

THE NICHE OF THE VESTIBULE OF THE ROYAL MORTUARY CULT COMPLEX OF THE TEMPLE OF HATSHEPSUT IN DEIR EL-BAHARI

Mariusz Caban

Wrocław University of Technology, Faculty of Architecture

Abstract: The article is about damages to the architecture and wall decoration of niches in the Vestibule of Hatshepsut in the Royal Mortuary Cult Complex. Traces of ancient repairs may be discerned in the distorted layers of limestone blocks and deformed relief. The nature of this restoration indicates that it took place once the sculpting of the reliefs had been completed but before the painting. The reasons for this can be related to the short building time of the temple.

Keywords: Deir el-Bahari, Temple of Hatshepsut, Royal Mortuary Cult Complex, architecture

The Vestibule of the Royal Mortuary Cult Complex continues to be the topic of architectural research (Szafrński 2008: 273–274; 2010: 261–262; 2011: 197–198), the wall reliefs indicating the presence of an open courtyard in the northern part and a roofed vestibule on the south.

Two niches in the Vestibule were placed in the east wall, opposite the entrance to the Chapel of Hatshepsut (Szafrński 2008: 274, Fig. 5) [*Fig. 1*]. The original design of the niches is not evident. The southern niche B, which is in the corner, preserves traces of the original guidelines for the wall that were cut in the pavement. The cut is lined up with the face of the south wall of the Vestibule and the Room of the Window [see *Fig. 1*], illustrating the original design

that called for a square plan of the niche with an entrance on axis. The niche was subsequently extended southward, cutting into the thickness of the temple outer wall. It is not likely that these alterations derived from either compositional or structural considerations. The different size of the two niches must have derived from their function.

The decoration of the walls of niche B, reconstructed by Mirosław Barwik, has now been prepared as a computer model, incorporating a revised positioning of some of the blocks. An analysis of the state of the decoration revealed the extent of the deformation of the relief. The nature of this deformation and its causes are discussed in this paper.

WALL DECORATION IN NICHE B AND ITS DEFORMATION

Scenes on the walls of niche B represent Queen Hatshepsut and her *ka*, making offerings on a dais in front of the deities of the Ennead. The raised relief was carved on a wall of limestone blocks that were fitted together without bonding mortar. Bigger gaps between blocks and losses in the surface of the stone were filled with a light lime mortar before the relief was painted.

Over the ages this decoration was damaged substantially, by natural processes as much as intentional destruction, the latter in the form of chiseled parts and modified text occurring in Pharaonic times, as well as devastation of facial features. Natural processes included corrosion of the stone caused by atmospheric conditions

and seismic-related mechanical damage. A crashing roof slab could have brought down the upper parts of the walls. Falling blocks were shattered, damaging the reliefs on the standing parts of the walls.

The polychromy has been preserved fragmentarily and the colors have faded considerably. Red is still prevalent, mainly on the *ka* figures and as the red and yellow of the dado rail. Black occurs in the lower part of the decoration, mostly along the corners. The ornamental checker band also bears traces of white and blue next to the black. White was preserved partly on the divine figures.

