The Temple of Queen Hatshepsut at Deir el Bahari Its Original Form*

By Zygmunt Wysocki

(Tafeln 30-31)

For many years now I have wondered over the form and the construction of the walls surrounding the Upper Courtyard of the temple. My attention has been especially attracted by the south and the north wall because they are distinctly different from the walls of the rooms adjoining them. Their vertical cross-section shows a slant on both sides of each of them resulting from the fact that the wall is 240 cm wide at the bottom and goes narrow towards the top so that at the height of 575 cm it is 135 cm wide. It must be stressed here that both walls of the Courtyard are the thickest in the temple (Fig. 1). The same regularity can be observed in the east wall, but here it is 160 cm wide at the bottom and 110 cm wide at the top.

The fact of applying a slant to both sides of the wall should not be surprising because all the walls of the porticos and the courtyards are formed in this way. It probably resulted from the reasons of construction since the temple walls were raised in a singular way. Their outer facings were formed by stone blocks but the inside was filled with rubble sometimes mixed with lime mortar. The facing blocks were fastened together with wooden anchor ties shaped to resemble fish tails. Some of the blocks reached into the filling farther than others to fasten the construction of the wall. The walls built in this way successfully resisted the pressure of the inner filling. It seems that the slant of the porticos and other walls sticking directly to the cliff, which have their facing only on one side, do not have such a justification in construction. They were, however, raised in the same way. It might have been that an ancient architect repeated the form or foresaw the weathering of the cliff and the pressure of the weathered parts on the facing blocks in future.

Besides, it can be easily seen that the inner walls are perpendicular in such chambers as the Main Shrine, the north-west Chapel of Amon, the south Chapel of Hatshepsut and others. Such a situation can also result from the reasons of construction. With thick walls and, which is more important, with short perpendicular distances, the stone walls stand well against the rubble filling without any danger of their disfigurement (Fig. 1).

What intrigued me was the fact of building both perpendicular and slanting walls in the interiors. Such a situation can be found in all the chambers sticking to the south wall of the Upper Courtyard, that is in the south-west Chapel of Amon-Min where the west and north walls are slanting, but the south and east are perpendicular, in the Chapel of Tuthmosis I with

^{*} The article was accomplished in the Ateliers for Conservation of Cultural Property (P.K.Z.) within the framework of the interdisciplinary research program III/9 of the Polish Academy of Science Ancient and Early Christian Culture in Mediterranean Countries.

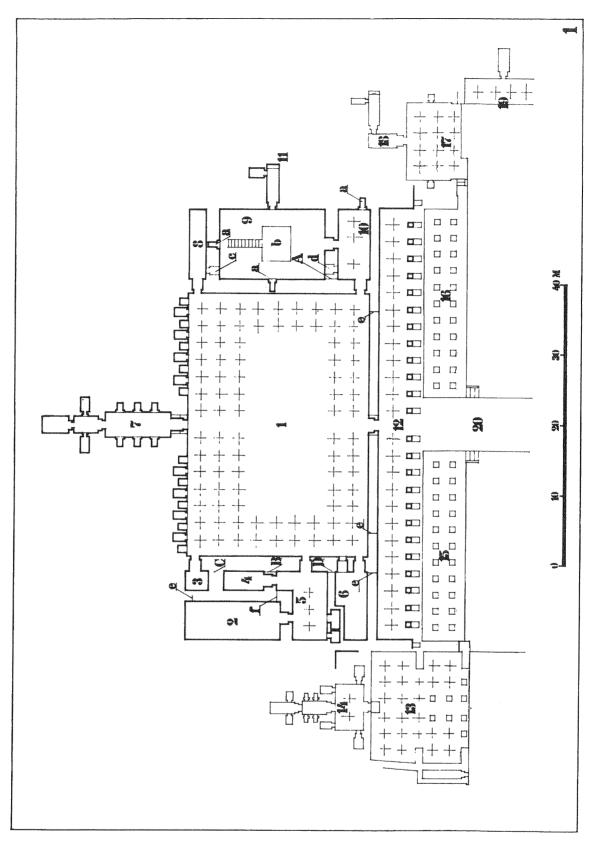


Fig. 1. A view of the Upper Terrace of the temple

- A, B, C, D Examined bonds of the walls
- 1. Upper Courtyard
- 2. Chapel of Hatshepsut
- 3. South-west Chapel of Amon-Min
- 4. Chapel of Tuthmosis I
- 5. Vestibule
- 6. Room with the window of appearances
- 7. Main sanctuary
- 8. North-west Chapel of Amon
- 9. Sun-Altar courtyard
- 10. Vestibule of Sun-Altar courtyard
- 11. Upper Chapel of Anubis
- 12. Upper Portico

- 14. Chapel of Hathor
- 15. Southern wing of the Middle Portico
- 16. Northern wing of the Middle Portico
- 17. Portico of the Lower Chapel of Anubis
- 18. Lower Chapel of Anubis
- 19. Northern Colonnade of the Middle Courtyard
- 20. Upper ramp
- a Niches
- b Sun-Altar
- c Bricklaid entrance
- d Tracing of a portal
- e Vertical joints in the face of the wall
- f Joints at the added wall

the west, north and east walls slanting but the south one perpendicular; and finally in the chamber with the window of appearances where all the walls are perpendicular except the north wall and part of the east one. It looks as if the chambers adjoining the south wall of the Upper Courtyard had not been originally planned but added later. Hence their interiors disclose both slanting and perpendicular walls (Fig. 1).

There was no evidence, however, to prove this hypothesis except one thing, quite obvious but the one which did not exhaust the question thoroughly. This piece of evidence has been preserved at the place where the wall separating the chamber with the window of appearances from the vestibule of the Chapel of Tuthmosis I adjoined the south wall of the Upper Courtyard. This butt lacks a stone bond in the corners of the walls and the joint between the two walls is visible along the whole preserved relic. So, it is unquestionable that the chamber with the window of appearances was raised some time after the original part of the Upper Terrace had been built and before the walls of the vestibule of the Chapel of Tuthmosis I were decorated with relief, which can be easily seen in the composition of the relief (Fig. 1 D).

