

DEIR EL-BAHARI

THE TEMPLE OF QUEEN HATSHEPSUT

SEASON 2001

Mirosław Barwik

The work of the Polish-Egyptian Archaeological and Restoration Mission of the Hatshepsut Temple was conducted at Deir el-Bahari in the period from February 3 to March 19, 2001.¹⁾ The main objective of the season was the preparation of projects for further restoration, including the Solar Cult Complex and the Royal Mortuary Cult Complex. Despite a short season, conservation and restoration work was continued in different parts of the Upper Terrace of the temple.²⁾

1) The staff of the mission included: Dr. Zbigniew Szafranski, Director; Dr. Mirosław Barwik, Deputy Director; Mr. Mikołaj Budzanowski, Egyptologist; Ms Monika Czerniec, Mr. Rajmund W. Gazda, conservators; Mr. Tomasz Górecki, ceramologist; Mr. and Mrs. Andrzej and Magdalena Grzegorzczak, photographers; Ms Jadwiga Iwaszczuk, Egyptologist; Messrs. Waldemar Jerke, George B. Johnson, photographers; Mr. Andrzej Kwaśnica, architect; Mrs. Maria Lulkiewicz, conservator; Mr. Mieczysław Michiewicz, architect; Ms. Ute Rummel, Egyptologist; Mr. Yasser Youssif Ahmed, Egyptologist and SCA inspector; Ms Olga Białostocka, Mr. Łukasz Dzieciołowski, students of Egyptology.

2) The author would like to express his sincere gratitude to Prof. Dr. Gaballa Ali Gaballa, Secretary General of the Supreme Council of Antiquities; Dr. Mohammed El-Saghir, General Director of the Pharaonic Department; Mr. Sabry Abd El Aziz Khater, Director of Antiquities in Luxor; Mr. Mohammed El-Bialy, Director of Antiquities at Qurna; and to Prof. Dr. Michał Gawlikowski, Director of the Polish Centre of Archaeology of Warsaw University in Cairo, for their invaluable help and friendly attitude.

ROYAL MORTUARY CULT COMPLEX

The key objective in this part of the temple was to prepare the project for its reconstruction in the near future. Studies on the reconstruction of the collapsed part



Fig. 1. Fragment of the "Pyramid Texts" inscribed in the Chapel of Hatshepsut (Photo W. Jerke)

of the ceiling of the Chapel of Hatshepsut (inscribed with the so-called "Stundenritual"), started some years ago, were now continued and led to new fragments being attributed to the previously reconstructed parts of inscriptions.³⁾ Full-scale drawings of preserved fragments of the collapsed part of the ceiling were made. Moreover, the available documentation of the inscriptions decorating the walls of the Hatshepsut chapel was verified:

- **Chapter 178** of the Book of the Dead (inscribed twice on the southern and northern walls of the chapel) with a tradition dating back to the Middle Kingdom or even to the Pyramid Texts of the Old Kingdom.⁴⁾ Its redaction, in the version from the Chapel of Hatshepsut, forms an important stage in the evolution of the early versions of the Book of the Dead, an evolution which achieved its decisive stage during the reign of Hatshepsut and her successor Tuthmosis III. In addition to some blocks inserted earlier by Baraize in the northern wall, and another attributed by Lipińska,⁵⁾ a new fragment of this inscription has been identified (Fig. 1).
- A spell accompanying both versions of chapter 178 of the Book of the Dead in the chapel of the queen finds only two earlier parallels dating to the Middle Kingdom, one version dating to the

3) Cf. M. Barwik, "The so called "Stundenritual" from Hatshepsut's Temple at Deir el-Bahari", in: Proceedings of the Seventh International Congress of Egyptologists, Cambridge 3-9 Sept. 1995, ed. C.J. Eyre (Leuven 1998), 109-117; cf. also J. Karkowski, "Deir el-Bahari, Temple of Hatshepsut: Egyptological Studies 1977-1980", *ET XIV* (1990), 356f., fig. 8.

