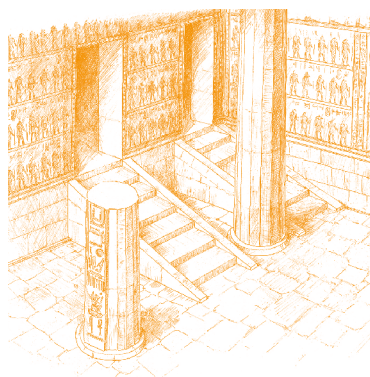


Enigma of the niches in the eastern wall of the Royal Mortuary Cult Complex in the Temple of Hatshepsut at Deir el-Bahari



Abstract: The paper offers an explanation of the misalignment of blocks and their decorations in two cultic niches in the Vestibule of the Chapel of Hatshepsut in the Royal Mortuary Cult Complex. Detachment of the niches from the adjacent walls, discrepancies in their dimensions, and intentional absence of jambs have led the author to conclude that the niches were reconstructed in this spot after having been removed from their original location in another part of the temple.

As the previously matching elements were reassembled in the new location during the reign of Queen Hatshepsut, the correct reconstruction of their decoration proved impossible, as the decorated blocks were irreversibly damaged.

Keywords: niche, plinth, connections of courses of blocks, land subsidence, temple expansion

INTRODUCTION

One of the most important parts of the temple, the Royal Mortuary Cult Complex, was located on the southern edge of the Upper Terrace [Fig. 1]. This complex consisted of two chapels and vestibules, five niches, and a courtyard. Out of these rooms, the most important

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was the Offering Chapel of Hatshepsut. The eastern wall of the vestibule in front of the entrance to the Chapel of Hatshepsut holds two cultic niches, *de facto* minuscule chapels.¹ Their spatial solutions and structural details, unusual from the perspective of architectural and constructional principles, make these features enigmatic. They were both located in a relatively thin wall (only 1.04 m thick)² that separated the Royal Mortuary Cult Complex from the Room with a Window,

and their placement severely distorted the otherwise regular layout of the latter room [Fig. 2].³ In addition, several blocks used in their construction had been cut in a way that had caused damage to their decoration. The slope of the flooring inside the niches has led researchers to attribute their state to an earthquake, land subsidence, or the pressure of the tower of the Coptic monastery that stood partly on top of the walls of the vestibule niches, which could have led to deformation and

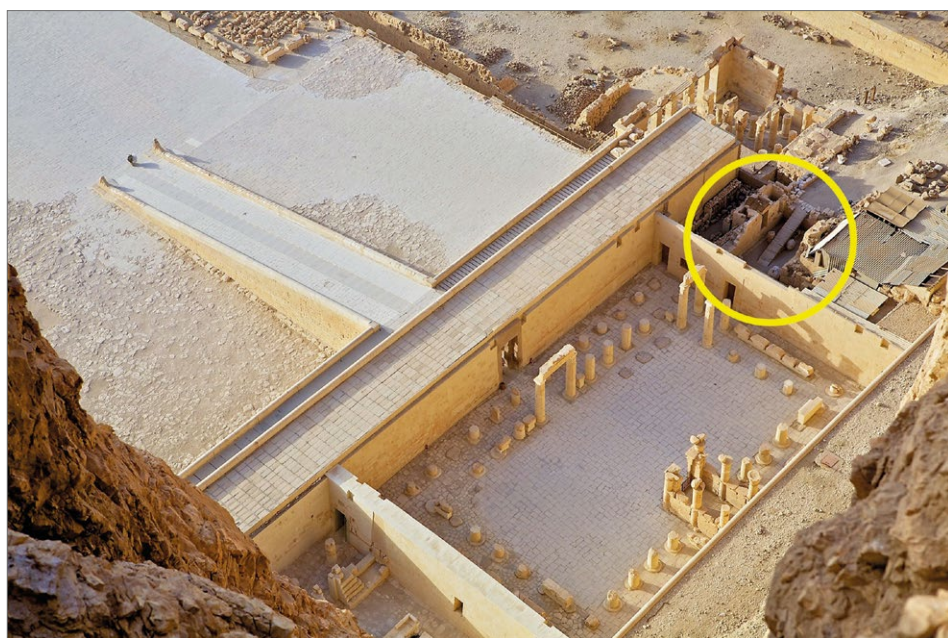


Fig. 1. Location of the Royal Mortuary Cult Complex on the southern edge of the Upper Terrace of the Temple of Hatshepsut (Photo M. Jawornicki; processing A. Kwaśnica)

- 1 On the typology and functioning of niches in sacral architecture, see Budzanowski 2004: 38–43 with collected literature. See also Iwaszczuk 2016: 206–207; 2017: 115 with bibliography of the two niches.
- 2 The western wall of the Upper Courtyard is 1.60 m thick, while the southern and northern walls of the Upper Courtyard are 2.40 m thick at the base and taper to about 1.35 m at the top (Wysocki 1986: 213).
- 3 The Room with a Window most likely served as a symbolic Slaughterhouse (Karkowski 2001: 133–134). For the proposed cosmological symbolism of this room and its links with the solar cult, see Białostocka 2014.

damage (Caban 2015: 80), or faulty reconstructions carried out in the course of the last century.⁴

The subject of these distortions was taken up by Mariusz Caban (2015: 76–82), an architect, who pointed to defects in the decoration of the niches and formulated some conclusions regarding their causes. Caban stated that their causes were as mentioned above: land subsidence, earthquakes, and multiple repairs performed not only in the

building's initial phase, but also during later stages of its functioning. He also blamed the activity of the French architect Émile Baraize inside the temple (Caban 2015: 81).⁵

An in-depth architectural study of the Upper Terrace has led the present author to question the conclusions put forward in past scholarship concerning the construction of the niches and to reassess the causes of their damage. The results of this research are presented herein.

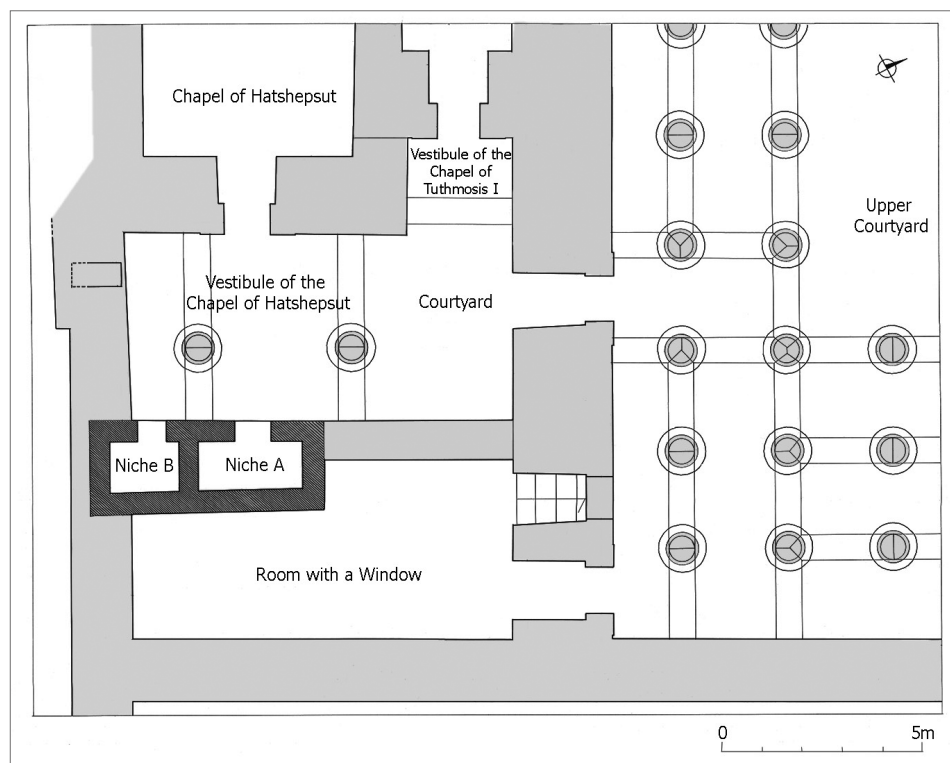


Fig. 2. Niches A and B located between the Vestibule of the Chapel of Hatshepsut and the Room with a Window (Drawing A. Kwaśnica)

- 4 It is important to add that the niches were inaccessible (most probably due to damage) or blocked during the Coptic and Greek periods. This is indicated by the lack of graffiti from these times inside the niches. See Godlewski 1986: 33, note 71, Fig. 13, Pls I–III; Łajtar 2006: Fig. 6.
- 5 Repairs in the niche close to the Southern Hall of Offerings were also reported by Edouard Naville (1896a: 5).

EXTENSION OF THE SOUTHERN PART OF THE UPPER TERRACE

The Royal Mortuary Cult Complex was erected in very challenging terrain. Prior to its construction, a single artificial platform supported the walls of the southeastern corner of the Upper Courtyard. Its southern side was occupied by the Slaughterhouse (Room with a Window) and probably a storage

room (the later Chapel of Thutmose I) [Fig. 3].