In the season 1983/84 we analysed this bond by removing few blocks of the west wall of the chamber with the window of appearances at the butt with the south wall of the Upper Courtyard. Behind the blocks we saw a smooth, white facing of the wall covered with a thin layer of whitewash (gesso) and with drawings of a Horus head made with red and black paint. There was also a sketch of a hieroglyphic inscription covered by the block of a lower layer below. They did not make, however, an arranged set of a relief decoration but only the decorator's exercise.

Analysing the walls of the other chambers, which run square to the south wall of the Upper Courtyard, that is the portal wall of the Chapel of Tuthmosis I and the wall separating it from the Chapel of Amon-Min, I could see stone bonds in the corners of each of the walls. So at first, the chambers and the south wall of the Upper Courtyard seemed to have been raised at the same time. However, with such an assumption I could not see why an ancient architect had not made all the walls perpendicular.

Looking for an answer I concentrated on the north part of the Upper Terrace, which seemed to be even more difficult to support my hypothesis because only two walls at this side of the Upper Terrace run square to the north wall of the Upper Courtyard. The wall separating the north-west Chapel of Amon from the yard of the Sun-Altar, preserved in its full height, is one of them.

The Chapel's inside walls were perpendicular except the west wall sticking to the cliff. So, part of the north wall of the Upper Courtyard was perpendicular in this chamber unlike the wall in the rooms of the south part of the Upper Terrace. This part in the Upper Courtyard was made slanting together with the entrance of the chapel.

Moreover, there are traces of a door opening on the east wall inside the chapel, now bricklaid without a stone bond. Similar traces can be observed on the other side of the wall i.e. on the west side of the Sun-Altar's yard. It is obvious that the door had been bricklaid before the chapel was decorated with reliefs because the reliefs are placed on the blocks of its brickwork. The corners outside and inside the chapel have stone bonds in successive layers of wall blocks where the chapel's east wall butts the wall of the Upper Courtyard. So, one can suppose that the north wall of the Upper Courtyard and the north-west Chapel of Amon have been raised at the same time (Fig. 1, 8).

There was one more wall to be searched in the north part of the Upper Terrace, the wall separating the yard of the Sun-Altar from its vestibule, which also runs square to the north

wall of the Upper Court. It has been preserved in one layer of blocks above the floor thus disclosing its inside and butts with the wall of the Upper Courtyard.

In the first phase of my research I did not see much of the conspicuous evidence that has been preserved in this place. It was in the season 1983/84 that I finally established unquestionable proofs to show the way how both the walls were connected (Fig. 1 A). The studies proved that the north wall of the Upper Courtyard had been originally built without a wall butting it, the one which later separated the yard of the Sun-Altar from its vestibule. The proof is supported by the facing blocks of the north wall of the Upper Courtyard preserved at the place where both walls butted. The surface of the blocks is rough, undressed but the edges are bevelled, which is normal in assembling undressed blocks (Taf. 30). Moreover, there is a cavity in one of the preserved facing blocks made there in order to insert a stone bond into the corner of the south and west facing of the vestibule walls (Fig. 2). One can see a distinct line inside the cavity on a lower layer of the blocks. The line marks a vertical joint of a higher layer, a block of which was partly damaged by boring a cavity to put a corner stone into it (Taf. 31 a). These proofs were discovered in the second and third layer from the floor. Two preserved upper layers have neither roughly dressed facing nor bevelled block edges, but large irregular blocks which were generally used for filling of walls (Fig. 3).

Thus it can be said that at the time when the wall separating the Sun-Altar court from its vestibule was being built, the northern wall of the Upper Court was not higher than three layers of undressed stone. This is clear, for its northern facing preserved at the place where these walls butted remains undressed up to that height.

Perhaps it was this fact that settled such a realization of the butt. If the wall had been completed up to its full height at this time it would not be necessary to introduce a false block connection. Most probably other methods of joining these two walls would have been chosen e.g. the method employed at the southern side of the Upper Terrace, at the wall which separates the room with the window of appearances from the vestibule of the Hatshepsut Chapel. It is obvious that the change in the architectonic idea of the northern part of the Upper Terrace must have occurred in the early phase of the construction of the temple.

Once we made this discovery we definitely had to find further evidence to prove that the chambers were built later at the walls of the Upper Courtyard not only on the north side of the Upper Terrace but also on its south side.

We could not look for proofs in the wall separating the north-west Chapel of Amon from the yard of the Sun-Altar because the relic itself had to be respected, but we could expect some results on the south side of the Upper Terrace. And so we started examining the joint of the portal wall of the Chapel of Tuthmosis I with the south wall of the Upper Courtyard (Fig. 1B). The place was partly restored by our predecessors so the inside of the walls was partly filled with rubble. We started digging at the top where the two walls butted. Only after we had reached the second layer from the floor we found the identical block in situ in the south facing of the Upper Courtyard's wall, which was covered with filling of the portal wall of the Chapel of Tuthmosis I (Taf. 31 b). We found it undressed but with its edges bevelled ready to be assembled (Fig. 5). And so, the wall of the chapel was also added here to the wall of the courtyard when the plan of the temple changed.¹)

¹⁾ It should be stressed that all the wall connections described here cannot be regarded as so called working joints which sometimes appear in places where a wall butts another one without a stone joint. In such a case the place of a joint is left rough. An instance of this can be observed on a side wall of the pylon of the Temple of Ramesses III

