

# The Necropolis of Dahshur

## Eleventh Excavation Report of the work in spring 2014

### German Archaeological Institute

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#### *Abstract*

In spring 2014 the team of the German Archaeological Institute (Cairo) continued its work at Dahshur. The focus was the excavation of an extensive brick structure north of the valley temple of king Snefru. The building is older than the stone temple and more extensive than previously thought. It was surrounded by a massive brick enclosure wall. Much of the area encompassed by the enclosure wall was occupied by a garden with tree pits.

In addition, a limited magnetometric investigation was conducted to the northwest and south of the temple area. Here, extensive settlements were discovered.

#### *Introduction*

In spring 2014 the team of the German Archaeological Institute (Cairo)<sup>1</sup> continued its work at Dahshur from March 22<sup>nd</sup> to April 24<sup>th</sup> 2014<sup>2</sup>. Due to security reasons our possibilities were again limited but we were able to execute a short field season. The focus of the field work was the excavation of an extensive brick structure north of the valley temple of king Snefru which was discovered by a magnetometric survey in 2013. In addition, a limited magnetometric investigation was conducted northwest and south of the temple area.

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<sup>1</sup> For earlier reports see N. Alexanian, S.J. Seidlmayer, „Die Residenznekropole von Dahschur, Erster Grabungsbericht“, *MDAIK* 58 (2002) 1-28; N. Alexanian, S.J. Seidlmayer, „Survey and Excavations at Dahshur“, *Egyptian Archaeology* 20 (2002) 3-4; N. Alexanian, S. J. Seidlmayer, „Die Nekropole von Dahschur. Forschungsgeschichte und Perspektiven“, in: M. Bartá, J. Krejčí (eds.), *Abusir and Saqqarah in the Year 2000, Archiv Orientalni Supplement IX* (Prague, 2000) 283-304; N. Alexanian, H. Becker, M. Müller, S.J. Seidlmayer, „Die Residenznekropole von Dahschur. Zweiter Grabungsbericht“, *MDAIK* 62 (2006) 7-41; N. Alexanian, R. Schiestl, S.J. Seidlmayer, „The Necropolis of Dahshur. Excavation Report Spring 2006“, *ASAE* 83 (2009) 25-41; W. Bebermeier, N. Alexanian, D. Blaschta, A. Ramisch, B. Schütt, S. Seidlmayer, „Analysis of Past and Present Landscapes Surrounding the Necropolis of Dahshur“, *Die Erde* 142, 3 (2011) 325-352; A. Ramisch, W. Bebermeier, K. Hartmann, B. Schütt, N. Alexanian, „Fractals in topography: Application to geoarchaeological studies in the surroundings of the necropolis of Dahshur, Egypt“, in: *Quaternary International* 266 (2012) 34-46.

<sup>2</sup> We thank the Ministry of Antiquities for its support. The Ministry was represented by Inspector Haeny Abdel Aziz, the directors of Dahshur Nasr Ramadan and Mohammed Youssef and the Minister of Antiquities Dr Mohammed Ibrahim. We also wish to thank all team members for their work. Members of the field mission in spring 2014 were Felix Arnold, Sandra Müller, Jacob Ordutowski, Josuah Pinke and Reinhardt Stolle.

### *Magnetometric survey*

The magnetic survey undertaken in 2013 in the area north of the valley temple of the Bent Pyramid was extended this season in a northwestern direction under the direction of T. Herbich. Already last year a settlement with orthogonal streets was detected. This year the northwestern edge of this settlement was surveyed, with some additional blocks of buildings. The total area can now be estimated to be about 350 m from east to west and about 200 m from north to south. In addition, a magnetic survey was conducted to the south of the valley temple. Here, the remains of an extensive building were detected, apparently standing opposite the southern entrance of the temple. (N.A., F.A.)

### *Building north of the valley temple of the Bent Pyramid*

The focus of the field work was the excavation of an extensive brick structure north of the valley temple of king Snefru (Fig. 1).



Figure 1. General overview of the excavation north of the valley temple of the Bent Pyramid,

© GAI Cairo, J. Pinke.