The walls of the later Chapel of Thutmose I and the southern wall of the courtyard differed structurally from the walls of the extension in the northern part of the Upper Terrace. The former consisted of even courses of large blocks,

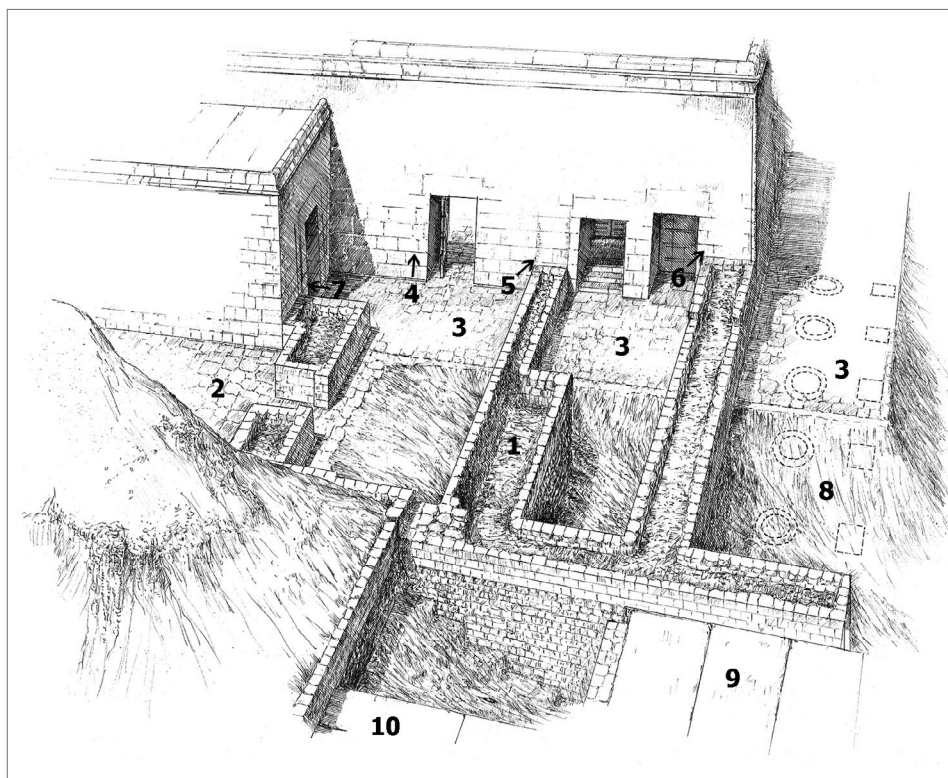


Fig. 3. Visualization of the southern part of the Upper Terrace at the time of the construction of the Royal Mortuary Cult Complex. View from the south. 1 – location of Niches A and B; 2 – Chapel of Hatshepsut; 3 – artificial platform in the southeastern corner of the Upper Court, built in the early construction phase of the temple; 4 – portal leading to the Upper Court, lacking the decorative band [see Fig. 5]; 5 – added eastern wall of the Royal Mortuary Cult Complex [see Fig. 7]; 6 – added southern part of the wall of the Upper Portico [see Fig. 6]; 7 – decorative band cut in an originally flat wall after transformation of the storage room into the Chapel of Thutmose I; 8 – location of the columns and pillars of the Upper Portico; 9 – roof slabs of the Hather Shrine, Second Hypostyle Hall; 10 – roof slabs of the Vestibule of the Hather Shrine (Drawing A. Kwaśnica)



Fig. 4. Differences in the construction of the façades: a – Chapel of Hatshepsut and b – Chapel of Thutmose I (Photos A. Kwaśnica)



Fig. 5. Portal lacking a band around the entrance. Arrows indicate the place where it should have been. Decorations were executed on a flat wall, originally meant to be plain [see Fig. 3:4] (Photo and processing A. Kwaśnica)

while the extension was built of much smaller blocks [Fig. 4:a, b].⁶

Walls in this part of the temple were originally not meant to be decorated, as indicated by the lack of decorative bands around the portals [Fig. 5].⁷ The decorations were executed after the establishment of the Mortuary Cult Complex.

Prior to the southward extension of the Upper Terrace, there was no platform under the southern part of the Upper Portico, which implies the absence of the portico wall, columns, and pillars, all of these being later additions [see Fig. 3]. The lack of interlacing between adjacent walls confirms it

6 It has been suggested that the southern and eastern walls of the Chapel of Thutmose I were added at different times, and that the façade was built at the same time as the façade of the Chapel of Hatshepsut (Barwik and Dziedzic 2021: 88–89, Pl. 30). However, the arrangement of the layers of blocks in the wall, as well as the size and shape of the blocks used, rather indicate that the Chapel of Thutmose I formed a homogeneous structure with the Southern Chapel of Amun and the southern wall of the Upper Courtyard. In addition, the construction methods applied in the façade and walls of the Chapel of Hatshepsut were different from those used in the other walls of the Royal Mortuary Cult Complex, indicating that these construction works were carried out in different periods (Kwaśnica and Pawlicki in preparation).

7 The façade of the Chapel of Thutmose I also lacked a band around the portal. The decoration was created when the former storage room was transformed into the Chapel of Thutmose I. Testimony of this can be found in the southern part of the façade, abutted by a wall of the Chapel of Hatshepsut. The fragment of the façade concealed behind the new wall is flush with the face of the portal, indicating that the entire wall was originally flat. After the wall of the Chapel of Hatshepsut was added, the wall face in the part of the façade of the Chapel of Thutmose I between the portal, the side walls and the ceiling were cut away to create a decorative band around the entrance.

[Fig. 6].⁸ Jadwiga Iwaszczuk (2017: 89) also suggests that originally there was only a floor on the site of the Upper Portico, and the columns were a later addition.

In the new spatial arrangement, the

Royal Mortuary Cult Complex was separated from the Room with a Window by a new wall with niches, which was attached to the already standing southern wall of the Upper Courtyard [Fig. 7] (Wysocki 1992: 246–248).

NICHES IN THE VESTIBULE OF THE CHAPEL OF HATSHEPSUT



Fig. 6. Joint of the southern wall of the Upper Courtyard (left) and the eastern wall of the Room with a Window, which is simultaneously the southern part of the Upper Portico [see Fig. 3:6] (Photo A. Kwaśnica)

The niches were undoubtedly an important element of the Royal Mortuary Cult Complex. However, their location and architectural features seem less than ideal. Considering that the whole area from the eastern wall of the Room with a Window to the façade of the Chapel of Hatshepsut was open, one might expect a more fortunate design. As shall be demonstrated below, the builders faced considerable limitations and obstacles that hindered their endeavors. Analysis of these irregularities and challenges helps explain the reasons behind the niches' present state.

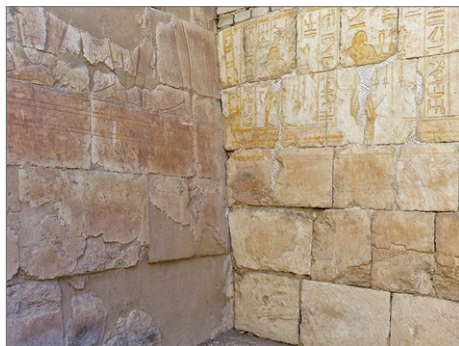


Fig. 7. Eastern wall of the Royal Mortuary Cult Complex abutting the southern wall of the Upper Courtyard [see Fig. 3:5]. The later wall was built of smaller blocks (Photo A. Kwaśnica)

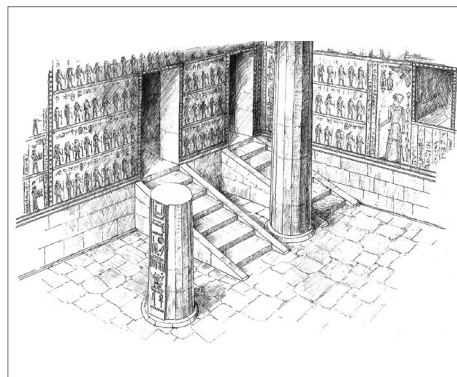


Fig. 8. Visualization of the southeastern corner of the Vestibule of the Chapel of Hatshepsut (Drawing A. Kwaśnica)

8 The lack of a bond between the walls is also visible on the other the side, in the portico (Barwik and Dziedzic 2021: 88).

SIZE AND ELEVATION

The first peculiar trait of the niches is their large size. The niches practically constituted separate rooms,⁹ indicating that offering rituals could have been carried out inside. The royal cult was an integral function of “temples of a million years” (Arnold 1962: 61).¹⁰ The cultic nature of the rooms is also indicated by their wall decoration. The main motif represented in Niche A is offerings made by Hatshepsut and her *ka* spirit to

the bull and the seven celestial cows in order to secure food and prosperity for the queen in the Netherworld. To ensure success, and to protect the queen from all dangers, it was necessary for her to know a fragment of the *Book of the Dead* (chapter 148), which was inscribed on the wall of Niche A for the queen's convenience. In Niche B, Hatshepsut is shown making offerings to eight mummified solar deities, who are to aid her in her journey to the Netherworld (El-Sayed 1980;



Fig. 9. Blocks protruding from the face of the wall beneath the entrance to Niche B (Photo A. Kwaśnica)

- 9 Niche A: 2.65 m (length) × 1.17 m (width); Niche B: 1.64 m (length) × 1.25 m (width). The width was measured along the inner faces of the walls, at a height of 2.07 m. The niches are connected by a wall 0.49 m thick, decorated on both sides.
- 10 Arnold's statement is quoted by Gabolde (2009: 131) in a discussion of the function of the so-called building with niches in Karnak, which is decorated with representations of Thutmose II and Hatshepsut.