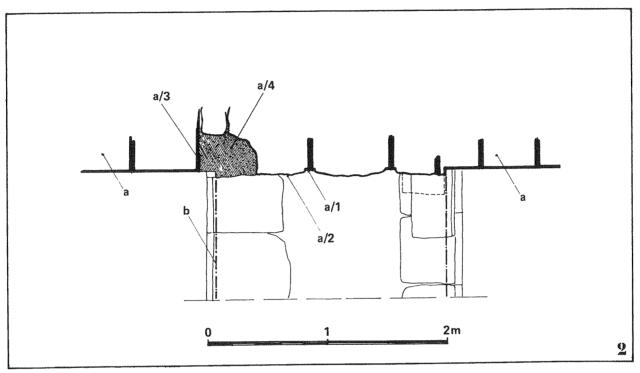


Fig. 2. Horizontal section through bond A

- a Northern wall of the Upper Courtyard
- a/1 Block edges bevelled at the joint
- a/2 Roughly dressed face of blocks

- a/3 A mark incised on the lower layer
- a/4 A cavity prepared for a corner block
- b Face of the added wall

Consequently, we took into examination the joint of the wall separating the south-west Chapel of Amon-Min from the Chapel of Tuthmosis I, with the south wall of the Upper Courtyard (Fig. 1 C). We could not dig into the wall from above because both the walls were complete and the Chapel of Amon-Min had its roof made of stone slabs. The only place we could dig to reach the lower layers of the south wall of the Upper Courtyard was a low, door-

at Medinet Habu. They have been applied in the places where a wall built of bricks (not of stones) butted a stone one. With a brick wall butting a stone one a rough part of the stone wall could be covered with mortar, but when a stone wall was to stick to a stone one without a bond, the place of the joint should be made smooth so that the stone blocks stuck along a uniform joint. In the case described by me new walls have been added to the old ones and artificial bonds have been applied in their angles, which is an unquestionable proof that the joints had not been originally planned. The rough surface of the facing blocks in the place where the two walls butt is an additional proof that these joints appeared when the original walls of the structure still had a rough surface. If it had taken place in a completed structure, the wall facing covered by a new wall would have been smooth and it would not have been necessary to apply an artificial stone bond. An instance of this has been preserved in the joint between the south wall of the Upper Courtyard and the wall separating the chamber with the window of appearances from the vestibule of the Chapel of Tuthmosis I. The application of such a solution is likely to have resulted from the need of reducing labour consumption because applying it one would keep out from smoothing a large wall surface. It was less laborious, then, to hew cavities in a few layers in order to put corner stones into them. In some layers, however, the advantage of the rough surface wastaken to form an apparent bond.

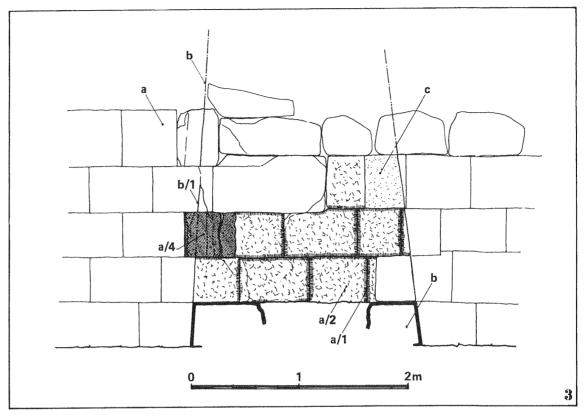


Fig. 3. View of bond A

a - Northern wall of the Upper Courtyard

a/1 - Block edges bevelled at the joint

a/2 - Roughly dressed face of block

a/4 - A cavity prepared for a corner block

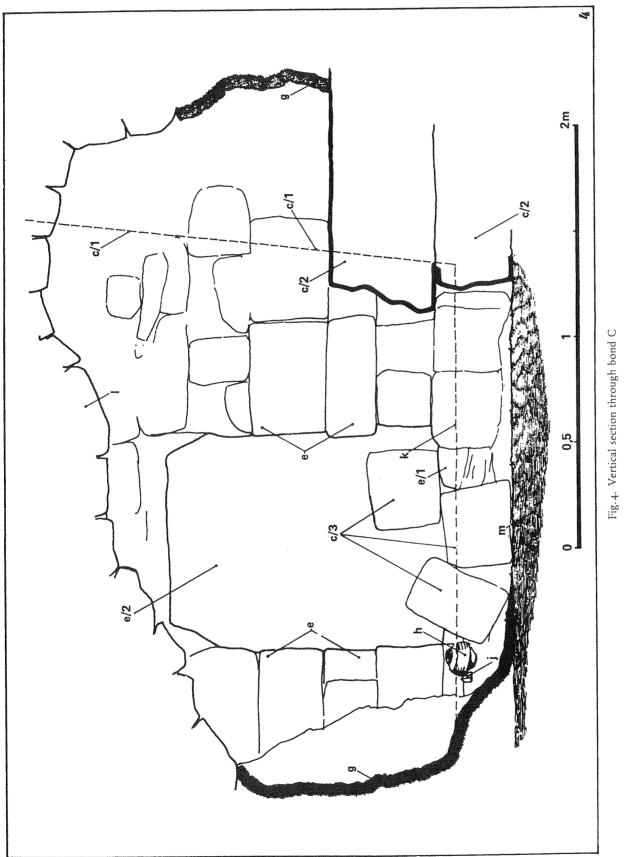
b - Added wall

b/1 - Trace of the face of the added wall

like opening made by removing few layers of blocks from the bottom part of the east wall of the Chapel of Amon-Min. This opening, which was 90 cm wide, was bricklaid by our predecessors. It might have been an entrance leading to a Coptic tomb located in the adjacent Chapel of Tuthmosis I in which the Copts built a barrel vault of which remained only the buttresses hewn in ancient blocks of both longitudinal walls in the middle of the chapel's height. It might as well have been an opening made to reach the back of the false door once placed in the Chapel of Tuthmosis I. The opening might have been made also on the occasion of looking for findings.

The stone facing of the east wall, covered with the relief of Hatshepsut's time, was preserved intact above the discussed opening on the side of the Chapel of Amon-Min, but the west wall on the side of the Chapel of Tuthmosis I was reconstructed by our predecessors together with a plaster-copy of the false door. The reconstruction covered the entire wall except for some lower layers and a few corner blocks of the joint with the south wall of the Upper Courtyard.

