

**DEIR EL-BAHARI  
HATSHEPSUT TEMPLE  
CONSERVATION PROJECT 1993/1994**

**Franciszek Pawlicki**

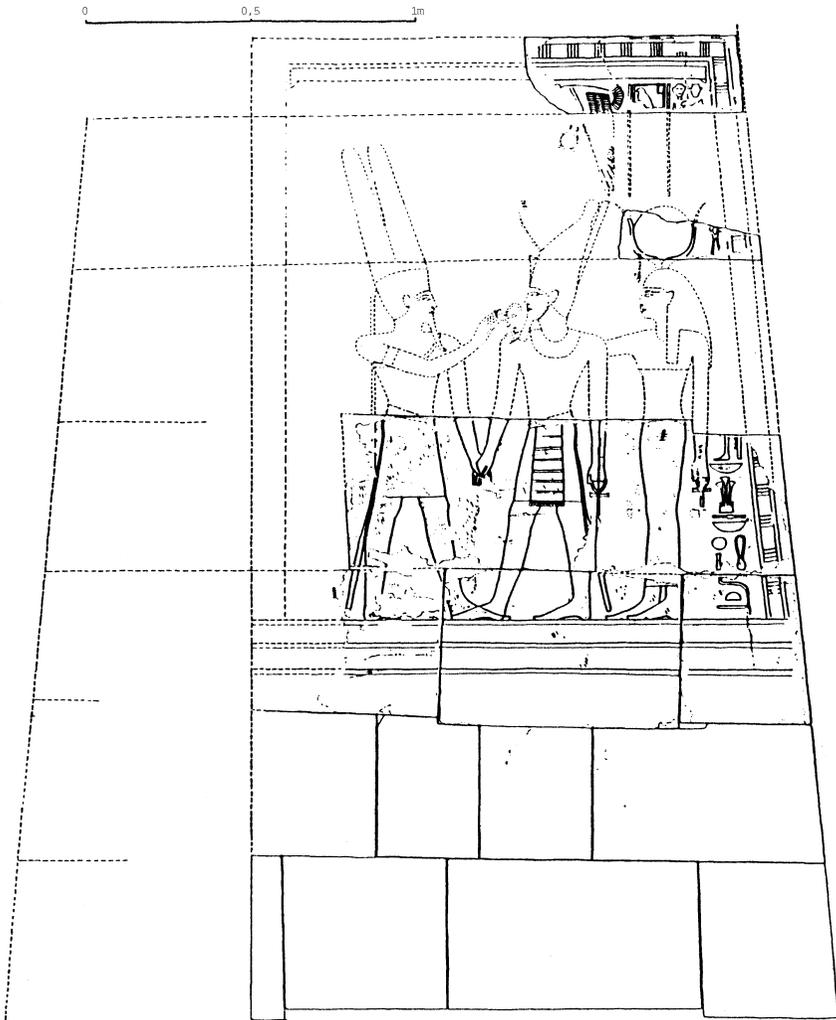
The second season of the Polish-Egyptian Conservation Mission to the Temple of Hatshepsut at Deir el-Bahari lasted from December 3, 1993, to April 2, 1994.<sup>1</sup> Jointly funded by the Egyptian Antiquities Organization and the Polish Centre of Archaeology of Warsaw University, the mission continued to implement the general program adopted by the EAO Permanent Committee intended to complete conservation activities prerequisite to opening the temple's Third Terrace to the public.<sup>2</sup> Conservation also proceeded in the chapels and porticos of the other two terraces, protecting wherever necessary the disintegrating ancient substance.

The work comprised: conservation of limestone blocks in the lapidaries; conservation of the stone in the walls of the Upper Court and the Royal Chapels; conservation of the polychromy and plaster of the Anubis Chapel; reconstruction of the western section of the southern wall of the Upper Terrace; reconstruction of an Osiriac statue in the facade of the Upper Portico; technical protection of the northern wall of the Anubis Chapel. Intensive egyptological and architectural studies paralleled the actual conservation activities with a view to

---

<sup>1</sup> The Mission included: Dr. Franciszek Pawlicki (director), Prof. Dr. Jan Winnicki, Dr. Maciej Witkowski, Dr. Zbigniew Szafrński, egyptologists; Prof. Dr. Andrzej Drągowski, geologist; Dr. Grzegorz Bogobowicz, constructor; Mr. Andrzej Kwaśnica, architect; Mr. Krzysztof Złotkowski, electrician; Mr. Rajmund Gazda, Mrs. Anna Bogusz, conservators; Mr. Waldemar Jerke, photographer.

<sup>2</sup> The program of work was adopted based on a report of the temple's condition prepared in the 1992-1993 season.



