

The Temple of Queen Hatshepsut at Deir el Bahari: The Raising of the Structure in View of Architectural Studies

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(Tafeln 42-47)

As a result of my architectural studies conducted in the Temple of Queen Hatshepsut at Deir el Bahari, it appeared evident that the temple had been built in two phases, each of which was based on a different spatial plan. The execution of each of the phases happened in stages.

My predecessors, i. e. NAVILLE, WINLOCK and even DABROWSKI, considered the building to be the result of a uniform plan being raised by Queen Hatshepsut until her death¹⁾. It is true, however, that SOMERS CLARKE, NAVILLE's architect, noticed traces of changes in the building taking them to be an accumulation of layers in a uniform building of the Queen's temple²⁾.

This doctrine is due to the fact that the researchers were mostly Egyptologists - thus their research focused on the hieroglyphic and figural decoration, but not on architectural clues. The decoration as such could not provide any other conclusion but attribute the raising of the temple to the Queen because it was the last element of completing the structure which was indeed carried out under her reign. So they thought that the temple had been built by Queen Hatshepsut and her architect Senmut, and, according to them, the incomplete northern portico of the Middle Courtyard proved that the building had been abandoned when the Queen had died. Consequently, this part of the structure was considered to be the last one in the building carried out by her³⁾.

However, the reason for abandoning the work in the portico was not Hatshepsut's death, but a collision of the portico with the tomb of Meryt-Amon of the former dynasty, located in this place. Therefore it was not the last element in raising the structure, but one of many to follow⁴⁾.

WINLOCK in his analysis of the placing of the foundation deposits of the Queen discovered on the Lower Courtyard, indicates that they marked the original plan of the structure which was to be a true but diminished copy of the neighbouring Temple of Mentuhotep of XIth dynasty. For unknown reasons, however, this plan had not been carried out and what eventually followed was a temple larger than its prototype⁵⁾.

1) E. NAVILLE, *The Temple of Deir el Bahari VI*, London 1908, p. 11; H. E. WINLOCK, *The Egyptian Expedition 1924-1925*, in: *Bulletin of the Metropolitan Museum of Art*, New York, March 1926, part 2, p. 26; L. DĄBROWSKI, *The Main Hypostyle Hall of the Temple of Hatshepsut at Deir el-Bahari*, in: *JEA* 56, 1976, p. 104.

2) S. CLARKE, in: E. NAVILLE, *op. cit.*, pp. 17-31.

3) E. NAVILLE, *op. cit.*, p. 14; H. E. WINLOCK, *The Egyptian Expedition 1921-1931, Excavations at the Temple of Deir el Bahri 1921-1931*, American Philosophical Society, Proceedings 6, 1932, p. 326.

4) Z. WYSOCKI, *The results of research, architectonic studies and of protective work over the Northern Portico of the Middle Courtyard in the Hatshepsut Temple at Deir el Bahari*, in: *MDAIK* 40, 1984, Taf. 42-44; ID., *Świątynia królowej Hatshepsut w Deir el Bahari - Wyniki badań architektonicznych północnego portyku środkowego dziedzińca*, to be published in: *Ochrona Zabytków*.

5) H. E. WINLOCK, *Excavations at the Temple of Deir el Bahri 1921-1931*, pp. 327 f.

It is unquestionable today that the building of the temple was initially based on an architectural plan different from the final version. It was indeed to some extent modelled after the neighbouring temple, but this original form was executed on the Upper Terrace and not on the Lower Courtyard where the foundation deposits were placed and it was bigger, not smaller, than the Temple of Mentuhotep. Thus, the placement of the Queen's foundation deposits indicates that they are not connected with the first building phase of the temple. They date from later years when the temple was enlarged towards the east.

No foundation deposits have so far been found on the Upper Terrace, that is in the place where the first form of the temple was started. The absence of any of them, especially if compared with the Queen's deposits found on the Lower Courtyard talking explicitly about "the time of stretching the cord"⁶⁾ (that is, setting out the temple), proves that she was not the founder of the first building phase, but the one who continued the work started earlier.

Another indication to point out the first founder of the structure was the replacement of the Queen's names by the names of Thutmose II in the decoration of the Upper Courtyard and the Hathor Shrine by Thutmose III after the Queen's death. The changes were introduced into the elements of the structure which did not have Hatshepsut's deposits, but were located on the site of the first building phase⁷⁾.

Undoubtedly, this is an exception to the common practice of Egyptian rulers, where usually the names of the predecessors were replaced by the names of their successors. But here Thutmose III put his father's name instead of his own. It seems to be a way of stressing the importance and attribution of this part of the temple to its actual founder.

There was also this sudden change of the spatial plan in the still incomplete temple, which can testify to the change of the temple builder. There must have been some very important event that caused such a decision and this, undoubtedly, was the death of the temple founder whose successor became the new owner of the building.

In this particular case, the degree to which the work in the temple was advanced at the moment of changing the plan corresponded with Thutmose II execution potential for he had ruled for only eight years and could not have completed the building⁸⁾.

All this information points out that it was not Hatshepsut but Thutmose II, her predecessor, who was the founder of the first form of the temple located on the present Upper Terrace. As soon as he died the Queen took over the building and altered its plan, according to her needs⁹⁾. First she rebuilt the walls according to a new plan, placing foundation deposits to mark new parts of the temple, then she extended it towards the north and the east.

Undoubtedly, both the first building phase, in my opinion carried out by Thutmose II, and the second phase (by Hatshepsut) were executed in stages, the evidence of which is preserved in the structure and proved by the logic of building. However, distinguishing phases must to some degree be conventional. Though the sequence of raising particular walls is clearly readable, it is not possible to establish now whether the building was or was not simultaneously executed in various parts of the temple.

In my previous papers there was no need to break up the building into so many stages. Therefore this article is limited to a strict minimum, concerning the undisputable rebuilding and

⁶⁾ ID., *The Egyptian Expedition 1923-1924*, in: *BMAA*, New York, December 1924, part 2, p. 18.

⁷⁾ Z. WYSOCKI, *The Temple of Queen Hatshepsut at Deir el Bahari - Its Original Form*, in: *MDAIK* 42, 1986, p. 226.

⁸⁾ K. MICHAŁOWSKI, *Nie tylko Piramidy*, Warszawa 1974, Chronological list, p. 286 after *CAH* 1-2, rev. ed., Cambridge 1960-1962 and *CAH* 1, Cambridge 1971.

⁹⁾ Z. WYSOCKI, *Świątynia królowej Hatshepsut w Deir el Bahari - Architektoniczne badania fundamentów niektórych ścian w południowej partii górnego tarasu*, unpublished paper.

two stages of extension only. I did not try to date both phases or particular stages to the reign of Egyptian rulers; this seems pointless since neither the beginning nor the end of the building, not to mention the stages, could be precisely defined.

I shall now try to define the scope of work in particular stages of building phases basing it both on the traces preserved in the structure and on the logic of building.

Phase I: The execution by Thutmosis II

Analysing the traces preserved in the walls, especially in wall joints, one can see that the spatial form of the temple in this phase varied from the present one. It certainly was influenced by the neighbouring Mentuhotep Temple, but it was not its diminished copy as WINLOCK suggested. The similarities lay in a general view of the structure: the main part of the temple was surrounded by a portico and also in a way the structure was protected against rock falls.

It was located on the present Upper Terrace, that is not in the place suggested by WINLOCK.

Most probably a square form of today's Upper Courtyard was then planned to be built. From the south, east and north it was to be surrounded with porticos located on a raised terrace, the front of which was to be screened with a portico placed beneath. Today it is called the middle portico. Above the structure there was a ledge hewn in the rock to protect it against rockfall (Fig. 1).

Obviously, this plan had never been fully completed because after Thutmosis' II death Queen Hatshepsut's plan was carried out. However, after removing the walls built by her and examining the traces preserved there one can see the original plan of the temple designed by its first architects.

Today it is impossible to establish the degree to which the work had been advanced under Thutmosis II, at the time the plan changed under the Queen, because the Queen's building must have obliterated many a trace. On the whole one can say that the first phase left the temple incomplete, the work slightly advanced. Only by some fragments it is possible to define precisely the scope of work then done.

The phase of construction work under Thutmosis II discussed here could be divided into two stages. The first one includes ground work, that is, preparations for raising the structure. The second stage concerns the actual execution of the accepted architectural plan.

Phase I, stage I

The rock massif chosen for the location of the temple sloped the east and the south. To locate a construction in such conditions one had to cut into the lower parts of the limestone rock consisting of Esna shale. Thus, a rectangular platform was formed for a future structure. It abutted on the western part of the massif with its longer side, from the south and north it was surrounded by the rock sloping towards the east. The massif's sloping towards the south made it necessary to construct an artificial south-east corner for the platform.

Later, the debris obtained by cutting a platform into the massif was used for building a part of the temple terrace and part of its foreground. It was necessary to build simultaneously revetment walls in the south and east parts to secure the terrace. At the same time a foundation for future temple walls was built at least in the parts of the artificially formed terrace.