Karkowski 2001: 147–148). Such walk-in niches or chapels were usually located 0.4–0.5 m above the floor level and were accessed by flights of two or three steps.¹¹

This raises the issue of access to the niches, which were located 1.01–1.04 m above the flooring of the vestibule.¹² It

seems that dedicated stairs must have been built from the side of the Chapel of Hatshepsut, most likely beginning flush with the bases of the two columns of the vestibule on the side of the entrances to these small chapels [Fig. 8].¹³ The existence of such stairs is supported by the presence

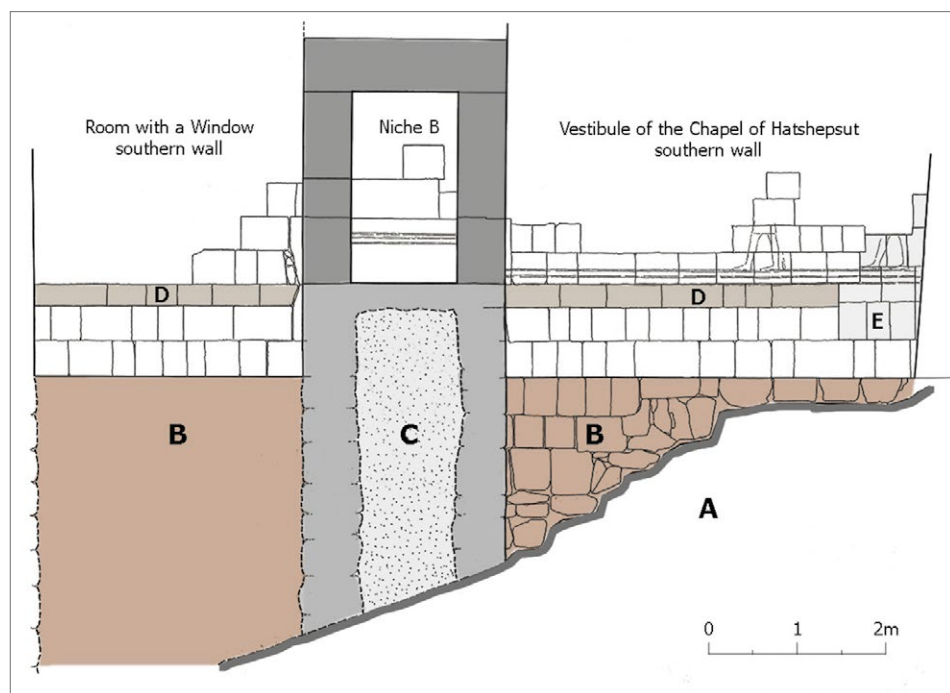


Fig. 10. Cross-section of the eastern wall of the Vestibule of the Chapel of Hatshepsut with a view of its southern wall and of the southern wall of the Room with a Window. A – Esna shale; B – stone foundation of the walls; C – rock debris; D – third layer of blocks leveling the walls and the platform under the niches; E – earlier fragment of the wall (PCMA UW | drawing A. Kwaśnica, based on a drawing of A. Brzozowska-Jawornicka)

- 11 E.g., the side rooms in the Statue Room of the Main Sanctuary of Amun or the niche in the Lower Anubis Shrine.
- 12 Niches in the Bark Hall and in the western wall of the Upper Courtyard were at a similar (1.03 m) or higher (1.55 m) level, but they were not meant to be entered. They also differed from Niches A and B in size and shape, and, most importantly, in the fact that they had three walls and openings closed by a door in place of the fourth. Niches A and B, however, have four walls, all of them decorated, and only a small part of the texts is visible from the outside.
- 13 Based on the fragments of architraves found, it was possible to establish that the axis of the columns was located at a distance of 1.75 m from the eastern wall. Therefore, the space was big enough to fit six steps, each 0.35 m wide and 0.14 m high.

of blocks protruding from the face of the wall beneath the entrance to Niche B. They appear to be remains of a structure anchoring the stairs to the wall [Fig. 9].¹⁴ The elevation of the entrances was not haphazard, given that the niches perfectly fit the decorations. The builders could have placed them 0.40–0.50 m above the ground, making access to them easier, but that was not the priority. Instead, the most important goal was apparently to harmoniously integrate the niches with the decorations of the western and southern walls.

LACK OF JAMBS

The second atypical feature of the niches is the lack of jambs and door mountings, making them impossible to close. In the Temple of Hatshepsut, the only niches without doors were located in roofed spaces (in the chapels of Thutmose I and Hatshepsut — see Karkowski 2001: 152;

Barwik and Dziedzic 2021: 37–41). In addition, a small open niche is present in the southern wall of the Vestibule of the Chapel of Hatshepsut, 2.09 m above the floor [see Fig. 8]. In the case of large niches, however, no such examples have been found, and all other niches, chapels, and portals always had doors and could be closed. This raises the question of why Niches A and B were constructed differently.

LACK OF INTERLACING WITH ADJACENT WALLS

Remarkably, the walls of the niches were not bonded to adjacent structures. The eastern wall of the Royal Mortuary Cult Complex, in which both niches are located, stood on bedrock that sloped towards the southeast [Fig. 10]. Test trenches in the Vestibule of the Chapel of Hatshepsut (Szafranski 2015: 184) revealed that the lower part of the eastern wall, the south-



Fig. 11. Eastern wall of the Vestibule of the Chapel of Hatshepsut with its third layer highlighted. In the southern part, this layer serves as the floor of both niches (PCMA UW | photo M. Caban, processing A. Kwaśnica)

¹⁴ The new plaster, seen in the photo, shows that the wall was renovated, but it seems likely that the protruding blocks were not the result of a clumsy early modern reconstruction. The cutting of the protruding blocks was most probably the result of construction activities related to the Coptic monastery.

ern wall of the vestibule, and the southern wall of the Room with a Window were built together and bonded to form a T-shaped structure. The foundation of the southern wall stretched from the eastern wall of the Chapel of Hatshepsut, where it had the form of one layer of stones. As the slope of the bedrock grew steeper, near the eastern wall of the vestibule the foundation already comprised five courses and was two meters deep.

The bedrock also continued to slope under the Room with a Window. The rock substrate was located 3.8 m below the flooring of the entrance to this room (Szafranski 1995: 371–372), and in its southeastern corner it dropped below 6 m (Konikowski 1991: cross-section No. 14; Barwik and Dziedzic 2021: 87). The eastern wall of the Room with a Window, which closed off the new part of the temple from the east, belonged to the same structure.

During the construction of the new walls, the space between their founda-

tions was gradually filled to bring both areas (the vestibule and the Room with a Window) to level, thus creating an extension of the platform in the southern corner of the Upper Terrace. At that point, the builders reached for an interesting solution in construction of the floors of the niches. Once the walls of the T-shaped structure were two layers high above the flooring, the third layer was laid using narrow, long blocks. Their top surfaces, which formed a level, horizontal line in the wall faces, constituted the flooring of both niches [Figs 11–12].

The next step was the construction of Niches A and B. At this point, the simultaneous construction of the three interconnected walls was no longer continued. Above the third layer of blocks, where the decoration begins, the walls of the niches are detached from the adjacent walls. Niche B is not bonded with the walls on the southern side [Fig. 13:a, b], and Niche A was attached to the northern wall without observing the principles of masonry joints with

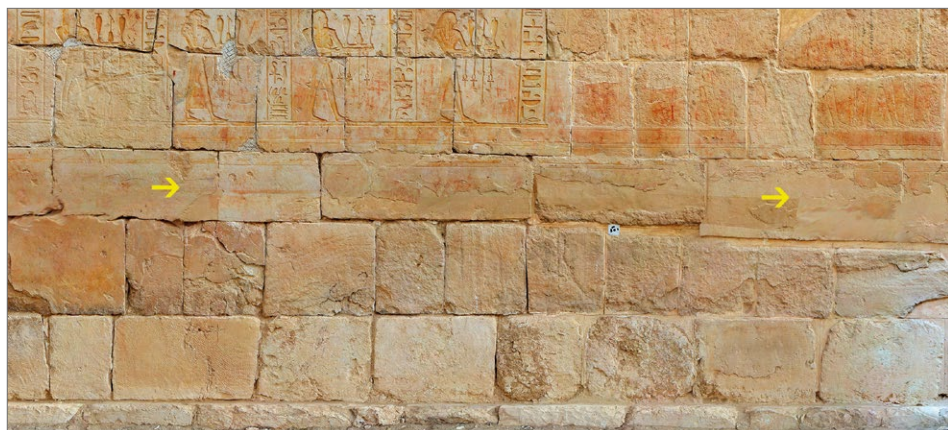


Fig. 12. Third layer of blocks marked with arrows. The blocks in this layer are longer and thinner than in other layers of the eastern wall of the vestibule. The top surface of this layer forms an even, horizontal line. The layer continues throughout the entire length of the southern wall of the vestibule and the Room with a Window [see Fig. 10] (PCMA UW | photo M. Caban, processing A. Kwaśnica)

the wall to the north. The layers of stone are not interlaced, and the blocks of the whole structure are haphazardly arranged. This leads to a conclusion that the niches were built separately from the wall adjoining them from the north [Fig. 14].