*Fig. 1. Entrance to the Royal Cult Complex. Eastern side.*

completing the final reconstruction project for the Upper Court and the Royal Cult and Re-Horakhty complexes.

The major goal of reconstruction activities during the season was the rebuilding of the western section of the southern wall of the Upper Court, comprising its longest section from the western corner to the entrance to the Royal Cult Complex. Egyptological and architectural investigations revealed a number of discrepancies in the earlier two stages of reconstruction, making it impossible to continue work on the upper registers until the errors will be corrected. Deformation of the southwestern corner of the Upper Court has led to both the lintel and jambs of the entrance to the Southern Offering Chapel becoming dislocated and dislodging in turn the other blocks in the southern wall. The face of the central part of the wall has also become deformed as a result of the pressure exerted upon it by the disintegrated rock debris and earth fill in back of it. The blocks projecting from the wall face had caused pressure at the edges, producing cracking, powdering and peeling of the decorated surface. The first stage of the work required the western section of the wall to be dismantled completely; the rock debris was then removed and brick reinforcements introduced instead. The position of the lintel and jambs was corrected, as was also the location of the remaining blocks in the lower registers of the decoration. Over a hundred new original blocks or fragments of blocks were introduced, reconstructing the wall to its original height and localizing the architraves. The exact disposition of the nests for mounting the architraves has ended the discussion as to the number of column rows and the intercolumnar space in the Upper Court.

Of the scenes in the bottom register, that of the purification ceremony of Tuthmosis III merits special attention, its reconstruction enabling a determination of the height of the adjacent passage from the Court to the Royal Cult Complex (Fig. 1). The reconstructed decoration of the lower register of the walls comprises

a series of scenes connected with the daily ritual; in the upper register the dominating iconographic theme is a representation of a procession of Nile gods. The two lengthy inscriptions which accompany the representations (speeches by Amon and Thot) emphasize the role and importance of the ruler as the rightful successor to the Egyptian throne, responsible for ensuring prosperity and plenty to the land and its inhabitants. The reconstructed fragments of the inscription indicate the presence of a *k3* royal cult in the Royal Cult Complex, the facade of which had been rebuilt together with the southern wall of the Upper Court.

The reconstruction of the wall was preceded by full preservation and conservation work. All the structural fissures and cracks were consolidated and filled in. The backs of the blocks were impregnated with a surface silicon-organic agent against humidity penetrating from the rocky backdrop of the wall. Wacker stone-hardener was used to reinforce disintegrating surfaces. Missing stone substance was replaced with binders of polyvinyl acetate, powdered limestone and white cement. The surface plaster and putty were made with an admixture of powdered limestone to give them a natural patina. It was strictly observed to have new plaster receded with respect to the ancient block face. Also the technology for producing the slabs facing the unpreserved parts of the walls was modified. Cement slabs were covered with a uniform layer of plaster of the same color as the putty filling the missing parts of ancient blocks, avoiding in this manner the aggressive rhythm of bonding in the unpreserved parts. For structural reasons, smaller fragments forming a full-sized block of stone were joined by stainless steel rods.

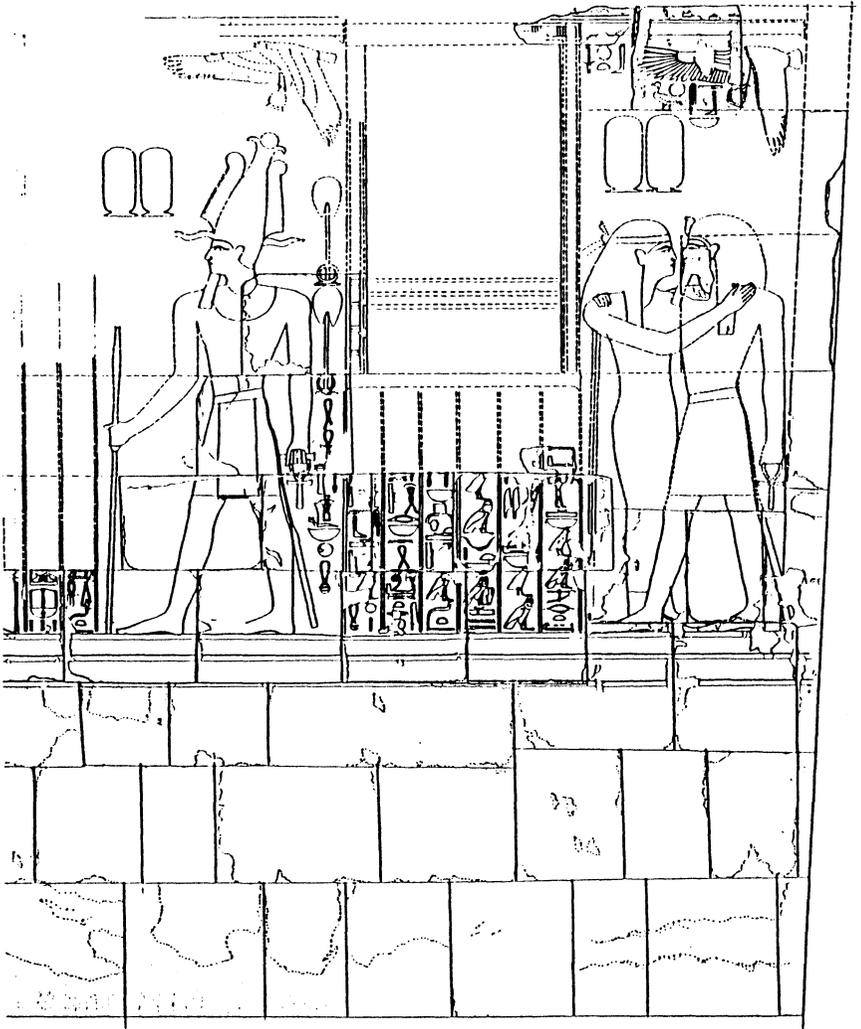
The same method was applied to the reconstruction of one of the Osiriac heads in the Upper Portico. A gypsum model was prepared (negative and positive) of the whole statue and original fragments were selected to start upon the reconstruction of two other pieces. The project could not be completed because of