4) Cf. R. Lucarelli, "Some Remarks about ch. 178 of the Book of the Dead", in: *Egyptological Studies for Claudio Barocas*, ed. R. Pirelli (Napoli 1999), 37 ff.; H.O. Lange, H. Schäfer, *Grab- und Denksteine des Mittleren Reichs*, *CG*, vol. II (Berlin 1908), 116 ff. (cols. 16 ff.); A. Grimm, "Zur Tradition des Spruchtitels *r3 nj sw3d wdhw*", *SAK* 10 (1983), 185ff. (particularly 192f.).

5) Cf. J. Lipińska, "Studies on Reconstruction of the Hatshepsut Temple", in: *Festschrift zum 150. Jährigen Bestehen des Berliner Ägyptischen Museums* (Berlin 1974), 169 (no. 9), pl. 22b, Figs. 3-4.

18th Dynasty and two of the Late Epoch.⁶⁾ It is a significant remnant of the much older religious tradition exerting a strong impact on the theological concepts of the early 18th Dynasty. A new fragment of the text inscribed on the northern wall has now been attributed (*Fig. 2*).

- Chapter 148 of the Book of the Dead accompanying the false-door stela on the rear wall of the chapel. This particular scheme of decoration was copied in some tombs of the 18th Dynasty in the Theban necropolis, e.g.

the tombs of Puyimre (TT 39), Senenmut (TT 353), and in other tombs as well.⁷⁾ The same chapter was used in the decoration of the northern niche in the vestibule of the Royal Cult Complex, and in the Chapel of Tuthmosis I. Stone fragments capable of filling some gaps in the three versions of BD Chapter 148 were selected from the preserved material.

Conservation work in this part of the temple started with the cleaning⁸⁾ of the central part of the western tympanum above the false-door stela in the Chapel of

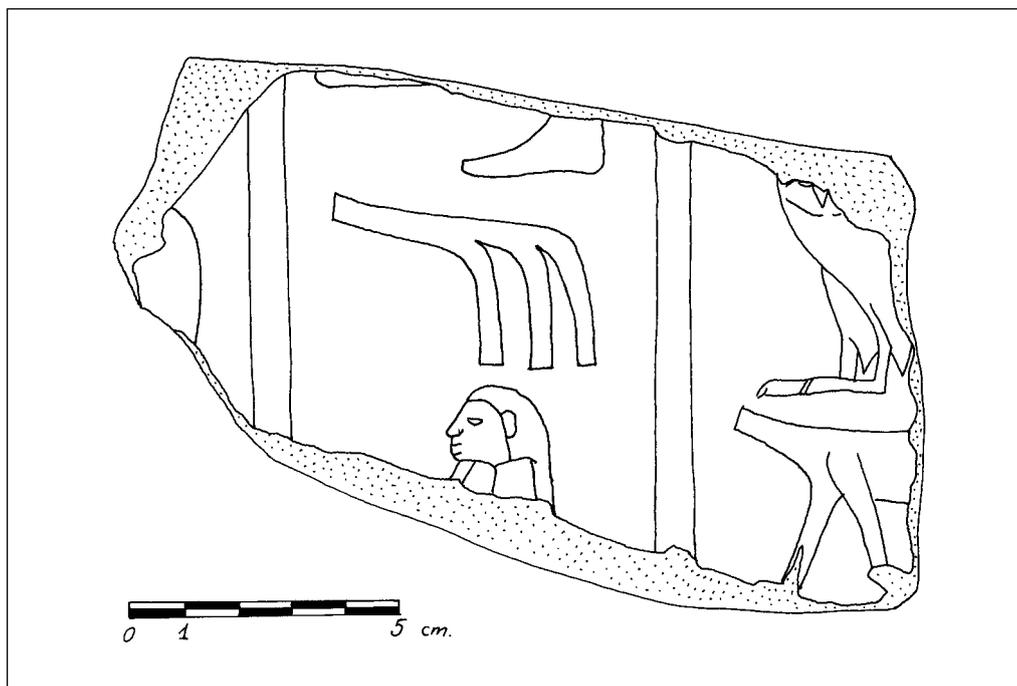


Fig. 2. Newly attributed fragment of a text dating back to the Middle Kingdom, inscribed in the Chapel of Hatshepsut (Drawing K. Szantoch)