It therefore appears that Niches A and B were “inserted” in the wall structure. Although the construction is uniform at the level of the foundation and plinth, the walls are not bonded at the level of the decorated blocks.

SIZE OF THE BLOCKS

Another relevant trait of the niches is the size of the blocks used in their construction. Nine massive blocks

(0.74–0.76 m high; length of the largest blocks: 1.28 m; 1.31 m; 1.49 m; more than 1.80 m) frame both niches at their lower level. They were placed directly on the plinth, which also served as the floor of the niches. By comparison, the blocks used in the vestibule, the Chapel of Hatshepsut, and the Room with a Window were several times smaller. This raises the question of why a group of very large and almost identical blocks was placed in this location. The only blocks of similar size found in the temple are the lintels of portals, chapels, and niches, present also in the Main Sanctuary and in the Lower Anubis Shrine.¹⁵

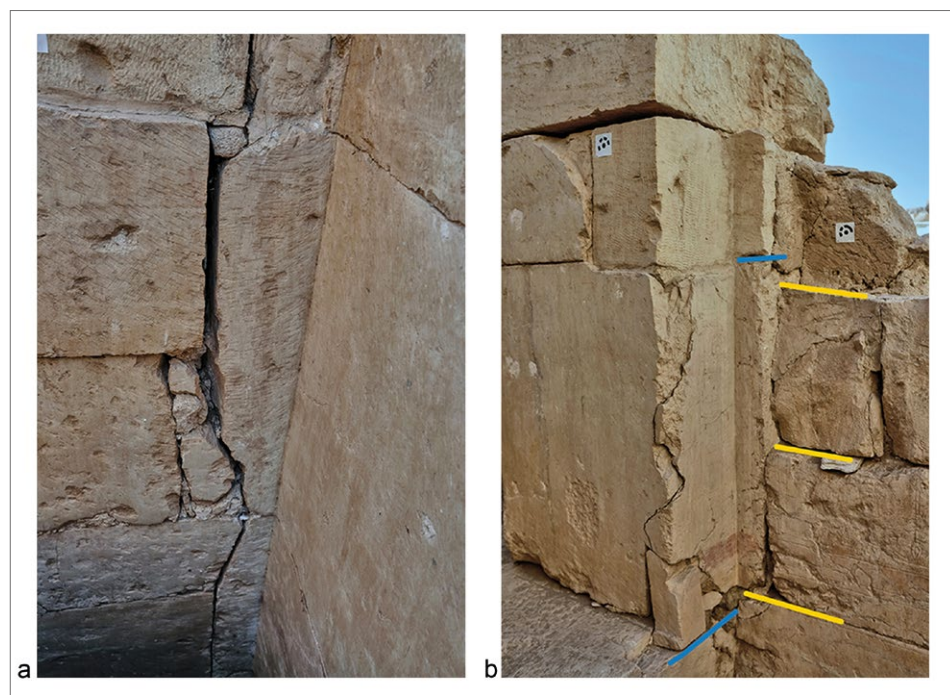


Fig. 13. Lack of bonding between niches and adjacent walls: a – blocks of Niche B added to the southern wall of the Room with a Window and the Vestibule of the Chapel of Hatshepsut (Photo M. Jawornicki); b – much smaller blocks adjoining the blocks of the niche (Photo M. Jawornicki, processing A. Kwaśnica)

15 Considered to be the oldest elements of the temple, see Wysocki 1992: Fig. 1; Iwaszczuk 2017: 86.

Most importantly, however, the blocks inside Niches A and B carry decorations that had been executed prior to the construction of these features and subsequently reassembled in an incorrect manner. This includes eight blocks with damage to their decoration caused by the trimming of their edges.¹⁶ For more on this, see below.

SLOPING FLOOR AND RESULTING PROBLEMS

Another issue is the incorrect alignment of the walls on the previously prepared floor. In order to understand these incompatibilities, a more detailed discussion of the interior of the niches is necessary.

It appears that the stone platform on which the niches were built posed a significant challenge for the builders. Measurements indicate that the platform slopes by 2.5 cm per meter towards the north, reaching a 12 cm difference in levels over the span equal to the length of the two niches. This was likely related to the sub-

sidence of the ground in the southeastern part of the Upper Terrace (Caban 2015: 79, Fig. 3). The floor level of the niches is parallel to the level of the floor in the Room with a Window. However, on the other side, the floor in the Vestibule of the Chapel of Hatshepsut was not parallel to the floor level of the niches, as the latter sloped more steeply towards the north.

The western and northern walls of Niche A stood on a plinth measuring several centimeters in height, built to level the structures. However, the eastern wall lacked such a plinth, which is why the decorative motifs in the corner are misaligned [Fig. 15]. To date, their erroneous position has been attributed to modern reconstruction work in the temple, repairing damage caused by subsidence, earthquakes, and alterations related to the activity of a Coptic monastery on this site. Careful scrutiny of the position and decoration of the blocks placed inside and outside the niches shows that the reason was, in fact, different.

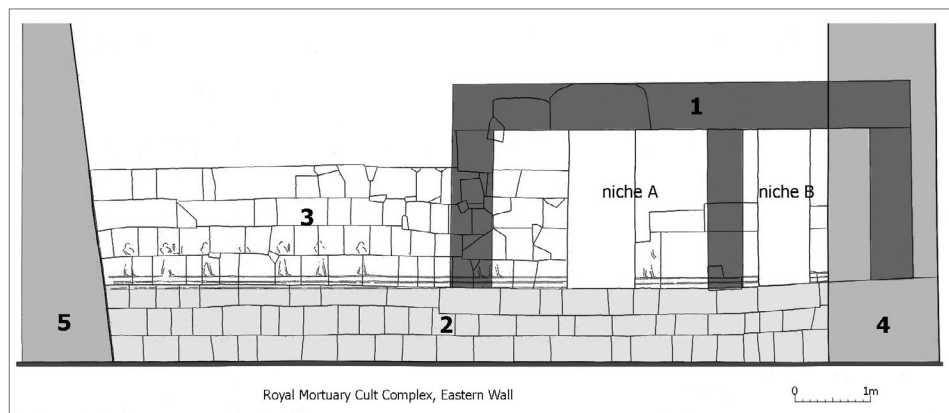


Fig. 14. Placement of Niches A and B in the northern part of the eastern wall: 1 – niches; 2 – three layers of the eastern wall; 3 – part of the wall with regular layers of blocks; 4 – southern wall of the vestibule; 5 – southern wall of the Upper Courtyard (Drawing A. Kwaśnica)

¹⁶ The blocks with trimmed decoration were likely more numerous, but those from the upper parts of the walls have not survived.

ALTERATIONS IN THE WALLS OF THE NICHES

Decoration was present both in the interiors of the niches, and on their external walls on the side of the Vestibule of the Chapel of Hatshepsut. Importantly, as the walls of the niches were one block thick, the blocks of the western wall were decorated on both sides. This is relevant because the original layout of the blocks required the decorations to be legible concurrently on the internal and the external sides.

WESTERN WALL OF NICHES A AND B

Since this wall was erected on a sloping floor (see above), a wedge-shaped plinth was inserted under its lower end [Figs 16–17]. The wedge slightly raised the blocks, making them parallel to the vestibule flooring. However, this altered the alignment of the dado rail inside the niches. Instead of forming a straight line running across the entrances in both spaces, in Niche B the top levels of the dado rail on both sides of the doorway differ in elevation. In turn, in Niche A, the dado rail runs diagonally on the left and right-hand sides of the entrance [see Fig. 16].

One might think that the skewed dado rail and the plinth are second-

ary effects of earthquakes and incorrect reconstruction, but this is not the case. Proof that the decorated blocks were arranged correctly during the construction of the niches is found on the external face of the wall, where the decoration is properly aligned. Any later changes in the arrangement of the blocks would have affected the decoration on both sides of the wall. Had the plinth been removed, or the interior dado rail straightened, the exterior decoration, which has its horizontal lines parallel to the floor level of the vestibule, would have been disturbed [Figs 18–19]. Therefore, the placement of the western wall of Niche A on the slanted plinth and the slope of the dado rail were no doubt contemporary to the construction and decoration of the vestibule.

The same applies to Niche B with block No. 1 [Fig. 20:a]. From the outside, the dado rail is parallel to the floor of Niche B because the entrances to the niches were integrated into the external decoration [see Fig. 8]. The dado rail also continues on the southern wall of the vestibule [Fig. 20:b], meaning that this part of the temple was decorated at the same time.

To sum up, the mismatched decoration on the inner faces of the western walls of both niches caused by the sloping floor, the plinth in the northern part, and the tilt of the dado rail date back to the time of construction and decoration of the vestibule walls. Therefore, the misalignments inside the niches belonged to the same construction episode and were unrelated to later reconstructions.

