

P. ANDRÁSSY, J. BUDKA & F. KAMMERZELL

NON-TEXTUAL MARKING SYSTEMS,
WRITING AND PSEUDO SCRIPT
FROM PREHISTORY TO MODERN TIMES

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Frank Kammerzell, Gerald Moers und Kai Widmaier

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NON-TEXTUAL MARKING SYSTEMS,
WRITING AND PSEUDO SCRIPT
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edited by

Petra Andrásy, Julia Budka & Frank Kammerzell

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www.uni-goettingen.de/lingaeg
LingAeg@uni-goettingen.de

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with mud brick superstructures of the 25th and 26th Dynasties as well as numerous shaft and saff tombs, mostly dating from the Middle Kingdom and reused in the Late Period.³ The major discovery by the Austrian Mission was the monumental tomb of Ankh-Hor (Theban Tomb TT 414), High Steward of the Divine adoratrice Nitocris (26th Dynasty).⁴

The royal temples of Deir el-Bahari (Mentuhotep Nebheptre, Hatshepsut and Thutmose III) rise above the plain of the Asasif valley. Bietak and others have shown extensively that there was a strong connection between the Asasif and Deir el-Bahari throughout much of Egyptian history.⁵ Most importantly, the royal causeways run through the Asasif. They functioned as processional approaches to the temples, especially on the occasion of the Beautiful Feast of the Valley.⁶ The orientation of the Late period tombs is influenced by these causeways.⁷ It is probably because of the position in relation to Deir el-Bahari, that the Asasif held an important position as sacred landscape for a very long time span until the Roman Period.⁸

In the following, non-textual marks on stone architecture that were documented in the course of the Austrian excavations will be discussed.⁹ The majority comes from the Thutmoside causeway. Several marks find close parallels within the temples of Hatshepsut and Thutmose III at Deir el-Bahari, yet again underlining the closeness between the Asasif and Deir el-Bahari.

1. Royal causeways and temples of the Middle and New Kingdom

Although the general area of the Asasif is most famous for its monumental ‘temple tombs’ of the Late Period like TT 414,¹⁰ the history of this part of the Theban necropolis is much older. It goes back to the time of Mentuhotep Nebheptre (11th Dynasty).¹¹ Mentuhotep was the first who cut a monumental causeway through the plain of the Asasif valley. It is of enormous size with a minimal length of 960 m and a width of 46 m¹² and belongs to the terrace temple of the king situated at the base of the cliffs of Deir el-Bahari.¹³ More substantial remains of this broad avenue than the scarce remains that

2 Kampff-Seyfried (1999: 802); Polz (2001: 140-142); for the obscure etymology of the toponym cf. Eigner (1984: 28); Elias (1993: 188, note 1).

3 Cf. Bietak (1972); Budka (2006).

4 Bietak & Reiser-Haslauer (1978); Bietak & Reiser-Haslauer (1982).

5 Bietak & Reiser-Haslauer (1978: 19-29); Eigner (1984: 21); Lajtar (2006).

6 For this important festival of the Theban necropolis see Schott (1953); Bleeker (1967: 137-139); Graefe (1986: 187-189); Naguib (1991: 21-32); for the function of the temples cf. Karkowski (1992); Dolinska (1994); Ullmann (2002: 36-46, 48-52 and 88-95); Arnold (2003).

7 Bietak & Reiser-Haslauer (1978: 19-29). The only causeway kept in use as processional route during the Late Period was the one by Hatshepsut; the causeways by Mentuhotep and Thutmose III were dismantled and built over by tombs after the New Kingdom.

8 Cf. Strudwick (2003: 172-174); Budka (2006: 110-111).

9 Cf. Budka (2008c).

10 Cf. the concise study by Eigner (1984).

11 See Winlock (1942: 4-6); Bietak (1972: 13).

12 Cf. Lansing (1935: 9, fig. 5); Winlock (1942: 4-6). For a summary of the work conducted on the causeway and the problems to locate its valley temple see Arnold (1979: 5-7) and Cabrol (2001: 46-48 and 150-153); for some additional remarks Graefe (1980).

13 Naville (1907-1913); Arnold (1974a, 1974b, 1979 and 1981).

were found in the Austrian concession were unearthed during German excavations in the 1960s. The results enabled Dieter Arnold to establish the construction phases of the monument. It was built in several distinct segments in three main building phases.¹⁴ These building phases do not correspond exactly to the ones of the temple itself which are four in number. In some sections of the Asasif, the causeway's mud brick paving has survived.¹⁵ Within the mud brick parts of the building situated at Deir el-Bahari – both its pavement and a screen wall – Winlock recorded a minimum of eight brick marks.¹⁶ Such features, which are very similar to team marks, were not observed during the excavations in the 1960s. The Austrian excavations yielded no bench-marks, control notes or masons' marks that can be attributed to the Middle Kingdom.¹⁷

A major remodelling of the landscape of the Asasif happened during the reign of Thutmose III. Probably late in his reign, the king erected a terrace temple between the ones of his predecessors Mentuhotep and Hatshepsut at Deir el-Bahari and provided it with a monumental causeway.¹⁸ This approach is 32.5 m wide and runs along the northern side of the causeway of Mentuhotep and therefore right through the Austrian concession (fig. 1). Space for this causeway was created between the two older ones¹⁹ by removing parts of the so-called Hill 104 and parts of older tombs.²⁰

The latest of the New Kingdom monuments in the Austrian concession of the Asasif is the foundation of a huge temple project by Ramesses IV which remained unfinished²¹ and can be dated thanks to several foundation deposits.²² It is located at the entrance of the Asasif and would have been the largest of the buildings of Ramesses IV in Western Thebes,²³ even bigger than the well-known temple of his predecessor Ramesses III in Medinet Habu that was copied in some respects. The Asasif-temple occupies the eastern part of the causeway of Mentuhotep Nebhepetre and to some extent the southern part of the causeway of Thutmose III.²⁴ Blocks of these two older buildings were used along with other *spoliae* for the foundation of the Ramesside monument.²⁵ The foundation's filling blocks are basically the only parts of the temple that are left because from the Late New Kingdom onwards it suffered from intense stone robbery.²⁶

14 Arnold & Settgast (1971: 32-35); Arnold (1974a: 62-67).

15 Bietak (1972: 13).

16 See Arnold (1979: 7).

17 For some bench-marks in the area of the temple itself see Arnold (1979: 27-28) and Arnold, F. (1990: 33 and 51-59).

18 See Lansing (1935); Bietak (1972: 16); Lipińska (1977: 59); Gilbert (1977); Ullmann (2002: 88-95); Lipińska (2005: 285-288). The dating of the temple is still unclear, see Ullmann (2002: 92-93) with references.

19 For concise remarks on the Hatshepsut causeway see Cabrol (2001: 41-43).

20 Cf. Budka (2006, vol. I: 44-45).

21 Cf. Ullmann (2002: 524-546); Budka (2008c).

22 Weinstein (1973: 277-280); Bietak (1972: 19-20).

23 For the discussion of the number of temples possibly built by the king see Ullmann (2002: 529-530).

24 See the reconstruction by Lansing (1935: 9, fig. 7).

25 Cf. Bietak (1972: 24-25).

26 Cf. Arnold (1999: 28).

The examination of the temple foundation and especially of the causeway of Thutmose III yielded various marks which are the subject of this paper. In 2007, a joint mission of the Austrian Archaeological Institute and Humboldt University Berlin resumed work in the Austrian concession in the Asasif.²⁷ Although the re-examination of the temple foundations had to be postponed to future campaigns, some 18th Dynasty blocks were studied, photographed and the marks were traced (cf. figs. 4-5). The work on the Thutmoside causeway corresponds well with latest efforts in the temple of Hatshepsut at Deir el-Bahari – the recent work of the Polish mission among others is focusing on ‘building dipin-ti.’²⁸ The new material from Deir el-Bahari is of striking similarity to the material from the Asasif.

Consequently, this paper will deal primarily with marks and ostraca from the Thutmoside causeway and raise questions of possible implications for links to the temples in Deir el-Bahari and their construction process. Since the study of the material from the Asasif is as yet not completed, it will offer – other than concise answers – some insights in the practical use of non-textual marking systems on royal building sites in New Kingdom Egypt.

2. The material from the Thutmoside causeway

In the 1970s, Bietak was able to study the Thutmoside causeway in the Austrian concession (fig. 2) in close detail and to examine the section of its northern wall. This



Fig. 2: View of a section of the northern boundary wall of the Thutmose III causeway, Austrian concession (photo: J. Budka).



Fig. 3: The best preserved section of the northern boundary wall of the Thutmose III causeway, former American concession (photo: J. Budka).

27 Budka (2008a); Budka (2008b).

28 For information about this ongoing work I wish to thank Zbigniew Szafranski (Project Director and Director of the Polish Centre for Mediterranean Archaeology in Cairo) and especially Dawid F. Wieczorek, PhD candidate of Warsaw University, who wrote a MA-thesis dealing with ‘building dipinti’ from the temples in Deir el-Bahari. The latter was the first who drew my attention to the similarities between the marks from the Thutmoside causeway and the ostraca published by Hayes and others. I am much indebted for his kindness to share information and I profited a lot from his enthusiasm on the subject.

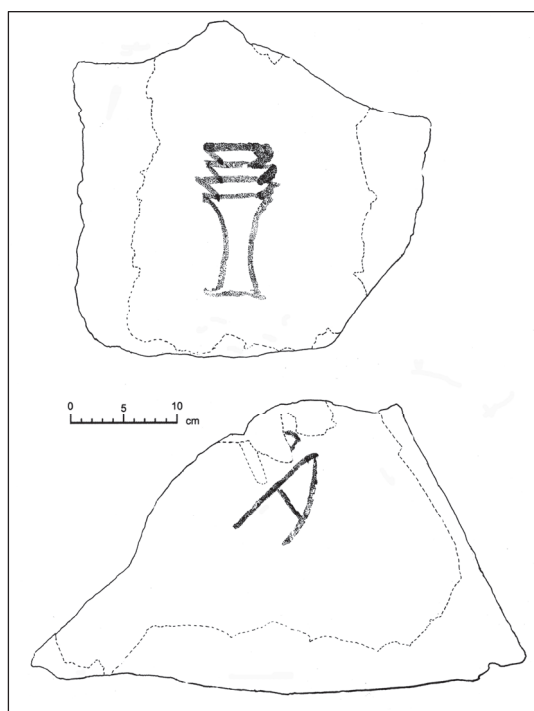


Fig. 4: Examples for unheewn filling blocks from the Thutmoside causeway with marks (drawing by Arvi Korhonen, courtesy Austrian Archaeological Institute Cairo).

boundary wall is in some parts preserved up to its original height (fig. 3), measuring a maximum of 3.46 m and comprising of eleven layers of stones.²⁹ The bottom width is 2.16 m and the top width is 1.05 m. Both rough irregular filling blocks and casing blocks with dressed faces of the wall bear painted marks, mostly in red (figs. 4-5).³⁰ These marks that were carefully documented in the section of the wall (fig. 6) are related to building processes of the monument and will be discussed in the following.