Future temple walls had been planned to have two rows of an outer stone facing filled with debris inside. Likewise their foundations consisted of two rows of foundation walls, resting on

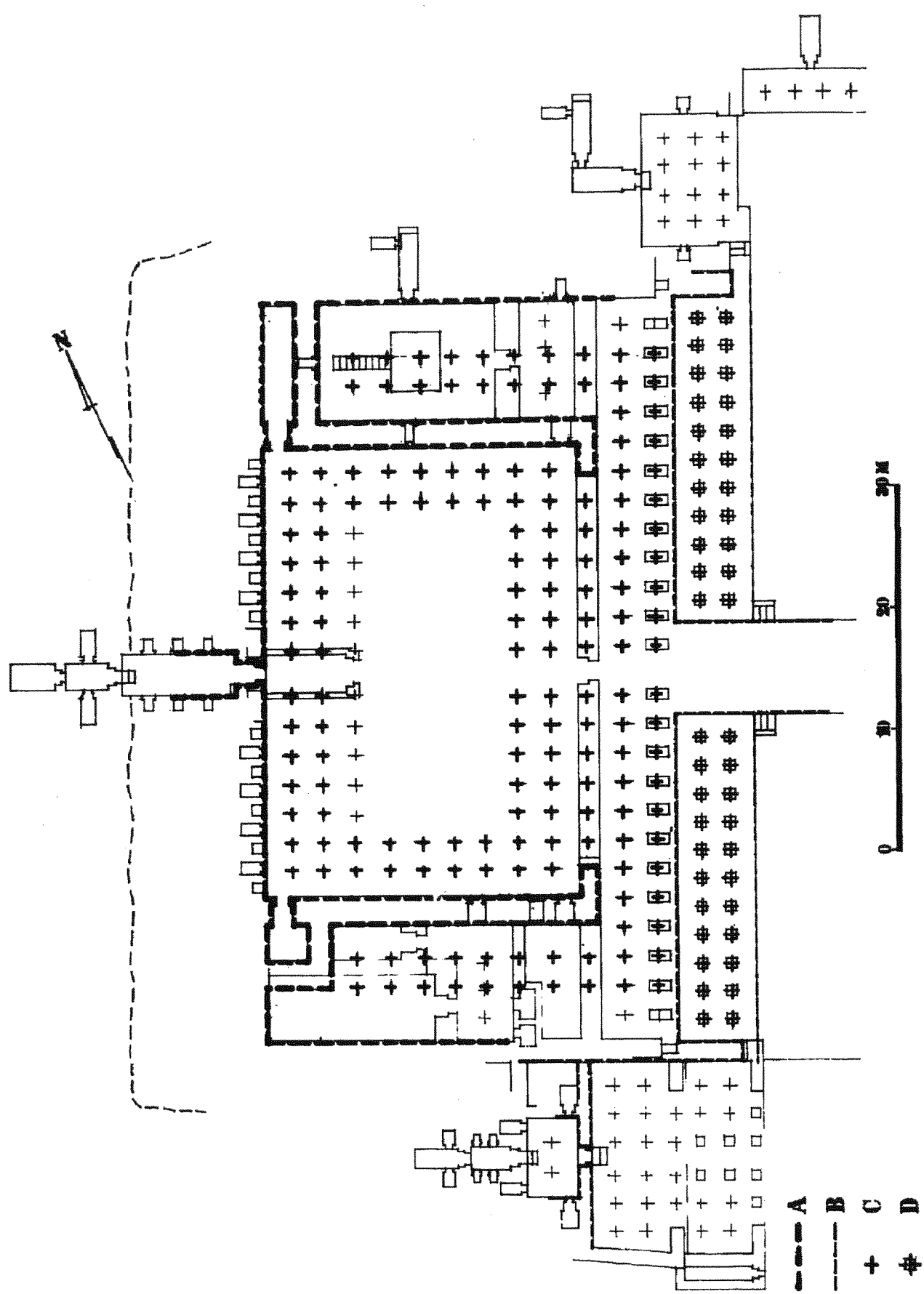


Fig. 1: A possible plan of a horizontal view of the temple carried out under Thutmosis II in the first phase of building (drawing by A. STEFANOWICZ)

- A. Walls of the Upper Terrace
- B. Walls of the Middle Terrace
- C. Colonnades of the Upper Terrace
- D. Colonnades of the Middle Terrace

the shale rock. Such a foundation construction had to be carried out together with the formation of the artificial part of the terrace and the revetment. So, after arranging a few layers of foundation and revetment blocks they were covered with debris. The process was repeated until the adequate level of the terrace was achieved⁹⁾.

Due to the uneven surface of the rock platform and its natural slope towards the south and east, part of the foundations in the embankment was deeply buried in order to reach the matrix, while others went into the debris sometimes as little as one layer of blocks. The ground for the floor was levelled with debris.

At this stage a protective ledge was cut into the rock along the entire width of the terrace (Fig. 2, X). The idea was most probably taken from the Mentuhotep Temple¹⁰⁾, where we discovered the remains of similar protective device. It was the most convenient time to cut the rock to such an extensive degree since the output amounted to 16000 tons which had to be removed from the building site to the dumping-ground. To make the building work efficient it was necessary to do the cutting before raising the temple walls, not after it.

This protective ledge ran along the rock above the site. In its middle part, along the temple axis, a cavity was cut to form the main shrine of the temple.

In my previous article on the discovery and research of the protective ledge I had drawn some false conclusions¹¹⁾ which were subsequently corrected in one of my later papers on the original form of the temple¹²⁾.

At that time the work was started on adapting the middle part of the ledge into the Hathor Shrine, the place where goddess Hathor was to be worshipped. Worshipping Hathor had been practised there since a long time and NAVILLE suggested there should have been a cave devoted to the goddess¹³⁾.

My conviction that the adaptation of this hypothetical cave for a shrine was started during the first stage, is based on an analysis of a series of erasures of Hatshepsut's names. Thutmose III had them replaced by the names of Thutmose II in this part of the temple. Only on the Upper Courtyard and in the Hathor Shrine the erasures appear in great number¹⁴⁾. Since among other things it is on these erasures that I base the establishment of elements founded by Thutmose II, the building of the Hathor Shrine should be considered, at least partially, to date from the first building phase of the temple. The connection of the western wall of its first portico with the southern revetment of the Upper Terrace (Fig. 2, no. 11) is a fact that assigns the building to the first stage of this phase. It is true that this connection is visible at the back of this wall up to the height of a setoff, but it fades higher up and is not visible on the facing from the portico side. So, one may conclude that the work on the building of the shrine had been started during this stage, but for some reasons it had been interrupted and was restarted by Queen Hatshepsut. Evidence could be provided by the revetment, which was an extension of the western wall of the first cham-

¹⁰⁾ 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*, in: *MDAIK* 39, 1983, p. 251.

¹¹⁾ In *MDAIK* 39, 1983, p. 250 I drew a false conclusion: "That the platform was built after the shrine had been erected is confirmed firstly by the different treatment of its planes caused by the shrine break and secondly by the difference in their formation lines, which is 31 cm. This situation proves that the both wings were erected separately, which could take place after the shrine had been built", and on p. 253: "The middle part of the platform was carried out artificially since there had to be a dig-out made for the first chamber of the shrine and it could be done in the form of a cave due to bad condition of the rock."

¹²⁾ Z. WYSOCKI, in: *MDAIK* 42, 1986, p. 223.

¹³⁾ E. NAVILLE, *The Temple of Deir el Bahari* IV, London 1908, p. 6 (description of pl. CVI).

¹⁴⁾ Z. WYSOCKI, in: *MDAIK* 42, 1986, pp. 213-228, pl. 30f.