After removing the brickwork from the opening on the side of the Chapel of Amon-Min we found inside the rubble-filling which looked as if it was original because the new filling of a reconstructed part overhanging the opening was fastened with clay mortar and it made a sort



e/1 - Foundation blocks e/2 - A cavity done probably by the Copts

c/1 - The face of the southern wall of the Upper Court-

c/2 – Blocks of the first and second layer in situ c/3 – Scattered blocks with bevelled edges at the joints e – Blocks of the transverse wall

- Coptic pottery - Ostracon

k - Level of the pavement from the Chapel of Amon-Min
l - Blocks on the lime mortar
m - Rock (1afla)

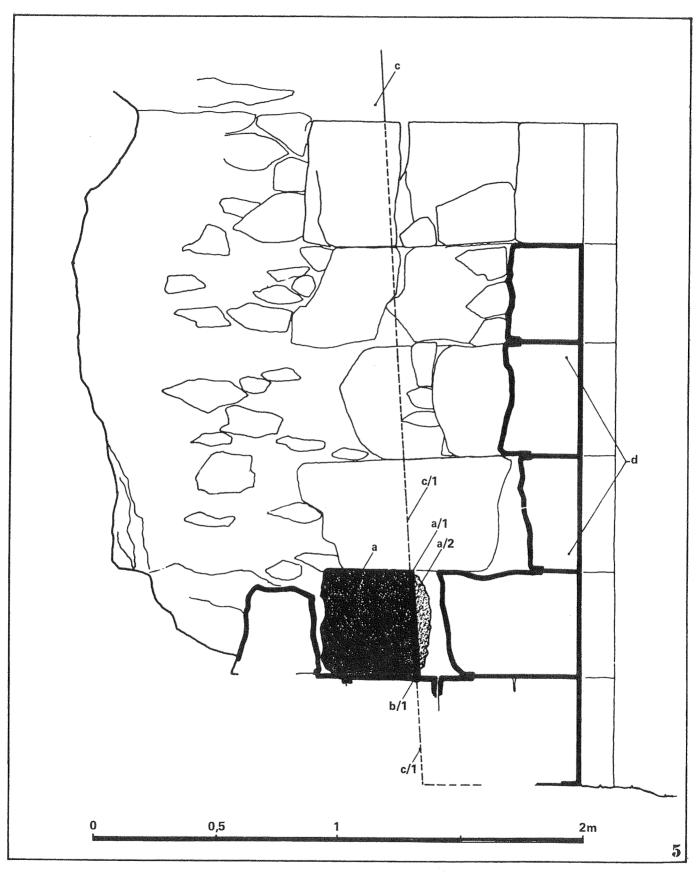


Fig. 5. Vertical section through bond D

- a Block found in situ with bevelled edges at joints
- a/1 Bevelled edges at the joint
- a/2 Roughly dressed face of the block b/1 Tracing on the block of the first layer
- c Southern wall of the Upper Courtyard
- c/1 Face of the southern wall of the Upper Courtyard d Wall added in the second phase

of a vault inside the wall. However, the filling of the lower part must have been moved because the existence of the opening itself through which we, too, could get inside, testifies to that. The filling contained fragments of blocks similar to those we had found in situ in the joints examined before. But we did not find any blocks with a characteristic treatment in the facing of the south wall of the Upper Courtyard as we descended to its lower parts (Fig. 4). Bigger and smaller fragments found in the rubble were easy to recognize because they had rough surfaces and bevelled edges, like the ones discovered before.

So, the question arises from where they come. They could have belonged to the former south wall-facing of the Upper Courtyard in the place where it butted the wall separating the Chapel of Amon-Min from the Chapel of Tuthmosis I and when this joint was damaged, the fragments were buried in the filling of the wall. However, such a possibility does not seem convincing because the fragments were not found near the courtyard's wall but in the middle of the wall separating the Chapel of Amon-Min from the Chapel of Tuthmosis I. There is still another possibility. The wall separating these two chapels has in the Chapel of Amon-Min a perpendicular facing, but in the second chapel it is slanting. Its width is nearly the same as the width of the south and north wall of the Upper Courtyard and as the width of the wall separating the north-west Chapel of Amon from the yard of the Sun-Altar on the north side of the Upper Terrace. What is more, both the walls fall into an almost straight north-south line in a horizontal view and they are elements of symmetry in the composition of a spatial arrangement. Thus, the wall separating the Chapel of Amon-Min from the Chapel of Tuthmosis I and the south wall of the Upper Courtyard are likely to come from the same period. It seems to have originally been the same or almost the same length as its counterpart on the north side of the Upper Terrace or at least it was planned as such and the subsequent construction of the Chapel of Hatshepsut left nothing more than a fragment of it.

The question remains from where the fragments of facing blocks with a characteristic rough treatment came. Both the place in which they were found and their condition seem to indicate that they come from the wall in the Chapel of Tuthmosis I provided that this wall and the wall of the Upper Courtyard come from the same period. The fragments must have been removed to prepare a place for a false door. In such a case the false door, which is a Hatshepsut element, must have been fitted into the rough wall of the first phase of building the structure. Some blocks of the rough facing must have been removed and the original filling poured out. The filling was then completed with the fragments of the removed blocks and the false door set firm in the wall.

Considering the reasoning above and the relics found on the site one can state with a great degree of probability that the wall separating the Chapel of Amon-Min from the Chapel of Tuthmosis I comes from the same period as the west, south and north walls of the Upper Courtyard.

Wondering about the Chapel of Amon-Min today, one can suppose that the inside of the chapel once reached much farther southward (Fig. 1, 3). The chapel may have been planned as an open chamber with a stairway for instance, which led to the rock ledge which must have been somehow accessible. There is not even a trace of any access to it on the north side of the Upper Terrace.²)

²) A similar solution has been applied between two walls in the access to the Chapel of Hathor in this temple. There a ramp or a ramp with a stairway has been built between the north facing of the south enclosure wall of the temple and the revetment of the Middle Courtyard.