The reliefs on the north wall and a part of the eastern one are substantially

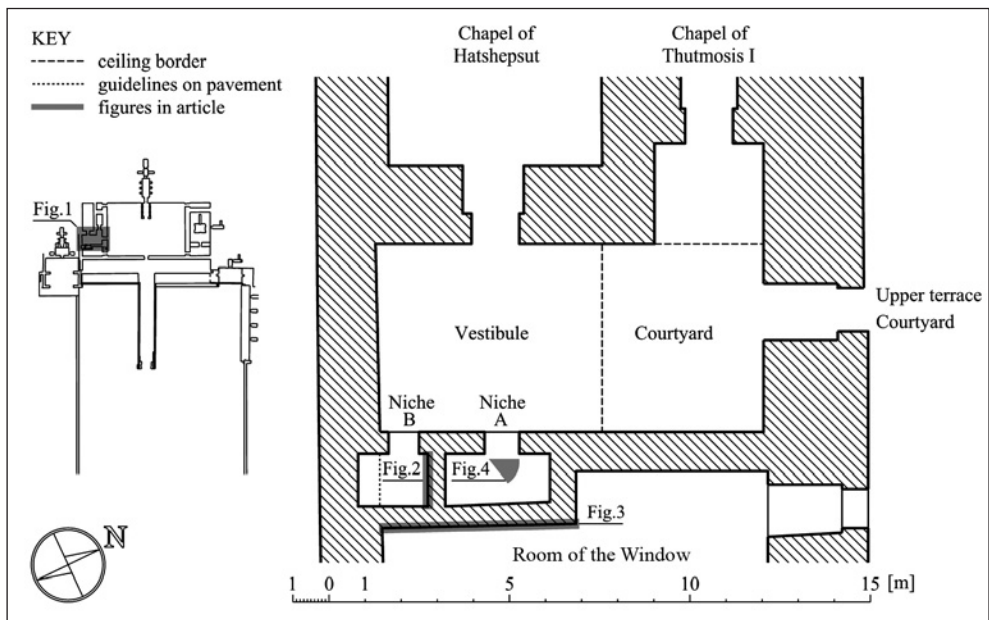


Fig. 1. Royal Mortuary Cult Complex with the location of the niches
(Drawing M. Caban, after T. Dziedzic)

deformed, the blocks having shifted leaving gaps, both in the surface plane and within the wall thickness. The biggest gaps are 4 cm wide. Numerous peeling chips off the face of the stone can be seen where the blocks touch and in the wall corners.

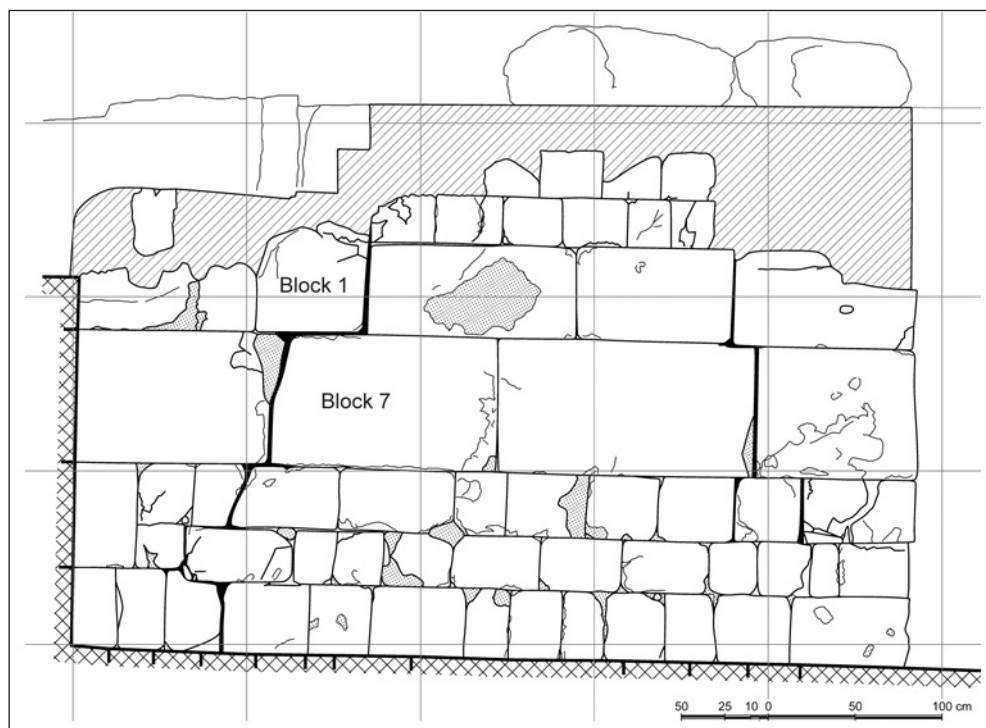
Cracks are occasionally seen through whole blocks, visible also in neighboring halls wherever the walls are just one block thick and decorated on both sides. The biggest deformations are observed currently on the north wall of the niche [Fig. 2].



Fig. 2. North wall of niche B (Egyptological interpretation M. Barwik, drawing M. Caban, A. Stupko, M. Puzskarski; photos M. Caban)

The illustration combines a photographic record of the blocks with epigraphic documentation of the relief. Blocks 1, 2 and 7 have more than one decorated face, which constitute the corners of the two niches, A as well as B. Block 2 is at the same time the northwestern corner of niche B and the southwestern corner of niche A, the face of the east wall of the vestibule and the jamb of the entrance to niche B. Blocks 1 and 7 served an analogous function on the opposite side, forming furthermore the face of the west wall of the Room of the Window. The remaining blocks are faced on two, opposite sides: the north wall of niche B and the south wall of niche A.