In total, the material from the causeway is quite homogenous and includes primarily single team marks and semi-hieratic/cursive hieroglyphic notes and short hieratic texts.³¹ A differentiation or classification as “textual” and “non-textual” is not

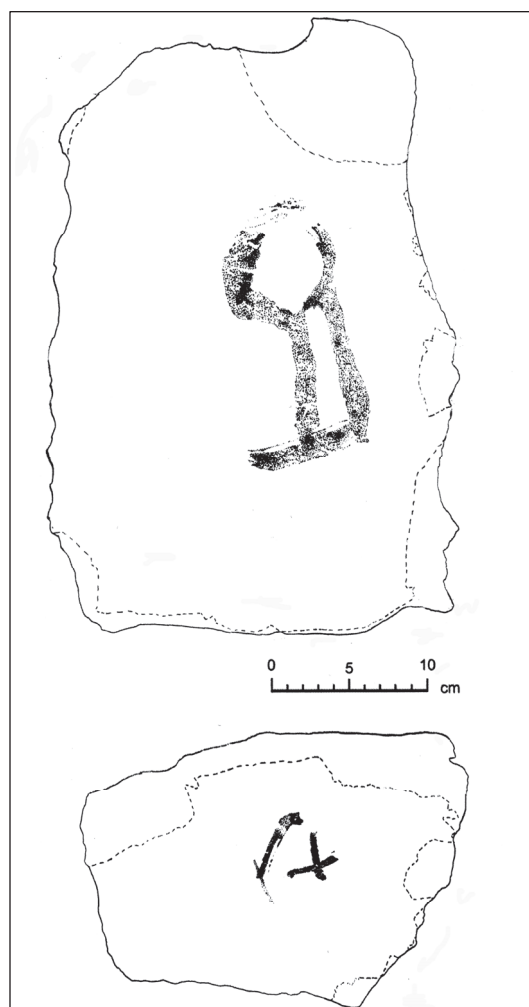


Fig. 5: Examples for unheewn filling blocks from the Thutmoside causeway with marks (drawing by Arvi Korhonen, courtesy Austrian Archaeological Institute Cairo).

29 The boundary wall is best preserved in the former American concession since Ramesses IV covered part of it with a building ramp which in turn protected the Thutmoside wall over the centuries; see Lansing (1935: 15).

30 See Budka (2009). That irregular filling blocks were marked as well might be a special feature of the Egyptian architecture, since in most cases in the Ancient world marks are restricted to worked stone, cf. the contribution by Martin Bachmann (in this volume).

31 For preliminary results on the very similar material from the temple of Hatshepsut see Wiczorek (in press); Wiczorek (Forthcoming) (cf. note 28).



Fig. 6: Detail of unhewn filling blocks from the Thutmoside causeway with marks, *in situ* (photo: Austrian Archaeological Institute Cairo).

mixed with Middle Kingdom ones. Later, these stones were scattered around the surface together with Ramesside blocks. This disorder was due primarily to stone robbers of the time right after Ramesses IV (late 20th and 21st Dynasties) as well as tomb builders of the Late Period who used both the Thutmoside causeway and the 20th Dynasty temple as quarries and sources for building materials. Nevertheless, the field season in 2007 confirmed that most of the blocks with non-textual marks found scat-

Northern wall	Southern wall

Fig. 7: A first assessment: marks from the Thutmoside causeway, the northern vs. southern wall.

The majority of the documented marks come from the north wall of the Thutmoside approach; the southern wall blocks are fewer in number. Given the uneven state of preservation of the two boundary walls, it is difficult to draw a comparison between the two. Nevertheless, the repertoire of marks seems to differ in various respects (fig. 7): the most common marks like *mr* and *hwt* appear on both sides; more specific marks are attested either in the North or in the South (cf. below). This might not be accidental nor solely due to the preservation but may be related to the organisation of working groups participating in the building process. It might be noted that *mr* appears frequently also on blocks in the temple of the king at Deir el-

always apparent – as in other cases of *dipinti* or graffiti there are permeable borders between the two, perhaps connected with the authorship of these marks.³²

Contrary to the northern boundary wall of the causeway of Thutmose III that is partly well preserved, the section of the southern wall within the Austrian concession was pulled down and dismantled already during the Late New Kingdom to prepare the building site for the Rameside temple. 18th Dynasty blocks became

scattered like this on the surface, or mixed with stone blocks of various time periods, were indeed Thutmoside in date.³³ Most of the blocks from the 18th Dynasty are of a distinctive limestone³⁴ and the appearance of the marks is quite characteristic; most often red ink was used. Only very few blocks and marks can be dated to the Ramesside Period and these are more or less script like (cursive hieroglyphs or hieratic writing), painted in black.

32 Cf. the case of graffiti, see Fronczak & Rzepka (in this volume).

33 Like I have already assumed earlier; see Budka (2009).

34 For this differentiation see already Lansing (1935: 12).

Bahari³⁵ – sometimes together with other marks – thus, an use exclusively to denote an institution is uncertain. On the other hand,  appears on other contemporaneous buildings of Thutmose III, for example on a small chapel at Abydos. This is a cult chapel outside the temple of Osiris, connected with the cult of Osiris and the procession to Umm el-Qaab.³⁶ In this case, the sign has been considered as a team mark.³⁷

Similar to the examples set by Mentuhotep and Hatshepsut, the royal causeway of Thutmose III in the Asasif comprised an alley of trees of which some pits were found in the Austrian concession.³⁸ According to Bietak, remains of roots attest that the trees died soon after the reign of the king, showing that the alley was not kept in use.³⁹ Some of the tree pits were even left unfinished. This strongly suggests that they were constructed in the final phase of the reign, most probably in the last year of Thutmose III. Furthermore, the tree alley seems to be restricted to the eastern quarter of the causeway. In this section, the builders used some of the numerous shaft tombs originating from the Middle Kingdom as tree pits (fig. 8), probably for reasons of saving time and labour.⁴⁰ One can thus conclude that the processional approach to the temple of Thutmose III was only partly finished.⁴¹ Similar to the case of Hatshepsut,⁴² there might have been a small barque shrine in

the area where the tree alley began, somewhere in the Austrian concession, although Bietak and his team were not able to locate it; it might be lost due to stone robbers.

The total of 143 marks (86 types) safely attributed to the Thutmoside causeway, ranging between 6 x 6 cm up to 10 x 20 cm,⁴³ can be characterized with four groupings according to the form of the mark and its relation to hieroglyphs and/or hieratic writing:

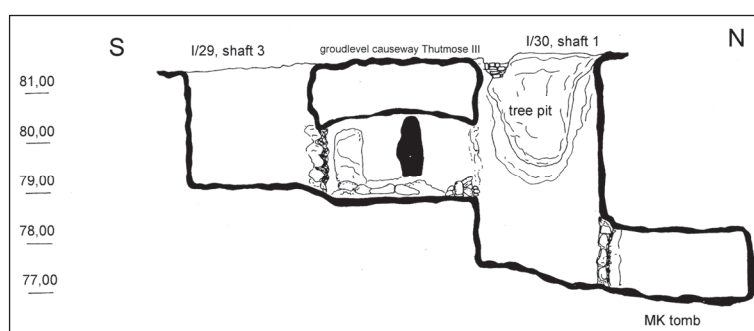


Fig. 8: North-South-section of Middle Kingdom shaft tombs in area I/29 and 30, Austrian concession. Shaft 1, I/30 was reused as tree pit by Thutmose III (illustration Julia Budka, courtesy Austrian Archaeological Institute).

35 Lipińska (1977: fig. 11).

36 Pouls-Wegner (2002: fig. 58).

37 Pouls-Wegner (2002: 301-303).

38 For the layout of the causeway of Hatshepsut see Cabrol (2001: 44-45, 446-449) and Arnold, F. (2004: 21-23 with fig. 8). For the reconstructed situation under Thutmose III see Lansing (1935: 9, fig. 6).

39 Bietak (1972: 17).

40 Budka (2006: 44-45).

41 This is supported by the fact that a group of ostraca was found in the sections of the walls of the approach further to the west, close to Deir el-Bahari. These documents date between the years 43-49 of Thutmose III. Thus, Hayes (1960: 52) concluded that the last working steps on the causeway were probably undertaken during the reign of Amenhotep II.

42 Cabrol (2001: 447); Arnold, F. (2004: fig. 8).

43 The marks on the masonry of the Thutmose III-temple at Deir el-Bahari are larger in scale, up to 50 cm and more; see Lipińska (1977: 22).

- Group A: single cursive hieroglyphic signs (“team marks”): 24 types of marks on 67 + x blocks⁴⁴
- Group B: short texts with components of hieroglyphic cursive or groups of linear hieroglyphs (“semi-hieratic”): 12 marks on 21 blocks
- Group C: hieratic marks and short control notes: 36 + 2 possible marks on 40 + 2 possible blocks⁴⁵
- Group D: non-hieroglyphic signs/invented geometric figures (“stone masons’ marks”): 12 symbols on 13 blocks

Out of this group of Thutmoside marks, twelve marks are attested twice or more often. Like some of the so-called *funny signs*,⁴⁶ team marks often resemble hieroglyphic signs and roughly a quarter of the Asasif material falls into this category (Group A). The most common signs within this corpus, partly in combination with others, are  *mr* (17 times),  *dd* (8 times, fig. 4),⁴⁷  *hwt* (7 times, fig. 6),  *mr* with a dot/circle⁴⁸ (4 times, fig. 4),  *ms* (5 times);  *nfr* (3 times)⁴⁹ and  *nb* (3 times). Two slightly differing marks (fig. 5) resemble the hieroglyph  Gardiner W 85.⁵⁰ The classifier for *njw.t*, , is attested several times. It appears in combination with the *pr* sign (e.g. Steinreg. 445 ) and with a fragmentarily preserved symbol, most likely representing  (block without number from excavation square N/27, see drawing in fig. 7, section Northern wall, middle right). The latter is attested as team mark since the Middle Kingdom⁵¹ and finds very close and almost contemporaneous parallels in the valley temple of Hatshepsut, written in charcoal on stones of the northern boundary wall of the building.⁵² Carter interpreted  as *snt* meaning ground plan,⁵³ but a literal significance of the mark is not essential. The common marks  and  appear on both casing and filling blocks, whereas  and  seem to be restricted to unhewn filling blocks (the latter come from the southern wall only, cf. fig. 7). Since ostraca found at Deir el-Bahari confirm that a division was made between different types of stones,

44 Lipińska (1977: 22) called these marks “cursive hieroglyphs inclining to the hieratic script”; Winlock referred to them as “semi-hieratic” (ibid).