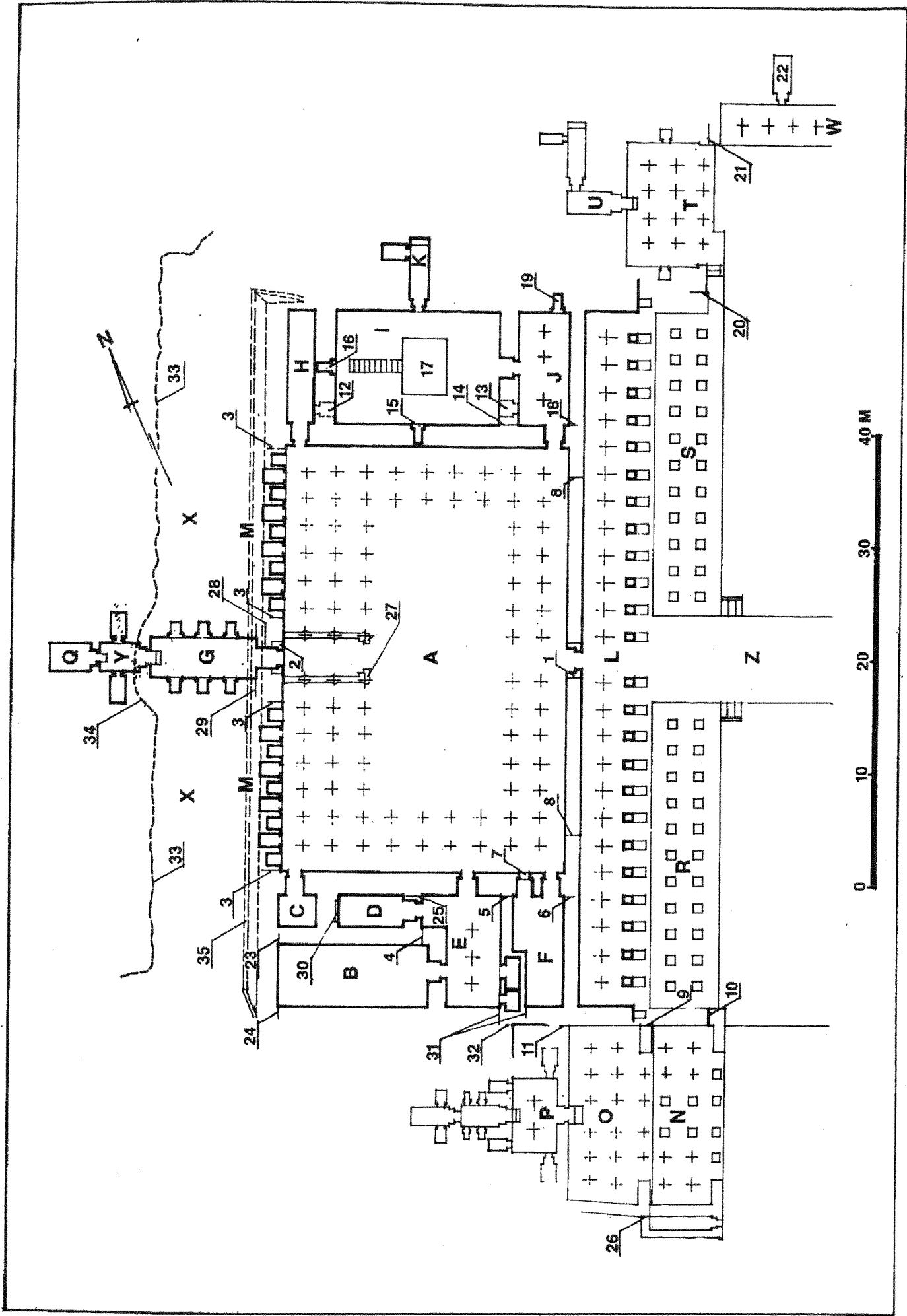


Fig. 2: A horizontal view of the upper part of the temple (drawing by A. STEFANOWICZ)

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| A. Upper Courtyard | N. Second portico of the Hathor Shrine |
| B. Chapel of Hatshepsut | O. First portico of the Hathor Shrine |
| C. South-west Chapel of Amon Min | P. Hathor Shrine |
| D. Chapel of Thutmosis I | Q. Third, Ptolemaic chamber of the main shrine |
| E. Vestibule in front of Hatshepsut's and Thutmosis' I
Chapels | R. Southern wing of the middle portico |
| F. Chamber with the Window of Appearance | S. Northern wing of the middle portico |
| G. First, eastern chamber of the main shrine | T. Portico of the lower Chapel of Anubis |
| H. North-west Chapel of Amon | U. Lower Chapel of Anubis |
| I. Sun Altar's yard | W. Northern colonnade or northern portico of the
Middle Courtyard |
| J. Vestibule of the Sun Altar's yard | X. Protective ledge over the Upper Terrace |
| K. Upper Chapel of Anubis | Y. Second chamber of the main shrine |
| L. Upper portico | |
| M. Western wall of the Upper Courtyard, so-called wall
with niches | |

1. Granite portal in the western wall of the upper portico leading to the Upper Courtyard.
2. Granite portal in the western wall of the Upper Courtyard leading to the main shrine.
3. Vertical joints running almost in line where the new part of the wall with niches was set.
4. Butt of the northern wall of the Hatshepsut Chapel without a stone bonding with the portal wall of the Chapel of Thutmosis I.
5. Unbonded joint of the wall separating the vestibule of Hatshepsut's and Thutmosis' I Chapels from the chamber with the Window of Appearance, with the southern wall of the Upper Courtyard.
6. Unbonded joint of the eastern wall of the chamber with the Window of Appearance with the southern wall of the Upper Courtyard.
7. Window of Appearance.
8. Vertical joints coinciding with several layers in the western wall of the upper portico.
9. Unbonded joint of the eastern wall of the second portico of the Hathor Shrine with the southern wall of the Upper Terrace.
10. Unbonded joint of the eastern wall of the second portico of the Hathor Shrine with the southern wall of the middle portico.
11. Unbonded joint in the facing of the western wall of the first portico of the Hathor Shrine with the southern wall of the Upper Terrace. There is a stone bonding in its rear reaching a setoff seen there.
12. An old, bricked up doorway in the western wall of the Sun Altar's yard leading to the north-west Chapel of Amon.
13. Doorway linking the Sun Altar's yard with its vestibule, planned but not executed.
14. Joint of the wall separating the Sun yard and its vestibule from the northern wall of the Upper Courtyard. One can see its former facing.
15. Niche in the southern wall of the Sun Altar's yard.
16. Niche in the western wall of the Sun Altar's yard.
17. Sun Altar.
18. Unbonded joint of the eastern wall of the Sun yard's vestibule with the northern wall of the Upper Courtyard.
19. Niche in the northern wall of the vestibule of the Sun Altar's yard.
20. Joint of the added portico of the lower Chapel of Anubis with the northern end of the middle portico.
21. Unbonded joint of the northern colonnade of the Middle Courtyard with the portico façade of the lower Chapel of Anubis.
22. Chapels in the northern colonnade of the Middle Courtyard.
23. Unbonded joint of the northern wall of the Hatshepsut Chapel with its western wall.
24. Unbonded joint of the southern wall of the Hatshepsut Chapel with its western wall.
25. Joint of the portal wall of the Chapel of Thutmosis I with the southern wall of the Upper Courtyard.
26. Unbonded joint of the wall in a room of unknown purpose with the southern wall of the first portico of the Hathor Shrine.
27. Ptolemaic portico.
28. Back reveal of the old limestone portal of the main shrine.
29. Unbonded joint of the southern and northern walls of the first chamber in the main shrine with its eastern wall.
30. False door set into the western wall of the Chapel of Thutmosis I.
31. Eastern wall of the vestibule in front of the Hatshepsut's and Thutmosis' I Chapels cutting into the eastern wall of the Upper Terrace.
32. Western wall of the chamber with the Window of Appearance cutting into the southern wall of the Upper Terrace.
33. Rock massif.
34. Incision in the rock massif where the middle part of the rock ledge was cut out.
35. Protective wall facing the forefront of the rock ledge.

ber in the present Hathor Shrine, because it was not bound in stone with the southern revetment of the Upper Terrace (Fig. 2, no. 32).

As a result of the work of the first stage, which was to prepare the site for a future temple modelled after the neighbouring temple of the XIth dynasty, the present Upper Terrace was built, framed with a revetment and the foundations for the walls of the entire temple were laid. There was also a stone ledge cut out along the width of the terrace to protect the temple against rock falls (Fig. 2, X).

It is worth mentioning here that WINLOCK's suggestion, that the building of the temple was started with the procession alley, which he based on a fragment of a dated jug found underneath¹⁵), can not be true. Obviously, in such a location, that is at the bottom of the rock massif, the construction works must make progress from higher parts to lower ones, never the other way round. The building, then, was not started with a procession alley in the higher parts descending to the lower temple, but the preparation of the site for the future temple must have been the first step. The alley that was built last, must have been at that time a local road used for the supply of building material (Fig. 3, no. 21).