the time spent on preparing the models and because of a lack of good-quality stone in the local quarry. The future reconstruction will depend upon the smaller fragments, like the feet and hands, being made in new stone and the remaining parts of the body and head being made using a maximum of original material. To emphasize the sculptural quality of the facade decoration of the Upper Portico, it was decided to reconstruct the statues which will stand close to the main axis, on either side of the entrance ramp.

The fissured polychrome plaster of the cobra frieze in the Portico of Punt was reinforced in the corner of the western and northern walls. In the Anubis Chapel, conservation concerned the northern wall of the columnar hall where the peeling and disintegrating painted layer was protected. The conservation of the central scene (Tuthmosis III offering to Sokar) was completed, the fissuring being treated and the missing parts filled with aesthetizing putty. The conservation of the representations of divinities required special attention due to the weakness of the original plaster from the period following the Amarna destruction. An attempt was also made to clean off mechanically the soot covering the polychromy of the Room of the Bark since the Coptic period.

Conservation of the stone blocks gathered in lapidaries and chapels proceeded with salt efflorescence being removed from the surfaces mechanically and the stone substance being later treated with a silicon-organic agent. Highly disintegrated blocks were moved to closed quarters inside the temple, other fragments were separated from the ground and protected by mats.

The loose rock and earth debris from behind the partly deformed northern wall of the Anubis Chapel was removed. No disintegrated shale debris was found in the immediate vicinity of this wall. The back of the wall was then reinforced structurally with a stone buttress and a monolithic limestone rock was displaced removing with it the pressure it had exerted on the loose debris behind the wall causing its deformation. A geological and



*Fig. 2. Vestibule of the Royal Cult Complex. Southern wall.*

engineering expertise of the wall of the Northern Colonnade of the Middle Terrace did not reveal any significant changes in the conditions there. Some minor and harmless pressing was noted next to the jambs of the entrances to two of the four chapels. The indications are to complete the interrupted protection of the back of the wall taking into consideration conservation principles and to implement a system to drain water from the northern part of the temple.

Egyptological and architectural research on the blocks in the lapidaries brought progress in the work on identifying the decoration and arranging the vestibule of the Royal Cult Complex. In the bottom registers of the southern wall of the vestibule to Hatshepsut's Chapel, a niche was localized between scenes of protection and a procession of the Great Ennead (Fig. 2). The decoration of the upper register of this wall contained consecutive scenes of the Great Ennead striding toward Tuthmosis I and Hatshepsut (Tuthmosis II) seated inside a palace. The decoration of the facade of the Hatshepsut Chapel and partly of the opposite eastern wall was recorded in drawings. A preliminary analysis of the previously reconstructed entrance to Hatshepsut's Chapel revealed a series of discrepancies and a measuring error in the positioning of the portal lintel.

Additional blocks were found to fit into the reconstruction of the upper part of the decoration of the western wall of the Upper Portico and the upper register of the eastern wall (southern wing). The reconstruction project for the eastern section of the southern wall of the Court was completed with over 20 blocks being added to the scene of the ceremony of Hatshepsut(?) and Tuthmosis III being led to the Theban triad of divinities. The actual reconstruction of this part of the southern wall of the Upper Court is planned for the next season.