45 A number of these were also documented on the masonry of the Thutmose III-temple at Deir el-Bahari; see Lipińska (1977: 22).

46 These marks, first dubbed “funny signs” by Richard Parkinson (1999: 93) based on research results by Andrea McDowell (1993), are referred to in several contributions in this volume, e.g. by Haring, Fronczak & Rzepka and Killen & Weiss.

47 For the common use of this hieroglyph as team mark see Arnold, F. (1990: 28 with note 124).

48 Cf. marks from Amarna: Pendlebury (1951: 93, fig. 17); Roeder (1969: pl. 219, no. 43). It remains doubtful if this group should be read as *Mrj-R^c*, see below.

49 This mark is attested on rough filling blocks as well as on blocks with relief (e.g. Steinreg. 257). It is difficult to decide whether it was actually a team mark or if it referred to the “0 level” – both forms of usage are attested in the Old Kingdom, cf. Verner (2006: 188) and it appears on the Thutmoside temple at Deir el-Bahari as well, see Lipińska (1977: 22). For its common use as team mark from the Old Kingdom to the New Kingdom see also Arnold, F. (1990: 27 with note 118).

50 This mark appears incised as masons’ mark at the site of the temple of Eje and Haremhab (personal observation at the site, April 2007). For painted parallels at Lisht and the temple of Mentuhotep at Deir el-Bahari see Arnold, F. (1990: 28).

51 Arnold, F. (1990: 28).

52 Carnarvon & Carter (1912: 40-41, fig. 11, especially no. 2). Similar marks without the *njw.t*-sign are also attested from Amarna, see Pendlebury (1951: 93, fig. 17); Roeder (1969: pl. 219, no. 76).

53 Cf. Wb 4, 178.16-179.8 „*Fundament; Grundriss; Bauplan*”; the abbreviated form of the mark would correspond even better with *snt.t*, Wb 4, 179.9-14 „*Grundmauerwerk, Grundriss*”.

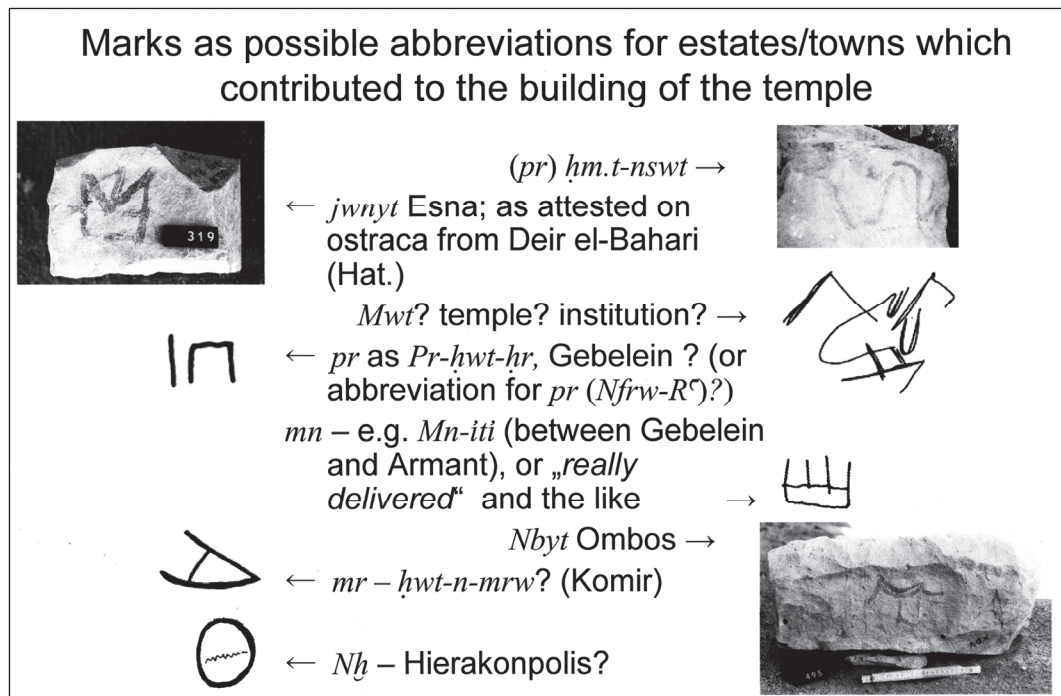


Fig. 9: Marks from the Thutmoside causeway as possible abbreviations for estates/towns.

whether they were worked casing blocks or rough stones for foundations and fills (see below),⁵⁴ this is likely to be intentional.⁵⁵

2.1 Institutions and towns contributing to the building process

It is well known from earlier times in Ancient Egypt that team marks frequently denote toponyms, either as the home-cities of the workmen/teams or more generally the towns involved in the building process.⁵⁶ This seems to hold true for most of Group A of the Thutmoside marks from the Asasif as well.

Several of these marks from the causeway might be considered as possible abbreviations for institutions or towns which contributed to its building (fig. 9). This interpretation is based on similar settings that are well documented in the Old and Middle Kingdom⁵⁷ and also on comparable texts on ostraca from the New Kingdom.⁵⁸ A large amount of ostraca, for the most part dating from the reign of Thutmose III, were unearthed in the temples at Deir el-Bahari and their surrounding area.⁵⁹ A selection of that corpus was published by Hayes (1960) (fig. 10). That these ostraca and marks are related to each other is best illustrated by the find spot of a small group of ostraca: 23 hieratic ostraca were found by the Metropolitan Museum of Art Expedition just adjacent

54 Hayes (1960: 33-34, with note 5).

55 See also Verner (2006: 200) for the assessment that marks were applied for “the stone to be used in different parts of the building.”

56 Arnold, F. (1990: 22).

57 Cf. Arnold, F. (1990); for crew/phyle/division names of the Old Kingdom see Helck (1973); Roth (1991: 124-133 and passim); Verner (2006: 201) and Andr  ssy (2007).

58 Hayes (1960: 34). See also recently R  mer (2008: 624).

59 Hayes (1960: 29).

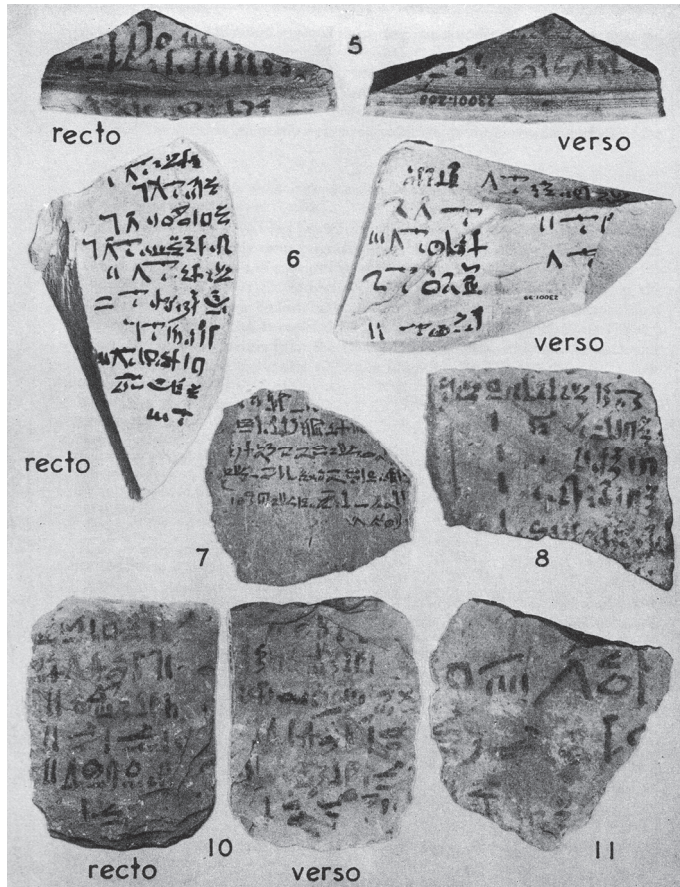


Fig. 10: Ostraca from Deir el-Bahari (Hayes 1960: pl. 10).

to the Austrian concession⁶⁰ and Bietak's excavation yielded two more ostraca from that area, the bed of the Thutmoside causeway.⁶¹ Thus, both ostraca and marks are connected with the royal approach.

The team marks that also have hieratic equivalents in the ostraca, or are otherwise of special interest, are as follows (fig. 9):

- (pr) *hm.t-nswt*, estate of the Queen (Neferure?; see below); attested on ostraca from Deir el-Bahari⁶² and maybe TT 71 (tomb of Senenmut), where it probably refers to Hatshepsut.
- *Jwny.t* Esna; as attested on ostraca from Deir el-Bahari (Hatshepsut), cf. Gardiner (1947, vol. II: On. Am. No. 323).
- *Nby.t* Kom Ombos, cf. Gardiner (1947, vol. II: On. Am. No. 316) or Ombos, *Nb.t*, cf. Gardiner (1947, vol. II: On. Am. No. 341).
- *Mr*, possible abbreviation for *Hwt-n-mrw* (Komir), given as *Pr-mrw* by Gardiner (1947, vol. II: On. Am. No. 322), but the distribution of this mark at Deir el-Bahari and the Asasif might correspond to a more complex meaning (see above).
- *Nh*, possibly Hierakonpolis?
- *Pr* as *Pr-hwt-hr*, Gebelein? (or abbreviation for *Pr-mrw* or *pr Nfrw-R^c*, see below).
- *Mw.t* (?), a Theban temple? an institution?
- *Mn(w)* possibly *Mn-iti* (between Gebelein and Armant), but very unclear; appears together with other marks on one block (cf. Steinreg. 644) and might as well be an abbreviation for something else in the context of stone delivery: an adjective (“durable”⁶³) or a short note like “the remainders are...”⁶⁴, “valuable kind of stone”⁶⁵, “really delivered/landed”⁶⁶ or the like.