After I had found the evidence discussed above my hypothesis proved true and it became obvious why there were perpendicular and slanting walls in some chambers.

There is no doubt now that here on the Upper Terrace of the present temple the structure acquired its first, original form. It was surrounded by the wall sticking to the cliff³) from the west and the walls that enclosed the area of the Upper Courtyard from the north and south. Its today's east wall is probably an element of a later phase because it is much thinner and there was no explicable reason in changing its width if it belonged to the same period as both side walls of the Upper Courtyard.⁴) Besides, the west wall was raised to its full height but its form was different as compared to the form preserved today. Rows of niches in its both wings, divided by a portal to the shrine, were introduced in the second phase of constructing the temple, which is testified by explicit traces of removing blocks of the old wall and forming niches in their place. The joint of the old face and the new one is seen on the wall along the entire height of the rebuilding.

However, the middle part of the courtyard's west wall comes from the first phase as do the blocks of the limestone jamb which is a remnant of an old doorway to the shrine and where a granite portal was set after the old one had been removed. No sooner had it occurred than the wall with niches was decorated with relief because the granite portal discontinues the sequence of its composition.⁵)

The arrangement of horizontal joints in the facings of the south and north wall of the first, east chamber of the temple's Main Shrine does not correspond to the arrangement of the joints of the limestone jamb, the remnant of an old portal. Thus it should be assumed that the present, stone facing of the shrine comes from the second phase of construction (Fig. 1, 7).

There must have been a chamber in this place. It was probably a cave in the cliff and inlaid with stone blocks, which was rebuilt later to acquire the present state. Its existence is testified by the remains of an old, limestone doorway jamb which must have led to a chamber.

- 3) The west wall of the Upper Terrace, sticking directly to the rock, is of a uniform stone construction. This is evidenced by a course of horizontal joints in its facing, which generally run in a planned order along the entire wall, that is in the chambers of the south part of the terrace, on the Upper Courtyard and in the north-west Chapel of Amon. Besides, the wall preserves its slanting along its entire length, both in the chambers and on the yard.
- 4) The only reason of applying a thinner east wall on the Upper Courtyard, providing it comes from the first phase of the building, would have been an architectural plan for the front wall where a colonnade would have been introduced in line with the wall, which is exemplified in the fronts of the porticos of Hathor and Anubis on the Middle Courtyard of the temple. In such a case, however, the side walls of the porticos should have been planned to resemble pylons and a colonnade should have been set back from their facing. The reason of doing so would have been to form a base for the architrave crowning the colonnade, the dimensions of which would have allowed to place pillars or columns diagonally square or nearly square, with their sides of 1,5 royal cubit each. Some traces in the form of vertical joints running in line along few layers of blocks are to be seen on the east wall of the Upper Courtyard and the west wall of the Upper Portico. They can suggest such a planning of the original facade. However, they are not satisfactory because, at first, they are not placed at the same distance from the side walls of the Upper Courtyard and, secondly, it is not possible to examine them since it would require the dismantling of the original wall, which could spoil the edges and the relief of the blocks.
- 5) Some of my conclusions drawn from research works published in The Temple of Queen Hatshepsut. Results of the investigations and conservation works of the Polish-Egyptian Archaeological and Preservation Mission Deir el Bahari, Vol. 3, Warsaw 1985, Publisher P. K. Z. and in my article The results of architectural investigations on historical development of the queen Hatshepsut Temple, ibid. 35-39, are no longer adequate to the recent research, which mainly results from the fact that the queen was treated there as the only founder of the temple. Due to that fact all hypotheses concerning the dating of the object lost their value.

Taking into consideration the period in which the rock platform and the facing wall were built it seems that the architect of the first phase of the temple must have been influenced by the construction and architectural solutions of the adjacent Temple of Mentuhotep. In my research on the influence coming from this temple I learned while digging a sounding pit that the structure also had a rock platform and probable a facing wall to protect it against rockfalls. So, the rock platform above the Temple of Hatshepsut was a result of an inspiration taken from the Temple of Mentuhotep. Its building as well as the building of the facing wall should be also placed in the first phase. It is only true that everyone would try to find a protective device against the danger of overhanging rocks in such a location in order to provide relative durability of his creation and to safeguard the people who might possibly be there.6)

We already know that the present from of the first chamber of the Main Shrine, which belongs to the second phase of construction, is a result of enlarging or rebuilding of the former chamber of smaller dimensions, the execution of which did not require hewing the rocks lying above. It was only the introduction of the present, high chamber in limestone rock of very bad quality that forced an architect to remove the rock that was a natural vault of the original shrine. The rock was removed as far as the level of the rock platform. It is true that the removal destroyed the platform's middle part but on the other hand it was easier to set up a stone panelling onto the walls of a new chamber and onto its vault. The panelling outlasted till today in the first shrine chamber.

The second chamber, which is considerably lower and which is hewn in the rock and has got stone panelling on all the walls and a flat ceiling, seems to come also from the second phase of constructing and if so it was contemporary to the today's inside of the first shrine chamber. The arrangement of horizontal joints in both the chambers points to that.

After the construction of a new shrine had been finished the cavity which appeared in the middle part of the platform had to be artificially completed. To do that a special relieving construction had to be applied over the false vault of the sanctuary because this kind of a vault could not take over the pressure of the artificial filling of the platform, which consisted of debris and stone blocks. The construction took the form of a triangle made of stone slabs set over the entire length of the first chamber. The slabs passed the pressure of the filling overlying them onto the rock. All these changes are, however, a result of the rebuilding of the second phase.⁷)

⁶⁾ Z.Wysocki, Discovery, research, studies and the reconstruction of the rock platform above the upper terrace of queen Hatshepsut temple at Deir el Bahari. The temple of queen Hatshepsut. State Enterprise for the Conservation of Cultural Property (P.K.Z.) Information Centre, Warsaw 1980, 7-43. Id., The Discoveries, Research and the Results of the Reconstruction made at the Rock Platform and the Protective Wall over the Upper Terrace in the Temple of Queen Hatshepsut at Deir el Bahari, MDAIK 39, 1983, 245-253.