During his excavation of the valley temple of king Snefru, A. Fakhry discovered a brick building on the north side of the temple that he dated to the Middle Kingdom (Fig. 2)<sup>3</sup>. R. Stadelmann interpreted

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<sup>3</sup> H. Ricke, in: A. Fakhry, *The Monuments of Sneferu at Dahshur I. The Bent Pyramid* (Cairo, 1959) 113 f., Fig. 60 and 62.

the building as a magazine or vestry of the temple<sup>4</sup>. A reexamination of the site in 2012 and 2013 showed that the building is actually older than the temple itself and its remains much more extensive than previously thought. The major aim of this season was to investigate this earlier building in its entirety and gain as much archaeological evidence as possible on its original layout, date and function.



Figure 2. Remains of the brick building north of the valley temple © GAI Cairo, J. Pinke.

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<sup>4</sup> R. Stadelmann, „Neue Forschungen an der Knickpyramide. Die Kampagnen des DAI Kairo in den Jahren 2005 und 2006“, *Sokar* 14 (2007) 10, Abb. 10.



Figure 3. Map of the remains north of the valley temple, © GAI Cairo, F. Arnold and R. Stolle

Already in 2012 a magnetic survey was conducted, revealing the outer limits of the features. This season, about half of the total surface area could be uncovered (Fig. 3). The remains of the building are preserved below a layer of windblown sand that is rarely more than 10-15 cm deep. Of the original structures very little is preserved, sometimes only last traces of its foundations. The building was constructed directly on the natural surface of the desert, in the north on *tafl*, in the south on a compact layer of sand.



Figure 4. Reconstruction of the enclosure in its original state, © GAI Cairo, F. Arnold.

The brick building known from the publication of A. Fakhry turns out to have been surrounded by a massive enclosure wall (Fig. 4). The rectangular enclosure measures about 80.5 m from north to south and 55.8 m from east to west. Of the wall itself only a 5 m wide foundation layer of compact earth remains. Only at the southwest corner some of the original brick work is still preserved. Walls of this dimension are known from the so called funerary enclosures of the Early Dynastic period at Abydos as well as from city temples of the Old Kingdom, such as at Bubastis. No entrance could be detected for certain. At least two gates are likely to have existed, one near the south end of the east side and one in the center of the south side.



Figure 5. General overview of the tree pits along the north side of the enclosure,  
© GAI Cairo, J. Pinke.



Figure 6. Rows of tree pits along the northern side of the enclosure, © GAI Cairo, J. Pinke.



Figure 7. Remains of a bush in the northern extension of the enclosure, © GAI Cairo, J. Pinke.

Much of the area encompassed by the enclosure wall was occupied by a garden (Fig. 5-7). Along the west side, four rows of 26 tree pits each could be detected<sup>5</sup>. The pits are about 2.2-2.4 m apart and have a diameter of 50-100 cm. Where ever preserved, the pits are surrounded by a circular irrigation channel, enabling water to filter to the roots of the plants. In most cases, the space between the pits was covered by a thin layer of earth, allowing smaller plants to grow. Only in one segment, the earth was limited to narrow strips, possibly serving as flower pits. Additional rows of tree pits were arranged along the east side of the enclosure, though apparently more densely spaced. On the north side only two rows of plants are preserved. In one case, the roots of a palm tree are clearly visible here. Whether the entire garden was planted with palms cannot be verified since the state of conservation is in most cases insufficient.

In the center of the enclosure an area of about 30 x 50 m was left free of plants. The ground level was not entirely horizontal. In the south the ground is more than 1 m higher than in the north (about 29.5 m above sea level in the south, about 28.5 m in the north). On this elevated ground a brick building was constructed, part of which is the one discovered by A. Fakhry (Fig. 2-4). The building was originally about 34 m long from north to south and 25 m wide from east to west. The southern part

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<sup>5</sup> A very similar garden was found next to the temple on the east side of the Red Pyramid. R. Stadelmann et al., „Pyramiden und Nekropole des Snofru in Dahschur. Dritter Vorbericht über die Grabungen des Deutschen Archäologischen Instituts in Dahschur“, *MDAIK* 49 (1993) 261, Abb. 1a-b.

of the building was occupied by three entrance rooms (A, B and C), the northern part by a courtyard (D). The main entrance lay at the southern end of the east side and was set into the back of a shallow niche. Behind the door the direction of the entrance was bent twice, leading through a passage (A) into a columned hall (B). Along the foot of the walls of both rooms deep pits are preserved, possibly serving as emplacements for offering vessels. West of the hall lies a third room (C), square in ground plan. A large area in the middle of this room was originally sunken 20 cm below the surrounding floor level. The room may have served as a space for washing or ritual purification. At first it was not roofed. Only later the sunken area was reduced in size, two columns were added and the room roofed over.