60 Lansing (1935: 3-16); Hayes (1960: 29).

61 Bietak (1972: pl. IXb = Cairo Museum JE 94472) and another unpublished piece (Magazine Thebes, Westbank).

62 Hayes (1960: 31, MMA Negative no. CN 33, as “House of the King’s wife, the justified”; 34, MMA Field no. 23001.39, as “House of the King’s wife”).

63 Wb 2, 60-61.

64 Wb 2, 63.11.

65 Wb 2, 68 and Wb 2, 72.4-6.

66 Cf. Wb 2, 74.4.

On some ostraca found in the Asasif and at Deir el-Bahari, towns are listed as having participated in building the temple for Hatshepsut.⁶⁷ For example, on Ostrakon MMA Field no. 23001.39⁶⁸ the following toponyms are attested (fig. 10):

- Esna (*Jwny.t*, Latopolis⁶⁹), El-Kab (*Nḥb*⁷⁰), Ageni (= Asfun el-Mataaina⁷¹) and Hefat (Moalla⁷²).

Of special interest within Group B, groups of linear hieroglyphs, is an assemblage that is found at least five times and can be read as *pr Nfrw-R^c* with Neferura written in a cartouche.⁷³ The mark is probably the name of a royal estate,⁷⁴ belonging to Neferura, the daughter of Hatshepsut.⁷⁵ In

addition to this mark, a *pr*-sign with a stroke (𓂏), which was recorded twice, may indicate an estate in general or serve as an abbreviation for *pr Nfrw-R^c*.⁷⁶ Bietak suggested a nearby, separate building of the princess as origin of the blocks,⁷⁷ but a contribution of the estate *pr Nfrw-R^c* to build the Thutmoside causeway cannot be ruled out despite the fact that the princess died probably soon after the eleventh regnal year of her mother.⁷⁸



Fig. 11: Stone block with hieratic note from the Thutmoside causeway (no. 407 of the Austrian concession, photo: Austrian Archaeological Institute Cairo).

67 Hayes (1960: 35) with reference to Gardiner (1947).

68 Hayes (1960: 34-35, no. 6).

69 Cf. Gardiner (1947, vol. II: On. Am. No. 323).

70 Cf. Gardiner (1947, vol. II: On. Am. No. 321).

71 Cf. Gardiner (1947, vol. II: On. Am. No. 326 for Asfun and On. Am. No. 324 for Ageni).

72 Cf. Gardiner (1947, vol. II: On. Am. No. 326 – *Pr-ḥḥt* to the north of Asfun el-Mataaina).

73 Cf. a similar, incomplete example from the tomb of Senenmut, TT 71, see Hayes (1942: 17, no. 43).

74 Cf. Hayes (1951: 97) with references and Hope (1993: 97). For *pr* as *temple estate* cf. Spencer (1984: 14-20).

75 Bietak (1972: 16-17). For new material from Deir el-Bahari relating to Neferura and the assumption that she should have become the successor of her mother see Szafranski (2007).

76 An alternative reading would be *Pr* as abbreviation for *Pr-ḥwt-ḥr*, Gebelein, see above.

77 Bietak (1972: 17); misunderstood by Lipińska (1977: 22, “the excavator [i.e. Bietak] believes, that these blocks could have belonged to the wall. This does not seem to be the case, unless they were re-used in it from some other structure”). Cf. Spalinger (1978: 406: “The problematic building block which has on it an inscription mentioning the ‘temple/house of Neferure’ certainly cannot have been part of the Thutmose III temple”).

78 Against the views expressed in note 77, especially Spalinger (1978: 406).

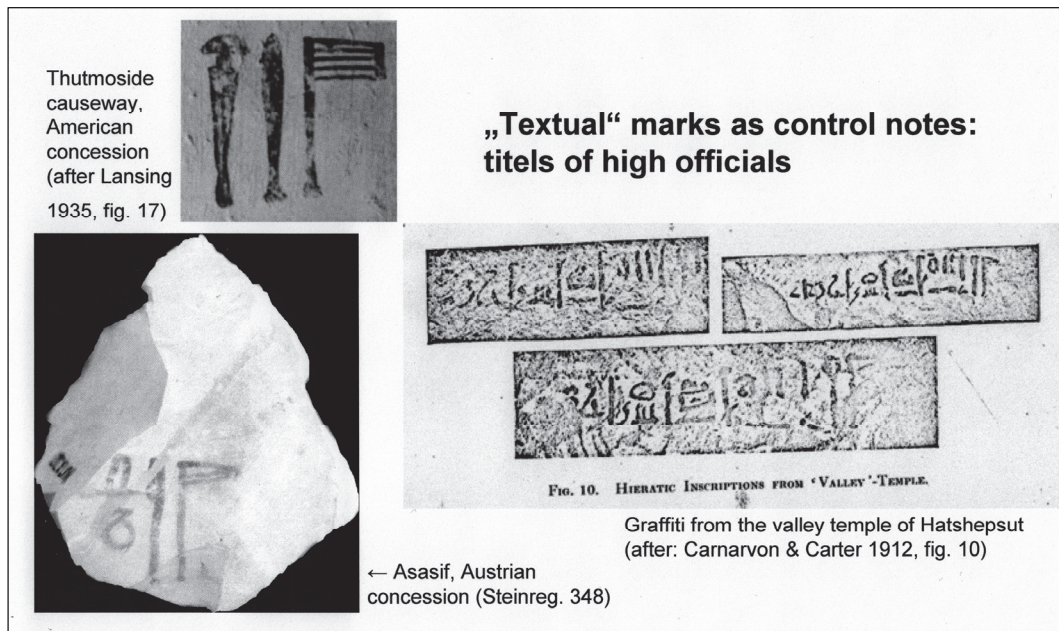


Fig. 12: Titels of high officials from the Thutmoside causeway and parallels from the valley temple of Hatshepsut.

Interesting examples for hieratic notes classified as Group C are *nfr rnp.t* and *nfr rnp.wt* (fig. 11). These groups find numerous parallels in the temple of Thutmose III at Deir el-Bahari (cf. fig. 14 and see below) and a similar group, *rnp.t nfr*, appears frequently at the temple of Hatshepsut.⁷⁹ Sometimes the marks were even painted on all four sides of the blocks. Borchardt (1938: 58-59) related it to the Golden Horus-name of Thutmose I (*nfr-rnp.wt s^cnh-jb.w*); Arnold (1980: 118-119) identified it as gang of stone masons. Although the latter seems convincing, I would like to add that the phrase literally means “end of the year.” In connection with the epagomenal days (*hrj.w rnp.t*), the first/additional five days of the year that are frequently referred to in building graffiti in the Theban area,⁸⁰ these marks might correspond to the general idea of an Egyptian temple as cosmos and new creation by the king. Rather than being accurate references to specific day dates,⁸¹ *nfr rnp.t/nfr rnp.wt* and *hrj.w rnp.t* might have functioned as highly symbolic names for stone masons’ gangs and/or particular sections of the building.

2.2 Personal marks on stone blocks: individuals contributing to the building process

A broken block from the Thutmoside causeway has a reference to a Second Priest (of Amun) (*hm-ntr snw ...*, fig. 12). This title is attested in the valley temple of Hatshepsut as well. Unfortunately, the name of the official on the block from the Asasif is either lost or, as is perhaps more likely, was never mentioned. A reconstruction as

⁷⁹ Information courtesy by Dawid F. Wieczorek (personal communication, Nov. 2007 and Nov. 2008).

⁸⁰ E.g. in the temple of Hatshepsut; information courtesy by Dawid F. Wieczorek (personal communication, Nov. 2007) and in the Ramesside temple of the Asasif, see Budka (2008c) and below.

⁸¹ Dates are commonly written in hieratic on stone blocks, often omitting the regnal year and stating day and month only, cf. Lipińska (1977: 22-23 with further references). As yet, no such dates were documented within the Thutmoside causeway.

Puiemra, the official who is mentioned with this title in the valley temple of Hatshepsut, is tempting but raises problems of dating.⁸² On the wall of the Thutmoside causeway excavated by Lansing, a perfectly preserved and accurately painted mark *hm ntr tpj* was found (fig. 12).⁸³ Borchardt noted an identical mark *hm ntr tpj* at the temple of Thutmose III,⁸⁴ but these blocks are unfortunately lost today – they could not be relocated by Lipińska (1977). An isolated *tpj* was mentioned as well.⁸⁵ Among the various officials that are referred to on the group of ostraca from the Asasif and Deir el-Bahari there are also *hm.w ntr tpj*⁸⁶ and especially overseers of the treasure (*mr.w pr wr*).

One ostrakon, MMA Field no. 23001.39, mentions a steward named Merira as having contributed to the building of the king's temple. Although proof is lacking, it seems tempting to associate the mark  (fig. 4) with this official.⁸⁷

The exact kind of contribution by these high officials to the royal building remains unclear – like institutions, they might have been responsible for workmen and material (stone). This would correspond to several lists attested on ostraca.⁸⁸ On the other hand, the marks might document inspections by the officials at the building site and indicate their responsibility for specific steps of work and their supervision.⁸⁹

Excursus: Name stones as “ownership marks”

The above mentioned references to specific officials in royal buildings lead to an extraordinary type of “ostraca” that differs from ostraca in both content and function: so called name stones of the 18th Dynasty.⁹⁰ Several dozen, if not hundreds, of name stones were found in the retaining wall of Senenmut's tomb, Theban Tomb TT 71.⁹¹ A smaller group was recovered from the valley temple of Hatshepsut⁹² as well as from the area of the temple of the 18th Dynasty at Medinet Habu (Hatshepsut and Thutmose III).⁹³

Name stones are small, irregular stones that are carved or painted with royal names or the names and titles of high officials (fig. 13). All of the attested examples so far can be dated to the reigns of Hatshepsut and Thutmose III. Their aim was probably, as Hayes concluded from the material from TT 71, to denote the owner or the main contributor of the building, not visibly “but magically to bind them to him,

82 Although Puiemra survived Hatshepsut's reign and was buried during the reign of Thutmose III in Theban Tomb TT 39, it is rather unlikely that he held the office until the late years of the king.