6) Cf. É. Naville, "La Plante de Horbéit", *ASAE* 10 (1910), 191f., pls. I-II; id., "La Plante de Horbéit II", *ASAE* 16 (1916), 187-190; H. Kees, "Ein alter Götterhymnus als Begleittext zur Opfertafel", *ZÄS* 57 (1922), 92-120; J. Vandier, "Deux textes religieux du Moyen Empire", in: *Festschrift für S. Schott zu seinem 70. Geburtstag* (Wiesbaden 1968), 121ff.; W. Barta, "Bemerkungen zu einem alten Götterhymnus", *RdE* 25 (1973), 84ff.

Hatshepsut (M. Lulkiewicz). A partial cleaning of the red granite false-door stela at the rear wall of the Chapel of Hatshepsut was undertaken in its upper left corner. The original decoration of the stela was completely chiseled away and then covered with plaster in Coptic times. Tiny traces of a Coptic painting in very poor condition are still visible today⁹⁾ (the painting was partly consolidated with a 5% solution of Primal A-33). Fragments of the original surface of the stela with remnants of its decoration were exposed in the upper left corner of the stela. However, the use of artificial light to enhance other remnants of the original decoration of the stela appeared to be in vain, as it was thoroughly erased and/or concealed beneath a thick layer of Coptic plaster.

The cleaning and conservation of some parts of the preserved ceiling of the Chapel of Hatshepsut in its western part were started this season and will be continued (M. Lulkiewicz, M. Czerniec, R. Gazda). Ancient putties were consolidated (with injections of a solution of Primal A-33). The work was concentrated on the cleaning of parts of hieroglyphic inscriptions restored in antiquity. Inscriptions were painted in red on the surface of plaster applied by ancient restorers in previously erased parts of the text.

To prepare the documentation of the eastern wall of the Chapel of Hatshepsut (its southern part, to the left of entrance), it was necessary to clean its badly damaged surface. The cleaning required repeated soaking with a solution of Condrat.

Conservation work executed in the Chapel of Hatshepsut provided further information concerning the ancient history of this part of the temple. It was possible to elucidate some technical problems concerning ancient (probably early Rameside) restorations of the destroyed parts of decoration, and the much later Coptic adaptation of the chapel as a place of Christian cult. Traces left by early restorers, probably from the beginning of the 20th century, are also discernible in the chapel and enable us to identify early restoration techniques, which caused some damage to the ancient reliefs. The data should be taken into consideration in the final version of the project for the reconstruction of the entire complex.

The exterior face of the portal of the Chapel of Tuthmosis I, and adjoining northern wall of the court preceding this chapel were cleaned (M. Czerniec). In some parts of the northern wall, the monochrome yellow painting of the reliefs is preserved very well. In the vestibule of the Chapel of Hatshepsut it was necessary to consolidate some limestone blocks in the western wall (R.W. Gazda) due to the extremely poor condition of stone material. In the case of the eastern wall of the vestibule, the entire lower part of the wall up to a height of c. 2 m was consolidated with injections of Primal A-33 (M. Lulkiewicz). The aesthetic unification of the upper parts of the wall was achieved through painting the older putties a yellowish colour (whitewash mixed with pigment and Primal A-33).

7) Cf. R. el Sayed, "Les sept vaches célestes, leur taureau et les quatre gouvernails d'après les données de documents divers", *MDAIK* 36 (1980), 357-390; P. Der Manuelian, "Prolegomena zur Untersuchung saitischer 'Kopien' ", *SAK* 10 (1983), 225.

8) M. Lulkiewicz was responsible for this part of the project. A 10% solution of Condrat in water was applied. The cracks of stone were filled with a 5%-10% solution of Primal A-33, the soft putties were consolidated with 3% solution of Paraloid B-72 in acetone.

9) Now its state of preservation seems to be much worse than presented in W. Godlewski, *Le monastère de St. Phoibammon, Deir el-Bahari V* (Warsaw 1986), 34ff., Figs. 16-19.