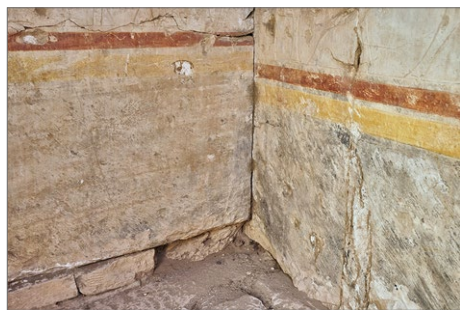


Fig. 15. Corner of the northern and eastern walls of Niche A (Photo M. Jawornicki)

NORTHERN WALL OF NICHE A

Even more clues helping to explain the enigma of the niches could be observed on the northern wall of Niche A. The plinth continues below this wall, as well as under the western wall, proving that this leveling layer came into being at the same time as the niche. The dado rail continues on the same level from the western onto the northern wall, ruling out any subsidence of the blocks in that part of the structure. However, the most significant clue lies in the decoration itself. The northern wall bears an erased representation of Queen Hatshepsut standing in front of an offering table [Fig. 21:b]. Behind the queen is a relatively well-preserved figure of the royal *ka*. The entire scene, like all others in the temple, was framed by a decorative border, visible behind the royal *ka* in the left corner of the scene but missing on

the other side. The original large block with the dado and the offering table had been trimmed by several centimeters on the right-hand side, depriving the scene of the decorative border in that part. A sketch of the missing fragment [Fig. 21:a] and a reconstruction of the scene on the northern wall of Niche A are provided herein [see Fig. 21:b].

Based on the decoration, the original internal width of Niche A along the western wall can be reconstructed as 1.28 m. Given the current width of 1.17 m, it is easy to calculate that 11 cm are missing. This can be explained by spatial constraints. To restore the original width of Niche A, its eastern wall would have to be pushed out by 11 cm. This would cause this fragment of the wall to protrude from the face of the wall inside the Room with a Window, because, as previously mentioned, the wall had the

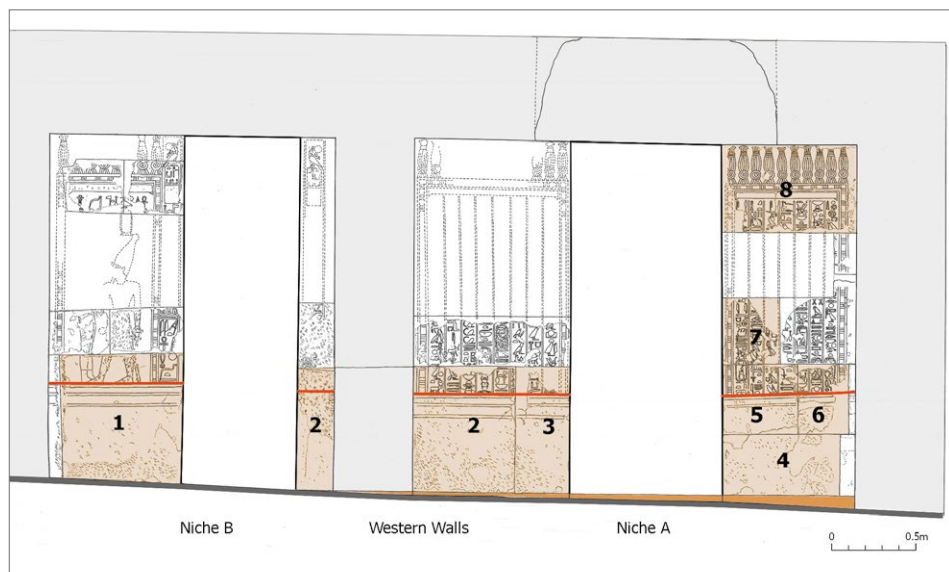


Fig. 16. Western wall of Niches A and B. The marked and numbered blocks were decorated on both sides. A wedge leveling this part of the wall is visible in the lower right corner, under Block 4 (Drawing A. Kwaśnica, on the basis of Egyptological documentation by J. Karkowski)

thickness of one block. Thus, any attempt to recreate the original appearance of the decorations on the northern wall inside Niche A would have caused the niche to protrude beyond the plinth [Fig. 22:a, b].

NORTHERN WALL OF NICHE B

The wall separating the two niches is a similar case: it was also built of blocks, which had been decorated and subsequently cut in several places [Fig. 23:a, b]. Reassembly of the blocks to keep the original decoration was impeded by the limited space between the side walls of the niche, too small to recreate the full length of the northern wall. The eastern wall would have to be shifted by 6–7 cm to accommodate original decoration including the missing part. Interestingly, the blocks that had been cut off

were located in the lower and middle parts of the wall. In order to trim these blocks, the wall had to be completely dismantled. A reconstruction of the original wall decoration is shown below [see Fig. 23:b].

SECONDARY MATCHING OF THE DECORATED BLOCKS

Caban (2015: 81) rightly pointed out that the decoration in the corners of Niche B had been trimmed and repainted during the reassembly of the niches in the vestibule. This applies, in particular, to the junction of the western and southern walls. The latter was, in fact, integrated into the wall flanking the vestibule of Hatshepsut from the south [see Fig. 2], and therefore constituted a very sturdy element of the structure. Two huge decorated blocks were placed in this spot in such a way that their faces were misaligned. For this reason, their decorated surfaces were cut at the joint, then plastered and painted again by the builders of the vestibule [Fig. 24].

PLATFORM BENEATH THE TWO NICHEs

A closer scrutiny of the dimensions of the platform on which the walls were erected helps explain the enigma of the niches. The width of Niche B along its southern wall is 1.25 m. The thickness of its outer walls is 0.55 cm and 0.56 cm, rendering the plinth 2.36 m wide in the southern part. Niche A, in turn, is 1.17 m wide along the northern wall, and the thickness of its walls is 0.52 and 0.55 m, giving a total width of 2.24 m



Fig. 17. Blocks Nos 4–7 in the western wall of Niche A. The red line indicates where the top of the dado rail should be; the yellow line marks the wedge-shaped plinth (PCMA UW | photo M. Caban, processing A. Kwaśnica)

for the plinth. Thus, the plinth tapered towards the north by 0.12 m. However, the northern walls of the original Niches A and B, as calculated on the basis of their reconstructed decoration, were both about 1.28 m wide. The southern wall of Niche B, which retained its original dimensions, had a similar width.¹⁷ Thus, the niches were meant to be rectangular in plan, but ended

up tapering towards the north. If the original-sized niches had been placed on the platform as it stands today, their back sides would protrude from the western face of the wall into the Room with a Window [see *Fig 22:a, b*]. Most likely, during the initial stage of the construction process, the plinth was built too small to accommodate the niches in their original size.

RETRACING THE COURSE OF EVENTS

The data presented above indicates that the niches had been transferred from another place in the temple to

the vestibule of the Royal Mortuary Cult Complex when the latter was still under construction. Reconstructions

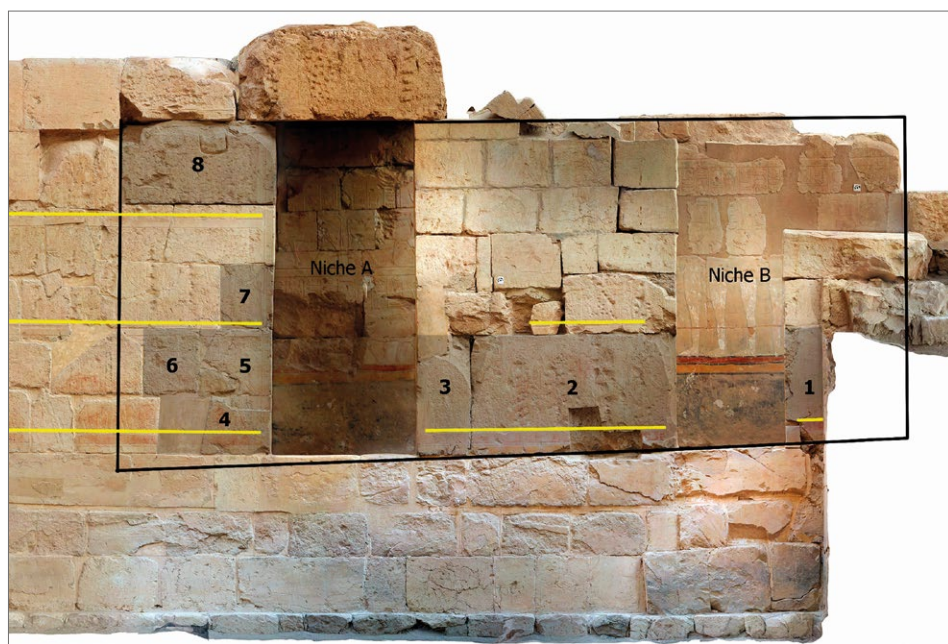


Fig. 18. Eastern wall of the Vestibule of the Chapel of Hatshepsut with the wedge-shaped plinth and the walls of the niches marked. Blocks Nos 1–8 are decorated on both sides. Yellow lines mark the horizontal elements (parallel to the floor) in the decorative scenes on the exteriors of the niches (PCMA UW | photo M. Caban, processing A. Kwaśnica)

¹⁷ The width at floor level is 1.25 m, but it expands higher up and at the level of decoration it is about 1.28 m, matching the dimensions of the walls analyzed previously.

and architectural transformations resulting from the change of the function of some rooms are typical of many buildings erected by Hatshepsut, but the transfer of entire finished segments and their reassembly in another place remains without parallel. Both niches became part of a major construction project that resulted in the erection of the Royal Mortuary Cult Complex. The builders made optimal use of the limited area behind the southern wall of the courtyard. The undertaking involved preparing the building site for the Chapel of Hatshepsut by leveling the rock formation on the western side and building a sturdy retaining wall

from the southeast, down to the level of the Middle Portico.