83 Lansing (1935: 16, fig. 17).

84 Borchardt (1938: 58-59).

85 Borchardt (1938: 58-59).

86 See e.g. Hayes (1960: 34, MMA Field no. 23001.39).

87 Parallels from Amarna (cf. note 125) would not contradict this; the name Merira was also quite common during the Amarna period and the mark in question could be an identity symbol as in the case of the Asasif.

88 Cf. the lists on oDAI 55 and oDAI 56, Römer (2008).

89 Cf. Lansing's interpretation: Lansing (1936: 16): “officials' marks recording the inspection of the masons' dressing.”

90 Cf. Dziobek & Dorman (1990: 8): “They differ from ostraca, therefore, in having been selected for an architectural purpose and only subsequently inscribed.”

91 Hayes & Lansing (1937: 4-5); Hayes (1942); Dorman (1991: 26).

92 Carnarvon & Carter (1912: 40 and 46, pl. xxxii); Hayes (1942: 46); Hayes (1960: 39).

93 Hayes (1942).



Fig. 13: Examples of name stones of Senenmut (Hayes 1942).

there has been a contribution “by private individuals to the building of the temple.”⁹⁸ In the case of the valley temple of Hatshepsut this is further strengthened by similar rocks that bear both crude cartouches of her and hieratic name graffiti of the mentioned officials.⁹⁹

This use of name stones recalls the tradition of stamped bricks, that were in use since the reign of Ahmose and flourished during the Thut-moside era.¹⁰⁰ Early cases come from the buildings by Ahmose at Abydos, recently unearthed by Stephen Har-

to associate them permanently not only with his tomb, but also with his person.”⁹⁴ This view was adopted by Dorman⁹⁵ and might well correspond to royal buildings such as the valley temple of Hatshepsut or the Small Temple at Medinet Habu. However, in the case of TT 71, similar name stones were found by the Chief Steward Wadjet-renput and Senenmut’s brother Amenem-hat.⁹⁶ Did these people contribute to Senenmut’s tomb as well?⁹⁷

This is further indicated by many short ink labels in hieratic that give the name of officials with a preceding “n”, “for, in behalf of”. The names attested all belong to architects: Senenmut, Hapuseneb, Djehuty, Tetemre, Puemra, Dewaenheb. Hayes described their character as “ex-votos” and used them as reference that

⁹⁴ Hayes (1942: 45).

⁹⁵ Dorman (1991: 26).

⁹⁶ For a complete list of 89 name stones from the tomb of Senenmut see Hayes (1942: 47-51, Pls. xxx-xxxiii).

⁹⁷ A very interesting ostrakon found in the debris under TT 71 could support the idea that several officials participated in the building process: Hayes (1942: 26, no. 131, pl. xxiii) interpreted it as list concerning a quarry expedition, but it might just as well be a roster of people contributing to TT 71.

⁹⁸ Hayes (1942: 46).

⁹⁹ Hayes (1942: 46). For crude cartouches of Hatshepsut on stone blocks of the Chapelle rouge see Van Siclen (1989).

¹⁰⁰ Spencer (1979: 144-145). For examples see Hölscher (1939: 7, fig. 6, Medinet Habu, Hatshepsut and Thutmose III); Bruyère (1952: II, p. 32, fig. 98, brick stamp of Senenmut); cf. also Helck (1958: 475).

vey.¹⁰¹ Harvey was able to reconstruct distinctive building phases because of different stamps in the bricks – thus, the stamps offer dating evidence and illustrate steps of work. But similar to the practice of name stones, the impetus to use stamped bricks within a building was not purely practical and for administrative purpose only. Like Spencer, Harvey and Pouls-Wegner have already suggested, an additional symbolic meaning related to the identity of the builder/owner of the structure is very likely.¹⁰² Besides royal stamps, that are the most common ones, private brick stamps are known.¹⁰³ The earliest examples, from a small cult building at South Abydos, give the name of the Chief Treasurer Neferperet and the King's wife Ahmose Nefertari.¹⁰⁴ Is it pure coincidence that Senenmut and the others attested by “stamped” stones belong to the same category of high officials with very tight connections to the female line of the royal court?¹⁰⁵

Until further evidence comes up, it is entirely speculative to reconstruct a special type of privilege reflecting particular relationships, honours and responsibilities. Nevertheless, the 18th Dynasty-tradition of officials to mark stones – and in some respects to stamp bricks – can be narrowed to a specific time period (early 18th Dynasty to Thutmoside)¹⁰⁶ and a specific group of people: royal individuals and high officials in the rank of treasurers, chief stewards or architects – persons involved in the supervision of buildings, either with administrative functions (officially and on paper) or with practical command at the building site.¹⁰⁷

Especially the name stones by architects associated the practice to label stones or to stamp bricks with non-textual marking systems used during the building process like mason's marks. Other than in the case of the latter, it is very obvious that marks on stones and bricks have not solely a practical function but bear symbolic implications as well. Although not as apparent, a similar two-folded use might apply for some of the so-called masons' marks as well (see above, e.g. *nfr rnp.wt*).

101 Harvey (1998: 190-206); Harvey (2007); Harvey (2007: 348) proposed a coincidence between the practice of impressing “funerary cones” and bricks.

102 Spencer (1979: 146); Harvey (1998: 192); Pouls-Wegner (2002: 276 with note 29).

103 See the collection by Spencer (1979: 144-146, pls. 21-38).

104 Harvey (2007: 348-349).

105 I would like to thank Stephen P. Harvey who pointed out to me that the role of Neferperet is similar to that of Senenmut (personal communication, May 2008).

106 Stamps on bricks are also attested after the 18th Dynasty; for some later private stamps from the Ramesside Period and the 26th Dynasty see Spencer (1979: pl. 38).

107 Dziobek & Dorman (1990: 8) also noted the restriction of these name stones but could not offer an explanation. For the responsibilities of ‘Chief of Treasures’ for royal building projects see Vernus (1994: 259-260) and Harvey (2007: 350).

3. Marks from the causeway vs. temple

The temple of Thutmose III at Deir el-Bahari was probably built during the last decades of the king, the earliest year date being 43 (see above).¹⁰⁸ By textual evidence it is known that the vizier

Rekhmire was responsible for this building.

The temple was discovered and excavated by a Polish mission from 1962-1967 and conservation work continues from 1985 to the present (with some additional excavations).¹⁰⁹ Lipińska published some of the marks in 1977 (fig. 14). The corpus comprised of team marks and marks with short hieratic notes that partly superimposed each other. The latter are mostly day dates. The groups *nfr rnp.wt* and *nfr rnp.t* appear very frequently and sometimes even on four sides of the blocks. Lipińska noted no significant difference between marks on sand- or limestone.¹¹⁰ In general, the marks from the Thutmoside temple are very similar to those found at the temple of Hatshepsut, currently being studied by Dawid Wieczorek.

For a concise comparison between the corpus of marks from the causeway and the temple of Thutmose III at Deir el-Bahari, the evidence is still far from complete since both constructions were heavily destroyed and only parts of the causeway have been examined. It is very likely that individual marks relate to specific parts of the royal building complex and to different teams and institutions. One of the few marks that frequently appear at the temple and the causeway is *mr* – maybe a sign that was more broadly recognized within the complex. However, given the scarce evidence available from blocks themselves, it is thus not yet possible to prove these ideas. Additional evidence may well come from Thutmoside ostraca found in the course of German excavations of which a large amount is still unpublished and currently studied by Malte Römer.¹¹¹

3.1 Marks as dating evidence?

Based on the material from the temple of Thutmose III at Deir el-Bahari and the marks from the causeway known to her in 1977, Lipińska has observed the following: “The difference in the marks on the wall blocks and these on the temple blocks can be explained in only such a way, that the wall was built later, after the death of Thutmose III. Since Amenhotpe II provided a statue of the Hathor-cow for the Hathor shrine

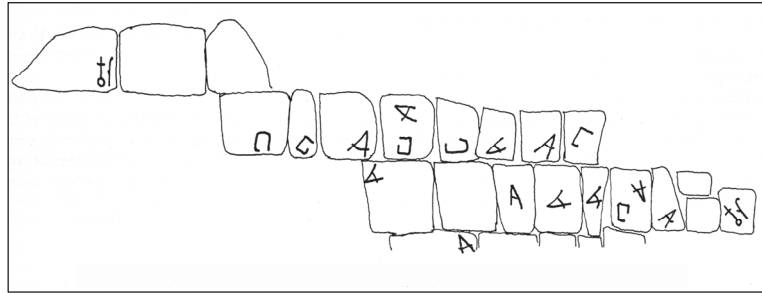


Fig. 14: Course of the limestone blocks of the platform substructure with painted marks in the Thutmose III temple at Deir el-Bahari (Lipińska 1977: fig. 11).

¹⁰⁸ Recently, the year dates attested on the ostraca ranging between year 43-49 were associated with later modifications whereas the beginning of building the temple was dated earlier than year 30, see Wiercińska (1992: 269) and Ullmann (2002: 93).

¹⁰⁹ Cf. Lipińska (2004).

¹¹⁰ Lipińska (1977: 22 and 25).

¹¹¹ See his recent publication of two ostraca from the Thutmoside causeway: Römer (2008).

of his father, it is possible that he also performed some other works in the unfinished Tuthmosis complex, and that the eastern part of the causeway was built during his reign.”¹¹² Nevertheless, various evidence suggests that sections of the causeway in the plain of the Asasif were already built during the last years of Thutmose III. First of all, the dated ostraca from the foundation of the causeway wall all postdate the years 43 and 44,¹¹³ in addition, Arnold found an ostrakon mentioning work on the causeway in the late years of the king.¹¹⁴ Secondly, since some of the tree pits were left unfinished, it is more likely that they were constructed in the final phase. Furthermore, the tree alley seems to be restricted to the eastern quarter of the causeway. In this area, the builders used some of the numerous shafts tombs dating from the Middle Kingdom as tree pits (see above).¹¹⁵ If Amenhotep II would have been responsible for the entire causeway, he might have done it in a way that does not recall time pressure at such a high level; certain areas were even left unfinished. However, with some modifications, the evidence from the area of the Asasif corresponds to the observations by Lipińska: The building phases of the temple do not correspond to the building phases of the causeway. In the case of the causeway, one can conclude that the processional approach to the temple of Thutmose III was only partly finished and that the work was conducted in sections – most probably in the late years of the king, after year 44. Work on the temple itself thus probably started earlier – as proposed by Wiercinska (1992), a building before year 30 seems possible. The causeway was the last element of the complex to be added¹¹⁶ and the difference in the non-textual marks from temple respectively approach corresponds to a long time span within the reign of Thutmose III.