⁷⁾ The ostracon No.71 from the Tomb of Senmut testified to the rebuilding of this shrine. This ostracon says: "The eleventh year, the third month of the Akhet period, the twenty seventh day when the heights to the shrine have been opened." The ostracon has been published by W.C. Hayes, in *JEA* 46, 1960. Another support to the rebuilding has been delivered by an ostracon found 1975 by our Mission while removing rubble from the top of the false vault of the shrine under its relieving construction.

This second ostracon, inscribed on both sides, has been described by M. MARCINIAK in *Un Reçu d'offrande de Deir el Bahari, BIFAO* 78, 1978, 165–170, Pl. LI. Apart from a number of gifts the text mentions the name of Senmut who, as we know, was a high official supervising, among other things, the building of the queen under her reign. Although there is no precise date, M. MARCINIAK dates it back after the eleventh year, which he considers the beginning of raising the shrine indicated by the Hayes ostracon. The place where we have found our ostracon No.85/75 suggests that

But it seems that the present north-west Chapel of Amon comes from the first phase. What testifies to it are perpendicular, not slanting, walls, in particular the south wall which is distinctly different from other walls placed at the north and south side of the Upper Terrace. So far we could not have examined the wall separating the Chapel of Amon from the yard of the Sun-Altar, where it butts the north wall of the Upper Courtyard. We would have to interfere in the originally preserved part of the structure, which is generally inadvisable and rarely accepted. But there are some data on the yard of the Sun-Altar, which are common for its two walls, that is for the west and the south one, and which indicate that they are raised at the same time. There are niches introduced along the axes of these walls. The niches come distinctly from a later period, which is evidenced by the arrangement of facing blocks, which does not correspond to the arrangement of blocks of both the walls. The same way of their treatment testifies that they have been set into the partly erected walls at the same time. And now, because the south wall of the yard of the Sun-Altar belongs to the first phase of construction which I have proved in my research described before, the west wall must be its contemporary.

The consideration above was mainly based upon the evidence preserved in the structure and it made it possible to select the elements of the first phase of building the temple. Taking into regard the state of treatment of the facing blocks belonging to this phase we may conclude that this was the phase of unfinished state, the advancement of which could be varying with each of the elements of the temple. It is impossible, however, to establish precisely a degree of the advancement. We do not know and we will never know how high the south and north walls of the Upper Courtyard were raised in different places of their length. Neither do we have any traces of colonnades there. If there were any columns already executed or only planned we do not know what architectural form they presented or to what extent they were raised. We do not have any clue from which we could learn what the elevations of the structure, both the front and the side ones, looked like.

there must have been some building under construction, probably the relieving construction for the shrine vault. Otherwise it would not have been possible to get the ostracon under the relieving construction. Because Senmut disappears from records in the sixteenth year, the building of the shrine vault must have been carried out between the eleventh and the sixteenth year of the queen's reign.

M. MARCINIAK is impressed that the temple was still under construction when this text was written, but it already started to perform its sacral functions because gifts were offered there. He writes as follows (p. 169 of his publication): "Mais un autre aspect du texte est frappant. Il indique en effet qu'au moment où fut écrit cet éclat de calcaire le temple était encore en construction, mais déjà remplissait ses fonctions sacrées et on y déposait des offrandes."

It seems to me that both the texts are impressive. The one from the ostracon No.71 about "opening heights" to the shrine can be understood as opening an entrance to it, but it can refer to another event as well, to remove the rock heights, i.e. the middle part of the rock platform over the former shrine in the course of its rebuilding. Then the eleventh year would not mark the completion of the shrine but the beginning of its rebuilding.

The ostracon No. 85/75 gives evidence of offering gifts in the shrine while it was still under construction. However, it could be regarded as offering gifts deposed in the original shrine which undoubtedly started the execution of the first phase of the temple and which could perform its sacral functions though it was still incomplete.

Besides, if the beginning of the work in the shrine, which, anyway, must have started the building of the temple dates back to the eleventh year of the reign of Tuthmosis III that is also of Hatshepsut, then the year could not have indicated the beginning of the construction of the temple because if so, they would have had too little time (merely 10 years) to complete it. After all, we know that the process of building was carried out in phases, probably with some intervals.

Thus, one should consider both the ostraca connected with the rebuilding a part of the temple within the shrine rather than see them as indicating the beginning of the temple's construction.

It is most probable that the first phase of building the structure had not been entirely completed, it might have been only advanced a little, when the second phase started.

The original, general plan of the architecture and possibly also details are likely to have been influenced by the adjacent Temple of Mentuhotep. It constituted a square of main walls, a shrine hewn in the rock and a hypostyle hall on the present Upper Courtyard. The square was surrounded by few rows of pillars or columns covered with a ceiling and a ramp was built along the axis of the structure.

The next question to pose is whether Queen Hatshepsut was the founder of both the phases of building the temple. An exhaustive answer with explicit evidence is at the present state of research impossible. There are some data, however which can indicate that it was not she but her predecessor on the throne of Egypt, i.e. Tuthmosis II who was the founder of the first version of the temple.

Firstly, the temple has not only been enlarged but rebuilt as well. The rebuilding took place during the first phase of constructing the temple whereas the second phase added new elements to the structure already raised.

Secondly, the diversity of form of both succeeding versions of the temple points to Tuthmosis II. It is hardly acceptable that one founder would suddenly and completely change an architectural plan and above all that he would change this plan at the moment when the first form had not only been incomplete but probably advanced only a little. It is more probable that Tuthmosis II started to build his temple some time after he had ascended to the throne and having ruled for eight years only, he was not able to complete it. After his death the queen set about building her temple in an altered architectural form taking advantage of the existing walls of her predecessor. She rebuilt them and extended the Upper Terrace according to her plan which she carried out in stages as she rose in power.