Having cracked in half, block 1 now consists of two pieces that have moved apart to either side of the wall axis, causing the corners with the east and west walls to cave in and the block surface to bulge out into the Room of the Window. This shift can be seen in the deformation of the relief at the joining of blocks 2 and 3 to the west and of blocks 4, 5, 6 and 7 to the east. Traces of repairs could be seen in the gap between blocks 3 and 4 after the cleaning of the joint, both a light white mortar and dark gray modern mortar. A light white mortar was used for repairs at the joining of blocks 1, 5, 6 and 7, where there are many peeling chips, the bulges and edges of the relief with remnants of paint ensconced



*Fig. 3. Southern end of the west wall of the Room of the Window
(Drawing M. Caban)*

in this mortar. The checker band running along the western edge of block 1 misses the continuation of this band on block 2 by 3.8 cm. In this corner, on the west wall of the niche, level with block 2, there is evident flat chiseling of the stone surface, extending the north wall of the niche to the west. In effect of these processes, the two walls at this level meet at less than a right angle. The chiseling was painted over and traces of this paint have been preserved. On the other side of the wall, the same deformation of the relief and traces of repairs with a light white mortar can be observed in the decoration of niche A.

The southern end of the west wall of the Room of the Window [Fig. 3] is formed of blocks that are at the same time facing blocks of the niche walls inside the

Vestibule. Assuming that the foundation and successive courses of blocks in this wall were originally horizontal, it is evident that the wall structure had settled toward the north. The footing has been recorded as falling approximately 2.5 cm every meter of its length, giving a total of about 12 cm across the entire length of the southern part of this wall. This process had the effect of deforming the decoration of niches in the Vestibule and is reflected in the directional shifting of the blocks. The dado rail in the northeastern corner of niche A is displaced between the north and east walls of the niche by approximately 8.5 cm [Fig. 4]. The west wall also reveals two vertical separations of blocks on the full preserved height of the wall [see Fig. 3]. Starting from the southern corner, one can



Fig. 4. North wall of niche A and the displacement of the dado band in the northeastern corner (Photo M. Caban)

observe the downward shift of the blocks after the first break line. In effect, the emerging crack should be seen as a sign of this wall undergoing a settling process.

A monastery was raised in the 5th century on top of the Royal Mortuary Cult Complex. The tower of the monastery stood partly on top of the walls of the Vestibule niches and the condition of the wall could have been aggravated by this, leading to deformation and damage. Archaeological excavations below the floor of niche B also revealed Coptic-period fill, replacing most probably earlier fill from the times of Hatshepsut. The fill contained decorated fragments of blocks and joints

with preserved polychromy, constituting elements of the decoration of niche B.

The excavations also revealed how the niches had been constructed. The outer walls of the niches were built from the level of the Vestibule floor and floor of the Room of the Window. The partition wall was not. A closed ring was formed, the interior of which was filled to create a platform under the pavement slabs that sealed everything. These slabs, decorated from the Vestibule side, featured guidelines cut in the stone for the walls rising to the roof. In this way the partition between the niches was founded on top of fill covered with pavement slabs.

CONCLUSIONS

The southeastern part of the upper temple terrace was constructed on an artificial platform instead of directly on bedrock (Szafrński 2010: 259–262). This platform consisted of loose fill encased by walls. The temple was built relatively fast, hence the platform fill could have been undergoing settling processes (Wilun 1976: 141–146, 156–157) not only during the construction of the sanctuary, but also for some time after the work had been completed. In such instances, water penetration is a factor, as is the weight of the fill, gradually compressing extant voids and subsequently lowering its level. Seismic events could have also augmented the settling processes, violently eliminating voids that could have remained from the time of construction. Had the fill consisted solely of hard rock fragments, settling need not have occurred owing to the incompressibility of the material. This state would have continued until the first tremors, which would have resulted in the

disappearance of the voids and further fill compression, lowering in effect the walking level. Ancient building lore in this regard remains a mystery to modern architects. Settling may have proceeded just as successive phases of the decoration were completed, forcing successive teams of artisans to deal with the resulting problems. It would explain the deformations described above as well as traces of repairs. It is also possible that the tremors and settling occurred already after the temple had been completed and the repairs reflect necessary action in later periods.