4. Some remarks on character & function of the marks

J. Lipińska argued that the marks documented in the temple of Thutmose III should not be called quarry marks, since both sand- and limestone blocks bear the same marks.¹¹⁷ The limestone is a local kind of stone; the sandstone was transported from further South. Thus, the marks can neither be explained as transport nor as setting marks but were rather used in different parts of the building.¹¹⁸ In summation, Lipińska concluded: “The repetition of the same marks on limestone and sandstone seems to indicate that the marking was already done at Deir el-Bahari, after the delivery of the stone, but before the employing of it in the structure. It is possible, that the different gangs of workmen used their own marks, but the presence of different marks on one block contradicts such a supposition. The difference in the signs cannot be logi-

112 Lipińska (1977: 24). That Amenhotep II erected part of the causeway was already proposed by Hayes (1960: 52).

113 See Hayes (1960).

114 This unpublished ostrakon was mentioned by Bietak (1972: 17); it remains uncertain whether it is identical with oDAI 56, mentioning year 45, recently published by Römer (2008: 619-624).

115 Budka (2006: 44-45).

116 See already Hayes (1960: 52).

117 Lipińska (1977: 25, referring to quarry marks after Haeny 1969: 26-27).

118 Lipińska (1977: 25).

cally explained until some new data from other structures clarify the problem.”¹¹⁹ One might add to this that the same marks, e.g. *mr*, *nfr* and *rnp.t nfr*, appear also on the buildings of Hatshepsut. D. Arnold interpreted the marks as stone masons’ marks that were applied in Thebes, possibly at a storage area of both lime- and sandstone. Marks that are attested within one temple only might refer to specific steps of work within the building.¹²⁰

The material from the Thutmoside causeway documented in the Austrian concession adds a little to this discussion. Close parallels from textual sources (ostraca) make it reasonable to assume that the marks were indeed identity or property marks. They denoted in most cases the estates, towns, teams and officials that contributed to the work. The idea proposed by Arnold that the actual process of marking took place at a kind of storage area seems likely. Some difficulties in explaining distinctive marks and especially ‘semi-hieratic’ notes may account for relating these marks to specific parts of the temple (cf. the differently marked rough filling and casing blocks of the causeway). Texts on ostraca from Deir el-Bahari frequently refer to “blocks destined for” a particular part of the building,¹²¹ e.g. *jnr ḥd n mj* and *jnr n tms*. Different classes of stones could also eventually explain clusters of marks like *nfr rnp.t/nfr rnp.wt*, *pr-ꜥ3*, the epagomenal days and universal marks all over the building like *mr*, *pr* and *nfr*.¹²²

5. Marks from the Ramesside temple

To complete the picture and to stress that differences between marking systems of the 18th Dynasty and the 20th Dynasty are detectable, this paper will close with short references to marks from the Ramesside temple in the Asasif.¹²³ To date, only three, possibly five, marks within the large corpus of marks can be related to the construction of the Ramesside temple.¹²⁴ Considering the frequency of textual marks in the temple foundation (cf. 5.1), this amount is strikingly small. During the fieldwork in 2007 it was confirmed that this is neither accidental nor due to the poor preservation of the building, but that this attests to different organisational methods which employed diverse marking systems. First, Ramesses IV chiefly used blocks from older monuments for the construction of his temple – a source of building material that differs significantly from the causeway of Thutmose III. Those blocks available for examination were not brought directly from quarries to the Asasif but were collected from various standing structures in the neighbourhood, primarily from the Ramesseum. Furthermore, blocks from the Ramesside temple have survived from the lower layers of the

119 Lipińska (1977: 25).

120 Arnold (1980: 118-119).

121 Hayes (1960: 344).

122 This is only a very tentative assessment since in finished structures the marks in question are not exposed to view and we will never know the exact amount of stones that was marked within a complete building.

123 Cf. Budka (2008c); Budka (2009).

124 For a complete list of these marks see Budka (2009).

foundation and the floor level. These bear no marks, although the lateral sides of such blocks are precisely the places where masons' marks would be found.¹²⁵

The Austrian excavations yielded numerous re-used 18th and 19th Dynasty relief blocks,¹²⁶ and a single one of Ramesses VI came to light.¹²⁷ Many of the blocks were originally used within a building of Hatshepsut; some of these were remodelled after her death by Thutmose III, as it is well attested at various sites throughout the country.¹²⁸ Because of the relief program and the amount of blocks, it was obviously an independent structure, but its identification is still open for discussion. The most likely candidate for the original context of these blocks is the House of Millions of Years *Hꜥj-3ḥ.t* of Hatshepsut, which was almost certainly situated between the Rameside temple in the Asasif and the terrace temple *Hnk.t-ꜥnh* of Thutmose III just north-west of the Ramesseum.¹²⁹ The blocks were rebuilt in a subsidiary structure within the Ramesseum during the 19th Dynasty before finally being transported to their present find spot, the eastern part of the Asasif. In some cases the name of the god *Jmn* was chiselled out on inscribed blocks, thus implying an original 18th Dynasty date and destruction of the relief during the Amarna period – and restoration during the Rameside period.¹³⁰

Only one hieroglyphic mark similar to those from the Thutmoside causeway can be attributed to the 20th Dynasty (𓂏, Steinreg. 631¹³¹). The other marks are mainly single characters with script-like appearance (e.g. Steinreg. 461 and Steinreg. 664 representing linear hieroglyphic and hieratic signs respectively). If these actually served the same purpose as the team marks mentioned above, then their character and form contradict F. Arnold's directive concerning team marks that these are in general: "signs [...] which the illiterate workmen could easily memorize and use to mark their

125 Cf. blocks from Amarna, Pendlebury (1951: 93, fig. 17: masons' marks on the foundation plaster at the entrance of the Hut-Aton) and Roeder (1969: 6-8, pl. 219) as well as from the Eje/Haremhab temple in Western Thebes (personal observation, April 2007).

126 Because the temple foundations were mainly built with re-used blocks, Keller (1994: 149) proposed that the location of the building project was partly based on practical reasons since "positioning his own mortuary temple at the northern end of the necropolis facilitated access to the stone available at several already-existing constructions of different types." In my opinion this might at best have been a secondary consideration. Rather, the choice of the king was primarily focused on the vicinity to Deir el-Bahari, the causeways and the buildings of Hatshepsut, see in more detail Budka (2008c).

127 Bietak & Haslauer (1978: 28) and Ullmann (2002: 526). For the large amounts of blocks (more than 700 pieces) that were unearthed earlier by the Metropolitan Museum of Art mission cf. Budka (2006: 47-48).

128 The name of Hatshepsut was in most cases altered to that of Thutmose II; cf. Ullmann (2002: 26-36 and 53).

129 For the location and the scarce remains of this building see el-Ayun Barakat (1981). For another block which was found in the Asasif and probably belongs to *Hꜥj-3ḥ.t* see Ullmann (2002: 53-59).

130 This is so in the case of the recently discovered re-used blocks from the Ramesseum as well, see especially Leblanc (1997: pl. 12) and the single one from the Asasif mentioned by Ullmann (2002: 53). All together, the material from the Ramesseum is very similar to the blocks from the Austrian excavations, thus implying the same original context, most likely the *Hꜥj-3ḥ.t* which was in use until the Post-Amarna period, cf. Ullmann (2002: 59).

131 Budka (2009: fig. 2).

stones.”¹³² However, the findings in the Asasif might reflect a more general development concerning non-textual marking systems during the New Kingdom: Haring has pointed out that there is the tendency for marks (*funny-signs*) to become more script-like, more closely related to hieratic, especially in Ramesside time (see Haring in this volume).

5.1 Hieratic bench-marks from the Ramesside temple

During the Austrian excavations, about 20 hieratic graffiti (dubbed by Kitchen as ‘bench-marks’¹³³) were found written on the *tafl*-stone of the foundations. These inscriptions provide some information on the process and organisation of work on the royal monument (fig. 15). They are control notes checking the output of the construction work as well as guiding data for measurements, particularly for levelling heights.¹³⁴ The notes give not only an idea about the process of work, the different phases of construction and their dating, but they also tell us who was responsible for the work: Usermaatrenakht, the son of the well-known high-priest Ramessesnakht (fig. 15, middle).¹³⁵ Bench-mark 3 gives the name of another official (Ptahmose), but his responsibilities and function at the building site are unknown (fig. 15, bottom).

All five epagomenal days are mentioned within the bench-marks. Since these days are usually attested as work-free time, one might wonder in the first place if these notes were written on the foundation bed during a break of the working process, marking the achievements to that point. However, the specific texts of the bench-marks and their relations

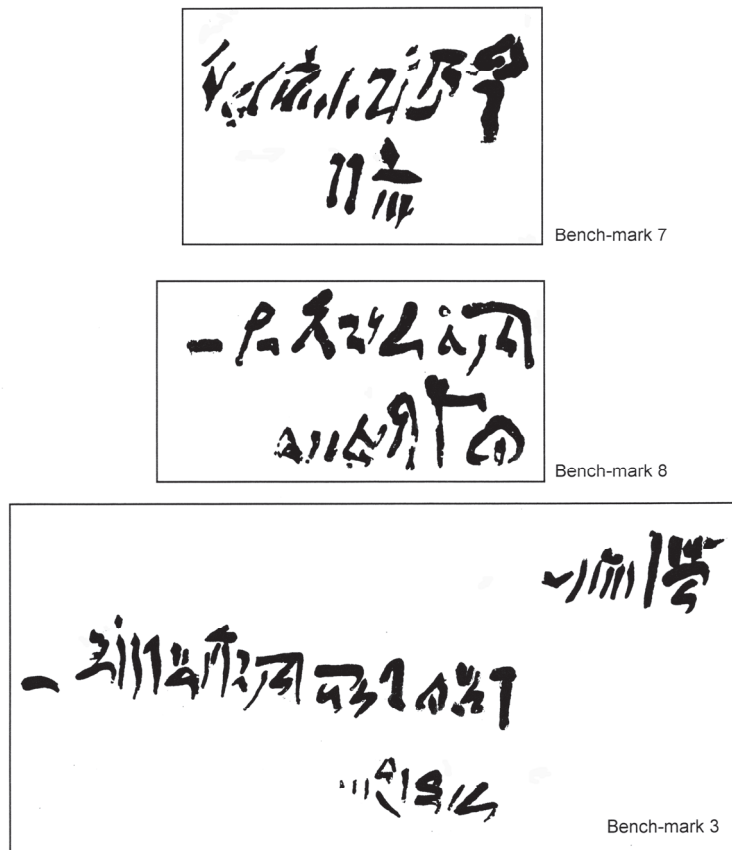


Fig: 15: Examples for bench-marks from the Ramesside temple in the Asasif (courtesy Austrian Archaeological Institute Cairo).