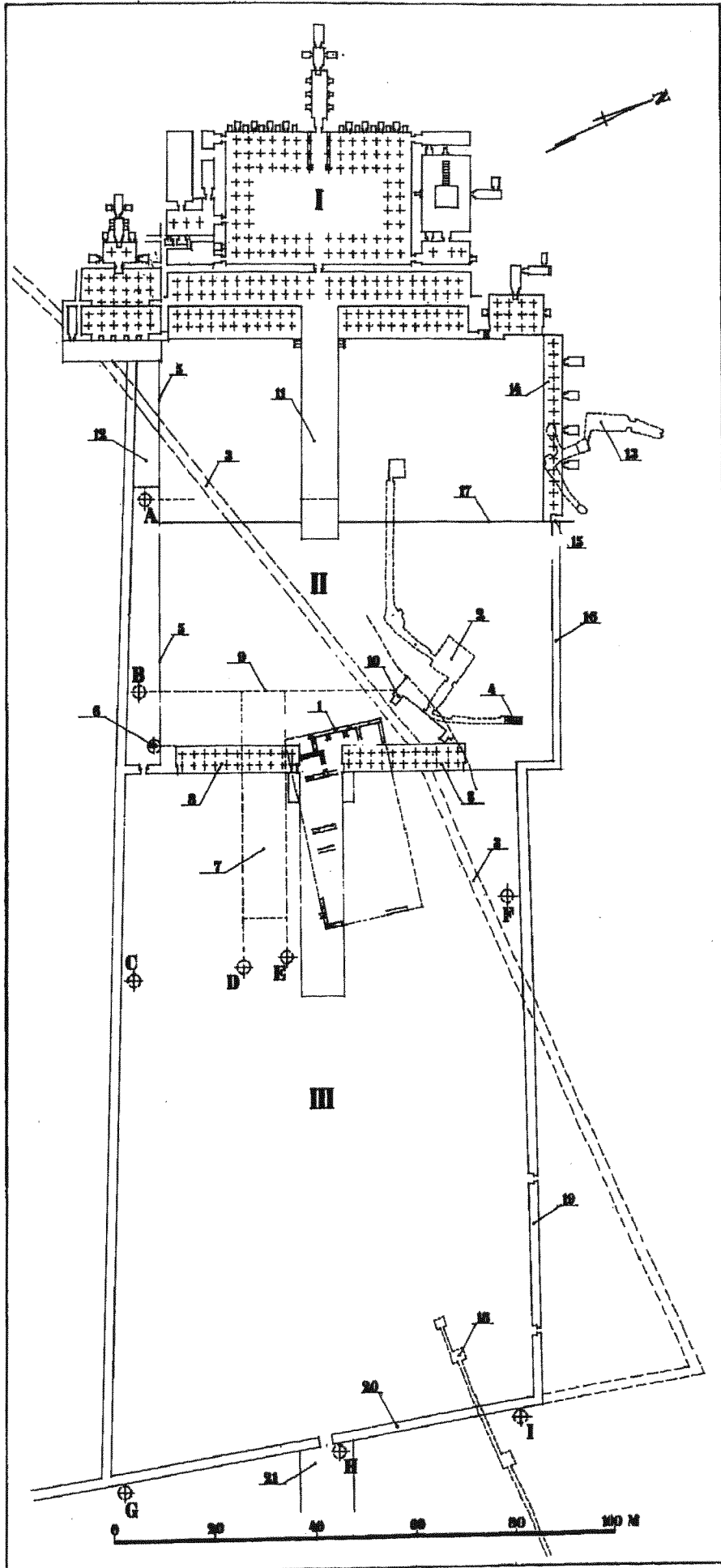
¹⁵) H. E. WINLOCK, *Excavations at the Temple of Deir el Bahri 1921-1931*, p. 325.

Fig. 3: A horizontal view of the entire temple precinct of Hatshepsut and the constructions of the XIth dynasty on the temple site (drawing by A. STEFANOWICZ)

- I. Upper Terrace
- II. Middle Terrace (Middle Courtyard)
- III. Lower Terrace (Lower Courtyard)

A, B, C, D, E, F - The first series of Queen Hatshepsut's foundation deposits, discovered by NAVILLE and WINLOCK.
G, H, I - The second series of Queen Hatshepsut's foundation deposits discovered by WINLOCK.

1. Brick walls of the Chapel of Amenhotep I of XVIIIth dynasty.
2. Tomb of Queen Neferu of XIth dynasty.
3. Mentuhotep's enclosure wall.
4. Entrance to the tomb of Queen Neferu of XIth dynasty, carried out by Queen Hatshepsut after raising her lower portico.
5. Southern revetment of the Middle Terrace.
6. Foundation pit discovered during our excavations indicating the western wall of the lower portico.
7. Originally planned location of the lower ramp marked D and E, indicated by Queen Hatshepsut's foundation deposits.
8. Lower portico.
9. A possible, original eastern borderline of the Middle Courtyard encompassing the tomb of Queen Neferu, believed to have been only planned.
10. Tomb's façade of Queen Neferu of XIth dynasty.
11. Upper ramp.
12. Ramp leading to the Hathor Shrine.
13. Tomb of Meryt Amon.
14. Northern colonnade of the Middle Courtyard.
15. Unbonded joint of the northern enclosure wall of the Middle Courtyard with the eastern façade of its northern colonnade.
16. Northern enclosure wall of the Middle Courtyard.
17. Step running along the entire width of the Middle Courtyard, joining its northern colonnade.
18. Tomb of Senmut.
19. Northern enclosure wall of the Lower Courtyard.
20. Eastern enclosure wall of the Lower Courtyard.
21. Procession alley connecting the upper temple with the lower temple.



Phase I, stage II

Since the first stage of execution included the ground work and the preparation of the site for the building, the second one should include the raising of walls. The latter were composed of limestone blocks dressed along contact planes and bevelled towards the facing to make a proper arrangement of layers possible. The face of the blocks was left undressed, projecting from the wall surface. I found instances of such treatment during my research into some wall bonds¹⁶). The blocks prepared in this way were arranged in layers on both sides of the wall, frequently fixed from inside with plaster mortar. Next, the inside was filled with debris sometimes mixed with mortar. The back sides of the blocks sank into the filling.

Most of the walls had a slight slant on both sides, which made them become narrower at the top. Only in the north-west Chapel of Amon (Fig. 2, no. 14) all the walls – except the western one – were kept vertical and in the south-west Chapel of Amon Min (Fig. 2, no. C) the eastern and southern walls were vertical, but the other two walls had a slant.

The walls were slanted to balance the pressure of the filling debris. In the interiors, where the segments of the walls were short, that is less exposed to deformation, they were kept vertical.

There might have been other reasons also, e.g. the architectural form or arrangement of light and shade in the porticos since the slant of a wall increases the degree of shading.

That the construction of walls could not be the only justification for slanting them was exemplified by the “ambulatorium” in the Mentuhotep Temple. It also shows a slant on both sides, but had been built of full stone blocks with no space to be filled with debris.

The walls adjoining the rock which surrounds the terrace form a facing which either stuck to its rock background or which was a little apart from it depending on the extent to which the rock had been cut off. The slant of those walls was probably intended to balance the pressure of weathered shale which was sure to gather there.

There is no certainty today to what height particular walls in the temple were raised in this stage. Later rebuildings as well as wall joints show that nearly the entire western wall of the Upper Terrace in this stage was built to its full height. Analysing its segments one by one in the chambers adjoining it one can see that the western wall of the north-west Chapel of Amon (Fig. 2, H) shows a disarrangement in the layers of blocks covering the distance of about 2,5 m in its northern part. It is highly probable, then, that this part was executed in the later, the second building phase.

Another part of this wall, the one on the Upper Courtyard (Fig. 2, A), was raised to its full height during the first stage, obviously without the niches present there today. Those very niches indicate clearly the height to which the western wall of the Upper Courtyard was built then (pl. 42 a).

It is also clear that a limestone portal leading to the main shrine must have been erected at the same time. The rear blocks of its frame have been preserved (Fig. 2, no. 28). A granite portal was installed much later, not until the relief decoration of Hatshepsut had been carried out (Fig. 2, no. 2).

Other segments of the western wall on the Upper Terrace, the one in the south-west Chapel of Amon Min (Fig. 2, C) and in the Chapel of Hatshepsut (Fig. 2, B) were also built to reach their full height during the second stage of the first phase. The preserved traces provide this evidence. The former one, also constructed during this stage, has the southern and northern walls bound with the western wall along its full height. But in the Chapel of Hatshepsut, built by the Queen during the second phase, both the southern and northern walls are not bound with the western wall.

¹⁶) See n. 14.

Now, analysing the interior of the main shrine of the temple one should point out that its present decoration could not have been executed during the first phase (Fig. 2, G). The following evidence proves that. Both the southern and northern walls of this interior are not bound in stone with its eastern wall. Moreover, the horizontal joints of the blocks of these walls do not correspond with the joints of the eastern wall and with a limestone portal, the joints of which correspond with the layers of the western wall of the Upper Courtyard (pl. 42b). So it is obvious that the decoration of the interior walls of the shrine was executed after the eastern wall, that is part of the shrine, was built. However, it is not possible to establish whether during this stage any other decoration was carried out or how many chambers the shrine comprised. Since there was an entrance to the shrine highly advanced, the interior could not have been left without any decoration as a bare cave hewn in the rock.

Examining other walls surrounding the present Upper Courtyard one can see that the erection of both the southern and northern walls was started during this stage (Fig. 2, A). This is evidenced by their stone bonds with the western wall of the courtyard and the fact that the southern wall has deeply buried foundations executed unquestionably during the first stage of this phase. An additional proof is provided by the analysis of wall bonds in these walls, which attach them from the south and north. Remnants of the old facing of the walls surrounding the Upper Courtyard could be established.