A computer reconstruction of the decoration on the north wall of niche B was prepared using special software that permitted the blocks to be placed in their original position, compensating for the deformation of the relief. It was thought that correcting the position of the blocks will make the relief whole again, but the result was not satisfactory as far as the joining of the original relief at the

junction of blocks 1 and 2 [see *Fig. 2*]. The ornamental checker band was still displaced by about 4 cm. A gap 4 cm wide would have had to exist between blocks 2, 3 and 8 for the line of the checker band on both blocks to match up. This would make the whole wall wider. It was assumed that the position of blocks in the lower parts of the wall of the niche was unchanged and consequently the wall was not made wider by these 4 cm in the reconstruction.

Block 2 also proved interesting in terms of the intensity of the color on the dado rail running across blocks 2 to 7. The color of this band is evidently darker on the corner block 2, which also bears traces of white mortar on the face. It is also in this corner that we observe the chiseling that extended the wall. An analogous change in the intensity of the dado rail can be seen on the other side of this particular wall, in niche A. An analysis of these facts leads to the conclusion that the observed traces are proof of repairs being made to the relief already during the making of the decoration. The color on this block was preserved in better condition, because it must have been masked for a longer time by a coat of white mortar. It could attest to the settling of niche walls while the temple was still under construction, caused most probably by the settling of layers of fill making up the platform.

The stabilizing work that French egyptologist Émile Baraize carried out in this part of the complex as part of his excavation and reconstruction program in the 1930s may have affected the niche decoration. A dark-colored mortar [see *Fig. 2*] testifies to these activities. Some decisions taken then would not pass muster today (such as cutting the original capitals of the columns in the Shrine of

Hathor in order to introduce a concrete slab under the cracked architraves and raise them to their original height). It is possible that one of the blocks from the wall of the niche was cut down intentionally in order for better mounting and stabilizing of other blocks. The imprecise joining of the checker described above could have been the effect of such activities.

Seismic activity should also be taken into consideration, earthquakes having destroyed many temples in the general neighborhood already in antiquity, including the next-door complex of Tuthmosis III. Earth tremors caused evident damages, deformation of the architecture and decoration that was repaired on a current basis. It is therefore possible that the repairs discernible on the niche walls came from later periods.

Not all the different damages noted on the niche walls in the Vestibule of the Royal Mortuary Cult Complex in Deir el-Bahari can be attributed to specific events. Observations of the current condition and recorded facts from the history of the temple can support different versions of events and it is equally probable that all the different circumstances could have affected to some extent the present state of preservation. Neither chronology nor the extent of the effect can be determined easily today, but continued studies may yet help to reconstruct the building history of the niches as well as that of the temple as a whole.

ACKNOWLEDGEMENTS

I would like to thank Dr. Mirosław Barwik for a place on the documentation team assisting him in his egyptological research on the reconstruction of the Royal Mortuary Cult Complex of the

Temple of Hatshepsut, and I am grateful to the Polish Centre of Mediterranean Archaeology, University of Warsaw, for the opportunity to participate in the work of

the Polish–Egyptian Archaeological and Conservation Mission to the Temple of Hatshepsut in Deir el-Bahari as part of the Centre’s scholarship program.

Mariusz Caban

Wrocław University of Technology, Faculty of Architecture, Chair
50-370 Wrocław, Poland, Wybrzeże Wyspiańskiego 27
mariusz.caban@gmail.com

REFERENCES

- Szafrński, Z. E. (2008). Deir el-Bahari. Temple of Hatshepsut, season 2005/2006. *PAM*, 18, 269–284.
- Szafrński, Z. E. (2010). Temple of Hatshepsut at Deir el-Bahari, season 2006/2007. *PAM*, 19, 251–268.
- Szafrński, Z. E. (2011). Temple of Hatshepsut at Deir el-Bahari, season 2007/2008. *PAM*, 20, 193–202.
- Wiłun, Z. (1976). *Zarys geotechniki* [*An outline of geotechnics*]. Warsaw: Wydawnictwa Komunikacji i Łączności [in Polish].