132 Arnold, F. (1990: 14). For comments on literacy and the use of *funny signs* see also Fronczak & Rzepka (in this volume); for analphabets and stone masons’ marks see Bachmann (in this volume).

133 Kitchen (1983: 49).

134 See in more detail Budka (2009).

135 Cf. Budka (2008c); Budka (2009).

to each other make it clear that work proceeded during these days, and so these graffiti are further evidence for a policy of excessive work under Ramesses IV. But, as was mentioned above, epagomenal dates are currently found in foundations of the temple of Hatshepsut as well.¹³⁶ Together with the well documented *rnp.t nfr* these labels might be in some way connected with foundations of royal buildings – another explanation would be that work at building sites proceeded during epagomenal days already during the 18th Dynasty.

6. Discussion

Although the analysis of the marks from the Austrian concession is far from complete, the following remarks can be made on the subject “textual in relation to non-textual marks”:

- Ostraca provide important background information for non-textual marks from the causeway of Thutmose III. Both, textual and non-textual sources originate from the construction phase and refer to identities and properties. The textual marks on the blocks comprise mostly names and dates and provide therefore *additional* information to the non-textual marks.¹³⁷
- Marks from the Ramesside temple appear as textual marks on bed rock and give evidence for specific steps of work during the construction. Non-textual marks on worked stones are more or less missing because these blocks are mostly dressed and re-used blocks from other monuments. The few marks that were found are not abstract or invented signs but essentially “script-like” ones.
- The attested textual and non-textual marking systems indicate different organisation patterns for the work on the Thutmoside respectively the Ramesside building. The changes affected non-textual marks only – textual marks are in both cases comparable and mainly include names and dates.
- Non-textual marking systems as indication for dating and building phases:¹³⁸ The marks from the Thutmoside causeway provide important evidence for the temporal dimension of its construction and underline that the working process was conducted in sections. Different parts of the building were done separately, most likely by different groups (thus different marks), who worked simultaneous as well as step by step. Like the causeway of Mentuhotep, this causeway was built in a number of distinct segments in several main building phases.¹³⁹ Additional comparison between the material from the Asasif (Ramesside temple and causeway)

¹³⁶ Information courtesy by D. Wiczorek, see his work cited in note 31.

¹³⁷ Cf. the contribution by Depauw (in this volume) for a similar situation in Late Period quarries.

¹³⁸ Cf. the contributions by Bachmann (Hellenistic marks) and Fuchs (Medieval masons’ marks) in this volume.

¹³⁹ For more exact divisions, the part from the Austrian concession is as yet not comprehensive. In order to establish a complete picture, it would be necessary to analyze not only the marks from the Austrian concession, but from the former American concession further to the east as well. The diaries, notebooks and drawings by Winlock are currently kept at the Metropolitan Museum of Art, New York – they might give information on ostraca, team marks and building graffiti and will be consulted in the future. The study of the material from the German excavations at the Asasif (cf. Römer 2008) will add to our knowledge as well.

and the temples of Thutmose III & Hatshepsut at Deir el-Bahari has the potential to provide further insights into the building processes during the New Kingdom in Thebes.

Bibliography

- Andrássy, Petra. 2007. Zur Organisation und Finanzierung von Tempelbauten im Alten Ägypten, in: *Das Heilige und die Ware*, Internetbeiträge zur Ägyptologie und Sudanarchäologie VII, ed. by M. Fitzenreiter, London, 143-164.
- Arnold, Dieter. 1974a. *Der Tempel des Königs Mentuhotep von Deir el-Bahari*, vol. 1, Archäologische Veröffentlichungen 8, Mainz am Rhein.
- 1974b. *Der Tempel des Königs Mentuhotep von Deir el-Bahari*, vol. 2, Archäologische Veröffentlichungen 11, Mainz am Rhein.
- 1979. (from the notes of Herbert Winlock) *The Temple of Mentuhotep at Deir el-Bahari*, The Metropolitan Museum of Art Egyptian Expedition, New York.
- 1980. [review of] Lipińska, Jadawiga, *The Temple of Thutmosis III. Architecture*. Varsovie : PWN – Éditions Scientifiques de Pologne 1977 = Deir el-Bahari II, Centre d'Archéologie Méditerranéenne de l'Académie Polonaise des Sciences et Centre Polonais d'Archéologie Méditerranéenne dans la République Arabe d'Égypte au Caire, in: *Orientalische Literaturzeitung* 75, Nr. 2, 118-122.
- 1981. *Der Tempel des Königs Mentuhotep von Deir el-Bahari*, vol. 3, Archäologische Veröffentlichungen 23, Mainz am Rhein.
- 1999. *Temples of the Last Pharaohs*, New York.
- 2003. The Temple of Hatshepsut at Deir el-Bahari, in: *Hatshepsut: From Queen to Pharaoh*, ed. by C. H. Roehrig, New York, 135-140.
- Arnold, Dieter & Jürgen Settgast. 1971. *Die Architektur der 11. Dynastie. Das Grab des Inj jtf*, Archäologische Veröffentlichungen 4, Mainz am Rhein.
- Arnold, Felix. 1990. *The Control Notes and Team Marks, The South Cemeteries of Lisht*, Vol. II, Publications of the Metropolitan Museum of Art Egyptian Expedition 23, New York.
- 2004. Pharaonische Prozessionsstrassen. Mittel der Machtdarstellung unter Königin Hatshepsut, in: *Macht der Architektur – Architektur der Macht, Bauforschungskolloquium in Berlin vom 30. Oktober bis 2. November 2002 veranstaltet vom Architektur-Referat des DAI*, ed. by E.-L. Schwandner & K. Rheidt, Mainz am Rhein, 13-23.
- el-Ayun Barakat, Abu. 1981. The Temple of Kha'-'Akhet in Western Thebes, in: *Mitteilungen des Deutschen Archäologischen Instituts Abteilung Kairo* 37, 29-33.
- Bietak, Manfred. 1972. *Theben-West (Luqsor). Vorbericht über die ersten vier Grabungskampagnen (1969-1971)*, Sitzungsberichte der Österreichischen Akademie der Wissenschaften 278, 4., Vienna.
- Bietak, Manfred & Elfriede Reiser-Haslauer. 1978. *Das Grab des Anch-Hor, Obersthofmeister der Gottesgemahlin Nitokris*, Denkschriften der Österreichischen Akademie der Wissenschaften 6, Untersuchungen der Zweigstelle Kairo 4, Vienna.
- 1982. *Das Grab des Anch-Hor, Obersthofmeister der Gottesgemahlin Nitokris*, Denkschriften der Österreichischen Akademie der Wissenschaften 7, Untersuchungen der Zweigstelle Kairo 5, Vienna.
- Bleeker, Claas Jouco 1967. *Egyptian Festivals, Enactments of Religious Renewal*, Supplement to Numen 13, Leiden.
- Borchardt, Ludwig. 1938. *Ägyptische Tempel mit Umgang*, Beiträge zur Ägyptischen Bauforschung 2, Cairo.
- Bruyère, Bernard. 1952. *Rapport sur les fouilles de Deir el Médineh*, Fouilles d'Institut Français d'Archéologie Orientale XX; fasc. II, Cairo.
- Budka, Julia 2006. *Die Spätzeit in Theben-West: Das Asasif. Bestattungsbrauch und Friedhofsstruktur anhand der Ergebnisse der österreichischen Ausgrabungen in den Jahren 1969-1977*, 4 vols., PhD thesis, University of Vienna.
- 2008a. Wiedersehen mit Anch-Hor: Neue Arbeiten in der österreichischen Konzession des Asasifs (Theben-West), in: *Sokar* 16, 74-79.