It is impossible, however, to reconstruct their original height. The building of the side walls, the southern and northern ones, of the Upper Courtyard might have proceeded from the western wall of the Upper Terrace. So when they butted this wall, they must have reached their full height in this stage. The evidence is provided by their stone bonds preserved at the full height of the adjoining facings. Most probably the eastern parts of these walls were not as high as that. There have been preserved only seven layers of blocks until today. But in the bond of the northern wall on the Upper Courtyard and the wall separating the Sun Altar's yard from its vestibule there is a trace indicating that in this place the northern wall of the Upper Courtyard was built to reach three layers before the building plan was changed¹⁷⁾ (Fig. 2, no. 14).

The eastern wall of the Upper Courtyard is much thinner than its two side walls. This must have been caused by its specific architectural design. On its facing towards the upper portico in its southern wing there is a trace in the form of vertical joints that coincide in several layers. A similar trace has been preserved on this very wall but towards the Upper Courtyard, in its northern wing (Fig. 2, no. 8). The distance of these traces from the courtyard's corners is slightly different, which does not make it easy to draw unequivocal conclusions. However, both the discussed traces and considerably lesser thickness of the wall seem to indicate that the original plan did not provide a full wall with a portal along its axis, but an access to the courtyard through a colonnade set along the present wall, flanked by its short parts, similar to the design carried out later in both porticos of the Hathor Shrine (Fig. 1).

Examining the walls of the south-west Chapel of Amon Min one can see that both the southern and northern walls are bound along their entire height with a stone bond to the western wall of the Upper Terrace (Fig. 2, C). So then, both walls were undoubtedly carried out in the discussed, second stage of the first building phase.

Originally the southern wall must have been thicker. It corresponded with the northern or eastern wall of this chamber, which is evidenced by a different levelling of block layers at both sides as well as by a lack of any stone binding of its southern facing with the western wall of the Upper Terrace. The rebuilding of this facing and the diminishing of the wall's thickness must

¹⁷⁾ Z. WYSOCKI, in: *MDAIK* 42, 1986, p. 216.

have been carried out while the Chapel of Hatshepsut was being added to the Chapel of Amon Min, that is no sooner than in the second phase.

Examining the built-up area of the Upper Terrace one cannot forget that this period also witnessed the raising of the wall separating the north-west Chapel of Amon from the present yard of the Sun Altar (Fig. 2, W, J). In its southern part the building reached about 2–2,6 m, as can be deduced from an analysis of the doorway carried out at this time and in this place but which was never finished (Fig. 2, no. 12). Although it was erected in the second phase, the facing of the wall from the courtyard carries the traces of irregular blocks around the frame, which testifies to its incomplete state. Moreover, there is no lintel above 2,6 m, which would signify the limit to which the wall was built in this stage (pl. 42 c).

The middle part of this wall might have been raised higher than that. At present there is a niche along its axis which is likely to belong to the second phase of building (Fig. 2, no. 16). A proof to support this is the fact that the arrangement of the horizontal joints shows a certain wavering at both its sides and above it up to the height of about 4,5 m. It seems to suggest that the wall reached its height without a niche built in it (pl. 43 a).

It also seems possible that the northern wall of today's Sun yard (Fig. 2, I) was started in this stage because it is bound in stone with its western wall. However, it was continued in the second phase, the evidence of which will be discussed with the stages of the second building phase.

So one can state that the building was little advanced and the temple was left incomplete when work was interrupted after the two stages of the first phase.

There was the western wall of the Upper Terrace raised to its full height on a high base supported by a revetment to keep the heaped debris of the Upper Terrace firm. From it some other walls extended towards the east to enclose the present Upper Courtyard (Fig. 2, A). The base was cut into the lower, shale layers of the rock massif surrounding the temple site from the south, west and north. The terrace had the walls of the Chapel of Amon (Fig. 2, H) considerably advanced at its northern side and the walls of the Chapel of Amon Min (Fig. 2, C) showed towards its southern part. Over the entire width of the temple site there was a rock ledge cut out in the massif. Its forefront, however, did not have any facing then (Fig. 2, X).

The building must have been advanced this far when its founder, Thutmosis II died and the spatial plan of the temple was changed to start the second phase of building initiated by Queen Hatshepsut.

Phase II: The execution by Queen Hatshepsut

Queen Hatshepsut became patron of a new spatial plan. Extending the inherited structure eastward, she first rebuilt the temple on the Upper Terrace adapting it to her needs by adding new constructions and changing the previous ones.

A new plan was possibly designed at the beginning of her reign because titulatory honours preserved in the first series of deposits are exceptionally modest. They are limited to "the daughter of the Sun God"¹⁸⁾.

The Queen did not content herself with a preliminary design of the scope of work. She also extended it eastward witnessed by another series of her deposits, the contents of which are markedly different, which in turn makes it possible to distinguish two periods of setting out the temple. The titulatory honours in this series represent her as the Sovereign of Upper and Lower Egypt, a title that points to the middle of her reign¹⁹⁾.

¹⁸⁾ H. E. WINLOCK, *The Egyptian Expedition 1923–1924*, p. 16, fig. 29, p. 29.

¹⁹⁾ ID., *The Egyptian Expedition 1924–1925*, p. 26.

Phase II, stage I

This stage includes further work on the elements started by Thutmose II and the rebuilding on the Upper Terrace meant to change the architectural view of the temple.

We shall deal first with the modifications of the existing walls, left incomplete after the first phase.

There is clear evidence that the architecture of the western wall on the Upper Courtyard was changed (Fig. 2, M), the one that had been built previously as a uniform plane with a limestone portal along its axis leading to the main shrine of the temple. Both wings of this wall received niches so that there were five higher and four lower niches at either side of the portal. The wall existing so far had to be taken to pieces partly before it was built in a new form. Its middle part with the portal, the whole socle of both wings and narrow parts joining the southern and northern walls of the Upper Courtyard preserved their arrangement of blocks from the first phase. This could be proved easily by examining the dimensions of the blocks used in both phases and by the traces of building niches in the old wall where the vertical, bordering joints coincide along a straight line where a new architectural element was introduced (pl. 42 a, Fig. 2, no. 3).

The logic of the building process tells us that the first stage of the second phase was to rebuild the main shrine erected by Thutmose II (Fig. 2, C). We neither know how many chambers it comprised nor how big it was, but the preserved frame of the old limestone portal and the stone decoration of its eastern wall suggest that it could not have been left as a rock cave without stonework.

That a shrine had been built there is indicated by ostrakon 25-75 found on the surface of the present, visible vault constructed in the second phase. It deals with offerings brought to the temple, which proves according to M. MARCINIAK that the shrine had its sacral functions even before the building was completed²⁰). This ostrakon may possibly be related to the offerings of the previous shrine.

Both the northern and the southern walls of the first, eastern chamber of the present shrine (Fig. 2, G) are not bonded in stone with the shrine's eastern wall. A stone binding between the two walls appears in the vault which is bound with the top part of the eastern wall closing the forefront of the vault. One may claim, that the previous brickwork of this chamber did not reach higher than the base of the present vault. Just the lower part of the present, eastern wall and the rear part of the frame of the limestone portal have been preserved there (pl. 42 b).

The second, smaller shrine chamber dates also from the second building phase since the arrangement of the horizontal joints in particular block layers was set out at the same level in both chambers²¹) (Fig. 2, Y).

As soon as it was decided to carry out the apparent barrel vault over the eastern shrine chamber, one had to make arrangements for the installation of big, heavy blocks. Since this was not possible in a cave with rock vault, one had to cut out a part of the rock removing the middle part of the rock ledge. After constructing the vault, the damaged part of the rock ledge had to be rebuilt with added debris. But, because the apparent vault would have collapsed under the pressure of the debris, an appropriate relieving construction was designed and built of stone slabs in

²⁰) M. MARCINIAK, *Un Reçu d'Offrande de Deir el-Bahari*, in: *BIFAO* 78, 1, 1978, p. 169.

²¹) W. POŁOZANIN, *The Composition of the Building Development of the Temple of Queen Hatshepsut in the Light of Investigations into Selected Sections of the Building*, 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, Warszawa 1985, pp. 63-73, pl. 3. Cross section through the Upper and Central Terrace with the modular grid superimposed.

the form of a triangle over the first shrine chamber. The construction transferred the pressure from the artificially built middle part of the rock ledge to the side walls and the adjacent rock²²).

There are two ostraca the contents of which refer undoubtedly to this work. One text, published by HAYES, says: "Month 4 of Akhet, day 16. Beginning opening the doorway of the temple in the mountain of Djoseru"²³).

HAYES explains in footnote 1 that "beginning opening the doorway" is an expression used in texts of that period to present the beginning of cutting out a rock cave or a shrine in a hillside or a precipice. In footnote 2 he says that "the temple" was a more precise expression referring to a shrine.

The other ostrakon, also published by HAYES, says: "year 11, month 3 of Akhet, day 27 when the rise leading to the shrine was opened"²⁴). M. MARCINIAK claims that this ostrakon indicates the beginning of cutting out the shrine²⁵). Needless to say both ostraca refer to the same event. However, I think that ostrakon CM 25 refers to the beginning of the work because the word "beginning" is precise and should be taken literally. But ostrakon 80 refers to the completion of the work, which is indicated by the tense used to express the meaning, and the date tells us that it occurred in the 11th year of Tuthmosis' III reign, that is also of Hatshepsut's reign.