UPPER COURT

Having in mind the necessity to protect the reconstructed parts of the temple from rainfall, the tops of the northern and southern walls of the upper court were provisionally covered by slabs. To achieve this task, it was necessary to add some layers of brick masonry to the southern wall of the court on its southern side, above the Royal Mortuary Cult Complex. It was especially important to protect the surface of the painted reliefs consolidated in the previous seasons, because of the potential threat of atmospheric factors. The final protection of both walls will be possible once the reconstruction projects concerning the adjoining Solar and Mortuary Cult Complexes are implemented.

Conservation work in the Upper Court this season comprised the cleaning and preservation of relief paintings:

- some fragments of the decoration of the southern wall;
- monochrome and polychrome inscriptions on some architraves exhibited on benches;
- monochrome yellow representations of the god Hapy on the lower parts of columns of the western and eastern colonnades;
- monochrome (green) decoration of the granite portal leading to the Upper Court (exterior, eastern) surface).

Some operations on the pavement of the upper court, which had been made by an Egyptian team from the SCA earlier during the summer of 2000, were undertaken, mainly in its southern part. During these operations a new decorated block was found in the northwestern part of the pavement, near the western wall (*Fig. 3*). It



Fig. 3. Decorated block found in the Ptolemaic pavement in the northwestern part of the Upper Court (Photo W. Jerke)

was inserted into the pavement in the Ptolemaic period.¹⁰⁾ Three ancient blocks were placed in the southeastern part of the newly made pavement in the place of bases of the third row of colonnade in the eastern part of the upper court (theoretically reconstructed by A. Kwaśnica in previous seasons.¹¹⁾ Thus the third row of the colonnade was clearly marked out in the general layout of the upper court. In addition, one of the reconstructed column bases of the western colonnade (J-6) was reshaped.

The documentation of reconstructed walls of the upper court decorated with scenes of the Beautiful Feast of the Valley was verified. Similarly, the documentation of the niches in the western wall of the court, made in previous seasons, was verified, and a complete photographic documentation was made. The representations of Inmutef decorating the niches of the Hatshepsut temple were studied by Ute Rummel (documentation available on CD-Rom).

MAIN SANCTUARY OF AMUN

The examination of the ceiling of the Bark Hall revealed that in some parts of the uppermost layer of the stonework, on the edges of the blocks alongside the main axis of the hall, some cracks and splits were visible. These were repaired by injections of Primal A-33 in the case of small fissures. Epidian-glue pure or mixed with limestone powder (or white cement with limestone powder and Primal) was used in the case of wider cracks and losses. A structural analysis shows that there is no important threat to the stability of the ceiling. Consequently, conservation and

consolidation of damaged parts will suffice to protect the ceiling of the Bark Hall.

The documentation work in this part of the temple concerned the niches in the Bark Hall and the sanctuary. They were photographed and drawings of their decoration were made.

A set of hieratic, as well as hieroglyphic and figurative graffiti was located in the chamber constructed above the Bark Hall of Amun.¹²⁾ They were written on the surface of the limestone slabs of the tent-like protective structure constructed above the Bark Hall. Two hieroglyphic texts were

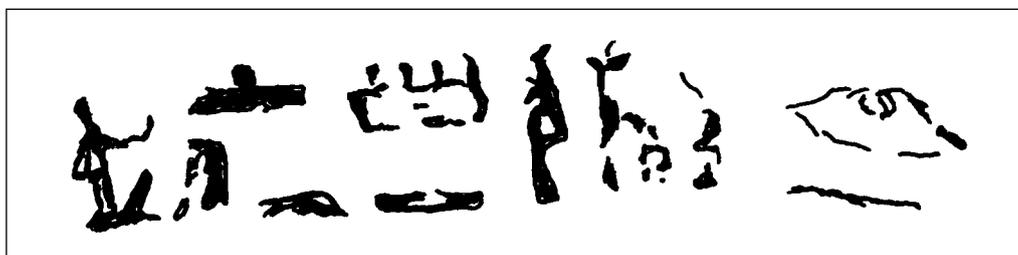


Fig. 4. One of the graffiti left by the scribe Amenhotep (scale 1:1)
(Drawing M. Czerniec)

10) Cf. Z.E. Szafrński, *PAM XII. Reports 2000* (2001), 193f.