An artificial platform was created in front of the future Chapel of Hatshepsut. Two niches were inserted into the wall built between the Vestibule of the Chapel of Hatshepsut and the Room with a Window. Thus, the Royal Mortuary Cult Complex was created on a newly prepared level surface [see *Fig. 3*].

Both niches were pre-made elements integrated into the newly created complex. They had to be dismantled and moved from their original location, which had changed its function. The niches were mostly made of large

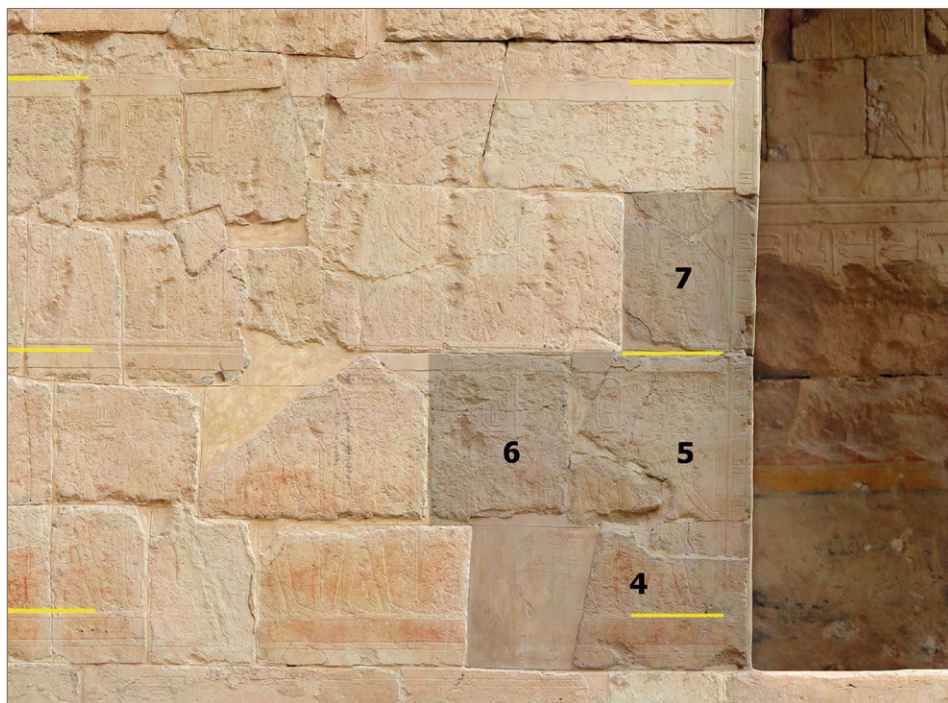


Fig. 19. Eastern wall of the Vestibule of the Chapel of Hatshepsut. Blocks Nos 4–7 are decorated on both sides, which means that they could not have been moved without destroying the scenes. The exterior decoration on the walls of the niches must have been executed when these blocks were placed in their present position (PCMA UW | photo M. Caban, processing A. Kwaśnica)



Fig. 20. Connection of the eastern and southern walls of the Vestibule of the Chapel of Hatshepsut: a – the dado rail on the eastern wall of the vestibule (PCMA UW | photo M. Caban, processing A. Kwaśnica); b – the dado rail on both walls is on the same level (Photo M. Jawornicki, processing A. Kwaśnica)

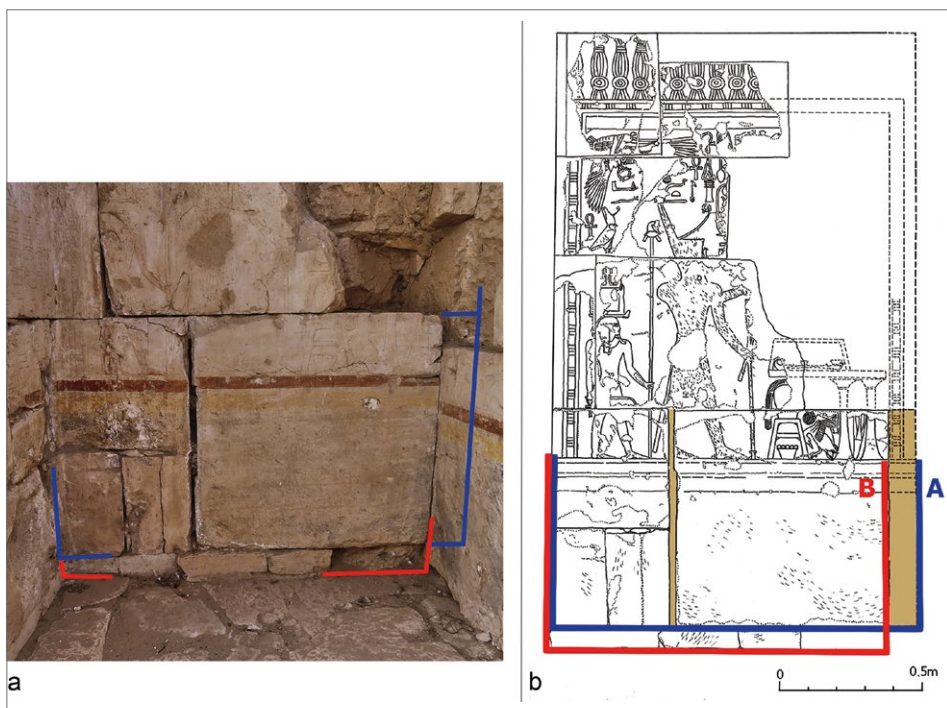


Fig. 21. Northern wall of Niche A: a – the blue line marks the original length of the wall, and the red line shows its current condition (Photo and processing A. Kwaśnica A. Kwaśnica); b – reconstruction of the wall. The cut fragments of the blocks are highlighted in brown. The blue line (A) marks the original floor level and width of the niche. The red line (B) shows the current floor level and width of the niche (Drawing A. Kwaśnica, on the basis of Egyptological documentation by J. Karkowski)

blocks and their disassembly was not difficult. The intention was to save the builders a lot of work involved in creating and decorating the same niches from scratch. This decision was most likely made for economic reasons and to reduce the time required to complete the construction. However, the builders encountered unexpected complications. Their cause was an unpredictable error in the planning of the foundation and platform, the dimensions of which were difficult to calculate precisely. The decorated blocks were removed from the original wall by roughly and unevenly cutting their back sides and re-

quired careful masonry work. However, it was not possible to cut each block separately. Firstly, both niches had to be reassembled in the new location, and only then could the rough blocks, which simultaneously became the face of the western wall of the Room with a Window, be cut down and leveled.¹⁸ Cutting off too much would make the walls too thin. Leaving the walls too thick would lead to many uneven surfaces. As a result, after the final leveling of the face, there were still rough surfaces that had to be hidden under the mortar. Remains of this mortar and rough surfaces are still visible today [Fig. 25].

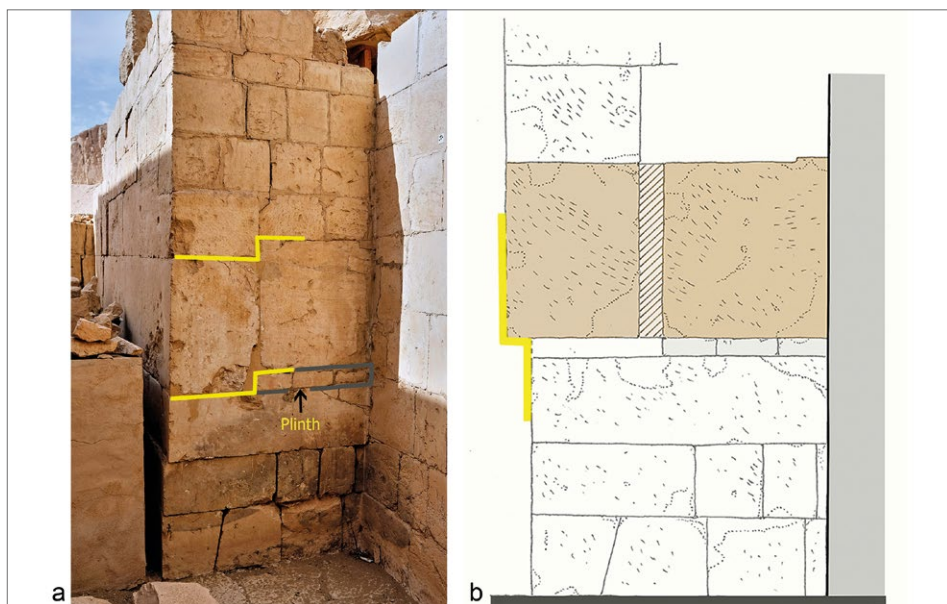


Fig. 22. Northern wall of Niche A: a – in the Room with a Window, showing the effects of placing the plinth under the wall (Photo M. Jawornicki, processing A. Kwaśnica); b – the drawing shows the niche in its original width (Drawing A. Kwaśnica)

¹⁸ A remnant of the rough surface left after cutting a block placed on the platform can be seen in the southern wall of the Room with a Window. This fragment is a connector between the walls [see Fig. 13:a]. A rough block was placed on the plinth, and then the surface was cut to create a smooth face. The photo shows the uneven edge of the block, indicating the thickness of the cut layer.