Thirdly, there are no foundation deposits of the queen on the Upper Terrace. The deposits discovered by Naville and Winlock were placed on the Lower Courtyard and they marked part of the Middle Courtyard and the whole Lower Courtyard. The inscriptions preserved on the alabaster jars refer to "the day of stretching the cord", that is at the beginning of raising the temple and delimiting it on the site.8) It looks as if she delimited a new structure which was to be added to the already existing construction in the scope of its general enlargement. Rebuilding and minor changes of the already existing first phase of the temple did not require delimiting.

We searched in vain the Upper Terrace for foundation deposits of either Tuthmosis II or Hatshepsut. The only probable deposit pit is a cavity hewn in the north rock slope enclosing the rock platform there. Our measurements show that it could be a deposit pit delimiting the course of the west wall of the Upper Terrace, that is the wall of the first phase. Its counterpart must have been placed in the south rock slope enclosing the terrace from the south at that time. The slope, however, was removed while building the Temple of Tuthmosis III. Unfortunately, the pit did not contain any deposits nor other traces which could suggest the ruling sovereign of the time of its founding.

⁸⁾ H.E. Winlock, *The Egyptian Expedition 1923–1924, BMMA* Part II, New York, December MCMXXIV, 1: "It was on these jars that we found engraved the clue to the meaning of the deposits: 'The Daughter of the Sun-God, Hatshepsut. She made this as her monument to her father Amon at the time of stretching the cord over the Temple of Amon at Deir el-Bahri [Zeser-zeseru]. May she be living!."

Finally, there is a great number of names of Tuthmosis II introduced among the walls of the first phase on the Upper Courtyard. His names were introduced there by order of Tuthmosis III to replace the names of Hatshepsut after her death. Obviously he also introduced his names and the names of his grandfather, Tuthmosis I, but they were not as numerous as the names of his father. According to the counts taken by one of the Egyptologists of the Mission9) there are 114 names of Hatshepsut re-engraved with the names of Tuthmosis II on the walls and portals of the Upper Courtyard. If we add 16 cartouches of Hatshepsut placed on the columns of the court, we will have the number of 130 engravings of Tuthmosis II put in the place of the Hatshepsut's names. Additionally, Tuthmosis III introduced one engraving of his name. The Main Shrine, the decoration of which belongs to the second phase of constructing the temple, contains 2 names of Tuthmosis III and 3 names of Tuthmosis II introduced there in the place of the queen's names. Such re-engravings did not take place at all or they appeared exceptionally in the lower part of the temple, which also belongs to the second phase. The Hatshepsut's names have been removed from the Lower and Middle Porticos, but they have not been replaced by other names. Even in the Upper Portico only a sparse number of 7 names of Tuthmosis III, 2 names of Tuthmosis I and 4 names of Tuthmosis II replace the names of Hatshepsut.

The only exception is the Chapel of Hathor and its porticos on the Middle Courtyard where, again, 60 names of Tuthmosis II, 2 names of Tuthmosis III and one name of Tuthmosis I replace the names of the queen. Such a preference of the names of Tuthmosis II over other names in some parts of the temple seems to indicate that Tuthmosis III wanted to give back to his father what had been once taken from him by the queen. This is presented on the table opposite.

In such a case, however, we should assume that the Hathor Chapel was raised in the first phase of building the temple, which is not impossible since independently of the upper part of the original temple the Chapel of Hathor could have been built on a lower level, that is in the place where it is situated at present.¹⁰)

However, it is not a subject matter of the present article to discuss all the stages of the development of the Hatshepsut Temple, which it went through at the second phase of its building because this needs a more extensive elaboration. Some of them have been mentioned because they are connected with the original plan of the temple and with the changes which occurred as a result of there appearing a new architectural conception.

What has been proved here, namely: that there were two phases in both the architectural planning and the carrying out of the temple, will be the starting point of a new article.

The following conclusions emerge from the article:

- 1. The Temple of Queen Hatshepsut was raised in two phases according to different architectural conceptions.
 - a) The first phase was limited to the middle part of the present Upper Terrace. It contained the west wall of the Upper Terrace with a shrine along its axis, the north-west chapel

⁹⁾ KRYSTYNA POLACZEK, MA, an Egyptologist of the Mission, took a preliminary count of the cartouches where Hatshepsut's names have been replaced by the names of Tuthmosis II, Tuthmosis II, and Tuthmosis III.

¹⁰) It is not an exception to build a Hathor Shrine disconnected from the main edifice. Such a situation can be observed in the Temple of Tuthmosis III where its Hathor Chapel has been set below, hewn in the rock at the foot of the structure: J. Lipińska, *The Temple of Tuthmosis III. Architecture, Deir el Bahari* II, Warsaw 1977, 38-45.

-today's Chapel of Amon and the south-west chamber, a part of which is preserved today as the Chapel of Amon-Min. It also contained the north, south and probably the east wall of the Upper Courtyard. The rock platform and the facing wall above the Upper Terrace could belong to this phase, too.

b) The second phase resulted first of all in the rebuilding of the first one and then in the enlargement of the temple. The enlargement was carried out in stages at first on the

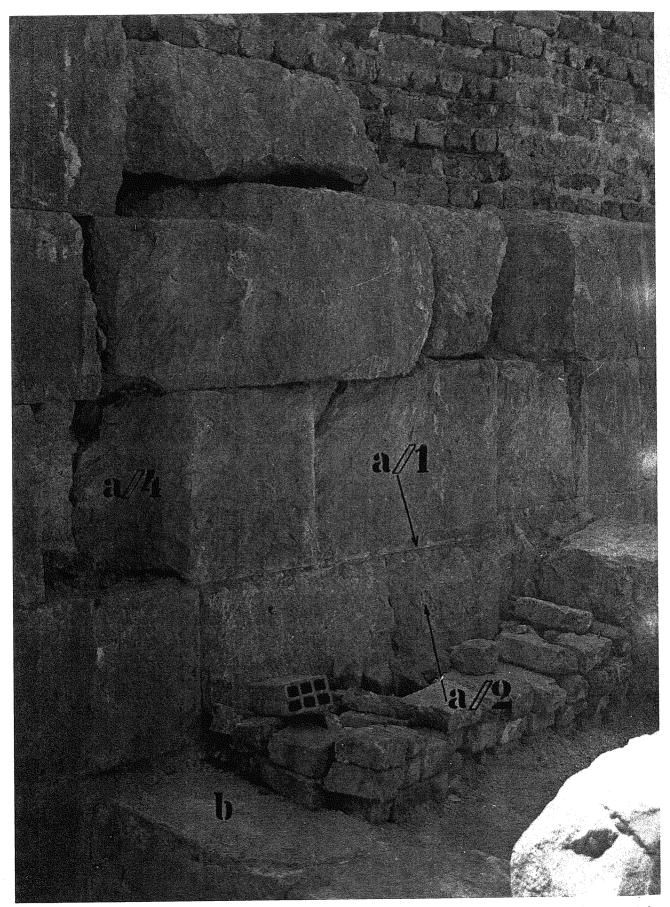
Upper Terrace and then on the Middle and Lower Courtyard.