Most probably the new interior decoration of the shrine, the building of the protective wall (Fig. 2, no. 35) facing the forefront of the protective rock ledge and the building of side walls protecting the temple from the south and north have been carried out simultaneously.

During the same building stage the southern part of the Upper Terrace, where new chambers were added to the walls built by Thutmosis II was rebuilt. And so, the Chapel of Thutmosis I (Fig. 2, D) was added to the south-west Chapel of Amon Min (Fig. 2, C). In a wall joint of the newly added chapel and the southern wall of the Upper Courtyard there is a clear trace of the added chamber. In a sounding pit penetrating the filling of this joint we found an old block which was a part of the original, southern wall facing of the Upper Courtyard. This block has an undressed facing and is bevelled at its edges. It was found in the foundations set on a line marking a course of a wall²⁶) (Fig. 2, no. 25).

While building the Chapel of Thutmosis I the so-called blind door was set in its western wall, which formerly was a wall of the Chapel of Amon Min. Most probably at that time some of the blocks had been removed from the wall and left inside to fix the blind door in its place. Those blocks with a characteristic, undressed surface and bevelled edges were uncovered in the filling of the wall²⁷).

The Chapel of Hatshepsut (Fig. 2, B) was another chamber attached to the already existing walls in the southern part of the Upper Terrace. It was added to the southern wall of the Chapel of Amon Min from the first building phase and to its extension, that is, to the southern wall of the Chapel of Thutmosis I from the second phase. There have been preserved some distinct traces to reveal the process of erecting this interior. The facing of the northern wall of the Chapel of Hatshepsut is not uniform with the facing of the southern walls of the adjacent chapels, Amon Min's and Thutmosis' I. Moreover, the level of block layers is not equal on the two sides of the wall. The conclusion is that originally the wall must have been thicker, and, while raising the Queen's chapel, it must have been made thinner with a new facing in the interior. Besides, the

²²) Z. WYSOCKI, in: *MDAIK* 39, 1983, pp. 243-253, pl. 60-65.

²³) W. C. HAYES, *A Selection of Tuthmoside Ostraca from Dēir el-Bahri*, in: *JEA* 46, 1960, p. 32 (MMA Negative no. CM 25), n. 1 and 2.

²⁴) Id., *Ostraca and Name Stones from the Tomb of Sen-Mut (No. 71)*, New York 1942, pp. 23 f., pl. XVI, no. 80.

²⁵) M. MARCINIAK, *op. cit.*, pp. 165-170, pl. LI.

²⁶) See n. 17.

²⁷) Z. WYSOCKI, in: *MDAIK* 42, 1986, p. 221.

portal, eastern wall of the Chapel of Hatshepsut extends beyond the line of the portal wall of Thutmosis' I Chapel which butts (Fig. 2, no. 4) against the northern wall of the Queen's Chapel (pl. 42 d). This is also testified to inside the Chapel of Hatshepsut by a uniform slanting joint in its northern wall. The joint appears in five block layers (pl. 43 b) and its slant corresponds with Thutmosis' I portal wall.

That this chappel was added to the elements already existing in the first phase is confirmed by lack of stone bindings in the south-west corner where its block layers and those of the western wall of the Upper Terrace (Fig. 2, no. 24) do not even correspond with each other. Moreover, in the north-west corner one can see rudimentary projections as of the blocks in the western wall. They occur in the whole wall except the top layer with a mould to which a new facing was added, the one that forms the northern wall of the Queen's Chapel (Fig. 2, no. 23). Here too the layers of both walls do not correspond with each other (pl. 43 c).

At the same time the Chapel of Hatshepsut was erected, the southern wall of the built-up area on the Upper Terrace was started. It was positioned on a revetment lying below, which had been carried out during the first phase. This contemporaneity is testified to by a full stone binding in the walls of these structures in the corner of the portal wall of the chapel and the southern wall of its present vestibule (pl. 44 a).

At that time no division of the site in front of the chapels into a vestibule and a chamber with a Window of Appearance was intended. The architect may have designed a big yard or a covered hall instead.

So then, the southern wall of the built-up area on the Upper Terrace was built as far as the south-east corner of the present chamber, with the Window of Appearance (Fig. 2, F) where again one can find a full stone binding with its eastern wall, preserved now in a few, lower layers (pl. 44 c). This proves that this part was carried out simultaneously with the building of the Hatshepsut Chapel and the southern wall of the built-up area on the Upper Terrace.

However, the building of the southern wall of the present chamber with the Window of Appearance (Fig. 2, F) is based on the plan providing a full dimension for the present upper portico because it closes the southern wing of its western wall preserved today in full dimensions.

In the place where the newly raised part (Fig. 2, no. 6) adheres to the old, southern wall of the Upper Courtyard one can see that they are not uniform. There is no stone binding between them and their horizontal joints run at different levels (pl. 44 b). But it is not possible to see this from the upper portico since the facing of its western wall is uniform and covers the contacting point of the two elements.

Another construction built in this part of the Upper Terrace was a wall dividing the site in front of the Hatshepsut and Thutmosis I chapels into a vestibule and a chamber with a Window of Appearance (Fig. 2, E and F). It was built when the temple walls, at least in this part, had been already completed and were left for relief decoration without, however, any decorative element on them, yet.

We discovered where this wall butted the southern wall of the Upper Courtyard. Its facing in this place is smooth and coated with "gesso" (pl. 45 a). There, hidden behind an added wall we found decorators' sketches of Horus' head drawn in black and red paint (Fig. 2, no. 5).

That this part of the structure had not been decorated at that time, though it was prepared to be treated so, is testified to by the relief decoration found on the northern vestibule wall in front of the Chapel of Thutmosis I (Fig. 2, E). This decoration is adjusted to the surface of a newly added wall. Besides, the facing hidden by the butting walls shows that at that time the southern wall of the Upper Courtyard was ready for decoration.

The erection of the wall marking out the vestibule and the chamber with a Window of Appearance resulted in some modifications of the already existing southern wall of the built-up

area on the Upper Terrace. The newly raised wall cut into the old one (Fig. 2, no. 31), which could be seen at both sides of the new wall where it butted the old construction (pls. 45 b and c).

The last examination of its foundations shows that it had been built once directly on the ground which in this place was an added, debris part of the Upper Terrace. Its present foundation reaching down to the shale rock must have been laid much later, when tombs were built there, which made it necessary to strengthen the wall from the vestibule side. On the other side, in the chamber with the Window of Appearance, the wall was fixed with crushed stone and mortar when our predecessors did their archaeological excavations.

Now, taking into consideration the northern part of the Upper Terrace one can see that the erection of walls started in the first phase was continued there. The work comprised the southern wall of the present Sun yard (Fig. 2, I) as well as the western and northern walls, the latter being adapted to the new plan providing building the yard's chambers and its vestibule (Fig. 2, J). At that time there were no plans to design this part for the worship of the Sun, but to build rooms in front of the Chapel of Anubis (Fig. 2, K) raised above at that time.

In this stage of rebuilding two niches were introduced into partly raised walls of the first phase (Fig. 2, nos. 15 and 16), one into the southern wall (pl. 45 d) and the other one into the western wall of the yard. Both niches show a distinct discontinuity in the arrangement of doorway blocks and layers of facing blocks, which proves that they were set in the wall after it had been built.

Another evidence that both niches, and also the upper Chapel of Anubis, belong to the second phase of building is their location along the axes of the walls of the newly built Sunyard.

So then, in this building stage a new wall was built which divided the northern part of the Upper Terrace into the present Sun yard and its vestibule. This is evidenced by my research: on the northern wall of the Upper Courtyard butts a newly constructed wall (Fig. 2, no. 14). The evidence covers three layers of an old wall built of blocks with bevelled edges and rough facing, and also a distinct example of an artificial stone binding, that cuts into the old wall²⁸⁾ (Fig. 2, no. 15).

Analysing the construction of this wall we can state subsequent modifications. Initially a doorway connecting two rooms had been planned near the northern wall of the Upper Courtyard, almost in the axis of the doorway from the first phase, the one that exists in the western wall of the Sun yard and which once led to the present north-west Chapel of Amon. The designed doorway had been outlined with incisions on a fragment of the floor (Fig. 2, no. 13) where there was to be a passage by the newly raised wall (pl. 46 b). The project, however, had not been carried out because the initial plan was changed and a doorway was placed in the axis of the Sunyard. Most probably the opposite, old doorway in the western wall of the Sun yard was bricked up at that time (Fig. 2, no. 12).

During our study of this courtyard we discovered marks preserved on the socle layer of its southern wall indicating that a column hall had been planned in the place of the present yard. But for the lack of such marks on the western and eastern walls we have to assume that the plan had never been carried out. Further the plan of a doorway in the wall separating the yard from its vestibule has never been realized.