11) Cf. A. Kwaśnica, "Reconstructing the Architectural Layout of the Upper Courtyard", in: *Queen Hatshepsut and her temple 3500 years later*, ed. Z.E. Szafrński (Warsaw 2001), 81ff. (esp. 87ff.).

12) Some of them were documented earlier by Prof. J. Lipińska.

inscribed on bedrock in the western part of the upper chamber above the Bark Hall. The name of the scribe Amenhotep is mentioned thrice in these graffiti (*Fig. 4*), besides those of a certain Sapaïry and Amenemope (and the fourth one quite unintelligible). As the palaeography of the hieratic texts points to the Tuthmoside period, the scribe Amenhotep was probably one of the artists decorating the temple in the time of Hatshepsut.¹³) It cannot be excluded, however, that he was engaged in building operations connected with the construction of the tent-like

protecting structure. The enigmatic drawings of triangles (*Fig. 5*) accompanying the graffiti seem to suggest such a possibility. These can be interpreted presumably as architect's sketches concerning the gradient of the slabs forming the tent-like ceiling of the chamber above the Bark Hall.

At the request of the SCA a project for closing the entrance to the Main Sanctuary was prepared by A. Kwaśnica. It provides for a metal and glass two-leaf door inserted into a metal frame mounted in the granite portal leading to the Bark Hall.

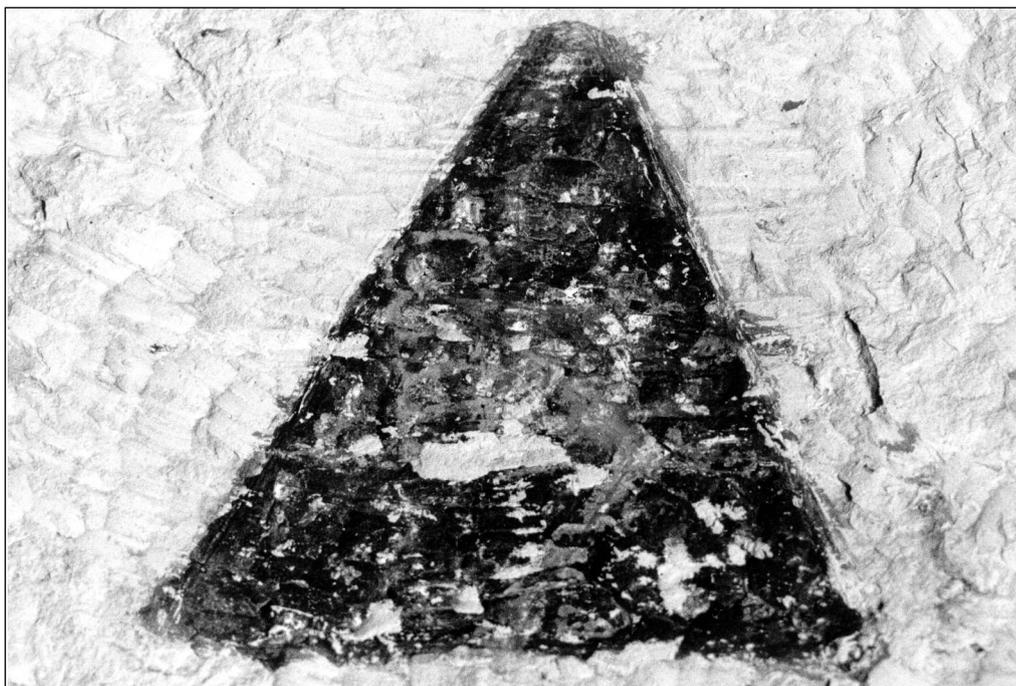


Fig. 5. One of the triangles drawn on the tent-like ceiling of the chamber constructed above the Bark Hall. Height of triangle: 19 cm (Photo W. Jerke)

13) It is possible that he is identical with the scribe Amenhotep mentioned on the building ostraca from Deir el-Bahari, cf. W.C. Hayes, "A selection of Tuthmoside ostraca from Der el-Bahri", *JEA* 46 (1960), 34 (no. 6, ro. 4), note 2. Cf. also M. Megally, "Un ostracon intéressant de la XVIIIe dynastie de Thèbes", in: *Bulletin du centenaire (Suppl. au BIFAO 81)* (Le Caire 1981), 296 (9-10), 308.