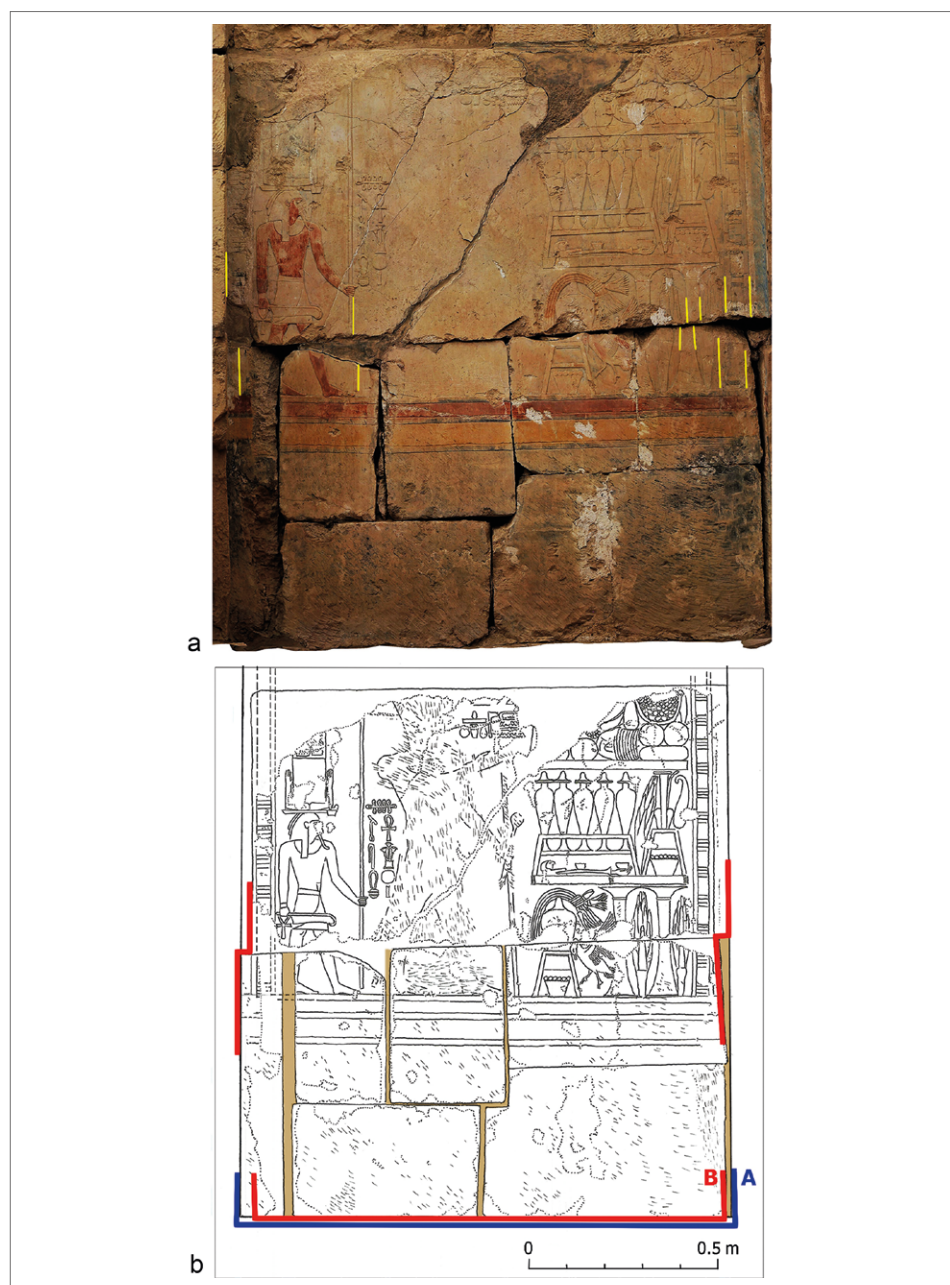


Fig. 23. Northern wall of Niche B separating it from Niche A: a – photo with the yellow lines showing the incorrect arrangement of the upper and lower blocks, which resulted in the deformation of the decoration (Photo M. Caban, processing A. Kwaśnica); b – reconstruction of the wall with the cut-off fragments of blocks highlighted in brown. The blue line (A) marks the original width of the niche. The red line (B) shows the current width of the niche (Drawing A. Kwaśnica, on the basis of Egyptological documentation by J. Karkowski)

Cutting the original exterior decoration from the side of the vestibule was also not a simple task.¹⁹ Had the block been cut too deep or a piece of the edge chipped, a new piece would have been required in its place. This was much more difficult than inserting new blocks, as was usually done. In this particular case, inserting new blocks was impossible, since they were decorated on both sides. As a result of cutting away the outer layer of the face, the original jambs were removed



Fig. 24. Southwestern corner of Niche B. The faces of adjacent blocks do not form a single plane. In the time of Hatshepsut, both blocks were cut, plastered and covered with polychromy. Traces of ancient plaster are still visible on the surface (Photo M. Jawornicki, processing A. Kwaśnica)

as well. Thus, the transferred niches could no longer be closed.

Evidence of cutting off the mentioned layer of the face is a fragment of a large, original block of Niche B, which is also a piece of the southern wall of the Vestibule of the Chapel of Hatshepsut. This wall fragment reveals the thickness of the removed layer [see Fig. 13*b*].

In the light of the above, the exact dimensions of the plinth are nearly impossible to calculate. The final external dimensions of the niches had to be corrected on site during their reassembly. The only mistake that could have been avoided was building a platform with a non-sloping upper surface. On the other hand, the slope of the plinth may have also been caused by uncontrollable subsidence of a part of the foundations, which seems very likely upon examination of the third leveling layer of blocks of the eastern wall of the vestibule. At the time of construction, the plinth should have been parallel to the floor of the vestibule, and now it is not [see Niche B, Figs 11, 14]. Reconstruction of the niches in a new place, on a new pedestal, began with the placement of large slabs 0.74–0.76 m high around the entire plinth [Fig. 26].

Reassembling the entrance to Niche A turned out to be problematic. Since the floor of the niche sloped towards the north, the jambs placed on it were perpendicular to this level, but not to the floor of the vestibule. As a result, the doorway leaned to the left, towards the north. To level the doorway, a wedge-shaped plinth was

19 Since the decoration was inside the niches, it would have also been present on the face of the wall from which the niches were removed.



Fig. 25. Eastern wall of Niche B in the Room with a Window. Arrows indicate cavities patched with lime mortar most likely at the time of erecting the niches (Photo M. Jawornicki; processing A. Kwaśnica)



Fig. 26. Large limestone slab in the eastern wall of Niche B (Photo A. Kwaśnica)

constructed, but its use meant that it had to extend also under the northern wall. There was not enough space to reconstruct the northern wall of Niche A and the wall separating the niches in their original dimensions, so the decorated blocks had to be cut. In order to gain more space inside, the external wall on the side of the vestibule was cut in the northern part of Niche A. This operation caused variation in the wall thickness: from 0.56 m in the southern part of Niche B to 0.52 m in the northern part of Niche A, which was a continuation of the same wall. These were the additional consequences of building the niches on a platform that tapered towards the north due to a construction error. Further re-

duction of the thickness of the outer walls was ill-advised because they supported the heavy ceiling slabs of the vestibule of Hatshepsut, and excessive “slimming” would lead to the danger of ceiling collapse. The above sequence of events resulted in the mismatched wall decorations inside both niches already in the time of functioning of the Royal Mortuary Cult Complex during the reign of Hatshepsut.

ORIGINAL LOCATION OF THE NICHES

Hard though it may appear, answering the question about the initial location of the niches is in fact not difficult. A search for potential sites requires taking the following criteria into account:

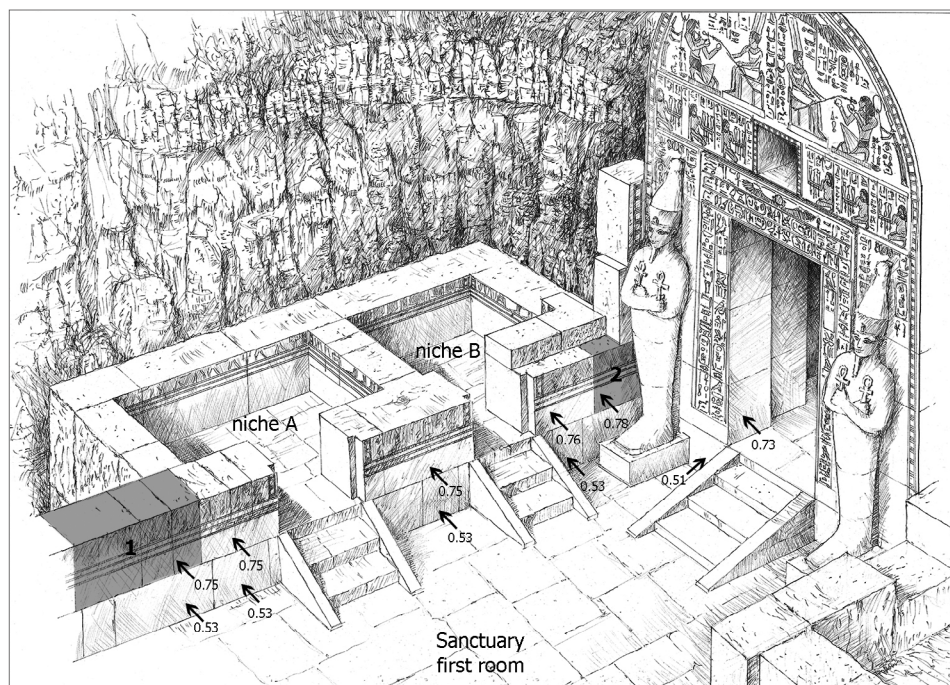


Fig. 27. Visualization of the first room of the Sanctuary prior to the removal of Niches A and B. 1, 2 – blocks that remained *in situ*. The blocks with specified heights (e.g. 0.75), given in meters, are indicated with arrows. The sizes of the blocks indicate that the lower course of the southern wall of the sanctuary and the lower course of blocks from Niches A and B had originally formed one structure (Drawing A. Kwaśnica)