- 2008b. *Austrian Archaeological Mission to Luxor/Asasif: Report 2007-2008*, Berlin [online, http://www2.hu-berlin.de/aknoa/forschung/asasif/Budka_Report_Asasif_2007-2008.pdf].
- 2008c. The Ramesside Temple in the Asasif: Observations on its construction and function, based on the results of the Austrian Excavations, in: *Structuring Religion. Proceedings of the 7th Egyptological Tempeltagung, Leuven 2005*, ed. by R. Preys, Königstum, Staat und Gesellschaft früher Hochkulturen 3/2, Wiesbaden, 17-45.
- 2009. Mason's marks, pot marks and other pictograms from the Asasif (Western-Thebes), in: *Pictograms or Pseudo Script? Non-textual identity marks in practical use in Ancient Egypt and elsewhere, Proceedings of the conference, Leiden 2006*, ed. by B. J. J. Haring, O. E. Kaper & C. Zoest, Egyptologische Uitgaven, Leiden [in press].
- Cabrol, Agnès. 2001. *Les voies processionnelles de Thèbes*, Orientalia Lovaniensia Analecta 97, Leuven.
- Carnarvon, The Earl of & Howard Carter. 1912. *Five Year's Explorations at Thebes, A Record of Work Done 1907-1911*, London, New York, Toronto & Melbourne.
- Dolinska, Monika. 1994. Some Remarks About the Function of the Thutmosis III Temple at Deir el-Bahari, in: *Ägyptische Tempel – Struktur, Funktion und Programm (Akten der Ägyptologischen Tempeltagungen in Gosen 1990 und in Mainz 1992)*, ed. by R. Gundlach & M. Rochholz, Hildesheimer ägyptologische Beiträge 37, Hildesheim, 33-45.
- Dorman, Peter F. 1991. *The Tombs of Senenmut. The Architecture and Decoration of Tombs 71 and 353*, The Metropolitan Museum of Art Egyptian Expedition, vol. 24, New York.
- Dziobek, Eberhardt & Peter F. Dorman. 1990. Additional Name Stones of Senmut, in: *Göttinger Miscellen* 119, 7-12.
- Eigner, Dieter. 1984. *Die monumentalen Grabbauten der Spätzeit in der Thebanischen Nekropole*, Denkschriften der Österreichischen Akademie der Wissenschaften 8, Untersuchungen der Zweigstelle Kairo 6, Vienna.
- Elias, Jonathan Paul. 1993. *Coffin Inscriptions in Egypt after the New Kingdom: a study of text production and use in elite mortuary preparation*, Ann Arbor, Mich.
- Gardiner, Alan H. 1947. *Ancient Egyptian Onomastica*, 2 vols., Oxford.
- Gilbert, Pierre. 1977. Le temple de Thoutmosis III à Deir el-Bahari, in: *Chronique d'Égypte* 52, 252-259.
- Graefe, Erhart. 1980. Untersuchungen des Monthuhotep-Aufweges im Bereich der belgischen Konzession vor dem Pylon des Grabes Nr. 196 (Theben-West), in: *Mitteilungen des Deutschen Archäologischen Instituts Abteilung Kairo* 36, 175-191.
- 1986. s.v. „Talfest“, in: *Lexikon der Ägyptologie* VI, 187-189.
- Haeny, Gerhard. 1969. Die Steinbruch- und Baumarken, in: E. Edel et al., *Das Sonnenheiligtum des Königs Userkaf II. Die Funde*, Beiträge zur Ägyptischen Bauforschung und Altertumskunde 8, Wiesbaden, 23-47.
- Harvey, Stephen P. 1998. *The Cults of King Ahmose at Abydos*, PhD thesis, University of Pennsylvania.
- 2007. King Heqatawy: Notes on a Forgotten Eighteenth Dynasty Royal Name, in: *The Archaeology and Art of Ancient Egypt. Essays in Honor of David B. O'Connor*, ed. by Z. A. Hawass & J. Richards, vol. II, Annales du Service des Antiquités de l'Égypte Cahier No. 36, Cairo, 343-356.
- Hayes, William C. 1942. *Ostraka and Name Stones from the Tomb of Sen-Mūt (No. 71) at Thebes*, The Metropolitan Museum of Art Egyptian Expedition, vol. 15, New York.
- 1951. Inscriptions from the Palace of Amenhotep III, in: *Journal of Near Eastern Studies* 10, No. 4, 231-242.
- 1960. A Selection of Thutmoside Ostraca from Dēr El-Bahri, in: *Journal of Egyptian Archaeology* 46, 29-52.
- Hayes, William C. & Ambrose Lansing. 1937. The Egyptian Expedition 1935–1936. The Museum's Excavations at Thebes, in: *Bulletin of the Metropolitan Museum of Art* 32, Section II, 4-39.
- Helck, Wolfgang. 1958. *Zur Verwaltung des Mittleren und Neuen Reichs*, Probleme der Ägyptologie 3, Leiden & Köln.
- 1973. Die Handwerker- und Priesterphylen des Alten Reiches in Ägypten, in: *Die Welt des Orients* 7, 1-8.
- Hölscher, Uwe. 1939. *The Excavations of Medinet Habu II, The Temples of the Eighteenth Dynasty*, Oriental Institute Publication 41, Chicago.

- Hope, Colin A. 1993. The Jar Sealings, in: *Stone vessels, Pottery and Sealings from the Tomb of Tutanchamun*, ed. by J. Baines, Oxford, 87-138.
- Kampp-Seyfried, Friederike. 1999. 'Thebes, el-Asasif', in: *Encyclopedia of the Archaeology of Ancient Egypt*, ed. by K. Bard, London, 802-804.
- Karkowski, Janusz. 1992. Notes on the Beautiful Feast of the Valley as Represented in Hatshepsut's Temple at Deir el-Bahari, in: *50 Years of Polish Excavations in Egypt and the Near East, Acts of the Symposium at Warsaw University 1986*, Warsaw, 155-166.
- Keller, Cathleen A. 1994. Speculations concerning interconnections between the royal policy and reputation of Ramesses IV, in: *For His Ka, Essays offered in Memory of Klaus Baer*, ed. by D. P. Silverman, Studies in Ancient Oriental Civilisation, The Oriental Institute of the University of Chicago 55, Chicago, 145-157.
- Kitchen, Kenneth A. 1983. *Ramesside Inscriptions. Historical and Biographical*, vol. VI, Oxford.
- Lajtar, Adam. 2006. *Deir el-Bahari in the Hellenistic and Roman Periods, A study of an Egyptian temple based on Greek sources*, The Journal of Juristic Papyrology, Supplements, Vol. IV, Warsaw.
- Lansing, Ambrose. 1935. The Egyptian Expedition 1934-1935. The Museum's Excavations at Thebes, in: *Bulletin of the Metropolitan Museum of Art* 30, Section II, 4-16.
- Leblanc, Christian. (& M. de Saintilan). 1997. Autres remplois de blocs décorés de la XVIII^{ème} dynastie, dans le secteur sud du Ramesseum, in: *Memnonia* 8, 47-59.
- Lipińska, Jadawiga. 1977. *Deir el-Bahari II, The Temple of Thutmosis III, Architecture*, Centre d'Archéologie Méditerranéenne de l'Académie Polonaise des Sciences et Centre Polonais d'Archéologie Méditerranéenne dans la République Arabe d'Égypte au Caire, Warsaw.
- 2005. The Temple of Thutmose III at Deir el-Bahri, in: *Hatshepsut: From Queen to Pharaoh*, ed. by C. H. Roehrig, New York, 285-288.
- McDowell, Andrea. 1993. *Hieratic Ostraca from the Hunterian Museum, Glasgow (The Colin Campbell ostraca)*, Oxford.
- Naguib, Saphinaz-Amal 1991. The Beautiful Feast of the Valley, in: *Understanding and History in Arts and Sciences*, ed. by R. Skarsten, E. J. Kleppe & R. B. Finnestad, Acta Humaniora Universitatis Bergensis 1, Oslo, 21-32.
- Naville, Eduard. 1907-1913. *The XIth Dynasty Temple at Deir el-Bahari*, 3 vols., London.
- Parkinson, Richard. 1999. *Cracking Codes. The Rosetta Stone and Decipherment*, London.
- Pendlebury, John D. S. 1951. *The City of Akhenaten III*, Egypt Exploration Society Excavation Memoir 44, London.
- Polz, Daniel. 2001. 'Asasif', in: *The Oxford Encyclopedia of Ancient Egypt*, Vol. I, ed. by D. B. Redford, Oxford, 140-142.
- Pouls-Wegner, Marie-Ann. 2002. *The Cult of Osiris at Abydos: an Archaeological Investigation of the Development of an Ancient Egyptian Sacred Center during the Eighteenth Dynasty*, Ann Arbor, Mich. (Forthcoming as *The Monumental Building Program of Thutmose III at Abydos: Pilgrims, Patrons, and the Organization of Sacred Space*).
- Roeder †, Günter. 1969. *Amarna-Reliefs aus Hermopolis. Ausgrabungen der Deutschen Hermopolis-Expedition in Hermopolis 1929-1939*, Band II, Pelizaeus-Museum zu Hildesheim, Wissenschaftliche Veröffentlichungen 6, Hildesheim.
- Römer, Malte 2008. Die Ostraka DAI/ASASIF 55 und 56 – Dokumente der Bauarbeiten in Deir el-Bahri und im Asasif unter Thutmosis III., in: *Zeichen aus dem Sand, Streiflichter aus Ägyptens Geschichte zu Ehren von Günter Dreyer*, ed. by E.-M. Engel, V. Müller & U. Hartung, Menes 5, Wiesbaden, 613-625.
- Roth, Ann Macy. 1991. *Egyptian Phyles in the Old Kingdom. The Evolution of a System of Social Organization*, Studies in Ancient Oriental Civilization 48, Chicago.
- Schott, Siegfried. 1953. *Das schöne Fest vom Wüstantale, Festbräuche einer Totenstadt*, Abhandlungen der Mainzer Akademie der Wissenschaften 11, Mainz.
- Van Siclen, Charles C. 1989. New Data on the Date of the Defacement of Hatshepsut's Name and Image on the Chapelle rouge, in: *Göttinger Miszellen* 107, 85-86.
- Spalinger, Anthony. 1978. [review of] *Deir el-Bahari II, the Temple of Thutmosis III. Architecture* by Jadawiga Lipińska, in: *American Journal of Archaeology* 82, No. 3, 405-406.
- Spencer, A. Jeffrey. 1979. *Brick Architecture in Ancient Egypt*, Warminster.
- Spencer, Patricia. 1984. *The Egyptian Temple, A Lexicographical Study*, London, Boston, Melbourne & Henley.

- Strudwick, Nigel. 2003. Some aspects of the archaeology of the Theban necropolis in the Ptolemaic and Roman periods, in: *The Theban Necropolis, Past, Present and Future*, ed. by N. Strudwick & J. H. Taylor, London, 167-188.
- Szafrński, Zbigniew E. 2007. King (?) Neferure, daughter of kings Tuthmosis II and Hatshepsut, in: *Études et Travaux XXI*, 139-150.
- Ullmann, Martina. 2002. *König für die Ewigkeit – Die Häuser der Millionen von Jahren, Eine Untersuchung zu Königskult und Tempeltypologie in Ägypten*, Ägypten und Altes Testament 51, Wiesbaden.
- Verner, Miroslav. 2006. *Abusir IX, The Pyramid Complex of Raneferef*, Prague.
- Vernus, Pascal. 1994. Observations sur le titre *jmy-r3 htmt*, 'directeur du trésor', in: *Grund und Boden in Altägypten*, ed. by S. Allam, Untersuchungen zum Rechtsleben im alten Ägypten II, Tübingen, 251-260.
- Weinstein, John. 1973. *Foundation Deposits in Ancient Egypt*, Ann Arbor, Mich.
- Wieczorek, Dawid F. In press. Building dipinti in the temple of Hatshepsut, Preliminary Remarks, 2005/2006, in: *Polish Archaeology in the Mediterranean XVIII*, Reports 2006.
- Forthcoming. Building dipinti in the Hatshepsut temple at Deir el-Bahari, Preliminary Observation, 2006-2008, in: *Proceedings of the 8th Egyptological Tempeltagung, Interconnections between temples*, 22-25 September 2008, Warsaw.
- Wiercińska, Janina. 1992. Les dimensions de la barque d'Amon suivant les données du Temple de Thoutmosis III à Deir el-Bahari, in: *Études et Travaux XVI*, 263-269.
- Winlock, Herbert. 1942. *Excavations at Deir el Bahri 1911-1931*, New York.