Both the dimension of the yard and the spacing of the marks on its southern wall seem to indicate that a three-row colonnade was to be raised in front of the upper Chapel of Anubis, which corresponds with the same number of rows in front of all the temple shrines, that is the main Chapel of Amon, the Hathor Shrine in its both porticos and the lower Chapel of Anubis.

In the northern part of the newly added wall separating the yard from the vestibule both its facings are bonded in stone with the northern wall of the Upper Terrace adhering to the rocks sur-

²⁸⁾ See n. 14.

rounding the temple. Therefore the northern wall, at least in this part, must have been also raised in the second phase. The other part of the northern wall, the one in the vestibule, has a small niche placed not far from the eastern wall of this room (Fig. 2, no. 19). A rectangular arrangement of blocks in particular layers of the wall and of the niche testifies to simultaneous execution (pl. 46 c). This wall is bonded with the eastern wall of the vestibule which in turn butts the eastern end of the northern wall of the Upper Courtyard dating from the first building phase (Fig. 2, no. 18). This is evidenced by rudimentary stone bindings made of an excess of rough block facings from the first phase (pl. 46 d).

This part outlines the full size of the northern wing of the wall in the upper portico (Fig. 2, L). That it was added can be seen only from the vestibule of the Sunyard because from the portico side the wall facing is uniform.

Obviously, within the scope of work of this stage of rebuilding and adjusting the temple to the new architectural plan the work is continued at the walls of the Upper Courtyard where doorways both at the south as well as the north side of the Upper Terrace were added. The arrangement of the external reveals shows that the doors opened to the inside of the rooms built then.

A new building must have been started at the eastern wall of the Upper Courtyard (Fig. 2, A) to close the middle part of the western wall of the upper portico designed in the new spatial plan (Fig. 2, L).

Work in the present middle portico (Fig. 2, R and S) was also continued. Its completion must have preceded the erection of pillars in the upper portico of the temple. Proof is provided by the construction of the Osiride pillars in the upper portico: They form one construction with statues once standing in their front since particular layers of blocks of which they were built ran from a pillar to a statue and from a statue to a pillar. Therefore they have been built at the same time. The socles of the statues extended beyond the wall coping of the rear part of the middle portico, which was also the revetment from the first phase to prop the debris part of the Upper Terrace, and if so they had to stand partly on the stone floor of the middle portico. In such a situation the first thing to do was to build the middle portico including the floor and the colonnades. After that the pillars with Osiride statues could be erected in the upper portico. The laying out of the floor slabs in the middle portico could not have been possible if the colonnade in the higher portico had been raised first.

One could believe that in this stage work was continued in the Hathor Shrine and its first portico, which had been started in the first building phase under Thutmose II (Fig. 2, O and P).

I do not think that one could unanimously answer the question if all the work discussed above was fully or only partly carried out in this building stage. Some of it might have been continued later. It seems, however, that its sequence was similar to the one presented here in that this stage was concerned with the rebuilding of the constructions taken over by the Queen in which she adapted the structure to her new plan.

Phase II, stage II

Actually, there is no definite division line in the execution of particular building enterprises carried out by the Queen and her architects since they could overlap or could be done simultaneously. The work there could be said to have been continuous. However, because of the different character it is possible to distinguish another building stage which I would arbitrarily call the stage of extending the temple.

As soon as the Queen took over the temple or possibly when the built-up area on the Upper Terrace was being adapted to the new plan, the Queen decided to extend the temple northward placing the first series of her foundation deposits (Fig. 3) marked by WINLOCK A, B, C, D, E, F and starting the present terrace of the Middle Courtyard. First a revetment south of the terrace (Fig. 3, no. 5) and a similar one east of it had to be risen. Whether an eastern wall had ever been started within the limits of the first lay-out can hardly be decided. WINLOCK during his excavations did not encounter any of its remains although he excavated nearly the whole area of the Middle Courtyard. The plan might have been repeatedly changed during the construction works of the terrace until it took its final form of closing the terrace with the walls of the present lower portico.

The placement of the first series of the Queen's foundation deposits outlines the border point of the temple which was to be extended eastward according to the initial plan. While verifying them one has to realize that all the foundation pits in this series contained the same components, which means that they had been founded at the same time.

One should also take into consideration the terrain onto which the temple was to be built and which must have influenced the plan.

Earlier structures dating from the XIth dynasty had to be respected by the Queen's architects. She could not run the risk of removing them, at least at the beginning of her reign.

There was a Chapel of Amenhotep I (Fig. 3, no. 1) built of brick, close to today's lower ramp of the temple. Its remains were unearthed by WINLOCK²⁹⁾. There was also a tomb of Queen Neferu located just behind the old Mentuhotep enclosure wall, at the north side of the valley (Fig. 3, no. 2).

And so the Queen's plans of extending the temple had to respect the structures present at the site, which was reflected in placing her foundation deposits of the first series.

Having all that in mind one can picture the original, eastern boundary of the planned terrace of the Middle Courtyard in the following way. It was indicated by a deposit marked "B" in WINLOCK's plan. The line limiting the built-up area of the courtyard in the east leads in its northern part to the façade of the tomb of Neferu (Fig. 3, no. 9), which becomes part of the Queen's design then. Deposit "A", discovered by NAVILLE, could not concern any of the alternative, eastern boundaries of the Middle Courtyard because it was founded simultaneously with other deposits of this series thus it must have indicated one of the characteristic points of the plan. It may have indicated a starting point of the upper ramp which, if so, was to be slightly shorter than the present ramp (Fig. 3, no. 11). Examining the lay-out of the block layers in this ramp one can see that originally the slant was bigger, which means that the ramp was indeed shorter.

Deposits "C" and "F" certainly mark the original, eastern enclosure of the temple site, and "D" and "E" show where a lower ramp should be (Fig. 3, no. 7). Its deposits have it placed southward in relation to the present one to avoid collision with the Amenhotep I temple located in the foreground of the Hatshepsut temple. In this way it became part of the enclosure of the Hatshepsut temple.

Most probably at this stage work at the Hathor Shrine and its first portico were completed. The ramp leading to it was located between the revetment and Mentuhotep's northern enclosure wall³⁰⁾ (Fig. 3, no. 12) and its slanting marked on the revetment of the terrace of the Middle Courtyard.

²⁹⁾ H. E. WINLOCK, *The Egyptian Expedition 1923-1924*, pp. 14-16.

³⁰⁾ Z. WYSOCKI, *The Temple of Queen Hatshepsut at Deir el-Bahari. The results of analysis and studies on the meaning of the lines retained on the south revetment of the Middle Courtyard Terrace*, in: *MDAIK* 41, 1985, pp. 293-307.

It is worth mentioning here that the modification of the northern part of the Upper Terrace during the first stage of this phase, which resulted in giving up the building of a column hall in front of the upper Anubis Chapel (Fig. 2, K), might mean that this site was designed for the Sun worship thus leaving the site as an open yard which received a Sun Altar in the second stage of this phase. Its first version was one block layer lower (Fig. 2, no. 17) because later it was made one layer higher. The stairs leading to it had been rebuilt too.

The change in the worship function of this part of the temple as well as the attempt to keep the symmetry of the temple façade, impaired by the addition of the Hathor Shrine and its portico at the southern wing of the middle portico, resulted in building the lower Chapel of Anubis and its portico during this stage (Fig. 2, T and U).

That this chapel was added later is evidenced in the northern part of the middle portico. Initially at its end it had a narrow fragment of a wall with half-bead in the corner, identical with the southern end of this portico. Not until later was a façade added to the portico of the Anubis Chapel, slightly withdrawn in its facing (Fig. 2, no. 20). As the portico of the lower Chapel of Anubis was raised almost in line with the built-up area of the middle portico, the first Hathor portico, however, being withdrawn westward, another portico was added to the Hathor Shrine in the east in order to balance the forms of the structure (Fig. 2, N). It had no bonding, as can still be seen (Fig. 2, nos. 9 and 10).

This building most certainly resulted in modifying the slant of the ramp leading to the Hathor Shrine. Subsequent slants were marked with paint on the facing of the southern revetment of the terrace of the Middle Courtyard.

This stage of extending the temple also included an addition of the northern portico of the Middle Courtyard, the so-called northern colonnade (Fig. 2, W), the addition of which is clearly visible (pl. 47 a, Fig. 2, no. 21).

Yet, this structure has never been finished; not because of the Queen's death, as WINLOCK suggested, but because the portico collided with a tomb of an earlier dynasty located underneath³¹) (Fig. 3, no. 13). There we can see deviations from the modular design and a reluctance to build another, fifth chapel planned over the tomb's vault. In order to avoid a collapse of the vault the erection of the portico was stopped, laying only architraves, cornices and a balustrade on the "safe" columns, while leaving those over the vault without any load. No ceiling was constructed, which is evidenced not only by the lack of any ceiling over the portico, but also by a full architectural order over a part of the colonnade. This conclusion seems obvious because one never sets out a cornice and a balustrade on architraves before laying out ceiling slabs. The usual sequence is to set out a ceiling first, then a cornice and finally a balustrade are added.