The columned hall (B) had a side entrance from the south. Opposite lies the entrance to the courtyard (D) which occupied the northern part of the building. The northern limit of the courtyard is not preserved. Its location can be inferred, however, from two rows of plants placed along the outside of the wall. Several column bases were found in this area which originally must have been arranged along the north side of the courtyard. The western half of the courtyard was occupied by a sunken area much like the one in room C. The bottom and the sides of the 5 m wide, 7 m long and 20 cm deep space were furnished with a lime plaster.

During its period of use, the building was repeatedly refurbished and altered. At some point a wing of rooms was added to the west (E), giving the building a square ground plan. The extension occupied an area formerly occupied by part of the garden, the plants now being covered by the floor of the building. In a third stage, the new wing was subdivided into at least two spaces (E and F) and an entrance added at the south end of the west side.

Additions were also made in the area surrounding the building. In the east an additional building was constructed, abutting to the enclosure wall and again covering some plants of the original garden. Another, smaller structure was built into the southwest corner of the enclosure. The northern half of the enclosure remained free of buildings, however. Traces indicate that the free space in the middle was supplied with a gypsum floor, possibly transforming the area into a kind of courtyard.

The purpose of the enclosure and the structures in its interior remains unclear. Two interpretations seem possible. The complex could be seen as a direct predecessor of the stone temple built later in its vicinity. The ground plan of the brick building indeed does share some features with the temple, such as the wing of entrance rooms in the south and the courtyard in the north. On the other hand, the building was constructed entirely of brick and appears more temporary in character. The building thus could have had a different or at least partially different purpose. Possibly it was built only for the celebration of certain festivals, not for eternity. Furthermore, it cannot be ruled out that the king was present in the building as a living person, not as a statue. In this sense the structure could be related in purpose and meaning to the funerary enclosures of the First and Second Dynasty at Abydos or the "sacred enclosure" familiar from depictions of burial rituals<sup>6</sup>.

The date of the structure can be narrowed to the middle of the reign of king Snefru. Quite possibly it was erected at the time work started on the Bent Pyramid, in the year of the 8<sup>th</sup> counting. The

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<sup>6</sup> J. Settgast, *Untersuchungen zu altägyptischen Bestattungsdarstellungen*, ADAIK 3 (Glückstadt, 1963) 48-74.

building could thus have been used for less than 15 years, until the stone temple was erected in the year of the 15<sup>th</sup> counting<sup>7</sup>.

While the placement of the stone temple appears to respect the location of the brick building, the earlier structures do not seem to have been used after the temple was completed. Most brick walls are covered by the building debris of the temples. The thick enclosure wall was entirely removed and replaced by a new, much thinner wall. The new enclosure wall did encompass most of the space formally occupied by the brick enclosure, however. The garden was even extended in the north, along the slope of a low hill. Two additional rows of plants were added here. In several cases the roots of bushes are preserved in this part of the garden (Fig. 7). How much of the original garden remained in use is unclear. In some areas plants were added later, sometimes replacing earlier plants.

While the specific function and meaning of the structure remains unclear, the building does add a new facet to our knowledge and understanding of the origin of pyramid temples at the beginning of the Old Kingdom. Though possibly related to other building types of the period, the structure in its design and especially in its extensive integration of plants is something new and so far unique. Buildings of the same or similar kind may indeed have existed in the vicinity of valley temples of other pyramid complexes, however<sup>8</sup>. (F.A.)

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<sup>7</sup> For the chronology of the reign of king Snefru see R. Gundacker, *Untersuchungen zur Chronologie der Herrschaft Snofrus, Beiträge zur Ägyptologie* 22 (Vienna, 2006).

<sup>8</sup> Compare for example the *r'-š* and the *mrt* mentioned by texts of the Old Kingdom. H. Goedicke, *Königliche Dokumente aus dem Alten Reich*, ÄA 14 (Wiesbaden, 1967) 69-72. The columned hall within the brick building might indeed be a *ḏ3d.w* known to have existed within an *r'-š*.