The thesis above is proved in the content of the article with findings encountered in situ in the walls of the structure, that is with the original facing blocks of the north and south wall of the Upper Courtyard, which were encountered in the place where the chambers butt the walls. The thesis mentioned above is also supported by the analysis of other indications.

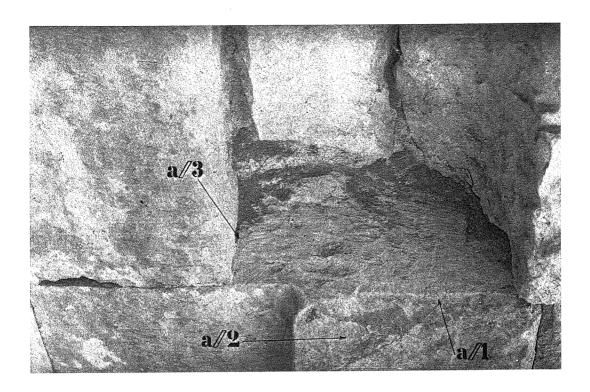
The occurrence of the Tuthmosis' names in particular elements of the temple introduced by Tuthmosis III, in the places of names of the queen Hatshepsut.

No.	Part of the temple	Tuthmosis I	Tuthmosis II	Tuthmosis III	Notes
1.	Lower Portico			_	Names of the queen
2.	Middle Portico		_	_	hewn but not substi-
3.	Lower Chapel of	_	_		tuted by other.
	Anubis				
4.	Chapel of Hathor	1	60	2	
5.	Upper Portico	2	4	7	1 cartouche of
6.	Upper Courtyard	-	114	1	Tuthmosis III restor. in Amarna Period. + colonnades 16 There exist original titles of Tuthmosis III in niches.
7.	Vestibule of Sun-Altar	2.	6		
8.	South Chapel of	2.	6	_	
	Amon-Min	deservation of the second of t			
9.	North Chapel of			_	Cartouches hewn but
	Amon			7	not restored.
10.	Vestibule of Hatshep-	_	2		
	sut Chapel			- Approximation	
11.	Main Sanctuary	_	3	2	
12.	Upper Chapel of	1	_	-	
	Anubis				
	Total	8	195(+16)	12	

- 2. The architectural form of the temple carried out in the first phase was different from the conception executed finally in the second one. It is most likely that the original form resembled the general conception of the Temple of Mentuhotep, a pharaoh of the XIth Dynasty, that is a core surrounded with porticos. What testified to it are slants on both sides of the walls of the Upper Courtyard, which indicates that the porticos were planned also on their outer sides.
- 3. When the changes of the second phase were being introduced, the first phase was still unfinished or only a little advanced. This can be proved by the state of treatment of the blocks found *in situ* in the walls of the first phase.
- 4. The founder of the first phase of building the temple was probably Tuthmosis II. After his death Queen Hatshepsut rearranged the original conception and extended it according to her plans. The data discussed in the text account for this.

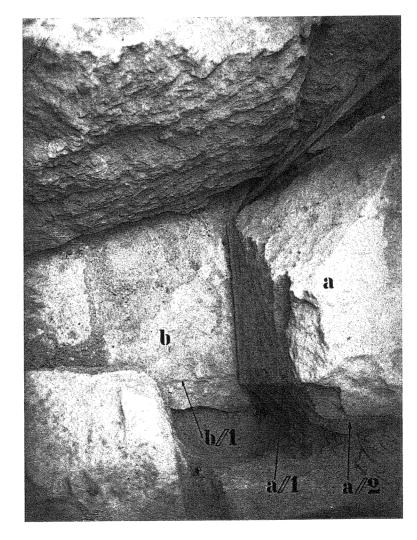


Bond A. Visible point of contact of the northern wall of the Upper Courtyard with the wall separating the Sun-Altar court and its vestibule; a/1 — Block edges dressed of the joints; a/2 — Roughly dressed face of the northern wall of the Upper Courtyard; a/4 — A cavity cut in the wall for insertion of the block (False bond); b — Added wall (Phot. by A. Stefanowicz)



Bond A. Visible cavity in the face block of the northern wall of the Upper Courtyard, prepared for corner block; a/1 — Block edges bevelled at the joints; a/2 — Roughly dressed face of a block; a/3 — Mark showing points of contact in blocks of the layer (Phot. by A. Stefanowicz)

Bond B. Visible point of contact of the southern wall of the Upper Courtyard with the wall separating the Tuthmosis I Chapel from its vestibule; a - Distinctive dressing of a stone block found in situ in the second layer; a/1 — Block edges bevelled at the joints; a/2 - Roughly dressed face of the block; b — A block from the first layer; b/1 - A mark tracing the rum of the second layer of blocks (Phot. by A. Stefanowicz)



MITTEILUNGEN

DES

DEUTSCHEN ARCHÄOLOGISCHEN INSTITUTS ABTEILUNG KAIRO

BAND 42

1986



VERLAG PHILIPP VON ZABERN · MAINZ/RHEIN