The sounding pit dug out at the eastern, narrow façade of the portico proved that the enclosure wall butting it was a later element because it had been added without any stone binding and the portico wall in this place had been left smooth (Fig. 3, no. 15). It also appeared that it had been coated with "gesso" (pl. 47 b). It is evident that the eastern portico façade had been exposed before the enclosure wall was added to it in the next stage of extending the temple.

Very likely the upper ramp was lengthened at that time. Its slanting was less steep, which was a result of building the northern portico and an additional step as long as the width of the Middle Courtyard. The change in the ramp's slant and length can be seen in the arrangement and slanting of block layers in its side walls.

In this stage a part of the structure had already received its relief decoration or was being decorated, while another part was still about to be rebuilt. In the Upper Courtyard a limestone portal was replaced by a granite one (Fig. 2, no. 2). This new portal was built into the already

³¹) *Id.*, in: *MDAIK* 40, 1984, pp. 329-349, pl. 42-44.

decorated wall and it was likely to have been reused there because its dimensions were different from the dimensions of the old one. That is why the decoration of the niched wall was partly damaged while the portal was being installed in the wall. To repair the damage the outer edges of the granite portal were cut off, the place was filled with mortar on which the relief was completed. The newly set portal reached half the width of the wall, the remaining half were the remnants of the old limestone portal.

At more or less the same time another granite portal was set into the passage from the upper portico to the Upper Courtyard (Fig. 2, no. 1). For all we know it had been designed and then carried out for this wall because it is exactly as wide as the wall itself. It was installed during the erection of the wall, most certainly before decorating it, for the reliefs are not damaged and the decoration fits the project. This situation can be a proof that under Thutmosis II, that is during the first phase of construction works, the middle part of the eastern wall of the old temple had not been executed, possibly not even planned until the second phase when it closed the rear part of the upper portico under Queen Hatshepsut.

In result of two building phases the Queen's temple did not reach beyond the borderline marked by the first series of foundation deposits. So WINLOCK is wrong in saying that Senmut's tomb was located under the temple courtyard (Fig. 3, no. 18) because the temple did not reach that far southward when the tomb was built³²).

Phase II, stage III

Another element closing the temple façade was the lower portico (Fig. 3, no. 8). There was also a wall surrounding part of the Middle Courtyard from the north (Fig. 3, no. 16) and the Lower Courtyard from the north and east (Fig. 3, nos. 19 and 20).

The Queen must have made the decision to build the lower portico when she was in full power and could afford taking the Chapel of Amenhotep I to pieces (Fig. 3, no. 1) and overshadowing the façade of Queen Neferu's tomb with the northern wing of her lower portico (Fig. 3, no. 2). But even then she felt compelled to partly honour the tomb because shadowing it with the portico she introduced a new entrance from the Middle Courtyard.

The foundation pit uncovered during our excavations over the ramp leading to the Hathor Shrine (Fig. 3, no. 6) was undoubtedly meant to indicate the borderline of the western wall of the lower portico. The pit just contained a stone at the bottom³³).

Other foundation pits, marked G, H, I by WINLOCK, indicated the eastern borderline of the temple site. Their contents were much the same and the inscriptions on the scarabs found in them addressed Hatshepsut as the sovereign of Upper and Lower Egypt.

During this stage the range of the courtyard reached its final, eastern borderline and consequently the slant and the length of the ramp leading to the Hathor Shrine and its portico also changed. The final slant of the ramp was marked with red paint by the first line from the east on the revetment of the terrace on the Middle Courtyard. In consequence the western part of the northern enclosure wall of the Mentuhotep temple was raised. The Queen used this part of the wall as the southern enclosure of her temple. The slant of the wall in this part corresponded with the slant of the ramp adjacent to it.

The lower ramp of the temple was shifted from its former place to the axis of the structure. Remains of a brick chapel of Amenhotep I had been buried in it.

³²) H. E. WINLOCK, *Excavations at Deir el Bahri 1921-1931*, p. 341.

³³) Z. WYSOCKI, in: *MDAIK* 41, 1985, p. 298.

It was only during this stage of rebuilding the temple that the northern enclosure wall was added to the eastern façade of the northern portico on the Middle Courtyard and that the wall enclosing the Lower Courtyard in the north and east was built.

It is worth mentioning that the architectural plan for the lower portico differs from other porticos in detail and architectural order of its façade. A high socle was laid. The pillars of the outer row set on it were rectangular in front, but septangular in the rear. There was also a low balustrade, never met in other porticos, and one may assume, that the idea came from another architect. The former one might have been dismissed for failing to complete the northern portico of the Middle Courtyard.

At first I thought that this new architectural form had been introduced to the middle portico already complete and decorated with a socle added to it (Fig. 2, R and S). However, it appeared that the change happened later, when restoration was under way because restorers' exercises on the western wall of the portico were partly situated below the floor of the added socle. That means that the socle of this portico was added after the reliefs had been restored.

And finally a procession alley was built connecting the lower and the upper temple (Fig. 3, no. 21). It seems logical that the west-east direction was taken as it was most convenient concerning the supply of building materials. This requirement was certainly met by an old transport route used for many years in order to supply the upper temple with building material. It was likely to run along the same line that the procession alley took some time later with the only exception of the Lower Courtyard where it had to by-pass the Chapel of Amenhotep I. If, however, the builders had accepted the reverse, east-west direction of building the alley, they would have been forced to set out an additional, parallel supply road to build the alley.

It is not possible to say whether the erection of the lower temple was executed during this stage or earlier. It might also belong to the next stage since the two elements of the temple complex could have been carried out parallelly as well as successively. This is, however, another question for the Egyptologists to solve, which could be possible after examining the texts preserved on a few blocks found in the lower temple and comparing them with the texts of the upper temple. This might possibly give a clue towards deciding which of them was earlier or whether they were parallel in time.

EPILOGUE

The two building phases of the temple distinguished in respect of two different spatial views – the former one was started by Thutmose II and interrupted when he died, and the latter one was carried out by Queen Hatshepsut until its full completion – do not cover later building work by, for instance, Thutmose III who cut off the Osiride statues of the Queen from the pillars of the upper portico (Fig. 2, L) and destroyed the rock surrounding in the south of her temple while levelling the site for his own temple. Neither do I include here the restoration by the Ramessides or by Euergetes II under whom the western wall of the last, small room (Fig. 2, Y) was rebuilt in the main shrine. The scope of work in this period also included building up the niches in the southern and northern walls of the eastern interior of the Queen's Chapel³⁴ (Fig. 2, G), adding a new shrine (Fig. 2, Q) and raising a Ptolemaic portico leading to it (Fig. 2, no. 27). All those activities have not been commented here because they are not connected with the building of the temple by the two successive rulers of Egypt.

³⁴) *Id.*, *The Discovery and Reintegration of Two Niches in the East Chamber of the Queen Hatshepsut's Main Sanctuary at Deir el-Bahri*, in: *BdE* 97, 2, 1985, pp. 361–378, pl. I–IV.

Yet, I realize that distinguishing particular stages within two building phases runs the risk of not fully covering the actual building activity since the execution of some elements might have been done simultaneously. So I tried to distinguish only essential stages in both phases basing the distinction on characteristic features of particular activities. In the first phase, executed by Thutmosis II, I distinguished a stage of preparing the site for the future temple and a stage of raising its walls according to the original architectural plan. In the second phase, carried out by Hatshepsut, I included the rebuilding and extending of the Upper Terrace into the first stage. The second stage covered the extension of the structure northward and eastward indicated by the first series of the Queen's foundation deposits. And finally the third stage concerned the final borderline of the temple marked by the second series of foundation pits.

I would like to stress that the succession of additions of particular chambers and elements is evidenced by the traces preserved in the temple walls on which I based my considerations.

I hope that the data presented here, based on architectural research, providing a new insight into the rise of the temple will contribute to its history. The elaborations presented so far were based on the studies of the hieroglyphic and figural decorations and, naturally, could not answer the questions asked here because the decoration of the temple had been done only under Hatshepsut so, obviously, they attributed the building to the Queen.

I dealt with the authorship of the temple prescribed to Senmut in my previous articles³⁵). I still believe that he should not be considered the author *stricto sensu* as nowadays we understand an architect designer. He was rather what we call today an investigator or supervisor, which must have resulted from his position at the court and numerous duties and also from the lack of any family experience in building. Therefore I believe that we know the work but not its author, as usually was the case with the structures of ancient Egypt. His images behind the external reveals of the niches need not have been a signature of the author but a proof of great power.

I also believe that there were many builders involved in raising the temple. The names of some of them are known to us, e. g. Minmose, Nakht or Thuty. One of them might have been the general designer or possibly the author of one or a few temple elements built within particular stages of building³⁶).

³⁵) ID., *The Results of Architectural Investigations on Historical Development of the Queen Hatshepsut Temple*, 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, Warszawa 1985, pp. 45, 47 f.

³⁶) W. C. HAYES, in: *JEA* 46, 1960, pp. 38 f.

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