NORTHERN CHAPEL OF AMUN

Four shaft-tombs discovered in 1999/2000 were filled with stone and sand, and covered with a pavement of blocks (some undecorated ancient blocks were used in its northern part). The cleaning of fragments of coffins, especially pieces covered with a black substance, resin presumably, discovered in the tombs in the past season, was continued (M. Czerniec, M. Lulkiewicz), revealing new texts originally decorating the surface.¹⁴ One of the most interesting is a fragment belonging to the foot end of Coffin 11 (*Fig. 6*). Four columns of inscription with a religious content were brought to light; unfortunately, the name of the coffin owner has not been preserved.

Pottery fragments found during excavations in the temple area in the 1999/2000 season (on the Upper Ramp and in Northern Chapel of Amun) were studied by T. Górecki. The material comprises Late Roman tableware, kitchen vessels, containers, so-called gadduses, censers, carinated bowls. It was possible to identify about 50 Egyptian amphorae of LRA 7 type,¹⁵ as well as some imported amphorae of LRA 1 type. Four mud stoppers of LRA 7 amphorae were documented. The available material dates to the late 5th-end of 6th century AD, and can be connected with the Coptic monastery located in the temple area.

SOLAR CULT COMPLEX

The documentation of the niches of the vestibule and solar court has been prepared. A study on the decoration of the missing western wall of the vestibule was

undertaken (A. Kwaśnica). The results achieved will be used to prepare a project for the reconstruction of the Solar Cult Complex, planned for the 2001/02 season.

CONSERVATION RESEARCH

Research on non-invasive conservation methods has been continued this season,¹⁶ including tests on stone capillary-absorption. Four kinds of limestone were selected based on structure and salinity. The liquids used were distilled water, Steinfestiger Funcosil 300, Steinfestiger Funcosil 500 STE E, Steinfestiger Wacker 280 (in a 11% solution of alcohol), 4% solution of

paraloid B-72 in toluene. Furthermore, the degree of absorption according to time was investigated. Apart from unconsolidated limestone, stone reinforced with the following materials was taken into consideration:

- 1) Steinfestiger Funcosil 300 Remmers, applied superficially;
- 2) Steinfestiger Funcosil 500 STE E, Remmers;

14) Cf. M. Barwik (with contribution by M. Czerniec), "New data concerning the Third Intermediate Period cemetery in the Hatshepsut temple at Deir el-Bahari", in: Proceedings of the International Symposium "Theban Necropolis: Past, Present, Future", London - British Museum 27-28.07.2000 (forthcoming).

15) Typology according to J. W. Hayes, "Pottery: Stratified Groups", in: J.H. Humphrey (ed.), Excavations at Carthage 1975 conducted by the University of Michigan, I (Tunis 1976), 108 ff.

16) Cf. R. Gazda, "Conservation work and Studies", *PAM XI, Reports 1999* (2000), 167ff.

