of House 169a few fragments of lamps (or incense burners) were identified by the project's head ceramicist Leslie A. Warden (pottery convolute 46501C/b-1). A small bowl with a blackened spot on the rim (46501M/k-1-1) came from another similar dating ashy fill layer from Room 02 and could be interpreted as a lamp. Because of their find context none of them can currently be connected with certainty to the actual use of the structure. They proof, however, the presence of artificial lighting in general.

⁷¹ In Sudan mat-roofed kitchens, in which fire is used in several places for cooking and baking, can still be observed. However, these kitchens are constructed all around from branches and reeds and thus are provided with circulating air through these parts in contrast to the houses on Elephantine with their brick walls: information thanks to material filmed by Ulrike Nowotnick and Stephen Matthews in the scope of the project Connecting Foodways, Spring 2020, cf. <https://www.dainst.blog/entangled-africa/en/home/> and <https://youtu.be/oyti866mnuw>.

⁷² Own experience with curtain screening of kitchen, 2006–2013.

⁷³ According to Sanders (1993, 59) sound can travel up to 30.2 m. From own experience with local architecture, especially the excavation house of the German Institute on Elephantine built of mudbrick, and the local environment at the first cataract, however, sounds may be reflected or swallowed by the internal structures, but may also be completely blocked when coming from the outside with all openings closed. Wind and the fact that the steep shore of the western side of the Nile throws back loud noises (including the braying of donkeys) from as far as the eastern bank of the river, additionally impact the actual acoustic experience.

⁷⁴ Visible e.g. as slots at the end walls of vaulted rooms in the abandoned village Bab south of Aswan: Zabrana 2013, pl. XXVIII: 3. Observed also in Tell Beydar, Syria, by Pieter Collet, personal communication October 2020.

⁷⁵ The today prevailing northwestern wind regime was only established about 2700 cal. BP: Kröpelin et al. 2008.



Fig. 8: Ventilation openings near the ceiling of a room in an abandoned Nubian house on Biggeh Island.

sand, dust, insects and commensals or pests (e.g. mice or rats), maybe partially also explaining the previously mentioned infestations of edible goods in the house. The draft would also have blown ashes rising from the fire in Room 07 away from the rear and first floor of the house. At the same time, any breeze from the river or the western Nile shore would have carried along any kind of pollution coming from other buildings in the northwestern town north of Unit 196-166-73. Thus, even though much diluted, a certain general smell must have lain over the town, which the inhabitants probably were used to and did not specifically notice during most of the day.

In House 166 the situation might have been similar to House 169. However, due to the fact that the main hearth was situated in northern Room 05 and this room most likely was covered with a solid roof, heat and ash particles might have been more intense in the center of the house. In the later 13th dynasty, when Corridor 01 was blocked off by a door, most of the air might have come into the house by the opening of the staircase. The installation of ventilation gaps in the northern wall of the house might in this case have been a good addition. In Room 05 they might have added air flow in order to allow the fire to burn bright.

In addition to these sensory experiences, others can only be imagined to-date: how did the inhabitants of Unit 169-166-73 for example deal with their own feces? Their presence somewhere in the house may be assumed, not the least due to the finds of insect species breeding preferably in human excrement.⁷⁶ Did they collect these in ceramic vessels or in the area where fuel was stored to be burned with other household waste? The streets might not have been the ideal place to rid themselves of these bodily products.⁷⁷ Neither may it have been an option to walk over to the Nile's shore to urinate or defecate, especially in the middle of the night and in case of having contracted diarrhea. The Nile shore could have been the place to empty and clean one's chamber pot as well as perform bodily hygiene, if this was not done in the house.⁷⁸

6 Closing Remarks

Houses 169, 166 and 73 have been placed in their natural environment. Several aspects of daily life were discussed. Others are awaiting answers from the archaeological and natural scientific analyses of the Realities of Life-team. Even though the individuals occupying these houses in the late Middle Kingdom cannot be identified by name or social status, some aspects of their living situation could be revealed. Preliminary solutions to questions such as how it felt like to live in these houses could be given. The collaborative analysis of the excavated material from the perspective of various sciences has proven to produce new data on households on Elephantine Island and with them new possibilities of interpretation. And with the support of our Egyptian colleagues and of the German Institute, the current picture of life's realities in the northwestern island town hopefully will be sharpened and clarified even further in the near future.

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⁷⁶ Panagiotakopulu in: Sigl et al. 2019, 41–42.

⁷⁷ On the inadequacy of the street as waste disposal area in general see Arnold 2015, 158.

⁷⁸ On chamber pots and bodily hygiene in the context of the workmen's barracks in Giza cf. Lehner in preparation. Chamber pots are known from Mesopotamia since the 4th millennium BCE, cf. e.g. Wald 2016. In the town of Tell el-Amarna bathrooms have been identified, however without toilets: Spence 2015.

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plans © J. Sigl, German Archaeological Institute Cairo, 2020 after drawings of P. Kopp, German Archaeological Institute Cairo, 2019

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photo © J. Sigl, 2015 with permission of B. Schäfer, 'The Nubian villages on Biggeh Island'-project and the Aswan Inspectorate of the Ministry of Tourism and Antiquities