- The niches came from a place that already bore wall decoration, and this decoration was altered during the construction of the Royal Mortuary Cult Complex.
- The room from which the niches were removed changed its function, which means that it had been in use prior to the building of the Royal Mortuary Cult Complex.
- The original room undoubtedly served (albeit only to a degree) an analogous function to Hatshepsut's Offering Hall, as the text in Niche A refers to Chapter 148 of the *Book of the Dead* about ensuring the queen's prosperity and supplying her with food in the Netherworld (Karkowski 2001: 146–147). The location of these niches in the temple must have been a crucial one, and the room from which they came must have been among the most important spaces in the original plan of the temple.
- The depth of the niches (2.36 m), and the fact that the back sides of the decorated blocks had a rough surface, both indicate that the niches were moved from a wall built against the rock face.²⁰
- The lower course of blocks in both niches is 0.74–0.76 m high. Courses consisting of such large, regularly arranged blocks have been found in only one place in the temple:²¹ the

southern wall in the Bark Hall, where blocks on both ends of the second course are of similar or identical height.²² Inserting the blocks from the niches in-between these blocks would bring the entire second course to a uniform height almost throughout its length [Fig. 27].

The southern wall of the Bark Hall is virtually the only place in the entire temple that meets all of the criteria listed above. There is no doubt that it was built much earlier than the Royal Mortuary Cult Complex and it underwent significant structural changes (Pawlicki in preparation; Wysocki 1992: 245). The height of the lower course of blocks in the southern wall of the Bark Hall (0.53 m) is nearly the same along its entire length, which additionally speaks in favor of this location. Blocks of this height would have been ideal for a platform below both niches, as they would provide for a convenient entrance. Other than the Bark Hall, it is difficult to find a room in the temple that could accommodate such a large structure (over 5.5 m long) incorporating the two interconnected niches, especially ones that seem to have been originally associated with the royal cult.²³

Considering whether the iconographic program of the niches, certainly appropriate for the Mortuary Complex, could have originally been executed in a wall of the Bark Hall, one must take one factor into

20 Walls this thick were not found in the temple; the two thickest ones (southern and northern walls of the Upper Courtyard) are 2.2 m thick at a height of 1.5 m.

21 The courses of blocks in the Upper Courtyard are 0.45–0.50 m high, while those in the Middle and Lower Porticoes reach 0.40–0.45 m.

22 The two blocks on the eastern end of the southern wall are 0.75 m high, and the last block in this course on the western side is 0.77 m high. The other blocks of this course were inserted later, as part of the reconstruction of the Bark Hall.

23 The southern wall of the Bark Hall is 9.06 m long.

consideration: the Bark Hall was built after the disassembly of a previously existing room of the sanctuary and after rebuilding the last room (Inner Sanctuary). Then the Inner Sanctuary ceased to serve as an offerings hall with false doors. From this point onward, the Hall of the Offerings of Hatshepsut in the Mortuary Complex carried out this function.²⁴ The Inner Sanctuary, reconstructed in 2020,²⁵ was originally dedicated to the royal cult. It proved to be the prototype of the Hatshepsut Chapel, later built in the Mortuary Complex with analogous decorative elements, but on a larger scale.²⁶ The niches must have originally been located in the “vestibule” of the Inner Sanctuary [see *Fig. 27*], where they served the same purpose as in the Royal Mortuary Cult Complex. Their relocation would have been a natural consequence of the construction of the new Hatshepsut Chapel. The Bark Hall was a new design, to which the previously existing niches did not

readily correspond. They were, therefore, dismantled and moved to another part of the temple (for more about the transformations of the Sanctuary, see Kwaśnica and Pawlicki in preparation).

Besides the Bark Hall, a look at the plan of the Upper Terrace of the temple practically leaves no other place that could be considered as the original location of the niches. Attempts to search for it outside the Upper Terrace area would, in turn, be speculative at best.

The relocation of Niches A and B is valid proof of a direct relationship between the reconstruction of the Main Sanctuary of Amun and the creation of the Mortuary Cult Complex. The existence of such decorated niches before the launch of construction work on the Royal Mortuary Cult Complex indicates that such a temple, albeit with a limited functional program, was already in operation on the Upper Terrace at that time.

24 The concept that the Bark Hall was a secondary function of this room was presented by Pawlicki 2000: 116.

25 The Inner Sanctuary was disassembled in the Ptolemaic period and replaced with a chapel of two sages, Imhotep and Amenhotep son of Hapu, preserved to this day. The primary and secondary versions of the Inner Sanctuary decorations were reconstructed on the basis of 20 wall fragments. Most of them were buried under the floor of the Bark Hall during the Ptolemaic period and some were reused to fill cavities in the walls (Kwaśnica and Pawlicki in preparation).

26 A previous reconstruction of the Inner Sanctuary (Barwik 2010: 4–12), which places an ebony naos found in 1893 by Naville (1896b: 1–4) inside the Inner Sanctuary, is, in my opinion, incorrect. The placement of the ebony naos in the Inner Sanctuary seems impossible for technical reasons. Firstly, the naos would not have fit in the doorway, which is less than 0.73 m wide (own measurements; according to Barwik’s plan (2010: *Fig. 1*), the width of the doorway was about 0.74 m), while according to Barwik’s reconstruction the naos was wider than 0.74 m. Therefore, it would have to be assembled inside the very narrow space of the Inner Sanctuary (0.82 m wide), which seems practically impossible. The strongest argument against this hypothesis, however, is that the walls of the naos bear the originally carved names of Thutmose II, not Hatshepsut. Consequently, the king making sacrifices to Amun in the naos decoration is Thutmose II (for a detailed description, see Naville 1896b: 1–4). It therefore seems unlikely that Hatshepsut kept the naos, which she had made for her deceased husband and predecessor, in the most important place in her own temple.

CONCLUSIONS

The relocation of the niches indicates that the chronology of the temple's construction differed from the commonly accepted one. It seems that the temple was initially situated solely on the Upper Terrace.²⁷ The decorated walls from this period feature Hatshepsut with full royal titles, which may indicate that the construction work was completed around the 7th year of the reign of Thutmose III. It was probably only after the success of the expedition to the Land of Punt (9th year), around the 10th year, that the new construction project was launched. It involved the transformation of the small temple into a vast terrace complex with a lower temple, a causeway, and Tomb KV20. At that time, foundation deposits were made in the lower courtyard, paving the way for a new spatial arrangement. Dismantlement of the southern and northern walls of the first room of the sanctuary down to the first, lowest course²⁸ was associated with the creation of the Bark Hall. The appearance of the bark of Amun-Ra in the temple required the transformation of the previously existing courtyard into a "festival courtyard" (Gabolde 1993: 56–61; Iwaszczuk

2017: 95), which, in addition to functions related to making offerings to Amun-Ra, would also be associated with the celebration of the Beautiful Festival of the Valley to be held in this place. Following the new design, the Upper Court was turned into an enclosed courtyard surrounded on each side by two rows of columns, while previously the columns were only on the western side.²⁹ Three previously plain walls of the Upper Courtyard received decorations. Two of them (northern and eastern) bore scenes related to the participation of the bark of Amun-Ra in the Beautiful Festival of the Valley and in the Opet Festival.³⁰

The design of the terraced Hatshepsut Temple, created in the 10th regnal year most likely by Senenmut,³¹ is widely assumed to have been an original project, implemented in stages from the time of the queen's coronation in the 7th year. However, the niches bearing decoration related to royal cult, relocated from a different part of the temple, show that the chronology of the subsequent stages of the construction of the temple requires further scrutiny and revision.

27 The first investments in the Middle Terrace were directly related to the reconstruction of the Upper Terrace (Kwaśnica forthcoming a).

28 Two niches on the northern side, also sharing a wall (decorated on both sides) were dismantled and partly adapted to the new temple design (Kwaśnica and Pawlicki in preparation).

29 Based on the present author's reconstruction of the architraves on the Upper Terrace in 2010–2017 (Kwaśnica forthcoming b).

30 A detailed analysis of the transformations of the Upper Court is in preparation (Kwaśnica and Pawlicki in preparation).

31 Senenmut received extensive privileges related to the temple in Deir el-Bahari — tomb TT 353 under the Lower Courtyard and the opportunity to place his images behind the doors of all rooms in the temple.

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