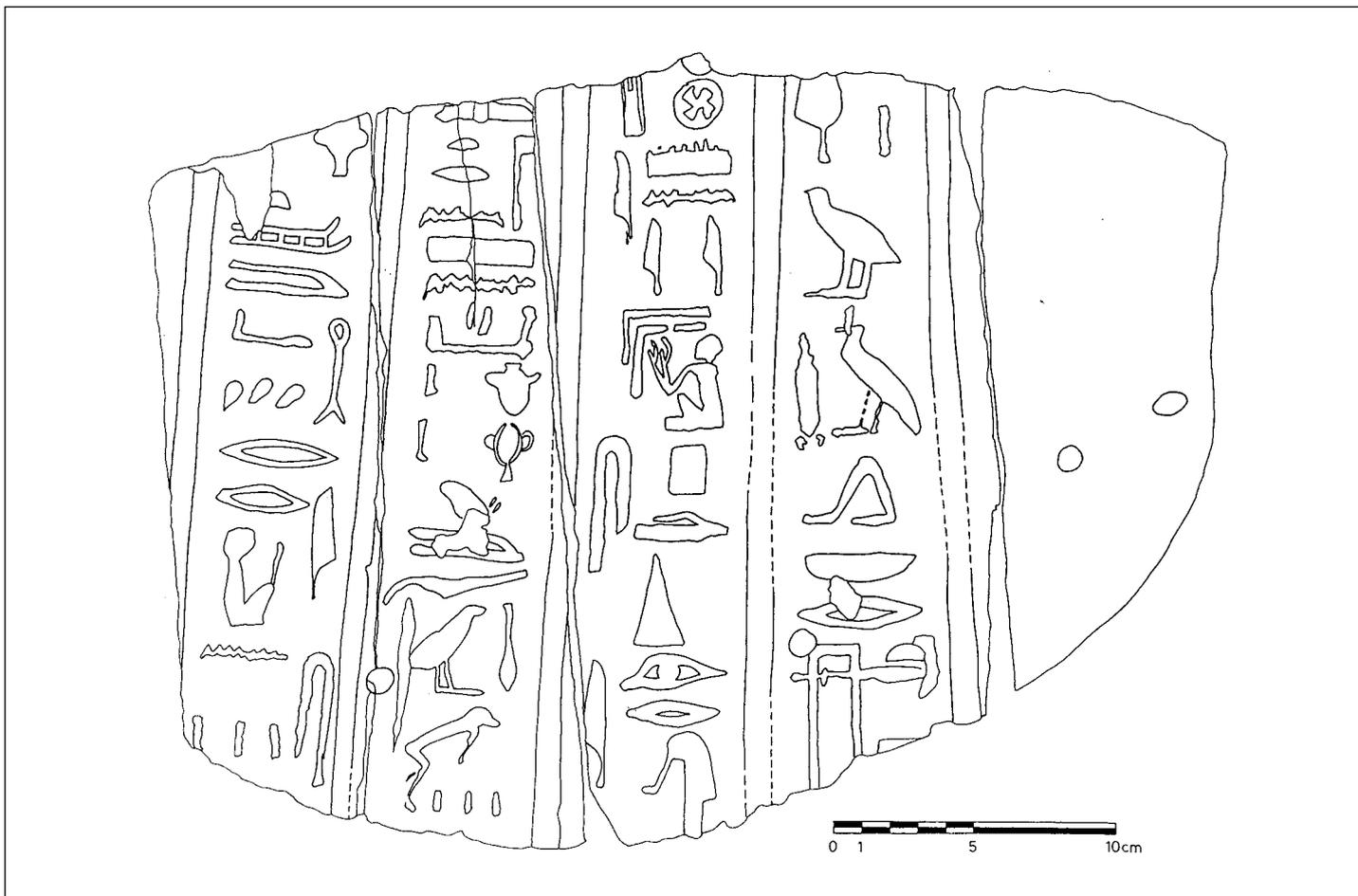


Fig. 6. Reconstructed foot end of an anthropoid coffin (no. 11) from the Northern Chapel of Amun. The monochrome inscription was originally covered by a resinous black substance removed this season (Drawing M. Barwik)

- 3) Steinfestiger Wacker 280, in a 11% solution of a white spirit;
- 4) Steinfestiger 300E Remmers;
- 5) Steinfestiger 510, Remmers;
- 6) Steinfestiger 300 applied after the initial prehydrolysis which took place 24 hours before.

In order to control methods of conservation and review the condition of stone used as building material on the Upper Terrace, a weather condition monitoring

project was started this season (R. Gazda, Lab-el: Rh, T, Dp, ppm device, February 2-27). Measurements were taken in the Upper Court, Bark Hall, Sanctuary, and the Chapel of Hatshepsut. A Lab el-496 device was used in the Upper Chapel of Anubis and on the Solar Court on February 24-26. The condition of the elements consolidated during the previous ten years in different parts of the temple was also evaluated.